

# **1R-254**

## **Annual GW Monitoring report**

**DATE:  
2008**



**CONESTOGA-ROVERS  
& ASSOCIATES**

2135 S. Loop 250 West  
Midland, Texas 79703  
Telephone: (432) 686-0086 Fax: (432) 686-0186  
<http://www.craworld.com>

July 31, 2009

Reference No. 039177 (4)

Mr. Matt Hudson  
Chevron Environmental Management Company (CEMC)  
15 Smith Road, Room 5317  
Midland, TX 79705

**Re: 2008 Annual Groundwater Monitoring Report  
W.A. Estes #100 Well Location  
Sections 3 & 4, Block B-28, PSL Survey  
Crane County, Texas**

Dear Mr. Hudson:

Enclosed is one electronic copy of the 2008 Annual Groundwater Monitoring Report for the Site referenced above. CRA appreciates the opportunity to provide environmental consulting services for CEMC. If you have any questions regarding this correspondence, please contact me at (432) 686-0086.

Yours truly,  
CONESTOGA-ROVERS & ASSOCIATES

Todd Wells  
Project Manager

Encl. 2008 Annual Groundwater Monitoring Report  
W.A. Estes #100 Location  
Section 3 & 4, Block B-28, PSL Survey  
Latitude: N 31° 27' 16.2" Longitude: W 102° 45' 44.2"  
Crane County, Texas

Cc: Bill Hartzoge – RRC Midland  
Dick Watt

---

Equal  
Employment Opportunity  
Employer

---



**CONESTOGA-ROVERS  
& ASSOCIATES**

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July 31, 2009

Reference No. 039124 (6)

Mr. Matt Hudson  
Chevron Environmental Management Company (CEMC)  
15 Smith Road, Room 5317  
Midland, Texas 79705

**Re: 2008 Annual Groundwater Monitoring Report  
G.L. Erwin "A & B" Federal NCT-2 Tank Battery  
OGRID No. 4323  
Lea County, New Mexico**

Dear Mr. Hudson:

Enclosed are three final copies (one hard copy and two electronic copies) of the 2008 Annual Groundwater Monitoring Report for the G.L. Erwin "A & B" Federal NCT-2 Tank Battery site located in Lea County, New Mexico, prepared by Conestoga-Rovers & Associates (CRA). CRA appreciates the opportunity to provide environmental consulting services for CEMC. If you have any questions regarding this correspondence, please contact me at (432) 686-0086.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Todd Wells  
Project Manager

Encl. 2008 Annual Groundwater Monitoring Report  
G.L. Erwin "A & B" Federal NCT-2 Tank Battery  
OGRID No. 4323  
SW/4, SE/4, Section 35, T-24-S, R-37-E  
Latitude: N 32° 10' 11.9" Longitude: W 103° 07' 46.9"  
Lea County, New Mexico

Cc: Becky Jo Doom  
Bill and Elena Grobe  
George and Joyce Willis  
Michael Newell

Equal  
Employment Opportunity  
Employer



## **2008 ANNUAL GROUNDWATER MONITORING REPORT**

**G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
CASE NO. 1R254  
OGRID NO. 4323  
SW/4, SE/4, SECTION 35, T-24-S, R-37-E  
LATITUDE: N 32° 10' 11.9" LONGITUDE: W 103° 07' 46.9"  
LEA COUNTY, NEW MEXICO**





# 2008 ANNUAL GROUNDWATER MONITORING REPORT

**G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY**

**CASE NO. 1R254**

**OGRID NO. 4323**

**SW/4, SE/4, SECTION 35, T-24-S, R-37-E**

**LATITUDE: N 32° 10' 11.9" LONGITUDE: W 103° 07' 46.9"**

**LEA COUNTY, NEW MEXICO**

**Prepared For:**

**Mr. Matt Hudson**

**CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY**

**Upstream Business Unit**

**15 Smith Road, Room 5317**

**Midland, Texas 79705**

**Prepared by:  
Conestoga-Rovers  
& Associates**

2135 South Loop 250 West  
Midland, Texas 79703

Office: (432) 686-0086  
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**JULY 23, 2009  
REF. NO. 039124 (6)**

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## 1.0 INTRODUCTION

This Annual Groundwater Monitoring Report presents groundwater data collected during the 2008 reporting period at the G.L. Erwin "A & B" Federal NCT-2 Tank Battery (hereafter referred to as the "Site"). On February 18-21 and August 11-13, 2008, Conestoga-Rovers & Associates (CRA) conducted the semi-annual groundwater monitoring events on behalf of Chevron Environmental Management Company (CEMC), as successor to Texaco Exploration and Production, Inc. (Texaco).

The Site is located on Lea County Road J4, approximately 3 miles northeast of Jal, New Mexico in the southwest quarter (SW/4) of the southeast quarter (SE/4), Section 35, Township 24 South, Range 37 East, Lea County, New Mexico. The Site's coordinates are latitude N 32° 10' 11.9" and longitude W 103° 07' 46.9". The Site is relatively flat and improved with bermed above ground storage tanks (ASTs), caliche roadways, and oil and gas production equipment. The production equipment includes pipelines, ASTs of various capacities and active production wells. Land use in the vicinity of the Site includes rangeland with indigenous grass, livestock ranching, and oil and gas production. The topography slopes gently southeast toward Monument Draw located approximately 1.5 miles east of the Site.

Site assessment activities were initiated in 1993. In September 1993, Environmental Spill Control, Inc. (ESCI) of Hobbs, New Mexico performed a subsurface investigation in and around an unlined earthen emergency produced water overflow pit that was located adjacent to the west edge of the Site. During the investigation, 16 boreholes ranging from 30 to 100 feet below ground surface (bgs) were installed to evaluate soil and groundwater at the Site. Analytical results indicated hydrocarbon impacts to the soil and chloride impacts to the groundwater. In September 1994, ESCI excavated the former pit to approximately 62-feet bgs and removed approximately 40,000-cubic yards of hydrocarbon-affected soil. The excavation was lined from 62.5-feet up to 55-feet with a mixture of clean sand and clay and was backfilled with clean soil to the surface. ESCI submitted the closure report to Texaco in October 1994.

In February 1995, Texaco submitted a work plan to the New Mexico Oil Conservation Division (NMOCD) to assess affected groundwater at the Site. On March 28, 1995, the work plan was conditionally approved by the NMOCD. Two monitoring wells (WMW and SWMW) were installed and sampled in 1997. Analytical results demonstrated groundwater chloride concentrations were at or above the New Mexico Water Quality Control Commission (NMWQCC) Human Health Standard. In January 1998, Highlander Environmental Corp. (Highlander) performed an electromagnetic (EM-34) terrain conductivity survey. Additionally, Highlander installed eight monitoring wells (MW-1 thru MW-8) from February 1998 to January 1999 in order to further evaluate the extent of affected groundwater.

Texaco submitted a corrective action proposal to the New Mexico Office of the State Engineer (NMOSE) to recover groundwater from recovery well (RW-1). From September 2001 to October 2003, nine additional monitor wells were installed under the direction of Larson and Associates, Inc. (LA). On September 9, 2004, the New Mexico State Engineer Office issued Permit CP 00886 to Divert Underground Waters from recovery well RW-1. Monitor wells (MW-18 thru MW-20) were installed under the direction of LA in November 2004. A groundwater recovery system was installed at RW-1 under CRA's direct supervision in September 2006. At the request of the NMOCD, two additional groundwater monitoring wells were installed at the Site on November 19, 2007 to evaluate the extent of affected groundwater. Currently, the Site is monitored semi-annually by CRA.

## 2.0 REGULATORY FRAMEWORK

The NMOCD guidelines require groundwater to be analyzed for constituents of concern (COC) as defined by the NMWQCC regulations. The NMWQCC regulations provide Human Health Standards for Groundwater. The COC in affected groundwater at the Site is chloride. In this report, groundwater analytical results for chloride and four additional analytes are compared to the NMWQCC standards shown in the following table:

Analyte	NMWQCC Standard for Groundwater (mg/L)
Chloride	250
Fluoride	1.6
Nitrate (NO <sub>3</sub> as N)	10
Sulfate (SO <sub>4</sub> )	600
Total Dissolved Solids (TDS)	1,000

### 3.0 2008 GROUNDWATER MONITORING

Currently, groundwater at the Site is monitored semi-annually with a network of 26 monitor wells.

Prior to purging the monitor wells, static fluid levels were measured with an electric interface probe to the nearest hundredth of a foot. After recording fluid levels, the wells were handbailed and purged of three casing volumes of groundwater. Water quality parameters pH, temperature and conductivity were recorded during purging. All non-disposable groundwater sampling equipment was decontaminated with a soap (Liquinox®) and potable water wash, a potable water rinse and a final de-ionized water rinse. Subsequent to the purging, groundwater samples were collected with new disposable PVC bailers. Laboratory-supplied sample containers were filled directly from the bailers.

The groundwater samples were placed on ice in insulated coolers and chilled to a temperature of approximately 4°C (40°F). The coolers were sealed for shipment and proper chain-of-custody documentation accompanied the samples to TestAmerica Laboratories, Inc. (TestAmerica) for analysis of major cations, anions and TDS by Environmental Protection Agency (EPA) Methods 300.0 and 6010B, SM 2320B, and 2540C. The fluids recovered during the sampling events were containerized and subsequently disposed at an OCD-permitted salt water disposal (SWD) facility by Nabors.

#### 3.1 POTENTIOMETRIC SURFACE AND GRADIENT

Groundwater elevation data are presented in TABLE I and generally fall within historical ranges. Groundwater gradient maps for February and August 2008 are presented in FIGURES 3 and 4, respectively. Depth to groundwater ranged from 58.83-feet to 81.90-feet below top of casing on February 18, 2008 and from 58.84-feet to 81.99-feet below top of casing on August 11, 2008. Groundwater flow at the Site is to the southeast at an average gradient of 0.013-ft/ft.

#### 3.2 ANALYTICAL RESULTS

The 2008 analytical results generally fall within historical ranges, and are summarized in TABLE II. All wells sampled in 2008 had at least one COC (Chloride, Fluoride, Nitrate-N, Sulfate or Total Dissolved Solids) that exceeded NMWQCC standards and are shown on FIGURE 5. Isopleth maps approximating chloride concentrations for both February and August 2008 events are shown on FIGURES 6 and 7, respectively.

Groundwater COCs detected above the NMWQCC standards are highlighted in TABLE II and are listed below:

- Chloride was detected at concentrations above the NMWQCC standard (250 mg/L) in all 24 wells sampled in February 2008, 22 wells in August 2008;
- Fluoride was detected at concentrations above the NMWQCC standard (1.60 mg/L) in 12 wells during February and in 15 wells during August;
- Sulfate was detected at concentrations above the NMWQCC standard (600 mg/L) in three wells during February and in four wells during August; and
- Total Dissolved Solids were detected at concentrations above the NMWQCC standard (1,000mg/L) in 21 wells during both February & August events.

Two duplicate samples were collected from RW-1 during the February 2008 and the August 2008 events. Duplicate constituents were detected without any significant deviations. Copies of the certified analytical reports and chain-of-custody documentation are attached in APPENDIX A.

4.0 CORRECTIVE ACTION

Excluding brief periods for routine maintenance, the groundwater recovery system in RW-1 operated continuously from January to December 2008.

Operation and maintenance (O&M) activities were performed on a weekly basis. In 2008, approximately 3799 bbls have been recovered from RW-1 and 4374 bbls since the system was installed.

## 5.0 SUMMARY

Based on historical data review and groundwater monitoring activities performed at the Site, CRA presents the following summary:

- Groundwater at the Site is monitored semi-annually with a network of 26 monitor wells;
- Depth to groundwater ranged 58.83-feet to 81.90-feet below top of casing on February 18, 2008 and from 58.84-feet to 81.99-feet below top of casing on August 11, 2008. Groundwater flow at the Site is to the southeast at a gradient of 0.013-ft/ft;
- The analytical results generally fall within historical ranges. All wells sampled in 2008 had at least one COC (Chloride, Fluoride, Nitrate-N, Sulfate or Total Dissolved Solids) that exceeded NMOCD standards; and
- Excluding brief periods for routine maintenance, the groundwater recovery system in RW-1 operated continuously from January to December 2008. Operation and maintenance (O&M) activities were performed on a weekly basis. In 2008, approximately 3799 bbls have been recovered from RW-1 and 4374 bbls since the system was installed.

6.0 PLANNED ACTIVITIES

Planned activities at the G.L. Erwin "A & B" Federal NCT-2 Tank Battery include:

- Continue to perform semi-annual groundwater monitoring and sampling events; and
- Continue to recover groundwater from RW-1 in accordance to permit requirements.

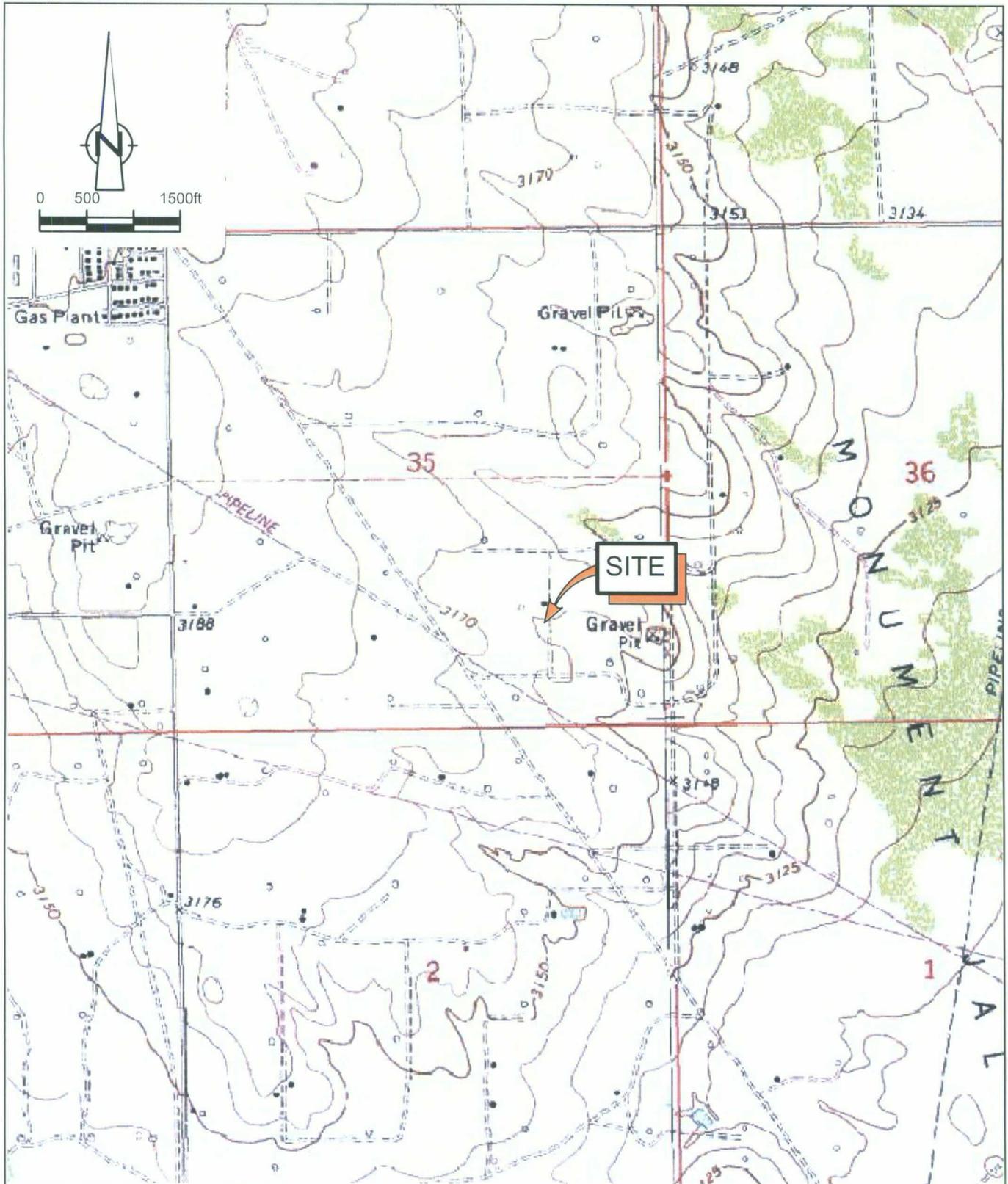
All of Which is Respectfully Submitted,  
**CONESTOGA-ROVERS & ASSOCIATES**



Todd Wells  
Project Manager



Thomas C. Larson  
Operations Manager



SOURCE: USGS 7.5 MINUTE QUADRANGLE;  
JAL NW, NEW MEXICO (1977)

32° 10' 11.9" N, 103° 07' 46.9" W

figure 1

**SITE LOCATION MAP**  
**G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY**  
**LEA COUNTY, NEW MEXICO**  
*Chevron Environmental Management Company*





figure 2

**SITE DETAILS MAP**  
**G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY**  
**LEA COUNTY, NEW MEXICO**  
*Chevron Environmental Management Company*

**LEGEND**

- MONITOR WELL LOCATION
- RECOVERY WELL LOCATION
- WATER WELL LOCATION
- GROUNDWATER RECOVERY SYSTEM

**NOTES:**

1. MONITOR WELL LOCATIONS AND TOP OF CASING ELEVATIONS ARE BASED ON A PROFESSIONAL SURVEY CONDUCTED BY PIPER SURVEYING COMPANY IN FEBRUARY AND JULY 1998, OCTOBER 2001, OCTOBER 2003, AND DECEMBER 2004.
2. PUMP AND TREAT GROUNDWATER RECOVERY SYSTEM WAS INSTALLED IN SEPTEMBER 2006.
3. MONITOR WELLS MW-21 AND MW-22 WERE INSTALLED ON NOVEMBER 19, 2007 AND TOP OF CASING ELEVATIONS ARE BASED ON A PROFESSIONAL SURVEY CONDUCTED BY WEST COMPANY IN DECEMBER 2007.





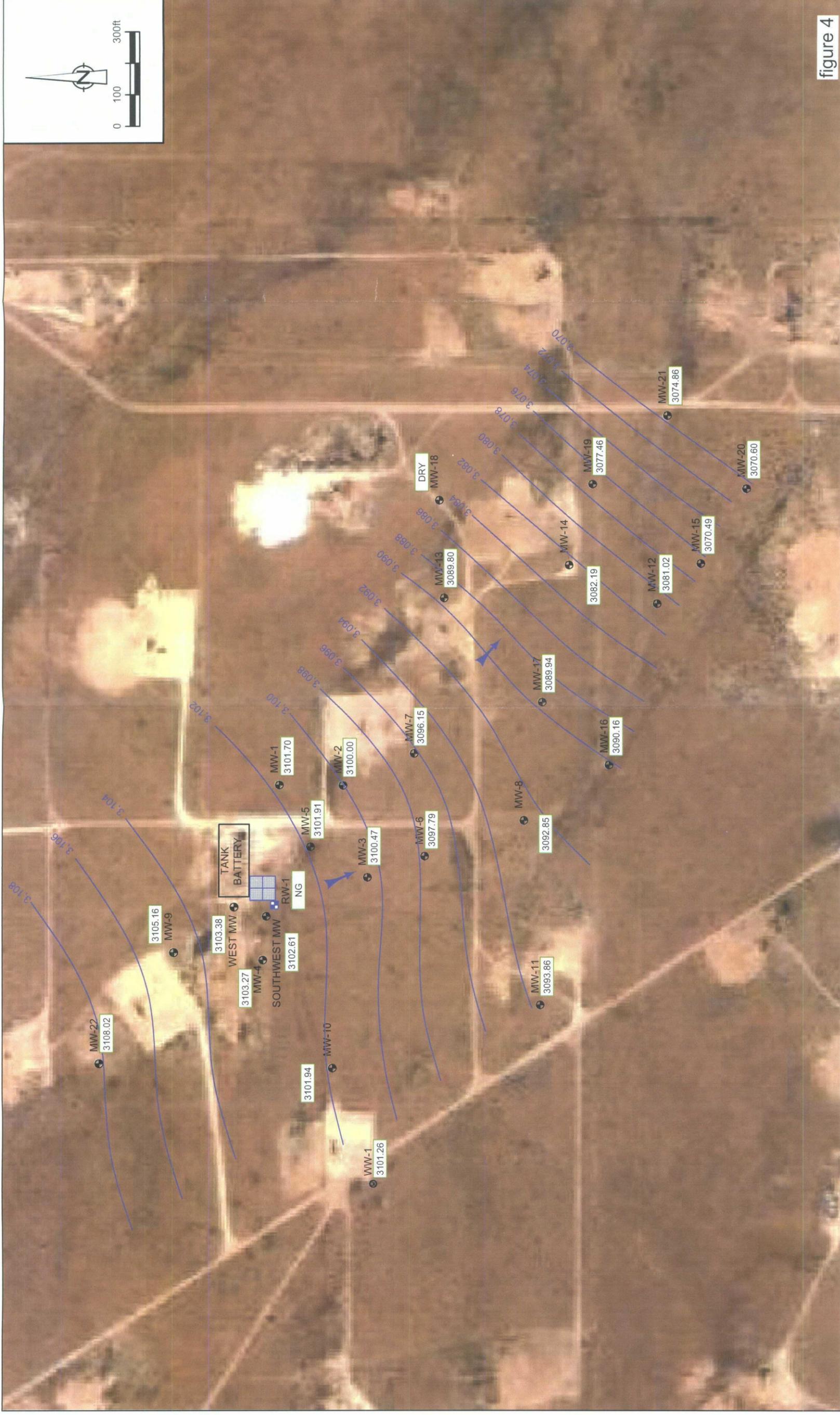


figure 4

**GROUNDWATER GRADIENT MAP - AUGUST 2008**  
**G.L. ERWIN "A&B" FEDERAL TANK BATTERY**  
**LEA COUNTY, NEW MEXICO**  
*Chevron Environmental Management Company*

- NOTES:**
1. GROUNDWATER LEVEL ELEVATIONS WERE COLLECTED AUGUST 11, 2008.
  2. CONTOURS ARE AT TWO-FOOT INTERVALS.
  3. ELEVATION FOR MONITOR WELLS MW-15 AND MW-21 WERE NOT USED TO DETERMINE GROUNDWATER CONTOURS.

- LEGEND:**
- MONITOR WELL LOCATION
  - RECOVERY WELL LOCATION
  - WATER WELL LOCATION
  - GROUNDWATER RECOVERY SYSTEM
  - DIRECTION OF GROUNDWATER FLOW
  - GROUNDWATER LEVEL ELEVATION
  - NOT GAUGED
  - GROUNDWATER LEVEL ELEVATION CONTOUR





figure 5

**CHLORIDE CONCENTRATION MAP - FEBRUARY AND AUGUST 2008**  
**G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY**  
 LEA COUNTY, NEW MEXICO

*Chevron Environmental Management Company*

**LEGEND**

- MONITOR WELL LOCATION
- RECOVERY WELL LOCATION
- WATER WELL LOCATION
- GROUNDWATER RECOVERY SYSTEM

**NOTE:**

1. CHLORIDE ANALYSIS BY EPA METHOD 300.0.

**Concentrations in mg/L**

Sample Location	Sample Date	Chloride	Exceedance
MW-1	8/24/2008	180/180	

Duplicate Sample Concentration



figure 6

**CHLORIDE ISOCONCENTRATION MAP - FEBRUARY 2008**  
**G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY**  
**LEA COUNTY, NEW MEXICO**  
*Chevron Environmental Management Company*

- LEGEND:**
- MONITOR WELL LOCATION
  - RECOVERY WELL LOCATION
  - WATER WELL LOCATION
  - GROUNDWATER RECOVERY SYSTEM
- NOTES:**
1. CHLORIDE ANALYSIS BY EPA METHOD 300.0.
  2. GROUNDWATER SAMPLES WERE COLLECTED ON FEBRUARY 20-21, 2008.



figure 7

**CHLORIDE ISOCONCENTRATION MAP - AUGUST 2008**  
**G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY**  
**LEA COUNTY, NEW MEXICO**  
*Chevron Environmental Management Company*

Legend

- MONITOR WELL LOCATION
- RECOVERY WELL LOCATION
- WATER WELL LOCATION
- GROUNDWATER RECOVERY SYSTEM

Sample Data

Sample Location	Sample Date	Chloride (mg/L)	Exceedance
MW-1	8/12/2008	300/400	Exceedance
Duplicate Sample Concentration			

NOTES:

1. CHLORIDE ANALYSIS BY EPA METHOD 300.0.
2. GROUNDWATER SAMPLES WERE COLLECTED ON AUGUST 12-13, 2008.

TABLE I  
GROUNDWATER GAUGING SUMMARY  
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
LEA COUNTY, NEW MEXICO

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )
MW-01 3.161.69	2/4/1998	2	87.70	64.15	---	---	3,097.54	55'-85'
	2/7/2001			61.40	---	---	3,100.29	
	4/30/2002			61.43	---	---	3,100.26	
	10/11/2002			61.43	---	---	3,100.26	
	12/26/2002			61.43	---	---	3,100.26	
	2/17/2003			61.42	---	---	3,100.27	
	5/29/2003			61.58	---	---	3,100.11	
	8/22/2003			61.37	---	---	3,100.32	
	11/5/2003			61.35	---	---	3,100.34	
	2/3/2004			61.34	---	---	3,100.35	
	5/5/2004			61.13	---	---	3,100.56	
	8/2/2004			61.08	---	---	3,100.61	
	11/23/2004			60.61	---	---	3,101.08	
	2/9/2005			60.46	---	---	3,101.23	
	8/4/2005			60.62	---	---	3,101.07	
	2/22/2006			84.60	60.30	---	3,101.39	
	8/24/2006			84.6	60.46	---	3,101.23	
	2/27/2007				60.12	---	3,101.57	
8/23/2007		59.88	---	3,101.81				
2/18/2008	84.59	59.95	---	3,101.74				
8/11/2008	84.59	59.99	---	3,101.70				
MW-02 3.159.89	2/4/1998	2	72.94	61.33	---	---	3,098.56	50'-70'
	2/7/2001			61.45	---	---	3,098.44	
	4/30/2002			61.47	---	---	3,098.42	
	10/11/2002			61.46	---	---	3,098.43	
	12/26/2002			61.52	---	---	3,098.37	
	2/17/2003			61.53	---	---	3,098.36	
	5/29/2003			61.48	---	---	3,098.41	
	8/22/2003			61.41	---	---	3,098.48	
	11/5/2003			61.38	---	---	3,098.51	
	2/3/2004			61.35	---	---	3,098.54	
	5/5/2004			61.20	---	---	3,098.69	
	8/2/2004			61.11	---	---	3,098.78	
	11/23/2004			60.52	---	---	3,099.37	
	2/9/2005			60.45	---	---	3,099.44	
	8/4/2005			66.60	---	---	3,093.29	
	2/22/2006			72.81	60.26	---	3,099.63	
	8/24/2006			72.81	60.42	---	3,099.47	
	2/27/2007				60.04	---	3,099.85	
8/23/2007		59.80	---	3,100.09				
2/18/2008	72.82	59.83	---	3,100.06				
8/11/2008	72.81	59.89	---	3,100.00				
MW-03 3.164.08	2/4/1998	2	73.26	65.18	---	---	3,098.90	50'-70'
	2/7/2001			65.22	---	---	3,098.86	
	4/30/2002			65.11	---	---	3,098.97	
	10/11/2002			65.14	---	---	3,098.94	
	12/26/2002			65.15	---	---	3,098.93	
	2/17/2003			65.15	---	---	3,098.93	
	5/29/2003			65.19	---	---	3,098.89	
	8/22/2003			65.09	---	---	3,098.99	
	11/5/2003			65.09	---	---	3,098.99	
	2/3/2004			65.06	---	---	3,099.02	
	5/5/2004			64.97	---	---	3,099.11	
	8/2/2004			64.54	---	---	3,099.54	
	11/23/2004			64.47	---	---	3,099.61	
	2/9/2005			64.18	---	---	3,099.90	
	8/4/2005			64.30	---	---	3,099.78	
	2/22/2006			73.14	63.93	---	3,100.15	
	8/24/2006			73.14	64.09	---	3,099.99	
	2/27/2007				63.74	---	3,100.34	
8/23/2007		63.54	---	3,100.54				
2/18/2008	73.13	63.55	---	3,100.53				
8/11/2008	73.13	63.61	---	3,100.47				

TABLE I  
GROUNDWATER GAUGING SUMMARY  
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
LEA COUNTY, NEW MEXICO

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )	
MW-04 3,165.65	2/4/1998	2	73.31	63.94	---	---	3,101.71	50'-70'	
	10/19/2000			63.80	---	---	3,101.85		
	2/7/2001			63.78	---	---	3,101.87		
	4/30/2002			63.72	---	---	3,101.93		
	10/11/2002			63.74	---	---	3,101.91		
	12/26/2002			63.74	---	---	3,101.91		
	2/17/2003			63.74	---	---	3,101.91		
	5/29/2003			63.83	---	---	3,101.82		
	8/22/2003			63.71	---	---	3,101.94		
	11/5/2003			63.68	---	---	3,101.97		
	2/3/2004			63.64	---	---	3,102.01		
	5/5/2004			63.55	---	---	3,102.10		
	8/2/2004			63.45	---	---	3,102.20		
	11/23/2004			62.91	---	---	3,102.74		
	2/9/2005			62.83	---	---	3,102.82		
	8/4/2005			63.12	---	---	3,102.53		
	2/23/2006			73.11	62.80	---	---		3,102.85
	8/25/2006			73.11	62.97	---	---		3,102.68
2/27/2007		62.60	---	---	3,103.05				
8/23/2007		62.33	---	---	3,103.32				
2/18/2008	73.1	62.35	---	---	3,103.30				
8/11/2008	73.11	62.38	---	---	3,103.27				
MW-05 3,160.75	2/4/1998	2	73.10	60.33	---	---	3,100.42	50'-70'	
	10/19/2000			60.25	---	---	3,100.50		
	2/7/2001			60.58	---	---	3,100.17		
	4/30/2002			62.27	---	---	3,098.48		
	10/11/2002			60.29	---	---	3,100.46		
	12/26/2002			60.29	---	---	3,100.46		
	2/17/2003			60.30	---	---	3,100.45		
	5/29/2003			60.33	---	---	3,100.42		
	8/22/2003			60.24	---	---	3,100.51		
	11/5/2003			60.24	---	---	3,100.51		
	2/3/2004			60.20	---	---	3,100.55		
	5/5/2004			60.04	---	---	3,100.71		
	8/2/2004			59.97	---	---	3,100.78		
	11/23/2004			59.51	---	---	3,101.24		
	2/9/2005			59.32	---	---	3,101.43		
	8/4/2005			59.55	---	---	3,101.20		
	2/22/2006			72.95	59.22	---	---		3,101.53
	8/24/2006			72.95	59.39	---	---		3,101.36
2/27/2007		59.03	---	---	3,101.72				
8/23/2007		58.84	---	---	3,101.91				
2/18/2008	72.95	58.83	---	---	3,101.92				
8/11/2008	72.95	58.84	---	---	3,101.91				
MW-06 3,164.18	2/7/2001	2	77.24	68.00	---	---	3,096.18	59'-74'	
	4/30/2002			68.10	---	---	3,096.08		
	10/11/2002			68.04	---	---	3,096.14		
	12/26/2002			68.03	---	---	3,096.15		
	2/17/2003			68.03	---	---	3,096.15		
	5/29/2003			68.38	---	---	3,095.80		
	8/22/2003			67.99	---	---	3,096.19		
	11/5/2003			67.99	---	---	3,096.19		
	2/3/2004			67.92	---	---	3,096.26		
	5/5/2004			67.88	---	---	3,096.30		
	8/2/2004			67.78	---	---	3,096.40		
	11/23/2004			67.31	---	---	3,096.87		
	2/9/2005			67.17	---	---	3,097.01		
	8/4/2005			63.13	---	---	3,101.05		
	2/22/2006			77.00	66.72	---	---		3,097.46
	8/24/2006			77.00	66.93	---	---		3,097.25
	2/27/2007				66.58	---	---		3,097.60
	8/27/2007				66.35	---	---		3,097.83
2/18/2008	77.00	66.35	---	---	3,097.83				
8/11/2008	77.00	66.39	---	---	3,097.79				

TABLE I  
GROUNDWATER GAUGING SUMMARY  
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
LEA COUNTY, NEW MEXICO

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )
MW-07 3,162.06	2/7/2001	2	73.45	67.25	---	---	3,094.81	55'-70'
	4/30/2002			67.50	---	---	3,094.56	
	10/11/2002			67.53	---	---	3,094.53	
	12/26/2002			67.53	---	---	3,094.53	
	2/17/2003			67.53	---	---	3,094.53	
	5/29/2003			67.61	---	---	3,094.45	
	8/22/2003			67.49	---	---	3,094.57	
	11/5/2003			67.47	---	---	3,094.59	
	2/3/2004			67.46	---	---	3,094.60	
	5/5/2004			67.44	---	---	3,094.62	
	8/2/2004			67.34	---	---	3,094.72	
	11/23/2004			67.02	---	---	3,095.04	
	2/9/2005			67.74	---	---	3,094.32	
	8/4/2005			66.62	---	---	3,095.44	
	2/22/2006			72.56	---	---	3,095.75	
	8/24/2006			72.56	---	---	3,095.69	
	2/27/2007			66.05	---	---	3,096.01	
8/23/2007	65.87	---	---	3,096.19				
2/18/2008	72.55	---	---	3,096.18				
8/11/2008	72.55	---	---	3,096.15				
MW-08 3,159.66	2/3/1999	2	70.66	68.21	---	---	3,091.45	50'-70'
	2/7/2001			68.30	---	---	3,091.36	
	4/30/2002			68.42	---	---	3,091.24	
	10/11/2002			68.30	---	---	3,091.36	
	12/26/2002			68.30	---	---	3,091.36	
	2/17/2003			68.30	---	---	3,091.36	
	5/29/2003			68.36	---	---	3,091.30	
	8/22/2003			68.26	---	---	3,091.40	
	11/5/2003			68.26	---	---	3,091.40	
	2/3/2004			68.24	---	---	3,091.42	
	5/5/2004			68.24	---	---	3,091.42	
	8/2/2004			68.17	---	---	3,091.49	
	11/23/2004			67.72	---	---	3,091.94	
	2/9/2005			67.41	---	---	3,092.25	
	8/4/2005			67.39	---	---	3,092.27	
	2/22/2006			73.40	---	---	3,092.62	
	8/24/2006			73.40	---	---	3,092.37	
2/27/2007	66.87	---	---	3,092.79				
8/23/2007	66.77	---	---	3,092.89				
2/18/2008	73.40	---	---	3,092.87				
8/11/2008	73.40	---	---	3,092.85				
MW-09 3,167.07	4/30/2002	2	70.39	63.65	---	---	3,103.42	55'-70'
	10/11/2002			63.59	---	---	3,103.48	
	12/26/2002			63.59	---	---	3,103.48	
	2/17/2003			63.60	---	---	3,103.47	
	5/29/2003			63.73	---	---	3,103.34	
	8/22/2003			63.56	---	---	3,103.51	
	11/5/2003			63.55	---	---	3,103.52	
	2/3/2004			63.47	---	---	3,103.60	
	5/5/2004			63.27	---	---	3,103.80	
	8/2/2004			63.24	---	---	3,103.83	
	11/23/2004			62.40	---	---	3,104.67	
	2/9/2005			62.50	---	---	3,104.57	
	8/4/2005			62.89	---	---	3,104.18	
	2/23/2006			69.60	---	---	3,104.59	
	8/25/2006			69.6	---	---	3,104.39	
	2/27/2007			62.23	---	---	3,104.84	
	8/23/2007			61.88	---	---	3,105.19	
2/18/2008	69.59	---	---	3,105.17				
8/11/2008	69.59	---	---	3,105.16				

TABLE I  
GROUNDWATER GAUGING SUMMARY  
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
LEA COUNTY, NEW MEXICO

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )	
MW-10 3,170.99	4/30/2002	2	69.16	70.35	---	---	3,100.64	54'-69'	
	10/11/2002			70.49	---	---	3,100.50		
	12/26/2002			70.50	---	---	3,100.49		
	2/17/2003			70.50	---	---	3,100.49		
	5/29/2003			70.37	---	---	3,100.62		
	8/22/2003			70.47	---	---	3,100.52		
	11/5/2003			70.49	---	---	3,100.50		
	2/3/2004			70.43	---	---	3,100.56		
	5/5/2004			70.38	---	---	3,100.61		
	8/2/2004			70.26	---	---	3,100.73		
	11/23/2004			69.78	---	---	3,101.21		
	2/9/2005			NC	---	---	---		
	8/4/2005			69.89	---	---	3,101.10		
	2/22/2006			71.95	69.59	---	---		3,101.40
	8/25/2006			71.95	69.65	---	---		3,101.34
	2/27/2007				69.29	---	---		3,101.70
	8/23/2007				69.06	---	---		3,101.93
2/18/2008	71.94	69.06	---	---	3,101.93				
8/11/2008	71.94	69.05	---	---	3,101.94				
MW-11 3,168.24	4/30/2002	2	72.78	DRY	---	---	DRY	58'-73'	
	10/11/2002			DRY	---	---	DRY		
	12/26/2002			DRY	---	---	DRY		
	2/17/2003			DRY	---	---	DRY		
	5/29/2003			DRY	---	---	DRY		
	8/22/2003			DRY	---	---	DRY		
	11/5/2003			DRY	---	---	DRY		
	2/3/2004			DRY	---	---	DRY		
	5/5/2004			DRY	---	---	DRY		
	8/2/2004			DRY	---	---	DRY		
	11/23/2004			DRY	---	---	DRY		
	2/9/2005			DRY	---	---	DRY		
	8/4/2005			61.91	---	---	3,106.33		
	2/22/2006			75.45	74.71	---	---		3,093.53
	8/24/2006			75.45	74.71	---	---		3,093.53
	2/27/2007				74.51	---	---		3,093.73
	8/23/2007				74.38	---	---		3,093.86
2/18/2008	75.45	74.21	---	---	3,094.03				
8/11/2008	75.44	74.38	---	---	3,093.86				
MW-12 3,152.48	4/30/2002	2	74.37	72.80	---	---	3,079.68	59'-74'	
	10/11/2002			72.81	---	---	3,079.67		
	12/26/2002			72.82	---	---	3,079.66		
	2/17/2003			72.82	---	---	3,079.66		
	5/29/2003			72.77	---	---	3,079.71		
	8/22/2003			72.81	---	---	3,079.67		
	11/5/2003			72.81	---	---	3,079.67		
	2/3/2004			72.83	---	---	3,079.65		
	5/5/2004			72.78	---	---	3,079.70		
	8/2/2004			72.81	---	---	3,079.67		
	11/23/2004			72.69	---	---	3,079.79		
	2/9/2005			72.83	---	---	3,079.65		
	8/4/2005			72.48	---	---	3,080.00		
	2/22/2006			77.60	72.15	---	---		3,080.33
	8/24/2006			77.60	71.91	---	---		3,080.57
	2/27/2007				71.75	---	---		3,080.73
	8/23/2007				71.51	---	---		3,080.97
2/18/2008	77.60	71.42	---	---	3,081.06				
8/11/2008	77.60	71.46	---	---	3,081.02				

**TABLE I**  
**GROUNDWATER GAUGING SUMMARY**  
**CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY**  
**G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY**  
**SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST**  
**LEA COUNTY, NEW MEXICO**

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )	
MW-13 3,154.92	4/30/2002	2	67.90	66.97	---	---	3,087.95	53'-68'	
	10/11/2002			66.38	---	---	3,088.54		
	12/26/2002			66.37	---	---	3,088.55		
	2/17/2003			66.37	---	---	3,088.55		
	5/29/2003			66.68	---	---	3,088.24		
	8/22/2003			67.06	---	---	3,087.86		
	11/5/2003			67.36	---	---	3,087.56		
	2/3/2004			67.11	---	---	3,087.81		
	5/5/2004			67.05	---	---	3,087.87		
	8/2/2004			67.21	---	---	3,087.71		
	11/23/2004			66.82	---	---	3,088.10		
	2/9/2005			66.50	---	---	3,088.42		
	8/4/2005			66.11	---	---	3,088.81		
	2/22/2006			70.54	65.73	---	---		3,089.19
	8/24/2006			70.54	65.45	---	---		3,089.47
2/27/2007		65.22	---	---	3,089.70				
8/23/2007		65.06	---	---	3,089.86				
2/18/2008	70.54	65.10	---	---	3,089.82				
8/11/2008	70.54	65.12	---	---	3,089.80				
MW-14 3,151.91	11/5/2003	2	92.43	71.60	---	---	3,080.31	79.5'-89.5'	
	2/3/2004			71.62	---	---	3,080.29		
	5/5/2004			71.67	---	---	3,080.24		
	8/2/2004			71.69	---	---	3,080.22		
	11/23/2004			71.60	---	---	3,080.31		
	2/9/2005			71.30	---	---	3,080.61		
	8/4/2005			70.90	---	---	3,081.01		
	2/22/2006			92.30	70.49	---	---		3,081.42
	8/24/2006			92.3	70.24	---	---		3,081.67
	2/27/2007				70.05	---	---		3,081.86
	8/23/2007				69.78	---	---		3,082.13
	2/18/2008			92.29	69.68	---	---		3,082.23
8/11/2008	92.30	69.72	---	---	3,082.19				
MW-15 3,152.48	11/5/2003	2	87.45	DRY	---	---	DRY	64.5'-84.5'	
	2/3/2004			DRY	---	---	DRY		
	5/5/2004			DRY	---	---	DRY		
	8/2/2004			DRY	---	---	DRY		
	11/23/2004			DRY	---	---	DRY		
	2/9/2005			DRY	---	---	DRY		
	8/4/2005				86.91	---	---		3,065.57
	2/22/2006			87.40	86.54	---	---		3,065.94
	8/24/2006			87.40	86.34	---	---		3,065.66
	2/27/2007				85.73	---	---		3,066.75
	8/23/2007				85.26	---	---		3,067.22
	2/18/2008			87.40	81.90	---	---		3,070.58
8/11/2008	87.42	81.99	---	---	3,070.49				
MW-16 3,157.25	11/5/2003	2	77.22	65.68	---	---	3,091.57	59.5'-74.5'	
	2/3/2004			68.67	---	---	3,088.58		
	5/5/2004			68.69	---	---	3,088.56		
	8/2/2004			68.65	---	---	3,088.60		
	11/23/2004			68.10	---	---	3,089.15		
	2/9/2005			67.53	---	---	3,089.72		
	8/4/2005			67.77	---	---	3,089.48		
	2/22/2006			74.42	67.24	---	---		3,090.01
	8/24/2006			74.42	67.66	---	---		3,089.59
	2/27/2007				67.09	---	---		3,090.16
	8/23/2007				67.10	---	---		3,090.15
	2/18/2008			74.42	67.03	---	---		3,090.22
	8/11/2008			74.42	67.09	---	---		3,090.16

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GROUNDWATER GAUGING SUMMARY  
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
LEA COUNTY, NEW MEXICO

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )	
MW-17 3,158.37	11/5/2003	2	79.37	69.51	---	---	3,088.86	57'-77'	
	2/3/2004			69.53	---	---	3,088.84		
	5/5/2004			69.52	---	---	3,088.85		
	8/2/2004			70.12	---	---	3,088.25		
	11/23/2004			69.31	---	---	3,089.06		
	2/9/2005			69.04	---	---	3,089.33		
	8/4/2005			68.90	---	---	3,089.47		
	2/22/2006			80.10	68.72	---	---		3,089.65
	8/24/2006			80.10	68.78	---	---		3,089.59
	2/27/2007			68.55	---	---	---		3,089.82
	8/23/2007			68.50	---	---	---		3,089.87
2/18/2008	80.10	68.41	---	---	3,089.96				
8/11/2008	80.10	68.43	---	---	3,089.94				
MW-18 3,151.08	11/23/2004	2	76.98	DRY	---	---	DRY	54.5'-74.5'	
	2/9/2005			DRY	---	---	DRY		
	8/4/2005			DRY	---	---	DRY		
	2/22/2006			78.43	DRY	---	---		DRY
	8/24/2006			78.43	DRY	---	---		DRY
	2/27/2007			DRY	---	---	---		DRY
	8/23/2007			DRY	---	---	---		DRY
	2/18/2008			78.44	DRY	---	---		DRY
	8/11/2008			78.44	DRY	---	---		DRY
MW-19 3,147.79	11/23/2004	2	104.41	72.63	---	---	3,075.16	82.5'-102.5'	
	2/9/2005			72.36	---	---	3,075.43		
	8/4/2005			72.18	---	---	3,075.61		
	2/22/2006			105.55	71.83	---	---		3,075.96
	8/24/2006			105.55	71.57	---	---		3,076.22
	2/27/2007			71.28	---	---	---		3,076.51
	8/23/2007			70.75	---	---	---		3,077.04
	2/18/2008			105.53	70.29	---	---		3,077.50
	8/11/2008			105.50	70.33	---	---		3,077.46
MW-20 3,151.56	11/23/2004	2	94.94	81.81	---	---	3,069.75	72.5'-92.5'	
	2/9/2005			81.85	---	---	3,069.71		
	8/4/2005			81.81	---	---	3,069.75		
	2/22/2006			92.23	81.71	---	---		3,069.85
	8/24/2006			92.23	81.66	---	---		3,069.90
	2/27/2007			81.39	---	---	---		3,070.17
	8/23/2007			81.20	---	---	---		3,070.36
	2/18/2008			92.21	80.93	---	---		3,070.63
	8/11/2008			92.20	80.96	---	---		3,070.60
MW-21 3,145.87	11/20/2007	2	99.00	71.05	---	---	3,074.82	67'-97'	
	2/18/2008			98.60	70.96	---	---		3,074.91
	8/11/2008			98.60	71.01	---	---		3,074.86
MW-22 3,170.64	11/20/2007	2	68.95	62.35	---	---	3,108.29	46.5'-66.5'	
	2/18/2008			68.60	62.59	---	---		3,108.05
	8/11/2008			68.60	62.62	---	---		3,108.02

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GROUNDWATER GAUGING SUMMARY  
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
LEA COUNTY, NEW MEXICO

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )	
WW-1 3.170.21	4/30/2002			70.21	---	---	3,100.00		
	10/11/2002			69.71	---	---	3,100.50		
	12/26/2002			69.70	---	---	3,100.51		
	2/17/2003			69.70	---	---	3,100.51		
	5/29/2003			67.37	---	---	3,102.84		
	8/22/2003			70.27	---	---	3,099.94		
	11/5/2003			70.23	---	---	3,099.98		
	2/3/2004			70.31	---	---	3,099.90		
	5/5/2004			70.23	---	---	3,099.98		
	8/2/2004			69.47	---	---	3,100.74		
	11/23/2004			69.92	---	---	3,100.29		
	2/9/2005			69.75	---	---	3,100.46		
	8/4/2005			69.89	---	---	3,100.32		
	2/22/2006			69.51	---	---	3,100.70		
	8/25/2006			192.00	69.50	---	---		3,100.71
	2/27/2007			69.20	---	---	---		3,101.01
8/23/2007	68.99	---	---	---	3,101.22				
2/18/2008	192.00	69.00	---	---	3,101.21				
8/11/2008	191.98	68.95	---	---	3,101.26				
West MW 3.164.44	8/22/1997	2	70.43	62.58	---	---	3,101.86		
	2/4/1998			62.50	---	---	3,101.94		
	10/19/2000			62.37	---	---	3,102.07		
	2/7/2001			62.43	---	---	3,102.01		
	4/30/2002			62.37	---	---	3,102.07		
	10/11/2002			62.35	---	---	3,102.09		
	12/26/2002			62.34	---	---	3,102.10		
	2/17/2003			62.34	---	---	3,102.10		
	5/29/2003			62.22	---	---	3,102.22		
	8/22/2003			62.35	---	---	3,102.09		
	11/5/2003			62.31	---	---	3,102.13		
	2/3/2004			62.27	---	---	3,102.17		
	5/5/2004			62.11	---	---	3,102.33		
	8/2/2004			62.01	---	---	3,102.43		
	11/23/2004			61.40	---	---	3,103.04		
	2/9/2005			61.30	---	---	3,103.14		
	8/4/2005			61.61	---	---	3,102.83		
	2/23/2006			67.28	61.24	---	---		3,103.20
	8/25/2006			67.28	61.43	---	---		3,103.01
	2/27/2007			61.03	---	---	---		3,103.41
8/23/2007	60.74	---	---	---	3,103.70				
2/18/2008	67.28	60.97	---	---	3,103.47				
8/11/2008	67.28	61.06	---	---	3,103.38				
Southwest MW 3.164.54	8/22/1997	2	70.45	63.25	---	---	3,101.29		
	2/4/1998			63.21	---	---	3,101.33		
	10/19/2000			63.06	---	---	3,101.48		
	2/7/2001			63.10	---	---	3,101.44		
	4/30/2002			63.06	---	---	3,101.48		
	10/11/2002			62.72	---	---	3,101.82		
	12/26/2002			62.70	---	---	3,101.84		
	2/17/2003			62.70	---	---	3,101.84		
	5/29/2003			62.92	---	---	3,101.62		
	8/22/2003			63.04	---	---	3,101.50		
	11/5/2003			63.03	---	---	3,101.51		
	2/3/2004			62.99	---	---	3,101.55		
	5/5/2004			62.90	---	---	3,101.64		
	8/2/2004			62.71	---	---	3,101.83		
	11/23/2004			62.17	---	---	3,102.37		
	2/9/2005			62.05	---	---	3,102.49		
	8/4/2005			62.33	---	---	3,102.21		
	2/23/2006			70.16	61.98	---	---		3,102.56
	8/25/2006			70.16	62.17	---	---		3,102.37
	2/27/2007			61.78	---	---	---		3,102.76
8/23/2007	61.52	---	---	---	3,103.02				
2/18/2008	70.16	61.9	---	---	3,102.64				
8/11/2008	70.16	61.93	---	---	3,102.61				

TABLE I  
GROUNDWATER GAUGING SUMMARY  
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
LEA COUNTY, NEW MEXICO

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )
RW-1 3,163.52	1/14/1999	4	76.30	50.85	---	---	3,112.67	53'-73'
	10/19/2000			62.33	---	---	3,101.19	
	4/30/2002			62.28	---	---	3,101.24	
	10/11/2002			62.27	---	---	3,101.25	
	12/26/2002			62.26	---	---	3,101.26	
	2/17/2003			62.26	---	---	3,101.26	
	5/29/2003			62.34	---	---	3,101.18	
	8/22/2003			62.25	---	---	3,101.27	
	11/5/2003			62.25	---	---	3,101.27	
	2/3/2004			62.20	---	---	3,101.32	
	5/5/2004			62.12	---	---	3,101.40	
	8/2/2004			61.96	---	---	3,101.56	
	11/23/2004			61.46	---	---	3,102.06	
	2/9/2005			61.30	---	---	3,102.22	
	8/4/2005			61.51	---	---	3,102.01	
	2/23/2006			75.45	61.20	---	3,102.32	
	8/25/2006			75.45	61.36	---	3,102.16	
	2/27/2007				62.44	---	3,101.08	
	8/23/2007				NG	---	---	
	2/18/2008				NG	---	---	

Notes:

<sup>1</sup>TOC - Top of Casing

<sup>2</sup>MSL - Mean Sea Level

<sup>3</sup>BCS - Below ground surface

<sup>4</sup>NG - Not Gauged

<sup>5</sup>Professional Survey conducted by Piper Surveying Company in February & July 1998, October 2001, October 2003, & December 2004.

TABLE II

GROUNDWATER ANALYTICAL SUMMARY  
 CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
 C.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
 SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
 LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)	
		NMWWCC Standard				10.00	800.0					1000			
MW-1	8/22/97	<2.0	220	233	..	..	92	..	..	..	..	..	276	..	
	2/17/98	<1.0	136	440	2.1	2.8	70	15.7	55.8	11.4	115	1,200	..	..	
	2/7/01	<1.0	144	428	1.6	3.06	72.5	103	38.7	8.68	105	..	..	<1.00	
	05/03/02	<0.1	155	230	..	..	..	69.3	24.8	7.45	125	737	..	<0.10	
	10/11/02	<0.1	149	248	..	..	..	109	27.4	5.16	129	728	..	<0.10	
	12/27/02	<0.1	147	213	..	..	..	114	59.1	5.06	116	713	..	<0.10	
	2/18/03	<0.1	147	213	..	..	..	114	59.1	5.06	116	713	..	<0.10	
	6/2/03	<1.0	132	434	1.77	2.99	73.3	135	47.8	8.62	118	1,320	..	<1.00	
	8/25/03	<1.0	144	279	1.76	3.39	73.3	92.7	31.3	7.17	118	856	..	<1.00	
	11/5/03	<1.0	162	330	1.94	3.42	78.9	110	100	37.7	9.03	994	..	<1.00	
	2/4/04	<1.0	142	390	1.92	3.25	71.1	117	43.2	10.2	113	940	..	<1.00	
	5/6/04	<1.00	260	403	1.9	4.8	83.2	61.1	60.2	18.3	8.93	302	1,316	..	<1.00
	8/3/04	<0.1	155	222	..	..	..	104	101	45.5	6.41	127	431	..	<0.10
	8/3/04	<1.00	158	301	..	..	..	104	101	45.5	6.41	127	431	..	<0.10
	2/11/05	<1.00	146	289	2.68	4.3	79.2	97.9	33.5	8.18	108	840	..	<1.00	
	8/5/05	<1.00	156	245	2.08	4.34	89.6	89.6	75.5	26.7	6.99	125	856	..	<1.00
8/24/06	<10.0	160	180	1.8	3.5	83	55.9	55.9	18.7	5.19	104	707	..	<10.0	
2/22/06	<10.0	170	160	1.6	3.5	85	85	57.9	20	5.23	102	840	..	<10.0	
2/22/06	<10.0	300	180	1.8	2.5	81	81	57.4	19.3	4.36	107	660	..	<10.0	
8/24/06	<10.0	170	170	1.8	3.6	81	81	54.6	18.2	<5	103	650	..	<10	
2/28/07	<1.0	138	420	1.4	2.8	76	76	102	34.8	5.37	101	1,810	..	138	
8/23/2007	<1.0	166	300	1.9	2.92	82.1	111	111	39.7	7.34	104	860	..	<5	
2/20/08	<1.53	212	212	1.48	3.06	79.6	79.6	57.8	19.5	5.20	114	692	..	<1.53	
8/12/08	<1.53	287	287	1.44	5.39	144	144	20.6	5.84	6.53	308	1,080	..	<1.53	
MW-2	8/22/97	<2.0	360	423	..	..	141	..	..	..	..	..	124	..	
	2/17/98	<1.0	234	570	2.7	5	130	124	40.7	10.9	359	1,500	..	..	
	2/7/01	<1.0	262	349	2.28	5.36	148	21	6.18	8.52	315	..	..	<1.00	
	05/03/02	<1.0	250	357	..	..	..	18.1	4.92	7.49	329	1,120	..	<0.10	
	10/11/02	10	238	319	..	..	..	142	5.16	6.1	339	1,110	..	<0.10	
	12/27/02	12	228	310	..	..	..	178	6.02	6.3	331	1,070	..	<0.10	
	2/18/03	<0.1	206	769	2.05	4.43	115	176	52.6	9.94	383	1,955	..	<1.00	
	6/2/03	<1.0	242	374	2.07	5.14	142	36.1	10.8	8.49	333	1,240	..	<1.00	
	8/25/03	<1.0	232	498	2.21	5.13	145	68.7	21.1	10.1	327	1,354	..	<1.00	
	11/5/03	<1.0	230	450	2.06	4.97	131	76.1	25.2	10.7	324	1,424	..	<1.00	
	2/4/04	<1.0	230	341	1.79	3.23	75.3	108	38.5	8.38	102	984	..	<1.00	
	5/6/04	<1.00	150	496	..	..	..	144	30.8	34.7	11	472	811	..	<0.10
	8/3/04	<0.1	236	236	..	..	..	130	103	34.5	11.3	324	1,462	..	<1.00
	2/11/05	<1.00	220	604	2.79	5.48	130	103	34.5	11.3	324	1,462	..	<1.00	
	8/5/05	<1.00	228	404	2.24	5.7	134	34.5	10.3	10.7	341	1,120	..	<1.00	
	2/22/06	<10.0	250	320	1.7	5.1	130	19.5	5.84	6.15	259	1,150	..	<10.0	
8/24/06	<10.0	250	290	<2.5	3.78	140	26.3	7.7	4.23	298	1,610	..	<10.0		
2/28/07	<10	240	280	2.1	5.4	140	20.9	6.01	6.74	278	950	..	<10		
8/23/07	<10	226	290	1.7	5.3	140	19	5.6	<5	303	1,280	..	226		
2/20/08	<5	223	441	1.94	5.11	143	242	83.2	11.8	329	1,190	..	<5		
8/12/08	<1.53	287	331	1.54	5.39	144	20.6	5.84	6.53	308	1,080	..	<1.53		

TABLE II

GROUNDWATER ANALYTICAL SUMMARY  
 CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
 G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
 SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
 LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)	
MW-3				250	1.60	10.00	600.0					1000			
		<2.0	410	983			173					2,261	232		
		8.0	278	890	3.4	7.3	200	56.7	18.7	20.4	648	2,100			
		<1.0	298	735	2.84	7.37	213	27.5	8.39	24.7	42.8			<1.00	
		<1.0	146	767	2.9	7.39	207	37.9	11.5	25.5	28.2			<1.00	
		<0.1	288	753			272	29	9.18	20.6	622	1,960			<0.10
		<0.1	288	727			231	27	7.34	19.9	698	1,930			<0.10
		<0.1	277	802	3.07	8.06	203	64.9	7.84	16.4	728	2,720			<1.00
		<1.0	270	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
Dup		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
		<1.0	282	799	3	7.99	198	54.9	18	18.5	597	2,320			<1.00
MW-4		<2.0	510	372			136					1,268			
		<1.0	286	1,200	1.7	4.7	100	248	84.7	24	506	2,600			
		<1.0	250	868	1	4.72	163	137	48.4	40.7	441			<1.00	
		<0.1	342	381			124	9.39	2.48	38.4	405	1,220			
		<0.1	358	372			116	8.82	2.38	37.4	409	1,260			
		<0.1	288	505			114	21.2	4.42	50.6	461	1,450			
		<0.1	158	115			139	55.5	23	4.94	94.4	594			
		<0.1	264	691			118	32.2	7.5	59	474	1,610			
		<1.0	236	1,020	2.00	5.53	79.6	113	29.7	59.8	664	2,670			
		<1.0	192	1,170	<2.00	5.43	72.9	143	35	82.1	616	2,935			
		<1.0	194	1,620	<2.00	5.48	76.6	228	61.4	83.6	629	3,035			
		<1.0	170	1,730	<2.00	5.93	79	277	75.9	108	630	3,380			
		<1.0	158	2,150	<3.00	5.94	88.2	407	99.9	99.7	593	4,090			
		<0.1	130	1,500			125	632	124	134	832	6,810			
		<1.00	136	4,520	<1.00		5.19	127	1060	289	156	9,030			
	<1.00	132	6,380	<1.00		5.34	166	1650	375	142	13,200				
	<10.0	130	9,100	<2.5		10	220	1510	326	141	10,700				
	<10.0	140	12,000	<5		6.13	290	1550	364	136	17,900				
	<10	170	10,000	<250		<200	<2000	1550	310	160	21,800				
	<10	167	10,000	0.3		9	490	1630	443	112	26,000				
	<5	210	8,220	1.33 B		6.05	587	1200	372	143	18,200				
	<5	263	6,270	<1.5		6.64	607	770	209	97.3	15,100				

TABLE II

GROUNDWATER ANALYTICAL SUMMARY  
 CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
 G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
 SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
 LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
MW-5	8/22/97			250	1.60	10.00	600.0					1000		
	2/17/98	<2.0	360	408			151					1,219	116	
	2/17/01	<1.0	214	570	1.6	4.8	140	123	40.8	20.3	331	1,500		
	05/03/02	<1.0	238	335	0.96	5.36	162	37.3	11.1	27.3	287			<1.00
	10/11/02	<0.1	232	337				173	31.8	20.7	305	1,100		<0.10
	12/27/02	<0.1	232	337				171	31.3	20.6	319	1,210		<0.10
	2/18/03	<1.0	210	319				176	27.2	16.5	231	1,110		<0.10
	6/2/03	<1.0	196	588	1.23	4.86	142	132	40.5	21.2	364	1,644		<0.10
	8/26/03	<1.0	210	447	1.32	4.85	141	95.1	29.3	23.4	291	1,480		<1.00
	11/6/03	<1.0	214	456	1.43	5.11	152	94	29.3	24.8	282	1,430		<1.00
	2/4/04	<1.0	206	504	1.38	5.31	147	95.1	31.4	27.3	289	1,410		<1.00
	5/17/04	<1.00	222	381	1.02	5.98	151	55.9	16.3	25.7	301	1,250		<1.00
	5/17/04	<1.00	242	330	1.04	5.75	152	50.7	14.6	27.4	292	1,168		<1.00
	8/3/04	<0.1	229	461				155	47.9	31.3	435	968		<0.10
	2/11/05	<1.0	288	408	2.58	8.36	243	46.2	13.3	30.6	433	1,598		<1.0
	8/4/05	<1.00	256	423	1.83	6.82	201	60.5	18.6	20.3	354	1,334		<1.00
	8/4/05	<1.00	242	394	1.82	6.74	200	49.2	14.8	21.5	341	1,220		<1.00
2/22/06	<10.0	220	800	1.3	6.6	160	222	69.4	14	274	2,670		<10.0	
8/24/06	<10.0	190	930	<5	5.09	140	145	47.6	13.1	295	1,280		<10.0	
2/28/07	<1.0	300	300	730	3.5	5.2	340	36.9	10.6	18.4	301	1,310	<1.0	
8/23/2007	<1.0	115	360	1.8	5.2	170	50.1	18.4	16.4	291	2,500		115	
2/20/08	<5	255	505	2.9	5.61	168	127	42.1	19.6	353	1,500		<5	
8/13/08	<5	220	438	1.77	6.2	191	62.8	19.3	23.9	362	1,300		<5	
MW-6	2/17/01	<1.0	200	1,800	3.3	5.4	140	323	108	18.8	637	3,800		
	05/02/02	<1.0	264	503	3.68	7.04	183	24.9	7.29	17.4	475			<1.00
	10/14/02	<0.1	262	620			206	18.6	5.34	17.5	556	1,670		<0.10
	12/27/02	36	218	620			192	21.2	6.08	13.6	584	1,650		<0.10
	2/18/03	16	238	638			298	22.1	6.43	11.8	524	1,700		<0.10
	6/2/03	<1.0	244	772	3.24	6.62	181	68.7	23.3	14.4	614	2,040		<1.00
	8/26/03	<1.0	246	607	2.95	6.65	179	35.9	11.6	12.2	525	2,370		<1.00
	11/6/03	<1.0	250	649	3.28	6.89	191	46	13.9	18.1	503	1,932		<1.00
	2/4/04	<1.0	266	713	3.15	7.2	189	48.9	15.4	19.9	517	2,210		<1.00
	5/17/04	<1.00	266	696	2.92	6.71	182	54.8	16.1	16	503	2,095		<1.00
	8/3/04	<0.1	260	718				21.7	21.7	21.7	825	1,430		<0.10
	2/11/05	<1.00	270	660	3.76	7.84	192	30.1	9.13	19.5	531	1,774		<1.00
	8/4/05	<1.00	268	764	3.16	7.83	206	56.6	18.8	15.3	576	1,650		<1.00
2/22/06	<10.0	270	610	2.4	7.9	180	23.9	7.41	10.9	380	1,570		<10.0	
8/24/06	<10.0	260	590	3	5.96	170	108	6.14	9.38	448	1,880		<10.0	
2/28/07	<1.0	280	530	3	7.8	170	21	6.14	12.8	397	1,550		<1.0	
8/23/2007	<1.0	265	1,100	2.3	7.6	29.8	29.8	11.7	8.35	440	3,970		265	
2/20/08	<5	227	799	3.05	7.43	181	163	62.4	15.7	492	1,930		<5	
8/13/08	<5	238	563	2.56	7.83	176	22.6	6.57	14.4	558	1,640		<5	

TABLE II

GROUNDWATER ANALYTICAL SUMMARY  
 CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
 G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
 SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
 LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
MW-7	2/7/01	<1.0	238	250	1.60	10.00	600.0	80.3	27.3	10.4	326	1,300	---	---
	05/02/02	<1.0	244	500	3.2	4.1	100	46.6	17	8.42	307	---	---	<1.00
	10/11/02	<0.1	242	408	---	---	128	39.7	13.5	6.7	316	1,120	---	<0.10
	12/27/02	<0.1	232	452	---	---	109	56.2	19.2	5.82	353	1,220	---	<0.10
	2/17/03	<0.1	200	603	---	---	134	90.6	30.9	5.86	339	1,440	---	<0.10
	6/2/03	<1.0	242	388	3.23	4.33	115	39.5	12.5	6.16	370	1,216	---	<1.00
	8/25/03	<1.0	232	367	2.77	4.07	105	39.3	12.3	7.14	309	1,244	---	<1.00
	11/5/03	<1.0	240	343	3.08	4.16	117	36.6	11.4	7.67	304	1,186	---	<1.00
	2/4/04	<1.0	238	355	3.04	4.19	117	34.7	10.8	7.63	298	1,170	---	<1.00
	5/6/04	<1.00	262	320	3.1	4.25	112	30.7	9.87	7.95	298	1,138	---	<1.00
	8/3/04	<0.1	248	328	2.9	---	112	35.2	10.3	6.81	282	1,172	---	<1.00
	2/11/05	<1.00	238	332	3.76	---	126	22.8	12.1	7.55	436	734	---	<1.00
	8/5/05	<1.00	240	240	4.30	3.1	4.36	31.5	31.5	9.99	296	1,128	---	<1.00
	8/5/05	<1.00	236	387	3.14	4.3	3.14	38.7	38.7	12.5	315	1,100	---	<1.00
	2/22/06	<10.0	290	240	2.6	3.3	120	30.6	9.98	4.89	227	1,120	---	<10.0
	8/24/06	<10.0	260	230	3.1	2.97	110	23.3	7.82	2.96	245	952	---	<10.0
	2/28/07	<10	270	240	3.3	3.6	3.6	100	21.3	6.57	<5	230	885	---
8/25/2007	<10	261	250	2.7	3.2	3.2	110	18.8	8	<5	247	2,320	---	261
2/20/08	<5	251	269	2.4	3.18	3.18	122	37.6	12.4	5.41	261	930	---	<5
8/13/08	<5	274	251	2.41	3.21	3.21	121	25	7.64	4.86	273	887	---	<5
MW-S	2/7/01	20	240	900	3.2	6.6	160	79.4	24.5	12.7	604	2,100	---	---
	05/02/02	<1.0	236	818	2.65	6.68	168	94.5	29.2	13	527	---	---	<1.00
	10/14/02	<0.1	250	842	---	---	194	52.4	20.4	10.8	597	1,920	---	<0.10
	12/27/02	<0.1	233	833	---	---	173	59.8	20	8.64	627	2,000	---	<0.10
	2/18/03	<0.1	213	833	---	---	185	53	17.6	7.13	489	1,930	---	<0.10
	6/2/03	<1.0	244	777	3.29	6.82	173	60	18.9	9.47	630	1,968	---	<1.00
	8/25/03	<1.0	244	738	2.85	6.42	159	59.4	17.3	11.4	534	1,996	---	<1.00
	11/7/03	<1.0	248	722	3.27	6.65	171	58.1	17.9	12.2	525	1,972	---	<1.00
	2/4/04	<1.0	254	764	3.77	7.85	161	55.2	18.2	13.2	522	2,038	---	<1.00
	5/6/04	8	262	774	3.36	7.43	164	56.2	16.9	10.7	501	1,968	---	<1.00
	8/4/04	<0.1	246	771	---	---	222	28.6	21.5	11	707	1,530	---	<1.00
	2/11/05	<1.00	238	818	4.28	8.46	167	58.3	19	13.2	543	2,080	---	<1.00
	8/5/05	<1.00	236	888	3.29	7.66	184	71.5	23.3	11.7	574	2,230	---	<1.00
	2/22/06	<10.0	239	810	2.4	7.9	170	55.1	18	8.05	390	1,740	---	<10.0
	8/24/06	<10.0	280	710	3.2	5.51	170	51.2	16.5	6	470	926	---	<10.0
	2/28/07	<10	260	740	3.3	7.3	170	68.3	20.7	8.59	381	1,780	---	<10
	8/22/2007	<10	259	700	3	7.4	170	49.1	18.5	5.35	449	1,980	---	259
2/20/08	<5	240	711	3.66	7.15	188	82.2	26.4	9.48	461	1,780	---	<5	
8/12/08	<1.53	357	668	2.99	6.74	171	64.1	19.7	8.49	541	1,750	---	<1.53	

TABLE 11

GROUNDWATER ANALYTICAL SUMMARY  
 CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
 G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
 SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
 LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
MW-9	05/01/02	<1.0	142	250	1.60	10.00	600.0	---	---	---	---	1000	---	---
	10/14/02	<0.1	137	439	1.88	3.26	106	98.8	35.8	9.93	188	---	---	<1.00
	12/27/02	<0.1	124	434	---	---	120	88.4	33.1	10.4	216	1,240	---	<0.10
	2/18/03	<0.1	105	461	---	---	126	93.8	33.8	6.22	192	1,080	---	<0.10
	5/30/03	<1.0	122	514	1.82	3.01	102	113	34.1	5.62	200	1,190	---	<1.00
	8/25/03	<1.0	111	562	1.58	2.98	95.2	120	37.9	7.98	240	1,324	---	<1.00
	11/17/03	<1.0	132	468	1.68	2.86	96.2	119	39.2	9.45	219	1,428	---	<1.00
	2/5/04	<1.0	124	610	2.32	4.18	125	141.1	41.1	9.18	221	1,250	---	<1.00
	5/5/04	<1.0	122	581	1.23	2.19	132	132	43.9	10.1	203	1,325	---	<1.00
	8/3/04	<1.0	124	599	1.43	2.68	142	142	46.7	9.82	223	1,476	---	<1.00
	2/11/05	<1.0	110	691	---	---	---	115	62.9	10.5	279	1,530	---	<0.10
	8/4/05	<1.0	98	1,960	3.63	5.36	103	164	164	21.5	388	3,920	---	<1.00
	2/23/06	<10.0	110	13,000	<2.5	19	430	2050	438	47.8	1450	24,300	---	<10.0
	8/25/06	<10.0	260	10,000	<2.5	3.75	360	1,330	360	38.3	1,920	24,100	---	<10.0
8/23/2007	<10	157	6,900	<0.1	3.7	400	934	283	<50	2290	17,400	---	157	
2/20/08	<5	229	6,270	<0.3	<0.2	447	867	277	27.7	2190	12,500	---	<5	
8/12/08	<1.53	257	4,910	1.19	3.74	443	720	236	36.2	1,760	11,400	---	<1.53	
MW-10	10/14/02	<0.1	204	71	---	---	145	42.3	22.8	7.77	87.3	593	---	<0.10
	12/27/02	<0.1	196	70	---	---	149	68.4	23.1	7.69	92.8	529	---	<0.10
	2/18/03	<0.1	184	65	---	---	159	67.1	22.8	3.04	90.7	552	---	<0.10
	6/2/03	<1.0	198	55.7	1.6	4.31	134	75.7	22.4	4.95	80.4	624	---	<1.00
	8/26/03	<1.0	188	56.1	1.58	4.1	125	70.6	23.4	6.29	72.3	688	---	<1.00
	11/7/03	<1.0	200	70.9	1.69	4.19	131	70.2	23.5	5.8	69.3	638	---	<1.00
	2/5/04	<1.0	196	101	1.68	4.22	121	75.8	25.7	6.29	73.8	674	---	<1.00
	5/7/04	<1.00	174	186	1.4	3.8	111	92.9	30.1	6.34	73.6	736	---	<1.00
	8/3/04	<0.1	144	328	---	---	118	106	49.5	7.7	106	796	---	<0.10
	2/11/05	<1.0	112	1,110	3.44	5.86	93.1	357	115	14	157	2,295	---	<1.00
	8/4/05	<1.00	112	1,500	1.32	4.02	94.5	419	139	11.5	186	3,420	---	<1.00
	2/22/06	<10.0	89	2,000	<0.50	6.5	98	520	158	13.8	180	6,180	---	<10.0
	8/25/06	<10.0	110	2,200	<2.5	3.24	97	660	201	13.7	253	7,520	---	<10.0
	2/28/07	<10	360	2,200	0.8	4.2	100	601	168	16.9	224	6,140	---	<10
8/22/2007	<10	749	2,200	0.5	6	110	585	189	<50	270	7,270	---	74.9	
2/20/08	<5	253	1,930	0.75	3.3	109	551	186	17.8	280	4,620	---	<5	
8/12/08	<1.53	800	1,700	1.75	3.16	108	430	154	15.4	271	4,540	---	<1.53	

TABLE II

GROUNDWATER ANALYTICAL SUMMARY  
 CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
 G.L. ERWIN "A & B" FEDERAL NCF-2 TANK BATTERY  
 SW1/4, SE4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
 LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
MW-11	NM10QCC Standard			250	1.60	10.00	600.0					1000		
	4/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/11/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/26/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/17/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/29/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/22/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/3/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/5/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/2/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/23/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/9/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/4/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/22/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/28/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
8/22/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2/20/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
8/12/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-12	05/02/02	<1.0	88	1,120	1.37	4.09	45.3	431	153	17.7	123	--	---	<1.00
	10/11/02	<0.1	93	1,370	---	---	47.5	438	161	15.4	127	2,860	---	<0.10
	12/27/02	<0.1	78	1,520	---	---	49.3	507	181	14.1	151	3,460	---	<0.10
	2/17/03	<0.1	66	1,530	---	---	52.4	461	170	15.3	136	3,980	---	<0.10
	6/7/03	<1.0	72	1,380	<2.00	5.06	45.8	491	157	15.3	151	3,250	---	<1.00
	8/26/03	<1.0	66	1,550	<2.00	4.94	45.9	525	178	14.8	156	3,855	---	<1.00
	11/6/03	<1.0	80	1,610	2.25	4.81	50.3	566	189	20.1	159	3,860	---	<1.00
	2/5/04	<1.0	74	1,680	2.19	5.13	46	525	181	21.6	160	2,910	---	<1.00
	5/7/04	<1.0	70	1,620	<3.00	5.13	53.6	541	178	18.5	152	3,085	---	<1.00
	8/3/04	<0.1	66	1,680	---	---	55.2	680	252	31.1	211	4,300	---	<0.10
	2/11/05	<1.00	82	1,770	2.04	6.08	47.7	503	176	17.8	138	3,080	---	<1.00
	8/5/05	<1.00	73	1,800	1.66	4.69	48.6	517	194	15.2	149	4,180	---	<1.00
	2/22/06	<10.0	73	1,700	0.7	6.7	48	415	135	14.9	129	4,890	---	<10.0
	8/24/06	<10.0	87	1,700	0.93	3.06	6.9	463	157	12.2	140	6,190	---	<10.0
	2/28/07	<10	95	1,900	1.3	6.9	65	521	154	16.1	155	5,840	---	<10
	8/22/2007	<10	108	1,800	0.7	6	52	476	151	11.9	143	6,470	---	108
2/20/08	<5	83.8	2,020	0.93	3.99	70.8	589	211	18.1	179	4,580	---	<5	
8/12/08	<1.53	77	2,140	1.68	3.84	86.1	647	221	17.9	212	5,160	---	<1.53	

TABLE II

GROUNDWATER ANALYTICAL SUMMARY  
 CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
 G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
 SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
 LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)	
MIW-13	05/02/02	<1.0	122	250	1.60	10.00	600.0	---	---	---	---	1000	---	<1.00	
	10/11/02	<0.1	115	337	2.31	4.38	124	125	44.3	10.2	65.6	..	---	<0.10	
	12/27/02	<0.1	104	408	---	---	131	135	46.5	9.47	88.6	1,210	---	<0.10	
	2/17/03	<0.1	80	443	---	---	132	160	55.2	9.71	84.5	1,280	---	<0.10	
	6/2/03	<1.0	102	421	2.27	---	144	152	54.9	8.88	108	1,370	---	<1.00	
	8/26/03	<1.0	92	500	2.1	4.23	115	179	56	11	90.9	1,260	---	<1.00	
	11/6/03	<1.0	98	492	2.25	4.42	125	193	68.6	14.3	91.5	1,334	---	<1.00	
	2/5/04	<1.0	96	543	2.3	4.56	120	179	65.6	15.4	98.3	1,220	---	<1.00	
	5/7/04	<1.00	98	496	2.04	2.04	116	184	62.2	12.8	89.3	1,278	---	<1.00	
	8/3/04	<0.1	95	532	---	---	116	225	77.3	15	111	1,410	---	<0.10	
	2/11/05	<1.00	100	532	5.36	5.36	117	171	61.7	13.3	92.3	1,260	---	<1.00	
	8/5/05	<1.00	96	759	5.11	2.29	125	217	70.8	12.7	103	1,550	---	<1.00	
	2/22/06	<10.0	89	590	1.7	4.8	120	177	61.2	11.5	107	2,090	---	<10.0	
	8/24/06	<10.0	150	760	2.5	3.58	120	228	78.7	10.9	107	2,590	---	<10.0	
	2/25/07	<1.0	90	880	2	5.2	140	262	84.8	14.6	113	3,060	---	<1.0	
	8/22/2007	<1.0	129	980	1.6	4	130	279	94.7	11.6	122	3,480	---	129	
	2/20/08	<5	209	1,260	1.57	4.02	153	362	145	20.1	172	3,070	---	<5	
8/13/08	<5	141	1,410	2.33	1.53	154	389	155	20.1	176	4,940	---	<5		
MIW-14	11/5/03	<1.0	100	3,500	<4.00	6.58	525	951	321	45.3	732	7,315	---	<1.00	
	2/4/04	<1.0	74	3,910	<3.00	6.01	559	966	320	46.1	840	7,720	---	<1.0	
	5/6/04	<1.00	86	3,970	---	5.54	594	997	350	42.5	836	9,560	---	<1.00	
	8/4/04	<0.1	78	4,430	---	---	895	1350	455	60.3	1220	11,500	---	<0.10	
	2/11/05	<1.00	80	6,120	3.5	5.99	752	1180	370	56.8	1250	8,860	---	<1.00	
	8/5/05	<1.00	86	6,480	1.84	5.04	882	1230	400	46.3	1440	9,570	---	<1.00	
	2/22/06	<10.0	81	5,300	<0.50	11	700	914	253	34.1	885	12,100	---	<10.0	
	2/22/06	<10.0	82	5,000	<0.50	<40	690	916	253	34	884	11,600	---	<10.0	
	8/24/06	<10.0	85	5,600	<5	3.74	690	942	266	27.8	1370	11,300	---	<10.0	
	2/28/07	<10	95	5,200	<0.3	4.3	650	758	193	36.9	1060	12,400	---	<10	
	8/22/2007	<10	92.2	4,700	0.3	3.9	610	823	219	<50	1420	11,700	---	92.2	
	2/20/08	<5	108	4,910	3.14	3.7	674	847	272	25.7	1510	10,300	---	<5	
	8/12/08	<1.53	101	4,400	1.32	3.50	668	781	237	38.2	1650	10,300	---	<1.53	
	MIW-15	11/5/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/3/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/5/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		8/2/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
11/23/04		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2/9/05		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
8/4/05		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2/22/06		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2/28/07	<10	170	90	2.2	2.2	71	57.3	19.8	6.03	52.9	375	---	<10		
8/22/2007	<10	146	150	1.8	2.1	65	66.4	24.1	5.98	60.2	652	---	146		
2/20/08	<5	117	487	1.68	2.19	61.1	161	62.2	10.5	88.1	1,500	---	<5		
8/12/08	<1.53	101	792	1.81	2.38	68.3	238	92	13.3	120	2,370	---	<1.53		

TABLE II

GROUNDWATER ANALYTICAL SUMMARY  
 CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
 G.L. ERWIN 'A & B' FEDERAL NCT-2 TANK BATTERY  
 SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
 LEA COUNTY, NEW MEXICO

Well Number	Sample Date	NMWQCC Standard (mg/L)												
		Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
MW-16	11/6/03	<1.0	188	863	1.79	5.65	600.0	183	55.6	14.2	372	1000	---	<1.00
	2/4/04	<1.0	174	937	2.19	6.59	123	235	76.8	15.2	299	2,200	---	<1.00
	5/7/04	<1.00	172	953	<2.00	5.91	240	230	73.8	12.3	299	2,200	---	<1.00
	8/3/04	<0.1	158	1,010	---	---	159	250	87.5	13.5	382	2,560	---	<0.10
	2/11/05	<1.00	180	944	2.4	7.24	151	198	62.4	10.9	344	2,260	---	<1.00
	8/5/05	<1.00	230	568	1.99	5.14	146	134	46.9	8.7	249	1,420	---	<1.00
	2/22/06	<10.0	180	590	1.3	5.2	110	120	39.1	7.17	207	1,770	---	<10.0
	8/24/06	<10.0	490	500	<2.5	3.17	89	123	40.6	4.93	207	1,460	---	<10.0
	2/28/07	<10	220	410	1.6	4.6	110	71.8	22.2	6.46	228	1,200	---	<10
	8/12/2007	<10	296	360	1.3	3.6	87	83	29.9	<5	215	1,280	---	296
	2/20/08	<5	190	338	1.31	2.91	88.3	141	47.9	6.53	154	990	---	<5
	8/12/08	<1.53	220	536	1.36	3.34	86.2	112	37.4	6.75	221	1,660	---	<1.53
	MW-17	11/5/03	<1.0	154	587	2.06	3.85	104	177	58.2	12.5	184	1,556	---
2/4/04		<1.0	158	650	2.01	3.93	93.1	158	52.5	12.2	205	1,416	---	<1.00
2/4/04		<1.0	172	557	2.08	4.03	95.7	162	52.6	12.1	204	1,496	---	<1.00
5/6/04		<1.00	162	604	1.77	3.37	91.2	182	57.7	10.9	176	1,416	---	<1.00
8/4/04		<0.1	141	636	---	---	132	207	81	12.7	221	1,660	---	<0.10
2/11/05		<1.00	174	572	2.94	4.61	101	134	45.9	11	229	1,470	---	<1.00
8/5/05		<1.00	172	626	2.16	4.37	106	169	53.5	9.5	220	1,750	---	<1.00
2/22/06		<10.0	150	580	1.5	4	97	123	40.1	8.04	187	1,810	---	<10.0
8/7/2006		<10.0	200	560	<2.5	3.06	100	140	46.1	5.94	178	1,700	---	<10.0
8/24/06		<10.0	320	530	<2.5	2.94	100	135	46.5	5.76	175	1,700	---	<10.0
2/28/07		<10	180	530	2.2	4.1	130	94.9	30.3	7.06	213	1,240	---	<10
8/22/2007		<10	177	550	1.8	4.3	130	113	41.4	5.97	200	1,310	---	177
2/20/08		<5	147	622	2.1	3.45	130	169	59.9	8.35	155	1,550	---	<5
8/12/08	<1.53	173	519	1.86	3.37	125	124	43	7.92	222	1,660	---	<1.53	
MW-18	11/23/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/9/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/4/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/22/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/28/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/20/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE II

GROUNDWATER ANALYTICAL SUMMARY  
 CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
 G.L. ERWIN 'A' & 'B' FEDERAL NCT-2 TANK BATTERY  
 SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
 LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
MW-19	11/23/04	<1.00	86	7,000	1.60	10.00	600.0	2020	678	32.4	1590	1000	---	<1.00
	2/11/05	<1.00	92	5,200	1.3	5.12	562	1340	522	61.3	974	12,900	---	<1.00
	8/5/05	<1.00	82	4,850	1.76	4.7	430	1200	422	4.7	793	22,000	---	<1.00
	8/5/05	<1.00	80	5,170	1.87	4.83	462	1270	463	51	814	15,800	---	<1.00
	2/22/06	<1.00	75	3,900	<0.50	8.9	400	870	271	32.6	464	8,830	---	<1.00
	8/24/06	<1.00	250	3,900	3.00	3.01	390	902	293	28.8	582	10,900	---	<1.00
	2/28/07	<1.0	92	5,500	0.5	4.4	600	901	247	37	658	12,700	---	<1.0
	8/22/2007	<1.0	82.6	4,500	0.3	3.1	440	1040	367	<50	686	11,600	---	82.6
2/20/08	<5	80.1	4,800	1.72	3.62	476	1130	437	31.2	684	10,300	---	<5	
8/12/08	<1.53	79.8	4,240	2.94	3.27	429	1080	399	26.7	739	9,600	---	<1.53	
MW-20	11/23/04	<1.00	82	606	2.49	2.9	79.7	176	62.6	13.6	104	985	---	<1.00
	2/11/05	<1.00	88	745	1.86	4.34	73.8	227	77.5	15	117	1,480	---	<1.00
	8/5/05	<1.00	80	1,170	1.76	4.55	84.5	326	116	14.7	162	2,640	---	<1.00
	2/22/06	<1.00	110	1,100	0.98	5.5	83	295	103	13.5	145	3,000	---	<1.00
	8/24/06	<1.00	1,100	1,100	<2.5	3.39	84	288	101	11.2	160	3,590	---	<1.00
	2/28/07	<1.0	110	1,300	1.4	5.1	95	332	107	14.6	165	4,500	---	<1.0
	8/22/2007	<1.0	419	1,400	0.8	5.7	100	346	119	11.9	203	4,100	---	419
	2/20/08	<5	117	1,540	1.1	3.83	108	393	158	18.7	217	3,550	---	<5
8/12/08	<1.53	135	1,570	2.02	3.73	113	392	154	18.5	249	4,290	---	<1.53	
MW-21	11/28/2007	1.14	415	482	1.9	5.15	128	173	64.4	18.3	115	1,440	---	1.14
	2/20/08	<5	115	606	2.00	4.68	159	205	71.3	14.4	110	1,740	---	<5
	8/12/08	<1.53	126	544	2.00	4.68	147	193	64.7	12.5	116	2,060	---	<1.53
MW-22	11/28/2007	1.14	2950	1,020	0.93	2.7	169	286	96.7	12.1	229	2,330	---	1.14
	2/20/08	<5	374	1,060	1.70	2.73	171	291	102	11.1	244	2,560	---	<5
8/12/08	<1.53	143	1,370	1.70	1.70	167	359	129	12.9	272	3,670	---	<1.53	

TABLE II

GROUNDWATER ANALYTICAL SUMMARY  
 CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
 G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
 SW/4, SE/4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
 LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate-N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
West	8/22/97	<2.0	370	250	---	---	---	---	---	---	---	1000	---	---
	2/17/98	<1.0	236	237	---	---	134	---	---	---	---	975	96	---
	2/7/01	<1.0	214	329	2	4.5	4.5	120	39.7	12.5	264	1,000	---	---
	05/03/02	<1.0	210	337	1.39	4.36	4.36	116	41.9	11.9	234	---	---	<1.00
	10/14/02	<0.1	198	337	---	---	---	127	39.3	9.37	290	966	---	<0.10
	12/27/02	<0.1	190	354	---	---	---	134	43.1	12.5	263	997	---	<0.10
	2/18/03	<0.1	202	353	1.54	---	---	141	33.6	9.78	152	1,010	---	<0.10
	5/30/03	<1.0	194	351	1.54	4.16	4.16	116	48.4	13.3	283	1,050	---	<1.00
	8/25/03	<1.0	204	327	1.65	4.08	4.08	112	51.3	13.8	235	1,100	---	<1.00
	11/7/03	<1.0	196	345	1.66	4.09	4.09	112	51.6	14.6	235	1,074	---	<1.00
	2/5/04	<1.00	200	339	1.44	---	---	115	53.6	14	241	1,040	---	<1.00
	5/16/04	<0.1	186	337	---	---	---	147	41.7	20.1	297	717	---	<0.10
	8/3/04	<1.00	186	417	2.44	4.47	4.47	117	75.9	21.4	241	1,128	---	<1.00
	2/11/05	<1.00	150	800	1.54	5.26	4.16	129	87	23.6	280	1,704	---	<1.00
	8/4/05	<10.0	150	800	0.76	4	4	110	149	44.3	47.1	2,390	---	<10.0
	2/23/06	<10.0	150	1,500	<2.5	2.78	2.78	97	315	87.6	400	4,840	---	<10.0
	8/25/06	<10.0	150	2,500	0.86	6.6	6.6	120	515	130	410	7,600	---	<10.0
	2/28/07	<10.0	99.8	3,700	0.2	4.31	4.31	180	844	251	72.7	665	---	99.8
8/21/2007	<5	119	2,780	0.54	3.43	3.43	202	662	189	564	5,850	---	<5	
2/20/08	<5	175	1,940	1.57	3.89	3.89	227	387	119	588	5,570	---	<5	
Southwest	8/22/97	<2.0	420	3,300	---	---	---	---	---	---	---	---	---	---
	2/17/98	<1.0	326	1,900	2.2	5	5	350	197	59.1	1078	4,719	712	---
	2/7/01	<1.0	272	1,490	1.38	4.51	4.51	301	200	65	744	---	---	<1.00
	05/03/02	<0.1	330	308	---	---	---	360	110	32.5	929	3,020	---	<0.10
	10/14/02	<0.1	289	1,280	---	---	---	319	107	31.9	980	3,040	---	<0.10
	12/27/02	<0.1	298	1,290	---	---	---	300	104	31.3	918	2,910	---	<0.10
	2/18/03	<0.1	298	1,310	---	---	---	299	108	32.2	812	3,040	---	<0.10
	2/18/03	<1.0	304	1,420	2.34	5.83	5.83	282	161	45.7	935	4,070	---	<1.00
	6/2/03	<1.0	290	1,370	2.12	5.65	5.65	287	169	54.5	899	3,420	---	<1.00
	6/2/03	<1.0	310	1,190	2.25	6.1	6.1	272	117	33.6	774	3,205	---	<1.00
	8/25/03	<1.0	300	1,240	2.29	5.77	5.77	235	129	35.4	727	3,275	---	<1.00
	11/7/03	<1.0	300	1,240	2.37	6.37	6.37	238	109	33.1	716	2,860	---	<1.00
	2/5/04	<1.0	294	1,310	<3.00	6.38	6.38	231	158	30.8	780	3,180	---	<1.00
	5/16/04	<1.0	276	1,400	---	---	---	264	75.1	45.2	1640	2,550	---	<0.10
	8/3/04	<0.1	260	2,920	1.33	9.61	9.61	230	323	94.5	1240	5,575	---	<1.00
	2/11/05	<1.00	226	5,290	1.55	11.7	11.7	201	691	101	1980	12,000	---	<1.00
	8/4/05	<10.0	300	3,000	<2.5	5.99	5.99	450	373	108	896	6,300	---	<10.0
	2/23/06	<10.0	300	3,100	<5.0	11.7	11.7	600	415	117	1240	7,600	---	<10.0
8/25/06	<10.0	310	4,500	0.51	8.8	8.8	511	130	93.7	994	14,900	---	<10.0	
2/28/07	<10.0	265	5,500	0.1	11.7	11.7	860	879	242	82.6	2040	---	265	
8/21/2007	<5	278	5,940	0.63	9.3	9.3	896	1010	281	120	2300	---	<5	
2/20/08	<5	268	5,670	4.38	8.14	8.14	775	934	237	112	13,700	---	<5	

TABLE II

GROUNDWATER ANALYTICAL SUMMARY  
 CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
 G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
 SW/4, S/F4, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
 LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
	NMWWCC Standard			250	1.60	10.00	600.0					1000		
RV-1	10/20/00	<1.0	330	1,500	1.7	5.2	330	107	29.6	50	843	3,200	...	...
	10/14/02	<0.1	327	1,150	...	...	340	60.3	25.5	64.3	820	2,720	...	<0.10
	12/27/02	<0.1	294	1,300	...	...	330	123	40.3	56.8	933	3,190	...	<0.10
	2/15/03	<0.1	300	1,150	...	...	316	79.7	25.7	53	721	2,690	...	<0.10
	6/2/03	<1.0	276	1,500	2.05	5.34	275	194	67.21	46.1	923	4,070	...	<1.00
	8/25/03	<1.0	298	1,190	2.01	6.15	278	117	32.7	46.1	705	2,940	...	<1.00
	11/7/03	<1.0	298	1,300	2.13	5.56	266	166	48.1	51.7	106	3,240	...	<1.00
	2/5/04	<1.0	292	1,270	2.22	5.92	246	148	44.7	53.8	704	2,780	...	<1.00
	5/6/04	<1.00	310	1,100	<3.00	6.62	235	104	28.3	53.8	635	2,840	...	<1.00
Dup	5/6/04	<1.00	288	1,040	<3.00	6.64	243	90	24.1	44.5	642	2,705	...	<1.00
	8/4/04	<0.1	284	1,120	...	...	290	44.8	33	86.9	785	2,250	...	<0.10
Dup	8/4/04	<0.1	288	1,130	...	...	274	45	31.6	84	961	2,550	...	<0.10
	2/11/05	<1.00	262	1,730	3.59	8.93	217	172	51.5	84	910	3,995	...	<1.00
Dup	2/11/05	<1.00	268	1,690	2	8.59	224	159	46.4	81	813	3,170	...	<1.00
	8/4/05	<1.00	252	2,470	1.26	5.8	188	262	76.1	87.5	1090	5,120	...	<1.00
	2/23/06	<10.0	290	2,400	<2.5	8.9	350	234	67.6	70.4	762	4,680	...	<10.0
DUP	8/25/06	<10.0	290	2,300	<5	4.41	440	281	77.3	68.3	1040	5,610	...	<10.0
	8/25/06	<10.0	300	2,300	<5	4.6	450	272	77.3	67.1	1030	5,570	...	<10.0
	2/28/07	<10	300	3,100	<0.5	3.5	590	353	97.7	82.2	848	7,400	...	<10
Dup	2/28/07	<10	290	3,200	<0.5	3.5	600	416	115	83.4	878	7,280	...	<10
	8/21/2007	<10	265	4,100	0.3	3.54	620	656	193	72.6	1640	11,300	...	265
Dup	8/21/2007	<10	263	4,100	0.1	3.38	600	655	192	72.5	1650	11,400	...	263
	2/20/08	<5	473	5,130	0.56	6.8	674	892	255	126	1810	11,000	...	<5
Dup	2/20/08	<5	231	5,120	0.55	6.78	674	888	252	126	1800	10,800	...	<5
	8/12/08	<1.53	255	4,650	1.06	6.43	628	816	232	107	1770	11,000	...	<1.53
Dup	8/12/08	<1.53	229	4,600	1.05	6.37	612	778	222	105	1740	10,900	...	<1.53
WW-1	05/01/02	<1.0	172	97.2	1.64	4.05	137	51.4	23.4	8.23	84.9	...	...	<1.00
	10/10/02	<0.1	168	106	...	...	124	52.7	22.2	9.99	106	605	...	<0.10
	12/27/02	<0.1	157	111	...	...	134	55	22.5	5.3	96	572	...	<0.10
	2/18/03	<0.1	152	115	...	...	137	53.8	22.1	6.38	93.5	601	...	<0.10
	6/2/03	<1.0	151	127	1.69	3.77	119	59.5	24.1	7.14	116	621	...	<1.00
	8/25/03	<1.0	148	136	1.7	3.72	111	63	24	8.43	104	652	...	<1.00
	11/7/03	<1.0	156	149	1.8	3.62	111	62.3	24.4	8.3	95.5	669	...	<1.00
	2/4/04	<1.0	156	185	1.81	3.79	102	68.2	25.5	8.7	92.4	709	...	<1.00
	5/5/04	<1.00	148	204	1.54	3.48	99.7	71.9	26.5	8.25	120	695	...	<1.00
	8/4/04	<0.1	132	222	...	...	114	92.3	37.9	9.89	139	471	...	<0.10
	8/4/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	...	NS
	2/23/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	...	NS
	3/1/07	<10	130	360	1.5	3.2	77	101	30.7	5.94	103	1060	...	<10
	8/21/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	...	NS
	2/21/08	<5	106	461	1.22	2.9	84.4	112	41.4	6.82	116	1,310	...	<5
	8/12/08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	...	NS

Notes:  
 1. mg/L. Milligrams per liter  
 2. <. Concentration below test method detection limit  
 3. -. No data available  
 4. RW. Recovery well  
 5. All analyses prior to 10/13/02 conducted by TraceAnalysis, Inc., Lubbock, TX  
 6. Analyses from 10/14/02 conducted by Environmental Lab of Texas, Odessa, TX  
 7. Analyses from 5/30/03 and following conducted by Trace Analysis, Inc., Lubbock, TX  
 8. Analyses from 8/24/06 and 8/25/06 conducted by Pace Analytical, St. Rose, LA and Greenbay, WI Laboratories  
 9. Highlight. Result exceed NMWWCC Standard  
 10. WW. Water well  
 11. NS. Note sampled

## ANALYTICAL REPORT

JOB NUMBER: 350286  
Project ID: G. L. ERWIN

Prepared For:

Conestoga-Rovers and Associates  
2135 S. Loop 250 West  
Midland, TX 79703

Attention: James Ornelas

Date: 03/04/2008



Signature

03/04/08

Date

Name: Sachin G. Kudchadkar

Title: Project Manager III

E-Mail: sachin.kudchadkar@testamericainc.com

TestAmerica Laboratories, Inc  
6310 Rothway Drive  
Houston, TX 77040

PHONE: 713-690-4444

TOTAL NO. OF PAGES 26

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

03/04/2008

James Ornelas  
Conestoga-Rovers and Associates  
2135 S. Loop 250 West  
Midland, TX 79703

Reference:

Project : G. L. ERWIN  
Project No. : 350286  
Date Received : 02/22/2008  
TestAmerica Job : 350286

Dear James Ornelas:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

1. WW1 22108

All holding times were met for the tests performed on these samples.

Enclosed, please find the Quality Control Summary. All quality control results for the QC batch that are applicable to the sample(s) are acceptable except as noted in the QC batch reports.

The test results in this report meet all QC requirements for TestAmerica Houston's QC limits. Any exceptions to these QC requirements will be noted and included in a case narrative as a part of this report.

If the report is acceptable, please approve the enclosed invoice and forward it for payment.

Thank you for selecting TestAmerica to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

Sincerely,



Sachin G. Kudchadkar  
Project Manager

S A M P L E I N F O R M A T I O N  
Date: 03/04/2008

Job Number.: 350286  
Customer...: Conestoga-Rovers and Associates  
Attn.....: James Ornelas

Project Number.....: 99007700  
Customer Project ID....: G. L. ERWIN  
Project Description....: ANALYTICAL

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
350286-1	WW1 22108	Water	02/21/2008	11:40	02/22/2008	09:17

LABORATORY TEST RESULTS

Date: 03/04/2008

Job Number: 350286

ATTN: James Ornelas

PROJECT: G. L. ERWIN

Laboratory Sample ID: 350286-1  
 Date Received: 02/22/2008  
 Time Received: 09:17

Customer Sample ID: W41 22108  
 Date Sampled: 02/21/2008  
 Time Sampled: 11:40  
 Sample Matrix: Water

CUSTOMER: Conestoga-Rovers and Associates

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SM-846 3010A	Acid Digestion, Diss.	Complete				1		194934		03/03/08 0735	rim
SM-846 6010B	Metals Analysis (ICAP Trace) Calcium (Ca), Diss. Magnesium (Mg), Diss. Potassium (K), Diss. Sodium (Na), Diss.	112 41.4 6.82 118 106		0.02185 0.01604 0.08121 0.2000 1.53	2.000 2.000 2.000 20.00 5.0	1 1 1 10 1	mg/L mg/L mg/L mg/L mg/L	195011 195011 195011 195011 194438		03/03/08 1329 03/03/08 1329 03/03/08 1329 03/03/08 1418 02/22/08 1030	srp srp srp srp sng
SM 2320 B	Alkalinity, Total as CaCO3, Water	106		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
SM 2320 B	Bicarbonate (HCO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
SM 2320 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
SM 2320 B	Hydroxide (OH), Water	1310				1		194603		02/25/08 1045	daw
SM2540 C	Solids, Total Dissolved (TDS), Water	~461		1.5 0.10 3.4	5.0 0.30 5.0	10.000 1.0000 10.000	mg/L mg/L mg/L	194524 194524 194524		02/23/08 0213 02/23/08 0153 02/23/08 0213	sur sur sur
EPA 300.0	Ion Chromatography Analysis Chloride, Water Fluoride (F), Water Sulfate (SO4), Water	2.90		0.19	0.20	1.0000	mg/L	194524		02/23/08 0153	sur
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water										

\* In Description = Dry Wgt.

QUALITY CONTROL RESULTS

Job Number.: 350286

Report Date.: 03/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G. L. ERWIN

ATTN: James Ornelas

Test Method.....: SM 2320 B  
 Method Description.: Alkalinity  
 Parameter.....: Alkalinity, Total as CaCO3  
 Units.....: mg/L CaCO3  
 Batch(s)....: 194438  
 Analyst....: sng  
 Test Code.: ALK

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MS	350207-21	WC4081A	353.86		250.000000	119.19	93.9	75-125		02/22/2008	1030
DU	350207-11		81.95			83.81	2.2	20		02/22/2008	1030
DU	350207-21		122.92			119.19	3.1	20		02/22/2008	1030
LCS	194438--21	WC4050	931.21		1000.0		93.1	90.0-110.		02/22/2008	1030
MB	194438--21		1.86							02/22/2008	1030
DU	350207-1		165.75			165.75	0.0	20		02/22/2008	1030
LCS	194438--21	WC4050	931.21		1000.0		93.1	90.0-110.		02/22/2008	1030
MB	194438--21		1.86							02/22/2008	1030
MS	350207-11	WC4081A	311.02		250.000000	83.81	90.9	75-125		02/22/2008	1030
MS	350207-1	WC4081A	381.79		250.000000	165.75	86.4	75-125		02/22/2008	1030

Test Method.....: SM 2320 B  
 Method Description.: Alkalinity  
 Parameter.....: Bicarbonate (HCO3)  
 Units.....: mg/L CaCO3  
 Batch(s)....: 194438  
 Analyst....: sng  
 Test Code.: HCO3

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MB	194438--21		1.86							02/22/2008	1030
MB	194438--21		1.86							02/22/2008	1030
LCS	194438--21	WC4050	931.21		1000		93.1	90.0-110.		02/22/2008	1030
DU	350207-1		165.75			165.75	0.0	20		02/22/2008	1030
MS	350207-21	WC4081A	353.86		250.000000	119.19	93.9	75-125		02/22/2008	1030
MS	350207-11	WC4081A	311.02		250.000000	83.81	90.9	75-125		02/22/2008	1030
MS	350207-1	WC4081A	381.79		250.000000	165.75	86.4	75-125		02/22/2008	1030
DU	350207-11		81.95			83.81	2.2	20		02/22/2008	1030
LCS	194438--21	WC4050	931.21		1000		93.1	90.0-110.		02/22/2008	1030
DU	350207-21		122.92			119.19	3.1	20		02/22/2008	1030

Test Method.....: SM 2320 B  
 Method Description.: Alkalinity  
 Parameter.....: Carbonate (CO3)  
 Units.....: mg/L CaCO3  
 Batch(s)....: 194438  
 Analyst....: sng  
 Test Code.: CO3

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MB	194438--21		0							02/22/2008	1030
DU	350207-1		0			0	0	5		02/22/2008	1030
DU	350207-21		0			0	0	5		02/22/2008	1030
DU	350207-11		0			0	0	5		02/22/2008	1030
MB	194438--21		0							02/22/2008	1030

Test Method.....: SM 2320 B  
 Method Description.: Alkalinity  
 Parameter.....: Hydroxide (OH)  
 Units.....: mg/L CaCO3  
 Batch(s)....: 194438  
 Analyst....: sng  
 Test Code.: OH

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	350207-1		0			0	0	5		02/22/2008	1030
DU	350207-11		0			0	0	5		02/22/2008	1030
MB	194438--21		0							02/22/2008	1030
MB	194438--21		0							02/22/2008	1030

QUALITY CONTROL RESULTS

Job Number.: 350286

Report Date.: 03/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G. L. ERWIN

ATTN: James Ornelas

Test Method.....: SM 2320 B  
 Method Description.: Alkalinity  
 Parameter.....: Hydroxide (OH)

Units.....: mg/L CaCO3  
 Batch(s)....: 194438

Analyst...: sng  
 Test Code.: OH

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	350207-21		0			0	0	5		02/22/2008	1030

Test Method.....: SM2540 C  
 Method Description.: Solids, Total Dissolved (TDS)  
 Parameter.....: Solids, Total Dissolved (TDS)

Units.....: mg/L  
 Batch(s)....: 194603

Analyst...: daw  
 Test Code.: TDS

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MB	194603--21		0.00							02/25/2008	1045
LCS	194603--21	WCS48139	1797.00		1800		99.8	90.0-110.		02/25/2008	1045
DU	350207-18		3610.00			3552.00	1.6	10.0		02/25/2008	1045



QUALITY CONTROL RESULTS

Job Number.: 350286

Report Date.: 03/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G. L. ERWIN

ATTN: James Ornelas

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				02/23/2008	1013

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Fluoride (F)	0						
Chloride	0						
Sulfate (SO4)	0						
Nitrogen, Nitrate as N (NO3-N)	0.0321						
Nitrogen, Nitrite as N (NO2-N)	0						
Nitrate + Nitrite as N	0.032						

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sulfate (SO4)	19.4011		20.00		97.0	90.0-110.0	
Chloride	19.8654		20.00		99.3	90.0-110.0	
Fluoride (F)	10.5405		10.00		105.4	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.0543		10.00		100.5	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	10.0099		10.00		100.1	90.0-110.0	

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sulfate (SO4)	19.4197		20.00		97.1	90.0-110.0	
Fluoride (F)	10.6394		10.00		106.4	90.0-110.0	
Chloride	19.8853		20.00		99.4	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.0631		10.00		100.6	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.9600		10.00		99.6	90.0-110.0	

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Chloride	19.9413		20.00		99.7	90.0-110.0	
Sulfate (SO4)	19.4735		20.00		97.4	90.0-110.0	
Fluoride (F)	10.6477		10.00		106.5	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.0708		10.00		100.7	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.9808		10.00		99.8	90.0-110.0	

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Fluoride (F)	10.6559		10.00		106.6	90.0-110.0	
Chloride	19.9166		20.00		99.6	90.0-110.0	
Sulfate (SO4)	19.3968		20.00		97.0	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.0339		10.00		100.3	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.9589		10.00		99.6	90.0-110.0	

Job Number.: 350286

QUALITY CONTROL RESULTS

Report Date.: 03/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G. L. ERWIN

ATTN: James Ornelas

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS48411			02/23/2008	0953

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Chloride	19.8699		20.00		99.3	90.0-110.0	
Fluoride (F)	10.6790		10.00		106.8	90.0-110.0	
Sulfate (SO4)	19.3577		20.00		96.8	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.0197		10.00		100.2	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.9819		10.00		99.8	90.0-110.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
DU	Method Duplicate		350197-2	10.0	02/22/2008	2353

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Fluoride (F), Water	1.9919			1.9744	0.9	20	
Chloride, Water	4.3422			4.3871	1.0	20	
Sulfate (SO4), Water	5.9374			5.9555	0.3	20	
Nitrogen, Nitrate as N (NO3-N), Water	0.0477			0.0491	0.0014	0.2500	
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0	0	
Nitrate + Nitrite as N, Water	0.048			0.049	0.001	0.400	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
DU	Method Duplicate		350286-1	100.0	02/23/2008	0253

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sulfate (SO4), Water	0.7427			0.7365	0.0062	0.5000	
Fluoride (F), Water	0.0898			0.0819	0.0079	0.3000	
Chloride, Water	4.4958			4.4813	0.3	20	
Nitrogen, Nitrate as N (NO3-N), Water	0.0231			0.0243	0.0012	0.2500	
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0	0	
Nitrate + Nitrite as N, Water	0.023			0.024	0.001	0.400	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
DU	Method Duplicate		350247-2	10.0	02/23/2008	0713

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Chloride, Water	3.2564			3.2390	0.5	20	
Sulfate (SO4), Water	1.0704			1.0687	0.0017	0.5000	
Fluoride (F), Water	0.0422			0.0346	0.0076	0.3000	
Nitrogen, Nitrate as N (NO3-N), Water	0.0278			0.0281	0.0003	0.2500	
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0	0	
Nitrate + Nitrite as N, Water	0.028			0.028	0.000	0.400	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				02/22/2008	1412

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sulfate (SO4)	0						
Fluoride (F)	0						
Chloride	0						
Nitrogen, Nitrate as N (NO3-N)	0						
Nitrogen, Nitrite as N (NO2-N)	0						
Nitrate + Nitrite as N	0.000						

QUALITY CONTROL RESULTS

Job Number.: 350286

Report Date.: 03/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G. L. ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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ICV	Initial Calibration Verification	WCS48411			02/22/2008	1352
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sulfate (SO4)	19.3762		20.00		96.9	90.0-110.0	
Fluoride (F)	10.4972		10.00		105.0	90.0-110.0	
Chloride	19.8362		20.00		99.2	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.0435		10.00		100.4	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.9559		10.00		99.6	90.0-110.0	

LCS	Laboratory Control Sample	WCS48411			02/22/2008	1453
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sulfate (SO4)	19.3720		20.00		96.9	90.0-110.0	
Chloride	19.8402		20.00		99.2	90.0-110.0	
Fluoride (F)	10.4960		10.00		105.0	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.0368		10.00		100.4	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.9758		10.00		99.8	90.0-110.0	

LCS	Laboratory Control Sample	WCS48411			02/23/2008	0613
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Fluoride (F)	10.6827		10.00		106.8	90.0-110.0	
Sulfate (SO4)	19.3576		20.00		96.8	90.0-110.0	
Chloride	19.8850		20.00		99.4	90.0-110.0	
Nitrogen, Nitrate as N (NO3-N)	10.0164		10.00		100.2	90.0-110.0	
Nitrogen, Nitrite as N (NO2-N)	9.9806		10.00		99.8	90.0-110.0	

MB	Method Blank				02/22/2008	1432
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sulfate (SO4)	0						
Chloride	0						
Fluoride (F)	0						
Nitrogen, Nitrate as N (NO3-N)	0						
Nitrogen, Nitrite as N (NO2-N)	0						
Nitrate + Nitrite as N	0.000						

MB	Method Blank				02/23/2008	0553
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Fluoride (F)	0						
Chloride	0						
Sulfate (SO4)	0						
Nitrogen, Nitrate as N (NO3-N)	0						
Nitrogen, Nitrite as N (NO2-N)	0						
Nitrate + Nitrite as N	0.000						

QUALITY CONTROL RESULTS

Job Number.: 350286

Report Date.: 03/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G. L. ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS48338	350197-2	10.0	02/23/2008	0013

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Chloride, Water	13.7366		10.000000	4.3871	93.5	90-110	
Fluoride (F), Water	3.8630		2.000000	1.9744	94.4	90-110	
Sulfate (SO4), Water	15.1641		10.000000	5.9555	92.1	90-110	
Nitrogen, Nitrate as N (NO3-N), Water	1.8605		2.000000	0.0491	90.6	90-110	
Nitrogen, Nitrite as N (NO2-N), Water	1.8786		2.000000	0	93.9	90-110	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS48338	350286-1	100.0	02/23/2008	0313

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Fluoride (F), Water	2.1206		2.000000	0.0819	101.9	90-110	
Chloride, Water	13.8810		10.000000	4.4813	94.0	90-110	
Sulfate (SO4), Water	9.9825		10.000000	0.7365	92.5	90-110	
Nitrogen, Nitrate as N (NO3-N), Water	1.8187		2.000000	0.0243	89.7	90-110	A
Nitrogen, Nitrite as N (NO2-N), Water	1.8661		2.000000	0	93.3	90-110	
Nitrate + Nitrite as N, Water	3.685		0.000000	0.024			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS48338	350247-2	10.0	02/23/2008	0733

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Fluoride (F), Water	2.1149		2.000000	0.0346	104.0	90-110	
Chloride, Water	12.6800		10.000000	3.2390	94.4	90-110	
Sulfate (SO4), Water	10.3022		10.000000	1.0687	92.3	90-110	
Nitrogen, Nitrate as N (NO3-N), Water	1.7993		2.000000	0.0281	88.6	90-110	A
Nitrogen, Nitrite as N (NO2-N), Water	1.8604		2.000000	0	93.0	90-110	
Nitrate + Nitrite as N, Water	3.660		0.000000	0.028			

Test Method.....: SW-846 6010B	Units.....: mg/L	Analyst...: srp
Method Description.: Metals Analysis (ICAP Trace)	Batch(s)...: 194976 195011	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				03/03/2008	1307

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.00522						
Magnesium (Mg)	-0.01451						
Potassium (K)	0.01893						
Sodium (Na)	0.00300						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				03/03/2008	1402

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.00997						
Magnesium (Mg)	-0.00663						
Potassium (K)	0.13648						
Sodium (Na)	0.00658						

Job Number.: 350286

## QUALITY CONTROL RESULTS

Report Date.: 03/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G. L. ERWIN

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				03/03/2008	1437

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.01028						
Magnesium (Mg)	-0.00340						
Potassium (K)	0.06604						
Sodium (Na)	0.00507						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS022908CC			03/03/2008	1303

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	12.33392		12.50		98.7	90.0-110.0	
Magnesium (Mg)	4.82115		5.000		96.4	90.0-110.0	
Potassium (K)	11.64846		12.50		93.2	90.0-110.0	
Sodium (Na)	12.19531		12.50		97.6	90.0-110.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS022908CC			03/03/2008	1358

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	12.27481		12.50		98.2	90.0-110.0	
Magnesium (Mg)	4.79250		5.000		95.8	90.0-110.0	
Potassium (K)	11.60875		12.50		92.9	90.0-110.0	
Sodium (Na)	12.17182		12.50		97.4	90.0-110.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS022908CC			03/03/2008	1433

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	12.36270		12.50		98.9	90.0-110.0	
Magnesium (Mg)	4.86455		5.000		97.3	90.0-110.0	
Potassium (K)	11.51039		12.50		92.1	90.0-110.0	
Sodium (Na)	12.05982		12.50		96.5	90.0-110.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH1	Calibration check standard	MS022008T1			03/03/2008	1252

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.13322		0.1000		133.2	50.0-150.0	
Magnesium (Mg)	0.09873		0.1000		98.7	50.0-150.0	
Potassium (K)	0.63424		0.60000		105.7	50.0-150.0	
Sodium (Na)	0.63379		0.60000		105.6	50.0-150.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH3	Standard check for ICAP	MS022008T3			03/03/2008	1240

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	20.15275		20.00		100.8	95.0-105.0	
Magnesium (Mg)	20.15790		20.00		100.8	95.0-105.0	
Potassium (K)	20.28446		20.00		101.4	95.0-105.0	
Sodium (Na)	20.27460		20.00		101.4	95.0-105.0	

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QUALITY CONTROL RESULTS

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CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G. L. ERWIN

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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EB	Extraction Blank		194934		03/03/2008	1325
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.	0.03594						
Magnesium (Mg), Diss.	-0.00646						
Potassium (K), Diss.	0.02522						
Sodium (Na), Diss.	0.03403						

EB	Extraction Blank		194934		03/03/2008	1346
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Liquid	0.01378						
Magnesium (Mg), Liquid	-0.00663						
Potassium (K), Liquid	0.06554						
Sodium (Na), Liquid	0.01423						

ICB	Initial Calibration Blank				03/03/2008	1248
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.00709						
Magnesium (Mg)	-0.01635						
Potassium (K)	-0.03193						
Sodium (Na)	0.00408						

ICV	Initial Calibration Verification	MS022908CC			03/03/2008	1244
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	12.29603		12.50		98.4	90.0-110.0	
Magnesium (Mg)	4.79084		5.000		95.8	90.0-110.0	
Potassium (K)	11.73282		12.50		93.9	90.0-110.0	
Sodium (Na)	12.30713		12.50		98.5	90.0-110.0	

ISA	Interference Check Sample A	MS021981A			03/03/2008	1256
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	493.30291		500.0		98.7	80-120	
Magnesium (Mg)	568.59997		500.0		113.7	80-120	
Potassium (K)	0.30078		0.0				
Sodium (Na)	0.03083		0.0				

ISB	Interference Check Sample B	MS0219081B			03/03/2008	1300
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	504.65991		510.0		99.0	80.0-120.0	
Magnesium (Mg)	580.46313		510.0		113.8	80.0-120.0	

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CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G. L. ERWIN

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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LCS	Laboratory Control Sample	MSP1KEW	194934		03/03/2008	1321
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water	10.01492		10.00		100.1	80.0-120.0	
Magnesium (Mg), Water	9.90855		10.00		99.1	80.0-120.0	
Potassium (K), Water	9.83504		10.00		98.4	80.0-120.0	
Sodium (Na), Water	10.35040		10.00		103.5	80.0-120.0	

MD	Method Duplicate		350286-1		03/03/2008	1333
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.	116.32982	111.73442		111.73442	4.0	20	
Magnesium (Mg), Diss.	43.05409	41.36271		41.36271	4.0	20	
Potassium (K), Diss.	7.38046	6.81723		6.81723	0.56323	2.00000	

MD	Method Duplicate		350286-1	10	03/03/2008	1422
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sodium (Na), Diss.	12.14299	11.75680		11.75680	3.2	20	

MS	Matrix Spike	MSP1KEW	350286-1		03/03/2008	1337
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.	142.33984		10.00	111.73442	306.1	75-125	
Magnesium (Mg), Diss.	58.86088		10.00	41.36271	175.0	75-125	
Potassium (K), Diss.	20.35262		10.00	6.81723	135.4	75-125	a

MS	Matrix Spike	MSP1KEW	350286-1	10	03/03/2008	1426
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sodium (Na), Diss.	14.29636		1.000000	11.75680	25.4	75-125	a

MSD	Matrix Spike Duplicate	MSP1KEW	350286-1		03/03/2008	1340
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.	151.41271	142.33984	10.00	111.73442	396.8 25.8	75-125 20	c
Magnesium (Mg), Diss.	62.13167	58.86088	10.00	41.36271	207.7 17.1	75-125 20	
Potassium (K), Diss.	22.16030	20.35262	10.00	6.81723	153.4 12.5	75-125 20	a

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSPIKEW	350286-1	10	03/03/2008	1430

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sodium (Na), Diss.	15.15079	14.29636	1.000000	11.75680	33.9 28.7	75-125 20	a c

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PB	Prep. Blank		194934		03/03/2008	1317

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water	0.00390						
Magnesium (Mg), Water	-0.00957						
Potassium (K), Water	0.03756						
Sodium (Na), Water	0.00119						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PSD	Post Digestion Spike Duplicate	MSPIKE3	350286-1		03/03/2008	1410

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.	121.04384		10.00	111.73442			
Magnesium (Mg), Diss.	51.99418		10.00	41.36271			
Potassium (K), Diss.	18.42668		10.00	6.81723			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
S0	Calibration Blank				03/03/2008	1232

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.00363						
Magnesium (Mg)	0.01446						
Potassium (K)	0.35374						
Sodium (Na)	0.02127						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
SD	Serial Dilution		350286-1	5	03/03/2008	1414

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.	22.80166			111.73442	2.0	10.0	
Magnesium (Mg), Diss.	8.13697			41.36271	1.6	10.0	
Potassium (K), Diss.	1.22207			6.81723	10.4	10.0	e
Sodium (Na), Diss.	22.45513			85.99293	30.6	10.0	e

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
STD	Spiked Blank Duplicate				03/03/2008	1236

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.31148						
Magnesium (Mg)	0.49440						
Potassium (K)	2.00908						
Sodium (Na)	6.33215						

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCB	Continuing Calibration Blank				03/03/2008	1307
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.00522						
Magnesium (Mg)	-0.01451						
Potassium (K)	0.01893						
Sodium (Na)	0.00300						

CCB	Continuing Calibration Blank				03/03/2008	1402
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.00997						
Magnesium (Mg)	-0.00663						
Potassium (K)	0.13648						
Sodium (Na)	0.00658						

CCB	Continuing Calibration Blank				03/03/2008	1437
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.01028						
Magnesium (Mg)	-0.00340						
Potassium (K)	0.06604						
Sodium (Na)	0.00507						

CCB	Continuing Calibration Blank				03/03/2008	1559
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.02632						
Magnesium (Mg)	-0.00027						
Potassium (K)	-0.01155						
Sodium (Na)	0.09039						

CCV	Continuing Calibration Verification	MS022908CC			03/03/2008	1303
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	12.33392		12.50		98.7	90.0-110.0	
Magnesium (Mg)	4.82115		5.000		96.4	90.0-110.0	
Potassium (K)	11.64846		12.50		93.2	90.0-110.0	
Sodium (Na)	12.19531		12.50		97.6	90.0-110.0	

CCV	Continuing Calibration Verification	MS022908CC			03/03/2008	1358
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	12.27481		12.50		98.2	90.0-110.0	
Magnesium (Mg)	4.79250		5.000		95.8	90.0-110.0	
Potassium (K)	11.60875		12.50		92.9	90.0-110.0	
Sodium (Na)	12.17182		12.50		97.4	90.0-110.0	

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS022908CC			03/03/2008	1433

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	12.36270		12.50		98.9	90.0-110.0	
Magnesium (Mg)	4.86455		5.000		97.3	90.0-110.0	
Potassium (K)	11.51039		12.50		92.1	90.0-110.0	
Sodium (Na)	12.05982		12.50		96.5	90.0-110.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS022908CC			03/03/2008	1555

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	12.60295		12.50		100.8	90.0-110.0	
Magnesium (Mg)	5.19721		5.000		103.9	90.0-110.0	
Potassium (K)	11.32420		12.50		90.6	90.0-110.0	
Sodium (Na)	11.64582		12.50		93.2	90.0-110.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH1	Calibration check standard 1	MS022008T1			03/03/2008	1252

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.13322		0.1000		133.2	50.0-150.0	
Magnesium (Mg)	0.09873		0.1000		98.7	50.0-150.0	
Potassium (K)	0.63424		0.60000		105.7	50.0-150.0	
Sodium (Na)	0.63379		0.60000		105.6	50.0-150.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH3	Standard check for ICAP	MS022008T3			03/03/2008	1240

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	20.15275		20.00		100.8	95.0-105.0	
Magnesium (Mg)	20.15790		20.00		100.8	95.0-105.0	
Potassium (K)	20.28446		20.00		101.4	95.0-105.0	
Sodium (Na)	20.27460		20.00		101.4	95.0-105.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB	Extraction Blank		194934		03/03/2008	1325

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.	0.03594						
Magnesium (Mg), Diss.	-0.00646						
Potassium (K), Diss.	0.02522						
Sodium (Na), Diss.	0.03403						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB	Extraction Blank		194934		03/03/2008	1346

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Liquid	0.01378						
Magnesium (Mg), Liquid	-0.00663						
Potassium (K), Liquid	0.06554						
Sodium (Na), Liquid	0.01423						

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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ICB	Initial Calibration Blank				03/03/2008	1248
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.00709						
Magnesium (Mg)	-0.01635						
Potassium (K)	-0.03193						
Sodium (Na)	0.00408						

ICV	Initial Calibration Verification	MS022908CC			03/03/2008	1244
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	12.29603		12.50		98.4	90.0-110.0	
Magnesium (Mg)	4.79084		5.000		95.8	90.0-110.0	
Potassium (K)	11.73282		12.50		93.9	90.0-110.0	
Sodium (Na)	12.30713		12.50		98.5	90.0-110.0	

ISA	Interference Check Sample A	MS021981A			03/03/2008	1256
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	493.30291		500.0		98.7	80-120	
Magnesium (Mg)	568.59997		500.0		113.7	80-120	
Potassium (K)	0.30078		0.0				
Sodium (Na)	0.03083		0.0				

ISB	Interference Check Sample B	MS0219081B			03/03/2008	1300
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	504.65991		510.0		99.0	80.0-120.0	
Magnesium (Mg)	580.46313		510.0		113.8	80.0-120.0	

LCS	Laboratory Control Sample	MSPIKEW	194934		03/03/2008	1321
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water	10.01492		10.00		100.1	80.0-120.0	
Magnesium (Mg), Water	9.90855		10.00		99.1	80.0-120.0	
Potassium (K), Water	9.83504		10.00		98.4	80.0-120.0	
Sodium (Na), Water	10.35040		10.00		103.5	80.0-120.0	

MD	Method Duplicate		350286-1		03/03/2008	1333
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.	116.32982	111.73442		111.73442	4.0	20	
Magnesium (Mg), Diss.	43.05409	41.36271		41.36271	4.0	20	
Potassium (K), Diss.	7.38046	6.81723		6.81723	0.56323	2.00000	

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CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G. L. ERWIN

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		350286-1	10	03/03/2008	1422

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sodium (Na), Diss.	12.14299	11.75680		11.75680	3.2	20	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSP1KEW	350286-1		03/03/2008	1337

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.	142.33984		10.00	111.73442	306.1	75-125	
Magnesium (Mg), Diss.	58.86088		10.00	41.36271	175.0	75-125	
Potassium (K), Diss.	20.35262		10.00	6.81723	135.4	75-125	a

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSP1KEW	350286-1	10	03/03/2008	1426

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sodium (Na), Diss.	14.29636		1.000000	11.75680	254.0	75-125	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSP1KEW	350286-1		03/03/2008	1340

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.	151.41271	142.33984	10.00	111.73442	396.8	75-125	
					25.8	20	C
Magnesium (Mg), Diss.	62.13167	58.86088	10.00	41.36271	207.7	75-125	
					17.1	20	
Potassium (K), Diss.	22.16030	20.35262	10.00	6.81723	153.4	75-125	a
					12.5	20	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSP1KEW	350286-1	10	03/03/2008	1430

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Sodium (Na), Diss.	15.15079	14.29636	1.000000	11.75680	339.4	75-125	
					28.8	20	C

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PB	Prep. Blank		194934		03/03/2008	1317

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Water	0.00390						
Magnesium (Mg), Water	-0.00957						
Potassium (K), Water	0.03756						
Sodium (Na), Water	0.00119						

Job Number.: 350286

## QUALITY CONTROL RESULTS

Report Date.: 03/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G. L. ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
---------	-------------	------------	--------	-----------------	------	------

PSD	Post Digestion Spike Duplicate	MSPIKE3	350286-1		03/03/2008	1410
-----	--------------------------------	---------	----------	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.	121.04384		10.00	111.73442			
Magnesium (Mg), Diss.	51.99418		10.00	41.36271			
Potassium (K), Diss.	18.42668		10.00	6.81723			

SD	Calibration Blank					03/03/2008	1232
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.00363						
Magnesium (Mg)	0.01446						
Potassium (K)	0.35374						
Sodium (Na)	0.02127						

SD	Serial Dilution		350286-1	5		03/03/2008	1414
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca), Diss.	22.80166			111.73442	2.0	10.0	
Magnesium (Mg), Diss.	8.13697			41.36271	1.6	10.0	
Potassium (K), Diss.	1.22207			6.81723	10.4	10.0	e
Sodium (Na), Diss.	22.45513			85.99293	30.6	10.0	e

STD	Spiked Blank Duplicate					03/03/2008	1236
-----	------------------------	--	--	--	--	------------	------

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Calcium (Ca)	0.31148						
Magnesium (Mg)	0.49440						
Potassium (K)	2.00908						
Sodium (Na)	6.33215						

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 03/04/2008

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 correction required for water analysis is for method 1006 where the reported concentration 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 reviewed.
- 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 characterization 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: 03/04/2008

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 - GFAA, Mercury
- CRI - Low level standard check - ICP
- Dil Fac - Dilution Factor - Secondary dilution analysis

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 03/04/2008

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.

L A B O R A T O R Y   C H R O N I C L E

Job Number: 350286

Date: 03/04/2008

CUSTOMER: Conestoga Rovers and Associates

PROJECT: G. L. ERWIN

ATTN: James Ornelas

Lab ID: 350286-1		Client ID: WW1 22108		Date Recvd: 02/22/2008		Sample Date: 02/21/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED		DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	194934			03/03/2008 0735		
SM 2320 B	Alkalinity	1	194438			02/22/2008 1030		
EPA 300.0	Ion Chromatography Analysis	1	194524			02/23/2008 0153		1.0000
EPA 300.0	Ion Chromatography Analysis	1	194524			02/23/2008 0213		10.000
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194524			02/23/2008 0153		1.0000
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195011	194934		03/03/2008 1329		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195011	194934		03/03/2008 1418		10
N/A	Sample Filtration	1	194924			03/03/2008 1400		
SM2540 C	Solids, Total Dissolved (TDS)	1	194603			02/25/2008 1045		



rpjsckl

Job Sample Receipt Checklist Report

V2

Job Number.: 350286    Location.: 57216    Check List Number.: 1    Description.:  
 Customer Job ID.....:                      Job Check List Date.: 02/22/2008                      Date of the Report.: 02/22/2008  
 Project Number.: 99007700    Project Description.: ANALYTICAL                      Project Manager.....: sgk  
 Customer.....: Conestoga-Rovers and Associates                      Contact.: James Ornelas

Questions ?	(Y/N)	Comments
-------------	-------	----------

Chain of Custody Received?.....	Y	
...If "yes", completed properly?.....	Y	
Custody seal on shipping container?.....	N	
...If "yes", custody seal intact?.....		
Custody seals on sample containers?.....	N	
...If "yes", custody seal intact?.....		
Samples chilled?.....	Y	
Temperature of cooler acceptable? (4 deg C +/- 2).	Y	0.3
...If "no", is sample an air matrix?(no temp req.)		
Thermometer ID.....	Y	491
Samples received intact (good condition)?.....	Y	
Volatile samples acceptable? (no headspace).....	Y	
Correct containers used?.....	Y	
Adequate sample volume provided?.....	Y	
Samples preserved correctly?.....	Y	
Samples received within holding-time?.....	Y	
Agreement between COC and sample labels?.....	Y	
Radioactivity at or below background levels?.....		
Additional.....		
Comments.....		
Sample Custodian Signature/Date.....	Y	MT

*2-22-08*

## ANALYTICAL REPORT

JOB NUMBER: 350207  
Project ID: G. E. ERWIN

Prepared For:

Conestoga-Rovers and Associates  
2135 S. Loop West  
Midland, TX 79703

Attention: James Ornelas

Date: 03/05/2008



Signature

Name: Sachin G. Kudchadkar

Title: Project Manager III

E-Mail: sachin.kudchadkar@testamericainc.com

03/05/08

Date

TestAmerica Laboratories, Inc  
6310 Rothway Drive  
Houston, TX 77040

PHONE: 713-690-4444

TOTAL NO. OF PAGES 80

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

Date: 03/05/2008

Job Number.: 350207  
 Customer...: Conestoga-Rovers and Associates  
 Attn.....: James Ornelas

Project Number.....: 99007700  
 Customer Project ID....: G.L ERWIN  
 Project Description....: ANALYTICAL

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
350207-1	MW1 22008	Water	02/20/2008	13:45	02/21/2008	09:38
350207-2	MW2 22008	Water	02/20/2008	14:00	02/21/2008	09:38
350207-3	MW3 22008	Water	02/20/2008	14:40	02/21/2008	09:38
350207-4	MW4 22008	Water	02/20/2008	15:10	02/21/2008	09:38
350207-5	MW5 22008	Water	02/20/2008	14:55	02/21/2008	09:38
350207-6	MW6 22008	Water	02/20/2008	14:25	02/21/2008	09:38
350207-7	MW7 22008	Water	02/20/2008	14:10	02/21/2008	09:38
350207-8	MW8 22008	Water	02/20/2008	13:00	02/21/2008	09:38
350207-9	MW9 22008	Water	02/20/2008	13:30	02/21/2008	09:38
350207-10	MW10 22008	Water	02/20/2008	13:10	02/21/2008	09:38
350207-11	MW12 22008	Water	02/20/2008	11:10	02/21/2008	09:38
350207-12	MW13 22008	Water	02/20/2008	12:20	02/21/2008	09:38
350207-13	MW14 22008	Water	02/20/2008	11:25	02/21/2008	09:38
350207-14	MW15 22008	Water	02/20/2008	10:55	02/21/2008	09:38
350207-15	MW16 22008	Water	02/20/2008	12:45	02/21/2008	09:38
350207-16	MW17 22008	Water	02/20/2008	12:30	02/21/2008	09:38
350207-17	MW19 22008	Water	02/20/2008	11:40	02/21/2008	09:38
350207-18	MW20 22008	Water	02/20/2008	10:40	02/21/2008	09:38
350207-19	MW21 22008	Water	02/20/2008	11:55	02/21/2008	09:38
350207-20	MW22 22008	Water	02/20/2008	13:20	02/21/2008	09:38
350207-21	MWWEST 22008	Water	02/20/2008	15:25	02/21/2008	09:38
350207-22	MWSW 22008	Water	02/20/2008	15:40	02/21/2008	09:38
350207-23	RW1 22008	Water	02/20/2008	15:55	02/21/2008	09:38
350207-24	DUP 22008	Water	02/20/2008	00:00	02/21/2008	09:38

LABORATORY TEST RESULTS

Job Number: 350207

Date: 03/05/2008

ATTN: James Ornelas

PROJECT: G.L ERWIN

Customer Sample ID: MW1 22008  
 Date Sampled.....: 02/20/2008  
 Time Sampled.....: 13:45  
 Sample Matrix.....: Water

Laboratory Sample ID: 350207-1  
 Date Received.....: 02/21/2008  
 Time Received.....: 09:38

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	111		0.02185	2.000	1	mg/L	195055		03/04/08 0946	srp
	Magnesium (Mg), Diss.	39.7		0.01604	2.000	1	mg/L	195055		03/04/08 0946	srp
	Potassium (K), Diss.	7.34		0.08121	2.000	1	mg/L	195055		03/04/08 0946	srp
	Sodium (Na), Diss.	104		0.2000	20.00	10	mg/L	195128		03/05/08 0754	srp
20 B	Alkalinity, Total as CaCO3, Water	166		1.53	5.0	1	mg/L	194438		02/22/08 1030	snr
20 B	Bicarbonate (HCO3), Water	166		1.53	5.0	1	mg/L	194438		02/22/08 1030	snr
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	snr
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	snr
40 C	Solids, Total Dissolved (TDS), Water	860			10	1	mg/L	194443		02/21/08 1545	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	300		1.5	5.0	10	mg/L	194493		02/21/08 1604	sur
	Fluoride (F), Water	1.90		0.10	0.30	1	mg/L	194493		02/21/08 1548	sur
	Sulfate (SO4), Water	82.1		3.4	5.0	10	mg/L	194493		02/21/08 1604	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	2.92		0.19	0.20	1	mg/L	194493		02/21/08 1548	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 350207

Date: 03/05/2008

ER: Conestoga-Rovers and Associates

PROJECT: G.L. ERWIN

ATTN: James Ornelas

Customer Sample ID: MW2 22008  
 Laboratory Sample ID: 350207-2  
 Date Sampled: 02/20/2008  
 Date Received: 02/21/2008  
 Time Sampled: 14:00  
 Time Received: 09:38  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	242		0.02185	2.000	1	mg/L	195055		03/04/08 1001	srp
	Magnesium (Mg), Diss.	83.2		0.01604	2.000	1	mg/L	195055		03/04/08 1001	srp
	Potassium (K), Diss.	11.8		0.08121	2.000	1	mg/L	195055		03/04/08 1001	srp
	Sodium (Na), Diss.	329		0.2000	20.00	10	mg/L	195128		03/05/08 0809	srp
20 B	Alkalinity, Total as CaCO3, Water	223		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	223		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	1190			10	1	mg/L	194443		02/21/08 1545	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	441		1.5	5.0	10	mg/L	194493		02/21/08 1706	sur
	Fluoride (F), Water	1.94		0.10	0.30	1	mg/L	194493		02/21/08 1651	sur
	Sulfate (SO4), Water	143		3.4	5.0	10	mg/L	194493		02/21/08 1706	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water	5.11		0.19	0.20	1	mg/L	194493		02/21/08 1651	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Date: 03/05/2008

Job Number: 350207

ER: Conestoga-Rovers and Associates

PROJECT: G.L. ERWIN

ATTN: James Ornelas

Laboratory Sample ID: 350207-3  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: MW3 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 14:40  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	79.7		0.02185	2.000	1	mg/L	195055		03/04/08 1023	srp
	Magnesium (Mg), Diss.	26.2		0.01604	2.000	1	mg/L	195055		03/04/08 1023	srp
	Potassium (K), Diss.	19.1		0.08121	2.000	1	mg/L	195055		03/04/08 1023	srp
	Sodium (Na), Diss.	721		2.000	200.0	100	mg/L	195128		03/05/08 0824	srp
20 B	Alkalinity, Total as CaCO3, Water	246		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	246		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	2480			20	1	mg/L	194443		02/21/08 1545	daw
100.0	Ion Chromatography Analysis										
	Chloride, Water	1070		15	50	100	mg/L	194493		02/21/08 1840	sur
	Fluoride (F), Water	3.18		0.10	0.30	1	mg/L	194493		02/21/08 1808	sur
	Sulfate (SO4), Water	222		3.4	5.0	10	mg/L	194493		02/21/08 1824	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water	8.38		0.19	0.20	1	mg/L	194493		02/21/08 1808	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 350207

Date: 03/05/2008

CLIENT: Conestoga-Rovers and Associates

PROJECT: G.L. ERWIN

ATTN: James Ornelas

Laboratory Sample ID: 350207-4  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: MW4 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 15:10  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	1200		2.185	200.0	100	mg/L	195055		03/04/08 1243	sip
	Magnesium (Mg), Diss.	372		0.01604	2.000	1	mg/L	195055		03/04/08 1027	sip
	Potassium (K), Diss.	143		0.8121	20.00	10	mg/L	195128		03/05/08 1001	sip
	Sodium (Na), Diss.	3160		2.000	200.0	100	mg/L	195128		03/05/08 0827	sip
20 B	Alkalinity, Total as CaCO3, Water	210		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	210		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	18200			100	1	mg/L	194443		02/21/08 1545	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	8220		150	500	1000	mg/L	194493		02/21/08 1942	sur
	Fluoride (F), Water	1.33	B	0.50	1.5	5	mg/L	194493		02/21/08 1855	sur
	Sulfate (SO4), Water	587		34	50	100	mg/L	194493		02/21/08 1927	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	6.05		0.95	1.0	5	mg/L	194493		02/21/08 1855	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 350207

Date: 03/05/2008

ER: Conestoga-Rovers and Associates

PROJECT: G.L. ERWIN

ATTN: James Ornelas

Customer Sample ID: MW5 22008  
 Laboratory Sample ID: 350207-5  
 Date Sampled.....: 02/20/2008  
 Date Received.....: 02/21/2008  
 Time Sampled.....: 14:55  
 Time Received.....: 09:38  
 Sample Matrix.....: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	127		0.02185	2.000	1	mg/L	195055		03/04/08 1030	srp
	Magnesium (Mg), Diss.	42.1		0.01604	2.000	1	mg/L	195055		03/04/08 1030	srp
	Potassium (K), Diss.	19.6		0.08121	2.000	1	mg/L	195055		03/04/08 1030	srp
	Sodium (Na), Diss.	353		0.2000	20.00	10	mg/L	195128		03/05/08 0838	srp
20 B	Alkalinity, Total as CaCO3, Water	255		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	255		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	1500			10	1	mg/L	194443		02/21/08 1545	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	505		15	50	100	mg/L	194493		02/21/08 2029	sur
	Fluoride (F), Water	2.90		0.10	0.30	1	mg/L	194493		02/21/08 1958	sur
	Sulfate (SO4), Water	168		3.4	5.0	10	mg/L	194493		02/21/08 2013	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	5.61		0.19	0.20	1	mg/L	194493		02/21/08 1958	sur

\* In Description = Dry Wgt.

Job Number: 350207

LABORATORY TEST RESULTS

Date: 03/05/2008

PROJECT: G.L ERWIN

ATTN: James Ornelas

Customer Sample ID: MW6 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 14:25  
 Sample Matrix: Water

Laboratory Sample ID: 350207-6  
 Date Received: 02/21/2008  
 Time Received: 09:38

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	181		0.02185	2.000	1	mg/L	195055		03/04/08 1034	srp
	Magnesium (Mg), Diss.	62.4		0.01604	2.000	1	mg/L	195055		03/04/08 1034	srp
	Potassium (K), Diss.	15.7		0.08121	2.000	1	mg/L	195055		03/04/08 1034	srp
	Sodium (Na), Diss.	492		2.000	200.0	100	mg/L	195128		03/05/08 0842	srp
20 B	Alkalinity, Total as CaCO3, Water	227		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	227		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	1930			10	1	mg/L	194443		02/21/08 1545	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	799		15	50	100	mg/L	194493		02/22/08 1036	sur
	Fluoride (F), Water	3.05		0.10	0.30	1	mg/L	194493		02/22/08 1004	sur
	Sulfate (SO4), Water	163		3.4	5.0	10	mg/L	194493		02/22/08 1020	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	7.43		0.19	0.20	1	mg/L	194493		02/22/08 1004	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 350207

Date: 03/05/2008

CLIENT: Conestoga-Rovers and Associates

PROJECT: G.L. ERWIN

ATTN: James Ornelas

Customer Sample ID: MW7 22008  
 Laboratory Sample ID: 350207-7  
 Date Sampled: 02/20/2008  
 Date Received: 02/21/2008  
 Time Sampled: 14:10  
 Time Received: 09:38  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	37.6		0.02185	2.000	1	mg/L	195055		03/04/08 1038	srp
	Magnesium (Mg), Diss.	12.4		0.01604	2.000	1	mg/L	195055		03/04/08 1038	srp
	Potassium (K), Diss.	5.41		0.08121	2.000	1	mg/L	195055		03/04/08 1038	srp
	Sodium (Na), Diss.	261		0.2000	20.00	10	mg/L	195128		03/05/08 0846	srp
20 B	Alkalinity, Total as CaCO3, Water	251		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	251		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	930			10	1	mg/L	194443		02/21/08 1545	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	269		1.5	5.0	10	mg/L	194493		02/22/08 1508	sur
	Fluoride (F), Water	2.40		0.10	0.30	1	mg/L	194493		02/22/08 1114	sur
	Sulfate (SO4), Water	122		3.4	5.0	10	mg/L	194493		02/22/08 1508	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	3.18		0.19	0.20	1	mg/L	194493		02/22/08 1114	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Date: 03/05/2008

Job Number: 350207

CLIENT: Conestoga-Rovers and Associates

PROJECT: G.L. ERWIN

ATTN: James Ornelas

Laboratory Sample ID: 350207-8  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: MW8 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 13:00  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	O. FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	82.2		0.02185	2.000	1	mg/L	195055		03/04/08 1041	srp
	Magnesium (Mg), Diss.	26.4		0.01604	2.000	1	mg/L	195055		03/04/08 1041	srp
	Potassium (K), Diss.	9.48		0.08121	2.000	1	mg/L	195055		03/04/08 1041	srp
	Sodium (Na), Diss.	461		2.000	200.0	100	mg/L	195128		03/05/08 0849	srp
20 B	Alkalinity, Total as CaCO3, Water	240		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	240		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	1780			10	1	mg/L	194536		02/22/08 1535	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	711		15	50	100	mg/L	194493		02/22/08 1247	sur
	Fluoride (F), Water	3.66		0.10	0.30	1	mg/L	194493		02/22/08 1129	sur
	Sulfate (SO4), Water	188		3.4	5.0	10	mg/L	194493		02/22/08 1232	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water	7.15		0.19	0.20	1	mg/L	194493		02/22/08 1129	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Date: 03/05/2008

Job Number: 350207

ATTN: James Ornelas

PROJECT: G. L. ERWIN

Customer Sample ID: MW9 22008  
 Laboratory Sample ID: 350207-9  
 Date Sampled.....: 02/20/2008  
 Date Received.....: 02/21/2008  
 Time Sampled.....: 13:30  
 Time Received.....: 09:38  
 Sample Matrix.....: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	867		0.2185	20.00	10	mg/L	195128		03/05/08 1206	srp
	Magnesium (Mg), Diss.	293		0.01604	2.000	1	mg/L	195055		03/04/08 1045	srp
	Potassium (K), Diss.	27.7		0.8121	20.00	10	mg/L	195128		03/05/08 1206	srp
	Sodium (Na), Diss.	2190		2.000	200.0	100	mg/L	195128		03/05/08 0853	srp
20 B	Alkalinity, Total as CaCO3, Water	229		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	229		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	12500			40	1	mg/L	194536		02/22/08 1535	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	6270		30	100	200	mg/L	194493		02/22/08 1349	sur
	Fluoride (F), Water	0.10	U	0.10	0.30	1	mg/L	194493		02/22/08 1145	sur
	Sulfate (SO4), Water	447		3.4	5.0	10	mg/L	194493		02/22/08 1334	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	0.19	U	0.19	0.20	1	mg/L	194493		02/22/08 1145	sur

\* In Description = Dry Wgt.

ATTN: James Ornelas

PROJECT: G.L.ERWIN

ER: Conestoga-Rovers and Associates

Laboratory Sample ID: 350207-10  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: MW10 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 13:10  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	551		0.2185	20.00	10	mg/L	195128		03/05/08 0858	srp
	Magnesium (Mg), Diss.	186		0.01604	2.000	1	mg/L	195055		03/04/08 1049	srp
	Potassium (K), Diss.	17.8		0.08121	2.000	1	mg/L	195055		03/04/08 1049	srp
	Sodium (Na), Diss.	280		0.2000	20.00	10	mg/L	195128		03/05/08 0858	srp
20 B	Alkalinity, Total as CaCO3, Water	253		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	253		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	4620			20	1	mg/L	194536		02/22/08 1535	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	1930		15	50	100	mg/L	194493		02/22/08 1421	sur
	Fluoride (F), Water	0.75		0.10	0.30	1	mg/L	194493		02/22/08 1200	sur
	Sulfate (SO4), Water	109		3.4	5.0	10	mg/L	194493		02/22/08 1405	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water	3.30		0.19	0.20	1	mg/L	194493		02/22/08 1200	sur

LABORATORY TEST RESULTS

Job Number: 350207

Date: 03/05/2008

ER: Conestoga-Rovers and Associates

PROJECT: G.I. ERWIN

ATTN: James Ornelas

Laboratory Sample ID: 350207-11  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: MW12 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 11:10  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	589		0.2185	20.00	10	mg/L	195128		03/05/08 0902	srp
	Magnesium (Mg), Diss.	211		0.01604	2.000	1	mg/L	195055		03/04/08 1103	srp
	Potassium (K), Diss.	18.1		0.08121	2.000	1	mg/L	195055		03/04/08 1103	srp
	Sodium (Na), Diss.	179		0.2000	20.00	10	mg/L	195128		03/05/08 0902	srp
20 B	Alkalinity, Total as CaCO3, Water	83.8		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	83.8		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	4580			20	1	mg/L	194536		02/22/08 1535	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	2020		15	50	100	mg/L	194493		02/22/08 1452	sur
	Fluoride (F), Water	0.93		0.10	0.30	1	mg/L	194493		02/22/08 1216	sur
	Sulfate (SO4), Water	70.8		3.4	5.0	10	mg/L	194493		02/22/08 1436	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	3.99		0.19	0.20	1	mg/L	194493		02/22/08 1216	sur

L A B O R A T O R Y   T E S T   R E S U L T S

Date: 03/05/2008

Job Number: 350207

ATTN: James Ornelas

PROJECT: G.L. PRWIN

Laboratory Sample ID: 350207-12  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: MW13 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 12:20  
 Sample Matrix: Water

PER: Conestoga-Rovers and Associates

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	362		0.02185	2.000	1	mg/L	195055		03/04/08 1107	srp
	Magnesium (Mg), Diss.	145		0.01604	2.000	1	mg/L	195055		03/04/08 1107	srp
	Potassium (K), Diss.	20.1		0.08121	2.000	1	mg/L	195055		03/04/08 1107	srp
	Sodium (Na), Diss.	172		0.2000	20.00	10	mg/L	195128		03/05/08 0906	srp
20 B	Alkalinity, Total as CaCO3, Water	209		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	209		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	3070			10	1	mg/L	194536		02/22/08 1535	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	1260		15	50	100	mg/L	194493		02/22/08 0433	sur
	Fluoride (F), Water	1.57		0.10	0.30	1	mg/L	194493		02/22/08 0401	sur
	Sulfate (SO4), Water	153		3.4	5.0	10	mg/L	194493		02/22/08 0417	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water	4.02		0.19	0.20	1	mg/L	194493		02/22/08 0401	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 350207

Date: 03/05/2008

PER: Conestoga-Rovers and Associates

PROJECT: G.L. ERWIN

ATTN: James Ornelas

Customer Sample ID: MW14 22008  
 Laboratory Sample ID: 350207-13  
 Date Sampled.....: 02/20/2008  
 Date Received.....: 02/21/2008  
 Time Sampled.....: 11:25  
 Time Received.....: 09:38  
 Sample Matrix.....: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	847		0.2185	20.00	10	mg/L	195128		03/05/08 1008	srp
	Magnesium (Mg), Diss.	272		0.01604	2.000	1	mg/L	195055		03/04/08 1111	srp
	Potassium (K), Diss.	25.7		0.8121	20.00	10	mg/L	195128		03/05/08 1008	srp
	Sodium (Na), Diss.	1510		2.000	200.0	100	mg/L	195128		03/05/08 0909	srp
20 B	Alkalinity, Total as CaCO3, Water	108		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	108		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	10300			40	1	mg/L	194536		02/22/08 1535	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	4910		15	50	100	mg/L	194493		02/22/08 0519	sur
	Fluoride (F), Water	3.14		0.10	0.30	1	mg/L	194493		02/22/08 0448	sur
	Sulfate (SO4), Water	674		34	50	100	mg/L	194493		02/22/08 0519	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	3.70		0.19	0.20	1	mg/L	194493		02/22/08 0448	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Date: 03/05/2008

Job Number: 350207

ATTN: James Ornelas

PROJECT: G.L. ERWIN

CLIENT: Conestoga-Rovers and Associates

Laboratory Sample ID: 350207-14  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: MW15 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 10:55  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	161		0.02185	2.000	1	mg/L	195055		03/04/08 1114	srp
	Magnesium (Mg), Diss.	62.2		0.01604	2.000	1	mg/L	195055		03/04/08 1114	srp
	Potassium (K), Diss.	10.5		0.08121	2.000	1	mg/L	195055		03/04/08 1114	srp
	Sodium (Na), Diss.	88.1		0.2000	20.00	10	mg/L	195128		03/05/08 0913	srp
20 B	Alkalinity, Total as CaCO3, Water	117		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	117		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	1500			10	1	mg/L	194536		02/22/08 1535	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	487		15	50	100	mg/L	194493		02/22/08 0606	sur
	Fluoride (F), Water	1.68		0.10	0.30	1	mg/L	194493		02/22/08 0535	sur
	Sulfate (SO4), Water	61.1		3.4	5.0	10	mg/L	194493		02/22/08 0551	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	2.19		0.19	0.20	1	mg/L	194493		02/22/08 0535	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 350207

Date: 03/05/2008

PER: Conestoga-Rovers and Associates

PROJECT: G.L. ERWIN

ATTN: James Ornelas

Customer Sample ID: MW16 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 12:45  
 Sample Matrix: Water

Laboratory Sample ID: 350207-15  
 Date Received: 02/21/2008  
 Time Received: 09:38

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RLN	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	141		0.02185	2.000	1	mg/L	195055		03/04/08 1118	srp
	Magnesium (Mg), Diss.	47.9		0.01604	2.000	1	mg/L	195055		03/04/08 1118	srp
	Potassium (K), Diss.	6.53		0.08121	2.000	1	mg/L	195055		03/04/08 1118	srp
	Sodium (Na), Diss.	154		0.2000	20.00	10	mg/L	195128		03/05/08 0924	srp
20 B	Alkalinity, Total as CaCO3, Water	190		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	190		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	990			10	1	mg/L	194536		02/22/08 1535	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	338		1.5	5.0	10	mg/L	194493		02/22/08 0709	sur
	Fluoride (F), Water	1.31		0.10	0.30	1	mg/L	194493		02/22/08 0653	sur
	Sulfate (SO4), Water	88.3		3.4	5.0	10	mg/L	194493		02/22/08 0709	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water	2.91		0.19	0.20	1	mg/L	194493		02/22/08 0653	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Date: 03/05/2008

Job Number: 350207

CLIENT: Conestoga-Rovers and Associates

PROJECT: G.L. ERWIN

ATTN: James Ornelas

Laboratory Sample ID: 350207-16  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: MW17 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 12:30  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	169		0.02185	2.000	1	mg/L	195055		03/04/08 1122	srp
	Magnesium (Mg), Diss.	59.9		0.01604	2.000	1	mg/L	195055		03/04/08 1122	srp
	Potassium (K), Diss.	8.35		0.08121	2.000	1	mg/L	195055		03/04/08 1122	srp
	Sodium (Na), Diss.	155		0.2000	20.00	10	mg/L	195128		03/05/08 0928	srp
20 B	Alkalinity, Total as CaCO3, Water	147		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	147		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	1550			10	1	mg/L	194536		02/22/08 1535	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	622		15	50	100	mg/L	194493		02/22/08 0831	sur
	Fluoride (F), Water	2.10		0.10	0.30	1	mg/L	194493		02/22/08 0756	sur
	Sulfate (SO4), Water	130		3.4	5.0	10	mg/L	194493		02/22/08 0811	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water	3.45		0.19	0.20	1	mg/L	194493		02/22/08 0756	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 350207

Date: 03/05/2008

PER: Conestoga-Rovers and Associates

PROJECT: G.L. ERWIN

ATTN: James Ornelas

Laboratory Sample ID: 350207-17  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: MW19 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 11:40  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	1130		0.2185	20.00	10	mg/L	195128		03/05/08 1012	srp
	Magnesium (Mg), Diss.	437		0.01604	2.000	1	mg/L	195055		03/04/08 1125	srp
	Potassium (K), Diss.	31.2		0.8121	20.00	10	mg/L	195128		03/05/08 1012	srp
	Sodium (Na), Diss.	684		2.000	200.0	100	mg/L	195128		03/05/08 0931	srp
20 B	Alkalinity, Total as CaCO3, Water	80.1		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	80.1		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	10300			40	1	mg/L	194536		02/22/08 1535	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	4800		15	50	100	mg/L	194493		02/22/08 0917	sur
	Fluoride (F), Water	1.72		0.10	0.30	1	mg/L	194493		02/22/08 0846	sur
	Sulfate (SO4), Water	476		3.4	5.0	10	mg/L	194493		02/22/08 0902	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water	3.62		0.19	0.20	1	mg/L	194493		02/22/08 0846	sur

\* In Description = Dry Wgt.

PROJECT: G:L ERWIN

CLIENT: Conestoga-Rovers and Associates

ATTN: James Ornelas

Laboratory Sample ID: 350207-18  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: MW20 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 10:40  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q_FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	393		0.02185	2.000	1	mg/L	195055		03/04/08 1129	srp
	Magnesium (Mg), Diss.	158		0.01604	2.000	1	mg/L	195055		03/04/08 1129	srp
	Potassium (K), Diss.	18.7		0.08121	2.000	1	mg/L	195055		03/04/08 1129	srp
	Sodium (Na), Diss.	247		0.2000	20.00	10	mg/L	195128		03/05/08 0935	srp
20 B	Alkalinity, Total as CaCO3, Water	117		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	117		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	3550			20	1	mg/L	194603		02/25/08 1045	daw
100.0	Ion Chromatography Analysis										
	Chloride, Water	1540		15	50	100.00	mg/L	194436		02/21/08 1851	sur
	Fluoride (F), Water	1.10		0.10	0.30	1.0000	mg/L	194436		02/21/08 1811	sur
	Sulfate (SO4), Water	108		3.4	5.0	10.0000	mg/L	194436		02/21/08 1831	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water	3.83		0.19	0.20	1.0000	mg/L	194436		02/21/08 1811	sur

\* In Description = Dry Mgt.

Job Number: 350207

LABORATORY TEST RESULTS

Date: 03/05/2008

CLIENT: Conestoga-Rovers and Associates

PROJECT: G.I ERWIN

ATTN: James Ornelas

Customer Sample ID: MW21 22008  
 Laboratory Sample ID: 350207-19  
 Date Sampled: 02/20/2008  
 Date Received: 02/21/2008  
 Time Sampled: 11:55  
 Time Received: 09:38  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	205		0.02185	2.000	1	mg/L	195055		03/04/08 1133	srp
	Magnesium (Mg), Diss.	71.3		0.01604	2.000	1	mg/L	195055		03/04/08 1133	srp
	Potassium (K), Diss.	14.4		0.08121	2.000	1	mg/L	195055		03/04/08 1133	srp
	Sodium (Na), Diss.	110		0.2000	20.00	10	mg/L	195128		03/05/08 0939	srp
20 B	Alkalinity, Total as CaCO3, Water	115		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	115		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	1740			10	1	mg/L	194603		02/25/08 1045	daw
80.0	Ion Chromatography Analysis										
	Chloride, Water	606		15	50	100.00	mg/L	194436		02/21/08 2031	sur
	Fluoride (F), Water	1.90		0.10	0.30	1.0000	mg/L	194436		02/21/08 1951	sur
	Sulfate (SO4), Water	159		3.4	5.0	10.0000	mg/L	194436		02/21/08 2011	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water	5.15		0.19	0.20	1.0000	mg/L	194436		02/21/08 1951	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Date: 03/05/2008

Job Number: 350207

CLIENT: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: James Ornelas

Laboratory Sample ID: 350207-20  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: MW22 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 13:20  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195014		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	291		0.02185	2.000	1	mg/L	195055		03/04/08 1136	srp
	Magnesium (Mg), Diss.	102		0.01604	2.000	1	mg/L	195055		03/04/08 1136	srp
	Potassium (K), Diss.	11.1		0.08121	2.000	1	mg/L	195055		03/04/08 1136	srp
	Sodium (Na), Diss.	244		0.2000	20.00	10	mg/L	195128		03/05/08 0942	srp
20 B	Alkalinity, Total as CaCO3, Water	374		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	374		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	2560			10	1	mg/L	194603		02/25/08 1045	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	1060		15	50	100.00	mg/L	194436		02/21/08 2211	sur
	Fluoride (F), Water	0.93		0.10	0.30	1.0000	mg/L	194436		02/21/08 2131	sur
	Sulfate (SO4), Water	171		3.4	5.0	10.0000	mg/L	194436		02/21/08 2151	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	2.70		0.19	0.20	1.0000	mg/L	194436		02/21/08 2131	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 350207

Date: 03/05/2008

ER: Conestoga-Rovers and Associates

PROJECT: G.L. ERWIN

ATTN: James Ornelas

Customer Sample ID: MWMEST 22008

Laboratory Sample ID: 350207-21

Date Sampled: 02/20/2008

Date Received: 02/21/2008

Time Sampled: 15:25

Time Received: 09:38

Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195016		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	662		0.2185	20.00	10	mg/L	195128		03/05/08 1209	srp
	Magnesium (Mg), Diss.	189		0.01604	2.000	1	mg/L	195128		03/05/08 1037	srp
	Potassium (K), Diss.	81.8		0.8121	20.00	10	mg/L	195128		03/05/08 1209	srp
	Sodium (Na), Diss.	564		2.000	200.0	100	mg/L	195128		03/05/08 1121	srp
20 B	Alkalinity, Total as CaCO3, Water	119		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	119		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	5850			20	1	mg/L	194603		02/25/08 1045	daw
40.0	Ion Chromatography Analysis										
	Chloride, Water	2780		15	50	100.00	mg/L	194436		02/21/08 2311	sur
	Fluoride (F), Water	0.54		0.10	0.30	1.0000	mg/L	194436		02/21/08 2231	sur
	Sulfate (SO4), Water	202		3.4	5.0	10.000	mg/L	194436		02/21/08 2251	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	3.43		0.19	0.20	1.0000	mg/L	194436		02/21/08 2231	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 350207

Date: 03/05/2008

CLIENT: Conestoga-Rovers and Associates

PROJECT: G.I. ERWIN

ATTN: James Ornelas

Laboratory Sample ID: 350207-22  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: MWSW 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 15:40  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195016		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	1010		0.2185	20.00	10	mg/L	195128		03/05/08 1136	srp
	Magnesium (Mg), Diss.	281		0.01604	2.000	1	mg/L	195128		03/05/08 1052	srp
	Potassium (K), Diss.	120		0.8121	20.00	10	mg/L	195128		03/05/08 1136	srp
	Sodium (Na), Diss.	2300		2.000	200.0	100	mg/L	195128		03/05/08 1140	srp
20 B	Alkalinity, Total as CaCO3, Water	278		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Bicarbonate (HCO3), Water	278		1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	sng
40 C	Solids, Total Dissolved (TDS), Water	13100			40	1	mg/L	194603		02/25/08 1045	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	5940		30	100	200.00	mg/L	194524		02/23/08 0753	sur
	Fluoride (F), Water	0.63		0.10	0.30	1.0000	mg/L	194436		02/21/08 2331	sur
	Sulfate (SO4), Water	896		34	50	100.00	mg/L	194436		02/22/08 0011	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water	9.30		0.19	0.20	1.0000	mg/L	194436		02/21/08 2331	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Date: 03/05/2008

Job Number: 350207

CLIENT: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: James Ornelas

Laboratory Sample ID: 350207-23  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: RW1 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 15:55  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195016		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	892		0.2185	20.00	10	mg/L	195128		03/05/08 1143	srp
	Magnesium (Mg), Diss.	255		0.01604	2.000	1	mg/L	195128		03/05/08 1055	srp
	Potassium (K), Diss.	126		0.8121	20.00	10	mg/L	195128		03/05/08 1143	srp
	Sodium (Na), Diss.	1810		2.000	200.0	100	mg/L	195128		03/05/08 1147	srp
20 B	Alkalinity, Total as CaCO3, Water	473		1.53	5.0	1	mg/L	194438		02/22/08 1030	snr
20 B	Bicarbonate (HCO3), Water	473		1.53	5.0	1	mg/L	194438		02/22/08 1030	snr
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	snr
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	snr
40 C	Solids, Total Dissolved (TDS), Water	11000			40	1	mg/L	194603		02/25/08 1045	daw
100.0	Ion Chromatography Analysis										
	Chloride, Water	5130		30	100	200.00	mg/L	194524		02/23/08 0813	sur
	Fluoride (F), Water	0.56		0.10	0.30	1.0000	mg/L	194436		02/22/08 0111	sur
	Sulfate (SO4), Water	677		34	50	100.00	mg/L	194436		02/22/08 0151	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water	6.80		0.19	0.20	1.0000	mg/L	194436		02/22/08 0111	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Date: 03/05/2008

Job Number: 350207

PROJECT: G.L ERWIN

CLIENT: Conestoga-Rovers and Associates

ANALYST: James Ornelas

Laboratory Sample ID: 350207-24  
 Date Received: 02/21/2008  
 Time Received: 09:38

Customer Sample ID: DUP 22008  
 Date Sampled: 02/20/2008  
 Time Sampled: 00:00  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q_FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3010A	Acid Digestion, Diss.	Complete				1		195016		03/03/08 1600	rim
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	888		0.2185	20.00	10	mg/L	195128		03/05/08 1158	srp
	Magnesium (Mg), Diss.	252		0.01604	2.000	1	mg/L	195128		03/05/08 1059	srp
	Potassium (K), Diss.	126		0.8121	20.00	10	mg/L	195128		03/05/08 1158	srp
	Sodium (Na), Diss.	1800		2.000	200.0	100	mg/L	195128		03/05/08 1202	srp
20 B	Alkalinity, Total as CaCO3, Water	231		1.53	5.0	1	mg/L	194438		02/22/08 1030	snr
20 B	Bicarbonate (HCO3), Water	231		1.53	5.0	1	mg/L	194438		02/22/08 1030	snr
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	snr
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	194438		02/22/08 1030	snr
40 C	Solids, Total Dissolved (TDS), Water	10800			40	1	mg/L	194603		02/25/08 1045	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	5120		30	100	200.00	mg/L	194524		02/23/08 0833	sur
	Fluoride (F), Water	0.55		0.10	0.30	1.0000	mg/L	194436		02/22/08 0211	sur
	Sulfate (SO4), Water	674		34	50	100.00	mg/L	194436		02/22/08 0251	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold Nitrogen, Nitrate as N (NO3-N), Water	6.78		0.19	0.20	1.0000	mg/L	194436		02/22/08 0211	sur

\* In Description = Dry Wgt.

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: James Ornelas

Test Method.....: SM 2320 B  
 Method Description.: Alkalinity  
 Parameter.....: Alkalinity, Total as CaCO3  
 Units.....: mg/L CaCO3  
 Batch(s)....: 194438  
 Analyst....: sng  
 Test Code.: ALK

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MB	194438--21		1.86							02/22/2008	1030
MS	350207-21	WC4081A	353.86		250.000000	119.19	93.9	75-125		02/22/2008	1030
DU	350207-21		122.92			119.19	3.1	20		02/22/2008	1030
MB	194438--21		1.86							02/22/2008	1030
LCS	194438--21	WC4050	931.21		1000.0		93.1	90.0-110.		02/22/2008	1030
MS	350207-1	WC4081A	381.79		250.000000	165.75	86.4	75-125		02/22/2008	1030
MS	350207-11	WC4081A	311.02		250.000000	83.81	90.9	75-125		02/22/2008	1030
DU	350207-1		165.75			165.75	0.0	20		02/22/2008	1030
LCS	194438--21	WC4050	931.21		1000.0		93.1	90.0-110.		02/22/2008	1030
DU	350207-11		81.95			83.81	2.2	20		02/22/2008	1030

Test Method.....: SM 2320 B  
 Method Description.: Alkalinity  
 Parameter.....: Bicarbonate (HCO3)  
 Units.....: mg/L CaCO3  
 Batch(s)....: 194438  
 Analyst....: sng  
 Test Code.: HCO3

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MS	350207-1	WC4081A	381.79		250.000000	165.75	86.4	75-125		02/22/2008	1030
MS	350207-21	WC4081A	353.86		250.000000	119.19	93.9	75-125		02/22/2008	1030
DU	350207-11		81.95			83.81	2.2	20		02/22/2008	1030
DU	350207-21		122.92			119.19	3.1	20		02/22/2008	1030
LCS	194438--21	WC4050	931.21		1000		93.1	90.0-110.		02/22/2008	1030
DU	350207-1		165.75			165.75	0.0	20		02/22/2008	1030
MS	350207-11	WC4081A	311.02		250.000000	83.81	90.9	75-125		02/22/2008	1030
LCS	194438--21	WC4050	931.21		1000		93.1	90.0-110.		02/22/2008	1030
MB	194438--21		1.86							02/22/2008	1030
MB	194438--21		1.86							02/22/2008	1030

Test Method.....: SM 2320 B  
 Method Description.: Alkalinity  
 Parameter.....: Carbonate (CO3)  
 Units.....: mg/L CaCO3  
 Batch(s)....: 194438  
 Analyst....: sng  
 Test Code.: CO3

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	350207-11		0			0	0	5		02/22/2008	1030
MB	194438--21		0							02/22/2008	1030
DU	350207-1		0			0	0	5		02/22/2008	1030
DU	350207-21		0			0	0	5		02/22/2008	1030
MB	194438--21		0							02/22/2008	1030

Test Method.....: SM 2320 B  
 Method Description.: Alkalinity  
 Parameter.....: Hydroxide (OH)  
 Units.....: mg/L CaCO3  
 Batch(s)....: 194438  
 Analyst....: sng  
 Test Code.: OH

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MB	194438--21		0							02/22/2008	1030
DU	350207-21		0			0	0	5		02/22/2008	1030
MB	194438--21		0							02/22/2008	1030
DU	350207-1		0			0	0	5		02/22/2008	1030

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: James Ornelas

Test Method.....: SM 2320 B  
 Method Description.: Alkalinity  
 Parameter.....: Hydroxide (OH)

Units.....: mg/L CaCO3  
 Batch(s)....: 194438

Analyst....: sng  
 Test Code.: OH

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date
DU	350207-11		0			0	0	5		02/22/2008 10

Test Method.....: SM2540 C  
 Method Description.: Solids, Total Dissolved (TDS)  
 Parameter.....: Solids, Total Dissolved (TDS)

Units.....: mg/L  
 Batch(s)....: 194443 194536 194603

Analyst....: daw  
 Test Code.: TDS

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date
MB	194443--21		0.00							02/21/2008 10
LCS	194443--21	WCS48139	1742.00		1800		96.8	90.0-110.		02/21/2008
DU	350090-2		645.00			628.00	2.7	10.0		02/21/2008
MB	194536--21		1.00							02/22/2008
LCS	194536--21	WCS48139	1744.00		1800		96.9	90.0-110.		02/22/2008 10
DU	350207-8		1779.00			1781.00	0.1	10.0		02/22/2008 10
MB	194603--21		0.00							02/25/2008
LCS	194603--21	WCS48139	1797.00		1800		99.8	90.0-110.		02/25/2008
DU	350207-18		3610.00			3552.00	1.6	10.0		02/25/2008 10

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: James Ornelas

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: EPA 300.0

Units.....: mg/L

Analyst...: sur

Method Description.: Ion Chromatography Analysis

Batch(s)...: 194524

CCB	Continuing Calibration Blank					02/22/2008 18:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	0					
Fluoride (F)	0					
Nitrogen, Nitrate as N (NO3-N)	0					
Sulfate (SO4)	0					
Nitrogen, Nitrite as N (NO2-N)	0					
Nitrate + Nitrite as N	0.000					

CCB	Continuing Calibration Blank					02/22/2008 21:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	0					
Fluoride (F)	0					
Nitrogen, Nitrate as N (NO3-N)	0.0295					
Sulfate (SO4)	0					
Nitrogen, Nitrite as N (NO2-N)	0					
Nitrate + Nitrite as N	0.029					

CCB	Continuing Calibration Blank					02/23/2008 01:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	0.0174					
Fluoride (F)	0					
Nitrogen, Nitrate as N (NO3-N)	0					
Sulfate (SO4)	0					
Nitrogen, Nitrite as N (NO2-N)	0					
Nitrate + Nitrite as N	0.000					

CCB	Continuing Calibration Blank					02/23/2008 05:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	0.0098					
Fluoride (F)	0					
Nitrogen, Nitrate as N (NO3-N)	0					
Sulfate (SO4)	0					
Nitrogen, Nitrite as N (NO2-N)	0.0229					
Nitrate + Nitrite as N	0.023					

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: James Ornelas

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				02/23/2008	10:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	0					
Fluoride (F)	0					
Nitrogen, Nitrate as N (NO3-N)	0.0321					
Sulfate (SO4)	0					
Nitrogen, Nitrite as N (NO2-N)	0					
Nitrate + Nitrite as N	0.032					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS48411			02/22/2008	17:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	19.8654		20.00		99.3	90.0-110.0
Fluoride (F)	10.5405		10.00		105.4	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.0543		10.00		100.5	90.0-110.0
Sulfate (SO4)	19.4011		20.00		97.0	90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	10.0099		10.00		100.1	90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS48411			02/22/2008	21:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	19.8853		20.00		99.4	90.0-110.0
Fluoride (F)	10.6394		10.00		106.4	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.0631		10.00		100.6	90.0-110.0
Sulfate (SO4)	19.4197		20.00		97.1	90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.9600		10.00		99.6	90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS48411			02/23/2008	01:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	19.9413		20.00		99.7	90.0-110.0
Fluoride (F)	10.6477		10.00		106.5	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.0708		10.00		100.7	90.0-110.0
Sulfate (SO4)	19.4735		20.00		97.4	90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.9808		10.00		99.8	90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS48411			02/23/2008	05:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	19.9166		20.00		99.6	90.0-110.0
Fluoride (F)	10.6559		10.00		106.6	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.0339		10.00		100.3	90.0-110.0
Sulfate (SO4)	19.3968		20.00		97.0	90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.9589		10.00		99.6	90.0-110.0

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: G.L ERWIN ATTN: James Ornelas

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS48411			02/23/2008	09:58

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	19.8699		20.00		99.3	90.0-110.0
Fluoride (F)	10.6790		10.00		106.8	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.0197		10.00		100.2	90.0-110.0
Sulfate (SO4)	19.3577		20.00		96.8	90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.9819		10.00		99.8	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride, Water	4.3422			4.3871	1.0	20
Fluoride (F), Water	1.9919			1.9744	0.9	20
Nitrogen, Nitrate as N (NO3-N), Water	0.0477			0.0491	0.0014	0.2500
Sulfate (SO4), Water	5.9374			5.9555	0.3	20
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0	0
Nitrate + Nitrite as N, Water	0.048			0.049	0.001	0.400

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride, Water	4.4958			4.4813	0.3	20
Fluoride (F), Water	0.0898			0.0819	0.0079	0.3000
Nitrogen, Nitrate as N (NO3-N), Water	0.0231			0.0243	0.0012	0.2500
Sulfate (SO4), Water	0.7427			0.7365	0.0062	0.5000
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0	0
Nitrate + Nitrite as N, Water	0.023			0.024	0.001	0.400

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride, Water	3.2564			3.2390	0.5	20
Fluoride (F), Water	0.0422			0.0346	0.0076	0.3000
Nitrogen, Nitrate as N (NO3-N), Water	0.0278			0.0281	0.0003	0.2500
Sulfate (SO4), Water	1.0704			1.0687	0.0017	0.5000
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0	0
Nitrate + Nitrite as N, Water	0.028			0.028	0.000	0.400

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	0					
Fluoride (F)	0					
Nitrogen, Nitrate as N (NO3-N)	0					
Sulfate (SO4)	0					
Nitrogen, Nitrite as N (NO2-N)	0					
Nitrate + Nitrite as N	0.000					

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

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	WCS48411			02/22/2008	13:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	19.8362		20.00		99.2	90.0-110.0
Fluoride (F)	10.4972		10.00		105.0	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.0435		10.00		100.4	90.0-110.0
Sulfate (SO4)	19.3762		20.00		96.9	90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.9559		10.00		99.6	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	19.8402		20.00		99.2	90.0-110.0
Fluoride (F)	10.4960		10.00		105.0	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.0368		10.00		100.4	90.0-110.0
Sulfate (SO4)	19.3720		20.00		96.9	90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.9758		10.00		99.8	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	19.8850		20.00		99.4	90.0-110.0
Fluoride (F)	10.6827		10.00		106.8	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.0164		10.00		100.2	90.0-110.0
Sulfate (SO4)	19.3576		20.00		96.8	90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.9806		10.00		99.8	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	0					
Fluoride (F)	0					
Nitrogen, Nitrate as N (NO3-N)	0					
Sulfate (SO4)	0					
Nitrogen, Nitrite as N (NO2-N)	0					
Nitrate + Nitrite as N	0.000					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	0					
Fluoride (F)	0					
Nitrogen, Nitrate as N (NO3-N)	0					
Sulfate (SO4)	0					
Nitrogen, Nitrite as N (NO2-N)	0					
Nitrate + Nitrite as N	0.000					

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS48338	350197-2	10.0	02/23/2008	00:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride, Water	13.7366		10.000000	4.3871	93.5	90-110
Fluoride (F), Water	3.8630		2.000000	1.9744	94.4	90-110
Nitrogen, Nitrate as N (NO3-N), Water	1.8605		2.000000	0.0491	90.6	90-110
Sulfate (SO4), Water	15.1641		10.000000	5.9555	92.1	90-110
Nitrogen, Nitrite as N (NO2-N), Water	1.8786		2.000000	0	93.9	90-110

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride, Water	13.8810		10.000000	4.4813	94.0	90-110
Fluoride (F), Water	2.1206		2.000000	0.0819	101.9	90-110
Nitrogen, Nitrate as N (NO3-N), Water	1.8187		2.000000	0.0243	89.7	90-110
Sulfate (SO4), Water	9.9825		10.000000	0.7365	92.5	90-110
Nitrogen, Nitrite as N (NO2-N), Water	1.8661		2.000000	0	93.3	90-110
Nitrate + Nitrite as N, Water	3.685		0.000000	0.024		

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride, Water	12.6800		10.000000	3.2390	94.4	90-110
Fluoride (F), Water	2.1149		2.000000	0.0346	104.0	90-110
Nitrogen, Nitrate as N (NO3-N), Water	1.7993		2.000000	0.0281	88.6	90-110
Sulfate (SO4), Water	10.3022		10.000000	1.0687	92.3	90-110
Nitrogen, Nitrite as N (NO2-N), Water	1.8604		2.000000	0	93.0	90-110
Nitrate + Nitrite as N, Water	3.660		0.000000	0.028		

Test Method.....: EPA300.0 Rev2.1

Units.....: mg/L

Analyst....: sur

Method Description.: Ion Chromatography Analysis - Short Hold Batch(s)...: 194436 194493

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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	0.0618					
Sulfate (SO4)	0					
Fluoride (F)	0					
Nitrogen, Nitrate as N (NO3-N)	0.0116					

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

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				02/22/2008	03:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	0.0677					
Fluoride (F)	0					
Sulfate (SO4)	0					
Nitrogen, Nitrate as N (NO3-N)	0.0116					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	10.5324		10.00		105.3	90.0-110.0
Sulfate (SO4)	19.4582		20.00		97.3	90.0-110.0
Chloride	19.9175		20.00		99.6	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.0853		10.00		100.9	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	19.9957		20.00		100.0	90.0-110.0
Fluoride (F)	10.6018		10.00		106.0	90.0-110.0
Sulfate (SO4)	19.5172		20.00		97.6	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.1046		10.00		101.0	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	10.5974		10.00		106.0	90.0-110.0
Chloride	19.9939		20.00		100.0	90.0-110.0
Sulfate (SO4)	19.4924		20.00		97.5	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.0918		10.00		100.9	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F), Water	0.0215			0.0234	0.0019	0.3000
Sulfate (SO4), Water	1.0164			0.9998	0.0166	0.5000
Chloride, Water	15.4457			15.4033	0.3	20
Nitrogen, Nitrate as N (NO3-N), Water	0.0333			0.0341	0.0008	0.2500

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

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

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	WCS48411			02/21/2008	16:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	10.4760		10.00		104.8	90.0-110.0
Sulfate (SO4)	19.4646		20.00		97.3	90.0-110.0
Chloride	19.9093		20.00		99.5	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.0801		10.00		100.8	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sulfate (SO4)	19.4618		20.00		97.3	90.0-110.0
Chloride	19.9279		20.00		99.6	90.0-110.0
Fluoride (F)	10.4873		10.00		104.9	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.0937		10.00		100.9	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	0					
Chloride	0					
Sulfate (SO4)	0.0484					
Nitrogen, Nitrate as N (NO3-N)	0					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sulfate (SO4), Water	10.3264		10.000000	0.9998	93.3	90-110
Chloride, Water	23.1390		10.000000	15.4033	77.4	90-110
Fluoride (F), Water	2.1493		2.000000	0.0234	106.3	90-110
Nitrogen, Nitrate as N (NO3-N), Water	1.8951		2.000000	0.0341	93.0	90-110

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	0.1996					
Sulfate (SO4)	0					
Chloride	0					
Nitrogen, Nitrate as N (NO3-N)	0					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sulfate (SO4)	0					
Chloride	0					
Fluoride (F)	0.2040					
Nitrogen, Nitrate as N (NO3-N)	0					

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

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				02/22/2008	03:

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				02/22/2008	06:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	0.1855					
Chloride	0					
Sulfate (SO4)	0					
Nitrogen, Nitrate as N (NO3-N)	0					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				02/22/2008	09:

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				02/22/2008	13:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sulfate (SO4)	0					
Fluoride (F)	0					
Chloride	0.2457					
Nitrogen, Nitrate as N (NO3-N)	0					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				02/22/2008	16:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	0.1877					
Chloride	0					
Sulfate (SO4)	0					
Nitrogen, Nitrate as N (NO3-N)	0					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS48345			02/21/2008	17:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	10.364		10.00		103.6	90.0-110.0
Chloride	19.305		20.00		96.5	90.0-110.0
Sulfate (SO4)	19.577		20.00		97.9	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	9.8878		10.0		98.9	90.0-110.0

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	WCS48345			02/21/2008	210
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	10.575		10.00		105.8	90.0-110.0
Chloride	19.368		20.00		96.8	90.0-110.0
Sulfate (SO4)	19.369		20.00		96.8	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	9.8605		10.0		98.6	90.0-110.0

CCV	Continuing Calibration Verification	WCS48345			02/22/2008	030
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sulfate (SO4)	19.425		20.00		97.1	90.0-110.0
Chloride	19.601		20.00		98.0	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	9.9548		10.0		99.5	90.0-110.0

CCV	Continuing Calibration Verification	WCS48345			02/22/2008	060
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	11.054		10.00		110.5	90.0-110.0
Sulfate (SO4)	19.503		20.00		97.5	90.0-110.0
Chloride	19.697		20.00		98.5	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	9.9746		10.0		99.7	90.0-110.0

CCV	Continuing Calibration Verification	WCS48345			02/22/2008	090
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sulfate (SO4)	19.533		20.00		97.7	90.0-110.0
Chloride	19.621		20.00		98.1	90.0-110.0
Fluoride (F)	10.905		10.00		109.0	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	9.8848		10.0		98.8	90.0-110.0

CCV	Continuing Calibration Verification	WCS48345			02/22/2008	130
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	10.832		10.00		108.3	90.0-110.0
Chloride	19.639		20.00		98.2	90.0-110.0
Sulfate (SO4)	19.529		20.00		97.6	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	9.9881		10.0		99.9	90.0-110.0

CCV	Continuing Calibration Verification	WCS48345			02/22/2008	150
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	10.870		10.00		108.7	90.0-110.0
Sulfate (SO4)	19.416		20.00		97.1	90.0-110.0
Chloride	19.633		20.00		98.2	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	9.9792		10.0		99.8	90.0-110.0

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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DU	Method Duplicate		350207-1	10	02/21/2008	16:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sulfate (SO4), Water	8.1762			8.2146	0.5	20
Fluoride (F), Water	0.2939			0.2849	0.0090	0.3000
Chloride, Water	30.026			30.037	0.0	20
Nitrogen, Nitrate as N (NO3-N), Water	0.3594			0.3458	0.0136	0.2500

DU	Method Duplicate		350207-15	10	02/22/2008	07:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sulfate (SO4), Water	9.1142			8.8316	3.1	20
Chloride, Water	33.719			33.786	0.2	20
Fluoride (F), Water	0.2661			0.2705	0.0044	0.3000
Nitrogen, Nitrate as N (NO3-N), Water	0			0	0	0

DU	Method Duplicate		350207-7	10	02/22/2008	15:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sulfate (SO4), Water	12.131			12.160	0.2	20
Fluoride (F), Water	0.3644			0.3706	0.0062	0.3000
Chloride, Water	26.703			26.931	0.9	20
Nitrogen, Nitrate as N (NO3-N), Water	0.3406			0	0.3406	0.2500

ICB	Initial Calibration Blank					02/21/2008 14:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sulfate (SO4)	0					
Fluoride (F)	0					
Chloride	0					
Nitrogen, Nitrate as N (NO3-N)	0					

ICV	Initial Calibration Verification	WCS48345				02/21/2008 14:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	10.362		10.00		103.6	90.0-110.0
Chloride	18.715		20.00		93.6	90.0-110.0
Sulfate (SO4)	18.558		20.00		92.8	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	9.5394		10.0		95.4	90.0-110.0

LCS	Laboratory Control Sample	WCS48345				02/21/2008 15:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	19.344		20.00		96.7	90.0-110.0
Fluoride (F)	10.345		10.00		103.5	90.0-110.0
Sulfate (SO4)	19.230		20.00		96.2	90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	9.8302		10.0		98.3	90.0-110.0



Job Number.: 350207

QUALITY CONTROL RESULTS

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: G.L ERWIN ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCB	Continuing Calibration Blank				03/04/2008	10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00442					
Magnesium (Mg)	0.00297					
Potassium (K)	-0.08997					
Sodium (Na)	0.01299					

CCB	Continuing Calibration Blank				03/04/2008	11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00598					
Magnesium (Mg)	-0.03187					
Potassium (K)	-0.43144					

CCB	Continuing Calibration Blank				03/04/2008	11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01127					
Magnesium (Mg)	-0.05573					
Potassium (K)	-0.67945					

CCB	Continuing Calibration Blank				03/04/2008	11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00998					
Magnesium (Mg)	-0.06438					
Potassium (K)	-0.75879					

CCB	Continuing Calibration Blank			100	03/04/2008	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01611					
Magnesium (Mg)	-0.08535					
Potassium (K)	-0.97072					

CCB	Continuing Calibration Blank				03/04/2008	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.02415					
Magnesium (Mg)	-0.08328					
Potassium (K)	-0.97705					
Sodium (Na)	-0.03139					



Job Number.: 350207

## QUALITY CONTROL RESULTS

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	MS022908CC			03/04/2008	13:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	11.42210		12.50		91.4	90.0-110.0
Magnesium (Mg)	4.49563		5.000		89.9	90.0-110.0
Potassium (K)	10.66763		12.50		85.3	90.0-110.0

CHI	Calibration check standard 1	MS022008T1			03/04/2008	08:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.09823		0.1000		98.2	50.0-150.0
Magnesium (Mg)	0.11538		0.1000		115.4	50.0-150.0
Potassium (K)	0.68694		0.60000		114.5	50.0-150.0
Sodium (Na)	0.52468		0.60000		87.4	50.0-150.0

CHI	Calibration check standard 1	MS022008T1			03/04/2008	13:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.06408		0.1000		64.1	50.0-150.0

CH3	Standard check for ICAP	MS022008T3			03/04/2008	08:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	20.04857		20.00		100.2	95.0-105.0
Magnesium (Mg)	20.04486		20.00		100.2	95.0-105.0
Potassium (K)	20.19860		20.00		101.0	95.0-105.0
Sodium (Na)	20.14877		20.00		100.7	95.0-105.0

EB	Extraction Blank		195014		03/04/2008	09:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	0.05074					
Magnesium (Mg), Diss.	0.00244					
Potassium (K), Diss.	-0.21592					
Sodium (Na), Diss.	0.04451					

EB	Extraction Blank		195014		03/04/2008	10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	0.03035					
Magnesium (Mg), Diss.	-0.02173					
Potassium (K), Diss.	-0.39664					
Sodium (Na), Diss.	0.11059					

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				03/04/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.01362					
Magnesium (Mg)	0.01393					
Potassium (K)	0.13403					
Sodium (Na)	0.01057					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ICV	Initial Calibration Verification	MS022908CC				03/04/2008 08:
Calcium (Ca)	12.46045		12.50		99.7	90.0-110.0
Magnesium (Mg)	4.94161		5.000		98.8	90.0-110.0
Potassium (K)	11.93721		12.50		95.5	90.0-110.0
Sodium (Na)	11.64514		12.50		93.2	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISA	Interference Check Sample A	MS02198IA				03/04/2008 08:
Calcium (Ca)	456.57522		500.0		91.3	80-120
Magnesium (Mg)	517.18218		500.0		103.4	80-120
Potassium (K)	0.39405		0.0			
Sodium (Na)	0.19360		0.0			

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISA	Interference Check Sample A	MS02198IA				03/04/2008 13:
Calcium (Ca)	419.20831		500.0		83.8	80-120
Magnesium (Mg)	479.64160		500.0		95.9	80-120
Potassium (K)	-0.79902		0.0			

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISB	Interference Check Sample B	MS021908IB				03/04/2008 08:
Calcium (Ca)	462.95065		510.0		90.8	80.0-120.0
Magnesium (Mg)	526.90899		510.0		103.3	80.0-120.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISB	Interference Check Sample B	MS021908IB				03/04/2008 13:
Calcium (Ca)	420.85894		510.0		82.5	80.0-120.0
Magnesium (Mg)	483.58209		510.0		94.8	80.0-120.0
Potassium (K)	13.23727					

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	MSPIKEW	195014		03/04/2008	09:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	10.48674		10.00		104.9	80.0-120.0
Magnesium (Mg), Water	10.43246		10.00		104.3	80.0-120.0
Potassium (K), Water	10.05450		10.00		100.5	80.0-120.0
Sodium (Na), Water	9.58228		10.00		95.8	80.0-120.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	112.46644	111.46994		111.46994	0.9	20
Magnesium (Mg), Diss.	40.04423	39.67894		39.67894	0.9	20
Potassium (K), Diss.	7.52927	7.33849		7.33849	0.19078	2.00000

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	241.33070	241.68978		241.68978	0.1	20
Magnesium (Mg), Diss.	83.14186	83.15602		83.15602	0.0	20
Potassium (K), Diss.	11.77017	11.77022		11.77022	0.0	20

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	121.66001		10.00	111.46994	101.9	75-125
Magnesium (Mg), Diss.	50.15348		10.00	39.67894	104.7	75-125
Potassium (K), Diss.	20.46329		10.00	7.33849	131.2	75-125

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	251.01226		10.00	241.68978	93.2	75-125
Magnesium (Mg), Diss.	93.95075		10.00	83.15602	107.9	75-125
Potassium (K), Diss.	27.16063		10.00	11.77022	153.9	75-125

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	120.86222	121.66001	10.00	111.46994	93.9	75-125
					8.2	20
Magnesium (Mg), Diss.	49.96446	50.15348	10.00	39.67894	102.9	75-125
					1.7	20
Potassium (K), Diss.	20.45468	20.46329	10.00	7.33849	131.2	75-125
					0.0	20

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

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	MSPKEW	350207-2		03/04/2008	10:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	248.87213	251.01226	10.00	241.68978	71.8 25.9	75-125 20
Magnesium (Mg), Diss.	93.12158	93.95075	10.00	83.15602	99.7 7.9	75-125 20
Potassium (K), Diss.	27.00887	27.16063	10.00	11.77022	152.4 1.0	75-125 20

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	24.07053	24.09122	1.000000	23.05064	102.0 2.0	75-125 20

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	0.01172					
Magnesium (Mg), Water	-0.01448					
Potassium (K), Water	-0.26601					
Sodium (Na), Water	-0.00844					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	111.30348		10.00	111.46994	-1.7	75-125
Magnesium (Mg), Diss.	46.20615		10.00	39.67894	65.3	75-125
Potassium (K), Diss.	17.72871		10.00	7.33849	103.9	75-125

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00885					
Magnesium (Mg)	0.04486					
Potassium (K)	0.63792					
Sodium (Na)	0.27891					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	21.06233			111.46994	5.5	10.0
Magnesium (Mg), Diss.	7.38061			39.67894	7.0	10.0
Potassium (K), Diss.	0.46484			7.33849	68.3	10.0

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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.STD	Spiked Blank Duplicate				03/04/2008	080
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	3.62644					
Magnesium (Mg)	1.56274					
Potassium (K)	3.01610					
Sodium (Na)	20.58140					

CCB	Continuing Calibration Blank				03/05/2008	070
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00022					
Magnesium (Mg)	-0.01020					
Potassium (K)	-0.06280					
Sodium (Na)	-0.00537					

CCB	Continuing Calibration Blank				03/05/2008	080
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00049					
Magnesium (Mg)	-0.03204					
Potassium (K)	-0.20230					
Sodium (Na)	-0.01293					

CCB	Continuing Calibration Blank				03/05/2008	090
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00110					
Magnesium (Mg)	-0.03268					
Potassium (K)	-0.21739					
Sodium (Na)	-0.01317					

CCB	Continuing Calibration Blank				03/05/2008	090
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00077					
Magnesium (Mg)	-0.03845					
Potassium (K)	-0.26153					
Sodium (Na)	-0.01620					

CCB	Continuing Calibration Blank				03/05/2008	100
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00347					
Magnesium (Mg)	-0.04247					
Potassium (K)	-0.30308					
Sodium (Na)	-0.01384					

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

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	MS022908CC			03/05/2008	07:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.31589		12.50		98.5	90.0-110.0
Magnesium (Mg)	4.87040		5.000		97.4	90.0-110.0
Potassium (K)	11.75973		12.50		94.1	90.0-110.0
Sodium (Na)	11.63471		12.50		93.1	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.24465		12.50		98.0	90.0-110.0
Magnesium (Mg)	4.78653		5.000		95.7	90.0-110.0
Potassium (K)	11.62513		12.50		93.0	90.0-110.0
Sodium (Na)	11.62963		12.50		93.0	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.38281		12.50		99.1	90.0-110.0
Magnesium (Mg)	4.83140		5.000		96.6	90.0-110.0
Potassium (K)	11.79940		12.50		94.4	90.0-110.0
Sodium (Na)	11.79037		12.50		94.3	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.45902		12.50		99.7	90.0-110.0
Magnesium (Mg)	4.85963		5.000		97.2	90.0-110.0
Potassium (K)	11.80924		12.50		94.5	90.0-110.0
Sodium (Na)	11.79981		12.50		94.4	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.21790		12.50		97.7	90.0-110.0
Magnesium (Mg)	4.74988		5.000		95.0	90.0-110.0
Potassium (K)	11.64532		12.50		93.2	90.0-110.0
Sodium (Na)	11.67624		12.50		93.4	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.09518		0.1000		95.2	50.0-150.0
Magnesium (Mg)	0.08998		0.1000		90.0	50.0-150.0
Potassium (K)	0.49908		0.60000		83.2	50.0-150.0
Sodium (Na)	0.51448		0.60000		85.7	50.0-150.0

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.I. ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH3	Standard check for ICAP	MS022008T3			03/05/2008	07:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	20.10182		20.00		100.5	95.0-105.0
Magnesium (Mg)	20.10380		20.00		100.5	95.0-105.0
Potassium (K)	20.09605		20.00		100.5	95.0-105.0
Sodium (Na)	20.11068		20.00		100.6	95.0-105.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ICB Initial Calibration Blank						03/05/2008 07:
Calcium (Ca)	0.00012					
Magnesium (Mg)	0.00809					
Potassium (K)	0.05142					
Sodium (Na)	0.00496					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ICV Initial Calibration Verification						03/05/2008 07:
Calcium (Ca)	12.45751		12.50		99.7	90.0-110.0
Magnesium (Mg)	4.94538		5.000		98.9	90.0-110.0
Potassium (K)	11.80612		12.50		94.4	90.0-110.0
Sodium (Na)	11.61230		12.50		92.9	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISA Interference Check Sample A						03/05/2008 07:
Calcium (Ca)	445.94754		500.0		89.2	80-120
Magnesium (Mg)	504.97854		500.0		101.0	80-120
Potassium (K)	0.09280		0.0			
Sodium (Na)	0.17868		0.0			

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISB Interference Check Sample B						03/05/2008 07:
Calcium (Ca)	451.79901		510.0		88.6	80.0-120.0
Magnesium (Mg)	513.67614		510.0		100.7	80.0-120.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
LCS Laboratory Control Sample						03/05/2008 07:
Calcium (Ca), Water	9.95630		10.00		99.6	80.0-120.0
Magnesium (Mg), Water	9.74157		10.00		97.4	80.0-120.0
Potassium (K), Water	9.58378		10.00		95.8	80.0-120.0
Sodium (Na), Water	9.50468		10.00		95.0	80.0-120.0

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		350207-1	10	03/05/2008	07:58

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	10.83761	10.78788		10.78788	0.5	20
Magnesium (Mg), Diss.	3.70729	3.69176		3.69176	0.01553	2.00000
Potassium (K), Diss.	0.47032	0.47784		0.47784	0.00752	2.00000
Sodium (Na), Diss.	10.42258	10.39644		10.39644	0.3	20

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	23.90283	24.06742		24.06742	0.7	20
Magnesium (Mg), Diss.	7.70545	7.76723		7.76723	0.06178	2.00000
Potassium (K), Diss.	0.60443	0.65828		0.65828	0.05385	2.00000
Sodium (Na), Diss.	32.58054	32.85701		32.85701	0.8	20

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	11.81688		1.000000	10.78788	102.9	75-125
Magnesium (Mg), Diss.	4.67712		1.000000	3.69176	98.5	75-125
Potassium (K), Diss.	1.43159		1.000000	0.47784	95.4	75-125
Sodium (Na), Diss.	11.40919		1.000000	10.39644	101.3	75-125

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	25.08454		1.000000	24.06742	101.7	75-125
Magnesium (Mg), Diss.	8.76247		1.000000	7.76723	99.5	75-125
Potassium (K), Diss.	1.66281		1.000000	0.65828	100.5	75-125
Sodium (Na), Diss.	33.91465		1.000000	32.85701	105.8	75-125

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	11.73256	11.81688	1.000000	10.78788	94.5	75-125
					8.5	20
Magnesium (Mg), Diss.	4.64089	4.67712	1.000000	3.69176	94.9	75-125
					3.7	20
Potassium (K), Diss.	1.41231	1.43159	1.000000	0.47784	93.4	75-125
					2.1	20
Sodium (Na), Diss.	11.34819	11.40919	1.000000	10.39644	95.2	75-125
					6.2	20

Job Number.: 350207

QUALITY CONTROL RESULTS

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MSD	Matrix Spike Duplicate	MSPIKEW	350207-2	10	03/05/2008	08:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	25.06108	25.08454	1.000000	24.06742	99.4	75-125
					2.3	20
Magnesium (Mg), Diss.	8.76669	8.76247	1.000000	7.76723	99.9	75-125
					0.4	20
Potassium (K), Diss.	1.68306	1.66281	1.000000	0.65828	102.5	75-125
					2.0	20
Sodium (Na), Diss.	33.90298	33.91465	1.000000	32.85701	104.6	75-125
					1.1	20

PB	Prep. Blank		195014		03/05/2008	09:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	0.00427					
Magnesium (Mg), Water	-0.04032					
Potassium (K), Water	-0.29016					
Sodium (Na), Water	-0.01635					

S0	Calibration Blank				03/05/2008	07:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00532					
Magnesium (Mg)	0.03888					
Potassium (K)	0.51879					
Sodium (Na)	0.24901					

STD	Spiked Blank Duplicate				03/05/2008	07:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	3.32992					
Magnesium (Mg)	1.42976					
Potassium (K)	3.28309					
Sodium (Na)	18.19301					

CCB	Continuing Calibration Blank				03/05/2008	07:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00022					
Magnesium (Mg)	-0.01020					
Potassium (K)	-0.06280					
Sodium (Na)	-0.00537					

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

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				03/05/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00049					
Magnesium (Mg)	-0.03204					
Potassium (K)	-0.20230					
Sodium (Na)	-0.01293					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					03/05/2008 09:
Calcium (Ca)	0.00110					
Magnesium (Mg)	-0.03268					
Potassium (K)	-0.21739					
Sodium (Na)	-0.01317					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					03/05/2008 09:
Calcium (Ca)	-0.00077					
Magnesium (Mg)	-0.03845					
Potassium (K)	-0.26153					
Sodium (Na)	-0.01620					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					03/05/2008 10:
Calcium (Ca)	-0.00347					
Magnesium (Mg)	-0.04247					
Potassium (K)	-0.30308					
Sodium (Na)	-0.01384					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					03/05/2008 11:
Calcium (Ca)	0.01674					
Magnesium (Mg)	-0.03760					
Potassium (K)	-0.28162					
Sodium (Na)	0.01648					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					03/05/2008 11:
Calcium (Ca)	0.01427					
Magnesium (Mg)	-0.03965					
Potassium (K)	-0.28429					
Sodium (Na)	-0.00275					

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCB	Continuing Calibration Blank				03/05/2008	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.01331					
Magnesium (Mg)	-0.02783					
Potassium (K)	-0.21204					
Sodium (Na)	0.00229					

CCV	Continuing Calibration Verification	MS022908CC				03/05/2008 07:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.31589		12.50		98.5	90.0-110.0
Magnesium (Mg)	4.87040		5.000		97.4	90.0-110.0
Potassium (K)	11.75973		12.50		94.1	90.0-110.0
Sodium (Na)	11.63471		12.50		93.1	90.0-110.0

CCV	Continuing Calibration Verification	MS022908CC				03/05/2008 08:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.24465		12.50		98.0	90.0-110.0
Magnesium (Mg)	4.78653		5.000		95.7	90.0-110.0
Potassium (K)	11.62513		12.50		93.0	90.0-110.0
Sodium (Na)	11.62963		12.50		93.0	90.0-110.0

CCV	Continuing Calibration Verification	MS022908CC				03/05/2008 09:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.38281		12.50		99.1	90.0-110.0
Magnesium (Mg)	4.83140		5.000		96.6	90.0-110.0
Potassium (K)	11.79940		12.50		94.4	90.0-110.0
Sodium (Na)	11.79037		12.50		94.3	90.0-110.0

CCV	Continuing Calibration Verification	MS022908CC				03/05/2008 09:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.45902		12.50		99.7	90.0-110.0
Magnesium (Mg)	4.85963		5.000		97.2	90.0-110.0
Potassium (K)	11.80924		12.50		94.5	90.0-110.0
Sodium (Na)	11.79981		12.50		94.4	90.0-110.0

CCV	Continuing Calibration Verification	MS022908CC				03/05/2008 10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.21790		12.50		97.7	90.0-110.0
Magnesium (Mg)	4.74988		5.000		95.0	90.0-110.0
Potassium (K)	11.64532		12.50		93.2	90.0-110.0
Sodium (Na)	11.67624		12.50		93.4	90.0-110.0



QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				03/05/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00012					
Magnesium (Mg)	0.00809					
Potassium (K)	0.05142					
Sodium (Na)	0.00496					

ICV	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	MS022908CC			03/05/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.45751		12.50		99.7	90.0-110.0
Magnesium (Mg)	4.94538		5.000		98.9	90.0-110.0
Potassium (K)	11.80612		12.50		94.4	90.0-110.0
Sodium (Na)	11.61230		12.50		92.9	90.0-110.0

ISA	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISA	Interference Check Sample A	MS02198IA			03/05/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	445.94754		500.0		89.2	80-120
Magnesium (Mg)	504.97854		500.0		101.0	80-120
Potassium (K)	0.09280		0.0			
Sodium (Na)	0.17868		0.0			

ISB	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISB	Interference Check Sample B	MS021908IB			03/05/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	451.79901		510.0		88.6	80.0-120.0
Magnesium (Mg)	513.67614		510.0		100.7	80.0-120.0

LCS	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	MSPIKEW	195014		03/05/2008	09:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	9.95630		10.00		99.6	80.0-120.0
Magnesium (Mg), Water	9.74157		10.00		97.4	80.0-120.0
Potassium (K), Water	9.58378		10.00		95.8	80.0-120.0
Sodium (Na), Water	9.50468		10.00		95.0	80.0-120.0

LCS	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	MSPIKEW	195016		03/05/2008	10:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	9.73401		10.00		97.3	80.0-120.0
Magnesium (Mg), Water	9.49815		10.00		95.0	80.0-120.0
Potassium (K), Water	9.37212		10.00		93.7	80.0-120.0
Sodium (Na), Water	9.31067		10.00		93.1	80.0-120.0

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		350207-1	10	03/05/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	10.83761	10.78788		10.78788	0.5	20
Magnesium (Mg), Diss.	3.70729	3.69176		3.69176	0.01553	2.00000
Potassium (K), Diss.	0.47032	0.47784		0.47784	0.00752	2.00000
Sodium (Na), Diss.	10.42258	10.39644		10.39644	0.3	20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		350207-2	10	03/05/2008	08:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	23.90283	24.06742		24.06742	0.7	20
Magnesium (Mg), Diss.	7.70545	7.76723		7.76723	0.06178	2.00000
Potassium (K), Diss.	0.60443	0.65828		0.65828	0.05385	2.00000
Sodium (Na), Diss.	32.58054	32.85701		32.85701	0.8	20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		350207-21		03/05/2008	10:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Magnesium (Mg), Diss.	189.28170	189.48902		189.48902	0.1	20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		350207-21	100	03/05/2008	11:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sodium (Na), Diss.	5.59782	5.64020		5.64020	0.04238	2.00000

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		350207-21	10	03/05/2008	12:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	66.09181	66.16470		66.16470	0.1	20
Potassium (K), Diss.	8.19023	8.18283		8.18283	0.00740	2.00000

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	350207-1	10	03/05/2008	08:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	11.81688		1.000000	10.78788	102.9	75-125
Magnesium (Mg), Diss.	4.67712		1.000000	3.69176	98.5	75-125
Potassium (K), Diss.	1.43159		1.000000	0.47784	95.4	75-125
Sodium (Na), Diss.	11.40919		1.000000	10.39644	101.3	75-125

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	350207-2	10	03/05/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	25.08454		1.000000	24.06742	101.7	75-125
Magnesium (Mg), Diss.	8.76247		1.000000	7.76723	99.5	75-125
Potassium (K), Diss.	1.66281		1.000000	0.65828	100.5	75-125
Sodium (Na), Diss.	33.91465		1.000000	32.85701	105.8	75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	350207-21		03/05/2008	10:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Magnesium (Mg), Diss.	193.09454		10.00	189.48902	36.1	75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	350207-21	100	03/05/2008	11:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sodium (Na), Diss.	5.54459		0.100000	5.64020	-95.6	75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	350207-21	10	03/05/2008	12:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	65.33699		1.000000	66.16470	-82.8	75-125
Potassium (K), Diss.	9.02977		1.000000	8.18283	84.7	75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSPIKEW	350207-1	10	03/05/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	11.73256	11.81688	1.000000	10.78788	94.5	75-125
					8.5	20
Magnesium (Mg), Diss.	4.64089	4.67712	1.000000	3.69176	94.9	75-125
					3.7	20
Potassium (K), Diss.	1.41231	1.43159	1.000000	0.47784	93.4	75-125
					2.1	20
Sodium (Na), Diss.	11.34819	11.40919	1.000000	10.39644	95.2	75-125
					6.2	20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSPIKEW	350207-2	10	03/05/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	25.06108	25.08454	1.000000	24.06742	99.4	75-125
					2.3	20
Magnesium (Mg), Diss.	8.76669	8.76247	1.000000	7.76723	99.9	75-125
					0.4	20
Potassium (K), Diss.	1.68306	1.66281	1.000000	0.65828	102.5	75-125
					2.0	20
Sodium (Na), Diss.	33.90298	33.91465	1.000000	32.85701	104.6	75-125
					1.1	20

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSPIKEW	350207-21		03/05/2008	10:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Magnesium (Mg), Diss.	196.70773	193.09454	10.00	189.48902	72.2 66.7	75-125 20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSPIKEW	350207-21	100	03/05/2008	11:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sodium (Na), Diss.	5.68451	5.54459	0.100000	5.64020	44.3 545.4	75-125 20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSPIKEW	350207-21	10	03/05/2008	12:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	65.87405	65.33699	1.000000	66.16470	-29.1 96.0	75-125 20
Potassium (K), Diss.	9.15377	9.02977	1.000000	8.18283	97.1 13.6	75-125 20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PB	Prep. Blank		195014		03/05/2008	09:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	0.00427					
Magnesium (Mg), Water	-0.04032					
Potassium (K), Water	-0.29016					
Sodium (Na), Water	-0.01635					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PB	Prep. Blank		195016		03/05/2008	10:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	0.00361					
Magnesium (Mg), Water	-0.04005					
Potassium (K), Water	-0.31485					
Sodium (Na), Water	-0.01677					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PDS	Post Digestion Spike	MSPIKE3	350207-21		03/05/2008	11:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Magnesium (Mg), Diss.	196.58949		10.00	189.48902	71.0	75-125

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
S0	Calibration Blank				03/05/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00532					
Magnesium (Mg)	0.03888					
Potassium (K)	0.51879					
Sodium (Na)	0.24901					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
SD	Serial Dilution		350207-21	5	03/05/2008	11:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	130.44952			582.27478	12.0	10.0
Magnesium (Mg), Diss.	37.53335			189.48902	1.0	10.0
Potassium (K), Diss.	17.87343			105.87985	15.6	10.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
STD	Spiked Blank Duplicate				03/05/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	3.32992					
Magnesium (Mg)	1.42976					
Potassium (K)	3.28309					
Sodium (Na)	18.19301					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				03/05/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00022					
Magnesium (Mg)	-0.01020					
Potassium (K)	-0.06280					
Sodium (Na)	-0.00537					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				03/05/2008	08:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00049					
Magnesium (Mg)	-0.03204					
Potassium (K)	-0.20230					
Sodium (Na)	-0.01293					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				03/05/2008	09:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00110					
Magnesium (Mg)	-0.03268					
Potassium (K)	-0.21739					
Sodium (Na)	-0.01317					

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				03/05/2008	09:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00077					
Magnesium (Mg)	-0.03845					
Potassium (K)	-0.26153					
Sodium (Na)	-0.01620					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00347					
Magnesium (Mg)	-0.04247					
Potassium (K)	-0.30308					
Sodium (Na)	-0.01384					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.01674					
Magnesium (Mg)	-0.03760					
Potassium (K)	-0.28162					
Sodium (Na)	0.01648					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.01427					
Magnesium (Mg)	-0.03965					
Potassium (K)	-0.28429					
Sodium (Na)	-0.00275					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.01331					
Magnesium (Mg)	-0.02783					
Potassium (K)	-0.21204					
Sodium (Na)	0.00229					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.01331					
Magnesium (Mg)	-0.01357					
Potassium (K)	-0.14348					
Sodium (Na)	-0.00038					

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	MS022908CC			03/05/2008	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.31589		12.50		98.5	90.0-110.0
Magnesium (Mg)	4.87040		5.000		97.4	90.0-110.0
Potassium (K)	11.75973		12.50		94.1	90.0-110.0
Sodium (Na)	11.63471		12.50		93.1	90.0-110.0

CCV	Continuing Calibration Verification	MS022908CC			03/05/2008	08
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.24465		12.50		98.0	90.0-110.0
Magnesium (Mg)	4.78653		5.000		95.7	90.0-110.0
Potassium (K)	11.62513		12.50		93.0	90.0-110.0
Sodium (Na)	11.62963		12.50		93.0	90.0-110.0

CCV	Continuing Calibration Verification	MS022908CC			03/05/2008	09
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.38281		12.50		99.1	90.0-110.0
Magnesium (Mg)	4.83140		5.000		96.6	90.0-110.0
Potassium (K)	11.79940		12.50		94.4	90.0-110.0
Sodium (Na)	11.79037		12.50		94.3	90.0-110.0

CCV	Continuing Calibration Verification	MS022908CC			03/05/2008	09
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.45902		12.50		99.7	90.0-110.0
Magnesium (Mg)	4.85963		5.000		97.2	90.0-110.0
Potassium (K)	11.80924		12.50		94.5	90.0-110.0
Sodium (Na)	11.79981		12.50		94.4	90.0-110.0

CCV	Continuing Calibration Verification	MS022908CC			03/05/2008	10
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.21790		12.50		97.7	90.0-110.0
Magnesium (Mg)	4.74988		5.000		95.0	90.0-110.0
Potassium (K)	11.64532		12.50		93.2	90.0-110.0
Sodium (Na)	11.67624		12.50		93.4	90.0-110.0

CCV	Continuing Calibration Verification	MS030308CC			03/05/2008	11
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.15487		12.50		97.2	90.0-110.0
Magnesium (Mg)	4.75072		5.000		95.0	90.0-110.0
Potassium (K)	11.68164		12.50		93.5	90.0-110.0
Sodium (Na)	11.74679		12.50		94.0	90.0-110.0

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS030308CC			03/05/2008	11:58

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.20537		12.50		97.6	90.0-110.0
Magnesium (Mg)	4.73136		5.000		94.6	90.0-110.0
Potassium (K)	11.82256		12.50		94.6	90.0-110.0
Sodium (Na)	11.81579		12.50		94.5	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.14176		12.50		97.1	90.0-110.0
Magnesium (Mg)	4.69358		5.000		93.9	90.0-110.0
Potassium (K)	11.86410		12.50		94.9	90.0-110.0
Sodium (Na)	11.86025		12.50		94.9	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.24337		12.50		97.9	90.0-110.0
Magnesium (Mg)	4.77226		5.000		95.4	90.0-110.0
Potassium (K)	12.05498		12.50		96.4	90.0-110.0
Sodium (Na)	11.88931		12.50		95.1	90.0-110.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.09518		0.1000		95.2	50.0-150.0
Magnesium (Mg)	0.08998		0.1000		90.0	50.0-150.0
Potassium (K)	0.49908		0.60000		83.2	50.0-150.0
Sodium (Na)	0.51448		0.60000		85.7	50.0-150.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.08654		0.1000		86.5	50.0-150.0
Magnesium (Mg)	0.07265		0.1000		72.7	50.0-150.0
Potassium (K)	0.37348		0.60000		62.2	50.0-150.0
Sodium (Na)	0.52351		0.60000		87.3	50.0-150.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	20.10182		20.00		100.5	95.0-105.0
Magnesium (Mg)	20.10380		20.00		100.5	95.0-105.0
Potassium (K)	20.09605		20.00		100.5	95.0-105.0
Sodium (Na)	20.11068		20.00		100.6	95.0-105.0

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB	Extraction Blank		195014		03/05/2008	10:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	0.03756					
Magnesium (Mg), Diss.	-0.03562					
Potassium (K), Diss.	-0.32062					
Sodium (Na), Diss.	0.03297					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				03/05/2008	07:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00012					
Magnesium (Mg)	0.00809					
Potassium (K)	0.05142					
Sodium (Na)	0.00496					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	MS022908CC			03/05/2008	07:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	12.45751		12.50		99.7	90.0-110.0
Magnesium (Mg)	4.94538		5.000		98.9	90.0-110.0
Potassium (K)	11.80612		12.50		94.4	90.0-110.0
Sodium (Na)	11.61230		12.50		92.9	90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISA	Interference Check Sample A	MS02198IA			03/05/2008	07:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	445.94754		500.0		89.2	80-120
Magnesium (Mg)	504.97854		500.0		101.0	80-120
Potassium (K)	0.09280		0.0			
Sodium (Na)	0.17868		0.0			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISA	Interference Check Sample A	MS022708IA			03/05/2008	13:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	442.67657		500.0		88.5	80-120
Magnesium (Mg)	495.34716		500.0		99.1	80-120
Potassium (K)	0.02888		0.0			
Sodium (Na)	0.19082		0.0			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISB	Interference Check Sample B	MS021908IB			03/05/2008	07:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	451.79901		510.0		88.6	80.0-120.0
Magnesium (Mg)	513.67614		510.0		100.7	80.0-120.0

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Job Number.: 350207

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CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISB	Interference Check Sample B	MS022708IB			03/05/2008	13:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	452.57727		510.0		88.7	80.0-120.0
Magnesium (Mg)	509.09619		510.0		99.8	80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	MSPIKEW	195014		03/05/2008	09:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	9.95630		10.00		99.6	80.0-120.0
Magnesium (Mg), Water	9.74157		10.00		97.4	80.0-120.0
Potassium (K), Water	9.58378		10.00		95.8	80.0-120.0
Sodium (Na), Water	9.50468		10.00		95.0	80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	MSPIKEW	195016		03/05/2008	10:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	9.73401		10.00		97.3	80.0-120.0
Magnesium (Mg), Water	9.49815		10.00		95.0	80.0-120.0
Potassium (K), Water	9.37212		10.00		93.7	80.0-120.0
Sodium (Na), Water	9.31067		10.00		93.1	80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		350207-1	10	03/05/2008	07:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	10.83761	10.78788		10.78788	0.5	20
Magnesium (Mg), Diss.	3.70729	3.69176		3.69176	0.01553	2.00000
Potassium (K), Diss.	0.47032	0.47784		0.47784	0.00752	2.00000
Sodium (Na), Diss.	10.42258	10.39644		10.39644	0.3	20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		350207-2	10	03/05/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	23.90283	24.06742		24.06742	0.7	20
Magnesium (Mg), Diss.	7.70545	7.76723		7.76723	0.06178	2.00000
Potassium (K), Diss.	0.60443	0.65828		0.65828	0.05385	2.00000
Sodium (Na), Diss.	32.58054	32.85701		32.85701	0.8	20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		350207-21		03/05/2008	10:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Magnesium (Mg), Diss.	189.28170	189.48902		189.48902	0.1	20

QUALITY CONTROL RESULTS

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MD	Method Duplicate		350207-21	100	03/05/2008	11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sodium (Na), Diss.	5.59782	5.64020		5.64020	0.04238	2.00000

MD	Method Duplicate		350207-21	10	03/05/2008	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	66.09181	66.16470		66.16470	0.1	20
Potassium (K), Diss.	8.19023	8.18283		8.18283	0.00740	2.00000

MS	Matrix Spike	MSPIKEW	350207-1	10	03/05/2008	08:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	11.81688		1.000000	10.78788	102.9	75-125
Magnesium (Mg), Diss.	4.67712		1.000000	3.69176	98.5	75-125
Potassium (K), Diss.	1.43159		1.000000	0.47784	95.4	75-125
Sodium (Na), Diss.	11.40919		1.000000	10.39644	101.3	75-125

MS	Matrix Spike	MSPIKEW	350207-2	10	03/05/2008	08:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	25.08454		1.000000	24.06742	101.7	75-125
Magnesium (Mg), Diss.	8.76247		1.000000	7.76723	99.5	75-125
Potassium (K), Diss.	1.66281		1.000000	0.65828	100.5	75-125
Sodium (Na), Diss.	33.91465		1.000000	32.85701	105.8	75-125

MS	Matrix Spike	MSPIKEW	350207-21		03/05/2008	10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Magnesium (Mg), Diss.	193.09454		10.00	189.48902	36.1	75-125

MS	Matrix Spike	MSPIKEW	350207-21	100	03/05/2008	10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sodium (Na), Diss.	5.54459		0.100000	5.64020	-95.6	75-125

MS	Matrix Spike	MSPIKEW	350207-21	10	03/05/2008	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	65.33699		10.00	66.16470	-8.3	75-125
Potassium (K), Diss.	9.02977		10.00	8.18283	8.5	75-125

QUALITY CONTROL RESULTS

Job Number.: 350207

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PROJECT: G.L ERWIN

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MSD	Matrix Spike Duplicate	MSPIKEW	350207-1	10	03/05/2008	08:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	11.73256	11.81688	1.000000	10.78788	94.5 8.5	75-125 20
Magnesium (Mg), Diss.	4.64089	4.67712	1.000000	3.69176	94.9 3.7	75-125 20
Potassium (K), Diss.	1.41231	1.43159	1.000000	0.47784	93.4 2.1	75-125 20
Sodium (Na), Diss.	11.34819	11.40919	1.000000	10.39644	95.2 6.2	75-125 20

MSD	Matrix Spike Duplicate	MSPIKEW	350207-2	10	03/05/2008	08:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	25.06108	25.08454	1.000000	24.06742	99.4 2.3	75-125 20
Magnesium (Mg), Diss.	8.76669	8.76247	1.000000	7.76723	99.9 0.4	75-125 20
Potassium (K), Diss.	1.68306	1.66281	1.000000	0.65828	102.5 2.0	75-125 20
Sodium (Na), Diss.	33.90298	33.91465	1.000000	32.85701	104.6 1.1	75-125 20

MSD	Matrix Spike Duplicate	MSPIKEW	350207-21		03/05/2008	10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Magnesium (Mg), Diss.	196.70773	193.09454	10.00	189.48902	72.2 66.7	75-125 20

MSD	Matrix Spike Duplicate	MSPIKEW	350207-21	100	03/05/2008	11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Sodium (Na), Diss.	5.68451	5.54459	0.100000	5.64020	44.3 545.4	75-125 20

MSD	Matrix Spike Duplicate	MSPIKEW	350207-21	10	03/05/2008	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	65.87405	65.33699	10.00	66.16470	-2.9 96.4	75-125 20
Potassium (K), Diss.	9.15377	9.02977	10.00	8.18283	9.7 13.2	75-125 20

QUALITY CONTROL RESULTS

Job Number.: 350207

Report Date.: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PB	Prep. Blank		195014		03/05/2008	09:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	0.00427					
Magnesium (Mg), Water	-0.04032					
Potassium (K), Water	-0.29016					
Sodium (Na), Water	-0.01635					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PB	Prep. Blank		195016		03/05/2008	10:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	0.00361					
Magnesium (Mg), Water	-0.04005					
Potassium (K), Water	-0.31485					
Sodium (Na), Water	-0.01677					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PDS	Post Digestion Spike	MSPIKE3	350207-21		03/05/2008	11:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Magnesium (Mg), Diss.	196.58949		10.00	189.48902	71.0	75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
S0	Calibration Blank				03/05/2008	07:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00532					
Magnesium (Mg)	0.03888					
Potassium (K)	0.51879					
Sodium (Na)	0.24901					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
SD	Serial Dilution		350207-21	5	03/05/2008	11:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	130.44952			582.27478	12.0	10.0
Magnesium (Mg), Diss.	37.53335			189.48902	1.0	10.0
Potassium (K), Diss.	17.87343			105.87985	15.6	10.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
STD	Spiked Blank Duplicate				03/05/2008	07:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	3.32992					
Magnesium (Mg)	1.42976					
Potassium (K)	3.28309					
Sodium (Na)	18.19301					

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 03/05/2008

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 reiveiwed.
- 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

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- 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 - GFAA, Mercury
- CRI - Low level standard check - ICP
- Dil Fac - Dilution Factor - Secondary dilution analysis

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

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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: 350207

Date: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: James Ornelas

Lab ID: 350207-1		Client ID: MW1 22008		Date Recvd: 02/21/2008		Sample Date: 02/20/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED		DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008	1600	
SM 2320 B	Alkalinity	1	194438			02/22/2008	1030	
	Electronic Data Deliverables	1						
EPA 300.0	Ion Chromatography Analysis	1	194493			02/21/2008	1548	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/21/2008	1604	10
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/21/2008	1548	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008	0946	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008	0754	10
N/A	Sample Filtration	1	194924			03/03/2008	1400	
SM2540 C	Solids, Total Dissolved (TDS)	1	194443			02/21/2008	1545	

Lab ID: 350207-2		Client ID: MW2 22008		Date Recvd: 02/21/2008		Sample Date: 02/20/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED		DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008	1600	
SM 2320 B	Alkalinity	1	194438			02/22/2008	1030	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/21/2008	1651	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/21/2008	1706	10
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/21/2008	1651	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008	1001	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008	0809	10
N/A	Sample Filtration	1	194924			03/03/2008	1400	
SM2540 C	Solids, Total Dissolved (TDS)	1	194443			02/21/2008	1545	

Lab ID: 350207-3		Client ID: MW3 22008		Date Recvd: 02/21/2008		Sample Date: 02/20/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED		DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008	1600	
SM 2320 B	Alkalinity	1	194438			02/22/2008	1030	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/21/2008	1808	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/21/2008	1824	10
EPA 300.0	Ion Chromatography Analysis	1	194493			02/21/2008	1840	100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/21/2008	1808	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008	1023	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008	0824	100
N/A	Sample Filtration	1	194924			03/03/2008	1400	
SM2540 C	Solids, Total Dissolved (TDS)	1	194443			02/21/2008	1545	

Lab ID: 350207-4		Client ID: MW4 22008		Date Recvd: 02/21/2008		Sample Date: 02/20/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED		DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008	1600	
SM 2320 B	Alkalinity	1	194438			02/22/2008	1030	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/21/2008	1855	5
EPA 300.0	Ion Chromatography Analysis	1	194493			02/21/2008	1927	100
EPA 300.0	Ion Chromatography Analysis	1	194493			02/21/2008	1942	1000
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/21/2008	1855	5
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008	1027	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008	1243	100
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008	0827	100
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008	1001	10
N/A	Sample Filtration	1	194924			03/03/2008	1400	
SM2540 C	Solids, Total Dissolved (TDS)	1	194443			02/21/2008	1545	

Lab ID: 350207-5		Client ID: MW5 22008		Date Recvd: 02/21/2008		Sample Date: 02/20/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED		DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008	1600	
SM 2320 B	Alkalinity	1	194438			02/22/2008	1030	

LABORATORY CHRONICLE

Job Number: 350207

Date: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: James Ornelas

Lab ID: 350207-5	Client ID: MW5 22008	Date Recvd: 02/21/2008	Sample Date: 02/20/2008				
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION
EPA 300.0	Ion Chromatography Analysis	1	194493			02/21/2008	1958
EPA 300.0	Ion Chromatography Analysis	1	194493			02/21/2008	2013 10
EPA 300.0	Ion Chromatography Analysis	1	194493			02/21/2008	2029 100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/21/2008	1958
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008	1030
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008	0838 10
N/A	Sample Filtration	1	194924			03/03/2008	1400
SM2540 C	Solids, Total Dissolved (TDS)	1	194443			02/21/2008	1545

Lab ID: 350207-6	Client ID: MW6 22008	Date Recvd: 02/21/2008	Sample Date: 02/20/2008				
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008	1600
SM 2320 B	Alkalinity	1	194438			02/22/2008	1030
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008	1004
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008	1020 10
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008	1036 100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/22/2008	1004
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008	1034
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008	0842 100
N/A	Sample Filtration	1	194924			03/03/2008	1400
SM2540 C	Solids, Total Dissolved (TDS)	1	194443			02/21/2008	1545

Lab ID: 350207-7	Client ID: MW7 22008	Date Recvd: 02/21/2008	Sample Date: 02/20/2008				
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008	1600
SM 2320 B	Alkalinity	1	194438			02/22/2008	1030
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008	1114
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008	1508 10
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/22/2008	1114
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008	1038
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008	0846 10
N/A	Sample Filtration	1	194924			03/03/2008	1400
SM2540 C	Solids, Total Dissolved (TDS)	1	194443			02/21/2008	1545

Lab ID: 350207-8	Client ID: MW8 22008	Date Recvd: 02/21/2008	Sample Date: 02/20/2008				
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008	1600
SM 2320 B	Alkalinity	1	194438			02/22/2008	1030
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008	1129
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008	1232 10
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008	1247 100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/22/2008	1129
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008	1041
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008	0849 100
N/A	Sample Filtration	1	194924			03/03/2008	1400
SM2540 C	Solids, Total Dissolved (TDS)	1	194536			02/22/2008	1535

Lab ID: 350207-9	Client ID: MW9 22008	Date Recvd: 02/21/2008	Sample Date: 02/20/2008				
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008	1600
SM 2320 B	Alkalinity	1	194438			02/22/2008	1030
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008	1145
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008	1334 10
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008	1349 200
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/22/2008	1145

LABORATORY CHRONICLE

Job Number: 350207

Date: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: James Ornelas

Lab ID: 350207-9	Client ID: MW9 22008	Date Recvd: 02/21/2008	Sample Date: 02/20/2008				
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	# (S)	DATE/TIME ANALYZED	DILUTION
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008 1045	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008 0853	100
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008 1206	10
N/A	Sample Filtration	1	194924			03/03/2008 1400	
SM2540 C	Solids, Total Dissolved (TDS)	1	194536			02/22/2008 1535	

Lab ID: 350207-10	Client ID: MW10 22008	Date Recvd: 02/21/2008	Sample Date: 02/20/2008				
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	# (S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008 1600	
SM 2320 B	Alkalinity	1	194438			02/22/2008 1030	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 1200	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 1405	10
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 1421	100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/22/2008 1200	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008 1049	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008 0858	10
N/A	Sample Filtration	1	194924			03/03/2008 1400	
SM2540 C	Solids, Total Dissolved (TDS)	1	194536			02/22/2008 1535	

Lab ID: 350207-11	Client ID: MW12 22008	Date Recvd: 02/21/2008	Sample Date: 02/20/2008				
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	# (S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008 1600	
SM 2320 B	Alkalinity	1	194438			02/22/2008 1030	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 1216	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 1436	10
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 1452	100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/22/2008 1216	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008 1103	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008 0902	10
N/A	Sample Filtration	1	194924			03/03/2008 1400	
SM2540 C	Solids, Total Dissolved (TDS)	1	194536			02/22/2008 1535	

Lab ID: 350207-12	Client ID: MW13 22008	Date Recvd: 02/21/2008	Sample Date: 02/20/2008				
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	# (S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008 1600	
SM 2320 B	Alkalinity	1	194438			02/22/2008 1030	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0401	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0417	10
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0433	100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/22/2008 0401	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008 1107	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008 0906	10
N/A	Sample Filtration	1	194924			03/03/2008 1400	
SM2540 C	Solids, Total Dissolved (TDS)	1	194536			02/22/2008 1535	

Lab ID: 350207-13	Client ID: MW14 22008	Date Recvd: 02/21/2008	Sample Date: 02/20/2008				
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	# (S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008 1600	
SM 2320 B	Alkalinity	1	194438			02/22/2008 1030	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0448	
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0519	100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/22/2008 0448	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008 1111	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008 0909	100
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008 1008	10

LABORATORY CHRONICLE

Job Number: 350207

Date: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: James Ornelas

Lab ID:	Client ID:	Date Recvd:	Sample Date:			
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED
350207-13	MW14 22008	02/21/2008	02/20/2008			
N/A	Sample Filtration	1	194924			03/03/2008 1400
SM2540 C	Solids, Total Dissolved (TDS)	1	194536			02/22/2008 1535
350207-14	MW15 22008	02/21/2008	02/20/2008			
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008 1600
SM 2320 B	Alkalinity	1	194438			02/22/2008 1030
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0535
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0551 10
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0606 100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/22/2008 0535
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008 1114
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008 0913 10
N/A	Sample Filtration	1	194924			03/03/2008 1400
SM2540 C	Solids, Total Dissolved (TDS)	1	194536			02/22/2008 1535
350207-15	MW16 22008	02/21/2008	02/20/2008			
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008 1600
SM 2320 B	Alkalinity	1	194438			02/22/2008 1030
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0653
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0709 10
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/22/2008 0653
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008 1118
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008 0924 10
N/A	Sample Filtration	1	194924			03/03/2008 1400
SM2540 C	Solids, Total Dissolved (TDS)	1	194536			02/22/2008 1535
350207-16	MW17 22008	02/21/2008	02/20/2008			
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008 1600
SM 2320 B	Alkalinity	1	194438			02/22/2008 1030
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0756
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0811 10
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0831 100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/22/2008 0756
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008 1122
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008 0928 10
N/A	Sample Filtration	1	194924			03/03/2008 1400
SM2540 C	Solids, Total Dissolved (TDS)	1	194536			02/22/2008 1535
350207-17	MW19 22008	02/21/2008	02/20/2008			
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008 1600
SM 2320 B	Alkalinity	1	194438			02/22/2008 1030
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0846
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0902 10
EPA 300.0	Ion Chromatography Analysis	1	194493			02/22/2008 0917 100
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194493			02/22/2008 0846
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014		03/04/2008 1125
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008 0931 100
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014		03/05/2008 1012 10
N/A	Sample Filtration	1	194924			03/03/2008 1400
SM2540 C	Solids, Total Dissolved (TDS)	1	194536			02/22/2008 1535
350207-18	MW20 22008	02/21/2008	02/20/2008			
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014			03/03/2008 1600

LABORATORY CHRONICLE

Job Number: 350207

Date: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

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Lab ID: 350207-18		Client ID: MW20 22008	Date Recvd: 02/21/2008		Sample Date: 02/20/2008	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED	DILUTION
SM 2320 B	Alkalinity	1	194438		02/22/2008 1030	
EPA 300.0	Ion Chromatography Analysis	1	194436		02/21/2008 1811	1.0000
EPA 300.0	Ion Chromatography Analysis	1	194436		02/21/2008 1831	10.0000
EPA 300.0	Ion Chromatography Analysis	1	194436		02/21/2008 1851	100.00
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194436		02/21/2008 1811	1.0000
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014	03/04/2008 1129	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014	03/05/2008 0935	10
N/A	Sample Filtration	1	194924		03/03/2008 1400	
SM2540 C	Solids, Total Dissolved (TDS)	1	194603		02/25/2008 1045	

Lab ID: 350207-19		Client ID: MW21 22008	Date Recvd: 02/21/2008		Sample Date: 02/20/2008	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014		03/03/2008 1600	
SM 2320 B	Alkalinity	1	194438		02/22/2008 1030	
EPA 300.0	Ion Chromatography Analysis	1	194436		02/21/2008 1951	1.0000
EPA 300.0	Ion Chromatography Analysis	1	194436		02/21/2008 2011	10.0000
EPA 300.0	Ion Chromatography Analysis	1	194436		02/21/2008 2031	100.00
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194436		02/21/2008 1951	1.0000
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014	03/04/2008 1133	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014	03/05/2008 0939	10
N/A	Sample Filtration	1	194924		03/03/2008 1400	
SM2540 C	Solids, Total Dissolved (TDS)	1	194603		02/25/2008 1045	

Lab ID: 350207-20		Client ID: MW22 22008	Date Recvd: 02/21/2008		Sample Date: 02/20/2008	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195014		03/03/2008 1600	
SM 2320 B	Alkalinity	1	194438		02/22/2008 1030	
EPA 300.0	Ion Chromatography Analysis	1	194436		02/21/2008 2131	1.0000
EPA 300.0	Ion Chromatography Analysis	1	194436		02/21/2008 2151	10.0000
EPA 300.0	Ion Chromatography Analysis	1	194436		02/21/2008 2211	100.00
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194436		02/21/2008 2131	1.0000
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195055	195014	03/04/2008 1136	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195014	03/05/2008 0942	10
N/A	Sample Filtration	1	194924		03/03/2008 1400	
SM2540 C	Solids, Total Dissolved (TDS)	1	194603		02/25/2008 1045	

Lab ID: 350207-21		Client ID: MWWEST 22008	Date Recvd: 02/21/2008		Sample Date: 02/20/2008	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195016		03/03/2008 1600	
SM 2320 B	Alkalinity	1	194438		02/22/2008 1030	
EPA 300.0	Ion Chromatography Analysis	1	194436		02/21/2008 2231	1.0000
EPA 300.0	Ion Chromatography Analysis	1	194436		02/21/2008 2251	10.0000
EPA 300.0	Ion Chromatography Analysis	1	194436		02/21/2008 2311	100.00
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194436		02/21/2008 2231	1.0000
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195016	03/05/2008 1037	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195016	03/05/2008 1121	100
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195016	03/05/2008 1209	10
N/A	Sample Filtration	1	194924		03/03/2008 1400	
SM2540 C	Solids, Total Dissolved (TDS)	1	194603		02/25/2008 1045	

Lab ID: 350207-22		Client ID: MWSW 22008	Date Recvd: 02/21/2008		Sample Date: 02/20/2008	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195016		03/03/2008 1600	
SM 2320 B	Alkalinity	1	194438		02/22/2008 1030	
EPA 300.0	Ion Chromatography Analysis	1	194436		02/21/2008 2331	1.0000

LABORATORY CHRONICLE

Job Number: 350207

Date: 03/05/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

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Lab ID: 350207-22		Client ID: MNSW 22008		Date Recvd: 02/21/2008		Sample Date: 02/20/2008	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED	DILUTION	
EPA 300.0	Ion Chromatography Analysis	1	194436		02/22/2008 0011	100.00	
EPA 300.0	Ion Chromatography Analysis	1	194524		02/23/2008 0753	200.00	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194436		02/21/2008 2331	1.0000	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195016	03/05/2008 1052		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195016	03/05/2008 1136	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195016	03/05/2008 1140	100	
N/A	Sample Filtration	1	194924		03/03/2008 1400		
SM2540 C	Solids, Total Dissolved (TDS)	1	194603		02/25/2008 1045		

Lab ID: 350207-23		Client ID: RW1 22008		Date Recvd: 02/21/2008		Sample Date: 02/20/2008	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195016		03/03/2008 1600		
SM 2320 B	Alkalinity	1	194438		02/22/2008 1030		
EPA 300.0	Ion Chromatography Analysis	1	194436		02/22/2008 0111	1.0000	
EPA 300.0	Ion Chromatography Analysis	1	194436		02/22/2008 0151	100.00	
EPA 300.0	Ion Chromatography Analysis	1	194524		02/23/2008 0813	200.00	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194436		02/22/2008 0111	1.0000	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195016	03/05/2008 1055		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195016	03/05/2008 1143	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195016	03/05/2008 1147	100	
N/A	Sample Filtration	1	194924		03/03/2008 1400		
SM2540 C	Solids, Total Dissolved (TDS)	1	194603		02/25/2008 1045		

Lab ID: 350207-24		Client ID: DUP 22008		Date Recvd: 02/21/2008		Sample Date: 02/20/2008	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT # (S)	DATE/TIME ANALYZED	DILUTION	
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	195016		03/03/2008 1600		
SM 2320 B	Alkalinity	1	194438		02/22/2008 1030		
EPA 300.0	Ion Chromatography Analysis	1	194436		02/22/2008 0211	1.0000	
EPA 300.0	Ion Chromatography Analysis	1	194436		02/22/2008 0251	100.00	
EPA 300.0	Ion Chromatography Analysis	1	194524		02/23/2008 0833	200.00	
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	194436		02/22/2008 0211	1.0000	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195016	03/05/2008 1059		
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195016	03/05/2008 1158	10	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	195128	195016	03/05/2008 1202	100	
N/A	Sample Filtration	1	194924		03/03/2008 1400		
SM2540 C	Solids, Total Dissolved (TDS)	1	194603		02/25/2008 1045		

Temperature on Receipt \_\_\_\_\_  
 Drinking Water? Yes  No

Chain of Custody Record  
 TAL-4124 (1007)

3 50207

Client <b>CRA</b>		Project Manager <b>James Ornelas</b>		Date <b>2-20-08</b>		Chain of Custody Number <b>077506</b>												
Address <b>2135 S. Loop 250 W., Midland, TX 79703</b>		Telephone Number (Area Code)/Fax Number <b>432-686-0086</b>		Lab Number		Page <b>1</b> of <b>3</b>												
City <b>Midland, TX</b>		Site Contact <b>James Ornelas</b>		Analysis (Attach list if more space is needed)		Special Instructions/Conditions of Receipt												
Project Name and Location (State) <b>G.L. Erwin Tank Battery Jal, NM</b>		Carrier/Waybill Number		600B-Dissolved														
Contract/Purchase Order/Quote No. <b>039124</b>		Lab Contact		2540C123208														
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix						Containers & Preservatives									
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Kr					
MW1 22008	2-20-08	1345	X				X	X	X	X	X	X	X	X	X	X	X	
MW2 22008	2-20-08	1400	X				X	X	X	X	X	X	X	X	X	X	X	
MW3 22008	2-20-08	1440	X				X	X	X	X	X	X	X	X	X	X	X	
MW4 22008	2-20-08	1510	X				X	X	X	X	X	X	X	X	X	X	X	
MW5 22008	2-20-08	1455	X				X	X	X	X	X	X	X	X	X	X	X	
MW6 22008	2-20-08	1425	X				X	X	X	X	X	X	X	X	X	X	X	
MW7 22008	2-20-08	1410	X				X	X	X	X	X	X	X	X	X	X	X	
MW8 22008	2-20-08	1300	X				X	X	X	X	X	X	X	X	X	X	X	
MW9 22008	2-20-08	1330	X				X	X	X	X	X	X	X	X	X	X	X	
MW10 22008	2-20-08	1310	X				X	X	X	X	X	X	X	X	X	X	X	
MW11 22008	2-20-08	1110	X				X	X	X	X	X	X	X	X	X	X	X	
MW12 22008	2-20-08	1220	X				X	X	X	X	X	X	X	X	X	X	X	

Sample Disposal:  Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

QC Requirements (Specify)

1. Relinquished By *[Signature]* Date **2/20/08** Time **1800**

2. Relinquished By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

3. Relinquished By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Comments

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

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt \_\_\_\_\_  
 Drinking Water? Yes  No

## Chain of Custody Record

TAL-4124 (1007)

Client: **CRA** Project Manager: **James Ornelas** Date: **2-20-08** Chain of Custody Number: **077524**  
 Address: **2135 S. Loop 250 W.** Telephone Number (Area Code)/Fax Number: **432-686-0080** Lab Number: \_\_\_\_\_ Page **2** of **3**  
 City: **Midland** State: **TX** Zip Code: **79703** Site Contact: **James Ornelas** Lab Contact: \_\_\_\_\_  
 Project Name and Location (State): **G.L. Erwin Tank Battery Jal, NM** Carrier/Waybill Number: \_\_\_\_\_

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives					Special Instructions/ Conditions of Receipt		
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH			
MW14 22008	2-20-08	1125	X	X	X	X	X	X	X	X	X	X	X	X	6010B-Druid 254C/2320B water 300
MW15 22008	2-20-08	1055	X	X	X	X	X	X	X	X	X	X	X	X	
MW16 22008	2-20-08	1245	X	X	X	X	X	X	X	X	X	X	X	X	
MW17 22008	2-20-08	1230	X	X	X	X	X	X	X	X	X	X	X	X	
MW19 22008	2-20-08	1140	X	X	X	X	X	X	X	X	X	X	X	X	
MW20 22008	2-20-08	1040	X	X	X	X	X	X	X	X	X	X	X	X	
MW21 22008	2-20-08	1155	X	X	X	X	X	X	X	X	X	X	X	X	
MW22 22008	2-20-08	1320	X	X	X	X	X	X	X	X	X	X	X	X	
MWNEST 22008	2-20-08	1525	X	X	X	X	X	X	X	X	X	X	X	X	
MWSW 22008	2-20-08	1540	X	X	X	X	X	X	X	X	X	X	X	X	
RW-1 22008	2-20-08	1555	X	X	X	X	X	X	X	X	X	X	X	X	
DWP 22008	2-20-08	—	X	X	X	X	X	X	X	X	X	X	X	X	

Possible Hazard Identification:  Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  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): \_\_\_\_\_

1. Relinquished By: *[Signature]* Date: **2/20/08** Time: **1800**  
 2. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 3. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

1. Received By: \_\_\_\_\_ Date: **2/21/08** Time: **930**  
 2. Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 3. Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Comments: \_\_\_\_\_

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt  Yes  No

Drinking Water?  Yes  No

## Chain of Custody Record

TAL-4124 (1007)

Client: **CRA** Address: **2135 S. Loop 250 W.** City: **Midland** State: **TX** Zip Code: **79703**

Project Name and Location (State): **G.L. Edwin Tank Battery Dal. NM**

Contract/Purchase Order/Quote No.: **039124**

Project Manager: **James Ornelas** Telephone Number (Area Code)/Fax Number: **432-686-0086**

Site Contact: **James Ornelas** Carrier/Waybill Number: \_\_\_\_\_

Date: **2-20-08** Lab Number: \_\_\_\_\_

Chain of Custody Number: **077523** Page **3** of **3**

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix			Containers & Preservatives						Special Instructions/ Conditions of Receipt			
			Air	Sed.	Soil	H2O	Unpres.	H2SO4	HNO3	HCl	NaOH		ZnAc	NaOH	
Temp	---	---			X	X	X	X	X	X	X	X	X	X	
Temp	---	---			X	X	X	X	X	X	X	X	X	X	
Temp	---	---			X	X	X	X	X	X	X	X	X	X	
Temp	---	---			X	X	X	X	X	X	X	X	X	X	

Possible Hazard Identification:  Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

Turn Around Time Required:  24 Hours  48 Hours  7 Days  14 Days  21 Days  Other \_\_\_\_\_

QC Requirements (Specify): \_\_\_\_\_

Sample Disposal: \_\_\_\_\_

1. Relinquished By: *[Signature]* Date: **2/20/08** Time: **1900**

2. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

1. Received By: \_\_\_\_\_ Date: **2-11-08** Time: **4:30**

2. Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

3. Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Comments: \_\_\_\_\_

**ANALYTICAL REPORT**

JOB NUMBER: 358781  
Project ID: G.L. ERWIN

Prepared For:

Conestoga-Rovers and Associates  
2135 S. Loop 250 West  
Midland, TX 79707

Attention: Todd Wells

Date: 08/22/2008



Signature

08/22/08

Date

Name: Sachin G. Kudchadkar

Title: Project Manager III

E-Mail: sachin.kudchadkar@testamericainc.com

TestAmerica Laboratories, Inc  
6310 Rothway Drive  
Houston, TX 77040

PHONE: 713-690-4444

TOTAL NO. OF PAGES 63



LABORATORY TEST RESULTS

Date: 08/22/2008

Job Number: 358781

PER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: Todd Wells

Customer Sample ID: MW-3 81308  
 Laboratory Sample ID: 358781-1  
 Date Sampled.....: 08/13/2008  
 Date Received.....: 08/14/2008  
 Time Sampled.....: 11:10  
 Time Received.....: 09:27  
 Sample Matrix.....: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403616		08/14/08 1715	dcl
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	46.8		0.02185	2.000	1	mg/L	403717		08/15/08 1136	srp
	Magnesium (Mg), Diss.	14.3		0.01604	2.000	1	mg/L	403717		08/15/08 1136	srp
	Potassium (K), Diss.	17.5		0.08121	2.000	1	mg/L	403717		08/15/08 1136	srp
	Sodium (Na), Diss.	896		2.000	200.0	100	mg/L	403795		08/18/08 1636	srp
20 B	Alkalinity, Total as CaCO3, Water	222		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	222		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	2700		1.533	20	1	mg/L	403921		08/19/08 1015	claw
00.0	Ion Chromatography Analysis										
	Chloride, Water	1180		23.1	50	100	mg/L	403662		08/14/08 2040	sur
	Fluoride (F), Water	2.59		0.141	0.30	1	mg/L	403662		08/14/08 2009	sur
	Sulfate (SO4), Water	210		3.50	5.0	10	mg/L	403662		08/14/08 2024	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	8.27	Z	0.84	2.0	10	mg/L	403662		08/14/08 2024	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U	1.72	2.0	10	mg/L	403662		08/14/08 2024	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Date: 08/22/2008

Job Number: 358781

ATTN: Todd Wells

PROJECT: G.L ERWIN

ER: Conestoga-Rovers and Associates

Laboratory Sample ID: 358781-2  
 Date Received.....: 08/14/2008  
 Time Received.....: 09:27

Customer Sample ID: MW-4 81308  
 Date Sampled.....: 08/13/2008  
 Time Sampled.....: 12:10  
 Sample Matrix.....: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403616		08/14/08 1715	dcl
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	770		0.2185	20.00	10	mg/L	403795		08/18/08 1651	srp
	Magnesium (Mg), Diss.	209		0.01604	2.000	1	mg/L	403717		08/15/08 1152	srp
	Potassium (K), Diss.	97.3		0.8121	20.00	10	mg/L	403795		08/18/08 1651	srp
	Sodium (Na), Diss.	2510		2.000	200.0	100	mg/L	403795		08/18/08 1655	srp
20 B	Alkalinity, Total as CaCO3, Water	263		1.53	5.0	1	mg/L	403565		08/14/08 1200	snr
20 B	Bicarbonate (HCO3), Water	263		1.53	5.0	1	mg/L	403565		08/14/08 1200	snr
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	snr
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	snr
540C	Solids, Total Dissolved (TDS), Water	15100		1.533	100	1	mg/L	403921		08/19/08 1015	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	6270		46.2	100	200	mg/L	403816		08/18/08 1647	sur
	Fluoride (F), Water	0.705	U	0.705	1.5	5	mg/L	403662		08/14/08 2055	sur
	Sulfate (SO4), Water	607		35.0	50	100	mg/L	403662		08/14/08 2127	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	6.64		0.42	1.0	5	mg/L	403662		08/14/08 2055	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U, Z	1.72	2.0	10	mg/L	403662		08/14/08 2111	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: 358781

Date: 08/22/2008

ER: Conestoga-Rovers and Associates

PROJECT: G.I. ERWIN

ATTN: Todd Wells

Customer Sample ID: MW-5 81308  
 Laboratory Sample ID: 358781-3  
 Date Sampled.....: 08/13/2008  
 Date Received.....: 08/14/2008  
 Time Sampled.....: 13:05  
 Time Received.....: 09:27  
 Sample Matrix.....: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q. FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403616		08/14/08 1715	dc1
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	62.8		0.02185	2.000	1	mg/L	403717		08/15/08 1155	srp
	Magnesium (Mg), Diss.	19.3		0.01604	2.000	1	mg/L	403717		08/15/08 1155	srp
	Potassium (K), Diss.	23.9		0.08121	2.000	1	mg/L	403717		08/15/08 1155	srp
	Sodium (Na), Diss.	362		2.000	200.0	100	mg/L	403795		08/18/08 1659	srp
20 B	Alkalinity, Total as CaCO3, Water	220		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	220		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	1300		1.533	10	1	mg/L	403921		08/19/08 1015	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	438		2.31	5.0	10	mg/L	403662		08/14/08 2229	sur
	Fluoride (F), Water	1.77		0.141	0.30	1	mg/L	403662		08/14/08 2142	sur
	Sulfate (SO4), Water	191		3.50	5.0	10	mg/L	403662		08/14/08 2229	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	6.20	U	0.084	0.20	1	mg/L	403662		08/14/08 2142	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	Z	1.72	2.0	10	mg/L	403662		08/14/08 2229	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Date: 08/22/2008

Job Number: 358781

PROJECT: G.L ERWIN

ER: Conestoga-Rovers and Associates

ATTN: Todd Wells

Laboratory Sample ID: 358781-4  
 Date Received: 08/14/2008  
 Time Received: 09:27

Customer Sample ID: MW-6 81308  
 Date Sampled: 08/13/2008  
 Time Sampled: 10:50  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403616		08/14/08 1715	dcl
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	22.6		0.02185	2.000	1	mg/L	403717		08/15/08 1159	srp
	Magnesium (Mg), Diss.	6.57		0.01604	2.000	1	mg/L	403717		08/15/08 1159	srp
	Potassium (K), Diss.	14.4		0.08121	2.000	1	mg/L	403717		08/15/08 1159	srp
	Sodium (Na), Diss.	558		2.000	200.0	100	mg/L	403795		08/18/08 1711	srp
20 B	Alkalinity, Total as CaCO3, Water	238		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	238		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	1640		1.533	10	1	mg/L	403921		08/19/08 1015	daw
00.0	Ion Chromatography Analysis										
	Chloride, Water	563		23.1	50	100	mg/L	403662		08/14/08 2332	sur
	Fluoride (F), Water	2.56		0.141	0.30	1	mg/L	403662		08/14/08 2300	sur
	Sulfate (SO4), Water	176		3.50	5.0	10	mg/L	403662		08/14/08 2316	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	7.83	Z	0.84	2.0	10	mg/L	403662		08/14/08 2316	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	Z	1.72	2.0	10	mg/L	403662		08/14/08 2316	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

Date: 08/22/2008

Job Number: 358781

ER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: Todd Wells

Laboratory Sample ID: 358781-5  
 Date Received.....: 08/14/2008  
 Time Received.....: 09:27

Customer Sample ID: MW-7 81308  
 Date Sampled.....: 08/13/2008  
 Time Sampled.....: 11:35  
 Sample Matrix.....: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q. FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
: 3005A	Acid Digestion, Diss.	Complete				1		403616		08/14/08 1715	dcl
: 6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	25.0		0.02185	2.000	1	mg/L	403717		08/15/08 1210	srp
	Magnesium (Mg), Diss.	7.64		0.01604	2.000	1	mg/L	403717		08/15/08 1210	srp
	Potassium (K), Diss.	4.86		0.08121	2.000	1	mg/L	403717		08/15/08 1210	srp
	Sodium (Na), Diss.	273		2.000	200.0	100	mg/L	403795		08/18/08 1715	srp
: 20 B	Alkalinity, Total as CaCO3, Water	274		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
: 20 B	Bicarbonate (HCO3), Water	274		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
: 20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
: 20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
: 540C	Solids, Total Dissolved (TDS), Water	887		1.533	10	1	mg/L	403921		08/19/08 1015	daw
: 00.0	Ion Chromatography Analysis										
	Chloride, Water	251		2.31	5.0	10	mg/L	403662		08/15/08 0003	sur
	Fluoride (F), Water	2.41		0.141	0.30	1	mg/L	403662		08/14/08 2347	sur
	Sulfate (SO4), Water	121		3.50	5.0	10	mg/L	403662		08/15/08 0003	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	3.21		0.084	0.20	1	mg/L	403662		08/14/08 2347	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	U Z	1.72	2.0	10	mg/L	403662		08/15/08 0003	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Date: 08/22/2008

Job Number: 358781

ER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: Todd Wells

Laboratory Sample ID: 358781-6  
 Date Received: 08/14/2008  
 Time Received: 09:27

Customer Sample ID: MW-13 81308  
 Date Sampled: 08/13/2008  
 Time Sampled: 11:50  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RU	DILUTION	UNITS	BAICH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403616		08/14/08 1715	dcl
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
	Sodium (Na), Diss.	176		0.2000	20.00	10	mg/L	403881		08/19/08 1046	srp
20 B	Alkalinity, Total as CaCO3, Water	141		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	141		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	4940		1.533	20	1	mg/L	403921		08/19/08 1015	daw
00.0	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
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

LABORATORY TEST RESULTS

Date: 08/22/2008

Job Number: 358781

ATTN: Todd Wells

PROJECT: G.L ERWIN

ER: Conestoga-Rovers and Associates

Customer Sample ID: MW-SOUTHWEST 81308  
 Laboratory Sample ID: 358781-7  
 Date Sampled.....: 08/13/2008  
 Date Received.....: 08/14/2008  
 Time Sampled.....: 12:25  
 Time Received.....: 09:27  
 Sample Matrix.....: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q. FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
:3005A	Acid Digestion, Diss.	Complete				1		403616		08/14/08 1715	dcl
: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
:20 B	Alkalinity, Total as CaCO3, Water	268		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
:20 B	Bicarbonate (HCO3), Water	268		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
:20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
:20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
:540C	Solids, Total Dissolved (TDS), Water	13700		1.533	40	1	mg/L	403921		08/19/08 1015	daw
:00.0	Ion Chromatography Analysis										
	Chloride, Water	5670		46.2	100	200	mg/L	403616		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
0 Rev2.	Ion Chromatography Analysis - Short Hold										
	Nitrogen, Nitrate as N (NO3-N), Water	8.14	U	0.84	2.0	10	mg/L	403662		08/15/08 0224	sur
	Nitrogen, Nitrite as N (NO2-N), Water	1.72	Z	1.72	2.0	10	mg/L	403662		08/15/08 0224	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

Date: 08/22/2008

Job Number: 358781

ATTN: Todd Wells

PROJECT: G.L ERWIN

ER: Conestoga-Rovers and Associates

Laboratory Sample ID: 358781-8  
 Date Received: 08/14/2008  
 Time Received: 09:27

Customer Sample ID: MW-WEST 81308  
 Date Sampled: 08/13/2008  
 Time Sampled: 12:40  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q_FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403616		08/14/08 1715	dccl
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
20 B	Alkalinity, Total as CaCO3, Water	175		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	175		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	5570		1.533	20	1	mg/L	403921		08/19/08 1015	daw
00.0	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
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	Z	1.72	2.0	10	mg/L	403662		08/15/08 0311	sur

\* In Description = Dry Wgt.

QUALITY CONTROL RESULTS

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

QUALITY CONTROL RESULTS

Job Number.: 358781

Report Date.: 08/22/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: Todd Wells

Test Method.....: SM 2540C

Analyst...: daw

Method Description.: Solids, Total Dissolved (TDS)

Units.....: mg/L

Test Code.: TDS

Parameter.....: Solids, Total Dissolved (TDS)

Batch(s)...: 403921

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	T
MB	403921--21		1.00							08/19/2008	10
LCS	403921--21	WCS50727	1767.00		1800		98.2	90.0-110.		08/19/2008	10
DU	358841-14		4856.00			4728.00	2.7	10.0		08/19/2008	10
DU	358781-1		2676.00			2702.00	1.0	10.0		08/19/2008	10

QUALITY CONTROL RESULTS

Job Number.: 358781

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
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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	06:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	06:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	06:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	07:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

## 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
600		566-A-5@10			08/19/2008	07

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
600		566-A-5@10			08/19/2008	07

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
600		566-A-5 DU			08/19/2008	07

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
600		566-A-5 MS			08/19/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
600		566-A-6			08/19/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QUALITY CONTROL RESULTS

Job Number.: 358781

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
600		566-A-6@10			08/19/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
600		566-A-6@10			08/19/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
BK					08/19/2008	03:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
BK					08/19/2008	04:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
BK					08/19/2008	05:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QUALITY CONTROL RESULTS

Job Number.: 358781

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	05:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	16:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	19:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	22:00

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/19/2008	01:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QUALITY CONTROL RESULTS

Job Number.: 358781

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	03:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/19/2008	06:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/19/2008	09:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS50535			08/18/2008	15:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS50535			08/18/2008	18:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QUALITY CONTROL RESULTS

Job Number.: 358781

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	21:40

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Bromide (Br)	20.181		20.00		100.9	90.0-110.0
Fluoride (F)	8.9819		10.00		89.8	90.0-110.0
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS50535			08/19/2008	00:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS50535			08/19/2008	03:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS50535			08/19/2008	05:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS50535			08/19/2008	09:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QUALITY CONTROL RESULTS

Job Number.: 358781

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
DU	Method Duplicate		358757-1	10	08/18/2008	14:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	18:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	22:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	00:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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 13:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

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
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ICV	Initial Calibration Verification	WCS50535			08/18/2008	12
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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
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	13
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	01
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	13
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	01
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

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
MS	Matrix Spike	WCS50358	358757-1	10	08/18/2008	14:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS50358	358841-4	10	08/18/2008	18:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS50358	358841-13	100	08/18/2008	22:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS50358	358627-3	10	08/19/2008	00:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/14/2008	22:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

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
CCB	Continuing Calibration Blank				08/15/2008	010

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	035
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	065
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	095
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	215
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QUALITY CONTROL RESULTS

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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	00:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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
DU	Method Duplicate		358761-1	10	08/15/2008	04

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
DU	Method Duplicate		358690-1		08/15/2008	08

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				08/14/2008	19

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	WCS50535			08/14/2008	19

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	WCS50535			08/14/2008	19

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QUALITY CONTROL RESULTS

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Report Date.: 08/22/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				08/14/2008	19:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS50358	358781-5	10	08/15/2008	00:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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		

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS50358	358761-1	10	08/15/2008	05:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS50358	358690-1		08/15/2008	09:

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

Test Method.....: SW-846 6010B  
 Method Description.: Metals Analysis (ICAP Trace)

Units.....: mg/L  
 Batch(s)....: 403656 403668 403717 403795 403881

Analyst....: srp

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	08:

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					

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PROJECT: G.L ERWIN

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCB	Continuing Calibration Blank				08/15/2008	08:51
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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	09:51
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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	10:51
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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					

CCB	Continuing Calibration Blank				08/15/2008	10:51
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00215					
Magnesium (Mg)	-0.02521					
Potassium (K)	-0.18083					
Sodium (Na)	0.03046					

CCB	Continuing Calibration Blank				08/15/2008	11:51
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00351					
Magnesium (Mg)	-0.02804					
Potassium (K)	-0.19118					
Sodium (Na)	0.07797					

CCB	Continuing Calibration Blank				08/15/2008	12:51
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00355					
Magnesium (Mg)	-0.04737					
Potassium (K)	-0.33812					
Sodium (Na)	0.08739					

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CUSTOMER: Conestoga-Rovers and Associates

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	12:

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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCV	Continuing Calibration Verification	MS081308CC				08/15/2008 07:
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCV	Continuing Calibration Verification	MS081308CC				08/15/2008 08:
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCV	Continuing Calibration Verification	MS081308CC				08/15/2008 09:
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCV	Continuing Calibration Verification	MS081308CC				08/15/2008 10:
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCV	Continuing Calibration Verification	MS081308CC				08/15/2008 10:
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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	11
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

CHI	Calibration check standard 1	MS073008T1			08/15/2008	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	0.02394					
Magnesium (Mg), Diss.	-0.03999					
Potassium (K), Diss.	-0.31374					
Sodium (Na), Diss.	0.04285					

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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ICB	Initial Calibration Blank				08/15/2008	07:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00323					
Magnesium (Mg)	0.01089					
Potassium (K)	0.09126					
Sodium (Na)	0.00955					

ICV	Initial Calibration Verification	MS081308CC			08/15/2008	07:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	07:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	07:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	0.00547					
Magnesium (Mg), Water	-0.03600					
Potassium (K), Water	-0.31011					
Sodium (Na), Water	0.04682					

QUALITY CONTROL RESULTS

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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	11:44

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:44
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

MSD	Matrix Spike Duplicate	MSPIKEW	358781-1		08/15/2008	11:44
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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
					0.6	20

PDS	Post Digestion Spike	MSPIKE3	358781-1		08/15/2008	12:07
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

S0	Calibration Blank				08/15/2008	07:27
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12:07
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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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	07:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	2.95376					
Magnesium (Mg)	1.23946					
Potassium (K)	2.80953					
Sodium (Na)	16.09711					

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					

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					

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					

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					

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

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ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	11

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

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

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

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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	09:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	14:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00323					
Magnesium (Mg)	0.01089					
Potassium (K)	0.09126					
Sodium (Na)	0.00955					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	07:11

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	442.45367		510.0		86.8	80.0-120.0
Magnesium (Mg)	507.84594		510.0		99.6	80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	MSPIKEW	403616		08/15/2008	11:44

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank		403616		08/15/2008	11:44

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	0.00547					
Magnesium (Mg), Water	-0.03600					
Potassium (K), Water	-0.31011					
Sodium (Na), Water	0.04682					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		358781-1		08/15/2008	11:44

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	358781-1		08/15/2008	11:44

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSPIKEW	358781-1		08/15/2008	11:44

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	56.02812	56.18157	10.00	46.76205	92.7 1.6	75-125 20
Magnesium (Mg), Diss.	23.69364	23.70441	10.00	14.30331	93.9 0.1	75-125 20
Potassium (K), Diss.	33.93544	33.82741	10.00	17.45208	164.8 0.6	75-125 20

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
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PDS	Post Digestion Spike	MSPIKE3	358781-1		08/15/2008	12
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

SO	Calibration Blank				08/15/2008	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

STD	Spiked Blank Duplicate				08/15/2008	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	2.95376					
Magnesium (Mg)	1.23946					
Potassium (K)	2.80953					
Sodium (Na)	16.09711					

CCB	Continuing Calibration Blank				08/15/2008	08
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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	08
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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					

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
CCB	Continuing Calibration Blank				08/15/2008	09:

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					

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					

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

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

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

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

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				08/15/2008	14

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

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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00006					
Magnesium (Mg)	-0.03947					
Potassium (K)	-0.27834					
Sodium (Na)	0.00641					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00221					
Magnesium (Mg)	-0.03163					
Potassium (K)	-0.22128					
Sodium (Na)	-0.01100					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	09:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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
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CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	14
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	14
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	14
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	16
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	15
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.10961		0.1000		109.6	80.0-120.0
Sodium (Na)	0.55802		0.60000		93.0	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
CH3	Standard check for ICAP	MS073008T3			08/15/2008	07:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
EB	Extraction Blank		403616			08/15/2008 11:
Calcium (Ca), Diss.	0.02394					
Magnesium (Mg), Diss.	-0.03999					
Potassium (K), Diss.	-0.31374					
Sodium (Na), Diss.	0.04285					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ICB	Initial Calibration Blank					08/15/2008 07:
Calcium (Ca)	0.00323					
Magnesium (Mg)	0.01089					
Potassium (K)	0.09126					
Sodium (Na)	0.00955					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ICV	Initial Calibration Verification	MS081308CC				08/15/2008 07:
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISA	Interference Check Sample A	MS073008IA				08/15/2008 07:
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			

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISA	Interference Check Sample A	MS073008IA				08/15/2008 15:
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			

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
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ISB	Interference Check Sample B	MS073008IB			08/15/2008	07:15
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	15:15
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:15
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:15
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:15
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:15
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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Job Number.: 358781

Report Date.: 08/22/2008

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MSD	Matrix Spike Duplicate	MSPIKEW	358781-1		08/15/2008	11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	56.02812	56.18157	10.00	46.76205	92.7 1.6	75-125 20
Magnesium (Mg), Diss.	23.69364	23.70441	10.00	14.30331	93.9 0.1	75-125 20
Potassium (K), Diss.	33.93544	33.82741	10.00	17.45208	164.8 0.6	75-125 20

PDS	Post Digestion Spike	MSPIKE3	358781-1		08/15/2008	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

S0	Calibration Blank				08/15/2008	07:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

STD	Spiked Blank Duplicate				08/15/2008	07:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	2.95376					
Magnesium (Mg)	1.23946					
Potassium (K)	2.80953					
Sodium (Na)	16.09711					

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Report Date.: 08/22/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	090

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00322					
Magnesium (Mg)	-0.01181					
Potassium (K)	-0.17158					
Sodium (Na)	0.00070					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	100

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00025					
Magnesium (Mg)	-0.04626					
Sodium (Na)	0.04200					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	110

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01464					
Magnesium (Mg)	-0.05017					
Sodium (Na)	0.03835					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	120

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00340					
Magnesium (Mg)	-0.05970					
Sodium (Na)	0.01012					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	120

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.01529					
Magnesium (Mg)	-0.04509					
Potassium (K)	-0.40361					
Sodium (Na)	0.00344					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	130

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00998					
Magnesium (Mg)	-0.06228					
Potassium (K)	-0.52573					
Sodium (Na)	0.00882					

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	140

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01939					
Magnesium (Mg)	-0.07749					
Potassium (K)	-0.65722					
Sodium (Na)	-0.00509					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					08/18/2008 150
Calcium (Ca)	-0.01477					
Magnesium (Mg)	-0.06635					
Potassium (K)	-0.55357					
Sodium (Na)	-0.00210					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					08/18/2008 160
Calcium (Ca)	-0.00908					
Magnesium (Mg)	-0.05251					
Potassium (K)	-0.41409					
Sodium (Na)	-0.00378					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					08/18/2008 170
Calcium (Ca)	-0.01763					
Magnesium (Mg)	-0.06248					
Potassium (K)	-0.63380					
Sodium (Na)	-0.00524					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					08/18/2008 170
Calcium (Ca)	-0.02168					
Magnesium (Mg)	-0.07384					
Potassium (K)	-0.52539					
Sodium (Na)	-0.00633					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCV	Continuing Calibration Verification	MS081308CC				08/18/2008 090
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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	10
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	13
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	14
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	150

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.10864		0.1000		108.6	80.0-120.0
Sodium (Na)	0.62762		0.60000		104.6	80.0-120.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.10640		0.1000		106.4	80.0-120.0
Sodium (Na)	0.65120		0.60000		108.5	80.0-120.0

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH1	Calibration check standard 1	MS073008T1			08/18/2008	17

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.09826		0.1000		98.3	80.0-120.0
Sodium (Na)	0.65638		0.60000		109.4	80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH3	Standard check for ICAP	MS073008T3			08/18/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				08/18/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00255					
Magnesium (Mg)	-0.00706					
Potassium (K)	-0.18349					
Sodium (Na)	0.00310					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	MS081308CC			08/18/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISA	Interference Check Sample A	MS073008IA			08/18/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISA	Interference Check Sample A	MS073008IA			08/18/2008	16

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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			

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISA	Interference Check Sample A	MS073008IA			08/18/2008	17:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISB	Interference Check Sample B	MS073008IB			08/18/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	496.11413		510.0		97.3	80.0-120.0
Magnesium (Mg)	556.62023		510.0		109.1	80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISB	Interference Check Sample B	MS073008IB			08/18/2008	16:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISB	Interference Check Sample B	MS073008IB			08/18/2008	17:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	MSPIKEW	403616		08/18/2008	16:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank		403616		08/18/2008	16:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	-0.00869					
Magnesium (Mg), Water	-0.06748					
Potassium (K), Water	-0.62845					
Sodium (Na), Water	-0.00500					

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		358781-1	100	08/18/2008	16

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	358781-1	100	08/18/2008	16

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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
Sodium (Na), Diss.	8.97347		0.100000	8.96426	9.2	75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSPIKEW	358781-1	100	08/18/2008	16

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	1.26790	0.78266	0.100000	0.50515	762.8	75-125
					93.3	20
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
					34.4	20
Sodium (Na), Diss.	8.85389	8.97347	0.100000	8.96426	-110.4	75-125
					236.4	20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
S0	Calibration Blank				08/18/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00334					
Magnesium (Mg)	0.00672					
Potassium (K)	0.36252					
Sodium (Na)	0.02040					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
STD	Spiked Blank Duplicate				08/18/2008	08

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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/19/2008	08:

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

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

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

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

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

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

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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	16:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00830					
Magnesium (Mg)	-0.02026					
Potassium (K)	-0.12861					
Sodium (Na)	-0.00110					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00200					
Magnesium (Mg)	-0.02001					
Potassium (K)	-0.14386					
Sodium (Na)	0.02713					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QUALITY CONTROL RESULTS

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CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	MS081508CC			08/19/2008	10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	16:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	17:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	08:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.11225		0.1000		112.2	80.0-120.0
Sodium (Na)	0.53287		0.60000		88.8	80.0-120.0

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ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH1	Calibration check standard 1	MS073008T1			08/19/2008	17

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.11282		0.1000		112.8	80.0-120.0
Magnesium (Mg)	0.08352		0.1000		83.5	80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH3	Standard check for ICAP	MS073008T3			08/19/2008	07

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				08/19/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00056					
Magnesium (Mg)	0.00081					
Potassium (K)	-0.00662					
Sodium (Na)	-0.00106					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	MS081508CC			08/19/2008	07

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISA	Interference Check Sample A	MS073008IA			08/19/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISA	Interference Check Sample A	MS073008IA			08/19/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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			

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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	170

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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			

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	451.74597		510.0		88.6	80.0-120.0
Magnesium (Mg)	519.11096		510.0		101.8	80.0-120.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	446.64959		510.0		87.6	80.0-120.0
Magnesium (Mg)	512.40270		510.0		100.5	80.0-120.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	445.72625		510.0		87.4	80.0-120.0
Magnesium (Mg)	516.60327		510.0		101.3	80.0-120.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00704					
Magnesium (Mg)	0.03016					
Potassium (K)	0.44312					
Sodium (Na)	0.23759					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	2.74848					
Magnesium (Mg)	1.13482					
Potassium (K)	2.73523					
Sodium (Na)	15.56459					

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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 characterization 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

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- 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 - GFAA, Mercury
- CRI - Low level standard check - ICP
- Dil Fac - Dilution Factor - Secondary dilution analysis

QUALITY ASSURANCE METHODS

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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	Client ID	Date Recvd	Sample Date				
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME ANALYZED	DILUTION
Lab ID: 358781-1	Client ID: MW-3 81308	Date Recvd: 08/14/2008	Sample Date: 08/13/2008				
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				
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				
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				
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				
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	

Temperature on Receipt \_\_\_\_\_  
 Drinking Water? Yes  No

THE LEADER IN ENVIRONMENTAL TESTING

## Chain of Custody Record

TAL-4124 (1007)

Client: **CRA** Project Manager: **Todd Wells w/ CRA** Chain of Custody Number: **091667**  
 Address: **2135 S Loop 250 W.** Telephone Number (Area Code)/Fax Number: **432-686-0086 / 432-686-0186** Lab Number: **8/13/08** Page **1** of **1**  
 City: **Midland** State: **TX** Zip Code: **79703** Site Contact: **MATT HARSON** Lab Contact: **Sachin Kudchadkar**

Project Name and Location (State): **O.L. Edwin / 571, N.M.** Carrier/Maybill Number: **8608 3754 8667**  
 Contract/Purchase Order/Quote No.: **039124**

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix			Containers & Preservatives							Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt	
			Aq	Sed	Soil	Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	ICE			
MW-3 81308	8-13-08	1110	X			X								X HClO4 X Carb Mate X Bicarbonate X HClO4 X Carb Mate X Bicarbonate X HClO4 X Carb Mate X Bicarbonate	Temp
MW-4 81308	8-13-08	1210	X			X								X HClO4 X Carb Mate X Bicarbonate	
MW-5 81308	8-13-08	1305	X			X								X HClO4 X Carb Mate X Bicarbonate	
MW-6 81308	8-13-08	1050	X			X								X HClO4 X Carb Mate X Bicarbonate	
MW-7 81308	8-13-08	1135	X			X								X HClO4 X Carb Mate X Bicarbonate	
MW-13 81308	8-13-08	1150	X			X								X HClO4 X Carb Mate X Bicarbonate	
MW-Southwest 81308	8-13-08	1225	X			X								X HClO4 X Carb Mate X Bicarbonate	
MW-West 81308	8-13-08	1240	X			X								X HClO4 X Carb Mate X Bicarbonate	
Temp Blank						X									X

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

QC Requirements (Specify): **Run Specified Anions (including fluoride) by EPA 300 IC**

1. Relinquished By: *[Signature]* Date: **8/13/08** Time: **1600**  
 2. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 3. Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Comments: \_\_\_\_\_

039124  
CEMC G.L. ERWIN

ANALYTICAL REPORT

JOB NUMBER: 358699  
Project ID: GL ERWIN

Prepared For:

Conestoga Rovers and Associates  
2135 S. Loop 250 West  
Midland, TX 79707

Attention: Todd Wells

Date: 09/04/2008

Signature

09/04/08

Date

Name: Sachin G. Kudchadkar

Title: Project Manager III

E-Mail: sachin.kudchadkar@testamericainc.com

TestAmerica Laboratories, Inc  
6310 Rothway Drive  
Houston, TX 77040

PHONE: 713-690-4444

TOTAL NO. OF PAGES

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SAMPLE INFORMATION

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

ER: 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

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
20 B	Alkalinity, Total as CaCO3, Water	212		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	212		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
240C	Solids, Total Dissolved (TDS), Water	692		1.533	10	1	mg/L	403559		08/13/08 1500	daw
20.0	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
20 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	0.172	0.20	1	mg/L	403577		08/13/08 1318	sur

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Date: 09/04/2008

Job Number: 358699

ATTN: Todd Wells

PROJECT: GL ERWIN

PER: Conestoga-Rovers and Associates

Laboratory Sample ID: 358699-2  
 Date Received: 08/13/2008  
 Time Received: 09:37

Customer Sample ID: MW-2 81208  
 Date Sampled: 08/12/2008  
 Time Sampled: 16:50  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
20 B	Alkalinity, Total as CaCO3, Water	287		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	287		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	1080		1.533	10	1	mg/L	403559		08/13/08 1500	daw
100.0	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
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

Date: 09/04/2008

Job Number: 358699

ATTN: Todd Wells

PROJECT: GL ERWIN

ER: Conestoga-Rovers and Associates

Laboratory Sample ID: 358699-3  
 Date Received: 08/13/2008  
 Time Received: 09:37

Customer Sample ID: MW-8 81208  
 Date Sampled: 08/12/2008  
 Time Sampled: 14:40  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
20 B	Alkalinity, Total as CaCO3, Water	357		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	357		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
340C	Solids, Total Dissolved (TDS), Water	1750		1.533	10	1	mg/L	403559		08/13/08 1500	daw
30.0	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
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.

LABORATORY TEST RESULTS

Date: 09/04/2008

Job Number: 358699

ER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

ATTN: Todd Wells

Laboratory Sample ID: 358699-4  
 Date Received: 08/13/2008  
 Time Received: 09:37

Customer Sample ID: MW-9 81208  
 Date Sampled: 09/12/2008  
 Time Sampled: 16:20  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q. FLAGS	MDL	RL	DILUTION	UNITS	BAFCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
6010B	Metals Analysis (ICAP Trace)										
	Calcium (Ca), Diss.	720		0.2185	20.00	10	mg/L	403795		08/18/08 1159	sip
	Magnesium (Mg), Diss.	236		0.1604	20.00	10	mg/L	403795		08/18/08 1159	sip
	Potassium (K), Diss.	36.2		0.08121	2.000	1	mg/L	403716		08/15/08 1139	sip
	Sodium (Na), Diss.	1760		2.000	200.0	100	mg/L	403795		08/18/08 1344	sip
20 B	Alkalinity, Total as CaCO3, Water	257		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	257		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	11400		1.533	40	1	mg/L	403559		08/13/08 1500	daw
00.0	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
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.

LABORATORY TEST RESULTS

Date: 09/04/2008

Job Number: 358699

ER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

ATTN: Todd Wells

Customer Sample ID: MW-10 81208  
 Laboratory Sample ID: 358699-5  
 Date Sampled: 08/12/2008  
 Date Received: 08/13/2008  
 Time Sampled: 15:45  
 Time Received: 09:37  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
	Sodium (Na), Diss.	271		0.2000	20.00	10	mg/L	403795		08/18/08 1211	srp
20 B	Alkalinity, Total as CaCO3, Water	800		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	800		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	4540		1.533	20	1	mg/L	403559		08/13/08 1500	daw
100.0	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
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

Date: 09/04/2008

Job Number: 358699

PROJECT: GL ERWIN  
ATTN: Todd Wells

ER: Conestoga-Rovers and Associates

Laboratory Sample ID: 358699-6  
Date Received: 08/13/2008  
Time Received: 09:37

Customer Sample ID: MW-12 81208  
Date Sampled: 08/12/2008  
Time Sampled: 14:10  
Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
	Sodium (Na), Diss.	212		0.2000	20.00	10	mg/L	403795		08/18/08 1215	srp
20 B	Alkalinity, Total as CaCO3, Water	77.0		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	77.0		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	5160		1.533	20	1	mg/L	403559		08/13/08 1500	daw
00.0	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
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.

LABORATORY TEST RESULTS

Date: 09/04/2008

Job Number: 358699

ATTN: Todd Wells

PROJECT: GL ERWIN

IER: Conestoga-Rovers and Associates

Laboratory Sample ID: 358699-7  
 Date Received: 08/13/2008  
 Time Received: 09:37

Customer Sample ID: MW-14 81208  
 Date Sampled: 08/12/2008  
 Time Sampled: 15:15  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
	Sodium (Na), Diss.	1650		2.000	200.0	100	mg/L	403795		08/18/08 1348	srp
20 B	Alkalinity, Total as CaCO3, Water	101		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	101		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	10300		1.533	40	1	mg/L	403559		08/13/08 1500	daw
00.0	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
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

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

Job Number: 358699

ATTN: Todd Wells

PROJECT: GL ERWIN

ER: Conestoga-Rovers and Associates.

Laboratory Sample ID: 358699-8  
 Date Received: 08/13/2008  
 Time Received: 09:37

Customer Sample ID: MW-15 81208  
 Date Sampled: 08/12/2008  
 Time Sampled: 13:50  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q_FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
	Sodium (Na), Diss.	120		0.2000	20.00	10	mg/L	403795		08/18/08 1223	srp
20 B	Alkalinity, Total as CaCO3, Water	101		1.53	5.0	1	mg/L	403565		08/14/08 1200	spg
20 B	Bicarbonate (HCO3), Water	101		1.53	5.0	1	mg/L	403565		08/14/08 1200	spg
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	spg
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	spg
540C	Solids, Total Dissolved (TDS), Water	2370		1.533	10	1	mg/L	403559		08/13/08 1500	daw
00.0	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
0 Rev2.	Ion Chromatography Analysis - Short Field										
	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.

LABORATORY TEST RESULTS

Job Number: 358699

Date: 09/04/2008

ER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

ATTN: Todd Wells

Customer Sample ID: MW-16 81208  
 Laboratory Sample ID: 358699-9  
 Date Sampled: 08/12/2008  
 Date Received: 08/13/2008  
 Time Sampled: 14:25  
 Time Received: 09:37  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
	Sodium (Na), Diss.	221		0.2000	20.00	10	mg/L	403795		08/18/08 1227	srp
20 B	Alkalinity, Total as CaCO3, Water	220		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	220		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	1660		1.533	10	1	mg/L	403559		08/13/08 1500	daw
00.0	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
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

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

Job Number: 358699

ATTN: Todd Wells

ER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

Laboratory Sample ID: 358699-10  
 Date Received: 08/13/2008  
 Time Received: 09:37

Customer Sample ID: MW-17 81208  
 Date Sampled: 08/12/2008  
 Time Sampled: 15:00  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
	Sodium (Na), Diss.	222		0.2000	20.00	10	mg/L	403795		08/18/08 1231	srp
20 B	Alkalinity, Total as CaCO3, Water	173		1.53	5.0	1	mg/L	403565		08/14/08 1200	snr
20 B	Bicarbonate (HCO3), Water	173		1.53	5.0	1	mg/L	403565		08/14/08 1200	snr
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	snr
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	snr
540C	Solids, Total Dissolved (TDS), Water	1660		1.533	10	1	mg/L	403559		08/13/08 1500	daw
00.0	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
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

Date: 09/04/2008

Job Number: 358699

CLIENT: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

ATTN: Todd Wells

Customer Sample ID: MW-19 81208  
 Laboratory Sample ID: 358699-11  
 Date Sampled: 08/12/2008  
 Date Received: 08/13/2008  
 Time Sampled: 15:30  
 Time Received: 09:37  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
	Sodium (Na), Diss.	739		2.000	200.0	100	mg/L	403795		08/18/08 1352	srp
20 B	Alkalinity, Total as CaCO3, Water	79.8		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	79.8		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	9600		1.533	40	1	mg/L	403559		08/13/08 1500	daw
30.0	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
30 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

Job Number: 358699

ATTN: Todd Wells

PROJECT: GL ERWIN

PER: Conestoga-Rovers and Associates

Laboratory Sample ID: 358699-12  
 Date Received: 08/13/2008  
 Time Received: 09:37

Customer Sample ID: MW-20 81208  
 Date Sampled: 08/12/2008  
 Time Sampled: 13:35  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	gcl
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
	Sodium (Na), Diss.	249		0.2000	20.00	10	mg/L	403795		08/18/08 1238	srp
20 B	Alkalinity, Total as CaCO3, Water	135		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	135		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	4290		1.533	20	1	mg/L	403559		08/13/08 1500	daw
00.0	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
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.

LABORATORY TEST RESULTS

Job Number: 358699

Date: 09/04/2008

ER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

ATTN: Todd Wells

Customer Sample ID: MW-21 81208  
 Laboratory Sample ID: 358699-13  
 Date Sampled.....: 08/12/2008  
 Date Received.....: 08/13/2008  
 Time Sampled.....: 13:20  
 Time Received.....: 09:37  
 Sample Matrix.....: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDE	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
	Sodium (Na), Diss.	116		0.2000	20.00	10	mg/L	403795		08/18/08 1242	srp
20 B	Alkalinity, Total as CaCO3, Water	126		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	126		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	2060		1.533	10	1	mg/L	403559		08/13/08 1500	daw
100.0	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
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

Job Number: 358699

ER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

ATTN: Todd Wells

Laboratory Sample ID: 358699-14  
 Date Received: 08/13/2008  
 Time Received: 09:37

Customer Sample ID: MW-22 81208  
 Date Sampled: 08/12/2008  
 Time Sampled: 16:05  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
	Sodium (Na), Diss.	272		0.2000	20.00	10	mg/L	403795		08/18/08 1246	srp
20 B	Alkalinity, Total as CaCO3, Water	143		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	143		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	3670		1.533	10	1	mg/L	403559		08/13/08 1500	daw
00.0	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
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

Date: 09/04/2008

Job Number: 358699

PROJECT: GL ERWIN

ER: Conestoga-Rovers and Associates

AFTN: Todd Wellis

Customer Sample ID: RW-1 81208  
 Laboratory Sample ID: 358699-15  
 Date Sampled: 08/12/2008  
 Date Received: 08/13/2008  
 Time Sampled: 13:10  
 Time Received: 09:37  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
	Sodium (Na), Diss.	1770		2.000	200.0	100	mg/L	403795		08/18/08 1356	srp
20 B	Alkalinity, Total as CaCO3, Water	255		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	255		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	11000		1.533	40	1	mg/L	403559		08/13/08 1500	daw
00.0	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
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

Job Number: 358699

CLIENT: Conestoga-Rovers and Associates      PROJECT: GL ERWIN      AITIN: Todd Wells

Customer Sample ID: DUP 81208      Laboratory Sample ID: 358699-16  
 Date Sampled: 08/12/2008      Date Received: 08/13/2008  
 Time Sampled: 00:00      Time Received: 09:37  
 Sample Matrix: Water

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete				1		403614		08/14/08 1715	dcl
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
	Sodium (Na), Diss.	1740		2.000	200.0	100	mg/L	403795		08/18/08 1400	srp
20 B	Alkalinity, Total as CaCO3, Water	229		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Bicarbonate (HCO3), Water	229		1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Carbonate (CO3), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
20 B	Hydroxide (OH), Water	1.53	U	1.53	5.0	1	mg/L	403565		08/14/08 1200	sng
540C	Solids, Total Dissolved (TDS), Water	10900		1.533	40	1	mg/L	403559		08/13/08 1500	daw
00.0	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
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.

QUALITY CONTROL RESULTS

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

QUALITY CONTROL RESULTS

Job Number.: 358699

Report Date.: 09/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

ATTN: Todd Wells

Test Method.....: SM 2540C

Method Description.: Solids, Total Dissolved (TDS)

Units.....: mg/L

Analyst...: daw

Test Code.: TDS

Parameter.....: Solids, Total Dissolved (TDS)

Batch(s)...: 403559

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

QUALITY CONTROL RESULTS

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
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Test Method.....: EPA300.0 Rev2.1

Units.....: mg/L

Analyst....: sur

Method Description.: Ion Chromatography Analysis - Short Hold Batch(s)....: 403577

CCB	Continuing Calibration Blank					08/13/2008 15:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	0.2055					
Fluoride (F)	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					08/13/2008 18:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Chloride	0					
Bromide (Br)	0					
Sulfate (SO4)	0					
Fluoride (F)	0					
Nitrogen, Nitrate as N (NO3-N)	0					
Nitrogen, Nitrite as N (NO2-N)	0					

CCB	Continuing Calibration Blank					08/13/2008 21:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	0					
Bromide (Br)	0					
Sulfate (SO4)	0					
Chloride	0.2021					
Nitrogen, Nitrate as N (NO3-N)	0					
Nitrogen, Nitrite as N (NO2-N)	0					

CCB	Continuing Calibration Blank					08/14/2008 00:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F)	0					
Chloride	0.2038					
Sulfate (SO4)	0					
Bromide (Br)	0					
Nitrogen, Nitrate as N (NO3-N)	0					
Nitrogen, Nitrite as N (NO2-N)	0					

Job Number.: 358699

QUALITY CONTROL RESULTS

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	03:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/14/2008	06:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS50535			08/13/2008	19:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS50535			08/13/2008	18:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS50535			08/13/2008	20:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QUALITY CONTROL RESULTS

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	23:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS50535			08/14/2008	03:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS50535			08/14/2008	06:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
DU	Method Duplicate		358699-1	10	08/13/2008	13:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
DU	Method Duplicate		358699-9	100	08/13/2008	22:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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
ICB	Initial Calibration Blank				08/13/2008	12:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	WCS50535			08/13/2008	12:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	WCS50535			08/13/2008	13:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	WCS50535			08/14/2008	03:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				08/13/2008	12:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QUALITY CONTROL RESULTS

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CUSTOMER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				08/14/2008	03:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS50358	358699-1	10	08/13/2008	14:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Fluoride (F), Water	1.5474		2.000000	0.1611	69.3	90-110
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
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS50358	358699-9	100	08/13/2008	22:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Bromide (Br), Water	9.6828		10.000000	0	96.8	90-110
Fluoride (F), Water	1.5130		2.000000	0	75.7	90-110
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  
 Method Description.: Metals Analysis (ICAP Trace)

Units.....: mg/L  
 Batch(s)...: 403663 403668 403686 403716 403717 403740 403746 403747

Analyst...: srp

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	08:

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	09:

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

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CUSTOMER: Conestoga-Rovers and Associates. PROJECT: GL ERWIN ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCB	Continuing Calibration Blank				08/15/2008	10
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01590					
Magnesium (Mg)	-0.04452					
Potassium (K)	-0.25373					
Sodium (Na)	0.14642					

CCB	Continuing Calibration Blank				08/15/2008	10
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01989					
Potassium (K)	-0.36716					
Sodium (Na)	0.32666					

CCB	Continuing Calibration Blank				08/15/2008	10
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01939					
Potassium (K)	-0.31181					
Sodium (Na)	0.17276					

CCB	Continuing Calibration Blank				08/15/2008	10
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.02531					
Potassium (K)	-0.40637					
Sodium (Na)	0.07417					

CCB	Continuing Calibration Blank				08/15/2008	10
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.02654					
Potassium (K)	-0.44085					
Sodium (Na)	0.04488					

CCB	Continuing Calibration Blank				08/15/2008	10
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.02140					
Magnesium (Mg)	-0.06908					
Potassium (K)	-0.31023					
Sodium (Na)	0.03770					

QUALITY CONTROL RESULTS

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	08:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	09:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	13
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	13
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	0.00130					
Potassium (K), Diss.	-0.27515					
Sodium (Na), Diss.	0.15394					

ICB	Initial Calibration Blank				08/15/2008	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00049					
Magnesium (Mg)	-0.00008					
Potassium (K)	0.05823					
Sodium (Na)	0.00558					

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date Time

ICV	Initial Calibration Verification	MS081308CC			08/15/2008 07:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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 08:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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 08:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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 11:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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 11:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	-0.03190					
Potassium (K), Water	-0.55840					
Sodium (Na), Water	0.21101					

MD	Method Duplicate		358699-1		08/15/2008 11:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		358829-1		08/15/2008	12:00
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits
	Calcium (Ca), Water	203.33483	194.54071		194.54071	4.4 20
MS	Matrix Spike	MSPIKEW	358699-1		08/15/2008	11:00
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits
	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	12:00
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits
	Calcium (Ca), Water	202.34506		10.00	194.54071	78.0 75-125
MSD	Matrix Spike Duplicate	MSPIKEW	358699-1		08/15/2008	11:00
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits
	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	118.6 20 75-125
						0.3 20
MSD	Matrix Spike Duplicate	MSPIKEW	358829-1		08/15/2008	12:00
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits
	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	13:00
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits
	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
SO	Calibration Blank				08/15/2008	07:00
	Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result * Limits
	Calcium (Ca)	0.00325				
	Magnesium (Mg)	0.00628				
	Potassium (K)	0.34017				
	Sodium (Na)	0.02027				

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
SD	Serial Dilution		358699-1	5	08/15/2008	13:

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
STD	Spiked Blank Duplicate					08/15/2008 07:
Calcium (Ca)	0.28730					
Magnesium (Mg)	0.20832					
Potassium (K)	1.59922					
Sodium (Na)	4.32485					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					08/15/2008 08:
Calcium (Ca)	0.00407					
Magnesium (Mg)	-0.00286					
Potassium (K)	-0.01039					
Sodium (Na)	-0.00471					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					08/15/2008 08:
Calcium (Ca)	-0.00013					
Magnesium (Mg)	-0.01782					
Potassium (K)	-0.10690					
Sodium (Na)	-0.01121					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					08/15/2008 09:
Calcium (Ca)	-0.00072					
Magnesium (Mg)	-0.02890					
Potassium (K)	-0.19738					
Sodium (Na)	-0.00027					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					08/15/2008 10:
Calcium (Ca)	0.00414					
Magnesium (Mg)	-0.02016					
Potassium (K)	-0.13322					
Sodium (Na)	0.04853					

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	10

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	11

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	12

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	12

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	14

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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



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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	12:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	0.02394					
Magnesium (Mg), Diss.	-0.03999					
Potassium (K), Diss.	-0.31374					
Sodium (Na), Diss.	0.04285					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00323					
Magnesium (Mg)	0.01089					
Potassium (K)	0.09126					
Sodium (Na)	0.00955					

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	MS081308CC			08/15/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISA	Interference Check Sample A	MS073008IA			08/15/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISB	Interference Check Sample B	MS073008IB			08/15/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	442.45367		510.0		86.8	80.0-120.0
Magnesium (Mg)	507.84594		510.0		99.6	80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	MSPIKEW	403614		08/15/2008	13:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank		403614		08/15/2008	13:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	-0.00432					
Magnesium (Mg), Water	-0.02748					
Potassium (K), Water	-0.19242					
Sodium (Na), Water	0.01502					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		358829-1		08/15/2008	14:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MS	Matrix Spike	MSPKEW	358829-1		08/15/2008	14
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	MSPKEW	358829-1		08/15/2008	14
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	205.54167	207.47729	10.00	200.39595	51.5 31.6	75-125 20
Magnesium (Mg), Water	11.46903	11.49378	10.00	2.08547	93.8 0.3	75-125 20

S0	Calibration Blank				08/15/2008	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00613					
Magnesium (Mg)	0.03077					
Potassium (K)	0.45221					
Sodium (Na)	0.23306					

STD	Spiked Blank Duplicate				08/15/2008	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	2.95376					
Magnesium (Mg)	1.23946					
Potassium (K)	2.80953					
Sodium (Na)	16.09711					

CCB	Continuing Calibration Blank				08/15/2008	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00114					
Magnesium (Mg)	-0.00865					
Potassium (K)	-0.08294					
Sodium (Na)	0.00261					

CCB	Continuing Calibration Blank				08/15/2008	09
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01481					
Magnesium (Mg)	-0.05001					
Potassium (K)	-0.40687					
Sodium (Na)	0.08314					



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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	15

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.02419					
Magnesium (Mg)	-0.07148					
Potassium (K)	-0.47648					
Sodium (Na)	0.12426					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.02091					
Magnesium (Mg)	-0.04952					
Potassium (K)	-0.34895					
Sodium (Na)	0.08803					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	13:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	13:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	15:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	15:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CH1	Calibration check standard 1	MS073008T1			08/15/2008	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	0.00130					
Potassium (K), Diss.	-0.27515					
Sodium (Na), Diss.	0.15394					

ICB	Initial Calibration Blank				08/15/2008	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00049					
Magnesium (Mg)	-0.00008					
Potassium (K)	0.05823					
Sodium (Na)	0.00558					

ICV	Initial Calibration Verification	MS081308CC			08/15/2008	07
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	08
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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			

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISB	Interference Check Sample B	MS073008IB			08/15/2008	080

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	480.84558		510.0		94.3	80.0-120.0
Magnesium (Mg)	539.72991		510.0		105.8	80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	MSPIKEW	403614		08/15/2008	110

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank		403614		08/15/2008	110

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	-0.03190					
Potassium (K), Water	-0.55840					
Sodium (Na), Water	0.21101					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		358699-1		08/15/2008	110

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		358829-1		08/15/2008	120

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	203.33483	194.54071		194.54071	4.4	20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	358699-1		08/15/2008	110

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	358829-1		08/15/2008	120

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	202.34506		10.00	194.54071	78.0	75-125

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSPIKEW	358699-1		08/15/2008	11:20

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	68.12551	69.09146	10.00	57.84768	102.8 8.9	75-125 20
Potassium (K), Diss.	17.05924	17.08377	10.00	5.19646	118.6 0.3	75-125 20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSPIKEW	358829-1		08/15/2008	12:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	202.47694	202.34506	10.00	194.54071	79.4 1.8	75-125 20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PDS	Post Digestion Spike	MSPIKE3	358699-1		08/15/2008	13:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
S0	Calibration Blank				08/15/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00325					
Magnesium (Mg)	0.00628					
Potassium (K)	0.34017					
Sodium (Na)	0.02027					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
SD	Serial Dilution		358699-1	5	08/15/2008	13:00

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
STD	Spiked Blank Duplicate				08/15/2008	07:00

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					

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCB	Continuing Calibration Blank				08/15/2008	08:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00114					
Magnesium (Mg)	-0.00865					
Potassium (K)	-0.08294					
Sodium (Na)	0.00261					

CCB	Continuing Calibration Blank				08/15/2008	09:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01481					
Magnesium (Mg)	-0.05001					
Potassium (K)	-0.40687					
Sodium (Na)	0.08314					

CCB	Continuing Calibration Blank				08/15/2008	10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01590					
Magnesium (Mg)	-0.04452					
Potassium (K)	-0.25373					
Sodium (Na)	0.14642					

CCB	Continuing Calibration Blank				08/15/2008	10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01989					
Magnesium (Mg)	-0.06735					
Potassium (K)	-0.36716					
Sodium (Na)	0.32666					

CCB	Continuing Calibration Blank				08/15/2008	11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01939					
Magnesium (Mg)	-0.05589					
Potassium (K)	-0.31181					
Sodium (Na)	0.17276					

CCB	Continuing Calibration Blank				08/15/2008	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.02531					
Potassium (K)	-0.40637					
Sodium (Na)	0.07417					



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Report Date.: 09/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	09:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	13:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	13:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	15:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	15:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	16:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	07:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	07:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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





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Job Number.: 358699

Report Date.: 09/04/2008

CUSTOMER: Conestoga-Rovers and Associates

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MS	Matrix Spike	MSPIKEW	358829-1		08/15/2008	12:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	68.12551	69.09146	10.00	57.84768	102.8 8.9	75-125 20
Magnesium (Mg), Diss.	29.22079	29.56161	10.00	19.53488	96.9 3.4	75-125 20
Potassium (K), Diss.	17.05924	17.08377	10.00	5.19646	118.6 0.3	75-125 20
Sodium (Na), Diss.	89.21484	89.55017	10.00	81.79277	74.2 4.5	75-125 20

MSD	Matrix Spike Duplicate	MSPIKEW	358829-1		08/15/2008	12:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	202.47694	202.34506	10.00	194.54071	79.4 1.8	75-125 20
Potassium (K), Water	113.41035	112.68194	10.00	103.82865	95.8 7.9	75-125 20
Sodium (Na), Water	183.78099	181.66133	10.00	175.67666	81.0 30.1	75-125 20

PDS	Post Digestion Spike	MSPIKE3	358699-1		08/15/2008	13:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	07:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00325					
Magnesium (Mg)	0.00628					
Potassium (K)	0.34017					
Sodium (Na)	0.02027					

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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SD	Serial Dilution		358699-1	5	08/15/2008	13
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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

STD	Spiked Blank Duplicate				08/15/2008	07
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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					

CCB	Continuing Calibration Blank				08/15/2008	08
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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	08
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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	09
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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	10
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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					



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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/15/2008	15

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00006					
Magnesium (Mg)	-0.03947					
Potassium (K)	-0.27834					
Sodium (Na)	0.00641					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00221					
Magnesium (Mg)	-0.03163					
Potassium (K)	-0.22128					
Sodium (Na)	-0.01100					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	10:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	14:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	14:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS081308CC			08/15/2008	150

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.10961		0.1000		109.6	80.0-120.0
Sodium (Na)	0.55802		0.60000		93.0	80.0-120.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00323					
Magnesium (Mg)	0.01089					
Potassium (K)	0.09126					
Sodium (Na)	0.00955					

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	MS081308CC			08/15/2008	07:4

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISA	Interference Check Sample A	MS073008IA				08/15/2008 07:5
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			

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISA	Interference Check Sample A	MS073008IA				08/15/2008 15:5
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			

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISB	Interference Check Sample B	MS073008IB				08/15/2008 07:5
Calcium (Ca)	442.45367		510.0		86.8	80.0-120.0
Magnesium (Mg)	507.84594		510.0		99.6	80.0-120.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISB	Interference Check Sample B	MS073008IB				08/15/2008 15:5
Calcium (Ca)	433.39959		510.0		85.0	80.0-120.0
Magnesium (Mg)	496.83996		510.0		97.4	80.0-120.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
LCS	Laboratory Control Sample	MSPIKEW	403614			08/15/2008 13:5
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

QUALITY CONTROL RESULTS

Job Number.: 358699

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank		403614		08/15/2008	13:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	-0.00432					
Magnesium (Mg), Water	-0.02748					
Potassium (K), Water	-0.19242					
Sodium (Na), Water	0.01502					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		358829-1		08/15/2008	14:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	358829-1		08/15/2008	14:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSPIKEW	358829-1		08/15/2008	14:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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
					93.8	75-125
					0.3	20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
S0	Calibration Blank				08/15/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00613					
Magnesium (Mg)	0.03077					
Potassium (K)	0.45221					
Sodium (Na)	0.23306					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
STD	Spiked Blank Duplicate				08/15/2008	07:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	2.95376					
Magnesium (Mg)	1.23946					
Potassium (K)	2.80953					
Sodium (Na)	16.09711					

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	090

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00322					
Magnesium (Mg)	-0.01181					
Potassium (K)	-0.17158					
Sodium (Na)	0.00070					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					08/18/2008 100
Calcium (Ca)	0.00025					
Magnesium (Mg)	-0.04626					
Sodium (Na)	0.04200					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					08/18/2008 110
Calcium (Ca)	-0.01464					
Magnesium (Mg)	-0.05017					
Sodium (Na)	0.03835					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					08/18/2008 120
Calcium (Ca)	-0.00340					
Magnesium (Mg)	-0.05970					
Sodium (Na)	0.01012					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					08/18/2008 120
Calcium (Ca)	0.01529					
Magnesium (Mg)	-0.04509					
Potassium (K)	-0.40361					
Sodium (Na)	0.00344					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
CCB	Continuing Calibration Blank					08/18/2008 130
Calcium (Ca)	-0.00998					
Magnesium (Mg)	-0.06228					
Potassium (K)	-0.52573					
Sodium (Na)	0.00882					

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	0900
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	1000
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	1100
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	1200
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	1200
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	1300
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH1	Calibration check standard 1	MS073008T1			08/18/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.10864		0.1000		108.6	80.0-120.0
Sodium (Na)	0.62762		0.60000		104.6	80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH3	Standard check for ICAP	MS073008T3			08/18/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB	Extraction Blank		403614		08/18/2008	11:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	0.02108					
Magnesium (Mg), Diss.	-0.06764					
Sodium (Na), Diss.	0.02178					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				08/18/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00255					
Magnesium (Mg)	-0.00706					
Potassium (K)	-0.18349					
Sodium (Na)	0.00310					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	MS081308CC			08/18/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISA	Interference Check Sample A	MS073008IA			08/18/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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			

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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ISB	Interference Check Sample B	MS073008IB			08/18/2008	08:58
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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 11:44
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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 11:44
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	-0.01663					
Magnesium (Mg), Water	-0.07431					
Sodium (Na), Water	0.01258					

MD	Method Duplicate		358699-1	10		08/18/2008 11:44
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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 11:44
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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 11:44
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	7.01182	7.14679	1.000000	5.93093	108.1 11.8	75-125 20
Sodium (Na), Diss.	12.57971	12.67862	1.000000	11.40290	117.7 8.1	75-125 20



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QUALITY CONTROL RESULTS

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CUSTOMER: Conestoga-Rovers and Associates

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				08/18/2008	12:00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.01529					
Magnesium (Mg)	-0.04509					
Sodium (Na)	0.00344					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00998					
Magnesium (Mg)	-0.06228					
Sodium (Na)	0.00882					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01939					
Magnesium (Mg)	-0.07749					
Sodium (Na)	-0.00509					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	12:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	13:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	14:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	08:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	08:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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Report Date.: 09/04/2008

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: GL ERWIN

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB	Extraction Blank		403614		08/18/2008	11

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	0.02108					
Magnesium (Mg), Diss.	-0.06764					
Sodium (Na), Diss.	0.02178					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ICB	Initial Calibration Blank					08/18/2008 08
Calcium (Ca)	-0.00255					
Magnesium (Mg)	-0.00706					
Potassium (K)	-0.18349					
Sodium (Na)	0.00310					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ICV	Initial Calibration Verification	MS081308CC				08/18/2008 08
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

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISA	Interference Check Sample A	MS073008IA				08/18/2008 08
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			

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ISB	Interference Check Sample B	MS073008IB				08/18/2008 08
Calcium (Ca)	496.11413		510.0		97.3	80.0-120.0
Magnesium (Mg)	556.62023		510.0		109.1	80.0-120.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
LCS	Laboratory Control Sample	MSPIKEW	403614			08/18/2008 11
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

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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 11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	-0.01663					
Magnesium (Mg), Water	-0.07431					
Sodium (Na), Water	0.01258					

MD	Method Duplicate		358699-1	10	08/18/2008 11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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 11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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 11:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	7.01182	7.14679	1.000000	5.93093	108.1 11.8	75-125 20
Magnesium (Mg), Diss.	2.89842	2.95179	1.000000	1.92688	97.2 5.3	75-125 20
Sodium (Na), Diss.	12.57971	12.67862	1.000000	11.40290	117.7 8.1	75-125 20

S0	Calibration Blank				08/18/2008 08:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00334					
Magnesium (Mg)	0.00672					
Potassium (K)	0.36252					
Sodium (Na)	0.02040					

STD	Spiked Blank Duplicate				08/18/2008 08:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.28337					
Magnesium (Mg)	0.21195					
Potassium (K)	1.52170					
Sodium (Na)	4.11051					

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
CCB	Continuing Calibration Blank				08/18/2008	090

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00322					
Magnesium (Mg)	-0.01181					
Potassium (K)	-0.17158					
Sodium (Na)	0.00070					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00025					
Magnesium (Mg)	-0.04626					
Sodium (Na)	0.04200					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.01464					
Magnesium (Mg)	-0.05017					
Sodium (Na)	0.03835					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00340					
Magnesium (Mg)	-0.05970					
Sodium (Na)	0.01012					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.01529					
Magnesium (Mg)	-0.04509					
Potassium (K)	-0.40361					
Sodium (Na)	0.00344					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00998					
Magnesium (Mg)	-0.06228					
Potassium (K)	-0.52573					
Sodium (Na)	0.00882					



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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
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CCV	Continuing Calibration Verification	MS081308CC			08/18/2008	10:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	12:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	1:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	14:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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



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	17:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.09826		0.1000		98.3	80.0-120.0
Sodium (Na)	0.65638		0.60000		109.4	80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH3	Standard check for ICAP	MS073008T3			08/18/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB	Extraction Blank		403614		08/18/2008	11:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	0.02108					
Magnesium (Mg), Diss.	-0.06764					
Sodium (Na), Diss.	0.02178					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB	Extraction Blank		403614		08/18/2008	16:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Diss.	0.01031					
Magnesium (Mg), Diss.	-0.06137					
Potassium (K), Diss.	-0.72774					
Sodium (Na), Diss.	0.00460					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				08/18/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	-0.00255					
Magnesium (Mg)	-0.00706					
Potassium (K)	-0.18349					
Sodium (Na)	0.00310					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	MS081308CC			08/18/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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

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
ISA	Interference Check Sample A	MS073008IA			08/18/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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			

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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			

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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			

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	496.11413		510.0		97.3	80.0-120.0
Magnesium (Mg)	556.62023		510.0		109.1	80.0-120.0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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					

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
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LCS	Laboratory Control Sample	MSPIKEW	403614		08/18/2008	11:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca), Water	-0.01663					
Magnesium (Mg), Water	-0.07431					
Sodium (Na), Water	0.01258					

MD	Method Duplicate		358699-1	10	08/18/2008	11:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	11:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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	08:00
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
Calcium (Ca)	0.00334					
Magnesium (Mg)	0.00672					
Potassium (K)	0.36252					
Sodium (Na)	0.02040					

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
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STD	Spiked Blank Duplicate				08/18/2008	08:
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Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits
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 revealed.
- 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 characterization 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 - GFAA, 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	DILUTIO	
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	DILUTIO	
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	DILUTIO	
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: EUP 81208		Date Recvd: 08/13/2008		Sample Date: 08/12/2008		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	# (S)	DATE/TIME ANALYZED	DILUTIO	
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 \_\_\_\_\_  
 Drinking Water? Yes  No

THE LEADER IN ENVIRONMENTAL TESTING

# 358699

TAL-4124 (1/007)

Client **CRA**

Project Manager **Todd Wells w/cra**

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**

Lab Number

Page **2** of **2**

City **Milvond**

State **TX** Zip Code **79703**

Site Contact **MAT HUSON**

Lab Contact **Savin Kucera**

Analysis (Attach list if more space needed)

Project Name and Location (State) **O.L. ERIN / 5th, NW.**

Carrier/Waybill Number **8608 3754 8634**

Matrix **Soil**

Special Instructions/ Conditions of Receipt

Contract/Purchase Order/Quote No. **039124**

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	Matrix	Containers & Preservatives	Analysis (Attach list if more space needed)	Special Instructions/ Conditions of Receipt	
MW-21 81208	8-12-08	1330	X			X	X								TDS SM 2540 Dissolved Ca, Mg K, Na-6016 Chloride, Fluoride Sulfate, Nitrate Carbonate, Bicarbonate Hydroxide SM 2320 Total Alkalinity SM 2320P		
MW-22 81208	8-12-08	1605	X			X	X										
RW-1 81208	8-12-08	1310	X			X	X										
DUP 81208	8-12-08		X			X	X										
TEMP Blank						X	X										
TEMP Blank						X	X										

Possible Hazard Identification  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  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 \_\_\_\_\_  
 1. Reinquished By \_\_\_\_\_ Date **8/12/08** Time **1600**  
 2. Reinquished By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
 3. Reinquished By \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Comments \_\_\_\_\_  
 Distribution: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy