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Final Report

2013 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, Township 24 South, Range 37 East
Lea County, New Mexico

Prepared for: Chevron Environmental Management Company

Conestoga-Rovers & Associates
2135 South Loop, 250 West
Midland, Texas 79703

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Partners in Sustainability

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Section 1.0 Introduction

This Annual Groundwater Monitoring Report presents groundwater data collected during the 2013 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 13-16, 2013 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, 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 produced water emergency pit which 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 55.0 feet with a mixture of clean sand and clay and was backfilled with clean soil to the surface. ESCI submitted the pit 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 (west and southwest) were installed and sampled in 1997. Analytical results demonstrated groundwater chloride concentrations were at or above the New Mexico Water Quality Control Commission (NMWQCC) Standards. In January 1998, Highlander Environmental Corp. (Highlander) performed an electromagnetic (EM-34) terrain conductivity survey. Additionally, Highlander

installed eight monitoring wells (MW-1 through MW-8) from February 1998 to January 1999 in order to further evaluate the extent of affected groundwater.

Texaco submitted a corrective action proposal plan in 2004 to the New Mexico Office of the State Engineer (NMOSE) to recover groundwater from the recovery well (RW-1). From September 2001 through October 2003, nine additional monitor wells were installed under the direction of Larson and Associates, Inc. (LA). On September 9, 2004, the NMOSE issued Permit CP 00886 to Divert Underground Waters from recovery well RW-1. An allocation for 6.5 acre-feet per annum was granted by the NMOSE in the permit Monitor wells (MW-18 through MW-20) were installed under the direction of LA in November 2004. A total fluids groundwater recovery system was installed at RW-1 under CRA's direct supervision in September 2006. At the request of the NMOCD, two groundwater monitoring wells (MW-21 and MW-22) were installed at the Site on November 19, 2007 to further evaluate the extent of affected groundwater. Two additional monitoring wells (MW-23 and MW-24) were installed to the southeast of the Site on October 10-11, 2011. Also, on April 2-3, 2012 three monitor wells (MW-25, MW-26 and MW-27) were installed to facilitate the delineation of the chloride plume. Currently, the Site is monitored semi-annually by CRA.

Section 2.0 Regulatory Framework

The NMOCD guidelines require groundwater to be analyzed for constituents of concern (COC) as defined by the NMWQCC standards. The NMWQCC regulations provide Human Health Standards for Groundwater. The COCs in affected groundwater at the Site are chlorides, fluorides, nitrates, sulfates and total dissolved solids (TDS). Groundwater analytical results for COC analytes were compared to the NMWQCC standards shown in the following table:

Analyte	***NMWQCC Standard for Groundwater (mg/L)***
Fluoride[1]	1.6
Nitrate (NO_3 as N)[1]	10.0
Chloride[2]	250.0
Sulfate (SO_4)[2]	600.0
Total Dissolved Solids (TDS)[2]	1,000.0

Notes:

1) [1]NMWQCC HUMAN HEALTH STANDARDS PER NMAC 20.6.2.3103A

2) [2]NMWQCC OTHER STANDARDS FOR DOMESTIC WATER SUPPLY PER NMAC 20.6.2.3103B

Section 3.0 2013 Groundwater Monitoring

Currently, groundwater at the Site is monitored semi-annually with a network of 31 wells (Figure 2). CRA performed ground water sampling events on February 18-21 and August 13-16, 2013 at the Site.

Static fluid levels were measured with an electronic interface probe to the nearest hundredth of a foot and recorded. In addition, a conductivity probe was used to record the conductivity levels every two feet in each well to evaluate the vertical distribution of chloride impacted groundwater. After recording conductivity levels, discreet samples were collected at the interval of highest conductivity using a Hydrosleeve™. Geochemical Water quality parameters (pH, temperature and conductivity) were recorded at the sampling depth. 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. Laboratory-supplied sample containers were filled directly from the Hydrosleeve™.

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 ALS Laboratory Group (ALS) in Houston, Texas for analysis of dissolved metals (SW 6020), anions (EPA E300.0), alkalinity (SM 2320B) and TDS (M2540C). Certified laboratory reports and chain of custody documentation are attached as Appendix A. Any fluids recovered during the sampling events were containerized and subsequently disposed of at a CEMC–approved and OCD-permitted salt water disposal (SWD) facility by a third party contractor.

3.1 Potentiometric Surface and Gradient

Groundwater elevation data are presented in Table 1 and generally fall within historical ranges. Groundwater gradient maps for February and August 2013 are presented as Figures 3 and 4. Groundwater elevations ranged from 3,064.67 feet (MW-23) to 3,109.86 feet (MW-26) in February 2013 and from 3,064.66 feet (MW-23) to 3,109.95 feet (MW-26) in August 2013. Groundwater flow at the Site is to the southeast at a gradient of 0.014 feet/foot.

3.2 Analytical Results

The 2013 analytical results generally fall within historical ranges and are summarized in Table II. All wells were sampled during both events except for monitor wells, MW-18 and MW-27 which were dry in the February and August sampling events. A chloride concentration map for

February and August 2013 ground water monitoring events are presented for comparison purposes, as Figure 5. Isopleths maps of Chloride isoconcentration maps for February and August are presented as Figures 6 and 7, respectively. All wells sampled during the February and August 2013 monitoring events had at least one COC (chloride, fluoride, sulfate or TDS) that exceeded NMWQCC standards except WW-1 which did not exceed any standards in the February or August events.

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 (250.0 mg/L) in twenty-six wells sampled during the February 2013 event and in twenty-seven wells during the August 2013 sampling event.
- Fluoride was detected at concentrations above the NMWQCC standard (1.6 mg/L) in six wells sampled during the February 2013 event and in 11 wells during the August 2013 sampling event.
- Nitrate was not detected at concentrations above the NMWQCC standard (10.0 mg/L) in any wells during the February or the August 2013 events.
- Sulfate was detected at concentrations above the NMWQCC standard (600.0 mg/L) in one well sampled during the February and August 2013 sampling event.
- Total Dissolved Solids were detected at concentrations above the NMWQCC standard (1,000.0 mg/L) in twenty-four wells sampled during the February 2013 and August 2013 sampling event.

Evaluation of the character of groundwater impacts at the G. L. Erwin site complicated. The groundwater gradient is defined to flow toward the southeast. The aquifer appears to pinch out, or terminate to the south and east (MW-18 and MW-27) of the release area. Analytical results from MW-21, in the February and August 2013 events (Figure 5) demonstrate chloride concentrations below MNWQCC standards. However, chloride concentration up gradient, cross gradient and down gradient (MW-19, MW-15 and MW-24, respectively) all exhibit chloride concentrations above the NMWQCC standard of 250 mg/L. Consequently, any future assessment and remediation activities associated with this site should consider the unpredictable nature of the aquifer.

Section 4.0 Quality Assurance

Three duplicate samples were collected during the February 2013 event and August 2013 sampling event for QA/QC purposes. Duplicate concentrations did not exhibit significant deviations for constituents analyzed. Certified groundwater laboratory reports received from ALS Environmental for the groundwater samplings events were reviewed and approved by a CRA Chemist for laboratory and field method QA/QC. Copies of the certified analytical reports and chain-of-custody documentation are attached in Appendix A.

Section 5.0 Corrective Action

Excluding brief periods of routine maintenance, the groundwater recovery system in RW-1 operated continuously from January to December 2013, under Permit CP 00886 as issued by the NMOSE. Operation and Maintenance (O&M) activities were performed on a biweekly basis. Groundwater pumping record reports for RW-1 were submitted quarterly to the NMOSE in accordance to permit requirements.

Since the system was installed in September 2006, a total of 17,366.6 barrels of impacted water have been recovered from RW-1. In 2013, 4,413 barrels of impacted water and approximately 3,102 pounds of chlorides have been removed from the aquifer. Approximately 21,712 pounds of chlorides have been removed by the remediation system since 2006. A graph for RW-1 chloride and TDS concentrations versus time is presented in Appendix B.

Chevron continues to evaluate the effectiveness of the existing total fluids remediation system. Review of the historical trend data in recover well RW-1 does demonstrate a decreasing chloride concentration trend beginning in 2008 and continuing throughout 2013. However, concentration trends in other monitor wells surrounding RW-1 are relatively inconclusive and only marginal benefits in the reduction of chloride and TDS mass concentrations can be attributed to system operation. The one existing recovery well is most likely not capturing a majority of the impacted groundwater moving across the 0.62 mile wide stretch of the plume. Dewatering and lowering of the water table has occurred in the areas surrounding RW-1. The saturated thickness prior to pumping was approximately fifteen feet thick and it is estimated that the localized saturated thickness in the aquifer has been reduced more than five feet in the area surrounding RW-1. The continued total fluids removal (RW-1) and addition of more recovery wells would be effective in reduction the mass of chloride impacts across the width of the plume. However, groundwater removal activities could potentially dewater the aquifer (localized areas) prior to the reduction of chloride concentrations to below regulatory levels.

Consequently, alternative remedial technologies that are more effective in conserving groundwater resources and reducing groundwater impacts are currently being considered for implementation at the Site.

Section 6.0 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 31 wells.
- Groundwater elevation data are presented in Table I and generally fall within historical r ranges. Groundwater gradient maps for February and August 2013 are presented as Figures 3 and 4. Groundwater elevations ranged from 3,064.67 feet (MW-23) to 3,109.86 feet (MW-26) in February and from 3,064.66 feet (MW-23) to 3,109.95 feet (MW-26) in August. Groundwater flow at the Site is to the southeast at a gradient of 0.014 feet/foot.
- The 2013 analytical results generally fall within historical ranges, and are summarized in Table II. All wells were sampled during both events except for monitor wells, MW 18 and MW 27 which are dry in the February and August events.
- All wells sampled during the February and August 2013 monitoring events had at least one COC (chloride, fluoride, sulfate or TDS) that exceeded NMWQCC standards except WW-1 which did not exceed any standards in the February or August events.
- Excluding brief periods of routine maintenance, the groundwater recovery system in RW-1 operated continuously from January to December 2013. Operation and Maintenance (O&M) activities were performed on a biweekly basis.
- Groundwater pumping record reports for RW-1 were submitted quarterly to the NMOSE in accordance to permit requirements.
- Since the system was installed in September 2006, a total of 17,366.6 barrels of water have been recovered from RW-1. In 2013, a total of 4,413 barrels of impacted water was removed from the aquifer.
- Decreasing concentrations of TDS and chlorides have been observed in recovery well RW-1 from 2008-2013.
- Only marginal benefits in the localized (RW-1) reduction in groundwater impacts can be attributed to system operations.

- Evaluation of the character of groundwater impacts at the G. L. Erwin site complicated. The groundwater gradient is defined to flow toward the southeast. The aquifer appears to pinch out, or terminate to the south and east (MW-18 and MW-27) of the release area. Analytical results from MW-21, in the February and August 2013 events (Figure 5) demonstrate chloride concentrations below NMWQCC standards. However, chloride concentration up gradient, cross gradient and down gradient (MW-19, MW-15 and MW-24, respectively) all exhibit chloride concentrations above the NMWQCC standard of 250 mg/L. Consequently, any future assessment and remediation activities associated with this site should consider the unpredictable nature of the aquifer.

Section 7.0 Planned Activities

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

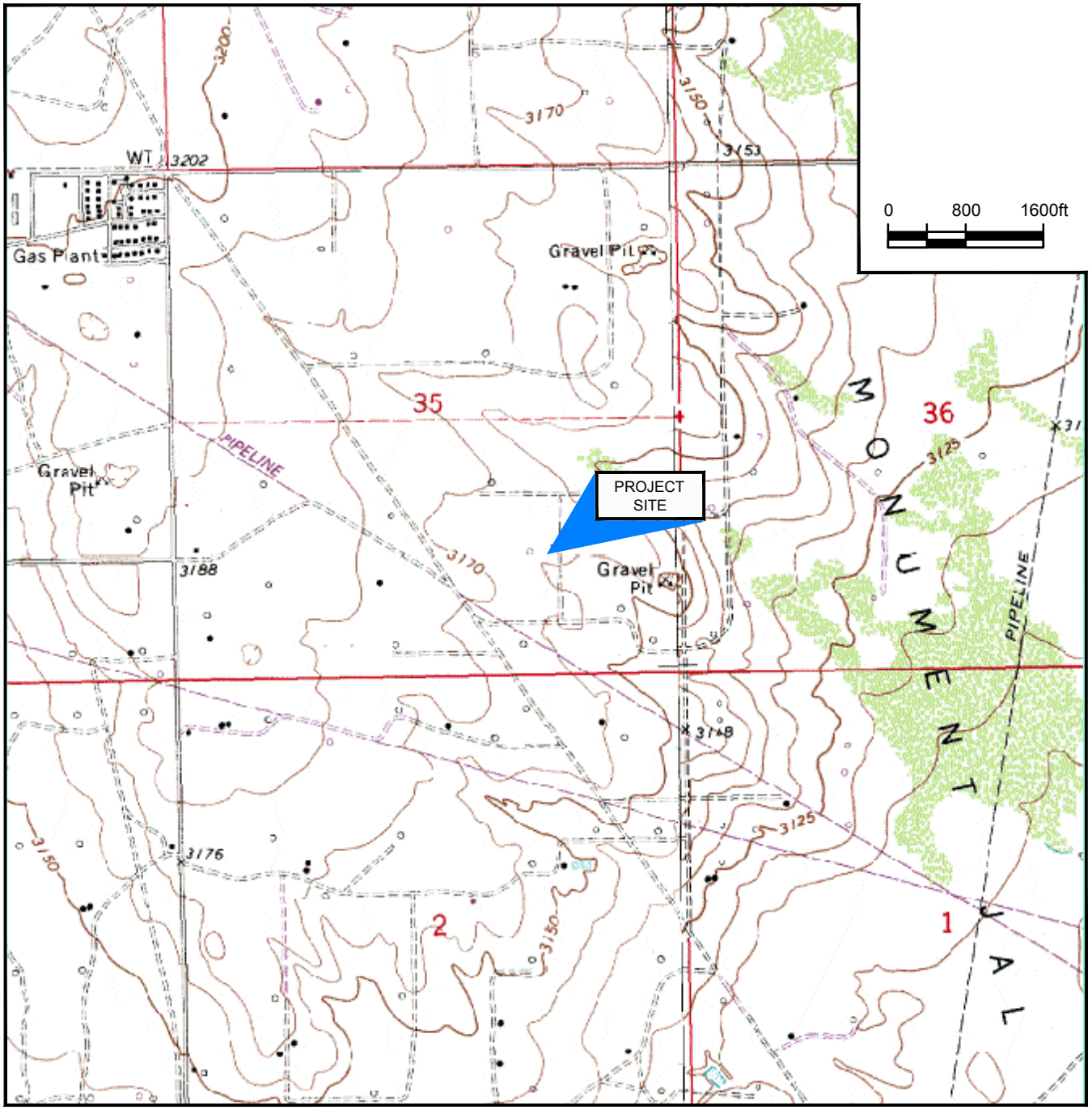
- Continue to perform semi-annual groundwater monitoring and sampling events in February and August 2014.
- Continue groundwater recovery from RW-1 in accordance to permit requirements, including submittal of quarterly pumping record reports to the NMOSE.
- Chevron will continue to evaluate the effectiveness of the total fluids recovery system that was installed in 2006. Alternative remedial technologies that are more effective in conserving groundwater resources while reducing groundwater impacts are currently being considered for implementation at the Site.

All of which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES

Kimberly Lambert
Project Manager

Thomas C. Larson, PG
Principal, Midland Operations Manager

Figures



SOURCE: USGS 7.5 MINUTE QUADS
"JAL NW AND JAL NE, NEW MEXICO"

LAT/LONG: 32.170° NORTH, 103.129° WEST
COORDINATE: NAD27 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

figure 1

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

039124-2013(011)GN-DL001 FEB 4/2013

RE: ESRI 009 Aerial Photograph.

LEGEND

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

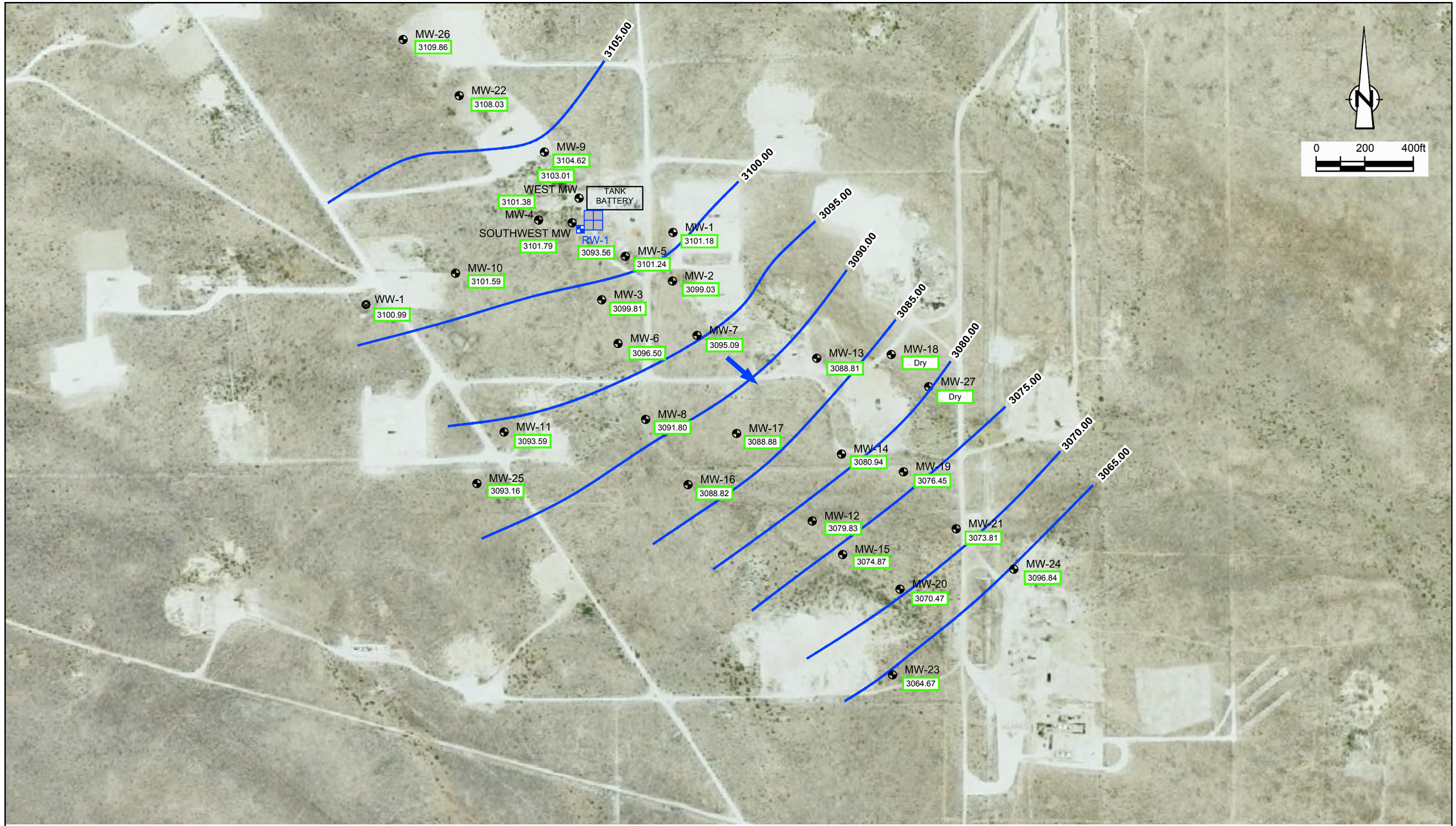
NOTES:

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, AND BY WEST COMPANY NOVEMBER 2011 AND JUNE 2012.
2. PUMP AND DISPOSE GROUNDWATER RECOVERY SYSTEM WAS INSTALLED IN SEPTEMBER 2006.
3. MONITOR WELLS MW-25, MW-26 AND MW-27 WERE INSTALLED IN APRIL 2012.

figure 2

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

039124-2013(011)GN-DL001 FEB 17/2014



RE: ESRI 009 Aerial Photograph.

LEGEND

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

- GROUNDWATER ELEVATION CONTOUR (INTERVAL = 5.00 FT)
- 3064.67 ELEVATION OF GROUNDWATER (FT)
- DIRECTION OF GROUNDWATER FLOW
- NG GROUNDWATER NOT GAUGED

NOTES:

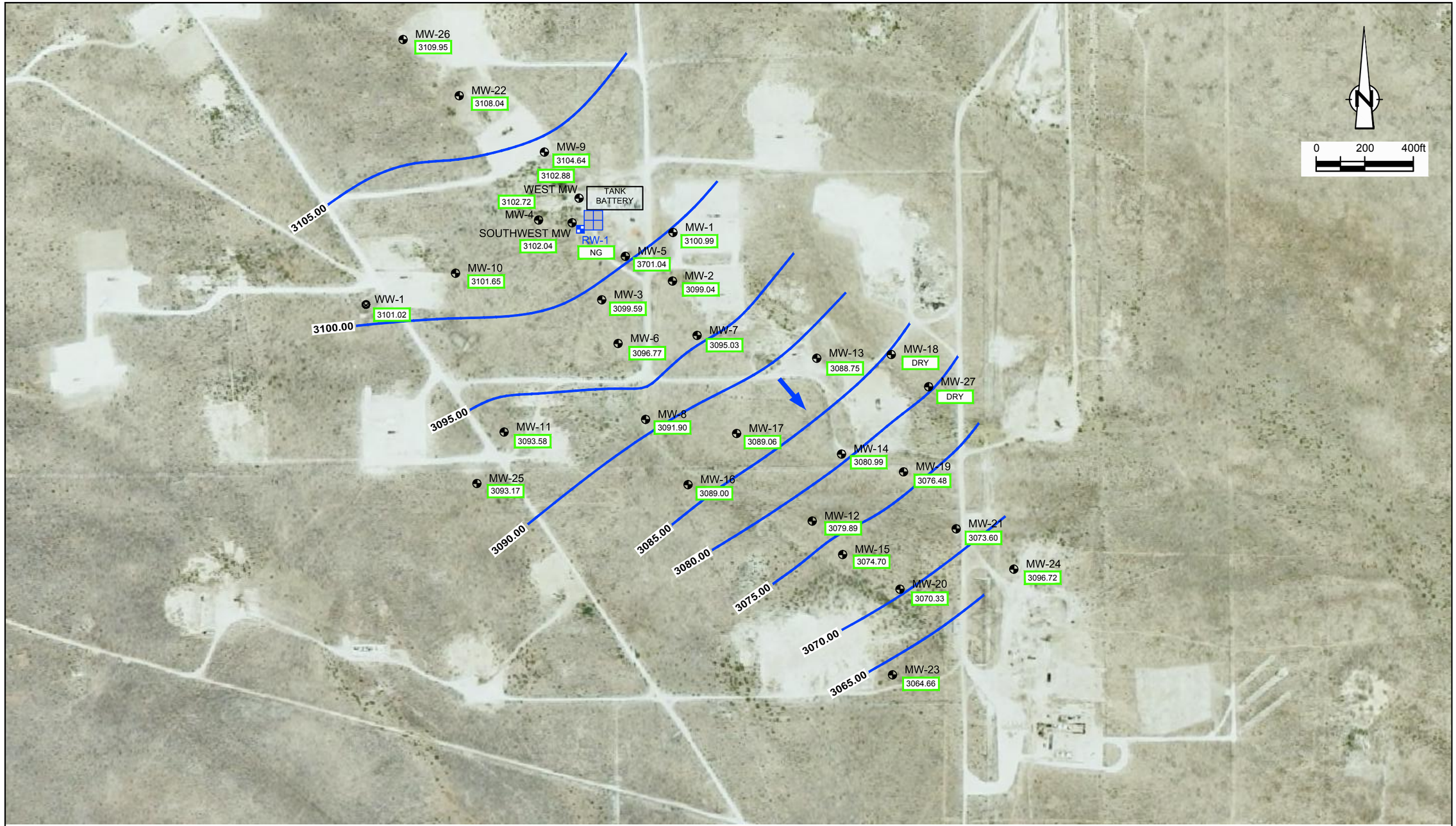
1. GROUNDWATER ELEVATIONS MEASUREMENTS COLLECTED ON FEBRUARY 19, 2013.
2. MONITOR WELLS MW-24 AND RW-1 WERE NOT HONORED IN THE GRADIENT.

figure 3

GROUNDWATER GRADIENT MAP - FEBRUARY 2013
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

039124-2013(011)GN-DL001 FEB 17/2014



RE: ESRI 009 Aerial Photograph.

LEGEND

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

- GROUNDWATER ELEVATION CONTOUR (INTERVAL = 5.00 FT)
- 3064.66 ELEVATION OF GROUNDWATER (FT)
- DIRECTION OF GROUNDWATER FLOW
- NG GROUNDWATER NOT GAUGED

NOTES:

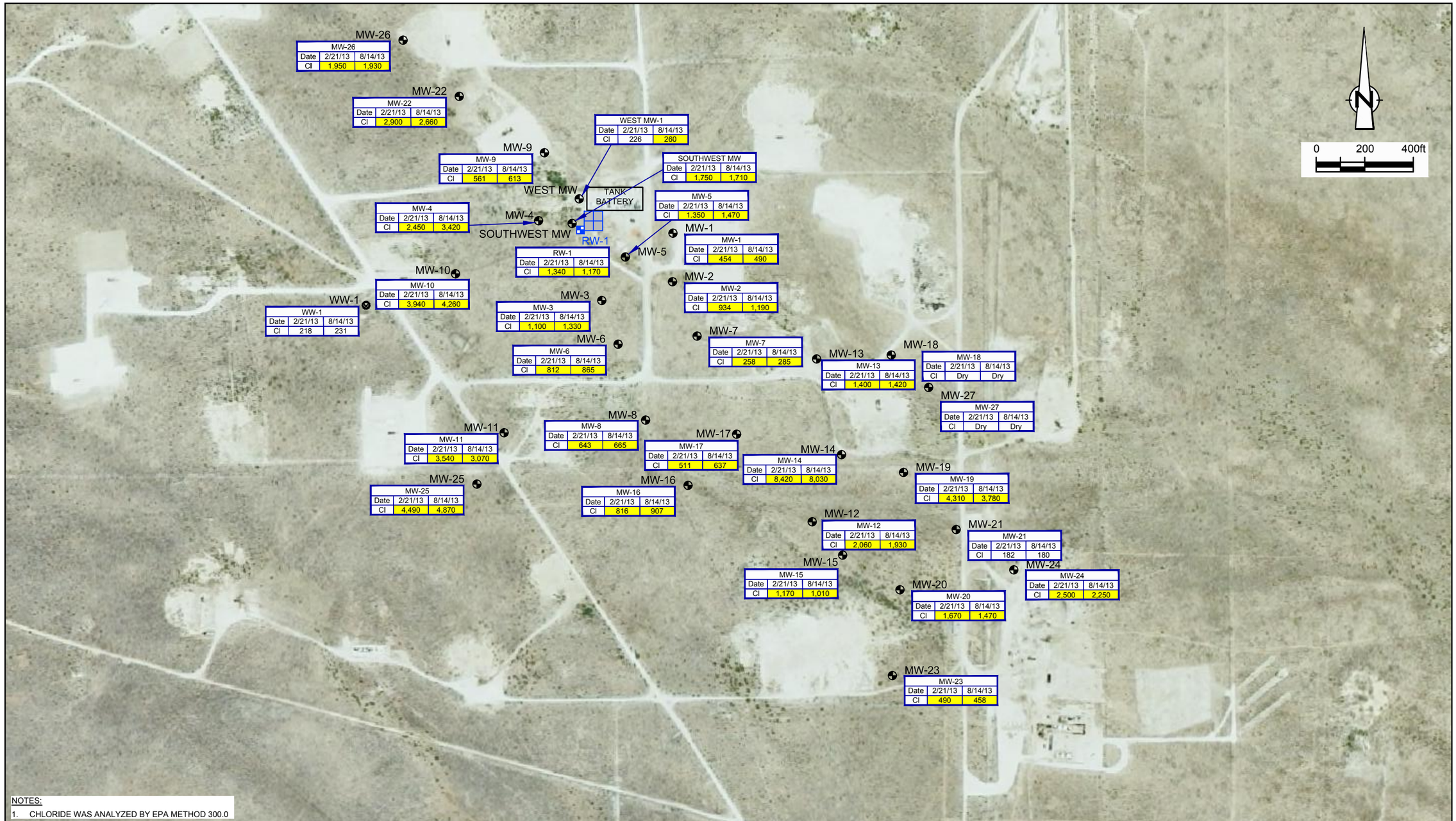
1. GROUNDWATER ELEVATIONS MEASUREMENTS COLLECTED ON AUGUST 13, 2013.
2. GROUNDWATER ELEVATION DATA FOR MONITORING WELL MW-24 WAS NOT USED IN CALCULATING CONTOURS.

figure 4

GROUNDWATER GRADIENT MAP - AUGUST 2013
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

039124-2013(011)GN-DL001 FEB 17/2014



NOTES:

1. CHLORIDE WAS ANALYZED BY EPA METHOD 300.0

RE: ESRI 009 Aerial Photograph.

LEGEND

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

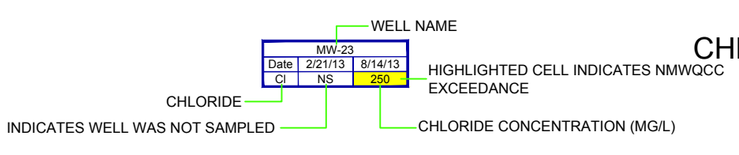
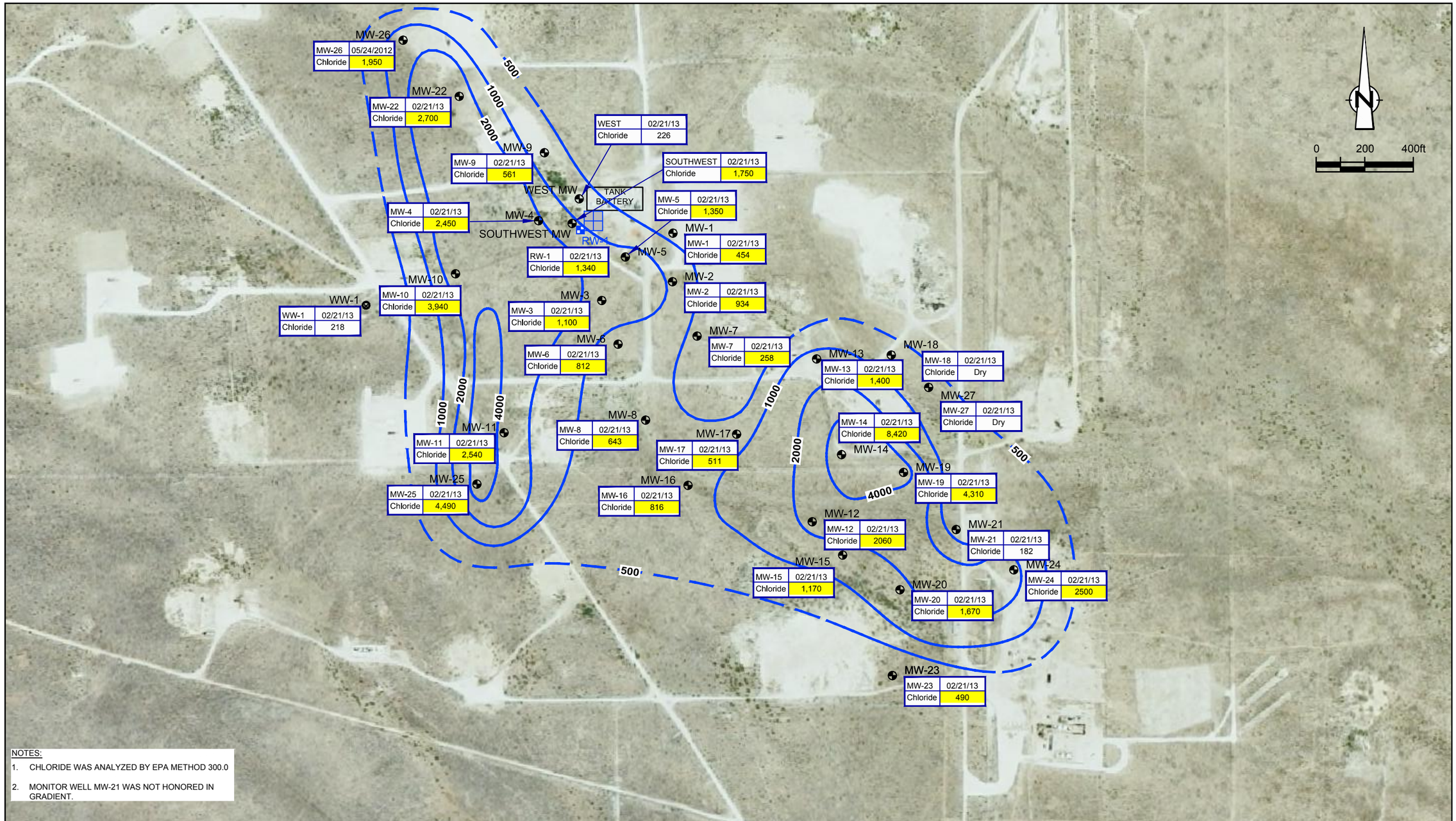


figure 5

CHLORIDE CONCENTRATION MAP - FEBRUARY AND AUGUST 2013
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

039124-2013(011)GN-DL001 FEB 17/2014



NOTES:

1. CHLORIDE WAS ANALYZED BY EPA METHOD 300.0
2. MONITOR WELL MW-21 WAS NOT HONORED IN GRADIENT.

RE: ESRI 009 Aerial Photograph.

LEGEND

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

CHLORIDE CONCENTRATION CONTOUR (MG/L)

NS NOT SAMPLED

SAMPLE DATE

SAMPLE LOCATION — MW-20 02/21/13 / Chloride 1,170 — HIGHLIGHTED CELL INDICATES NMWQCC EXCEEDANCE

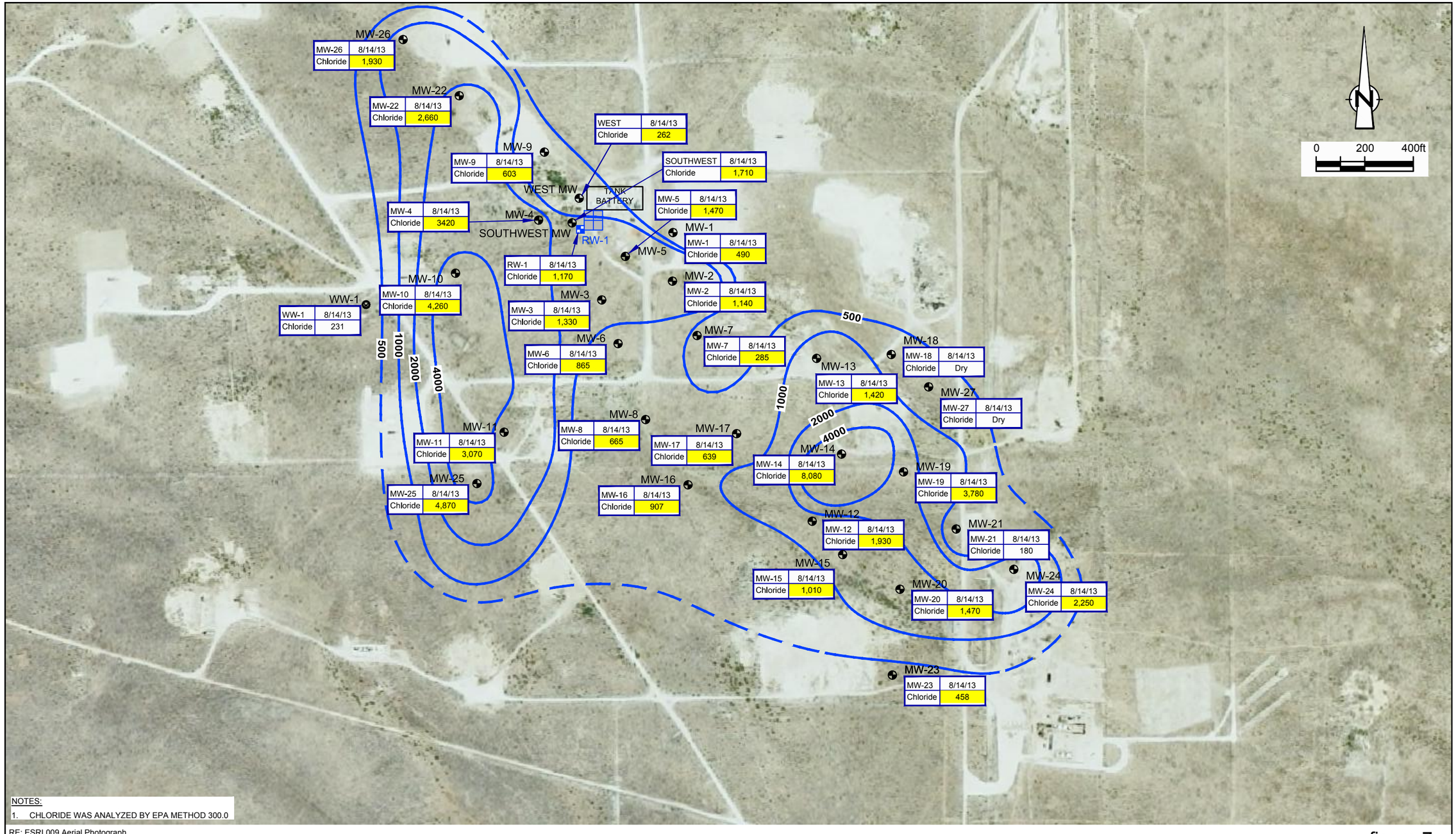
CONCENTRATION IN MG/L

figure 6

CHLORIDE ISOCONCENTRATION MAP - FEBRUARY 2013
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

039124-2013(011)GN-DL001 FEB 17/2014



NOTES:

1. CHLORIDE WAS ANALYZED BY EPA METHOD 300.0

RE: ESRI 009 Aerial Photograph.

LEGEND

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

CHLORIDE CONCENTRATION CONTOUR (MG/L)

NS NOT SAMPLED

SAMPLE DATE

SAMPLE LOCATION — MW-23 | 8/14/13 | Chloride | 250 — HIGHLIGHTED CELL INDICATES NMWQCC EXCEEDANCE

CONCENTRATION IN MG/L

figure 7

CHLORIDE ISOCONCENTRATION MAP - AUGUST 2013
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

039124-2013(011)GN-DL001 FEB 17/2014

Tables

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-01	2/4/98	64.15	---	---	3097.54	87.70	55'-85'
3,161.69	2/7/01	61.40	---	---	3100.29	---	
2	4/30/02	61.43	---	---	3100.26	---	
	10/11/02	61.43	---	---	3100.26	---	
	12/26/02	61.43	---	---	3100.26	---	
	2/17/03	61.42	---	---	3100.27	---	
	5/29/03	61.58	---	---	3100.11	---	
	8/22/03	61.37	---	---	3100.32	---	
	11/5/03	61.35	---	---	3100.34	---	
	2/3/04	61.34	---	---	3100.35	---	
	5/5/04	61.13	---	---	3100.56	---	
	8/2/04	61.08	---	---	3100.61	---	
	11/23/04	60.61	---	---	3101.08	---	
	2/9/05	60.46	---	---	3101.23	---	
	8/4/05	60.62	---	---	3101.07	---	
	2/22/06	60.30	---	---	3101.39	84.60	
	8/24/06	60.46	---	---	3101.23	84.60	
	2/27/07	60.12	---	---	3101.57	---	
	8/23/07	59.88	---	---	3101.81	---	
	2/18/08	59.95	---	---	3101.74	84.59	
	8/11/08	59.99	---	---	3101.70	84.59	
	2/16/09	60.44	---	---	3101.25	---	
	7/27/09	60.57	---	---	3101.12	---	
	2/22/10	60.73	---	---	3100.96	---	
	7/26/10	60.48	---	---	3101.21	---	
	2/15/11	60.42	---	---	3101.27	---	
	8/16/11	60.39	---	---	3101.30	84.60	
	2/20/12	60.52	---	---	3101.17	82.05	
	8/23/12	60.56	---	---	3101.13	81.91	
	2/18/13	60.51	---	---	3101.18	81.87	
	8/13/13	60.76	---	---	3100.99	81.87	
MW-02	2/4/98	61.33	---	---	3098.56	72.94	50'-70'
3,159.89	2/7/01	61.45	---	---	3098.44	---	
2	4/30/02	61.47	---	---	3098.42	---	
	10/11/02	61.46	---	---	3098.43	---	
	12/26/02	61.52	---	---	3098.37	---	
	2/17/03	61.53	---	---	3098.36	---	
	5/29/03	61.48	---	---	3098.41	---	
	8/22/03	61.41	---	---	3098.48	---	
	11/5/03	61.38	---	---	3098.51	---	
	2/3/04	61.35	---	---	3098.54	---	
	5/5/04	61.20	---	---	3098.69	---	
	8/2/04	61.11	---	---	3098.78	---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-02 (cont)	11/23/04	60.52	---	---	3099.37	---	
	2/9/05	60.45	---	---	3099.44	---	
	8/4/05	66.60	---	---	3093.29	---	
	2/22/06	60.26	---	---	3099.63	72.81	
	8/24/06	60.42	---	---	3099.47	72.81	
	2/27/07	60.04	---	---	3099.85	---	
	8/23/07	59.80	---	---	3100.09	---	
	2/18/08	59.83	---	---	3100.06	72.82	
	8/11/08	59.89	---	---	3100.00	72.81	
	2/16/09	60.42	---	---	3099.47	---	
	7/27/09	60.55	---	---	3099.34	---	
	2/22/10	60.56	---	---	3099.33	---	
	7/26/10	60.73	---	---	3099.16	---	
	2/15/11	60.50	---	---	3099.39	---	
	8/16/11	60.43	---	---	3099.46	72.81	
	2/20/12	60.56	---	---	3099.33	72.76	
	8/23/12	60.85	---	---	3099.04	72.86	
	2/18/13	60.86	---	---	3099.03	72.85	
	8/13/13	60.85	---	---	3099.04	---	
MW-03	2/4/98	65.18	---	---	3098.90	73.26	50'-70'
3,164.08	2/7/01	65.22	---	---	3098.86	---	
2	4/30/02	65.11	---	---	3098.97	---	
	10/11/02	65.14	---	---	3098.94	---	
	12/26/02	65.15	---	---	3098.93	---	
	2/17/03	65.15	---	---	3098.93	---	
	5/29/03	65.19	---	---	3098.89	---	
	8/22/03	65.09	---	---	3098.99	---	
	11/5/03	65.09	---	---	3098.99	---	
	2/3/04	65.06	---	---	3099.02	---	
	5/5/04	64.97	---	---	3099.11	---	
	8/2/04	64.54	---	---	3099.54	---	
	11/23/04	64.47	---	---	3099.61	---	
	2/9/05	64.18	---	---	3099.90	---	
	8/4/05	64.30	---	---	3099.78	---	
	2/22/06	63.93	---	---	3100.15	73.14	
	8/24/06	64.09	---	---	3099.99	73.14	
	2/27/07	63.74	---	---	3100.34	---	
	8/23/07	63.54	---	---	3100.54	---	
	2/18/08	63.55	---	---	3100.53	73.13	
	8/11/08	63.61	---	---	3100.47	73.13	
	2/16/09	64.09	---	---	3099.99	---	
	7/27/09	64.22	---	---	3099.86	---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-03 (cont)	2/22/10	64.15	---	---	3099.93	---	
	7/26/10	64.46	---	---	3099.62	---	
	2/15/11	64.16	---	---	3099.92	73.15	
	8/16/11	64.04	---	---	3100.04	73.13	
	2/20/12	64.20	---	---	3099.88	73.06	
	8/24/12	64.44	---	---	3099.64	73.11	
	2/18/13	64.27	---	---	3099.81	73.10	
	8/13/13	64.49	---	---	3099.59	---	
MW-04	2/4/98	63.94	---	---	3101.71	73.31	50'-70'
3,165.65	10/19/00	63.80	---	---	3101.85	---	
2	2/7/01	63.78	---	---	3101.87	---	
	4/30/02	63.72	---	---	3101.93	---	
	10/11/02	63.74	---	---	3101.91	---	
	12/26/02	63.74	---	---	3101.91	---	
	2/17/03	63.74	---	---	3101.91	---	
	5/29/03	63.83	---	---	3101.82	---	
	8/22/03	63.71	---	---	3101.94	---	
	11/5/03	63.68	---	---	3101.97	---	
	2/3/04	63.64	---	---	3102.01	---	
	5/5/04	63.55	---	---	3102.10	---	
	8/2/04	63.45	---	---	3102.20	---	
	11/23/04	62.91	---	---	3102.74	---	
	2/9/05	62.83	---	---	3102.82	---	
	8/4/05	63.12	---	---	3102.53	---	
	2/23/06	62.80	---	---	3102.85	73.11	
	8/25/06	62.97	---	---	3102.68	73.11	
	2/27/07	62.60	---	---	3103.05	---	
	8/23/07	62.33	---	---	3103.32	---	
	2/18/08	62.35	---	---	3103.30	73.1	
	8/11/08	62.38	---	---	3103.27	73.11	
	2/16/09	62.73	---	---	3102.92	---	
	7/27/09	62.85	---	---	3102.80	---	
	2/22/10	62.72	---	---	3102.93	---	
	7/26/10	62.99	---	---	3102.66	---	
	2/15/11	62.70	---	---	3102.95	---	
	8/16/11	62.64	---	---	3103.01	73.11	
	2/20/12			NG		---	
	8/24/12	63.41	---	---	3102.24	73.12	
	2/18/13	64.27	---	---	3101.38	73.11	
	8/13/13	62.93	---	---	3102.72	---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-05	2/4/98	60.33	---	---	3100.42	73.10	50'-70'
3,160.75	10/19/00	60.25	---	---	3100.50	---	
2	2/7/01	60.58	---	---	3100.17	---	
	4/30/02	62.27	---	---	3098.48	---	
	10/11/02	60.29	---	---	3100.46	---	
	12/26/02	60.29	---	---	3100.46	---	
	2/17/03	60.30	---	---	3100.45	---	
	5/29/03	60.33	---	---	3100.42	---	
	8/22/03	60.24	---	---	3100.51	---	
	11/5/03	60.24	---	---	3100.51	---	
	2/3/04	60.20	---	---	3100.55	---	
	5/5/04	60.04	---	---	3100.71	---	
	8/2/04	59.97	---	---	3100.78	---	
	11/23/04	59.51	---	---	3101.24	---	
	2/9/05	59.32	---	---	3101.43	---	
	8/4/05	59.55	---	---	3101.20	---	
	2/22/06	59.22	---	---	3101.53	72.95	
	8/24/06	59.39	---	---	3101.36	72.95	
	2/27/07	59.03	---	---	3101.72	---	
	8/23/07	58.84	---	---	3101.91	---	
	2/18/08	58.83	---	---	3101.92	72.95	
	8/11/08	58.84	---	---	3101.91	72.95	
	2/16/09	59.36	---	---	3101.39	---	
	7/27/09	59.50	---	---	3101.25	---	
	2/22/10	59.35	---	---	3101.40	---	
	7/26/10	59.72	---	---	3101.03	---	
	2/15/11			NG		---	
	8/16/11	59.28	---	---	3101.47	72.95	
	2/20/12	59.46	---	---	3101.29	72.86	
	8/24/12	59.47	---	---	3101.28	72.69	
	2/18/13	59.51	---	---	3101.24	72.88	
	8/13/13	59.71	---	---	3101.04	---	
MW-06	2/7/01	68.00	---	---	3096.18	77.24	59'-74'
3,164.18	4/30/02	68.10	---	---	3096.08	---	
2	10/11/02	68.04	---	---	3096.14	---	
	12/26/02	68.03	---	---	3096.15	---	
	2/17/03	68.03	---	---	3096.15	---	
	5/29/03	68.38	---	---	3095.80	---	
	8/22/03	67.99	---	---	3096.19	---	
	11/5/03	67.99	---	---	3096.19	---	
	2/3/04	67.92	---	---	3096.26	---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-06 (cont)	5/5/04	67.88	---	---	3096.30	---	
	8/2/04	67.78	---	---	3096.40	---	
	11/23/04	67.31	---	---	3096.87	---	
	2/9/05	67.17	---	---	3097.01	---	
	8/4/05	63.13	---	---	3101.05	---	
	2/22/06	66.72	---	---	3097.46	77.00	
	8/24/06	66.93	---	---	3097.25	77.00	
	2/27/07	66.58	---	---	3097.60	---	
	8/27/07	66.35	---	---	3097.83	---	
	2/18/08	66.35	---	---	3097.83	77.00	
	8/11/08	66.39	---	---	3097.79	77.00	
	2/16/09	66.94	---	---	3097.24	---	
	7/27/09	67.04	---	---	3097.14	---	
	2/22/10	67.10	---	---	3097.08	---	
	7/26/10	67.32	---	---	3096.86	---	
	2/15/11	67.15	---	---	3097.03	77.05	
	8/16/11	67.09	---	---	3097.09	77.00	
	2/20/12	67.14	---	---	3097.04	76.95	
	8/24/12	67.53	---	---	3096.65	76.87	
	2/18/13	67.68	---	---	3096.50	76.91	
	8/13/13	67.41	---	---	3096.77	---	
MW-07	2/7/01	67.25	---	---	3094.81	73.45	55'-70'
3,162.06	4/30/02	67.50	---	---	3094.56	---	
2	10/11/02	67.53	---	---	3094.53	---	
	12/26/02	67.53	---	---	3094.53	---	
	2/17/03	67.53	---	---	3094.53	---	
	5/29/03	67.61	---	---	3094.45	---	
	8/22/03	67.49	---	---	3094.57	---	
	11/5/03	67.47	---	---	3094.59	---	
	2/3/04	67.46	---	---	3094.60	---	
	5/5/04	67.44	---	---	3094.62	---	
	8/2/04	67.34	---	---	3094.72	---	
	11/23/04	67.02	---	---	3095.04	---	
	2/9/05	67.74	---	---	3094.32	---	
	8/4/05	66.62	---	---	3095.44	---	
	2/22/06	66.31	---	---	3095.75	72.56	
	8/24/06	66.37	---	---	3095.69	72.56	
	2/27/07	66.05	---	---	3096.01	---	
	8/23/07	65.87	---	---	3096.19	---	
	2/18/08	65.88	---	---	3096.18	72.55	
	8/11/08	65.91	---	---	3096.15	72.55	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-07 (cont)	2/16/09	66.35	---	---	3095.71	---	
	7/27/09	66.51	---	---	3095.55	---	
	2/22/10	66.70	---	---	3095.36	---	
	7/26/10	66.86	---	---	3095.20	---	
	2/15/11	66.74	---	---	3095.32	72.22	
	8/16/11	66.73	---	---	3095.33	72.30	
	2/20/12	66.74	---	---	3095.32	---	
	8/23/12	66.98	---	---	3095.08	71.87	
	2/18/13	66.97	---	---	3095.09	71.86	
	8/13/13	67.03	---	---	3095.03	---	
MW-08	2/3/99	68.21	---	---	3091.45	70.66	50'-70'
3,159.66	2/7/01	68.30	---	---	3091.36	---	
2	4/30/02	68.42	---	---	3091.24	---	
	10/11/02	68.30	---	---	3091.36	---	
	12/26/02	68.30	---	---	3091.36	---	
	2/17/03	68.30	---	---	3091.36	---	
	5/29/03	68.36	---	---	3091.30	---	
	8/22/03	68.26	---	---	3091.40	---	
	11/5/03	68.26	---	---	3091.40	---	
	2/3/04	68.24	---	---	3091.42	---	
	5/5/04	68.24	---	---	3091.42	---	
	8/2/04	68.17	---	---	3091.49	---	
	11/23/04	67.72	---	---	3091.94	---	
	2/9/05	67.41	---	---	3092.25	---	
	8/4/05	67.39	---	---	3092.27	---	
	2/22/06	67.04	---	---	3092.62	73.40	
	8/24/06	67.29	---	---	3092.37	73.40	
	2/27/07	66.87	---	---	3092.79	---	
	8/23/07	66.77	---	---	3092.89	---	
	2/18/08	66.79	---	---	3092.87	73.40	
	8/11/08	66.81	---	---	3092.85	73.40	
	2/16/09	67.31	---	---	3092.35	---	
	7/27/09	67.40	---	---	3092.26	---	
	2/22/10	67.53	---	---	3092.13	---	
	7/26/10	67.65	---	---	3092.01	---	
	2/15/11	67.65	---	---	3092.01	73.43	
	8/16/11	67.59	---	---	3092.07	73.40	
	2/20/12	67.59	---	---	3092.07	73.38	
	8/23/12	67.73	---	---	3091.93	73.40	
	2/19/13	67.86	---	---	3091.80	73.42	
	8/13/13	67.76	---	---	3091.90	---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-09	4/30/02	63.65	---	---	3103.42	70.39	55'-70'
3,167.07	10/11/02	63.59	---	---	3103.48	---	
2	12/26/02	63.59	---	---	3103.48	---	
	2/17/03	63.60	---	---	3103.47	---	
	5/29/03	63.73	---	---	3103.34	---	
	8/22/03	63.56	---	---	3103.51	---	
	11/5/03	63.55	---	---	3103.52	---	
	2/3/04	63.47	---	---	3103.60	---	
	5/5/04	63.27	---	---	3103.80	---	
	8/2/04	63.24	---	---	3103.83	---	
	11/23/04	62.40	---	---	3104.67	---	
	2/9/05	62.50	---	---	3104.57	---	
	8/4/05	62.89	---	---	3104.18	---	
	2/23/06	62.48	---	---	3104.59	69.60	
	8/25/06	62.68	---	---	3104.39	69.60	
	2/27/07	62.23	---	---	3104.84	---	
	8/23/07	61.88	---	---	3105.19	---	
	2/18/08	61.90	---	---	3105.17	69.59	
	8/11/08	61.91	---	---	3105.16	69.59	
	2/16/09	62.33	---	---	3104.74	---	
	7/27/09	62.42	---	---	3104.65	---	
	2/22/10	62.33	---	---	3104.74	---	
	7/26/10	62.53	---	---	3104.54	---	
	2/15/11	62.25	---	---	3104.82	---	
	8/16/11	62.29	---	---	3104.78	69.59	
	2/20/12			NG		---	
	8/24/12	62.53	---	---	3104.54	68.67	
	2/19/13	62.45	---	---	3104.62	68.60	
	8/13/13	62.43	---	---	3104.64	---	
MW-10	4/30/02	70.35	---	---	3100.64	69.16	54'-69'
3,170.99	10/11/02	70.49	---	---	3100.50	---	
2	12/26/02	70.50	---	---	3100.49	---	
	2/17/03	70.50	---	---	3100.49	---	
	5/29/03	70.37	---	---	3100.62	---	
	8/22/03	70.47	---	---	3100.52	---	
	11/5/03	70.49	---	---	3100.50	---	
	2/3/04	70.43	---	---	3100.56	---	
	5/5/04	70.38	---	---	3100.61	---	
	8/2/04	70.26	---	---	3100.73	---	
	11/23/04	69.78	---	---	3101.21	---	
	2/9/05			NG		---	
	8/4/05	69.89	---	---	3101.10	---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-10 (cont)	2/22/06	69.59	---	---	3101.40	71.95	
	8/25/06	69.65	---	---	3101.34	71.95	
	2/27/07	69.29	---	---	3101.70	---	
	8/23/07	69.06	---	---	3101.93	---	
	2/18/08	69.06	---	---	3101.93	71.94	
	8/11/08	69.05	---	---	3101.94	71.94	
	2/16/09	69.74	---	---	3101.25	---	
	7/27/09	69.27	---	---	3101.72	---	
	2/22/10	69.30	---	---	3101.69	---	
	7/26/10	69.40	---	---	3101.59	---	
	2/15/11			NG		---	
	8/16/11	69.28	---	---	3101.71	71.95	
	2/20/12			NG		---	
	8/24/12	69.41	---	---	3101.58	71.97	
	2/19/13	69.40	---	---	3101.59	71.95	
	8/13/13	69.34	---	---	3101.65	71.94	
MW-11	4/30/02			DRY		72.78	58'-73'
3,168.24	10/11/02			DRY		---	
2	12/26/02			DRY		---	
	2/17/03			DRY		---	
	5/29/03			DRY		---	
	8/22/03			DRY		---	
	11/5/03			DRY		---	
	2/3/04			DRY		---	
	5/5/04			DRY		---	
	8/2/04			DRY		---	
	11/23/04			DRY		---	
	2/9/05			DRY		---	
	8/4/05	61.91	---	---	3106.33	---	
	2/22/06	74.71	---	---	3093.53	75.45	
	8/24/06	74.71	---	---	3093.53	75.45	
	2/27/07	74.51	---	---	3093.73	---	
	8/23/07	74.38	---	---	3093.86	---	
	2/18/08	74.21	---	---	3094.03	75.45	
	8/11/08	74.38	---	---	3093.86	75.44	
	2/16/09	74.46	---	---	3093.78	---	
	7/27/09	74.45	---	---	3093.79	---	
	2/22/10	74.52	---	---	3093.72	---	
	7/26/10	74.61	---	---	3093.63	---	
	2/15/11	74.56	---	---	3093.68	75.50	
	8/16/11	74.63	---	---	3093.61	75.50	
	2/20/12			NG		---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-11 (cont)	8/23/12	74.62	---	---	3093.62	75.55	
	2/18/13	74.65	---	---	3093.59	75.45	
	8/13/13	74.66	---	---	3093.58	75.44	
MW-12	4/30/02	72.80	---	---	3079.68	74.37	59'-74'
3,152.48	10/11/02	72.81	---	---	3079.67	---	
2	12/26/02	72.82	---	---	3079.66	---	
	2/17/03	72.82	---	---	3079.66	---	
	5/29/03	72.77	---	---	3079.71	---	
	8/22/03	72.81	---	---	3079.67	---	
	11/5/03	72.81	---	---	3079.67	---	
	2/3/04	72.83	---	---	3079.65	---	
	5/5/04	72.78	---	---	3079.70	---	
	8/2/04	72.81	---	---	3079.67	---	
	11/23/04	72.69	---	---	3079.79	---	
	2/9/05	72.83	---	---	3079.65	---	
	8/4/05	72.48	---	---	3080.00	---	
	2/22/06	72.15	---	---	3080.33	77.60	
	8/24/06	71.91	---	---	3080.57	77.60	
	2/27/07	71.75	---	---	3080.73	---	
	8/23/07	71.51	---	---	3080.97	---	
	2/18/08	71.42	---	---	3081.06	77.60	
	8/11/08	71.46	---	---	3081.02	77.60	
	2/16/09	73.13	---	---	3079.35	---	
	7/27/09	71.59	---	---	3080.89	---	
	2/22/10	71.94	---	---	3080.54	---	
	7/26/10	72.21	---	---	3080.27	---	
	2/15/11	72.36	---	---	3080.12	77.57	
	8/16/11	72.50	---	---	3079.98	77.67	
	2/20/12	72.45	---	---	3080.03	77.52	
	8/22/12	72.71	---	---	3079.77	77.50	
	2/19/13	72.65	---	---	3079.83	77.63	
	8/13/13	72.59	---	---	3079.89	---	
MW-13	4/30/02	66.97	---	---	3087.95	67.90	53'-68'
3,154.92	10/11/02	66.38	---	---	3088.54	---	
2	12/26/02	66.37	---	---	3088.55	---	
	2/17/03	66.37	---	---	3088.55	---	
	5/29/03	66.68	---	---	3088.24	---	
	8/22/03	67.06	---	---	3087.86	---	
	11/5/03	67.36	---	---	3087.56	---	
	2/3/04	67.11	---	---	3087.81	---	
	5/5/04	67.05	---	---	3087.87	---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-13 (cont)	8/2/04	67.21	---	---	3087.71	---	
	11/23/04	66.82	---	---	3088.10	---	
	2/9/05	66.50	---	---	3088.42	---	
	8/4/05	66.11	---	---	3088.81	---	
	2/22/06	65.73	---	---	3089.19	70.54	
	8/24/06	65.45	---	---	3089.47	70.54	
	2/27/07	65.22	---	---	3089.70	---	
	8/23/07	65.06	---	---	3089.86	---	
	2/18/08	65.10	---	---	3089.82	70.54	
	8/11/08	65.12	---	---	3089.80	70.54	
	2/16/09	64.74	---	---	3090.18	---	
	7/27/09	64.89	---	---	3090.03	---	
	2/22/10	65.19	---	---	3089.73	---	
	7/26/10	65.45	---	---	3089.47	---	
	2/15/11	65.60	---	---	3089.32	70.50	
	8/16/11	65.79	---	---	3089.13	70.50	
	2/20/12	65.83	---	---	3089.09	70.49	
	8/23/12	66.01	---	---	3088.91	70.55	
	2/19/13	66.11	---	---	3088.81	70.53	
	8/13/13	66.17	---	---	3088.75	---	
MW-14	11/5/03	71.60	---	---	3080.31	92.43	79.5'-89.5'
3,151.91	2/3/04	71.62	---	---	3080.29	---	
2	5/5/04	71.67	---	---	3080.24	---	
	8/2/04	71.69	---	---	3080.22	---	
	11/23/04	71.60	---	---	3080.31	---	
	2/9/05	71.30	---	---	3080.61	---	
	8/4/05	70.90	---	---	3081.01	---	
	2/22/06	70.49	---	---	3081.42	92.30	
	8/24/06	70.24	---	---	3081.67	92.3	
	2/27/07	70.05	---	---	3081.86	---	
	8/23/07	69.78	---	---	3082.13	---	
	2/18/08	69.68	---	---	3082.23	92.29	
	8/11/08	69.72	---	---	3082.19	92.30	
	2/16/09	69.31	---	---	3082.60	---	
	7/27/09	69.37	---	---	3082.54	---	
	2/22/10	69.65	---	---	3082.26	---	
	7/26/10	69.95	---	---	3081.96	---	
	2/15/11	70.20	---	---	3081.71	92.15	
	8/16/11	70.39	---	---	3081.52	89.50	
	2/20/12	70.48	---	---	3081.43	92.07	
	8/23/12	70.81	---	---	3081.10	91.99	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-14 (cont)	2/19/13	70.97	---	---	3080.94	91.79	
	8/13/13	70.92	---	---	3080.99	---	
MW-15	11/5/03			DRY		87.45	64.5'-84.5'
3,152.48	2/3/04			DRY		---	
2	5/5/04			DRY		---	
	8/2/04			DRY		---	
	11/23/04			DRY		---	
	2/9/05			DRY		---	
	8/4/05	86.91	---	---	3065.57	---	
	2/22/06	86.54	---	---	3065.94	87.40	
	8/24/06	86.34	---	---	3066.14	87.40	
	2/27/07	85.73	---	---	3066.75	---	
	8/23/07	85.26	---	---	3067.22	---	
	2/18/08	81.90	---	---	3070.58	87.40	
	8/11/08	81.99	---	---	3070.49	87.42	
	2/16/09	77.83	---	---	3074.65	---	
	7/27/09	77.19	---	---	3075.29	---	
	2/22/10	77.06	---	---	3075.42	---	
	7/26/10	77.05	---	---	3075.43	---	
	2/15/11	77.08	---	---	3075.40	87.50	
	8/16/11	77.23	---	---	3075.25	84.50	
	2/20/12	77.31	---	---	3075.17	87.38	
	8/22/12	77.50	---	---	3074.98	87.28	
	2/19/13	77.61	---	---	3074.87	87.40	
	8/13/13	77.78	---	---	3074.70	---	
MW-16	11/5/03	65.68	---	---	3091.57	77.22	59.5'-74.5'
3,157.25	2/3/04	68.67	---	---	3088.58	---	
2	5/5/04	68.69	---	---	3088.56	---	
	8/2/04	68.65	---	---	3088.60	---	
	11/23/04	68.10	---	---	3089.15	---	
	2/9/05	67.53	---	---	3089.72	---	
	8/4/05	67.77	---	---	3089.48	---	
	2/22/06	67.24	---	---	3090.01	74.42	
	8/24/06	67.66	---	---	3089.59	74.42	
	2/27/07	67.09	---	---	3090.16	---	
	8/23/07	67.10	---	---	3090.15	---	
	2/18/08	67.03	---	---	3090.22	74.42	
	8/11/08	67.09	---	---	3090.16	74.42	
	2/16/09	67.85	---	---	3089.40	---	
	7/27/09	67.92	---	---	3089.33	---	
	2/22/10	68.10	---	---	3089.15	---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-16 (cont)	7/26/10	68.20	---	---	3089.05	---	
	2/15/11	68.18	---	---	3089.07	74.47	
	8/16/11	68.16	---	---	3089.09	74.50	
	2/20/12	68.12	---	---	3089.13	74.41	
	8/23/12	68.20	---	---	3089.05	74.41	
	2/19/13	68.43	---	---	3088.82	74.48	
	8/13/13	68.25	---	---	3089.00	---	
MW-17	11/5/03	69.51	---	---	3088.86	79.37	57'-77'
3,158.37	2/3/04	69.53	---	---	3088.84	---	
2	5/5/04	69.52	---	---	3088.85	---	
	8/2/04	70.12	---	---	3088.25	---	
	11/23/04	69.31	---	---	3089.06	---	
	2/9/05	69.04	---	---	3089.33	---	
	8/4/05	68.90	---	---	3089.47	---	
	2/22/06	68.72	---	---	3089.65	80.10	
	8/24/06	68.78	---	---	3089.59	80.10	
	2/27/07	68.55	---	---	3089.82	---	
	8/23/07	68.50	---	---	3089.87	---	
	2/18/08	68.41	---	---	3089.96	80.10	
	8/11/08	68.43	---	---	3089.94	80.10	
	2/16/09	68.87	---	---	3089.50	---	
	7/27/09	68.99	---	---	3089.38	---	
	2/22/10	69.14	---	---	3089.23	---	
	7/26/10	69.22	---	---	3089.15	---	
	2/15/11	69.23	---	---	3089.14	79.82	
	8/16/11	69.23	---	---	3089.14	79.96	
	2/20/12	69.19	---	---	3089.18	76.95	
	8/23/12	69.36	---	---	3089.01	77.02	
	2/19/13	69.49	---	---	3088.88	76.93	
	8/13/13	69.31	---	---	3089.06	---	
MW-18	11/23/04			DRY		76.98	54.5'-74.5
3,151.08	2/9/05			DRY		---	
2	8/4/05			DRY		---	
	2/22/06			DRY		78.43	
	8/24/06			DRY		78.43	
	2/27/07			DRY		---	
	8/23/07			DRY		---	
	2/18/08			DRY		78.44	
	8/11/08			DRY		78.44	
	2/16/09			DRY		---	
	7/27/09			DRY		---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-18 (cont)	2/22/10			DRY		---	
	7/26/10			DRY		---	
	2/15/11			DRY		---	
	8/16/11			DRY		74.50	
	2/20/12			DRY		78.40	
	8/23/12			DRY		78.41	
	2/18/13			DRY		---	
	8/13/13			DRY		---	
MW-19	11/23/04	72.63	---	---	3075.16	104.41	82.5'-102.5'
3,147.79	2/9/05	72.36	---	---	3075.43	---	
2	8/4/05	72.18	---	---	3075.61	---	
	2/22/06	71.83	---	---	3075.96	105.55	
	8/24/06	71.57	---	---	3076.22	105.55	
	2/27/07	71.28	---	---	3076.51	---	
	8/23/07	70.75	---	---	3077.04	---	
	2/18/08	70.29	---	---	3077.50	105.53	
	8/11/08	70.33	---	---	3077.46	105.50	
	2/16/09	71.54	---	---	3076.25	---	
	7/27/09	70.71	---	---	3077.08	---	
	2/22/10	69.91	---	---	3077.88	---	
	7/26/10	70.15	---	---	3077.64	---	
	2/15/11	70.26	---	---	3077.53	105.60	
	8/16/11	70.50	---	---	3077.29	102.50	
	2/20/12	70.61	---	---	3077.18	105.52	
	8/23/12	70.01	---	---	3077.78	105.61	
	2/19/13	71.34	---	---	3076.45	105.52	
	8/13/13	71.31	---	---	3076.48	---	
MW-20	11/23/04	81.81	---	---	3069.75	94.94	72.5'-92.5'
3,151.56	2/9/05	81.85	---	---	3069.71	---	
2	8/4/05	81.81	---	---	3069.75	---	
	2/22/06	81.71	---	---	3069.85	92.23	
	8/24/06	81.66	---	---	3069.90	92.23	
	2/27/07	81.39	---	---	3,070.17	---	
	8/23/07	81.20	---	---	3,070.36	---	
	2/18/08	80.93	---	---	3,070.63	92.21	
	8/11/08	80.96	---	---	3070.60	92.20	
	2/16/09	80.58	---	---	3070.98	---	
	7/27/09	80.42	---	---	3071.14	---	
	2/22/10	80.35	---	---	3071.21	---	
	7/26/10	80.39	---	---	3071.17	---	
	2/15/11	80.38	---	---	3071.18	90.40	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-20 (cont)	8/16/11	80.52	---	---	3071.04	92.50	
	2/20/12	80.61	---	---	3070.95	89.66	
	8/22/12	80.85	---	---	3070.71	89.34	
	2/19/13	81.09	---	---	3070.47	89.41	
	8/13/13	81.23	---	---	3070.33	---	
MW-21	11/20/07	71.05	---	---	3074.82	99.00	67'-97'
3,145.87	2/18/08	70.96	---	---	3074.91	98.60	
2	8/11/08	71.01	---	---	3074.86	98.60	
	2/16/09	70.78	---	---	3075.09	---	
	7/27/09	70.71	---	---	3075.16	---	
	2/22/10	70.83	---	---	3075.04	---	
	7/26/10	71.03	---	---	3074.84	---	
	2/15/11	71.04	---	---	3074.83	97.68	
	8/16/11	71.31	---	---	3074.56	97.00	
	2/20/12	71.50	---	---	3074.37	97.44	
	8/22/12	71.79	---	---	3074.08	96.98	
	2/19/13	72.06	---	---	3073.81	97.05	
	8/13/13	72.27	---	---	3073.60	---	
MW-22	11/20/07	62.35	---	---	3108.29	68.95	46.5'-66.5'
3,170.64	2/18/08	62.59	---	---	3108.05	68.60	
2	8/11/08	62.62	---	---	3108.02	68.60	
	2/16/09	62.68	---	---	3107.96	---	
	7/27/09	62.90	---	---	3107.74	---	
	2/22/10	62.74	---	---	3107.90	---	
	7/26/10	62.80	---	---	3107.84	---	
	2/15/11	62.59	---	---	3108.05	---	
	8/16/11	62.71	---	---	3107.93	68.60	
	2/21/12			NG		---	
	8/24/12	62.91	---	---	3107.73	68.21	
	2/19/13	62.61	---	---	3108.03	68.10	
	8/13/13	62.60	---	---	3108.04	---	
MW-23	2/20/12	89.59	---	---	3064.79	103.52	70-100'
3,154.38	8/22/12	89.54	---	---	3064.84	102.01	
2	2/19/13	89.71	---	---	3064.67	102.07	
	8/13/13	89.72	---	---	3064.66	---	
MW-24	2/20/12	48.81	---	---	3097.26	59.86	30-60'
3,146.07	8/22/12	49.11	---	---	3096.96	62.90	
2.00	2/19/13	49.23	---	---	3096.84	62.89	
	8/13/13	49.35	---	---	3096.72	---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
MW-25	4/5/12	78.08	---	---	3093.24	97.00	65-95'
3,171.32	5/24/12	77.96	---	---	3093.36	---	
2	8/23/12	77.79	---	---	3093.53	96.18	
	2/19/13	78.16	---	---	3093.16	96.11	
	8/13/13	78.15	---	---	3093.17	---	
MW-26	4/5/12	63.02	---	---	3109.82	76.58	55-75'
3,172.84	5/24/12	63.02	---	---	3109.82	---	
2	8/24/12	63.02	---	---	3109.82	76.61	
	2/19/13	62.98	---	---	3109.86	76.45	
	8/13/13	62.89	---	---	3109.95	---	
MW-27	4/5/12	46.30	---	---	3100.30	48.80	25-45'
3,146.60	8/23/12			DRY		48.79	
2.00	2/19/13	48.20	---	---	3098.40	48.75	
	8/13/13			DRY		48.56	
WW-1	4/30/02	70.21	---	---	3100.00	---	--
3,170.21	10/11/02	69.71	---	---	3100.50	---	
4	12/26/02	69.70	---	---	3100.51	---	
	2/17/03	69.70	---	---	3100.51	---	
	5/29/03	67.37	---	---	3102.84	---	
	8/22/03	70.27	---	---	3099.94	---	
	11/5/03	70.23	---	---	3099.98	---	
	2/3/04	70.31	---	---	3099.90	---	
	5/5/04	70.23	---	---	3099.98	---	
	8/2/04	69.47	---	---	3100.74	---	
	11/23/04	69.92	---	---	3100.29	---	
	2/9/05	69.75	---	---	3100.46	---	
	8/4/05	69.89	---	---	3100.32	---	
	2/22/06	69.51	---	---	3100.70	---	
	8/25/06	69.50	---	---	3100.71	192.00	
	2/27/07	69.20	---	---	3101.01	---	
	8/23/07	68.99	---	---	3101.22	---	
	2/18/08	69.00	---	---	3101.21	192.00	
	8/11/08	68.95	---	---	3101.26	191.98	
	2/16/09	69.00	---	---	3101.21	---	
	7/27/09	69.00	---	---	3101.21	---	
	2/22/10	68.89	---	---	3101.32	---	
	7/26/10			NG		---	
	2/15/11			NG		---	
	8/16/11			NG		---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
WW-1 (cont)	2/20/12	69.05	---	---	3101.16	195.00	
	8/23/12	69.22	---	---	3100.99	180.04	
	2/18/13	69.22	---	---	3100.99	180.04	
	8/13/13	69.09	---	---	3101.12	---	
West MW	8/22/97	62.58	---	---	3101.86	70.43	--
3,164.44	2/4/98	62.50	---	---	3101.94	---	
2	10/19/00	62.37	---	---	3102.07	---	
	2/7/01	62.43	---	---	3102.01	---	
	4/30/02	62.37	---	---	3102.07	---	
	10/11/02	62.35	---	---	3102.09	---	
	12/26/02	62.34	---	---	3102.10	---	
	2/17/03	62.34	---	---	3102.10	---	
	5/29/03	62.22	---	---	3102.22	---	
	8/22/03	62.35	---	---	3102.09	---	
	11/5/03	62.31	---	---	3102.13	---	
	2/3/04	62.27	---	---	3102.17	---	
	5/5/04	62.11	---	---	3102.33	---	
	8/2/04	62.01	---	---	3102.43	---	
	11/23/04	61.40	---	---	3103.04	---	
	2/9/05	61.30	---	---	3103.14	---	
	8/4/05	61.61	---	---	3102.83	---	
	2/23/06	61.24	---	---	3103.20	67.28	
	8/25/06	61.43	---	---	3103.01	67.28	
	2/27/07	61.03	---	---	3103.41	---	
	8/23/07	60.74	---	---	3103.70	---	
	2/18/08	60.97	---	---	3103.47	67.28	
	8/11/08	61.06	---	---	3103.38	67.28	
	2/16/09	61.27	---	---	3103.17	---	
	7/27/09	61.42	---	---	3103.02	---	
	2/22/10	61.26	---	---	3103.18	---	
	7/26/10	61.62	---	---	3102.82	---	
	2/15/11	61.20	---	---	3103.24	---	
	8/16/11	61.21	---	---	3103.23	67.28	
	2/21/12			NG		---	
	8/24/12	61.52	---	---	3102.92	67.24	
	2/18/13	61.43	---	---	3103.01	67.28	
	8/13/13	61.56	---	---	3102.88	---	
Southwest MW	8/22/97	63.25	---	---	3101.29	70.45	--
3,164.54	2/4/98	63.21	---	---	3101.33	---	
2	10/19/00	63.06	---	---	3101.48	---	
	2/7/01	63.10	---	---	3101.44	---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
Southwest MW (cont)	4/30/02	63.06	---	---	3101.48	---	
	10/11/02	62.72	---	---	3101.82	---	
	12/26/02	62.70	---	---	3101.84	---	
	2/17/03	62.70	---	---	3101.84	---	
	5/29/03	62.92	---	---	3101.62	---	
	8/22/03	63.04	---	---	3101.50	---	
	11/5/03	63.03	---	---	3101.51	---	
	2/3/04	62.99	---	---	3101.55	---	
	5/5/04	62.90	---	---	3101.64	---	
	8/2/04	62.71	---	---	3101.83	---	
	11/23/04	62.17	---	---	3102.37	---	
	2/9/05	62.05	---	---	3102.49	---	
	8/4/05	62.33	---	---	3102.21	---	
	2/23/06	61.98	---	---	3102.56	70.16	
	8/25/06	62.17	---	---	3102.37	70.16	
	2/27/07	61.78	---	---	3102.76	---	
	8/23/07	61.52	---	---	3103.02	---	
	2/18/08	61.9	---	---	3102.64	70.16	
	8/11/08	61.93	---	---	3102.61	70.16	
	2/16/09	62.10	---	---	3102.44	---	
	7/27/09	62.19	---	---	3102.35	---	
	2/22/10	62.00	---	---	3102.54	---	
	7/26/10	62.64	---	---	3101.90	---	
	2/15/11			NG		---	
	8/16/11	61.94	---	---	3102.60	---	
	2/21/12			NG		---	
	8/24/12	62.03	---	---	3102.51	70.35	
	2/18/13	62.75	---	---	3101.79	70.41	
	8/13/13	62.50	---	---	3102.04	---	
RW-1	1/14/99	50.85	---	---	3112.67	76.30	53'-73'
3,163.52	10/19/00	62.33	---	---	3101.19	---	
4	4/30/02	62.28	---	---	3101.24	---	
	10/11/02	62.27	---	---	3101.25	---	
	12/26/02	62.26	---	---	3101.26	---	
	2/17/03	62.26	---	---	3101.26	---	
	5/29/03	62.34	---	---	3101.18	---	
	8/22/03	62.25	---	---	3101.27	---	
	11/5/03	62.25	---	---	3101.27	---	
	2/3/04	62.20	---	---	3101.32	---	
	5/5/04	62.12	---	---	3101.40	---	
	8/2/04	61.96	---	---	3101.56	---	
	11/23/04	61.46	---	---	3102.06	---	

TABLE 1

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 ID TOC[1] elevation Diameter (in)	*DATE*	*Depth to Water (ft)*	*Depth to LNAPL (ft)*	*LNAPL Thickness (ft)*	*Corrected Groundwater Elevation (ft above MSL[2])*	*Total Depth (ft)*	*Screen Interval (bgs[3])*
RW-1 (cont)	2/9/05	61.30	---	---	3102.22	---	
	8/4/05	61.51	---	---	3102.01	---	
	2/23/06	61.20	---	---	3102.32	75.45	
	8/25/06	61.36	---	---	3102.16	75.45	
	2/27/07	62.44	---	---	3101.08	---	
	8/23/07			NG		---	
	2/18/08			NG		---	
	2/16/09			NG		---	
	7/27/09			NG		---	
	2/22/10			NG		---	
	7/26/10			NG		---	
	2/15/11			NG		---	
	8/16/11	61.14	---	---	3102.38	---	
	2/20/12			NG		---	
	8/24/12			NG		---	
	2/18/13	69.96	---	---	3093.56	72.30	
	8/13/13			NG		---	

Notes:

1 - Top of Casing
2 - Mean Sea Level
3 - Below ground surface
NG - Not Gauged
All depths were measured from the TOC
Professional Surveys were conducted by Piper Surveying Company in February and July 1998, October 2001 October 2003 and December 2004
Professional Surveys were conducted by West Company in November 2011 and June 2012

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	*---*	*---*	*---*	*---*	*1,000.0*	*---*	*---*
MW-1	02/17/98	<2.0	220	233	--	--	92	--	--	--	--	812	276	--
	02/07/01	<1.0	136	440	2.1	2.8	70	15.7	55.8	11.4	115	1,200	--	--
	05/03/02	<1.0	144	428	1.6	3.06	72.5	103	38.7	8.68	105	--	--	<1.00
	10/11/02	<0.1	155	230	---	---	109	69.3	24.8	7.45	125	737	---	<0.10
	12/27/02	<0.1	149	248	---	---	109	76.6	27.4	5.16	129	728	---	<0.10
	02/18/03	<0.1	147	213	---	---	114	59.1	21.4	5.06	116	713	---	<0.10
	06/02/03	<1.0	132	434	1.77	2.99	73.3	135	47.8	8.62	118	1,320	---	<1.00
	08/25/03	<1.0	144	279	1.76	3.39	73.3	92.7	31.3	7.17	118	856	---	<1.00
	11/05/03	<1.0	162	330	1.94	3.42	78.9	110	37.7	9.03	114	994	---	<1.00
	02/04/04	<1.0	142	390	1.92	3.25	71.1	117	43.2	10.2	113	940	---	<1.00
	05/06/04	<1.00	260	403	1.9	4.8	135	60.2	18.3	8.93	302	1,316	---	<1.00
	08/03/04	<0.1	155	222	---	---	83.2	64.1	30.8	6.41	127	431	---	<0.10
Dup	08/03/04	<0.1	158	301	---	---	104	101	45.5	672	436	605	---	<0.10
	02/11/05	<1.00	146	289	2.68	4.3	79.2	97.9	33.5	8.18	108	840	---	<1.00
	08/05/05	<1.00	156	245	2.08	4.34	89.6	75.5	26.7	6.99	125	856	---	<1.00
	02/22/06	<10.0	160	180	1.6	3.5	83	55.9	18.7	5.19	104	707	---	<10.0
Dup	02/22/06	<10.0	170	160	1.6	3.5	85	57.9	20	5.23	102	840	---	<10.0
	08/24/06	<10.0	300	180	<2.5	3.11	81	57.4	19.3	4.36	107	660	---	<10.0
	02/28/07	<10	170	170	1.8	3.6	81	54.6	18.2	<5.0	103	650	---	<10
	08/23/07	<10	138	420	1.40	2.80	76.0	102	34.8	5.37	101	1,810	--	138
	2/20/08	<5.0	166	300	1.9	2.92	82.1	111	39.7	7.34	104	860	---	<5.0
	8/12/08	<1.53	212	217	1.48	3.06	79.6	57.8	19.5	5.2	114	692	---	<1.53
	02/19/09	<5.0	160	150	2.00	3.00	84.0	55.0	19.0	5.3	120	610	---	<5.0
	7/29/09	<5.0	79.0	150	0.95	1.40	41.0	67.0	24.0	5.9	110	500	---	<5.0
	2/25/10	<5	172	167	1.79	3.23	83.1	57.5	21.2	4.3	105	684	---	<5.0
Dup	2/25/10	<5	192	157	1.68	<0.100	83.9	52.6	17.6	4.3	103	544	---	<5.1
	7/28/10	<5	168	147	1.88	2.56	84.8	51.1	17.1	3.8	91.6	564	---	<5.0
	02/16/11	<2.0	165	149	1.74	3.12	82.0	57.5	18.7	3.98	94.4	510	---	<2.0
Dup 1	02/16/11	<2.0	145	155	1.74	3.25	81.9	55.3	17.9	4.02	91.9	604	---	<2.0
	8/18/11	<5.0	167	127	1.76	3.34	83.3	50.7	17.2	2.80	91.4	490	---	<5.0
	02/22/12	<5.00	153	385	1.61	2.70	67.7	96.3	33.5	5.12	96.5	1,280	---	<5.0
	08/29/12	<10.0	149	456	1.60	1.48	67.4	130	44.3	5.61	90.5	1,340	---	<10.0
	02/21/13	<6.00	141	452	1.17	2.24	69.9	139	45.6	6.39	104	1,300	---	<6.00
DUP-3	02/21/13	<6.00	141	454	1.18	2.26	70.8	141	44.4	6.30	101	1,170	---	<6.00
	08/14/13	<6.00	140	490	1.47	2.33	67.0	158	53.2	7.07	112	1,590	---	<6.00
MW-2	02/17/98	<2.0	360	423	--	--	141	--	--	--	--	1,257	124	--
	02/07/01	<1.0	234	570	2.7	5	130	124	40.7	10.9	359	1,500	--	--

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-2 (cont)	05/03/02	<1.0	262	349	2.28	5.36	148	21	6.18	8.52	315	--	--	<1.00
	10/11/02	10	250	337	---	---	176	18.1	4.92	7.49	329	1,120	---	<0.10
	12/27/02	12	238	319	---	---	142	17.8	5.16	6.1	339	1,110	---	<0.10
	02/18/03	<0.1	228	310	---	---	178	19.4	6.02	6.3	331	1,070	---	<0.10
	06/02/03	<1.0	206	769	2.05	4.43	115	176	52.6	9.94	383	1,955	---	<1.00
	08/25/03	<1.0	242	374	2.07	5.14	142	36.1	10.8	8.49	333	1,240	---	<1.00
	11/05/03	<1.0	232	498	2.21	5.13	145	68.7	21.1	10.1	327	1,354	---	<1.00
	02/04/04	<1.0	230	450	2.06	4.97	131	76.1	25.2	10.7	324	1,424	---	<1.00
	05/06/04	<1.00	150	341	1.79	3.23	75.3	108	38.5	8.38	102	984	---	<1.00
	08/03/04	<0.1	236	496	---	---	144	50.8	34.7	11	472	811	---	<0.10
	02/11/05	<1.00	220	604	2.79	5.48	130	103	34.5	11.3	324	1,462	---	<1.00
	08/05/05	<1.00	228	404	2.24	5.7	154	34.5	10.3	10.7	341	1,120	---	<1.00
	02/22/06	<10.0	250	320	1.7	5.1	150	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
	02/28/07	<10	260	280	2.1	5.4	140	20.9	6.01	6.74	278	950	---	<10
	08/23/07	<10	226	290	1.70	5.30	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	2	5.39	144	20.6	5.8	6.5	308	1,080	---	<1.53
	2/19/09	<5	240	310	1.80	5.30	160	21.0	6.1	7.2	350	1,100	---	<5
	7/29/09	<5	200	730	1.50	4.60	130	16.0	4.6	3.1	160	1,900	---	<5
	2/25/10	<5	255	380	1.39	5.78	157	27.4	8.5	4.7	333	1,130	---	<5
	7/28/10	<5	275	273	1.58	4.68	167	20.8	5.6	4.3	354	1,010	---	<5
	02/16/11	<2.0	250	305	1.26	5.30	154	47.6	13.9	5.08	276	1,050	---	<2.0
	8/18/11	<5.0	251	259	1.52	5.56	158	24.6	6.98	3.48	263	1,090	---	<5.0
Dup 2	8/18/11	<5.0	272	255	1.38	6	135	21.0	5.36	4.08	276	1,090	---	<5.0
	2/22/12	<5.00	203	857	1.30	4.61	111	22.9	5.96	4.42	251	2,340	---	<5.00
	08/29/12	<10.0	165	1,180	1.29	2.19	83.9	335	105	8.09	236	3,360	---	<10.0
	02/21/13	<6.00	185	934	0.989	4.48	106	238	72.8	7.31	282	2,260	---	<6.00
	08/14/13	<6.00	177	1,140	1.36	4.29	113	292	105	8.41	264	2,780	---	<6.00
MW-3	02/17/98	<2.0	410	983	--	--	173	--	--	--	--	2,261	232	--
	02/07/01	8.0	278	890	3.4	7.3	200	56.7	18.7	20.4	648	2,100	---	--
	05/02/02	<1.0	298	735	2.84	7.57	213	27.5	8.39	24.7	42.8	--	--	<1.00
	05/03/02	<1.0	146	767	2.9	7.39	207	37.9	11.5	25.5	28.2	--	--	<1.00
	10/11/02	<0.1	288	753	---	---	272	29	9.18	20.6	622	1,960	---	<0.10
	12/27/02	<0.1	288	727	---	---	231	27	7.34	19.9	698	1,950	---	<0.10
	02/18/03	<0.1	277	762	---	---	180	25.2	7.84	16.4	580	1,950	---	<0.10
	06/02/03	<1.0	270	802	3.07	8.06	203	64.9	20	18.5	728	2,720	---	<1.00

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-3 (cont)	08/26/03	<1.0	282	799	3	7.99	198	54.9	18	16.4	597	2,320	---	<1.00
	11/06/03	<1.0	286	746	2.92	7.26	214	37.4	11.1	24.9	577	2,092	---	<1.00
Dup	11/06/03	<1.0	132	521	1.85	2.92	98.1	120	39.5	9.15	200	1,392	---	<1.00
	02/04/04	<1.0	296	755	2.74	7.36	205	42.7	13.1	27.1	546	2,275	---	<1.00
	05/07/04	<1.00	300	774	2.57	7.02	197	38.8	11.2	22.2	528	2,140	---	<1.00
	08/03/04	<0.1	291	798	---	---	155	21.5	16.7	25.8	794	1,640	---	<0.10
	02/11/05	<1.00	292	879	4.61	9.47	196	47	14.5	19.1	590	2,240	---	<1.00
	08/04/05	<1.00	282	922	2.86	8.17	217	48	14.7	21.1	630	1,950	---	<1.00
	02/22/06	<10.0	250	1,100	1.6	8.5	190	46.8	15.3	15.1	446	3,860	---	<10.0
	08/24/06	<10	260	750	2.6	6.43	190	25.3	7.68	11.9	565	1,990	---	<10.0
	02/28/07	<10	270	850	2.2	8.5	190	30.7	9.02	18	516	1,800	---	<10
	08/23/07	<10	204	1,000	1.50	9.50	190	228	80	<50	673	2,330	---	204
	2/20/08	<5	246	1,070	3.18	8.38	222	79.7	26.2	19.1	721	2,480	---	<5
	8/13/08	<5	222	1,180	2.59	8.27	210	46.8	14.3	17.5	896	2,700	---	<5
	02/19/09	<5	220	1,300	2.00	7.80	220	50.0	16.0	20.0	920	2,800	---	<5
	7/29/09	<5	190	1,600	1.60	7.60	210	140	47.0	26.0	770	3,400	---	<5
	2/24/10	<5	237	1,380	1.49	8.81	248	65.0	17.5	15.1	938	2,670	---	<5
	7/28/10	<5	221	1,230	1.68	7.12	259	84.8	24.6	14.1	857	2,680	---	<5
	02/16/11	<2.0	238	1,300	1.40	8.97	1,290	135	41.3	14.4	746	2,430	---	<2.0
	8/18/11	<5.0	227	1,250	1.42	9.18	887	76.3	23.2	11.2	700	2,750	---	<5.0
	2/22/12	<5.00	235	1,260	1.40	7.39	252	104	32.6	13.2	809	2,800	---	<5.00
Dup 2	02/22/12	<5.00	230	1,470	1.53	8.75	224	132	39.2	13.4	770	2,940	---	<5.00
	08/29/12	<10.0	283	1,200	1.72	6.42	271	56.3	16.4	13.1	745	2,600	---	<10.0
	02/21/13	<6.0	252	1,100	1.26	8.87	261	131	40.2	13.4	770	2,500	---	<6.00
	08/14/13	<6.0	275	1,330	1.40	7.59	309	254	87.9	12.3	925	2,890	---	<6.00
MW-4	02/17/98	<2.0	510	372	--	--	136	--	--	--	--	1,268	---	--
	02/07/01	<1.0	286	1,200	1.7	4.7	100	248	84.7	24	506	2,600	--	--
	05/03/02	<1.0	250	868	1	4.72	163	137	48.4	40.7	441	--	--	<1.00
	10/14/02	<0.1	342	381	--	--	124	9.39	2.48	38.4	405	1,220	--	<0.10
Dup	10/14/02	<0.1	358	372	--	--	116	8.82	2.38	37.4	409	1,260	--	<0.10
	12/27/02	<0.1	288	505	---	---	114	21.2	4.42	50.6	461	1,450	---	<0.10
Dup	12/27/02	<0.1	158	115	--	--	139	55.5	23	4.94	94.4	594	--	<0.10
	02/18/03	<0.1	264	691	---	---	118	32.2	7.5	59	474	1,610	---	<0.10
	05/30/03	<1.0	236	1,020	<2.00	5.53	79.6	113	29.7	59.8	664	2,670	---	<1.00
	08/25/03	<1.0	192	1,170	<2.00	5.43	72.9	143	35	82.1	616	2,935	---	<1.00
	11/07/03	<1.0	194	1,620	<2.00	5.48	76.6	228	61.4	83.6	629	3,035	---	<1.00
	02/05/04	<1.0	170	1,730	<2.00	5.93	79	277	75.9	108	630	3,380	---	<1.00

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-4 (cont)	05/06/04	<1.00	158	2,150	<3.00	5.94	88.2	407	99.9	99.7	593	4,090	---	<1.00
	08/03/04	<0.1	150	2,730	---	---	125	632	191	124	832	6,810	---	<0.10
	02/11/05	<1.00	136	4,520	<1.00	5.19	127	1,060	289	156	983	9,030	---	<1.00
	08/04/05	<1.00	132	6,580	<1.00	5.34	166	1,650	375	142	1,440	13,200	---	<1.00
	02/23/06	<10.0	130	9,100	<2.5	10	220	1,510	326	141	1,070	17,900	---	<10.0
	08/25/06	<10.0	140	12,000	<5	6.13	290	1,550	364	136	1,890	17,500	---	<10.0
	02/28/07	<10	170	10,000	<250	<200	<2000	1,550	310	160	1,520	21,800	---	<10
	08/21/07	<10	167	10,000	0.30	9	490	1,630	443	112	3,080	26,000	---	167
	2/20/08	<5	210	8,220	1.33 B	6.05	587	1,200	372	143	3,160	18,200	---	<5
	8/13/08	<5	263	6,270	<1.5	6.64	607	770.0	209	97.3	2,510	15,100	---	<5
	02/19/09	<5	300	4,900	<0.50	5.60	620	580.0	160	72.0	2,200	11,000	---	<5
	7/29/09	<5	320	3,700	<0.50	6.40	580	380.0	110	63.0	1,800	8,400	---	<5
	2/25/10	<5	338	3,590	0.23	5.94	478	378.0	107	40.0	1,830	7,940	---	<5
	7/28/10	<5	283	3,840	0.45	4.00	419	273.0	62.8	30.4	1,840	8,820	---	<5
	02/16/11	<2.0	337	2,480	0.540	4.08	1,240	179	53.6	30.6	1,300	5,840	---	<2.0
	8/18/11	<5.0	358	2,530	0.680	5.39	479	156	41.4	23.9	1,240	4,870	---	<5.0
	2/22/12	<5.00	292	3,250	0.718	5.30	220	656	204	27.8	1,180	8,100	---	<5.00
	08/28/12	<5.00	227	3,860	0.538	3.06	315	880	263	27.8	1,050	9,420	---	<5.00
	02/21/13	<6.00	303	2,450	0.581	5.53	331	761	228	27.5	1,070	5,170	---	<6.00
	08/14/13	<6.00	257	3,420	0.658	3.83	324	711	231	28	1,160	6,500	---	<6.00
MW-5	02/17/98	<2.0	360	408	--	--	151	--	--	--	--	1,219	116	--
	02/07/01	<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	10	20.7	305	1,100	---	<0.10
	12/27/02	<0.1	232	337	---	---	171	31.3	8.55	20.6	319	1,210	---	<0.10
	02/18/03	<0.1	210	319	---	---	176	27.2	8.48	16.5	231	1,110	---	<0.10
	06/02/03	<1.0	196	588	1.23	4.86	142	132	40.5	21.2	364	1,644	---	<0.10
	08/26/03	<1.0	210	447	1.32	4.85	141	95.1	29	23.4	291	1,480	---	<1.00
	11/06/03	<1.0	214	456	1.43	5.11	152	94	29.3	24.8	282	1,430	---	<1.00
	02/04/04	<1.0	206	504	1.38	5.31	147	95.1	31.4	27.3	289	1,410	---	<1.00
	05/07/04	<1.00	222	381	1.02	5.98	151	55.9	16.3	25.7	301	1,250	---	<1.00
Dup	05/07/04	<1.00	242	330	1.04	5.75	152	50.7	14.6	27.4	292	1,168	---	<1.00
	08/03/04	<0.1	229	461	---	---	155	47.9	31.3	31.1	435	968	---	<0.10
	02/11/05	<1.0	288	408	2.58	8.36	243	46.2	13.3	30.6	433	1,598	---	<1.0
	08/04/05	<1.00	256	423	1.83	6.82	201	60.5	18.6	20.3	354	1,334	---	<1.00
Dup 1	08/04/05	<1.00	242	394	1.82	6.74	200	49.2	14.8	21.5	341	1,220	---	<1.00
	02/22/06	<10.0	220	800	1.3	6.6	160	222	69.4	14	274	2,670	---	<10.0

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-5 (cont)	08/24/06	<10.0	190	930	<5	5.09	140	145	47.6	13.1	295	1,280	---	<10.1
	02/28/07	<10	300	730	3.5	5.2	340	36.9	10.6	18.4	301	1,310	---	<10.2
	08/23/07	<10	115	360	1.80	5.20	170	50.1	18.4	16.4	291	2,500	---	<10.3
	2/20/08	<5	255	505	2.9	5.61	168	127	42.1	19.6	353	1,500	---	<10.4
	8/13/08	<5	220	438	1.77	6.20	191	62.8	19.3	23.9	362	1,300	---	<10.5
	02/19/09	<5	220	390	1.60	6.20	200	63.0	19.0	25.0	310	1,200	---	<10.6
	7/29/09	<5	210	490	1.40	6.20	200	110	35.0	23.0	280	1,500	---	<10.7
	2/25/10	<5	223	326	1.02	6.27	195	58.0	19.0	16.5	232	1,120	---	<10.8
	7/28/10	<5	235	272	1.15	4.61	189	51.3	14.6	13.8	257	1,130	---	<10.9
Dup 2	7/28/10	<5	233	283	1.11	5.17	192	60.9	19.2	16.7	269	1,180	---	<10.10
	02/16/11	<2.0	206	272	1.12	5.87	413	64.7	18.8	14.9	240	1,010	---	<2.0
	8/18/11	<5.0	224	325	1.22	<0.0300	175	59.4	17.6	13.2	233	1,160	---	<5.0
	2/22/12	<5.00	174	1,140	0.860	4.06	94.6	55.4	16.0	14.9	272	3,330	---	<5.00
	08/29/12	<10.0	186	1,380	1.04	2.92	93.7	319	102	7.45	246	3,640	---	<10.0
	02/21/13	<6.0	159	1,350	0.762	3.99	101	224	69.2	10.5	339	3,110	---	<6.00
	08/14/13	<6.0	161	1470	1.01	3.57	102	370	125	9.47	281	3,780	---	<6.00
MW-6	02/07/01	<1.0	200	1,800	3.3	5.4	140	323	108	18.8	657	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
	02/18/03	16	238	638	---	---	298	22.1	6.43	11.8	524	1,700	---	<0.10
	06/02/03	<1.0	244	772	3.24	6.62	181	68.7	23.3	14.4	614	2,040	---	<1.00
	08/26/03	<1.0	246	607	2.95	6.65	179	35.9	11.6	12.2	525	2,370	---	<1.00
	11/06/03	<1.0	250	649	3.28	6.89	191	46	13.9	18.1	503	1,932	---	<1.00
	02/04/04	<1.0	266	713	3.15	7.2	189	48.9	15.4	19.9	517	2,210	---	<1.00
	05/07/04	<1.00	266	696	2.92	6.74	182	54.8	16.1	16	503	2,095	---	<1.00
	08/03/04	<0.1	260	718	---	---	240	22.7	21.7	21.7	825	1,430	---	<0.10
	02/11/05	<1.00	270	660	3.76	7.84	192	30.1	9.13	19.5	531	1,774	---	<1.00
	08/04/05	<1.00	268	764	3.16	7.83	206	56.6	18.8	15.3	576	1,650	---	<1.00
	02/22/06	<10.0	270	610	2.4	7.9	180	23.9	7.41	10.9	380	1,570	---	<10.0
	08/24/06	<10.0	260	590	3	5.96	170	108	35	9.38	448	1,880	---	<10.0
	02/28/07	<10	280	530	3	7.8	170	21	6.14	12.8	397	1,550	---	<10
	08/23/07	<10	265	1,100	2.30	7.60	150	29.8	11.7	8.35	440	3,970	---	265
	2/20/08	<5	227	799	3.05	7.43	163	181	62.4	15.7	492	1,930	---	<5
	8/13/08	<5	238	563	2.56	7.83	176	22.6	6.6	14.4	558	1,640	---	<5
	02/19/09	<5	370	1,200	2.00	6.10	150	140	47.0	16.0	590	3,200	---	<6
	7/29/09	<5	210	1,200	2.10	7.00	160	37.0	11.0	16.0	550	2,700	---	<5

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-6 (cont)	2/24/10	<5	243	780	2.07	7.89	193	39.7	10.6	9.0	558	1,910	---	<5
	7/28/10	<5	247	702	2.23	8.99	204	30.7	8.9	10.3	591	1,740	---	<5
	02/16/11	<2.0	214	768	1.56	6.36	385	30.8	8.32	9.81	539	1,800	---	<2.0
	8/18/11	<5.0	243	657	2.00	8.73	205	80.6	25.2	7.68	492	1,830	---	<5.0
	2/22/12	<5.00	273	685	2.28	9.03	228	85.5	27.7	8.62	504	1,810	---	<5.00
	08/29/12	<10.0	315	849	2.20	5.30	207	91.4	27.3	7.54	498	1,930	---	<10.0
	02/21/13	<6.00	253	812	1.71	8.30	221	25.8	7.77	8.68	496	1,900	---	<6.00
	08/14/13	<6.00	245	865	2.06	7.96	241	214	74.9	8.92	628	1,870	---	<6.00
MW-7	02/07/01	<1.0	238	500	3.2	4.1	100	80.3	27.3	10.4	326	1,300	---	---
	05/02/02	<1.0	244	466	2.94	4.18	106	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
	02/17/03	<0.1	200	603	---	---	134	90.6	30.9	5.86	339	1,440	---	<0.10
	06/02/03	<1.0	242	388	3.23	4.33	115	39.5	12.5	6.16	370	1,216	---	<1.00
	08/25/03	<1.0	232	367	2.77	4.07	105	39.3	12.3	7.14	309	1,244	---	<1.00
	11/05/03	<1.0	240	343	3.08	4.16	117	36.6	11.4	7.67	304	1,186	---	<1.00
Dup	11/05/03	<1.0	238	355	3.04	4.19	117	34.7	10.8	7.63	298	1,170	---	<1.00
	02/04/04	<1.0	262	320	3.1	4.25	112	30.7	9.87	7.95	298	1,138	---	<1.00
	05/06/04	<1.00	260	339	2.9	4	112	35.2	10.3	6.81	282	1,172	---	<1.00
	08/03/04	<0.1	248	328	---	---	126	22.8	12.1	7.55	436	734	---	<0.10
	02/11/05	<1.00	238	332	3.76	4.65	123	31.5	9.99	7.75	296	1,128	---	<1.00
	08/05/05	<1.00	240	430	3.1	4.36	144	58.2	19.2	8.43	325	1,180	---	<1.00
Dup 2	08/05/05	<1.00	236	387	3.14	4.3	144	38.7	12.5	6.51	315	1,100	---	<1.00
	02/22/06	<10.0	290	240	2.6	3.3	120	30.6	9.98	4.89	227	1,120	---	<10.0
	08/24/06	<10.0	260	230	3.1	2.97	110	23.3	7.82	2.96	245	952	---	<10.0
	02/28/07	<10	270	240	3.3	3.6	100	21.3	6.57	<5	230	885	---	<10
	08/23/07	<10	261	250	2.70	3.20	110	18.8	8	<5	247	2,320	---	261
	2/20/08	<5	251	269	2.4	3.18	122	37.6	12.4	5.41	261	930	---	<5
	8/13/08	<5	274	251	2.41	3.21	121	25.0	7.6	4.9	273	887	---	<5
	02/19/09	<5	250	240	2.90	3.30	100	26.0	8.3	5.1	260	880	---	<5
	7/29/09	<5	260	260	2.90	3.90	110	40.0	13.0	5.8	250	950	---	<5
	2/24/10	<5	263	282	2.54	4.08	106	34.3	9.1	3.6	310	1,000	---	<5
	7/28/10	<5	259	279	2.61	3.39	113	28.5	9.0	3.6	265	950	---	<5
	02/16/11	<2.0	212	286	2.55	4.07	123	32.8	9.39	3.64	246	910	---	<2.0
	8/18/11	<5.0	248	268	2.76	4.16	121	27.5	8.56	2.31	234	1,060	---	<5.0
Dup 1	8/18/11	<5.0	262	265	2.58	4.27	105	29.4	8.22	3.32	255	1,010	---	<5.0
	2/22/12	<5.00	262	287	2.80	4.50	107	32.8	9.87	3.45	266	952	---	<5.00

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-7 (cont)	08/28/12	<10.0	275	287	2.90	2.88	123	27.2	8.41	3.20	252	962	---	<10.0
	02/21/13	<6.00	257	258	2.30	4.76	134	29.3	9.11	3.79	284	904	---	<6.00
	08/14/13	<6.00	244	285	2.74	4.92	143	32.4	9.27	3.92	283	962	---	<6.00
MW-8	02/07/01	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
	02/18/03	<0.1	213	833	---	---	185	53	17.6	7.13	489	1,930	---	<0.10
	06/02/03	<1.0	244	777	3.29	6.82	173	60	18.9	9.47	650	1,968	---	<1.00
	08/25/03	<1.0	244	738	2.85	6.42	159	59.4	17.3	11.4	534	1,996	---	<1.00
	11/07/03	<1.0	248	722	3.27	6.65	171	58.1	17.9	12.2	525	1,972	---	<1.00
	02/04/04	<1.0	254	764	3.77	7.85	161	55.2	18.2	13.2	522	2,038	---	<1.00
	05/06/04	8	262	774	3.36	7.43	164	56.2	16.9	10.7	501	1,968	---	<1.00
	08/04/04	<0.1	246	771	---	---	222	28.6	21.5	11	707	1,530	---	<0.10
	02/11/05	<1.00	238	818	4.28	8.46	167	58.3	19	13.2	543	2,080	---	<1.00
	08/05/05	<1.00	236	888	3.29	7.66	184	71.5	23.3	11.7	574	2,230	---	<1.00
	02/22/06	<10.0	230	810	2.4	7.9	170	55.1	18	8.05	390	1,740	---	<10.0
	08/24/06	<10.0	280	710	3.2	5.51	170	51.2	16.5	6	470	926	---	<10.0
	02/28/07	<10	260	740	3.3	7.3	170	68.3	20.7	8.59	381	1,780	---	<10
	08/22/07	<10	259	700	3.00	7.40	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	8.5	541	1,750	---	<1.53
	02/19/09	<5	230	700	3.60	6.40	170	64.0	21.0	8.8	500	1,700	---	<5
	7/29/09	<5	290	740	3.50	6.80	170	60.0	19.0	9.5	490	1,800	---	<5
	2/24/10	<5	255	754	3.16	6.58	160	56.4	16.1	5.1	510	1,760	---	<5
	7/28/10	<5	263	711	3.43	5.67	164	54.2	17.0	4.8	533	1,720	---	<5
	02/16/11	<2.0	218	749	3.11	6.73	182	53.9	15.8	4.91	466	1,760	---	<2.0
	8/18/11	<5.0	257	676	3.21	7.56	148	47.2	15.0	3.68	440	1,770	---	<5.0
	2/22/12	<5.00	264	751	3.27	6.46	167	62.4	19.5	5.24	512	1,720	---	<5.00
	02/20/13	<6.00	271	643	3.17	7.01	203	46.6	15.0	4.66	443	1,590	---	<6.00
	08/14/13	<6.00	262	665	3.48	7.52	216	54.7	16.7	5.27	492	1,530	---	<6.00
MW-9	08/28/12	<10.0	268	684	3.49	5.06	176	83.1	25.4	5.70	483	1,670	---	<10.0
	05/01/02	<1.0	142	439	1.88	3.26	106	98.8	35.8	9.93	188	---	---	<1.00
	10/14/02	<0.1	137	443	---	---	119	88.4	33.1	10.4	216	1,240	---	<0.10
	12/27/02	<0.1	124	434	---	---	120	93.8	33.8	6.22	192	1,080	---	<0.10
	02/18/03	<0.1	105	461	---	---	126	99.3	34.1	5.62	200	1,190	---	<0.10

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-9 (cont)	05/30/03	<1.0	122	514	1.82	3.01	102	113	37.9	7.98	240	1,324	---	<1.00
	08/25/03	<1.0	114	562	1.58	2.98	95.2	120	39.2	9.45	219	1,428	---	<1.00
	11/07/03	<1.0	132	468	1.68	2.86	96.2	119	39	9.18	200	1,250	---	<1.00
	02/05/04	<1.0	124	610	2.32	4.18	97.7	125	41.1	10.3	221	1,345	---	<1.00
Dup	02/05/04	<1.0	120	581	1.23	2.19	53.6	132	43.9	10.1	203	1,325	---	<1.00
	05/05/04	<1.00	122	616	1.39	2.68	91	142	50	9.65	212	1,428	---	<1.00
Dup	05/05/04	<1.00	124	599	1.43	2.72	92.2	144	46.7	9.82	223	1,476	---	<1.00
	08/03/04	<0.1	110	691	---	---	115	184	62.9	10.5	279	1,530	---	<0.10
	02/11/05	<1.00	98	1,960	3.63	5.36	103	495	164	21.5	388	3,920	---	<1.00
	08/04/05	<1.00	218	10,000	1.54	5.15	224	2,280	686	42.8	1,390	27,000	---	<1.00
	02/23/06	<10.0	110	13,000	<2.5	19	430	2,050	438	47.8	1,450	24,300	---	<10.0
	08/25/06	<10.0	260	10,000	<2.5	3.75	360	1,330	360	38.3	1,920	24,100	---	<10.0
	02/28/07	<10	140	8,700	<0.5	4.6	430	1,180	276	46.9	1,510	17,700	---	<10
	08/23/07	<10	157	6,900	<0.1	3.70	400	934	283	<50	2,290	17,100	---	157
	2/20/08	<5	229	6,270	<0.3	<0.2	447	867	293	27.7	2,190	12,500	---	<5
	8/12/08	<1.53	257	4,910	1.19	3.74	443	720	236	36.2	1760	11,400	---	<1.53
	02/19/09	<5	310	4,300	0.75	3.00	490	600	190	25.0	1900	9,700	---	<5
	7/29/09	<5	250	3,300	0.91	3.40	500	420	150	32.0	1400	7,800	---	<5
	2/24/10	<5	304	2,070	1.00	3.56	452	249	65.5	9.2	1220	4,370	---	<5
	7/28/10	<5	312	1,260	1.41	2.38	413	136	46.7	7.7	848	3,100	---	<5
	02/16/11	<2.0	311	911	1.55	3.03	562	92.5	29.9	6.80	600	1,830	---	<2.0
	8/18/11	<5.0	285	689	2.06	2.95	294	62.7	21.1	3.92	484	1,940	---	<5.0
	2/22/12	<5.00	269	693	2.39	3.19	236	51.4	17.9	5.23	508	1,720	---	<5.00
	08/28/12	<10.0	366	607	2.67	1.72	206	62.3	15.9	4.50	433	1,680	---	<10.0
	02/21/13	<6.00	250	561	2.35	2.94	192	39.5	13.3	4.26	423	1,460	---	<6.00
	08/14/13	<6.00	224	603	2.91	2.68	173	40.2	12.9	4.32	459	1,410	---	<6.00
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
	02/18/03	<0.1	184	65	---	---	159	67.1	22.8	3.04	90.7	552	---	<0.10
	06/02/03	<1.0	198	55.7	1.6	4.31	134	75.7	22.4	4.95	80.4	624	---	<1.00
	08/26/03	<1.0	188	56.1	1.58	4.1	125	70.6	23.4	6.29	72.3	688	---	<1.00
	11/07/03	<1.0	200	70.9	1.69	4.19	131	70.2	23.5	5.8	69.3	638	---	<1.00
	02/05/04	<1.0	196	101	1.68	4.22	121	75.8	25.7	6.29	73.8	674	---	<1.00
	05/07/04	<1.00	174	186	1.4	3.8	111	92.9	30.1	6.34	78.3	736	---	<1.00
	08/03/04	<0.1	144	328	---	---	118	106	49.5	7.7	106	796	---	<0.10
	02/11/05	<1.0	112	1,110	3.44	5.86	93.1	357	115	14	157	2,295	---	<1.00
	08/04/05	<1.00	112	1,500	1.32	4.02	94.5	419	139	11.5	186	3,420	---	<1.00

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-10 (cont)	02/22/06	<10.0	89	2,000	<0.50	6.5	98	520	158	13.8	180	6,180	---	<10.0
	08/25/06	<10.0	110	2,200	<2.5	3.24	97	660	201	13.7	253	7,520	---	<10.0
	02/28/07	<10	360	2,200	0.8	4.2	100	601	168	16.9	224	6,140	---	<10
	08/22/07	<10	74.9	2,200	0.50	6.00	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
	02/20/09	<5	370	1,600	0.76	2.70	130	410	150	15.0	300	4,300	---	<5
	7/29/09	<5	250	2,000	0.67	3.10	140	470	170	19.0	300	5,800	---	<5
	2/24/10	<5	126	2,840	0.46	3.26	126	670	228	12.7	399	5,720	---	<6
	7/28/10	<5	89.1	2,260	0.82	2.48	85.5	842	292	12.1	501	6,840	---	<6
	02/16/11	<2.0	112	3,880	0.471	3.66	1,670	884	307	17.0	586	7,790	---	<2.0
	8/18/11	<5.0	110	3,990	0.626	4.30	172	1,000	298	15.9	671	8,290	---	<5.0
	2/22/12	<5.00	122	4,590	0.703	4.89	185	1,050	330	19.0	857	14,000	---	<5.00
	08/29/12	<5.00	127	4,110	0.566	4.00	176	1,010	322	19.3	897	12,400	---	<5.00
	02/21/13	<6.00	123	3,940	0.480	4.61	204	909	274	17.2	860	7,100	---	<6.00
	08/14/13	<6.00	133	4,260	0.607	4.05	226	806	271	18.3	991	9,470	---	<6.00
MW-11	04/30/02	DRY												
	10/11/02	DRY												
	12/26/02	DRY												
	02/17/03	DRY												
	05/29/03	DRY												
	08/22/03	DRY												
	11/05/03	DRY												
	02/03/04	DRY												
	05/05/04	DRY												
	08/02/04	DRY												
	11/23/04	DRY												
	02/09/05	DRY												
	08/04/05	NS - Insufficent Water Column												
	02/22/06	NS - Insufficent Water Column												
	02/28/07	NS - Insufficent Water Column												
	08/22/07	NS - Insufficent Water Column												
	02/20/08	NS - Insufficent Water Column												
	08/12/08	NS - Insufficent Water Column												
	02/19/09	<5	370.0	1,700	0.80	3.00	100.0	430.0	150.0	17.0	380.0	4,500	---	5
	07/29/09	<5	490.0	1,800	0.72	3.80	120.0	420.0	140.0	19.0	340.0	5,000	---	<5
	02/16/11	<2.0	115	1,720	0.607	3.40	760	365	116	9.65	336	3,420	---	<2.0

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	*---*	*---*	*---*	*---*	*1,000.0*	*---*	*---*
MW-11 (cont)	08/18/11	NS - Insufficent Water Column												
	02/22/12	<5.00	131	2,240	0.654	3.64	145	588	176	12.2	456	6,470	---	<5.00
	08/28/12	<5.00	146	2,450	0.668	2.14	128	563	169	12.6	460	7,980	---	<5.00
	02/20/13	<6.00	128	2,540	0.518	3.20	137	711	208	13.2	502	5,420	---	<6.00
	08/14/13	<6.00	117	3,070	0.589	3.22	140	779	260	15.1	579	6,620	---	<6.00
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
	02/17/03	<0.1	68	1,530	---	---	52.4	461	170	13.3	136	3,980	---	<0.10
	06/02/03	<1.0	72	1,380	<2.00	5.06	45.8	491	157	15.3	151	3,250	---	<1.00
	08/26/03	<1.0	66	1,550	<2.00	4.94	45.9	525	178	14.8	156	3,855	---	<1.00
	11/06/03	<1.0	80	1,610	2.25	4.81	50.3	568	189	20.1	159	3,860	---	<1.00
	02/05/04	<1.0	74	1,680	2.19	5.13	46	525	181	21.6	160	2,910	---	<1.00
	05/07/04	<1.0	70	1,620	<3.00	5.13	53.6	541	178	18.5	152	3,085	---	<1.0
	08/03/04	<0.1	66	1,680	---	---	55.2	680	252	31.1	211	4,300	---	<0.10
	02/11/05	<1.00	82	1,770	2.04	6.08	47.7	503	176	17.8	138	3,080	---	<1.00
	08/05/05	<1.00	72	1,800	1.66	4.69	48.6	547	194	15.2	149	4,180	---	<1.00
	02/22/06	<10.0	73	1,700	0.7	6.7	48	415	135	14.9	129	4,890	---	<10.0
	08/24/06	<10.0	87	1,700	0.93	3.06	48	463	157	12.2	140	6,190	---	<10.0
	02/28/07	<10	95	1,900	1.3	6.9	65	521	154	16.1	155	5,840	---	<10
	08/22/07	<10	108	1,800	0.70	6.00	52.0	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
	02/19/09	<5	120	2,600	0.97	3.20	120	810	280	23.0	340	5,400	---	<5
	7/29/09	<5	94.0	2,700	1.20	3.80	120	700	270	28.0	330	7,000	---	<5
	2/24/10	<5	89.1	2,120	0.61	3.74	69.4	626	218	12.9	214	4,290	---	<5
	7/28/10	<5	83.0	1,560	1.47	2.84	164	681	240	14.2	279	5,680	---	<5
	02/16/11	<2.0	84.6	2,430	0.747	3.91	73.6	528	184	11.1	190	4,390	---	<2.0
	8/18/11	<5.0	85.5	2,110	0.908	4.08	62.7	560	183	10.5	169	5,000	---	<5.0
	2/22/12	<5.00	91.2	2,270	0.990	4.36	67.3	650	217	13.4	209	4,110	---	<5.00
	08/28/12	<10.0	98.0	2,040	0.840	2.52	57.6	589	190	12.2	173	5,690	---	<10.0
	02/20/13	<6.00	88.2	2060	0.774	3.81	59.0	658	204	12.9	186	3,790	---	<6.00
	08/14/13	<6.00	86.9	1,930	0.792	3.82	65.3	596	203	13.3	180	4,550	---	<6.00
MW-13	05/02/02	<1.0	122	277	2.31	4.38	131	125	44.3	10.2	65.6	--	---	<1.00
	10/11/02	<0.1	115	337	---	---	124	135	46.5	9.47	88.6	1,210	---	<0.10
	12/27/02	<0.1	104	408	---	---	132	160	55.2	9.71	84.5	1,260	---	<0.10

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-13 (cont)	02/17/03	<0.1	80	443	---	---	144	152	54.9	8.88	108	1,370	---	<0.10
	06/02/03	<1.0	102	421	2.27	4.43	122	153	56	11	90.9	1,260	---	<1.00
	08/26/03	<1.0	92	500	2.1	4.23	115	179	66	12	95.6	1,360	---	<1.00
	11/06/03	<1.0	98	492	2.25	4.42	125	193	68.6	14.3	91.5	1,434	---	<1.00
	02/05/04		96	543	2.3	4.56	120	179	65.6	15.4	98.3	1,220	---	<1.00
	05/07/04	<1.00	98	496	2.04	4.14	116	184	62.2	12.8	89.3	1,278	---	<1.00
	08/03/04	<0.1	95	532	---	---	116	225	77.3	15	111	1,410	---	<0.10
	02/11/05	<1.00	100	491	2.19	5.36	117	171	61.7	13.3	92.3	1,260	---	<1.00
	08/05/05	<1.00	96	759	2.29	5.11	125	217	70.8	12.7	103	1,550	---	<1.00
	02/22/06	<10.0	89	590	1.7	4.8	120	177	61.2	11.5	91.8	2,090	---	<10.0
	08/24/06	<10.0	150	760	<2.5	3.58	120	228	78.7	10.9	107	2,590	---	<10.0
	02/28/07	<10	90	880	2	5.2	140	262	84.8	14.6	113	3,060	---	<10
	08/22/07	<10	129	980	1.60	4.0	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
	02/19/09	5	130	1,800	1.50	3.10	180	580	200	24.0	240	4,700	---	5
	7/29/09	<5	120	1,800	1.40	4.10	400	540	220	27.0	210	5,900	---	<5
	2/24/10	<5	91.1	1,570	1.05	3.53	150	452	139	13.0	160	3,400	---	<5
	7/28/10	<5	89.1	4,340	1.08	3.01	921.0	468	136	12.1	156	4,420	---	<5
	02/16/11	<2.0	82.7	1,630	1.36	3.88	1,680	392	150	14.0	170	4,440	---	<2.0
	8/18/11	<5.0	87.7	1,640	1.57	4.04	166	404	138	11.8	156	4,100	---	<5.0
	2/22/12	<5.00	88.9	1,580	1.46	4.21	120	478	154	14.1	174	3,930	---	<5.00
	08/28/12	<10.0	119	1,570	1.49	2.50	155	455	154	14.4	179	4,130	---	<10.0
	02/20/13	>6.00	113	1,400	1.26	3.78	150	428	139	13.4	165	3,300	---	<6.00
	08/18/13	<6.00	103	1,420	1.43	3.75	156	386	150	14.9	176	3,930	---	<6.00
MW-14	11/05/03	<1.0	100	3,500	<4.00	6.58	525	951	324	45.3	732	7,315	---	<1.00
	02/04/04	<1.0	74	3,910	<3.00	6.01	559	966	320	46.1	840	7,720	---	<1.0
	05/06/04	<1.00	86	3,970	<4.00	5.54	594	997	350	42.5	836	9,560	---	<1.00
	08/04/04	<0.1	78	4,430	---	---	895	1,350	455	60.3	1,220	11,500	---	<0.10
	02/11/05	<1.00	80	6,120	3.5	5.99	752	1,180	370	56.8	1,250	8,860	---	<1.00
	08/05/05	<1.00	86	6,480	1.84	5.04	882	1,230	400	46.3	1,440	9,570	---	<1.00
	02/22/06	<10.0	81	5,300	<0.50	11	700	914	253	34.1	885	12,100	---	<10.0
Dup	02/22/06	<10.0	82	5,000	<0.50	<40	690	916	253	34	884	11,600	---	<10.0
	08/24/06	<10.0	85	5,600	<5	3.74	690	942	266	27.8	1,370	11,300	---	<10.0
	02/28/07	<10	95	5,200	<0.5	4.3	620	758	193	36.9	1,060	12,400	---	<10
	08/22/07	<10	92.2	4,700	0.30	3.90	610	823	249	<50	1,420	11,700	---	92.2
	2/20/08	<5	108	4,910	3.14	3.7	674	847	272	25.7	1,510	10,300	---	<5

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-14 (cont)	8/12/08	<1.53	101	4,400	1.32	3.50	668	781	237	38.2	1650	10,300	---	<1.53
	02/19/09	<5	100	4,200	1.20	2.50	760	780	230	38.0	1600	9,000	---	<5
Dup	2/19/09	<5	100	4,200	1.20	2.40	760	700	220	24.0	1700	8,800	---	<5
	7/29/09	<5	110	4,100	1.40	2.90	830	690	200	39.0	1500	11,000	---	<5
	2/24/10	<5	107	4,280	1.04	3.36	844	752	218	18.9	1480	9,530	---	<5
	7/28/10	<5	107	4,290	1.18	2.17	83.8	844	256	15.1	1660	9,500	---	<5
	02/16/11	<2.0	85.4	5,070	0.706	0.424	1,470	902	294	21.4	1,650	11,200	---	<2.0
	8/18/11	13.1	109	7,490	0.274	3.65	1,010	1,410	318	20.3	2,280	12,800	---	<5.0
	2/22/12	<5.00	108	7,610	0.464	4.17	597	1,480	423	26.2	2,540	18,000	---	<5.00
	08/28/12	<10.0	113	7,730	0.698	2.48	816	1,390	389	23.0	2,330	22,100	---	<10.0
	02/20/13	<6.00	103	8,420	0.738	3.76	819	1,470	368	28.0	2,370	14,300	---	<6.00
	08/14/13	<6.00	102	8,030	1.08	4.53	708	1,470	423	28.4	2,890	15,900	---	<6.00
DUP-3	08/14/13	<6.00	102	8,090	0.970	3.99	736	1,520	431	29.5	2,950	16,600	---	<6.00
MW-15	11/05/03							DRY						
	02/03/04							DRY						
	05/05/04							DRY						
	08/02/04							DRY						
	11/23/04							DRY						
	02/09/05							DRY						
	08/04/05						NS - Insufficent Water Column							
	02/22/06						NS - Insufficent Water Column							
	02/28/07	<10	170	90	2.2	2.2	71	57.3	19.8	6.03	52.9	575	---	<10
	08/22/07	<10	146	150	1.80	2.10	65.0	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	101.0	792	1.81	2.38	68.3	238.0	92.0	13.3	120.0	2,370	---	<1.53
	02/19/09	<5	100.0	840	1.30	2.20	74.0	290.0	110.0	14.0	110.0	2,000	---	<5
	7/29/09	<5	83.0	1,000	1.30	2.70	85.0	270.0	110.0	15.0	130.0	3,300	---	<5
	2/25/10	<5	99.2	1,120	0.97	2.84	74.0	301.0	116.0	12.5	135.0	2,450	---	<5
	7/28/10	<5	91.1	801	1.16	2.02	152.0	337.0	110.0	11.1	128.0	3,350	---	<5
	02/16/11	<2.0	96.4	1,230	1.05	2.73	84.1	293	110	11.4	124	2,810	---	<2.0
	8/18/11	<5.0	97.0	1,110	1.20	2.84	83.4	293	103	9.52	115	3,720	---	<5.0
	2/22/12	<5.00	98.4	1,200	1.21	2.93	85.8	325	106	10.9	124	3,390	--	<5.00
	08/24/12	<10.0	108	1,430	1.13	2.43	84.4	357	133	13.4	147	3,640	---	<10.0
Dup	08/24/12	<5.00	107	1,420	1.11	2.42	84.6	361	131	13.2	148	4,160	---	<5.00
	02/20/13	<6.00	101	1,170	1.04	2.65	86.3	330	117	12.1	135	2,790	---	<6.00
	08/15/13	<6.00	96.9	1,010	1.19	2.92	92.7	237	121	12.7	143	3,180	---	<6.00

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-16	11/06/03	<1.0	188	863	1.79	5.65	150	183	55.6	14.2	372	2,100	---	<1.00
	02/04/04	<1.0	174	937	2.19	6.59	123	235	76.8	15.2	299	2,200	---	<1.00
	05/07/04	<1.00	172	953	<2.00	5.91	123	240	73.8	12.7	313	2,280	---	<1.00
	08/03/04	<0.1	158	1,010	---	---	159	250	87.5	13.5	382	2,560	---	<0.10
	02/11/05	<1.00	180	944	2.4	7.24	151	198	62.4	10.9	344	2,260	---	<1.00
	08/05/05	<1.00	230	568	1.99	5.14	146	134	46.9	8.7	249	1,420	---	<1.00
	02/22/06	<10.0	180	590	1.3	5.2	110	120	39.1	7.17	207	1,770	---	<10.0
	08/24/06	<10.0	490	500	<2.5	3.17	89	123	40.6	4.93	207	1,460	---	<10.0
	02/28/07	<10	220	410	1.6	4.6	110	71.8	22.2	6.46	228	1,200	---	<10
	08/22/07	<10	296	360	1.40	3.60	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	6.8	221	1,660	---	<1.53
	02/19/09	<5	190	710	1.30	4.10	110	130	42.0	8.7	340	1,900	---	<5
	7/29/09	<5	170	810	1.30	4.90	140	140	46.0	9.9	330	2,200	---	<5
	2/24/10	<5	194	866	1.05	4.75	132	173	46.9	5.7	318	1,980	---	<5
	7/28/10	<5	197	369	2.38	4.43	159	157	50.5	6.6	404	2,050	---	<5
	02/16/11	<2.0	197	862	1.18	5.13	260	138	39.8	5.67	347	1,990	---	<2.0
	8/18/11	<5.0	211	775	1.18	5.80	137	128	39.5	4.47	331	2,360	---	<5.0
	2/22/12	<5.00	211	874	1.34	6.12	139	158	45.0	5.64	396	2,090	---	<5.00
	08/28/12	<10.0	294	879	1.21	3.14	127	237	70.4	7.14	254	2,850	---	<10.0
	02/20/13	<6.00	238	816	1.15	5.42	159	207	67.8	6.99	304	1,900	---	<6.00
	08/14/13	<6.00	224	907	1.28	5.78	162	228	90.5	8.13	236	2,100	---	<6.00
MW-17	11/05/03	<1.0	154	587	2.06	3.85	104	177	58.2	12.5	184	1,556	---	<1.00
	02/04/04	<1.0	158	650	2.01	3.93	93.1	158	52.5	12.2	205	1,416	---	<1.00
Dup	02/04/04	<1.0	172	557	2.08	4.03	95.7	162	52.6	12.1	204	1,496	---	<1.00
	05/06/04	<1.00	162	604	1.77	3.57	91.2	182	57.7	10.9	176	1,416	---	<1.00
	08/04/04	<0.1	141	638	---	---	132	207	81	12.7	221	1,660	---	<0.10
	02/11/05	<1.00	174	572	2.94	4.61	101	134	45.9	11	229	1,470	---	<1.00
	08/05/05	<1.00	172	626	2.16	4.37	106	169	53.5	9.5	220	1,750	---	<1.00
	02/22/06	<10.0	150	580	1.5	4	97	123	40.1	8.04	187	1,810	---	<10.0
	08/24/06	<10.0	200	560	<2.5	3.06	100	140	46.1	5.94	178	1,700	---	<10.0
Dup	08/24/06	<10.0	320	530	<2.5	2.94	100	135	46.5	5.76	175	1,700	---	<10.0
	02/28/07	<10	180	530	2.2	4.1	130	94.9	30.3	7.06	213	1,240	---	<10
	08/22/07	<10	177	550	1.80	4.30	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	43.0	7.9	222	1,660	---	<1.53
	02/19/09	<5	180	460	2.40	3.60	170	70.0	21.0	7.5	320	1,300	---	<5

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-17 (cont)	7/29/09	<5	190	440	2.40	4.00	180	76.0	24.0	7.4	270	1,300	---	<5
	2/24/10	<5	182	512	1.85	3.60	148	90.6	30.9	5.4	265	1,380	---	<5
	7/28/10	<5	217	4,840	0.80	3.09	513	87.7	28.8	4.9	245	1,390	---	<5
	02/16/11	<2.0	177	401	2.14	3.64	253	54.6	15.2	4.20	248	1,060	---	<2.0
Dup 2	02/16/11	<2.0	206	368	2.27	<0.0300	259	53.0	16.4	4.18	238	1,060	---	<2.0
	8/18/11	<5.0	196	421	1.87	3.45	111	110	35.9	4.11	173	1,220	---	<5.0
	2/22/12	<5.00	207	441	2.08	3.33	109	98.8	29.7	4.90	220	1,140	---	<5.00
	08/28/12	<10.0	164	570	1.59	1.99	103	182	58.4	6.76	132	2,070	---	<10.0
	02/20/13	<6.00	192	511	1.75	3.33	130	153	50.4	6.09	160	1,280	---	<6.00
	08/14/13	<6.00	163	637	1.71	3.37	126	181	67.0	7.28	142	1,790	---	<6.00
MW-18	11/23/04							DRY						
	02/09/05							DRY						
	08/04/05							DRY						
	02/22/06							DRY						
	02/28/07							DRY						
	02/20/08							DRY						
	08/12/08							DRY						
	02/19/09							DRY						
	7/29/09							DRY						
	02/16/11							DRY						
	8/18/11							DRY						
	2/22/12							DRY						
	08/28/12							DRY						
	02/20/13							DRY						
	08/14/13							DRY						
MW-19	11/23/04	<1.00	86	7,000	<10.0	17.3	582	2,020	678	52.4	1,590	12,900	---	<1.00
	02/11/05	<1.00	92	5,200	1.3	5.12	502	1,340	522	61.3	974	22,000	---	<1.00
	08/05/05	<1.00	82	4,850	1.76	4.7	450	1,200	422	50.6	793	9,750	---	<1.00
Dup 3	08/05/05	<1.00	80	5,170	1.87	4.83	462	1,270	463	51	814	15,800	---	<1.00
	02/22/06	<10.0	75	3,900	<0.50	8.9	400	870	271	32.6	464	8,830	---	<10.0
	08/24/06	<10.0	250	3,900	<5	3.01	390	902	293	28.8	582	10,900	-	<10.0
	02/28/07	<10	92	5,500	<0.5	4.4	600	901	247	37	658	12,700	---	<10
	08/22/07	<10	82.6	4,500	0.30	3.10	440.0	1,040	367	<50	686	11,600	---	82.6
	2/20/08	<5	80.1	4,800	1.72	3.62	476	1,130	437	31.2	684	10,300	---	<5
	8/12/08	<1.53	79.8	4,240	2.94	3.27	429	1,080	399	26.7	739.0	9,600	---	<1.53
	02/19/09	<5	89.0	5,300	0.90	3.20	540	1,200	450	37.0	1200	10,000	---	<5

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-19 (cont)	7/29/09	<5	94.0	5,300	1.10	4.00	580	1,200	400	37.0	1100	13,000	---	<5
	2/24/10	<5	91.1	4,720	0.44	3.73	457	1,110	427	28.2	809	9,080	---	<5
	7/28/10	<5	104	4,760	1.08	3.30	130	1,160	407	27.2	1110	10,400	---	<5
	02/16/11	<2.0	81.4	4,180	0.624	2.01	3,010	1,130	370	27.3	972	9,980	---	<2.0
	8/18/11	<5.0	97.6	4,550	0.752	3.95	383	1,020	345	24.0	676	11,100	---	<5.0
	2/22/12	<5.00	101	542	0.913	4.38	30.3	1,300	425	29.2	1,040	14,800	---	<5.00
	08/28/12	<10.0	107	4,240	0.788	2.64	416	1,020	348	24.8	682	13,300	---	<10.0
	02/20/13	<6.00	94.0	4,310	0.695	3.76	424	1,130	344	27.1	673	7,740	---	<6.00
	08/14/13	<6.00	94.5	3,780	0.896	3.84	382	1,050	376	28.1	710	8,740	---	<6.0
MW-20	11/23/04	<1.00	82	606	2.49	2.9	79.7	176	62.6	13.6	104	985	---	<1.00
	02/11/05	<1.00	88	745	1.86	4.34	73.8	227	77.5	15	117	1,480	---	<1.00
	08/05/05	<1.00	80	1,170	1.76	4.55	84.5	326	116	14.7	162	2,640	---	<1.00
	02/22/06	<10.0	110	1,100	0.98	5.5	83	295	103	13.5	145	3,000	---	<10.0
	08/24/06	<10.0	1,100	1,100	<2.5	3.39	84	288	101	11.2	160	3,590	-	<10.0
	02/28/07	<10	110	1,300	1.4	5.1	95	332	107	14.6	165	4,500	---	<10
	08/22/07	<10	419	1,400	0.80	5.70	100.0	346	119	11.9	203	4,100	---	419
	2/20/08	<5	117	1,540	1.1	3.83	108	393	158	18.7	247	3,550	---	<5
	8/12/08	<1.53	135.0	1,570	2.02	3.73	113.0	392.0	154.0	18.5	249.0	4,290	---	<1.53
	02/19/09	<5	130.0	1,600	1.00	3.70	130.0	440.0	150.0	20.0	290.0	3,900	---	<5
	7/29/09	<5	120.0	1,700	1.10	4.10	150.0	400.0	150.0	21.0	280.0	4,600	---	<5
	2/25/10	<5	107.0	1,500	0.80	4.03	98.8	402.0	146.0	13.9	229.0	3,460	---	<5
	7/28/10	<5	102.0	245	2.00	3.43	143.0	451.0	156.0	13.6	289.0	4,740	---	<5
	02/16/11	<2.0	98.4	1,810	0.972	3.89	1,070	442	134	13.3	274	4,240	---	<2.0
	8/18/11	<5.0	106	1,610	1.16	3.99	135	393	128	11.1	253	4,550	---	<5.0
	2/22/12	<5.00	107	1,750	1.10	4.30	122	434	126	12.5	303	4,790	---	<5.00
	08/24/12	<5.00	123	1,830	1.03	3.46	134	440	152	14.2	295	4,510	---	<5.00
	02/20/13	<6.00	106	1,670	1	3.78	138	445	143	13.5	275	3,680	---	<6.00
	08/14/13	<6.00	104	1,470	1.02	4.17	121	435	152	15.1	275	4,310	---	<6.00
MW-21	11/28/07	1.14	415	482	---	---	128	173	64.4	18.3	115	1,440	---	1.14
	2/20/08	<5	115	606	1.9	5.15	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
	02/19/09	<5	190	400	2.10	4.30	140	150	46.0	11.0	120	1,200	---	<5
	7/29/09	<5	210	330	2.20	4.40	150	120	38.0	10.0	96	1,200	---	<5
	2/24/10	<5	184	280	1.79	4.04	143	123	37.8	7.9	100	1,030	---	<5
	7/28/10	<5	168	2,970	0.61	3.41	150	109	34.3	7.8	95.8	1,010	---	<5
	02/16/11	<2.0	149	240	1.87	4.56	250	106	33.4	8.13	90.0	888	---	<2.0

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
MW-21 (cont)	8/18/11	<5.0	176	213	2.15	4.93	141	89.5	27.5	5.90	79.1	876	---	<5.0
	2/22/12	<5.00	192	208	2.16	5.50	118	89.2	24.8	6.82	74.3	894	---	<5.00
	08/24/12	<5.00	196	241	1.95	4.10	137	99.9	35.0	9.71	80.5	750	---	<5.00
	02/21/13	<6.00	181	182	1.98	4.77	121	91	29	8.1	84	700	---	<6.00
	08/14/13	<6.00	175	180	2.48	5.90	123	100	30.3	8.42	103	798	---	<6.00
MW-22	11/28/07	1.14	2950	1,020			169	286	96.7	12.1	229	2,330	---	1.14
	2/20/08	<5	374	1,060	0.93	2.7	171	291	102	11.1	244	2,560	---	<5
	8/12/08	<1.53	143	1,370	1.70	2.73	167	359	129	12.9	272	3,670	---	<1.53
	02/20/09	<5	270	2,000	0.74	2.40	180	570	190	17.0	380	5,300	---	<5
	7/29/09	<5	310	3,000	0.85	2.60	200	730	260	25.0	570	6,700	---	<5
	2/25/10	<5	142	3,630	0.27	2.92	166	802	251	15.4	590	7,060	---	<5
	7/28/10	<5	136	3,640	0.64	2.17	204	982	309	15.9	865	8,760	---	<5
	02/16/11	<2.0	138	3,650	0.568	1.90	1,530	834	252	14.9	830	7,490	---	<2.0
	8/18/11	<5.0	142	4,020	0.594	2.94	206	745	232	13.7	974	8,900	---	<5.0
	2/22/12	<5.00	152	3,980	0.730	2.93	236	732	233	15.8	1,060	11,100	---	<5.00
	08/29/12	<10.0	171	3,210	0.791	1.79	258	603	195	15.0	1,080	9,460	---	<10.0
	02/20/13	<6.00	174	2,700	0.628	3.02	298	512	153	13.0	922	5,360	---	<6.00
	08/14/13	<6.00	183	2,660	0.839	2.55	294	437	129	12.7	996	5,450	---	<6.00
MW-23	2/22/12	NS - Soap Contaminant in the well from drilling completion activities.												
	08/24/12	<5.00	152	592	1.19	<2.00	91.2	155	55.0	8.44	114	1,460	---	<5.00
	02/20/13	<6.00	121	490	1.10	0.518	96.5	146	52.8	8.12	107	1,330	---	<6.00
	08/14/13	<6.00	117	458	1.29	0.686	93	156	52.8	8.82	111	1,510	---	<6.00
MW-24	2/22/12	<5.00	101	2,910	1.71	3.11	309	806	254	24.4	263	9,240	---	<5.00
	08/24/12	<5.00	118	3,140	1.05	3.18	309	866	263	25.1	291	9,160	---	<5.00
	02/20/13	<6.00	97.4	2,500	0.985	3.41	277	826	233	22.7	263	4,780	---	<6.00
DUP-1	02/20/13	<6.00	97.7	2,500	0.983	3.42	281	806	224	22.9	253	4,940	---	<6.00
	08/14/13	<6.00	94	2,250	1.21	3.66	268	790	234	24.8	261	5,540	---	<6.00
MW-25	05/24/12	<5.00	158	4,390	0.121	3.56	307	890	272	19.2	1,150	10,200	---	<5.00
Dup 1	05/24/12	<5.00	165	4,460	0.142	3.46	316	880	270	19.1	1,170	11,000	---	<5.00
	08/28/12	<10.0	294	4,350	0.618	2.32	290	877	255	18.4	1,150	11,400	---	<10.0
	02/20/13	<6.00	160	4,490	0.461	3.66	282	864	258	18.5	1,210	8,160	---	<6.00
	08/14/13	<6.00	138	4,870	0.552	3.60	255	929	289	20.2	1,370	10,100	---	<6.00
DUP-2	08/14/13	<6.00	150	5,160	0.651	3.87	268	900	287	20.2	1,340	11,400	---	<6.00

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	*---*	*---*	*---*	*---*	*1,000.0*	*---*	*---*
MW-26	05/24/12	<5.00	200	2,320	0.858	2.45	236	241	75.3	11.4	1,000	5,020	---	<5.00
	08/29/12	<5.00	205	2,200	0.929	1.57	225	267	72.9	11.3	1,140	4,940	---	<5.00
	02/21/13	<6.00	213	1,950	0.689	2.65	240	210	58.7	9.82	944	3,640	---	<6.00
	08/14/13	<6.00	215	1,930	0.935	2.46	244	174	59.9	10.6	913	3,700	---	<6.00
MW-27	05/24/12	<5.00	138	1,270	0.838	1.02	640	405	124	22.5	330	3,660	---	<5.00
	08/29/12							DRY						
	02/21/13							DRY						
	08/14/13							DRY						
West	08/22/97	--	--	250	--	--	--	--	--	--	--	--	--	--
	02/17/98	<2.0	370	237	--	--	134	--	--	--	--	975	96	--
	02/07/01	<1.0	236	340	2	4.5	120	39.7	12.5	33.2	264	1,000	--	--
	05/03/02	<1.0	214	329	1.39	4.36	116	41.9	11.9	40.9	234	--	---	<1.00
	10/14/02	<0.1	210	337	--	--	127	39.3	9.37	35.6	290	986	--	<0.10
	12/27/02	<0.1	198	337	---	---	134	43.1	12.5	33.2	263	997	--	<0.10
	02/18/03	<0.1	190	354	---	---	141	33.6	9.78	23.9	152	1,010	---	<0.10
	05/30/03	<1.0	202	353	1.54	4.16	116	48.4	13.3	35.1	283	1,050	---	<1.00
	08/25/03	<1.0	194	351	1.5	4.08	112	49.4	13.2	38.4	265	1,066	---	<1.00
	11/07/03	<1.0	204	327	1.65	3.98	115	51.3	13.8	38.8	235	1,100	---	<1.00
	02/05/04	<1.0	196	345	1.66	4.09	112	51.6	14.6	41.4	235	1,074	---	<1.00
	05/06/04	<1.00	200	339	1.44	3.83	115	53.6	14	37.3	241	1,040	---	<1.00
	08/03/04	<0.1	186	337	---	---	147	41.7	20.1	49.1	297	717	---	<0.10
	02/11/05	<1.00	186	417	2.44	4.47	117	75.9	21.4	43.9	241	1,128	---	<1.00
	08/04/05	<1.00	150	526	1.54	4.16	129	87	23.6	42.2	280	1,104	---	<1.00
	02/23/06	<10.0	150	800	0.76	4	110	149	44.3	47.1	257	2,390	---	<10.0
	08/25/06	<10.0	150	1,500	<2.5	2.78	97	315	87.6	67.7	400	4,840	---	<10.0
	02/28/07	<10	120	2,500	0.86	6.6	120	515	130	98.7	410	7,600	---	<10
	08/21/07	<10	99.8	3,700	0.20	4.31	180	844	251	72.7	665	12,700	---	99.8
	2/20/08	<5	119	2,780	0.54	3.43	202	662	189	81.8	564	5,850	---	<5
	8/13/08	<5	175	1,940	1.57	3.89	227	387	119	61.8	588	5,570	---	<5
	02/19/09	<5	180	1,700	0.67	2.80	230	330	100	51.0	550	4,300	---	<5
	7/29/09	<5	190	1,200	0.81	3.40	240	230	74.0	37.0	400	3,200	---	<5
	7/28/10	<5	238	541	0.99	2.69	224	128	36.6	26.0	345	1,760	---	<5
	02/16/11	<2.0	193	417	1.10	3.56	329	91.0	24.8	20.0	263	1,300	---	<2.0
	8/18/11	<5.0	247	322	1.36	3.66	205	68.5	18.1	15.1	232	1,220	---	<5.0
	2/22/12	<5.00	246	312	1.34	3.28	183	68.0	18.5	15.4	221	1,080	---	<5.00
	08/29/12	<5.00	241	249	1.78	2.46	169	64.1	18.6	16.2	225	988	---	<5.00

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
West (cont)	02/21/13	<6.00	243	226	1.34	3.78	175	56.7	16.7	14.6	212	872	---	<6.00
	08/14/13	<6.00	227	262	1.75	3.68	190	59.0	16.4	15.3	218	892	---	<6.00
Southwest	08/22/97	--	--	3,300	--	--	--	---	--	--	--	--	--	--
	02/17/98	<2.0	420	2,170	--	--	255	--	--	--	--	4,719	712	--
	02/07/01	<1.0	326	1,900	2.2	5	350	197	59.1	---	1,078	4,100	--	--
	05/03/02	<1.0	272	1,490	1.38	4.51	301	200	65	46.4	744	--	--	<1.00
	10/14/02	<0.1	330	1,330	--	--	360	110	32.5	61.5	929	3,020	--	<0.10
	12/27/02	<0.1	308	1,280	---	---	319	107	31.9	66.8	980	3,040	--	<0.10
	02/18/03	<0.1	289	1,290	---	---	300	104	31.3	63	918	2,910	---	<0.10
Dup	02/18/03	<0.1	298	1,310	---	---	299	108	32.2	58.3	812	3,040	---	<0.10
	06/02/03	<1.0	304	1,420	2.34	5.83	282	161	45.7	49.1	935	4,070	---	<1.00
Dup	06/02/03	<1.0	290	1,370	2.12	5.65	287	169	54.5	45	899	3,420	---	<1.00
	08/25/03	<1.0	310	1,190	2.25	6.1	272	117	33.6	49.7	774	3,205	---	<1.00
Dup	08/25/03	<1.0	200	1,260	<2.00	5.61	75.5	159	41.8	79	591	3,270	---	<1.00
	11/07/03	<1.0	300	1,240	2.29	5.77	255	129	35.4	48.5	727	3,275	---	<1.00
	02/05/04	<1.0	300	1,240	2.37	6.17	238	109	33.1	52.2	716	2,860	---	<1.00
	05/06/04	<1.00	294	1,310	<3.00	6.38	231	158	30.8	53.2	780	3,180	---	<1.00
	08/03/04	<0.1	276	1,400	---	---	264	75.1	45.2	82.4	1,660	2,550	---	<0.10
	02/11/05	<1.00	260	2,920	1.33	9.61	230	323	94.5	84.4	1,240	5,575	---	<1.00
	08/04/05	<1.00	226	5,290	1.55	11.7	325	691	201	101	1,980	12,000	---	<1.00
	02/23/06	<10.0	300	3,000		11	450	373	108	77.1	896	6,300	---	<10.0
	08/25/06	<10.0	300	3,100	<5.0	5.99	600	415	117	74.9	1,240	7,600	---	<10.0
	02/28/07	<10	310	4,500	0.51	8.8	670	511	130	93.7	994	9,120	---	<10
	08/21/07	<10	265	5,500	0.10	11.7	860	879	242	82.6	2,040	14,900	---	265
	2/20/08	<5	278	5,940	0.63	9.3	896	1,010	281	120	2,300	13,100	---	<5
	8/13/08	<5	268	5,670	4.18	8.14	775	934	237	112	2110	13,700	---	<5
	02/19/09	<5	280	5,200	0.78	5.40	870	920	240	120	2300	13,000	---	<5
	7/29/09	<5	260	5,300	0.96	6.10	810	790	240	110	2200	12,000	---	<5
	7/28/10	<5	254	3,890	0.96	5.17	565	758	190	67.6	1770	8,850	---	<5
Dup 1	7/28/10	<5	274	4,050	0.89	3.98	591	667	184	67.9	1730	7,250	---	<5
	02/16/11	<2.0	228	3,360	0.881	0.812	2,450	538	156	63.3	1,470	8,320	---	<2.0
	8/18/11	<5.0	319	3,370	1.04	5.10	643	401	98.9	48.6	1,310	5,170	---	<5.0
	2/22/12	<5.00	324	2,800	1.19	5.63	502	365	99.8	48.6	1,280	6,860	---	<5.00
	08/29/12	<5.00	323	2,670	1.14	2.96	524	304	90.8	44.3	1,270	5,940	---	<5.00
	02/21/13	<6.00	359	1,750	1.08	4.43	498	323	86.7	36.3	1,120	4,020	---	<6.00
	08/13/13	<6.00	342	1,710	1.44	4.09	525	295	86.2	35.7	1,110	3,200	---	<6.00

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
RW-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
	02/18/03	<0.1	300	1,150	---	---	316	79.7	25.7	53	721	2,690	---	<0.10
	06/02/03	<1.0	276	1,500	2.05	5.34	275	194	67.21	40.8	923	4,070	---	<1.00
	08/25/03	<1.0	298	1,190	2.01	6.15	278	117	32.7	46.1	705	2,940	---	<1.00
	11/07/03	<1.0	298	1,300	2.13	5.56	266	166	48.1	51.7	106	3,240	---	<1.00
	02/05/04	<1.0	292	1,270	2.22	5.92	246	148	44.7	53.8	704	2,780	---	<1.00
	05/06/04	<1.00	310	1,100	<3.00	6.62	235	104	28.3	53.8	635	2,840	---	<1.00
Dup	05/06/04	<1.00	288	1,040	<3.00	6.64	243	90	24.1	44.5	642	2,705	---	<1.00
	08/04/04	<0.1	284	1,120	---	---	290	44.8	33	86.9	785	2,250	---	<0.10
Dup	08/04/04	<0.1	288	1,130	---	---	274	45	31.6	84	961	2,550	---	<0.10
	02/11/05	<1.00	262	1,730	3.59	8.93	217	172	51.5	84	910	3,995	---	<1.00
Dup	02/11/05	<1.00	268	1,690	2	8.59	224	159	46.4	81	813	3,170	---	<1.00
	08/04/05	<1.00	252	2,470	1.26	5.8	188	262	76.1	87.5	1,090	5,120	---	<1.00
	02/23/06	<10.0	290	2,400	<2.5	8.9	350	234	67.6	70.4	762	4,680	---	<10.0
	08/25/06	<10	290	2,300	<5	4.41	440	281	77.3	68.5	1,040	5,610	-	<10.0
Dup	08/25/06	<10.0	300	2,300	<5	4.6	450	272	77.3	67.1	1,030	5,570	-	<10.0
	02/28/07	<10	300	3,100	<0.5	3.5	590	353	97.7	82.2	848	7,400	---	<10
Dup	02/28/07	<10	290	3,200	<0.5	3.5	600	416	115	83.4	878	7,280	---	<10
	08/21/07	<10	265	4,100	0.30	3.54	620.0	656	193	72.6	1,640	11,300	---	265
Dup	08/21/07	<10	263	4,100	0.10	3.38	600.0	655	192	72.5	1,630	11,400	---	263
	2/20/08	<5	473	5,130	0.56	6.8	677	892	255	126	1,810	11,000	---	<5
Dup	2/20/08	<5	231	5,120	0.55	6.78	674	888	252	126	1,800	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
	02/20/09	<5	260	4,600	0.69	1.40	690	680	200	84.0	1700	11,000	---	<5
Dup	02/20/09	<5	240	4,400	0.65	4.20	630	660	190	83.0	1600	11,000	---	<5
	7/29/09	<5	240	4,300	0.73	3.30	620	650	220	94.0	1700	10,000	---	<5
Dup	7/29/09	<5	240	4,200	0.72	3.70	600	640	220	95.0	1700	9,900	---	<5
	2/25/10	<5	263	4,890	0.34	4.28	650	680	180	75.6	1650	8,870	---	<5
	7/28/10	<5	254	2,920	0.77	4.98	455	442	132	59.5	1310	7,200	---	<5
	2/22/12	<5.00	314	2,030	1.03	6.05	449	256	69.0	43.8	1,020	4,860	---	<5.00
Dup 1	02/22/12	<5.00	317	2,080	0.956	5.39	400	239	69.2	43.7	943	4,300	---	<5.00
	08/29/12							NS						
	02/21/13	<6.00	339	1,340	0.942	5.18	411	172	48.2	36.8	876	3,120	---	<6.00
DUP-2	02/21/13	<6.00	341	1,340	0.925	5.15	432	172	46.9	34.8	827	3,110	---	<6.00
	08/14/13	<6.00	298	1,170	1.22	4.52	389	127	34.6	30.8	724	2,400	---	<6.00

TABLE 2

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)
NMWQCC Standard (mg/L)				*250.0*	*1.6*	*10.0*	*600.0*	---	---	---	---	*1,000.0*	---	---
DUP-1	08/14/13	<6.00	**311**	**1,230**	**1.36**	**4.79**	**416**	**126**	**35.5**	**31.1**	**704**	**2,480**	---	<6.00
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
	02/18/03	<0.1	**152**	**115**	---	---	**137**	**53.8**	**22.1**	**6.38**	**93.5**	**601**	---	<0.10
	06/02/03	<1.0	**154**	**127**	**1.69**	**3.77**	**119**	**59.5**	**24.1**	**7.14**	**118**	**621**	---	<1.00
	08/25/03	<1.0	**148**	**136**	**1.7**	**3.72**	**111**	**63**	**24**	**8.43**	**104**	**652**	---	<1.00
	11/07/03	<1.0	**156**	**149**	**1.8**	**3.62**	**111**	**62.3**	**24.4**	**8.3**	**95.5**	**669**	---	<1.00
	02/04/04	<1.0	**156**	**185**	**1.81**	**3.79**	**102**	**68.2**	**25.5**	**8.7**	**92.4**	**709**	---	<1.00
	05/05/04	<1.00	**148**	**204**	**1.54**	**3.48**	**99.7**	**71.9**	**26.5**	**8.25**	**120**	**695**	---	<1.00
	08/04/04	<0.1	**132**	**222**	---	---	**114**	**92.3**	**37.9**	**9.89**	**139**	**471**	---	<0.10
	08/04/05							NS						
	02/23/06							NS						
	03/01/07	<10	**130**	**360**	**1.50**	**3.20**	**77.0**	**101**	**30.7**	**5.9**	**103**	**1,060**	---	<10
	08/21/07							NS						
	2/21/08	<5	**106**	**461**	**1.22**	**2.9**	**84.4**	**112**	**41.4**	**6.82**	**118**	**1,310**	---	<5
	8/12/08							NS						
	02/20/09	<5	**150**	**320**	**1.30**	**2.80**	**100**	**97.0**	**33.0**	**6.4**	**110**	**1,100**	---	<5
	7/29/09							NS						
	2/24/10	<5	**128**	**246**	**1.23**	**2.89**	**115**	**80.10**	**27.20**	**4.93**	**107**	**804**	---	<5
	7/28/10							NS						
	2/16/11	<2.0	**127**	**232**	**1.21**	**2.80**	**232**	**83.3**	**26.8**	**5.40**	**101**	**822**	---	<2.0
	8/18/11							NS						
	2/22/12	<5.00	**163**	**229**	**1.40**	**2.92**	**103**	**81.0**	**27.0**	**5.51**	**102**	**834**	---	<5.00
	8/29/12	<5.00	**166**	**213**	**1.42**	**1.63**	**119**	**87.6**	**28.3**	**5.34**	**118**	**756**	---	<5.00
	2/20/13	<6.00	**165**	**218**	**1.16**	**2.55**	**134**	**83.0**	**28.6**	**5.58**	**108**	**724**	---	<6.00
	8/14/13	<6.00	**157**	**231**	**1.28**	**2.60**	**146**	**92.3**	**31.8**	**6.22**	**119**	**840**		<6.00

Notes

1. mg/L: Milligrams per liter
2. <: Concentration below test method detectin limit
3. - -: No data available
4. NS: Not Sampled
5. RW: Recovery well
6. WW: Water well
7. Highlight: Result exceeds NMWQCC standard
8. **Bold** indicates laboratory detection
9. B: This Qualifier indicates that the analyte is an estimated value between the RL and the MDL
10. All analyses prior to 10/14/02 conducted by TraceAnalysis, Inc., Lubbock, TX
11. Analyses from 10/14/02 conducted by Environmental Lab of Texas, Odessa, TX
12. Analyses from 5/30/03 through 08/2005 conducted by Trace Analysis Inc., Lubbock, TX
13. Analyses from 02/2006 through 08/2007, conducted by Pace Analytical, St. Rose, LA and Greenbay, WI Laboratories
14. Analyses from 02/2008 through 08/2009, conducted by Test America, Houston, TX
15. Analyses from 02/2010 and following, conducted by ALS Environmental, Houston, TX

Appendices

Appendix A
Certified Laboratory Reports and Chain of Custody Documentation

28-Feb-2013

Chris Knight
Conestoga Rovers & Associates
13091 Pond Springs Road, Suite A100
Austin, Texas 78729

Tel: (512) 506-8803
Fax:

Re: G L Erwin - 039124-002 Work Order: **1302672**

Dear Chris,

ALS Environmental received 16 samples on 21-Feb-2013 09:15 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 33.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Jumoke M. Lawal

John M. Cady
Project Manager

Certificate No: T104704231-12-10

ALS Environmental

Date: 28-Feb-13

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Work Order: **1302672**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1302672-01	MW23 022013	Water		2/20/2013 09:35	2/21/2013 09:15	☐
1302672-02	MW24 022013	Water		2/20/2013 10:05	2/21/2013 09:15	☐
1302672-03	MW21 022013	Water		2/20/2013 10:30	2/21/2013 09:15	☐
1302672-04	MW19 022013	Water		2/20/2013 10:50	2/21/2013 09:15	☐
1302672-05	MW14 022013	Water		2/20/2013 11:10	2/21/2013 09:15	☐
1302672-06	MW12 022013	Water		2/20/2013 11:35	2/21/2013 09:15	☐
1302672-07	MW15 022013	Water		2/20/2013 11:55	2/21/2013 09:15	☐
1302672-08	MW20 022013	Water		2/20/2013 12:20	2/21/2013 09:15	☐
1302672-09	MW13 022013	Water		2/20/2013 12:40	2/21/2013 09:15	☐
1302672-10	MW17 022013	Water		2/20/2013 12:55	2/21/2013 09:15	☐
1302672-11	DUP1 022013	Water		2/20/2013	2/21/2013 09:15	☐
1302672-12	MW16 022013	Water		2/20/2013 13:10	2/21/2013 09:15	☐
1302672-13	MW8 022013	Water		2/20/2013 13:30	2/21/2013 09:15	☐
1302672-14	MW11 022013	Water		2/20/2013 13:55	2/21/2013 09:15	☐
1302672-15	MW25 022013	Water		2/20/2013 14:15	2/21/2013 09:15	☐
1302672-16	WW1 022013	Water		2/20/2013 14:45	2/21/2013 09:15	☐

Client:	Conestoga Rovers & Associates
Project:	G L Erwin - 039124-002
Work Order:	1302672

Case Narrative

Batch 68015, Method 6020 (Dissolve): Ca, Mg, and Na recovered below acceptable QC limits in the MS and the MSD. The LCS passed.

Batch 68057, Method 6020 (Dissolve): Ca recovered below acceptable limits in the MS. Mg, K, and Na were above acceptable limits in the MSD. Ca and Na recovered above acceptable limits in the MSD. The LCS passed. The MS and MSD were analyzed on an unrelated sample.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW23 022013
Collection Date: 2/20/2013 09:35 AM

Work Order: 1302672
Lab ID: 1302672-01
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/22/13		Analyst: **ALR**
Calcium	**146**		**0.17**	**1.00**	**mg/L**	2	2/26/2013 22:36
Magnesium	**52.8**		**0.16**	**0.400**	**mg/L**	2	2/26/2013 22:36
Potassium	**8.12**		**0.17**	**0.400**	**mg/L**	2	2/26/2013 22:36
Sodium	**107**		**0.17**	**0.400**	**mg/L**	2	2/26/2013 22:36
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**490**		**2.0**	**5.00**	**mg/L**	10	2/26/2013 19:05
Fluoride	**1.10**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 16:08
Nitrogen, Nitrate (As N)	**0.518**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 16:08
Sulfate	**96.5**		**0.20**	**0.500**	**mg/L**	1	2/21/2013 16:08
Surr: Selenate (surr)	*104*			*85-115*	*%REC*	1	2/21/2013 16:08
Surr: Selenate (surr)	*89.3*			*85-115*	*%REC*	10	2/26/2013 19:05
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**121**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:12
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:12
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:12
Alkalinity, Total (As CaCO3)	**121**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:12
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,330**		**5.0**	**10.0**	**mg/L**	1	2/25/2013 18:15

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW24 022013
Collection Date: 2/20/2013 10:05 AM

Work Order: 1302672
Lab ID: 1302672-02
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/22/13		Analyst: **ALR**
Calcium	**826**		**0.86**	**5.00**	**mg/L**	10	2/27/2013 12:49
Magnesium	**233**		**0.16**	**0.400**	**mg/L**	2	2/26/2013 22:41
Potassium	**22.7**		**0.17**	**0.400**	**mg/L**	2	2/26/2013 22:41
Sodium	**263**		**0.17**	**0.400**	**mg/L**	2	2/26/2013 22:41
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**2,500**		**20**	**50.0**	**mg/L**	100	2/26/2013 19:19
Fluoride	**0.985**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 16:30
Nitrogen, Nitrate (As N)	**3.41**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 16:30
Sulfate	**277**		**20**	**50.0**	**mg/L**	100	2/26/2013 19:19
Surr: Selenate (surr)	*108*			*85-115*	*%REC*	1	2/21/2013 16:30
Surr: Selenate (surr)	*90.5*			*85-115*	*%REC*	100	2/26/2013 19:19
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**97.4**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:22
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:22
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:22
Alkalinity, Total (As CaCO3)	**97.4**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:22
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**4,780**		**5.0**	**10.0**	**mg/L**	1	2/25/2013 18:15

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW21 022013
Collection Date: 2/20/2013 10:30 AM

Work Order: 1302672
Lab ID: 1302672-03
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/22/13		Analyst: **ALR**
Calcium	**90.6**		**0.17**	**1.00**	**mg/L**	2	2/26/2013 22:46
Magnesium	**29.4**		**0.16**	**0.400**	**mg/L**	2	2/26/2013 22:46
Potassium	**8.11**		**0.17**	**0.400**	**mg/L**	2	2/26/2013 22:46
Sodium	**83.6**		**0.17**	**0.400**	**mg/L**	2	2/26/2013 22:46
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**182**		**2.0**	**5.00**	**mg/L**	10	2/26/2013 19:34
Fluoride	**1.98**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 17:13
Nitrogen, Nitrate (As N)	**4.77**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 17:13
Sulfate	**121**		**2.0**	**5.00**	**mg/L**	10	2/26/2013 19:34
Surr: Selenate (surr)	*107*			*85-115*	*%REC*	1	2/21/2013 17:13
Surr: Selenate (surr)	*88.6*			*85-115*	*%REC*	10	2/26/2013 19:34
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**181**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:28
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:28
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:28
Alkalinity, Total (As CaCO3)	**181**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:28
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**700**		**5.0**	**10.0**	**mg/L**	1	2/25/2013 18:15

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW19 022013
Collection Date: 2/20/2013 10:50 AM

Work Order: 1302672
Lab ID: 1302672-04
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/22/13		Analyst: **ALR**
Calcium	**1,130**		**0.86**	**5.00**	**mg/L**	10	2/27/2013 12:54
Magnesium	**344**		**0.82**	**2.00**	**mg/L**	10	2/27/2013 12:54
Potassium	**27.1**		**0.17**	**0.400**	**mg/L**	2	2/26/2013 22:51
Sodium	**673**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 12:54
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**4,310**		**20**	**50.0**	**mg/L**	100	2/26/2013 19:48
Fluoride	**0.695**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 17:35
Nitrogen, Nitrate (As N)	**3.76**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 17:35
Sulfate	**424**		**20**	**50.0**	**mg/L**	100	2/26/2013 19:48
Surr: Selenate (surr)	*101*			*85-115*	*%REC*	1	2/21/2013 17:35
Surr: Selenate (surr)	*91.6*			*85-115*	*%REC*	100	2/26/2013 19:48
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**94.0**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:33
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:33
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:33
Alkalinity, Total (As CaCO3)	**94.0**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:33
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**7,740**		**5.0**	**10.0**	**mg/L**	1	2/25/2013 18:15

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW14 022013
Collection Date: 2/20/2013 11:10 AM

Work Order: 1302672
Lab ID: 1302672-05
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/22/13		Analyst: **ALR**
Calcium	**1,470**		**1.7**	**10.0**	**mg/L**	20	2/27/2013 12:59
Magnesium	**368**		**1.6**	**4.00**	**mg/L**	20	2/27/2013 12:59
Potassium	**28.0**		**0.17**	**0.400**	**mg/L**	2	2/26/2013 22:56
Sodium	**2,370**		**1.7**	**4.00**	**mg/L**	20	2/27/2013 12:59
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**8,420**		**20**	**50.0**	**mg/L**	100	2/26/2013 20:03
Fluoride	**0.738**		**0.25**	**0.500**	**mg/L**	5	2/22/2013 10:33
Nitrogen, Nitrate (As N)	**3.76**		**0.15**	**0.500**	**mg/L**	5	2/22/2013 10:33
Sulfate	**819**		**20**	**50.0**	**mg/L**	100	2/26/2013 20:03
Surr: Selenate (surr)	*104*			*85-115*	*%REC*	5	2/22/2013 10:33
Surr: Selenate (surr)	*90.9*			*85-115*	*%REC*	100	2/26/2013 20:03
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**103**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:37
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:37
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:37
Alkalinity, Total (As CaCO3)	**103**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:37
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**14,300**		**5.0**	**10.0**	**mg/L**	1	2/25/2013 18:15

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW12 022013
Collection Date: 2/20/2013 11:35 AM

Work Order: 1302672
Lab ID: 1302672-06
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/22/13		Analyst: **ALR**
Calcium	**658**		**0.86**	**5.00**	**mg/L**	10	2/27/2013 12:19
Magnesium	**204**		**0.16**	**0.400**	**mg/L**	2	2/26/2013 19:14
Potassium	**12.9**		**0.17**	**0.400**	**mg/L**	2	2/26/2013 19:14
Sodium	**186**		**0.17**	**0.400**	**mg/L**	2	2/26/2013 19:14
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**2,060**		**20**	**50.0**	**mg/L**	100	2/26/2013 20:18
Fluoride	**0.774**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 18:18
Nitrogen, Nitrate (As N)	**3.81**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 18:18
Sulfate	**59.0**		**0.20**	**0.500**	**mg/L**	1	2/21/2013 18:18
Surr: Selenate (surr)	*107*			*85-115*	*%REC*	1	2/21/2013 18:18
Surr: Selenate (surr)	*89.2*			*85-115*	*%REC*	100	2/26/2013 20:18
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**88.2**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:42
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:42
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:42
Alkalinity, Total (As CaCO3)	**88.2**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:42
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**3,790**		**5.0**	**10.0**	**mg/L**	1	2/25/2013 18:15

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW15 022013
Collection Date: 2/20/2013 11:55 AM

Work Order: 1302672
Lab ID: 1302672-07
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**330**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 00:42
Magnesium	**117**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 00:42
Potassium	**12.1**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 00:42
Sodium	**135**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 00:42
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**1,170**		**20**	**50.0**	**mg/L**	100	2/26/2013 20:32
Fluoride	**1.04**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 18:40
Nitrogen, Nitrate (As N)	**2.65**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 18:40
Sulfate	**86.3**		**0.20**	**0.500**	**mg/L**	1	2/21/2013 18:40
Surr: Selenate (surr)	*106*			*85-115*	*%REC*	1	2/21/2013 18:40
Surr: Selenate (surr)	*94.9*			*85-115*	*%REC*	100	2/26/2013 20:32
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**101**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:48
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:48
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:48
Alkalinity, Total (As CaCO3)	**101**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:48
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**2,790**		**5.0**	**10.0**	**mg/L**	1	2/25/2013 18:15

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW20 022013
Collection Date: 2/20/2013 12:20 PM

Work Order: 1302672
Lab ID: 1302672-08
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**445**		**0.86**	**5.00**	**mg/L**	10	2/27/2013 15:20
Magnesium	**143**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 00:57
Potassium	**13.5**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 00:57
Sodium	**275**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 00:57
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**1,670**		**10**	**25.0**	**mg/L**	50	2/26/2013 21:16
Fluoride	**0.993**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 19:02
Nitrogen, Nitrate (As N)	**3.78**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 19:02
Sulfate	**138**		**10**	**25.0**	**mg/L**	50	2/26/2013 21:16
Surr: Selenate (surr)	*105*			*85-115*	*%REC*	1	2/21/2013 19:02
Surr: Selenate (surr)	*93.1*			*85-115*	*%REC*	50	2/26/2013 21:16
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**106**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:53
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:53
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:53
Alkalinity, Total (As CaCO3)	**106**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:53
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**3,680**		**5.0**	**10.0**	**mg/L**	1	2/25/2013 18:15

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW13 022013
Collection Date: 2/20/2013 12:40 PM

Work Order: 1302672
Lab ID: 1302672-09
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**428**		**0.86**	**5.00**	**mg/L**	10	2/27/2013 15:25
Magnesium	**139**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 01:02
Potassium	**13.4**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 01:02
Sodium	**165**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 01:02
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**1,400**		**10**	**25.0**	**mg/L**	50	2/26/2013 21:30
Fluoride	**1.26**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 20:07
Nitrogen, Nitrate (As N)	**3.78**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 20:07
Sulfate	**150**		**10**	**25.0**	**mg/L**	50	2/26/2013 21:30
Surr: Selenate (surr)	*102*			*85-115*	*%REC*	1	2/21/2013 20:07
Surr: Selenate (surr)	*90.4*			*85-115*	*%REC*	50	2/26/2013 21:30
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**113**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:58
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:58
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 14:58
Alkalinity, Total (As CaCO3)	**113**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 14:58
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**3,300**		**5.0**	**10.0**	**mg/L**	1	2/25/2013 18:15

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW17 022013
Collection Date: 2/20/2013 12:55 PM

Work Order: 1302672
Lab ID: 1302672-10
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**153**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 01:07
Magnesium	**50.4**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 01:07
Potassium	**6.09**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 01:07
Sodium	**160**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 01:07
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**511**		**2.0**	**5.00**	**mg/L**	10	2/26/2013 21:45
Fluoride	**1.75**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 20:29
Nitrogen, Nitrate (As N)	**3.33**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 20:29
Sulfate	**130**		**2.0**	**5.00**	**mg/L**	10	2/26/2013 21:45
Surr: Selenate (surr)	*108*			*85-115*	*%REC*	1	2/21/2013 20:29
Surr: Selenate (surr)	*94.4*			*85-115*	*%REC*	10	2/26/2013 21:45
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**192**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:04
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:04
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:04
Alkalinity, Total (As CaCO3)	**192**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:04
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,280**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: DUP1 022013
Collection Date: 2/20/2013

Work Order: 1302672
Lab ID: 1302672-11
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**806**		**0.86**	**5.00**	**mg/L**	10	2/27/2013 15:30
Magnesium	**224**		**0.82**	**2.00**	**mg/L**	10	2/27/2013 15:30
Potassium	**22.9**		**0.84**	**2.00**	**mg/L**	10	2/27/2013 15:30
Sodium	**253**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 15:30
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**2,500**		**20**	**50.0**	**mg/L**	100	2/26/2013 21:59
Fluoride	**0.983**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 16:52
Nitrogen, Nitrate (As N)	**3.42**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 16:52
Sulfate	**281**		**20**	**50.0**	**mg/L**	100	2/26/2013 21:59
Surr: Selenate (surr)	*101*			*85-115*	*%REC*	1	2/21/2013 16:52
Surr: Selenate (surr)	*93.2*			*85-115*	*%REC*	100	2/26/2013 21:59
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**97.7**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:09
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:09
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:09
Alkalinity, Total (As CaCO3)	**97.7**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:09
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**4,940**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW16 022013
Collection Date: 2/20/2013 01:10 PM

Work Order: 1302672
Lab ID: 1302672-12
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**207**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 01:17
Magnesium	**67.8**		**0.41**	**1.00**	**mg/L**	5	2/27/2013 15:35
Potassium	**6.99**		**0.42**	**1.00**	**mg/L**	5	2/27/2013 15:35
Sodium	**304**		**0.42**	**1.00**	**mg/L**	5	2/27/2013 15:35
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**816**		**2.0**	**5.00**	**mg/L**	10	2/26/2013 22:14
Fluoride	**1.15**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 20:50
Nitrogen, Nitrate (As N)	**5.42**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 20:50
Sulfate	**159**		**2.0**	**5.00**	**mg/L**	10	2/26/2013 22:14
Surr: Selenate (surr)	*104*			*85-115*	*%REC*	1	2/21/2013 20:50
Surr: Selenate (surr)	*91.0*			*85-115*	*%REC*	10	2/26/2013 22:14
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**238**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:14
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:14
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:14
Alkalinity, Total (As CaCO3)	**238**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:14
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,900**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW8 022013
Collection Date: 2/20/2013 01:30 PM

Work Order: 1302672
Lab ID: 1302672-13
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**46.6**		**0.43**	**2.50**	**mg/L**	5	2/27/2013 15:40
Magnesium	**15.0**		**0.41**	**1.00**	**mg/L**	5	2/27/2013 15:40
Potassium	**4.66**		**0.42**	**1.00**	**mg/L**	5	2/27/2013 15:40
Sodium	**443**		**0.42**	**1.00**	**mg/L**	5	2/27/2013 15:40
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**643**		**2.0**	**5.00**	**mg/L**	10	2/26/2013 22:28
Fluoride	**3.17**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 21:12
Nitrogen, Nitrate (As N)	**7.01**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 21:12
Sulfate	**203**		**2.0**	**5.00**	**mg/L**	10	2/26/2013 22:28
Surr: Selenate (surr)	*101*			*85-115*	*%REC*	1	2/21/2013 21:12
Surr: Selenate (surr)	*93.2*			*85-115*	*%REC*	10	2/26/2013 22:28
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**271**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:20
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:20
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:20
Alkalinity, Total (As CaCO3)	**271**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:20
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,590**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW11 022013
Collection Date: 2/20/2013 01:55 PM

Work Order: 1302672
Lab ID: 1302672-14
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**711**		**0.86**	**5.00**	**mg/L**	10	2/27/2013 15:45
Magnesium	**208**		**0.82**	**2.00**	**mg/L**	10	2/27/2013 15:45
Potassium	**13.2**		**0.84**	**2.00**	**mg/L**	10	2/27/2013 15:45
Sodium	**502**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 15:45
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**2,540**		**10**	**25.0**	**mg/L**	50	2/26/2013 22:43
Fluoride	**0.518**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 21:34
Nitrogen, Nitrate (As N)	**3.20**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 21:34
Sulfate	**137**		**10**	**25.0**	**mg/L**	50	2/26/2013 22:43
Surr: Selenate (surr)	*101*			*85-115*	*%REC*	1	2/21/2013 21:34
Surr: Selenate (surr)	*90.9*			*85-115*	*%REC*	50	2/26/2013 22:43
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**128**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:25
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:25
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:25
Alkalinity, Total (As CaCO3)	**128**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:25
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**5,420**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW25 022013
Collection Date: 2/20/2013 02:15 PM

Work Order: 1302672
Lab ID: 1302672-15
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**864**		**0.86**	**5.00**	**mg/L**	10	2/27/2013 15:51
Magnesium	**258**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 02:58
Potassium	**18.5**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 02:58
Sodium	**1,210**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 15:51
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**4,490**		**10**	**25.0**	**mg/L**	50	2/26/2013 22:58
Fluoride	**0.461**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 21:55
Nitrogen, Nitrate (As N)	**3.66**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 21:55
Sulfate	**282**		**10**	**25.0**	**mg/L**	50	2/26/2013 22:58
Surr: Selenate (surr)	*97.5*			*85-115*	*%REC*	1	2/21/2013 21:55
Surr: Selenate (surr)	*93.0*			*85-115*	*%REC*	50	2/26/2013 22:58
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**160**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:30
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:30
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:30
Alkalinity, Total (As CaCO3)	**160**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:30
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**8,160**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: WW1 022013
Collection Date: 2/20/2013 02:45 PM

Work Order: 1302672
Lab ID: 1302672-16
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**83.0**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 03:03
Magnesium	**28.6**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 03:03
Potassium	**5.58**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 03:03
Sodium	**108**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 03:03
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**218**		**2.0**	**5.00**	**mg/L**	10	2/26/2013 23:12
Fluoride	**1.16**		**0.050**	**0.100**	**mg/L**	1	2/21/2013 22:17
Nitrogen, Nitrate (As N)	**2.55**		**0.030**	**0.100**	**mg/L**	1	2/21/2013 22:17
Sulfate	**134**		**2.0**	**5.00**	**mg/L**	10	2/26/2013 23:12
Surr: Selenate (surr)	*105*			*85-115*	*%REC*	1	2/21/2013 22:17
Surr: Selenate (surr)	*91.6*			*85-115*	*%REC*	10	2/26/2013 23:12
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**165**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:35
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:35
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 15:35
Alkalinity, Total (As CaCO3)	**165**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 15:35
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**724**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **68015** Instrument ID **ICP7500** Method: **SW6020** **(Dissolve)**

MBLK Sample ID: **MBLKW3-022213-68015** Units: **mg/L** Analysis Date: **2/26/2013 07:04 PM**

Client ID: Run ID: **ICP7500_130226A** SeqNo: **3124907** Prep Date: **2/22/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	U	0.50								
Magnesium	U	0.20								
Potassium	U	0.20								
Sodium	U	0.20								

LCS Sample ID: **MLCSW3-022213-68015** Units: **mg/L** Analysis Date: **2/26/2013 07:09 PM**

Client ID: Run ID: **ICP7500_130226A** SeqNo: **3124908** Prep Date: **2/22/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	5.096	0.50	5	0	102	80-120	0			
Magnesium	5.004	0.20	5	0	100	80-120	0			
Potassium	5.044	0.20	5	0	101	80-120	0			
Sodium	5.01	0.20	5	0	100	80-120	0			

MS Sample ID: **1302672-06AMS** Units: **mg/L** Analysis Date: **2/26/2013 07:29 PM**

Client ID: **MW12 022013** Run ID: **ICP7500_130226A** SeqNo: **3124912** Prep Date: **2/22/2013** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	605.8	1.0	5	646.6	-816	75-125	0			SEO
Magnesium	198.3	0.40	5	204.2	-118	75-125	0			SO
Potassium	17.57	0.40	5	12.93	92.9	75-125	0			
Sodium	181.7	0.40	5	186.3	-90.4	75-125	0			SO

MSD Sample ID: **1302672-06AMSD** Units: **mg/L** Analysis Date: **2/26/2013 07:34 PM**

Client ID: **MW12 022013** Run ID: **ICP7500_130226A** SeqNo: **3124913** Prep Date: **2/22/2013** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	624.4	1.0	5	646.6	-444	75-125	605.8	3.02	25	SEO
Magnesium	201.2	0.40	5	204.2	-60	75-125	198.3	1.46	25	SO
Potassium	17.82	0.40	5	12.93	97.8	75-125	17.57	1.39	25	
Sodium	184.8	0.40	5	186.3	-30	75-125	181.7	1.65	25	SO

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302672
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **68015** Instrument ID **ICP7500** Method: **SW6020** **(Dissolve)**

DUP Sample ID: **1302672-06ADUP** Units: **mg/L** Analysis Date: **2/26/2013 07:19 PM**
Client ID: **MW12 022013** Run ID: **ICP7500_130226A** SeqNo: **3124910** Prep Date: **2/22/2013** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Magnesium	202.6	0.40	0	0	0	0-0	204.2	0.787	25	
Potassium	13.2	0.40	0	0	0	0-0	12.93	2.07	25	
Sodium	186	0.40	0	0	0	0-0	186.3	0.118	25	

DUP Sample ID: **1302672-06ADUP** Units: **mg/L** Analysis Date: **2/27/2013 12:24 PM**
Client ID: **MW12 022013** Run ID: **ICP7500_130227A** SeqNo: **3125770** Prep Date: **2/22/2013** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	653.1	5.0	0	0	0	0-0	658.5	0.823	25	

The following samples were analyzed in this batch:

1302672-01A	1302672-02A	1302672-03A
1302672-04A	1302672-05A	1302672-06A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302672
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **68057** Instrument ID **ICP7500** Method: **SW6020** **(Dissolve)**

MBLK Sample ID: **MBLKW5-022513-68057** Units: **mg/L** Analysis Date: **2/26/2013 11:11 PM**
Client ID: Run ID: **ICP7500_130226A** SeqNo: **3125199** Prep Date: **2/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	U	0.50								
Magnesium	U	0.20								
Potassium	U	0.20								
Sodium	U	0.20								

LCS Sample ID: **MLCSW5-022513-68057** Units: **mg/L** Analysis Date: **2/26/2013 11:16 PM**
Client ID: Run ID: **ICP7500_130226A** SeqNo: **3125202** Prep Date: **2/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	5.001	0.50	5	0	100	80-120	0			
Magnesium	5.068	0.20	5	0	101	80-120	0			
Potassium	5.087	0.20	5	0	102	80-120	0			
Sodium	5.109	0.20	5	0	102	80-120	0			

MS Sample ID: **1302744-01AMS** Units: **mg/L** Analysis Date: **2/26/2013 11:36 PM**
Client ID: Run ID: **ICP7500_130226A** SeqNo: **3125210** Prep Date: **2/25/2013** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	175.6	1.0	5	171.9	72.4	75-125	0			SO
Magnesium	57.82	0.40	5	48.22	192	75-125	0			SO
Potassium	44.66	0.40	5	36.76	158	75-125	0			SO
Sodium	971.8	0.40	5	875.8	1920	75-125	0			SEO

MSD Sample ID: **1302744-01AMSD** Units: **mg/L** Analysis Date: **2/26/2013 11:42 PM**
Client ID: Run ID: **ICP7500_130226A** SeqNo: **3125211** Prep Date: **2/25/2013** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	179.6	1.0	5	171.9	154	75-125	175.6	2.3	25	SO
Magnesium	53.06	0.40	5	48.22	96.8	75-125	57.82	8.59	25	O
Potassium	41.34	0.40	5	36.76	91.6	75-125	44.66	7.72	25	O
Sodium	888.6	0.40	5	875.8	256	75-125	971.8	8.94	25	SEO

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302672
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **68057** Instrument ID **ICP7500** Method: **SW6020** **(Dissolve)**

DUP Sample ID: **1302744-01ADUP** Units: **mg/L** Analysis Date: **2/26/2013 11:26 PM**
Client ID: Run ID: **ICP7500_130226A** SeqNo: **3125206** Prep Date: **2/25/2013** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	172.8	1.0	0	0	0	0-0	171.9	0.511	25	
Magnesium	47.34	0.40	0	0	0	0-0	48.22	1.84	25	
Potassium	36.08	0.40	0	0	0	0-0	36.76	1.87	25	

DUP Sample ID: **1302744-01ADUP** Units: **mg/L** Analysis Date: **2/27/2013 02:40 PM**
Client ID: Run ID: **ICP7500_130227A** SeqNo: **3125884** Prep Date: **2/25/2013** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium	886.2	2.0	0	0	0	0-0	876.5	1.1	25	

The following samples were analyzed in this batch:

1302672-07A	1302672-08A	1302672-09A
1302672-10A	1302672-11A	1302672-12A
1302672-13A	1302672-14A	1302672-15A
1302672-16A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302672
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R143131** Instrument ID **ICS3K2** Method: **E300** **(Dissolve)**

MBLK Sample ID: **WBLKW1-R143131** Units: **mg/L** Analysis Date: **2/21/2013 03:25 PM**
Client ID: Run ID: **ICS3K2_130221A** SeqNo: **3121403** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	U	0.10								
Nitrogen, Nitrate (As N)	U	0.10								
Sulfate	U	0.50								
Surr: Selenate (surr)	5.017	0.10	*5*	0	*100*	*85-115*	0			

LCS Sample ID: **WLCSW1-R143131** Units: **mg/L** Analysis Date: **2/21/2013 03:46 PM**
Client ID: Run ID: **ICS3K2_130221A** SeqNo: **3121405** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	3.806	0.10	4	0	95.2	90-110	0			
Nitrogen, Nitrate (As N)	3.812	0.10	4	0	95.3	90-110	0			
Sulfate	19.54	0.50	20	0	97.7	90-110	0			
Surr: Selenate (surr)	5.184	0.10	*5*	0	*104*	*85-115*	0			

MS Sample ID: **1302674-09CMS** Units: **mg/L** Analysis Date: **2/22/2013 12:49 AM**
Client ID: Run ID: **ICS3K2_130221A** SeqNo: **3121437** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	2.467	0.10	2	0.488	99	80-120	0			
Nitrogen, Nitrate (As N)	2.011	0.10	2	0.003	100	80-120	0			
Sulfate	8.9	0.50	10	0.21	86.9	80-120	0			
Surr: Selenate (surr)	4.752	0.10	*5*	0	*95*	*85-115*	0			

MSD Sample ID: **1302674-09CMSD** Units: **mg/L** Analysis Date: **2/22/2013 01:11 AM**
Client ID: Run ID: **ICS3K2_130221A** SeqNo: **3121438** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	2.426	0.10	2	0.488	96.9	80-120	2.467	1.68	20	
Nitrogen, Nitrate (As N)	1.735	0.10	2	0.003	86.6	80-120	2.011	14.7	20	
Sulfate	8.704	0.50	10	0.21	84.9	80-120	8.9	2.23	20	
Surr: Selenate (surr)	4.684	0.10	*5*	0	*93.7*	*85-115*	4.752	*1.44*	*20*	

The following samples were analyzed in this batch:

1302672-01B	1302672-02B	1302672-03B
1302672-04B	1302672-05B	1302672-06B
1302672-07B	1302672-08B	1302672-09B
1302672-10B	1302672-11B	1302672-12B
1302672-13B	1302672-14B	1302672-15B
1302672-16B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302672
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R143170** Instrument ID **ManTech01** Method: **SM2320B** **(Dissolve)**

MBLK Sample ID: **WBLKW2-130223-R143170** Units: **mg/L** Analysis Date: **2/23/2013 02:00 PM**
Client ID: Run ID: **MANTECH01_130223C** SeqNo: **3122050** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	U	6.0								
Alkalinity, Carbonate (As CaCO3)	U	6.0								
Alkalinity, Hydroxide (As CaCO3)	U	6.0								
Alkalinity, Total (As CaCO3)	U	6.0								

LCS Sample ID: **WLCSW2-130223-R143170** Units: **mg/L** Analysis Date: **2/23/2013 02:06 PM**
Client ID: Run ID: **MANTECH01_130223C** SeqNo: **3122051** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	1134	6.0	1000	0	113	80-120	0			

DUP Sample ID: **1302672-01BDUP** Units: **mg/L** Analysis Date: **2/23/2013 02:17 PM**
Client ID: **MW23 022013** Run ID: **MANTECH01_130223C** SeqNo: **3122053** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	122.9	6.0	0	0	0	0-0	121.5	1.18	0	
Alkalinity, Carbonate (As CaCO3)	U	6.0	0	0	0	0-0	0	0	0	
Alkalinity, Hydroxide (As CaCO3)	U	6.0	0	0	0	0-0	0	0	0	
Alkalinity, Total (As CaCO3)	122.9	6.0	0	0	0	0-0	121.5	1.18	20	

The following samples were analyzed in this batch:

1302672-01B	1302672-02B	1302672-03B
1302672-04B	1302672-05B	1302672-06B
1302672-07B	1302672-08B	1302672-09B
1302672-10B	1302672-11B	1302672-12B
1302672-13B	1302672-14B	1302672-15B
1302672-16B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302672
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R143233** Instrument ID **ICS3K2** Method: **E300** **(Dissolve)**

MBLK Sample ID: **WBLKW2-R143233** Units: **mg/L** Analysis Date: **2/22/2013 02:38 AM**
Client ID: Run ID: **ICS3K2_130222A** SeqNo: **3123123** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	U	0.10								
Nitrogen, Nitrate (As N)	U	0.10								
Surr: Selenate (surr)	4.904	0.10	*5*	0	*98.1*	*85-115*	0			

LCS Sample ID: **WLCSW2-R143233** Units: **mg/L** Analysis Date: **2/22/2013 02:59 AM**
Client ID: Run ID: **ICS3K2_130222A** SeqNo: **3123124** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	3.825	0.10	4	0	95.6	90-110	0			
Nitrogen, Nitrate (As N)	3.864	0.10	4	0	96.6	90-110	0			
Surr: Selenate (surr)	5.243	0.10	*5*	0	*105*	*85-115*	0			

MS Sample ID: **1302682-01FMS** Units: **mg/L** Analysis Date: **2/22/2013 04:04 AM**
Client ID: Run ID: **ICS3K2_130222A** SeqNo: **3123127** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	2.145	0.10	2	0.292	92.6	80-120	0			
Nitrogen, Nitrate (As N)	2.293	0.10	2	0.367	96.3	80-120	0			
Surr: Selenate (surr)	5.594	0.10	*5*	0	*112*	*85-115*	0			

MSD Sample ID: **1302682-01FMSD** Units: **mg/L** Analysis Date: **2/22/2013 04:26 AM**
Client ID: Run ID: **ICS3K2_130222A** SeqNo: **3123128** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	2.166	0.10	2	0.292	93.7	80-120	2.145	0.974	20	
Nitrogen, Nitrate (As N)	2.305	0.10	2	0.367	96.9	80-120	2.293	0.522	20	
Surr: Selenate (surr)	5.63	0.10	*5*	0	*113*	*85-115*	5.594	*0.641*	*20*	

The following samples were analyzed in this batch: 1302672-05B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302672
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R143352** Instrument ID **Balance1** Method: **M2540C** **(Dissolve)**

MBLK Sample ID: **WBLK-026113-R143352** Units: **mg/L** Analysis Date: **2/26/2013 02:40 PM**
Client ID: Run ID: **BALANCE1_130226D** SeqNo: **3126113** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	U	10								

LCS Sample ID: **WLCS-026113-R143352** Units: **mg/L** Analysis Date: **2/26/2013 02:40 PM**
Client ID: Run ID: **BALANCE1_130226D** SeqNo: **3126114** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	996	10	1000	0	99.6	85-115	0			

DUP Sample ID: **1302672-10BDUP** Units: **mg/L** Analysis Date: **2/26/2013 02:40 PM**
Client ID: **MW17 022013** Run ID: **BALANCE1_130226D** SeqNo: **3126092** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	1272	10	0	0	0	0-0	1282	0.783	20	

DUP Sample ID: **1302744-10BDUP** Units: **mg/L** Analysis Date: **2/26/2013 02:40 PM**
Client ID: Run ID: **BALANCE1_130226D** SeqNo: **3126112** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	3166	10	0	0	0	0-0	3114	1.66	20	

The following samples were analyzed in this batch:

1302672-10B	1302672-11B	1302672-12B
1302672-13B	1302672-14B	1302672-15B
1302672-16B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302672
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R143359** Instrument ID **Balance1** Method: **M2540C** **(Dissolve)**

MBLK Sample ID: **WBLK-025113-R143359** Units: **mg/L** Analysis Date: **2/25/2013 06:15 PM**
Client ID: Run ID: **BALANCE1_130225D** SeqNo: **3127326** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	U	10								

LCS Sample ID: **WLCS-025113-R143359** Units: **mg/L** Analysis Date: **2/25/2013 06:15 PM**
Client ID: Run ID: **BALANCE1_130225D** SeqNo: **3127327** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	1030	10	1000	0	103	85-115	0			

DUP Sample ID: **1302675-02FDUP** Units: **mg/L** Analysis Date: **2/25/2013 06:15 PM**
Client ID: Run ID: **BALANCE1_130225D** SeqNo: **3127325** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	496	10	0	0	0	0-0	496	0	20	

The following samples were analyzed in this batch:

1302672-01B	1302672-02B	1302672-03B
1302672-04B	1302672-05B	1302672-06B
1302672-07B	1302672-08B	1302672-09B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302672
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R143373** Instrument ID **ICS2100** Method: **E300** **(Dissolve)**

MBLK Sample ID: **WBLKW3-R143373** Units: **mg/L** Analysis Date: **2/26/2013 06:21 PM**
Client ID: Run ID: **ICS2100_130227A** SeqNo: **3126475** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.50								
Sulfate	U	0.50								
Surr: Selenate (surr)	4.62	0.10	*5*	0	*92.4*	*85-115*	0			

LCS Sample ID: **WLCSW3-R143373** Units: **mg/L** Analysis Date: **2/26/2013 06:36 PM**
Client ID: Run ID: **ICS2100_130227A** SeqNo: **3126476** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.08	0.50	20	0	95.4	90-110	0			
Sulfate	19.36	0.50	20	0	96.8	90-110	0			
Surr: Selenate (surr)	4.39	0.10	*5*	0	*87.8*	*85-115*	0			

MS Sample ID: **1302672-16BMS** Units: **mg/L** Analysis Date: **2/26/2013 11:27 PM**
Client ID: **WW1 022013** Run ID: **ICS2100_130227A** SeqNo: **3126496** Prep Date: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	319.6	5.0	100	218.4	101	80-120	0			
Sulfate	242.1	5.0	100	134.4	108	80-120	0			
Surr: Selenate (surr)	45.38	1.0	*50*	0	*90.8*	*85-115*	0			

MSD Sample ID: **1302672-16BMSD** Units: **mg/L** Analysis Date: **2/26/2013 11:41 PM**
Client ID: **WW1 022013** Run ID: **ICS2100_130227A** SeqNo: **3126497** Prep Date: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	308	5.0	100	218.4	89.6	80-120	308	0	20	
Sulfate	233	5.0	100	134.4	98.7	80-120	233	0	20	
Surr: Selenate (surr)	43.61	1.0	*50*	0	*87.2*	*85-115*	43.61	*0*	*20*	

The following samples were analyzed in this batch:

1302672-01B	1302672-02B	1302672-03B
1302672-04B	1302672-05B	1302672-06B
1302672-07B	1302672-08B	1302672-09B
1302672-10B	1302672-11B	1302672-12B
1302672-13B	1302672-14B	1302672-15B
1302672-16B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 28-Feb-13

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
WorkOrder: **1302672**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Units Reported	Description
mg/L	Milligrams per Liter

ALS Environmental

Sample Receipt Checklist

Client Name: **CRA - AUSTIN** Date/Time Received: **21-Feb-13 09:15**

Work Order: **1302672** Received by: **JBA**

Checklist completed by Johnnie B. Allen (eSignature) 21-Feb-13 (Date) Reviewed by: John M. Cady (eSignature) 21-Feb-13 (Date)

Matrices: water
Carrier name: FedEx Priority Overnight

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.5 C,2.7 C/uc	IR 1	
Cooler(s)/Kit(s):	2711/4224		
Date/Time sample(s) sent to storage:	2/21/13 10:50		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

ALS Environmental

Cincinnati, OH +1 513 733 5336 | Fort Collins, CO +1 970 490 1511
Everett, WA +1 425 356 2600 | Holland, MI +1 616 399 6070

Chain of Custody Form

Page 1 of 2

COC ID: 75737

1302672

CRA-MID: Conestoga-Rovers & Associates

Project: 039124-002 G.L. Erwin

ALS Project Manager:

Customer Information		Project Information			
Purchase Order		Project Name	G L Erwin	A	Diss
Work Order		Project Number	039124-002	B	Anions (300) Cl, F, SO4, Nitrate
Company Name	Conestoga-Rovers & Associates	Bill To Company	Conestoga Rovers & Associates	C	Alkalinity (SM 2320B) Carbonate,Bicarbonate,Hydroxide,and Total
Send Report To	Todd Wells	Invoice Attn	Chris Knight	D	TDS
Address	2135 S Loop 250 West	Address	13091 Pond Springs Road, Suite A10	E	
				F	
City/State/Zip	Midland, TX 79703	City/State/Zip	Austin, Texas 78729	G	
Phone	(432) 686-0086	Phone	(512) 506-8803	H	
Fax	(432) 686-0186	Fax		I	
e-Mail Address		e-Mail Address	cknight@craworld.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW23022013	2-20-13	935	H2O	none	2	X	X	X	X							
2	MW24022013		1005														
3	MW21 022013		1030														
4	MW19 022013		1050														
5	MW14 022013		1110														
6	MW12 022013		1135														
7	MW15 022013		1155														
8	MW20 022013		1220														
9	MW13 022013		1240														
10	MW17 022013		1255														

COC 336

Sampler(s) Please Print & Sign: Justin Nixon

Shipment Method: Fedex

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ Other ☐ 2 WK Days ☐ 24 Hour

Results Due Date:

Relinquished by:	Date:	Time:	Received by:
Justin Nixon	2-20-13	1815	
Relinquished by:	Date:	Time:	Received by (Laboratory): 2/21/13
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):

Notes: 10 Day TAT.

Cooler ID	Cooler Temp.

QC Package: (Check One Box Below)
- ☑ Level II Std QC
- ☐ Level III Std QC/Raw Data
- ☐ Level IV SW846/CLP
- ☐ Other / EDD
- ☐ TRRP CheckList
- ☐ TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

☐ ALS Laboratory Group
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

Chain of Custody Form

 (COC ID: 75737)

☐ ALS Laboratory Group
3352 128th Ave.
Holland, MI 49424-9263
Tel: +1 616 399 6070
Fax: +1 616 399 6185

ALS Project Manager: | ALS Work Order #: 1392677

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	GL erwin	A	Dissolved Metals (6020/7000) Ca, Mg, Na, K
Work Order		Project Number	039124-002	B	Anions (300) Cl, F, SO_4, Nitrate
Company Name	Conestoga-Rovers & Associates	Bill To Company	CRA	C	Alkalinity (SM2320B) Carbonate, Bicarbonate, Hydroxide, total
Send Report To	Todd Wells	Invoice Attn	Chris Knight	D	TDS
Address	2135 S Loop 250 West	Address	13091 Pond Springs Road, Suite A10	E	
				F	
City/State/Zip	Midland, TX 79703	City/State/Zip	Austin, TX 78729	G	
Phone	432-686-0086	Phone	(512) 506-8803	H	
Fax	432-686-0186	Fax		I	
e-Mail Address	Twells@craworld.com	e-Mail Address	CKnight@craworld.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	Dup1 022013	2-20-13	—	H_2O	none	2	X	X	X	X							
2	mw16 022013		1310														
3	mw8 022013		1330														
4	mw11 022013		1355														
5	mw25 022013		1415														
6	ww1 022013		1445														
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Justin Nixon

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☐ Other ____ ☒ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
	2-20-13	1815		
Relinquished by:	Date:	Time:	Received by (Laboratory): 2/21/13 0915	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Cooler ID	Cooler Temp

QC Package: (Check One Box Below)
☒ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Date ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other ____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.
2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

28-Feb-2013

Chris Knight
Conestoga Rovers & Associates
13091 Pond Springs Road, Suite A100
Austin, Texas 78729

Tel: (512) 506-8803
Fax:

Re: G L Erwin - 039124-002 Work Order: **1302744**

Dear Chris,

ALS Environmental received 16 samples on 21-Feb-2013 09:15 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 33.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Luke F. Hernandez

John M. Cady
Project Manager

Certificate No: T104704231-12-10

ALS Environmental

Date: 28-Feb-13

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Work Order: **1302744**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1302744-01	RW1022113	Water		2/21/2013 09:45	2/21/2013 09:15	☐
1302744-02	SWMW022113	Water		2/21/2013 10:00	2/21/2013 09:15	☐
1302744-03	MW4022113	Water		2/21/2013 10:15	2/21/2013 09:15	☐
1302744-04	WMW022113	Water		2/21/2013 10:35	2/21/2013 09:15	☐
1302744-05	MW3022113	Water		2/21/2013 10:50	2/21/2013 09:15	☐
1302744-06	MW6022113	Water		2/21/2013 11:10	2/21/2013 09:15	☐
1302744-07	MW7022113	Water		2/21/2013 11:30	2/21/2013 09:15	☐
1302744-08	MW2022113	Water		2/21/2013 11:50	2/21/2013 09:15	☐
1302744-09	MW1022113	Water		2/21/2013 12:15	2/21/2013 09:15	☐
1302744-10	MW5022113	Water		2/21/2013 12:40	2/21/2013 09:15	☐
1302744-11	MW10022113	Water		2/21/2013 12:50	2/21/2013 09:15	☐
1302744-12	MW9022113	Water		2/21/2013 13:00	2/21/2013 09:15	☐
1302744-13	MW22022113	Water		2/21/2013 13:15	2/21/2013 09:15	☐
1302744-14	MW26022113	Water		2/21/2013 13:30	2/21/2013 09:15	☐
1302744-15	DUP2022113	Water		2/21/2013	2/21/2013 09:15	☐
1302744-16	DUP3022113	Water		2/21/2013	2/21/2013 09:15	☐

Client:	Conestoga Rovers & Associates
Project:	G L Erwin - 039124-002
Work Order:	1302744

Case Narrative

Batch 68057, Method 6020 (Dissolved): Mg, Na, and K recovered above acceptable QC limits in the MS. Ca recovered below acceptable QC limits in the MS. Ca and Na recovered above acceptable QC limits in the MSD. LCS passed.

Batch 68057, Method 6020 (Dissolved): Ca recovered above acceptable QC limits in the MS and the MSD. Na recovered above acceptable QC limits in the MSD. The LCS passed. The MS and the MSD were analyzed on an unrelated sample.

Batch R143200, Method 300: Sulfate recovered above acceptable QC limits in the MSD. LCS and MS passed.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: RW1022113
Collection Date: 2/21/2013 09:45 AM

Work Order: 1302744
Lab ID: 1302744-01
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**172**		**0.17**	**1.00**	**mg/L**	2	2/26/2013 23:21
Magnesium	**48.2**		**0.16**	**0.400**	**mg/L**	2	2/26/2013 23:21
Potassium	**36.8**		**0.17**	**0.400**	**mg/L**	2	2/26/2013 23:21
Sodium	**876**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 14:35
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**1,340**		**20**	**50.0**	**mg/L**	100	2/27/2013 03:43
Fluoride	**0.942**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 16:40
Nitrogen, Nitrate (As N)	**5.18**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 16:40
Sulfate	**411**		**20**	**50.0**	**mg/L**	100	2/27/2013 03:43
Surr: Selenate (surr)	*89.7*			*85-115*	*%REC*	1	2/22/2013 16:40
Surr: Selenate (surr)	*110*			*85-115*	*%REC*	100	2/27/2013 03:43
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**339**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**339**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**3,120**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: SWMW022113
Collection Date: 2/21/2013 10:00 AM

Work Order: 1302744
Lab ID: 1302744-02
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**323**		**0.86**	**5.00**	**mg/L**	10	2/27/2013 15:10
Magnesium	**86.7**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 00:27
Potassium	**36.3**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 00:27
Sodium	**1,120**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 15:10
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**1,750**		**20**	**50.0**	**mg/L**	100	2/27/2013 04:05
Fluoride	**1.08**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 16:55
Nitrogen, Nitrate (As N)	**4.43**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 16:55
Sulfate	**498**		**20**	**50.0**	**mg/L**	100	2/27/2013 04:05
Surr: Selenate (surr)	*90.4*			*85-115*	*%REC*	1	2/22/2013 16:55
Surr: Selenate (surr)	*110*			*85-115*	*%REC*	100	2/27/2013 04:05
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**359**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**359**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**4,020**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW4022113
Collection Date: 2/21/2013 10:15 AM

Work Order: 1302744
Lab ID: 1302744-03
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**761**		**0.86**	**5.00**	**mg/L**	10	2/27/2013 15:15
Magnesium	**228**		**0.82**	**2.00**	**mg/L**	10	2/27/2013 15:15
Potassium	**27.5**		**0.84**	**2.00**	**mg/L**	10	2/27/2013 15:15
Sodium	**1,070**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 15:15
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**2,450**		**20**	**50.0**	**mg/L**	100	2/27/2013 04:27
Fluoride	**0.581**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 17:09
Nitrogen, Nitrate (As N)	**5.53**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 17:09
Sulfate	**331**		**20**	**50.0**	**mg/L**	100	2/27/2013 04:27
Surr: Selenate (surr)	*92.9*			*85-115*	*%REC*	1	2/22/2013 17:09
Surr: Selenate (surr)	*111*			*85-115*	*%REC*	100	2/27/2013 04:27
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**303**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**303**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**5,170**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: WMW022113
Collection Date: 2/21/2013 10:35 AM

Work Order: 1302744
Lab ID: 1302744-04
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**56.7**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 00:37
Magnesium	**16.7**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 00:37
Potassium	**14.6**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 00:37
Sodium	**212**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 00:37
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**226**		**2.0**	**5.00**	**mg/L**	10	2/27/2013 05:32
Fluoride	**1.34**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 17:24
Nitrogen, Nitrate (As N)	**3.78**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 17:24
Sulfate	**175**		**2.0**	**5.00**	**mg/L**	10	2/27/2013 05:32
Surr: Selenate (surr)	*87.9*			*85-115*	*%REC*	1	2/22/2013 17:24
Surr: Selenate (surr)	*112*			*85-115*	*%REC*	10	2/27/2013 05:32
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**243**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**243**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**872**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW3022113
Collection Date: 2/21/2013 10:50 AM

Work Order: 1302744
Lab ID: 1302744-05
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**131**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 04:54
Magnesium	**40.2**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 04:54
Potassium	**13.4**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 04:54
Sodium	**770**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 18:58
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**1,100**		**20**	**50.0**	**mg/L**	100	2/27/2013 05:53
Fluoride	**1.26**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 17:38
Nitrogen, Nitrate (As N)	**8.87**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 17:38
Sulfate	**261**		**20**	**50.0**	**mg/L**	100	2/27/2013 05:53
Surr: Selenate (surr)	*85.2*			*85-115*	*%REC*	1	2/22/2013 17:38
Surr: Selenate (surr)	*109*			*85-115*	*%REC*	100	2/27/2013 05:53
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**252**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**252**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**2,500**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW6022113
Collection Date: 2/21/2013 11:10 AM

Work Order: 1302744
Lab ID: 1302744-06
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**25.8**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 04:59
Magnesium	**7.77**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 04:59
Potassium	**8.68**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 04:59
Sodium	**496**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 19:03
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**812**		**2.0**	**5.00**	**mg/L**	10	2/27/2013 06:15
Fluoride	**1.71**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 17:53
Nitrogen, Nitrate (As N)	**8.30**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 17:53
Sulfate	**221**		**2.0**	**5.00**	**mg/L**	10	2/27/2013 06:15
Surr: Selenate (surr)	*90.4*			*85-115*	*%REC*	1	2/22/2013 17:53
Surr: Selenate (surr)	*111*			*85-115*	*%REC*	10	2/27/2013 06:15
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**253**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**253**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,900**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW7022113
Collection Date: 2/21/2013 11:30 AM

Work Order: 1302744
Lab ID: 1302744-07
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**29.3**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 05:14
Magnesium	**9.11**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 05:14
Potassium	**3.79**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 05:14
Sodium	**284**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 05:14
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**258**		**2.0**	**5.00**	**mg/L**	10	2/27/2013 06:37
Fluoride	**2.30**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 18:07
Nitrogen, Nitrate (As N)	**4.76**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 18:07
Sulfate	**134**		**2.0**	**5.00**	**mg/L**	10	2/27/2013 06:37
Surr: Selenate (surr)	*87.1*			*85-115*	*%REC*	1	2/22/2013 18:07
Surr: Selenate (surr)	*112*			*85-115*	*%REC*	10	2/27/2013 06:37
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**257**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**257**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**904**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW2022113
Collection Date: 2/21/2013 11:50 AM

Work Order: 1302744
Lab ID: 1302744-08
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**238**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 05:20
Magnesium	**72.8**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 05:20
Potassium	**7.31**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 05:20
Sodium	**282**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 05:20
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**934**		**2.0**	**5.00**	**mg/L**	10	2/27/2013 06:59
Fluoride	**0.989**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 18:22
Nitrogen, Nitrate (As N)	**4.48**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 18:22
Sulfate	**106**		**2.0**	**5.00**	**mg/L**	10	2/27/2013 06:59
Surr: Selenate (surr)	*88.0*			*85-115*	*%REC*	1	2/22/2013 18:22
Surr: Selenate (surr)	*111*			*85-115*	*%REC*	10	2/27/2013 06:59
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**185**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**185**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**2,260**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW1022113
Collection Date: 2/21/2013 12:15 PM

Work Order: 1302744
Lab ID: 1302744-09
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**139**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 05:25
Magnesium	**45.6**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 05:25
Potassium	**6.39**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 05:25
Sodium	**104**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 05:25
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**452**		**2.0**	**5.00**	**mg/L**	10	2/27/2013 07:20
Fluoride	**1.17**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 19:06
Nitrogen, Nitrate (As N)	**2.24**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 19:06
Sulfate	**69.9**		**0.20**	**0.500**	**mg/L**	1	2/22/2013 19:06
Surr: Selenate (surr)	*86.2*			*85-115*	*%REC*	1	2/22/2013 19:06
Surr: Selenate (surr)	*112*			*85-115*	*%REC*	10	2/27/2013 07:20
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**141**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**141**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,300**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW5022113
Collection Date: 2/21/2013 12:40 PM

Work Order: 1302744
Lab ID: 1302744-10
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**224**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 05:30
Magnesium	**69.2**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 05:30
Potassium	**10.5**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 05:30
Sodium	**339**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 05:30
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**1,350**		**20**	**50.0**	**mg/L**	100	2/27/2013 07:42
Fluoride	**0.762**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 19:20
Nitrogen, Nitrate (As N)	**3.99**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 19:20
Sulfate	**101**		**0.20**	**0.500**	**mg/L**	1	2/22/2013 19:20
Surr: Selenate (surr)	*88.4*			*85-115*	*%REC*	1	2/22/2013 19:20
Surr: Selenate (surr)	*110*			*85-115*	*%REC*	100	2/27/2013 07:42
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**159**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**159**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**3,110**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 14:40

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW10022113
Collection Date: 2/21/2013 12:50 PM

Work Order: 1302744
Lab ID: 1302744-11
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**909**		**0.86**	**5.00**	**mg/L**	10	2/27/2013 19:08
Magnesium	**274**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 05:35
Potassium	**17.2**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 05:35
Sodium	**860**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 19:08
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**3,940**		**10**	**25.0**	**mg/L**	50	2/27/2013 08:04
Fluoride	**0.480**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 19:35
Nitrogen, Nitrate (As N)	**4.61**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 19:35
Sulfate	**204**		**10**	**25.0**	**mg/L**	50	2/27/2013 08:04
Surr: Selenate (surr)	*88.4*			*85-115*	*%REC*	1	2/22/2013 19:35
Surr: Selenate (surr)	*111*			*85-115*	*%REC*	50	2/27/2013 08:04
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**123**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**123**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**7,100**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 16:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW9022113
Collection Date: 2/21/2013 01:00 PM

Work Order: 1302744
Lab ID: 1302744-12
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**39.5**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 05:40
Magnesium	**13.3**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 05:40
Potassium	**4.26**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 05:40
Sodium	**423**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 19:23
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**561**		**2.0**	**5.00**	**mg/L**	10	2/27/2013 08:25
Fluoride	**2.35**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 19:49
Nitrogen, Nitrate (As N)	**2.94**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 19:49
Sulfate	**192**		**2.0**	**5.00**	**mg/L**	10	2/27/2013 08:25
Surr: Selenate (surr)	*92.1*			*85-115*	*%REC*	1	2/22/2013 19:49
Surr: Selenate (surr)	*110*			*85-115*	*%REC*	10	2/27/2013 08:25
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**250**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**250**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,460**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 16:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW22022113
Collection Date: 2/21/2013 01:15 PM

Work Order: 1302744
Lab ID: 1302744-13
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**512**		**0.86**	**5.00**	**mg/L**	10	2/27/2013 19:29
Magnesium	**153**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 05:45
Potassium	**13.0**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 05:45
Sodium	**922**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 19:29
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**2,700**		**10**	**25.0**	**mg/L**	50	2/27/2013 08:47
Fluoride	**0.628**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 20:04
Nitrogen, Nitrate (As N)	**3.02**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 20:04
Sulfate	**298**		**10**	**25.0**	**mg/L**	50	2/27/2013 08:47
Surr: Selenate (surr)	*89.1*			*85-115*	*%REC*	1	2/22/2013 20:04
Surr: Selenate (surr)	*111*			*85-115*	*%REC*	50	2/27/2013 08:47
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**174**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**174**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**5,360**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 16:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: MW26022113
Collection Date: 2/21/2013 01:30 PM

Work Order: 1302744
Lab ID: 1302744-14
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**210**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 06:00
Magnesium	**58.7**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 06:00
Potassium	**9.82**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 06:00
Sodium	**944**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 19:34
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**1,950**		**10**	**25.0**	**mg/L**	50	2/27/2013 09:52
Fluoride	**0.689**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 20:18
Nitrogen, Nitrate (As N)	**2.65**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 20:18
Sulfate	**240**		**10**	**25.0**	**mg/L**	50	2/27/2013 09:52
Surr: Selenate (surr)	*87.1*			*85-115*	*%REC*	1	2/22/2013 20:18
Surr: Selenate (surr)	*112*			*85-115*	*%REC*	50	2/27/2013 09:52
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**213**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**213**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**3,640**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 16:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: DUP2022113
Collection Date: 2/21/2013

Work Order: 1302744
Lab ID: 1302744-15
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**172**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 06:05
Magnesium	**46.9**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 06:05
Potassium	**34.8**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 06:05
Sodium	**827**		**0.85**	**2.00**	**mg/L**	10	2/27/2013 19:39
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**1,340**		**10**	**25.0**	**mg/L**	50	2/27/2013 10:14
Fluoride	**0.925**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 20:33
Nitrogen, Nitrate (As N)	**5.15**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 20:33
Sulfate	**432**		**10**	**25.0**	**mg/L**	50	2/27/2013 10:14
Surr: Selenate (surr)	*91.8*			*85-115*	*%REC*	1	2/22/2013 20:33
Surr: Selenate (surr)	*110*			*85-115*	*%REC*	50	2/27/2013 10:14
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**341**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**341**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**3,110**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 16:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *28-Feb-13*

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
Sample ID: DUP3022113
Collection Date: 2/21/2013

Work Order: 1302744
Lab ID: 1302744-16
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS		Method: **SW6020**			Prep: SW3010A / 2/25/13		Analyst: **ALR**
Calcium	**141**		**0.17**	**1.00**	**mg/L**	2	2/27/2013 06:10
Magnesium	**44.4**		**0.16**	**0.400**	**mg/L**	2	2/27/2013 06:10
Potassium	**6.30**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 06:10
Sodium	**101**		**0.17**	**0.400**	**mg/L**	2	2/27/2013 06:10
ANIONS - EPA 300.0 (1993)		Method: **E300**					Analyst: **JKP**
Chloride	**454**		**2.0**	**5.00**	**mg/L**	10	2/27/2013 10:36
Fluoride	**1.18**		**0.050**	**0.100**	**mg/L**	1	2/22/2013 20:47
Nitrogen, Nitrate (As N)	**2.26**		**0.030**	**0.100**	**mg/L**	1	2/22/2013 20:47
Sulfate	**70.8**		**0.20**	**0.500**	**mg/L**	1	2/22/2013 20:47
Surr: Selenate (surr)	*87.7*			*85-115*	*%REC*	1	2/22/2013 20:47
Surr: Selenate (surr)	*112*			*85-115*	*%REC*	10	2/27/2013 10:36
ALKALINITY-SM2320B		Method: **SM2320B**					Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**141**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
Alkalinity, Carbonate (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Hydroxide (As CaCO3)	U		6.0	6.00	mg/L	1	2/23/2013 16:15
Alkalinity, Total (As CaCO3)	**141**		**6.0**	**6.00**	**mg/L**	1	2/23/2013 16:15
TOTAL DISSOLVED SOLIDS		Method: **M2540C**					Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,170**		**5.0**	**10.0**	**mg/L**	1	2/26/2013 16:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Batch ID: **68057** Instrument ID **ICP7500** Method: **SW6020** **(Dissolve)**

MBLK Sample ID: **MBLKW5-022513-68057** Units: **mg/L** Analysis Date: **2/26/2013 11:11 PM**

Client ID: Run ID: **ICP7500_130226A** SeqNo: **3125199** Prep Date: **2/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	U	0.50								
Magnesium	U	0.20								
Potassium	U	0.20								
Sodium	U	0.20								

LCS Sample ID: **MLCSW5-022513-68057** Units: **mg/L** Analysis Date: **2/26/2013 11:16 PM**

Client ID: Run ID: **ICP7500_130226A** SeqNo: **3125202** Prep Date: **2/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	5.001	0.50	5	0	100	80-120	0			
Magnesium	5.068	0.20	5	0	101	80-120	0			
Potassium	5.087	0.20	5	0	102	80-120	0			
Sodium	5.109	0.20	5	0	102	80-120	0			

MS Sample ID: **1302744-01AMS** Units: **mg/L** Analysis Date: **2/26/2013 11:36 PM**

Client ID: **RW1022113** Run ID: **ICP7500_130226A** SeqNo: **3125210** Prep Date: **2/25/2013** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	175.6	1.0	5	171.9	72.4	75-125	0			SO
Magnesium	57.82	0.40	5	48.22	192	75-125	0			SO
Potassium	44.66	0.40	5	36.76	158	75-125	0			SO
Sodium	971.8	0.40	5	875.8	1920	75-125	0			SEO

MSD Sample ID: **1302744-01AMSD** Units: **mg/L** Analysis Date: **2/26/2013 11:42 PM**

Client ID: **RW1022113** Run ID: **ICP7500_130226A** SeqNo: **3125211** Prep Date: **2/25/2013** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	179.6	1.0	5	171.9	154	75-125	175.6	2.3	25	SO
Magnesium	53.06	0.40	5	48.22	96.8	75-125	57.82	8.59	25	O
Potassium	41.34	0.40	5	36.76	91.6	75-125	44.66	7.72	25	O
Sodium	888.6	0.40	5	875.8	256	75-125	971.8	8.94	25	SEO

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302744
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **68057** Instrument ID **ICP7500** Method: **SW6020** **(Dissolve)**

DUP Sample ID: **1302744-01ADUP** Units: **mg/L** Analysis Date: **2/26/2013 11:26 PM**
Client ID: **RW1022113** Run ID: **ICP7500_130226A** SeqNo: **3125206** Prep Date: **2/25/2013** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	172.8	1.0	0	0	0	0-0	171.9	0.511	25	
Magnesium	47.34	0.40	0	0	0	0-0	48.22	1.84	25	
Potassium	36.08	0.40	0	0	0	0-0	36.76	1.87	25	

DUP Sample ID: **1302744-01ADUP** Units: **mg/L** Analysis Date: **2/27/2013 02:40 PM**
Client ID: **RW1022113** Run ID: **ICP7500_130227A** SeqNo: **3125884** Prep Date: **2/25/2013** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium	886.2	2.0	0	0	0	0-0	876.5	1.1	25	

The following samples were analyzed in this batch: 1302744-01A 1302744-02A 1302744-03A 1302744-04A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302744
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **68070** Instrument ID **ICP7500** Method: **SW6020** **(Dissolve)**

MBLK Sample ID: **MBLKW7-022513-68070** Units: **mg/L** Analysis Date: **2/27/2013 06:53 PM**
Client ID: Run ID: **ICP7500_130227A** SeqNo: **3126430** Prep Date: **2/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	U	0.50								
Magnesium	U	0.20								
Potassium	U	0.20								
Sodium	U	0.20								

LCS Sample ID: **MLCSW7-022513-68070** Units: **mg/L** Analysis Date: **2/27/2013 03:48 AM**
Client ID: Run ID: **ICP7500_130226A** SeqNo: **3125306** Prep Date: **2/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	5.102	0.50	5	0	102	80-120	0			
Magnesium	5.082	0.20	5	0	102	80-120	0			
Potassium	5.025	0.20	5	0	100	80-120	0			
Sodium	5.067	0.20	5	0	101	80-120	0			

MS Sample ID: **1302789-03CMS** Units: **mg/L** Analysis Date: **2/27/2013 04:09 AM**
Client ID: Run ID: **ICP7500_130226A** SeqNo: **3125310** Prep Date: **2/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	142	0.50	5	131.3	214	75-125	0			SO
Magnesium	20.24	0.20	5	14.8	109	75-125	0			
Potassium	7.248	0.20	5	1.992	105	75-125	0			
Sodium	45.26	0.20	5	39.18	122	75-125	0			O

MSD Sample ID: **1302789-03CMSD** Units: **mg/L** Analysis Date: **2/27/2013 04:14 AM**
Client ID: Run ID: **ICP7500_130226A** SeqNo: **3125311** Prep Date: **2/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	141	0.50	5	131.3	194	75-125	142	0.707	25	SO
Magnesium	20.42	0.20	5	14.8	112	75-125	20.24	0.885	25	
Potassium	7.272	0.20	5	1.992	106	75-125	7.248	0.331	25	
Sodium	45.63	0.20	5	39.18	129	75-125	45.26	0.814	25	SO

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302744
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **68070** Instrument ID **ICP7500** Method: **SW6020** **(Dissolve)**

DUP Sample ID: **1302789-03CDUP** Units: **mg/L** Analysis Date: **2/27/2013 03:59 AM**

Client ID: Run ID: **ICP7500_130226A** SeqNo: **3125308** Prep Date: **2/25/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	133.4	0.50	0	0	0	0-0	131.3	1.59	25	
Magnesium	15	0.20	0	0	0	0-0	14.8	1.34	25	
Potassium	2.062	0.20	0	0	0	0-0	1.992	3.45	25	
Sodium	39.77	0.20	0	0	0	0-0	39.18	1.49	25	

The following samples were analyzed in this batch:

1302744-05A	1302744-06A	1302744-07A
1302744-08A	1302744-09A	1302744-10A
1302744-11A	1302744-12A	1302744-13A
1302744-14A	1302744-15A	1302744-16A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302744
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R143197** Instrument ID **WetChem** Method: **SM2320B** **(Dissolve)**

MBLK Sample ID: **WBLKW1-022313-R143197** Units: **mg/L** Analysis Date: **2/23/2013 04:15 PM**
Client ID: Run ID: **WETCHEM_130223J** SeqNo: **3122384** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	U	6.0								
Alkalinity, Carbonate (As CaCO3)	U	6.0								
Alkalinity, Hydroxide (As CaCO3)	U	6.0								
Alkalinity, Total (As CaCO3)	U	6.0								

LCS Sample ID: **WLCSW1-022313-R143197** Units: **mg/L** Analysis Date: **2/23/2013 04:15 PM**
Client ID: Run ID: **WETCHEM_130223J** SeqNo: **3122385** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	1136	6.0	1000	0	114	80-120	0			

DUP Sample ID: **1302744-01BDUP** Units: **mg/L** Analysis Date: **2/23/2013 04:15 PM**
Client ID: **RW1022113** Run ID: **WETCHEM_130223J** SeqNo: **3122412** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	337.3	6.0	0	0	0	0-0	338.9	0.479	0	
Alkalinity, Carbonate (As CaCO3)	U	6.0	0	0	0	0-0	0	0	0	
Alkalinity, Hydroxide (As CaCO3)	U	6.0	0	0	0	0-0	0	0	0	
Alkalinity, Total (As CaCO3)	337.3	6.0	0	0	0	0-0	338.9	0.479	20	

The following samples were analyzed in this batch:

1302744-01B	1302744-02B	1302744-03B
1302744-04B	1302744-05B	1302744-06B
1302744-07B	1302744-08B	1302744-09B
1302744-10B	1302744-11B	1302744-12B
1302744-13B	1302744-14B	1302744-15B
1302744-16B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302744
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R143200** Instrument ID **ICS2100** Method: **E300** **(Dissolve)**

MBLK Sample ID: **WBLKW1-R143200** Units: **mg/L** Analysis Date: **2/22/2013 04:11 PM**
Client ID: Run ID: **ICS2100_130222A** SeqNo: **3122479** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	U	0.10								
Nitrogen, Nitrate (As N)	0.063	0.10								J
Sulfate	U	0.50								
Surr: Selenate (surr)	4.913	0.10	*5*	0	*98.3*	*85-115*	0			

LCS Sample ID: **WLCSW1-R143200** Units: **mg/L** Analysis Date: **2/22/2013 04:26 PM**
Client ID: Run ID: **ICS2100_130222A** SeqNo: **3122480** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	3.763	0.10	4	0	94.1	90-110	0			
Nitrogen, Nitrate (As N)	4.379	0.10	4	0	109	90-110	0			
Sulfate	21.66	0.50	20	0	108	90-110	0			
Surr: Selenate (surr)	4.856	0.10	*5*	0	*97.1*	*85-115*	0			

MS Sample ID: **1302744-16BMS** Units: **mg/L** Analysis Date: **2/22/2013 09:02 PM**
Client ID: **DUP3022113** Run ID: **ICS2100_130222A** SeqNo: **3122499** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	2.965	0.10	2	1.178	89.4	80-120	0			
Nitrogen, Nitrate (As N)	4.494	0.10	2	2.264	112	80-120	0			
Sulfate	81.79	0.50	10	70.83	110	80-120	0			O
Surr: Selenate (surr)	4.471	0.10	*5*	0	*89.4*	*85-115*	0			

MSD Sample ID: **1302744-16BMSD** Units: **mg/L** Analysis Date: **2/22/2013 09:16 PM**
Client ID: **DUP3022113** Run ID: **ICS2100_130222A** SeqNo: **3122500** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	3.042	0.10	2	1.178	93.2	80-120	2.965	2.56	20	
Nitrogen, Nitrate (As N)	4.619	0.10	2	2.264	118	80-120	4.494	2.74	20	
Sulfate	83.61	0.50	10	70.83	128	80-120	81.79	2.2	20	SO
Surr: Selenate (surr)	4.575	0.10	*5*	0	*91.5*	*85-115*	4.471	*2.3*	*20*	

The following samples were analyzed in this batch:

1302744-01B	1302744-02B	1302744-03B
1302744-04B	1302744-05B	1302744-06B
1302744-07B	1302744-08B	1302744-09B
1302744-10B	1302744-11B	1302744-12B
1302744-13B	1302744-14B	1302744-15B
1302744-16B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302744
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R143352** Instrument ID **Balance1** Method: **M2540C** **(Dissolve)**

MBLK Sample ID: **WBLK-026113-R143352** Units: **mg/L** Analysis Date: **2/26/2013 02:40 PM**
Client ID: Run ID: **BALANCE1_130226D** SeqNo: **3126113** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	U	10								

LCS Sample ID: **WLCS-026113-R143352** Units: **mg/L** Analysis Date: **2/26/2013 02:40 PM**
Client ID: Run ID: **BALANCE1_130226D** SeqNo: **3126114** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	996	10	1000	0	99.6	85-115	0			

DUP Sample ID: **1302672-10BDUP** Units: **mg/L** Analysis Date: **2/26/2013 02:40 PM**
Client ID: Run ID: **BALANCE1_130226D** SeqNo: **3126092** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	1272	10	0	0	0	0-0	1282	0.783	20	

DUP Sample ID: **1302744-10BDUP** Units: **mg/L** Analysis Date: **2/26/2013 02:40 PM**
Client ID: **MW5022113** Run ID: **BALANCE1_130226D** SeqNo: **3126112** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	3166	10	0	0	0	0-0	3114	1.66	20	

The following samples were analyzed in this batch:

1302744-01B	1302744-02B	1302744-03B
1302744-04B	1302744-05B	1302744-06B
1302744-07B	1302744-08B	1302744-09B
1302744-10B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302744
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R143369** Instrument ID **ICS3K2** Method: **E300** **(Dissolve)**

MBLK Sample ID: **WBLKW2-R143369** Units: **mg/L** Analysis Date: **2/27/2013 01:11 AM**
Client ID: Run ID: **ICS3K2_130226B** SeqNo: **3126365** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	0.209	0.50								J
Sulfate	U	0.50								
Surr: Selenate (surr)	5.566	0.10	*5*	0	*111*	*85-115*	0			

LCS Sample ID: **WLCSW2-R143369** Units: **mg/L** Analysis Date: **2/27/2013 01:33 AM**
Client ID: Run ID: **ICS3K2_130226B** SeqNo: **3126366** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.53	0.50	20	0	97.7	90-110	0			
Sulfate	20.61	0.50	20	0	103	90-110	0			
Surr: Selenate (surr)	5.459	0.10	*5*	0	*109*	*85-115*	0			

MS Sample ID: **1302744-16BMS** Units: **mg/L** Analysis Date: **2/27/2013 10:57 AM**
Client ID: **DUP3022113** Run ID: **ICS3K2_130226B** SeqNo: **3126392** Prep Date: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	540.1	5.0	100	453.7	86.4	80-120	0	0	0	O
Sulfate	175.8	5.0	100	66.72	109	80-120	0	0	0	
Surr: Selenate (surr)	54.79	1.0	*50*	0	*110*	*85-115*	0	*0*		

MSD Sample ID: **1302744-16BMSD** Units: **mg/L** Analysis Date: **2/27/2013 11:19 AM**
Client ID: **DUP3022113** Run ID: **ICS3K2_130226B** SeqNo: **3126393** Prep Date: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	539.6	5.0	100	453.7	85.9	80-120	540.1	0.0937	20	O
Sulfate	175.4	5.0	100	66.72	109	80-120	175.8	0.241	20	
Surr: Selenate (surr)	54.83	1.0	*50*	0	*110*	*85-115*	54.79	*0.0639*	*20*	

The following samples were analyzed in this batch:

1302744-01B	1302744-02B	1302744-03B
1302744-04B	1302744-05B	1302744-06B
1302744-07B	1302744-08B	1302744-09B
1302744-10B	1302744-11B	1302744-12B
1302744-13B	1302744-14B	1302744-15B
1302744-16B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1302744
Project: G L Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R143370** Instrument ID **Balance1** Method: **M2540C** **(Dissolve)**

MBLK Sample ID: **WBLK-026113-R143370** Units: **mg/L** Analysis Date: **2/26/2013 04:30 PM**
Client ID: Run ID: **BALANCE1_130226E** SeqNo: **3126421** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	U	10								

LCS Sample ID: **WLCS-026113-R143370** Units: **mg/L** Analysis Date: **2/26/2013 04:30 PM**
Client ID: Run ID: **BALANCE1_130226E** SeqNo: **3126422** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	944	10	1000	0	94.4	85-115	0			

DUP Sample ID: **1302744-11BDUP** Units: **mg/L** Analysis Date: **2/26/2013 04:30 PM**
Client ID: **MW10022113** Run ID: **BALANCE1_130226E** SeqNo: **3126411** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	7648	10	0	0	0	0-0	7100	7.43	20	

DUP Sample ID: **1302771-01FDUP** Units: **mg/L** Analysis Date: **2/26/2013 04:30 PM**
Client ID: Run ID: **BALANCE1_130226E** SeqNo: **3127093** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	1436	10	0	0	0	0-0	1432	0.279	20	

The following samples were analyzed in this batch:

1302744-11B	1302744-12B	1302744-13B
1302744-14B	1302744-15B	1302744-16B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Project: G L Erwin - 039124-002
WorkOrder: **1302744**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Units Reported	Description
mg/L	Milligrams per Liter

ALS Environmental

Sample Receipt Checklist

Client Name: **CRA - AUSTIN** Date/Time Received: **21-Feb-13 09:15**

Work Order: **1302744** Received by: **RDN**

Checklist completed by Rachel D. Naran (eSignature) 22-Feb-13 (Date) Reviewed by: John M. Cady (eSignature) 22-Feb-13 (Date)

Matrices: WATER
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	1.6C U/C 1.4C U/C	003	
Cooler(s)/Kit(s):	4042,7112		
Date/Time sample(s) sent to storage:	2/22/13 12:12		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

ALS Environmental

Cincinnati, OH +1 513 733 5336
Everett, WA +1 425 356 2600
Fort Collins, CO +1 970 490 1511
Holland, MI +1 616 399 6070

Chain of Custody Fo

Page 1 of 2

COC ID: 75740

1302744

CRA - AUSTIN: Conestoga Rovers & Associates

Project: G L Erwin - 039124-002

ton, WV 68

80

ALS Project Manager:

Customer Information		Project Information	
Purchase Order		Project Name	G L Erwin
Work Order		Project Number	039124-002
Company Name	Conestoga-Rovers & Associates	Bill To Company	Conestoga Rovers & Associates
Send Report To	Todd Wells	Invoice Attn	Chris Knight
Address	2135 S Loop 250 West	Address	13091 Pond Springs Road, Suite A10
City/State/Zip	Midland, TX 79703	City/State/Zip	Austin, Texas 78729
Phone	(432) 686-0086	Phone	(512) 506-8803
Fax	(432) 686-0186	Fax	
e-Mail Address		e-Mail Address	cknight@craworld.com

A	Dissolved Metals (6020/7000) Ca, Mg, Na, K
B	Anions (300) Cl, F, SO4, Nitrate
C	Alkalinity (SM 2320B) Carbonate,Bicarbonate,Hydroxide,and Total
D	TDS
E	
F	
G	
H	
I	
J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	RW1 022113	2-21-13	945	H_2O	none	2	X	X	X	X							
2	SW MW 022113		1000														
3	MW4 022113		1015														
4	W MW 022113		1035														
5	MW3 022113		1050														
6	MW6 022113		1110														
7	MW7 022113		1130														
8	MW2 022113		1150														
9	MW1 022113		1215														
10	MW5 022113		1240														

31 of 33

Sampler(s) Please Print & Sign: Justin Nixon

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☑ Std 10 W/K Days ☐ 5 W/K Days ☐ 2 W/K Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by:	Date: 2-21-13	Time: 1815	Received by:	
Relinquished by:	Date: 2/22/13	Time: 09:15	Received by (Laboratory):	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Notes: 10 Day TAT.

Cooler ID	Cooler Temp.

QC Package: (Check One Box Below)

- ☑ Level II Std QC
- ☐ Level III Std QC/Raw Data
- ☐ Level IV SW846/CLP
- ☐ Other / EDD _____
- ☐ TRRP CheckList
- ☐ TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note:
1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS Environmental

Cincinnati, OH +1 513 733 5336
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...ston, TX ...530 5656
...own, PA ...44 5541
Spring City, PA +1 610 948 4903
Salt Lake City, UT +1 801 266 7700
South Charleston, WV +1 304 356 3168
York, PA +1 717 505 5280

Chain of Custody For...

Page _____ of _____

COC ID: 75739

SHORT HOLDING TIME

ALS Project Manager: | ALS Work Order #: 1302744

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	G L Erwin	A	Dissolved Metals (6020/7000) Ca, Mg, Na, K
Work Order		Project Number	039124-002	B	Anions (300) Cl, F, SO4, Nitrate
Company Name	Conestoga-Rovers & Associates	Bill To Company	Conestoga Rovers & Associates	C	Alkalinity (SM 2320B) Carbonate,Bicarbonate,Hydroxide,and Total
Send Report To	Todd Wells	Invoice Attn	Chris Knight	D	TDS
Address	2135 S Loop 250 West	Address	13091 Pond Springs Road, Suite A10	E	
				F	
City/State/Zip	Midland, TX 79703	City/State/Zip	Austin, Texas 78729	G	
Phone	(432) 686-0086	Phone	(512) 506-8803	H	
Fax	(432) 686-0186	Fax		I	
e-Mail Address		e-Mail Address	cknight@craworld.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	3rd of MW10 022113	2-21-13	1250	H_2O	none	2	X	X	X	X							
2	MW9 022113		1300														
3	MW22 022113		1315														
4	MW26 022113		1330														
5	Dup2 022113		—														
6	Dup3 022113		—														
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Justin Nixon

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by:	Date: 2-21-13	Time: 1815	Received by:	
Relinquished by:	Date: 2/22/13	Time: 09:15	Received by (Laboratory):	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Notes: 10 Day TAT.

Cooler ID	Cooler Temp.

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP CheckList
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other / EDD _____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS Environmental
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

4092

CUSTODY SEAL

Date: 2-21-13 Time: 1815
Name: Justin Mixan
Company: CRA

Seal Broken By:
Date: 2-22-13

ALS Environmental
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

7112

CUSTODY SEAL
Time: 1815
Seal Broken By:
Date: 2-22-13

1302744

FedEx
TRK# 0215 8013 8012 6463

FRI – 22 FEB A1
PRIORITY OVERNIGHT
DSR
77099
TX – US IAH

AB SGRA

#447444 02/21 51BG1/DF24/93AB

FedEx Express Package US Airbill

FedEx Tracking Number 8013 8012 6452

1 From
Date 2-21-13
Sender's Name Justin Mixan Phone 432 686-0086
Company CRA
Address 2135 Sloop 250 W
Dept/Floor/Suite/Room
City Midland State Tx ZIP 79703

2 Your Internal Billing Reference

22-Aug-2013

Todd Wells
Conestoga Rovers & Associates
13091 Pond Springs Road, Suite A100
Austin, Texas 78729

Tel: (512) 506-8803
Fax:

Re: G.L. Erwin - 039124-002 Work Order: **1308536**

Dear Todd,

ALS Environmental received 5 samples on 14-Aug-2013 09:15 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 21.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Jumoke M. Lawal

Dane J. Wacasey

Certificate No: TX: T104704231-13-12

ALS Environmental

Date: 22-Aug-13

Client: Conestoga Rovers & Associates
Project: G.L. Erwin - 039124-002
Work Order: **1308536**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1308536-01	RW1-081313	Water		8/13/2013 13:40	8/14/2013 09:15	☐
1308536-02	MW-West-081313	Water		8/13/2013 14:25	8/14/2013 09:15	☐
1308536-03	MW-4-081313	Water		8/13/2013 14:00	8/14/2013 09:15	☐
1308536-04	SW-MW-081313	Water		8/13/2013 14:15	8/14/2013 09:15	☐
1308536-05	Dup-1-081313	Water		8/13/2013	8/14/2013 09:15	☐

Client:	Conestoga Rovers & Associates
Project:	G.L. Erwin - 039124-002
Work Order:	1308536

Case Narrative

Batch R152522, Method 300_W, Sample 1308536-01BMS/MSD: MS/MSD failed criteria due to matrix interference.

ALS Environmental

Date: *22-Aug-13*

Client: Conestoga Rovers & Associates

Project: G.L. Erwin - 039124-002 **Work Order:** 1308536

Sample ID: RW1-081313 **Lab ID:** 1308536-01

Collection Date: 8/13/2013 01:40 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/15/2013**	Analyst: **JCJ**
Calcium	**127**		**0.500**	**mg/L**	1	8/15/2013 02:53 PM
Magnesium	**34.6**		**0.200**	**mg/L**	1	8/15/2013 02:53 PM
Potassium	**30.8**		**0.200**	**mg/L**	1	8/15/2013 02:53 PM
Sodium	**724**		**20.0**	**mg/L**	100	8/16/2013 12:44 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**1,170**		**10.0**	**mg/L**	20	8/20/2013 06:32 PM
Fluoride	**1.22**		**0.200**	**mg/L**	2	8/14/2013 09:11 PM
Nitrogen, Nitrate (As N)	**4.52**		**0.200**	**mg/L**	2	8/14/2013 09:11 PM
Sulfate	**389**		**10.0**	**mg/L**	20	8/20/2013 06:32 PM
Surr: Selenate (surr)	*115*		*85-115*	*%REC*	20	8/20/2013 06:32 PM
Surr: Selenate (surr)	*103*		*85-115*	*%REC*	2	8/14/2013 09:11 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**298**		**6.00**	**mg/L**	1	8/15/2013 10:37 AM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/15/2013 10:37 AM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/15/2013 10:37 AM
Alkalinity, Total (As CaCO3)	**298**		**6.00**	**mg/L**	1	8/15/2013 10:37 AM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**2,400**		**10.0**	**mg/L**	1	8/19/2013 05:00 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *22-Aug-13*

Client: Conestoga Rovers & Associates

Project: G.L. Erwin - 039124-002 **Work Order:** 1308536

Sample ID: MW-West-081313 **Lab ID:** 1308536-02

Collection Date: 8/13/2013 02:25 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/15/2013**	Analyst: **JCJ**
Calcium	**59.0**		**0.500**	**mg/L**	1	8/15/2013 02:58 PM
Magnesium	**16.4**		**0.200**	**mg/L**	1	8/15/2013 02:58 PM
Potassium	**15.3**		**0.200**	**mg/L**	1	8/15/2013 02:58 PM
Sodium	**218**		**2.00**	**mg/L**	10	8/16/2013 12:49 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**262**		**2.50**	**mg/L**	5	8/20/2013 07:37 PM
Fluoride	**1.75**		**0.100**	**mg/L**	1	8/14/2013 09:32 PM
Nitrogen, Nitrate (As N)	**3.68**		**0.100**	**mg/L**	1	8/14/2013 09:32 PM
Sulfate	**190**		**2.50**	**mg/L**	5	8/20/2013 07:37 PM
Surr: Selenate (surr)	*115*		*85-115*	*%REC*	5	8/20/2013 07:37 PM
Surr: Selenate (surr)	*106*		*85-115*	*%REC*	1	8/14/2013 09:32 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**227**		**6.00**	**mg/L**	1	8/15/2013 10:47 AM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/15/2013 10:47 AM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/15/2013 10:47 AM
Alkalinity, Total (As CaCO3)	**227**		**6.00**	**mg/L**	1	8/15/2013 10:47 AM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**892**		**10.0**	**mg/L**	1	8/19/2013 05:00 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *22-Aug-13*

Client: Conestoga Rovers & Associates

Project: G.L. Erwin - 039124-002 **Work Order:** 1308536

Sample ID: MW-4-081313 **Lab ID:** 1308536-03

Collection Date: 8/13/2013 02:00 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/15/2013**	Analyst: **JCJ**
Calcium	**711**		**50.0**	**mg/L**	100	8/16/2013 12:54 PM
Magnesium	**231**		**20.0**	**mg/L**	100	8/16/2013 12:54 PM
Potassium	**28.1**		**0.200**	**mg/L**	1	8/15/2013 03:02 PM
Sodium	**1,160**		**20.0**	**mg/L**	100	8/16/2013 12:54 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**3,420**		**25.0**	**mg/L**	50	8/20/2013 07:58 PM
Fluoride	**0.658**		**0.500**	**mg/L**	5	8/14/2013 09:54 PM
Nitrogen, Nitrate (As N)	**3.83**		**0.500**	**mg/L**	5	8/14/2013 09:54 PM
Sulfate	**324**		**2.50**	**mg/L**	5	8/14/2013 09:54 PM
Surr: Selenate (surr)	*114*		*85-115*	*%REC*	50	8/20/2013 07:58 PM
Surr: Selenate (surr)	*102*		*85-115*	*%REC*	5	8/14/2013 09:54 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**257**		**6.00**	**mg/L**	1	8/15/2013 10:56 AM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/15/2013 10:56 AM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/15/2013 10:56 AM
Alkalinity, Total (As CaCO3)	**257**		**6.00**	**mg/L**	1	8/15/2013 10:56 AM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**6,500**		**10.0**	**mg/L**	1	8/19/2013 05:00 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *22-Aug-13*

Client: Conestoga Rovers & Associates

Project: G.L. Erwin - 039124-002 **Work Order:** 1308536

Sample ID: SW-MW-081313 **Lab ID:** 1308536-04

Collection Date: 8/13/2013 02:15 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/15/2013**	Analyst: **SKS**
Calcium	**295**		**10.0**	**mg/L**	20	8/21/2013 05:29 PM
Magnesium	**86.2**		**0.200**	**mg/L**	1	8/15/2013 03:07 PM
Potassium	**35.7**		**0.200**	**mg/L**	1	8/15/2013 03:07 PM
Sodium	**1,110**		**4.00**	**mg/L**	20	8/21/2013 05:29 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**1,710**		**12.5**	**mg/L**	25	8/20/2013 08:20 PM
Fluoride	**1.44**		**0.200**	**mg/L**	2	8/14/2013 10:15 PM
Nitrogen, Nitrate (As N)	**4.09**		**0.200**	**mg/L**	2	8/14/2013 10:15 PM
Sulfate	**525**		**12.5**	**mg/L**	25	8/20/2013 08:20 PM
Surr: Selenate (surr)	*115*		*85-115*	*%REC*	25	8/20/2013 08:20 PM
Surr: Selenate (surr)	*104*		*85-115*	*%REC*	2	8/14/2013 10:15 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**342**		**6.00**	**mg/L**	1	8/15/2013 11:02 AM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/15/2013 11:02 AM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/15/2013 11:02 AM
Alkalinity, Total (As CaCO3)	**342**		**6.00**	**mg/L**	1	8/15/2013 11:02 AM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**3,200**		**10.0**	**mg/L**	1	8/19/2013 05:00 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *22-Aug-13*

Client: Conestoga Rovers & Associates

Project: G.L. Erwin - 039124-002 **Work Order:** 1308536

Sample ID: Dup-1-081313 **Lab ID:** 1308536-05

Collection Date: 8/13/2013 **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/15/2013**	Analyst: **JCJ**
Calcium	**126**		**0.500**	**mg/L**	1	8/15/2013 03:12 PM
Magnesium	**35.5**		**0.200**	**mg/L**	1	8/15/2013 03:12 PM
Potassium	**31.1**		**0.200**	**mg/L**	1	8/15/2013 03:12 PM
Sodium	**704**		**2.00**	**mg/L**	10	8/16/2013 01:13 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**1,230**		**10.0**	**mg/L**	20	8/20/2013 08:42 PM
Fluoride	**1.36**		**0.100**	**mg/L**	1	8/14/2013 10:36 PM
Nitrogen, Nitrate (As N)	**4.79**		**0.100**	**mg/L**	1	8/14/2013 10:36 PM
Sulfate	**416**		**10.0**	**mg/L**	20	8/20/2013 08:42 PM
Surr: Selenate (surr)	*115*		*85-115*	*%REC*	20	8/20/2013 08:42 PM
Surr: Selenate (surr)	*103*		*85-115*	*%REC*	1	8/14/2013 10:36 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**311**		**6.00**	**mg/L**	1	8/15/2013 11:07 AM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/15/2013 11:07 AM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/15/2013 11:07 AM
Alkalinity, Total (As CaCO3)	**311**		**6.00**	**mg/L**	1	8/15/2013 11:07 AM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**2,480**		**10.0**	**mg/L**	1	8/19/2013 05:00 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Work Order: 1308536
Client: Conestoga Rovers & Associates
Project: G.L. Erwin - 039124-002

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
Batch ID 72320 **Test Name:** Dissolved Metals						
1308536-01A	RW1-081313	Water	8/13/2013 1:40:00 PM		8/15/2013 09:00 AM	8/15/2013 02:53 PM
					8/15/2013 09:00 AM	8/16/2013 12:44 PM
1308536-02A	MW-West-081313		8/13/2013 2:25:00 PM		8/15/2013 09:00 AM	8/15/2013 02:58 PM
					8/15/2013 09:00 AM	8/16/2013 12:49 PM
1308536-03A	MW-4-081313		8/13/2013 2:00:00 PM		8/15/2013 09:00 AM	8/15/2013 03:02 PM
					8/15/2013 09:00 AM	8/16/2013 12:54 PM
1308536-04A	SW-MW-081313		8/13/2013 2:15:00 PM		8/15/2013 09:00 AM	8/15/2013 03:07 PM
					8/15/2013 09:00 AM	8/21/2013 05:29 PM
1308536-05A	Dup-1-081313		8/13/2013		8/15/2013 09:00 AM	8/15/2013 03:12 PM
					8/15/2013 09:00 AM	8/16/2013 01:13 PM
Batch ID R152240 **Test Name:** Alkalinity-SM2320B						
1308536-01B	RW1-081313	Water	8/13/2013 1:40:00 PM			8/15/2013 10:37 AM
1308536-02B	MW-West-081313		8/13/2013 2:25:00 PM			8/15/2013 10:47 AM
1308536-03B	MW-4-081313		8/13/2013 2:00:00 PM			8/15/2013 10:56 AM
1308536-04B	SW-MW-081313		8/13/2013 2:15:00 PM			8/15/2013 11:02 AM
1308536-05B	Dup-1-081313		8/13/2013			8/15/2013 11:07 AM
Batch ID R152247 **Test Name:** Anions - EPA 300.0 (1993)						
1308536-01B	RW1-081313	Water	8/13/2013 1:40:00 PM			8/14/2013 09:11 PM
1308536-02B	MW-West-081313		8/13/2013 2:25:00 PM			8/14/2013 09:32 PM
1308536-03B	MW-4-081313		8/13/2013 2:00:00 PM			8/14/2013 09:54 PM
1308536-04B	SW-MW-081313		8/13/2013 2:15:00 PM			8/14/2013 10:15 PM
1308536-05B	Dup-1-081313		8/13/2013			8/14/2013 10:36 PM

Work Order: 1308536
Client: Conestoga Rovers & Associates
Project: G.L. Erwin - 039124-002

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
Batch ID R152495 **Test Name:** Total Dissolved Solids						
1308536-01B	RW1-081313	Water	8/13/2013 1:40:00 PM			8/19/2013 05:00 PM
1308536-02B	MW-West-081313		8/13/2013 2:25:00 PM			8/19/2013 05:00 PM
1308536-03B	MW-4-081313		8/13/2013 2:00:00 PM			8/19/2013 05:00 PM
1308536-04B	SW-MW-081313		8/13/2013 2:15:00 PM			8/19/2013 05:00 PM
1308536-05B	Dup-1-081313		8/13/2013			8/19/2013 05:00 PM
Batch ID R152522 **Test Name:** Anions - EPA 300.0 (1993)						
1308536-01B	RW1-081313	Water	8/13/2013 1:40:00 PM			8/20/2013 06:32 PM
1308536-02B	MW-West-081313		8/13/2013 2:25:00 PM			8/20/2013 07:37 PM
1308536-03B	MW-4-081313		8/13/2013 2:00:00 PM			8/20/2013 07:58 PM
1308536-04B	SW-MW-081313		8/13/2013 2:15:00 PM			8/20/2013 08:20 PM
1308536-05B	Dup-1-081313		8/13/2013			8/20/2013 08:42 PM

QC BATCH REPORT

Batch ID: **72320** Instrument ID **ICPMS04** Method: **SW6020** **(Dissolve)**

MBLK Sample ID: **MBLKW5-081513-72320** Units: **mg/L** Analysis Date: **8/15/2013 01:47 PM**

Client ID: Run ID: **ICPMS04_130815A** SeqNo: **3323216** Prep Date: **8/15/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	U	0.500								
Magnesium	U	0.200								
Potassium	U	0.200								
Sodium	U	0.200								

LCS Sample ID: **MLCSW5-081513-72320** Units: **mg/L** Analysis Date: **8/15/2013 01:52 PM**

Client ID: Run ID: **ICPMS04_130815A** SeqNo: **3323217** Prep Date: **8/15/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	5.181	0.500	5	0	104	80-120				
Magnesium	5.318	0.200	5	0	106	80-120				
Potassium	5.344	0.200	5	0	107	80-120				
Sodium	5.31	0.200	5	0	106	80-120				

MS Sample ID: **1308577-01EMS** Units: **mg/L** Analysis Date: **8/15/2013 02:06 PM**

Client ID: Run ID: **ICPMS04_130815A** SeqNo: **3323220** Prep Date: **8/15/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	72.28	0.500	5	73.07	-15.9	75-125				SO
Magnesium	34.26	0.200	5	31.97	45.8	75-125				SO
Potassium	5.336	0.200	5	0.4147	98.4	75-125				
Sodium	216.1	0.200	5	230.3	-282	75-125				SEO

MSD Sample ID: **1308577-01EMSD** Units: **mg/L** Analysis Date: **8/15/2013 02:10 PM**

Client ID: Run ID: **ICPMS04_130815A** SeqNo: **3323221** Prep Date: **8/15/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	75.48	0.500	5	73.07	48.2	75-125	72.28	4.34	25	SO
Magnesium	36.14	0.200	5	31.97	83.4	75-125	34.26	5.35	25	O
Potassium	5.538	0.200	5	0.4147	102	75-125	5.336	3.71	25	
Sodium	226.8	0.200	5	230.3	-69	75-125	216.1	4.82	25	SEO

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308536
Project: G.L. Erwin - 039124-002

QC BATCH REPORT

Batch ID: **72320** Instrument ID **ICPMS04** Method: **SW6020** **(Dissolve)**

DUP Sample ID: **1308577-01EDUP** Units: **mg/L** Analysis Date: **8/15/2013 02:01 PM**
Client ID: Run ID: **ICPMS04_130815A** SeqNo: **3323219** Prep Date: **8/15/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	72.11	0.500					73.07	1.32	25	
Magnesium	31.67	0.200					31.97	0.946	25	
Potassium	0.3833	0.200					0.4147	7.86	25	

DUP Sample ID: **1308577-01EDUP** Units: **mg/L** Analysis Date: **8/16/2013 12:30 PM**
Client ID: Run ID: **ICPMS04_130816A** SeqNo: **3324048** Prep Date: **8/15/2013** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium	219.5	2.00					228.6	4.08	25	

The following samples were analyzed in this batch:

1308536-01A	1308536-02A	1308536-03A
1308536-04A	1308536-05A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308536
Project: G.L. Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R152240** Instrument ID **ManTech01** Method: **SM2320B** **(Dissolve)**

MBLK Sample ID: **WBLKW1-130815-R152240** Units: **mg/L** Analysis Date: **8/15/2013 10:21 AM**
Client ID: Run ID: **MANTECH01_130815A** SeqNo: **3322573** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	U	6.00								
Alkalinity, Carbonate (As CaCO3)	U	6.00								
Alkalinity, Hydroxide (As CaCO3)	U	6.00								
Alkalinity, Total (As CaCO3)	U	6.00								

LCS Sample ID: **WLCSW1-130815-R152240** Units: **mg/L** Analysis Date: **8/15/2013 10:27 AM**
Client ID: Run ID: **MANTECH01_130815A** SeqNo: **3322574** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	1067	6.00	1000	0	107	80-120				

DUP Sample ID: **1308536-01BDUP** Units: **mg/L** Analysis Date: **8/15/2013 10:42 AM**
Client ID: **RW1-081313** Run ID: **MANTECH01_130815A** SeqNo: **3322578** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	299.2	6.00					298	0.402	0	
Alkalinity, Carbonate (As CaCO3)	U	6.00					0	0	0	
Alkalinity, Hydroxide (As CaCO3)	U	6.00					0	0	0	
Alkalinity, Total (As CaCO3)	299.2	6.00					298	0.402	20	

The following samples were analyzed in this batch:

1308536-01B	1308536-02B	1308536-03B
1308536-04B	1308536-05B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308536
Project: G.L. Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R152247** Instrument ID **ICS3000** Method: **E300** **(Dissolve)**

MBLK Sample ID: **WBLKW1-R152247** Units: **mg/L** Analysis Date: **8/14/2013 01:50 PM**
Client ID: Run ID: **ICS3000_130814C** SeqNo: **3322771** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	U	0.100								
Nitrogen, Nitrate (As N)	U	0.100								
Sulfate	U	0.500								
Surr: Selenate (surr)	5.674	0.100	*5*	*0*	*113*	*85-115*	*0*			

LCS Sample ID: **WLCSW1-R152247** Units: **mg/L** Analysis Date: **8/14/2013 02:12 PM**
Client ID: Run ID: **ICS3000_130814C** SeqNo: **3322772** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	3.863	0.100	4	0	96.6	90-110				
Nitrogen, Nitrate (As N)	3.806	0.100	4	0	95.2	90-110				
Sulfate	18.14	0.500	20	0	90.7	90-110				
Surr: Selenate (surr)	4.89	0.100	*5*	*0*	*97.8*	*85-115*	*0*			

MS Sample ID: **1308328-11DMSZ** Units: **mg/L** Analysis Date: **8/14/2013 07:25 PM**
Client ID: Run ID: **ICS3000_130814C** SeqNo: **3322786** Prep Date: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	10.56	0.500	10	0.323	102	80-120				
Nitrogen, Nitrate (As N)	9.881	0.500	10	0	98.8	80-120				H
Sulfate	198.6	2.50	50	156.6	84	80-120				
Surr: Selenate (surr)	25.2	0.500	*25*	*0*	*101*	*85-115*	*0*			

MSD Sample ID: **1308328-11DMSDZ** Units: **mg/L** Analysis Date: **8/14/2013 07:46 PM**
Client ID: Run ID: **ICS3000_130814C** SeqNo: **3322787** Prep Date: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	10.59	0.500	10	0.323	103	80-120	10.56	0.217	20	
Nitrogen, Nitrate (As N)	9.911	0.500	10	0	99.1	80-120	9.881	0.303	20	H
Sulfate	199.2	2.50	50	156.6	85.3	80-120	198.6	0.325	20	
Surr: Selenate (surr)	25.27	0.500	*25*	*0*	*101*	*85-115*	*25.2*	*0.277*	*20*	

The following samples were analyzed in this batch:

1308536-01B	1308536-02B	1308536-03B
1308536-04B	1308536-05B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308536
Project: G.L. Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R152495** Instrument ID **Balance1** Method: **M2540C** **(Dissolve)**

MBLK Sample ID: **WBLK-081913-R152495** Units: **mg/L** Analysis Date: **8/19/2013 05:00 PM**
Client ID: Run ID: **BALANCE1_130819D** SeqNo: **3327158** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	U	10.0								

LCS Sample ID: **WLCS-081913-R152495** Units: **mg/L** Analysis Date: **8/19/2013 05:00 PM**
Client ID: Run ID: **BALANCE1_130819D** SeqNo: **3327159** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	1010	10.0	1000	0	101	85-115				

DUP Sample ID: **1308536-05BDUP** Units: **mg/L** Analysis Date: **8/19/2013 05:00 PM**
Client ID: **Dup-1-081313** Run ID: **BALANCE1_130819D** SeqNo: **3327155** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	2452	10.0					2484	1.3	20	

The following samples were analyzed in this batch:

1308536-01B	1308536-02B	1308536-03B
1308536-04B	1308536-05B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308536
Project: G.L. Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R152522** Instrument ID **ICS3K2** Method: **E300** **(Dissolve)**

MBLK Sample ID: **WBLKW1-R152522** Units: **mg/L** Analysis Date: **8/20/2013 05:48 PM**
Client ID: Run ID: **ICS3K2_130820A** SeqNo: **3327794** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								
Sulfate	U	0.500								
Surr: Selenate (surr)	5.746	0.100	*5*	*0*	*115*	*85-115*	*0*			

LCS Sample ID: **WLCSW1-R152522** Units: **mg/L** Analysis Date: **8/20/2013 06:10 PM**
Client ID: Run ID: **ICS3K2_130820A** SeqNo: **3327795** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	21.99	0.500	20	0	110	90-110				
Sulfate	21.79	0.500	20	0	109	90-110				
Surr: Selenate (surr)	5.486	0.100	*5*	*0*	*110*	*85-115*	*0*			

MS Sample ID: **1308536-01BMS** Units: **mg/L** Analysis Date: **8/20/2013 06:53 PM**
Client ID: **RW1-081313** Run ID: **ICS3K2_130820A** SeqNo: **3327797** Prep Date: DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	1439	10.0	200	1174	132	80-120				SO
Sulfate	627.2	10.0	200	389.4	119	80-120				
Surr: Selenate (surr)	114.8	2.00	*100*	*0*	*115*	*85-115*	*0*			

MS Sample ID: **1308577-09DMS** Units: **mg/L** Analysis Date: **8/21/2013 03:56 AM**
Client ID: Run ID: **ICS3K2_130820A** SeqNo: **3327822** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	180	0.500	10	174.9	51	80-120				SEO
Sulfate	58.07	0.500	10	48.46	96	80-120				O
Surr: Selenate (surr)	5.727	0.100	*5*	*0*	*115*	*85-115*	*0*			

MSD Sample ID: **1308536-01BMSD** Units: **mg/L** Analysis Date: **8/20/2013 07:15 PM**
Client ID: **RW1-081313** Run ID: **ICS3K2_130820A** SeqNo: **3327798** Prep Date: DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	1438	10.0	200	1174	132	80-120	1439	0.00667	20	SO
Sulfate	629.2	10.0	200	389.4	120	80-120	627.2	0.316	20	
Surr: Selenate (surr)	114.9	2.00	*100*	*0*	*115*	*85-115*	*114.8*	*0.0644*	*20*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308536
Project: G.L. Erwin - 039124-002

QC BATCH REPORT

Batch ID: **R152522** Instrument ID **ICS3K2** Method: **E300** **(Dissolve)**

MSD Sample ID: **1308577-09DMSD** Units: **mg/L** Analysis Date: **8/21/2013 04:17 AM**

Client ID: Run ID: **ICS3K2_130820A** SeqNo: **3327823** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	181.4	0.500	10	174.9	65.1	80-120	180	0.78	20	SEO
Sulfate	58.32	0.500	10	48.46	98.6	80-120	58.07	0.433	20	O
Surr: Selenate (surr)	5.742	0.100	*5*	*0*	*115*	*85-115*	*5.727*	*0.262*	*20*	

The following samples were analyzed in this batch:

1308536-01B	1308536-02B	1308536-03B
1308536-04B	1308536-05B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 22-Aug-13

Client: Conestoga Rovers & Associates
Project: G.L. Erwin - 039124-002
WorkOrder: **1308536**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Units Reported	Description
mg/L	Milligrams per Liter

ALS Environmental

Sample Receipt Checklist

Client Name: **CRA - AUSTIN** Date/Time Received: **14-Aug-13 09:15**

Work Order: **1308536** Received by: **WTJ**

Checklist completed by Makenzie L. Henderson (eSignature) 14-Aug-13 (Date) Reviewed by: Sonia West (eSignature) 16-Aug-13 (Date)

Matrices: Water
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.2c/2.2c C/U	IR1	
Cooler(s)/Kit(s):	4684		
Date/Time sample(s) sent to storage:	8/14/13 10:28		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:	_		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

ALS Environmental

Cincinnati, OH +1 513 733 5336
Fort Collins, CO +1 970 490 1511
Everett, WA +1 425 356 2600
Holland, MI +1 616 399 6070

Chain of Custody Fo

Page 1 of 1

COC ID: 90420

1308536

CRA - AUSTIN: Conestoga Rovers & Associates

Project: G.L. Erwin - 039124-002

ALS Project Manager:

Customer Information		Project Information			
Purchase Order		Project Name	G L Erwin	A	Dissolved Metals (6020/7000) Ca, Mg, Na, K
Work Order		Project Number	039124-002	B	Anions (300) Cl, F, SO4, Nitrate
Company Name	Conestoga-Rovers & Associates	Bill To Company	Conestoga Rovers & Associates	C	Alkalinity (SM 2320B) Carbonate,Bicarbonate,Hydroxide,and Total
Send Report To	Todd Wells	Invoice Attn	Chris Knight	D	TDS
Address	2135 S Loop 250 West	Address	13091 Pond Springs Road, Suite A10	E	
				F	
City/State/Zip	Midland, TX 79703	City/State/Zip	Austin, Texas 78729	G	
Phone	(432) 686-0086	Phone	(512) 506-8803	H	
Fax	(432) 686-0186	Fax		I	
e-Mail Address	Twells@craworld.com	e-Mail Address	cknight@craworld.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	RW1-081313	8-1313	1340	W	—	2	X	X	X	X							
2	mw-west-081313		1425		—	2											
3	mw-4-081313		1400		—	2											
4	sw-mw-081313		1415		—	2											
5	Dup-1-081313		—		—	2											
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Justin Nixon, Stuart Meurer

Shipment Method: Fedex

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

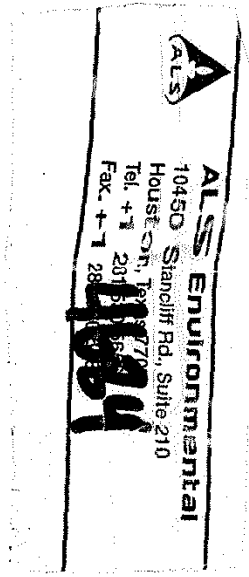
Relinquished by:	Date:	Time:	Received by:	Notes: 10 Day TAT.
Justin Nixon	8-1313	1735		
Relinquished by:	Date:	Time:	Received by (Laboratory): 8/14/13 0915	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

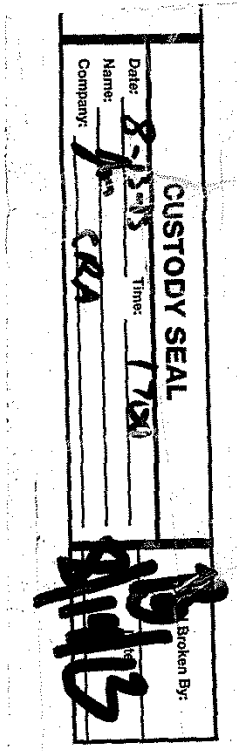
Cooler ID	Cooler Temp.

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP CheckList
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other / EDD

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.





FedEx Express Package US Airbill

FedEx Tracking Number 8020 3307 6917

From
Date 8-13-13

Sender's Name CRA Midland Phone 432 688-0038

Company CRA

Address 2135 S Loop 250 W

Dept/Floor/Suite/Room

City Midland State TX ZIP 79703

2 Your Internal Billing Reference

3 To
Recipient's Name CLIENT SERVICES Phone 281 530-5656

Company ALS LABORATORY GROUP

Address 10450 STANCLIFF RD STE 210
We cannot deliver to P.O. boxes or P.O. ZIP codes.
Dept/Floor/Suite/Room

HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Address
Use this line for the HOLD location address or for continuation of your shipping address.

City HOUSTON State TX ZIP 77099-4338

0102466797

8020 3307 6917

Fed Exp

TRK# 0215 8020 3307 6917

WED - 14 AUG 10:30
PRIORITY OVERNIGH

AB SGRA

77099
TX-US IAH

No Shipper's Declaration
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment Bill to:
Enter FedEx Acct. No. or Credit Card No. below.
Obtain recip. Acct. No.

Sender Acct. No. in Section 1 will be billed
Recipient
Third Party
Credit Card
Cash/Check

Total Packages 1
Total Weight 52 lbs.
Credit Card Auth.

611

*Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

130536

23-Aug-2013

Todd Wells
Conestoga Rovers & Associates
13091 Pond Springs Road, Suite A100
Austin, Texas 78729

Tel: (512) 506-8803
Fax:

Re: 039124-002 G.L. Erwin Work Order: **1308594**

Dear Todd,

ALS Environmental received 18 samples on 15-Aug-2013 09:15 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 41.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Luke F. Hernandez

Dane J. Wacasey

Certificate No: TX: T104704231-13-12

ALS Environmental

Date: 23-Aug-13

Client: Conestoga Rovers & Associates
Project: 039124-002 G.L. Erwin
Work Order: **1308594**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1308594-01	WW-1-081413	Water		8/14/2013 10:55	8/15/2013 09:15	☐
1308594-02	MW-11-081413	Water		8/14/2013 11:05	8/15/2013 09:15	☐
1308594-03	MW-25-081413	Water		8/14/2013 11:20	8/15/2013 09:15	☐
1308594-04	MW-10-081413	Water		8/14/2013 12:00	8/15/2013 09:15	☐
1308594-05	MW-9-081413	Water		8/14/2013 12:15	8/15/2013 09:15	☐
1308594-06	MW-22-081413	Water		8/14/2013 12:30	8/15/2013 09:15	☐
1308594-07	MW-26-081413	Water		8/14/2013 12:50	8/15/2013 09:15	☐
1308594-08	MW-5-081413	Water		8/14/2013 13:00	8/15/2013 09:15	☐
1308594-09	MW-1-081413	Water		8/14/2013 13:10	8/15/2013 09:15	☐
1308594-10	MW-2-081413	Water		8/14/2013 13:20	8/15/2013 09:15	☐
1308594-11	MW-3-081413	Water		8/14/2013 13:40	8/15/2013 09:15	☐
1308594-12	MW-6-081413	Water		8/14/2013 14:00	8/15/2013 09:15	☐
1308594-13	MW-7-081413	Water		8/14/2013 14:20	8/15/2013 09:15	☐
1308594-14	MW-8-081413	Water		8/14/2013 14:40	8/15/2013 09:15	☐
1308594-15	MW-16-081413	Water		8/14/2013 14:50	8/15/2013 09:15	☐
1308594-16	MW-17-081413	Water		8/14/2013 15:10	8/15/2013 09:15	☐
1308594-17	MW-13-081413	Water		8/14/2013 15:25	8/15/2013 09:15	☐
1308594-18	DUP-2-081413	Water		8/14/2013 23:59	8/15/2013 09:15	☐

Client:	Conestoga Rovers & Associates
Project:	039124-002 G.L. Erwin
Work Order:	1308594

Case Narrative

Batch R152613, Anions by 300.0, Sample DUP-2-081413 MS/MSD and WW-1-081413 MS/MSD: MS/MSD failed criteria due to matrix effect.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: WW-1-081413 **Lab ID:** 1308594-01

Collection Date: 8/14/2013 10:55 AM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**92.3**		**0.500**	**mg/L**	1	8/19/2013 07:48 PM
Magnesium	**31.8**		**0.200**	**mg/L**	1	8/19/2013 07:48 PM
Potassium	**6.22**		**0.200**	**mg/L**	1	8/19/2013 07:48 PM
Sodium	**119**		**0.200**	**mg/L**	1	8/19/2013 07:48 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**231**		**2.50**	**mg/L**	5	8/21/2013 07:39 PM
Fluoride	**1.28**		**0.100**	**mg/L**	1	8/15/2013 05:28 PM
Nitrogen, Nitrate (As N)	**2.60**		**0.100**	**mg/L**	1	8/15/2013 05:28 PM
Sulfate	**146**		**2.50**	**mg/L**	5	8/21/2013 07:39 PM
Surr: Selenate (surr)	*98.0*		*85-115*	*%REC*	1	8/15/2013 05:28 PM
Surr: Selenate (surr)	*104*		*85-115*	*%REC*	5	8/21/2013 07:39 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**157**		**6.00**	**mg/L**	1	8/17/2013 07:11 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:11 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:11 PM
Alkalinity, Total (As CaCO3)	**157**		**6.00**	**mg/L**	1	8/17/2013 07:11 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**840**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-11-081413 **Lab ID:** 1308594-02

Collection Date: 8/14/2013 11:05 AM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**779**		**50.0**	**mg/L**	100	8/21/2013 02:28 PM
Magnesium	**260**		**20.0**	**mg/L**	100	8/21/2013 02:28 PM
Potassium	**15.1**		**0.200**	**mg/L**	1	8/19/2013 07:53 PM
Sodium	**579**		**20.0**	**mg/L**	100	8/21/2013 02:28 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**3,070**		**25.0**	**mg/L**	50	8/21/2013 08:22 PM
Fluoride	**0.589**		**0.500**	**mg/L**	5	8/15/2013 05:49 PM
Nitrogen, Nitrate (As N)	**3.22**		**0.500**	**mg/L**	5	8/15/2013 05:49 PM
Sulfate	**140**		**2.50**	**mg/L**	5	8/15/2013 05:49 PM
Surr: Selenate (surr)	*99.3*		*85-115*	*%REC*	5	8/15/2013 05:49 PM
Surr: Selenate (surr)	*109*		*85-115*	*%REC*	50	8/21/2013 08:22 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**117**		**6.00**	**mg/L**	1	8/17/2013 07:15 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:15 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:15 PM
Alkalinity, Total (As CaCO3)	**117**		**6.00**	**mg/L**	1	8/17/2013 07:15 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**6,620**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-25-081413 **Lab ID:** 1308594-03

Collection Date: 8/14/2013 11:20 AM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**929**		**50.0**	**mg/L**	100	8/21/2013 02:32 PM
Magnesium	**289**		**20.0**	**mg/L**	100	8/21/2013 02:32 PM
Potassium	**20.2**		**0.200**	**mg/L**	1	8/19/2013 07:57 PM
Sodium	**1,370**		**20.0**	**mg/L**	100	8/21/2013 02:32 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**4,870**		**25.0**	**mg/L**	50	8/21/2013 08:37 PM
Fluoride	**0.552**		**0.500**	**mg/L**	5	8/15/2013 06:11 PM
Nitrogen, Nitrate (As N)	**3.60**		**0.500**	**mg/L**	5	8/15/2013 06:11 PM
Sulfate	**255**		**2.50**	**mg/L**	5	8/15/2013 06:11 PM
Surr: Selenate (surr)	*99.1*		*85-115*	*%REC*	5	8/15/2013 06:11 PM
Surr: Selenate (surr)	*105*		*85-115*	*%REC*	50	8/21/2013 08:37 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**138**		**6.00**	**mg/L**	1	8/17/2013 07:20 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:20 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:20 PM
Alkalinity, Total (As CaCO3)	**138**		**6.00**	**mg/L**	1	8/17/2013 07:20 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**10,100**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-10-081413 **Lab ID:** 1308594-04

Collection Date: 8/14/2013 12:00 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**806**		**50.0**	**mg/L**	100	8/21/2013 02:37 PM
Magnesium	**271**		**20.0**	**mg/L**	100	8/21/2013 02:37 PM
Potassium	**18.3**		**0.200**	**mg/L**	1	8/19/2013 08:02 PM
Sodium	**991**		**20.0**	**mg/L**	100	8/21/2013 02:37 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**4,260**		**25.0**	**mg/L**	50	8/21/2013 09:21 PM
Fluoride	**0.607**		**0.500**	**mg/L**	5	8/15/2013 06:32 PM
Nitrogen, Nitrate (As N)	**4.05**		**0.500**	**mg/L**	5	8/15/2013 06:32 PM
Sulfate	**226**		**2.50**	**mg/L**	5	8/15/2013 06:32 PM
Surr: Selenate (surr)	*99.4*		*85-115*	*%REC*	5	8/15/2013 06:32 PM
Surr: Selenate (surr)	*108*		*85-115*	*%REC*	50	8/21/2013 09:21 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**133**		**6.00**	**mg/L**	1	8/17/2013 07:25 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:25 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:25 PM
Alkalinity, Total (As CaCO3)	**133**		**6.00**	**mg/L**	1	8/17/2013 07:25 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**9,470**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-9-081413 **Lab ID:** 1308594-05

Collection Date: 8/14/2013 12:15 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**40.2**		**0.500**	**mg/L**	1	8/19/2013 08:07 PM
Magnesium	**12.9**		**0.200**	**mg/L**	1	8/19/2013 08:07 PM
Potassium	**4.32**		**0.200**	**mg/L**	1	8/19/2013 08:07 PM
Sodium	**459**		**20.0**	**mg/L**	100	8/21/2013 02:42 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**603**		**5.00**	**mg/L**	10	8/21/2013 09:35 PM
Fluoride	**2.91**		**0.100**	**mg/L**	1	8/15/2013 06:53 PM
Nitrogen, Nitrate (As N)	**2.68**		**0.100**	**mg/L**	1	8/15/2013 06:53 PM
Sulfate	**173**		**5.00**	**mg/L**	10	8/21/2013 09:35 PM
Surr: Selenate (surr)	*99.0*		*85-115*	*%REC*	1	8/15/2013 06:53 PM
Surr: Selenate (surr)	*105*		*85-115*	*%REC*	10	8/21/2013 09:35 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**224**		**6.00**	**mg/L**	1	8/17/2013 07:31 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:31 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:31 PM
Alkalinity, Total (As CaCO3)	**224**		**6.00**	**mg/L**	1	8/17/2013 07:31 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,410**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-22-081413 **Lab ID:** 1308594-06

Collection Date: 8/14/2013 12:30 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**437**		**50.0**	**mg/L**	100	8/21/2013 02:47 PM
Magnesium	**129**		**0.200**	**mg/L**	1	8/19/2013 08:12 PM
Potassium	**12.7**		**0.200**	**mg/L**	1	8/19/2013 08:12 PM
Sodium	**996**		**20.0**	**mg/L**	100	8/21/2013 02:47 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**2,660**		**12.5**	**mg/L**	25	8/21/2013 09:50 PM
Fluoride	**0.839**		**0.500**	**mg/L**	5	8/15/2013 07:15 PM
Nitrogen, Nitrate (As N)	**2.55**		**0.500**	**mg/L**	5	8/15/2013 07:15 PM
Sulfate	**294**		**2.50**	**mg/L**	5	8/15/2013 07:15 PM
Surr: Selenate (surr)	*100*		*85-115*	*%REC*	5	8/15/2013 07:15 PM
Surr: Selenate (surr)	*110*		*85-115*	*%REC*	25	8/21/2013 09:50 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**183**		**6.00**	**mg/L**	1	8/17/2013 07:36 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:36 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:36 PM
Alkalinity, Total (As CaCO3)	**183**		**6.00**	**mg/L**	1	8/17/2013 07:36 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**5,450**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-26-081413 **Lab ID:** 1308594-07

Collection Date: 8/14/2013 12:50 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**174**		**50.0**	**mg/L**	100	8/21/2013 02:52 PM
Magnesium	**59.9**		**0.200**	**mg/L**	1	8/19/2013 08:26 PM
Potassium	**10.6**		**0.200**	**mg/L**	1	8/19/2013 08:26 PM
Sodium	**913**		**20.0**	**mg/L**	100	8/21/2013 02:52 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**1,930**		**10.0**	**mg/L**	20	8/21/2013 10:04 PM
Fluoride	**0.935**		**0.500**	**mg/L**	5	8/15/2013 07:36 PM
Nitrogen, Nitrate (As N)	**2.46**		**0.500**	**mg/L**	5	8/15/2013 07:36 PM
Sulfate	**244**		**2.50**	**mg/L**	5	8/15/2013 07:36 PM
Surr: Selenate (surr)	*100*		*85-115*	*%REC*	5	8/15/2013 07:36 PM
Surr: Selenate (surr)	*103*		*85-115*	*%REC*	20	8/21/2013 10:04 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**215**		**6.00**	**mg/L**	1	8/17/2013 07:45 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:45 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:45 PM
Alkalinity, Total (As CaCO3)	**215**		**6.00**	**mg/L**	1	8/17/2013 07:45 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**3,700**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-5-081413 **Lab ID:** 1308594-08

Collection Date: 8/14/2013 01:00 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**370**		**50.0**	**mg/L**	100	8/21/2013 02:56 PM
Magnesium	**125**		**0.200**	**mg/L**	1	8/19/2013 08:31 PM
Potassium	**9.47**		**0.200**	**mg/L**	1	8/19/2013 08:31 PM
Sodium	**281**		**20.0**	**mg/L**	100	8/21/2013 02:56 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**1,470**		**10.0**	**mg/L**	20	8/21/2013 10:19 PM
Fluoride	**1.01**		**0.500**	**mg/L**	5	8/15/2013 07:57 PM
Nitrogen, Nitrate (As N)	**3.57**		**0.500**	**mg/L**	5	8/15/2013 07:57 PM
Sulfate	**102**		**2.50**	**mg/L**	5	8/15/2013 07:57 PM
Surr: Selenate (surr)	*100*		*85-115*	*%REC*	5	8/15/2013 07:57 PM
Surr: Selenate (surr)	*110*		*85-115*	*%REC*	20	8/21/2013 10:19 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**161**		**6.00**	**mg/L**	1	8/17/2013 07:51 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:51 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:51 PM
Alkalinity, Total (As CaCO3)	**161**		**6.00**	**mg/L**	1	8/17/2013 07:51 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**3,780**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-1-081413 **Lab ID:** 1308594-09

Collection Date: 8/14/2013 01:10 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**158**		**0.500**	**mg/L**	1	8/19/2013 08:35 PM
Magnesium	**53.2**		**0.200**	**mg/L**	1	8/19/2013 08:35 PM
Potassium	**7.07**		**0.200**	**mg/L**	1	8/19/2013 08:35 PM
Sodium	**112**		**0.200**	**mg/L**	1	8/19/2013 08:35 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**490**		**2.50**	**mg/L**	5	8/21/2013 10:33 PM
Fluoride	**1.47**		**0.100**	**mg/L**	1	8/15/2013 09:01 PM
Nitrogen, Nitrate (As N)	**2.33**		**0.100**	**mg/L**	1	8/15/2013 09:01 PM
Sulfate	**67.0**		**0.500**	**mg/L**	1	8/15/2013 09:01 PM
Surr: Selenate (surr)	*98.5*		*85-115*	*%REC*	1	8/15/2013 09:01 PM
Surr: Selenate (surr)	*106*		*85-115*	*%REC*	5	8/21/2013 10:33 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**140**		**6.00**	**mg/L**	1	8/17/2013 07:56 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:56 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 07:56 PM
Alkalinity, Total (As CaCO3)	**140**		**6.00**	**mg/L**	1	8/17/2013 07:56 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,590**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-2-081413 **Lab ID:** 1308594-10

Collection Date: 8/14/2013 01:20 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**292**		**50.0**	**mg/L**	100	8/21/2013 03:01 PM
Magnesium	**105**		**0.200**	**mg/L**	1	8/19/2013 08:40 PM
Potassium	**8.41**		**0.200**	**mg/L**	1	8/19/2013 08:40 PM
Sodium	**264**		**20.0**	**mg/L**	100	8/21/2013 03:01 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**1,140**		**10.0**	**mg/L**	20	8/21/2013 10:48 PM
Fluoride	**1.36**		**0.100**	**mg/L**	1	8/15/2013 09:22 PM
Nitrogen, Nitrate (As N)	**4.29**		**0.100**	**mg/L**	1	8/15/2013 09:22 PM
Sulfate	**113**		**10.0**	**mg/L**	20	8/21/2013 10:48 PM
Surr: Selenate (surr)	*102*		*85-115*	*%REC*	1	8/15/2013 09:22 PM
Surr: Selenate (surr)	*109*		*85-115*	*%REC*	20	8/21/2013 10:48 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**177**		**6.00**	**mg/L**	1	8/17/2013 08:01 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 08:01 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 08:01 PM
Alkalinity, Total (As CaCO3)	**177**		**6.00**	**mg/L**	1	8/17/2013 08:01 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**2,780**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-3-081413 **Lab ID:** 1308594-11

Collection Date: 8/14/2013 01:40 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**254**		**50.0**	**mg/L**	100	8/21/2013 03:06 PM
Magnesium	**87.9**		**0.200**	**mg/L**	1	8/19/2013 08:45 PM
Potassium	**12.3**		**0.200**	**mg/L**	1	8/19/2013 08:45 PM
Sodium	**925**		**20.0**	**mg/L**	100	8/21/2013 03:06 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**1,330**		**10.0**	**mg/L**	20	8/21/2013 11:03 PM
Fluoride	**1.40**		**0.100**	**mg/L**	1	8/15/2013 09:44 PM
Nitrogen, Nitrate (As N)	**7.59**		**0.100**	**mg/L**	1	8/15/2013 09:44 PM
Sulfate	**309**		**10.0**	**mg/L**	20	8/21/2013 11:03 PM
Surr: Selenate (surr)	*102*		*85-115*	*%REC*	1	8/15/2013 09:44 PM
Surr: Selenate (surr)	*105*		*85-115*	*%REC*	20	8/21/2013 11:03 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**275**		**6.00**	**mg/L**	1	8/17/2013 08:06 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 08:06 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 08:06 PM
Alkalinity, Total (As CaCO3)	**275**		**6.00**	**mg/L**	1	8/17/2013 08:06 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**2,890**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-6-081413 **Lab ID:** 1308594-12

Collection Date: 8/14/2013 02:00 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**214**		**50.0**	**mg/L**	100	8/21/2013 03:30 PM
Magnesium	**74.9**		**0.200**	**mg/L**	1	8/19/2013 08:50 PM
Potassium	**8.92**		**0.200**	**mg/L**	1	8/19/2013 08:50 PM
Sodium	**628**		**20.0**	**mg/L**	100	8/21/2013 03:30 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**865**		**5.00**	**mg/L**	10	8/21/2013 11:17 PM
Fluoride	**2.06**		**0.100**	**mg/L**	1	8/15/2013 10:05 PM
Nitrogen, Nitrate (As N)	**7.96**		**0.100**	**mg/L**	1	8/15/2013 10:05 PM
Sulfate	**241**		**5.00**	**mg/L**	10	8/21/2013 11:17 PM
Surr: Selenate (surr)	*100*		*85-115*	*%REC*	1	8/15/2013 10:05 PM
Surr: Selenate (surr)	*109*		*85-115*	*%REC*	10	8/21/2013 11:17 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**245**		**6.00**	**mg/L**	1	8/17/2013 08:11 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 08:11 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 08:11 PM
Alkalinity, Total (As CaCO3)	**245**		**6.00**	**mg/L**	1	8/17/2013 08:11 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,870**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-7-081413 **Lab ID:** 1308594-13

Collection Date: 8/14/2013 02:20 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**32.4**		**0.500**	**mg/L**	1	8/19/2013 08:54 PM
Magnesium	**9.27**		**0.200**	**mg/L**	1	8/19/2013 08:54 PM
Potassium	**3.92**		**0.200**	**mg/L**	1	8/19/2013 08:54 PM
Sodium	**283**		**20.0**	**mg/L**	100	8/21/2013 03:34 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**285**		**2.50**	**mg/L**	5	8/21/2013 11:32 PM
Fluoride	**2.74**		**0.100**	**mg/L**	1	8/15/2013 10:26 PM
Nitrogen, Nitrate (As N)	**4.92**		**0.100**	**mg/L**	1	8/15/2013 10:26 PM
Sulfate	**143**		**2.50**	**mg/L**	5	8/21/2013 11:32 PM
Surr: Selenate (surr)	*102*		*85-115*	*%REC*	1	8/15/2013 10:26 PM
Surr: Selenate (surr)	*105*		*85-115*	*%REC*	5	8/21/2013 11:32 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**244**		**6.00**	**mg/L**	1	8/17/2013 08:17 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 08:17 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 08:17 PM
Alkalinity, Total (As CaCO3)	**244**		**6.00**	**mg/L**	1	8/17/2013 08:17 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**962**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-8-081413 **Lab ID:** 1308594-14

Collection Date: 8/14/2013 02:40 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**54.7**		**0.500**	**mg/L**	1	8/19/2013 08:59 PM
Magnesium	**16.7**		**0.200**	**mg/L**	1	8/19/2013 08:59 PM
Potassium	**5.27**		**0.200**	**mg/L**	1	8/19/2013 08:59 PM
Sodium	**492**		**20.0**	**mg/L**	100	8/21/2013 03:39 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**665**		**5.00**	**mg/L**	10	8/22/2013 12:15 AM
Fluoride	**3.48**		**0.100**	**mg/L**	1	8/15/2013 10:47 PM
Nitrogen, Nitrate (As N)	**7.52**		**0.100**	**mg/L**	1	8/15/2013 10:47 PM
Sulfate	**216**		**5.00**	**mg/L**	10	8/22/2013 12:15 AM
Surr: Selenate (surr)	*101*		*85-115*	*%REC*	1	8/15/2013 10:47 PM
Surr: Selenate (surr)	*111*		*85-115*	*%REC*	10	8/22/2013 12:15 AM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**262**		**6.00**	**mg/L**	1	8/17/2013 08:22 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 08:22 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 08:22 PM
Alkalinity, Total (As CaCO3)	**262**		**6.00**	**mg/L**	1	8/17/2013 08:22 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,530**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-16-081413 **Lab ID:** 1308594-15

Collection Date: 8/14/2013 02:50 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**228**		**50.0**	**mg/L**	100	8/21/2013 03:44 PM
Magnesium	**90.5**		**0.200**	**mg/L**	1	8/19/2013 09:04 PM
Potassium	**8.13**		**0.200**	**mg/L**	1	8/19/2013 09:04 PM
Sodium	**236**		**20.0**	**mg/L**	100	8/21/2013 03:44 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**907**		**5.00**	**mg/L**	10	8/22/2013 12:30 AM
Fluoride	**1.28**		**0.100**	**mg/L**	1	8/15/2013 11:09 PM
Nitrogen, Nitrate (As N)	**5.78**		**0.100**	**mg/L**	1	8/15/2013 11:09 PM
Sulfate	**162**		**5.00**	**mg/L**	10	8/22/2013 12:30 AM
Surr: Selenate (surr)	*101*		*85-115*	*%REC*	1	8/15/2013 11:09 PM
Surr: Selenate (surr)	*106*		*85-115*	*%REC*	10	8/22/2013 12:30 AM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**224**		**6.00**	**mg/L**	1	8/17/2013 08:27 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/17/2013 08:27 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/17/2013 08:27 PM
Alkalinity, Total (As CaCO3)	**224**		**6.00**	**mg/L**	1	8/17/2013 08:27 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**2,100**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-17-081413 **Lab ID:** 1308594-16

Collection Date: 8/14/2013 03:10 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**181**		**50.0**	**mg/L**	100	8/21/2013 03:49 PM
Magnesium	**67.0**		**0.200**	**mg/L**	1	8/19/2013 09:09 PM
Potassium	**7.28**		**0.200**	**mg/L**	1	8/19/2013 09:09 PM
Sodium	**142**		**0.200**	**mg/L**	1	8/19/2013 09:09 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**637**		**5.00**	**mg/L**	10	8/22/2013 12:44 AM
Fluoride	**1.71**		**0.100**	**mg/L**	1	8/15/2013 11:30 PM
Nitrogen, Nitrate (As N)	**3.37**		**0.100**	**mg/L**	1	8/15/2013 11:30 PM
Sulfate	**126**		**5.00**	**mg/L**	10	8/22/2013 12:44 AM
Surr: Selenate (surr)	*103*		*85-115*	*%REC*	1	8/15/2013 11:30 PM
Surr: Selenate (surr)	*111*		*85-115*	*%REC*	10	8/22/2013 12:44 AM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**163**		**6.00**	**mg/L**	1	8/18/2013 07:17 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:17 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:17 PM
Alkalinity, Total (As CaCO3)	**163**		**6.00**	**mg/L**	1	8/18/2013 07:17 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,790**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: MW-13-081413 **Lab ID:** 1308594-17

Collection Date: 8/14/2013 03:25 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**386**		**50.0**	**mg/L**	100	8/21/2013 03:54 PM
Magnesium	**150**		**0.200**	**mg/L**	1	8/19/2013 09:23 PM
Potassium	**14.9**		**0.200**	**mg/L**	1	8/19/2013 09:23 PM
Sodium	**176**		**0.200**	**mg/L**	1	8/19/2013 09:23 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**1,420**		**10.0**	**mg/L**	20	8/22/2013 12:59 AM
Fluoride	**1.43**		**0.100**	**mg/L**	1	8/15/2013 11:51 PM
Nitrogen, Nitrate (As N)	**3.75**		**0.100**	**mg/L**	1	8/15/2013 11:51 PM
Sulfate	**156**		**10.0**	**mg/L**	20	8/22/2013 12:59 AM
Surr: Selenate (surr)	*99.4*		*85-115*	*%REC*	1	8/15/2013 11:51 PM
Surr: Selenate (surr)	*104*		*85-115*	*%REC*	20	8/22/2013 12:59 AM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**103**		**6.00**	**mg/L**	1	8/18/2013 07:22 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:22 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:22 PM
Alkalinity, Total (As CaCO3)	**103**		**6.00**	**mg/L**	1	8/18/2013 07:22 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**3,930**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *23-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin **Work Order:** 1308594

Sample ID: DUP-2-081413 **Lab ID:** 1308594-18

Collection Date: 8/14/2013 11:59 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **SKS**
Calcium	**900**		**50.0**	**mg/L**	100	8/21/2013 03:59 PM
Magnesium	**287**		**20.0**	**mg/L**	100	8/21/2013 03:59 PM
Potassium	**20.2**		**0.200**	**mg/L**	1	8/19/2013 09:28 PM
Sodium	**1,340**		**20.0**	**mg/L**	100	8/21/2013 03:59 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**5,160**		**50.0**	**mg/L**	100	8/22/2013 01:13 AM
Fluoride	**0.651**		**0.500**	**mg/L**	5	8/16/2013 12:12 AM
Nitrogen, Nitrate (As N)	**3.87**		**0.500**	**mg/L**	5	8/16/2013 12:12 AM
Sulfate	**268**		**2.50**	**mg/L**	5	8/16/2013 12:12 AM
Surr: Selenate (surr)	*101*		*85-115*	*%REC*	5	8/16/2013 12:12 AM
Surr: Selenate (surr)	*111*		*85-115*	*%REC*	100	8/22/2013 01:13 AM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**150**		**6.00**	**mg/L**	1	8/18/2013 07:27 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:27 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:27 PM
Alkalinity, Total (As CaCO3)	**150**		**6.00**	**mg/L**	1	8/18/2013 07:27 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**11,400**		**10.0**	**mg/L**	1	8/21/2013 09:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Work Order: 1308594
Client: Conestoga Rovers & Associates
Project: 039124-002 G.L. Erwin

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
Batch ID 72387	**Test Name:** Dissolved Metals					
1308594-01A	WW-1-081413	Water	8/14/2013 10:55:00 AM		8/19/2013 10:00 AM	8/19/2013 07:48 PM
1308594-02A	MW-11-081413		8/14/2013 11:05:00 AM		8/19/2013 10:00 AM	8/19/2013 07:53 PM
					8/19/2013 10:00 AM	8/21/2013 02:28 PM
1308594-03A	MW-25-081413		8/14/2013 11:20:00 AM		8/19/2013 10:00 AM	8/19/2013 07:57 PM
					8/19/2013 10:00 AM	8/21/2013 02:32 PM
1308594-04A	MW-10-081413		8/14/2013 12:00:00 PM		8/19/2013 10:00 AM	8/19/2013 08:02 PM
					8/19/2013 10:00 AM	8/21/2013 02:37 PM
1308594-05A	MW-9-081413		8/14/2013 12:15:00 PM		8/19/2013 10:00 AM	8/19/2013 08:07 PM
					8/19/2013 10:00 AM	8/21/2013 02:42 PM
1308594-06A	MW-22-081413		8/14/2013 12:30:00 PM		8/19/2013 10:00 AM	8/19/2013 08:12 PM
					8/19/2013 10:00 AM	8/21/2013 02:47 PM
1308594-07A	MW-26-081413		8/14/2013 12:50:00 PM		8/19/2013 10:00 AM	8/19/2013 08:26 PM
					8/19/2013 10:00 AM	8/21/2013 02:52 PM
1308594-08A	MW-5-081413		8/14/2013 1:00:00 PM		8/19/2013 10:00 AM	8/19/2013 08:31 PM
					8/19/2013 10:00 AM	8/21/2013 02:56 PM
1308594-09A	MW-1-081413		8/14/2013 1:10:00 PM		8/19/2013 10:00 AM	8/19/2013 08:35 PM
1308594-10A	MW-2-081413		8/14/2013 1:20:00 PM		8/19/2013 10:00 AM	8/19/2013 08:40 PM
					8/19/2013 10:00 AM	8/21/2013 03:01 PM
1308594-11A	MW-3-081413		8/14/2013 1:40:00 PM		8/19/2013 10:00 AM	8/19/2013 08:45 PM
					8/19/2013 10:00 AM	8/21/2013 03:06 PM
1308594-12A	MW-6-081413		8/14/2013 2:00:00 PM		8/19/2013 10:00 AM	8/19/2013 08:50 PM
					8/19/2013 10:00 AM	8/21/2013 03:30 PM
1308594-13A	MW-7-081413		8/14/2013 2:20:00 PM		8/19/2013 10:00 AM	8/19/2013 08:54 PM
					8/19/2013 10:00 AM	8/21/2013 03:34 PM
1308594-14A	MW-8-081413		8/14/2013 2:40:00 PM		8/19/2013 10:00 AM	8/19/2013 08:59 PM

Work Order: 1308594
Client: Conestoga Rovers & Associates
Project: 039124-002 G.L. Erwin

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
1308594-14A	MW-8-081413	Water	8/14/2013 2:40:00 PM		8/19/2013 10:00 AM	8/21/2013 03:39 PM
1308594-15A	MW-16-081413		8/14/2013 2:50:00 PM		8/19/2013 10:00 AM	8/19/2013 09:04 PM
					8/19/2013 10:00 AM	8/21/2013 03:44 PM
1308594-16A	MW-17-081413		8/14/2013 3:10:00 PM		8/19/2013 10:00 AM	8/19/2013 09:09 PM
					8/19/2013 10:00 AM	8/21/2013 03:49 PM
1308594-17A	MW-13-081413		8/14/2013 3:25:00 PM		8/19/2013 10:00 AM	8/19/2013 09:23 PM
					8/19/2013 10:00 AM	8/21/2013 03:54 PM
1308594-18A	DUP-2-081413		8/14/2013 11:59:00 PM		8/19/2013 10:00 AM	8/19/2013 09:28 PM
					8/19/2013 10:00 AM	8/21/2013 03:59 PM

Work Order: 1308594
Client: Conestoga Rovers & Associates
Project: 039124-002 G.L. Erwin

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
Batch ID R152295 **Test Name:** Anions - EPA 300.0 (1993)						
1308594-01B	WW-1-081413	Water	8/14/2013 10:55:00 AM			8/15/2013 05:28 PM
1308594-02B	MW-11-081413		8/14/2013 11:05:00 AM			8/15/2013 05:49 PM
1308594-03B	MW-25-081413		8/14/2013 11:20:00 AM			8/15/2013 06:11 PM
1308594-04B	MW-10-081413		8/14/2013 12:00:00 PM			8/15/2013 06:32 PM
1308594-05B	MW-9-081413		8/14/2013 12:15:00 PM			8/15/2013 06:53 PM
1308594-06B	MW-22-081413		8/14/2013 12:30:00 PM			8/15/2013 07:15 PM
1308594-07B	MW-26-081413		8/14/2013 12:50:00 PM			8/15/2013 07:36 PM
1308594-08B	MW-5-081413		8/14/2013 1:00:00 PM			8/15/2013 07:57 PM
1308594-09B	MW-1-081413		8/14/2013 1:10:00 PM			8/15/2013 09:01 PM
1308594-10B	MW-2-081413		8/14/2013 1:20:00 PM			8/15/2013 09:22 PM
1308594-11B	MW-3-081413		8/14/2013 1:40:00 PM			8/15/2013 09:44 PM
1308594-12B	MW-6-081413		8/14/2013 2:00:00 PM			8/15/2013 10:05 PM
1308594-13B	MW-7-081413		8/14/2013 2:20:00 PM			8/15/2013 10:26 PM
1308594-14B	MW-8-081413		8/14/2013 2:40:00 PM			8/15/2013 10:47 PM
1308594-15B	MW-16-081413		8/14/2013 2:50:00 PM			8/15/2013 11:09 PM
1308594-16B	MW-17-081413		8/14/2013 3:10:00 PM			8/15/2013 11:30 PM
1308594-17B	MW-13-081413		8/14/2013 3:25:00 PM			8/15/2013 11:51 PM
1308594-18B	DUP-2-081413		8/14/2013 11:59:00 PM			8/16/2013 12:12 AM

Work Order: 1308594
Client: Conestoga Rovers & Associates
Project: 039124-002 G.L. Erwin

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
Batch ID R152375 **Test Name:** Alkalinity-SM2320B						
1308594-01B	WW-1-081413	Water	8/14/2013 10:55:00 AM			8/17/2013 07:11 PM
1308594-02B	MW-11-081413		8/14/2013 11:05:00 AM			8/17/2013 07:15 PM
1308594-03B	MW-25-081413		8/14/2013 11:20:00 AM			8/17/2013 07:20 PM
1308594-04B	MW-10-081413		8/14/2013 12:00:00 PM			8/17/2013 07:25 PM
1308594-05B	MW-9-081413		8/14/2013 12:15:00 PM			8/17/2013 07:31 PM
1308594-06B	MW-22-081413		8/14/2013 12:30:00 PM			8/17/2013 07:36 PM
1308594-07B	MW-26-081413		8/14/2013 12:50:00 PM			8/17/2013 07:45 PM
1308594-08B	MW-5-081413		8/14/2013 1:00:00 PM			8/17/2013 07:51 PM
1308594-09B	MW-1-081413		8/14/2013 1:10:00 PM			8/17/2013 07:56 PM
1308594-10B	MW-2-081413		8/14/2013 1:20:00 PM			8/17/2013 08:01 PM
1308594-11B	MW-3-081413		8/14/2013 1:40:00 PM			8/17/2013 08:06 PM
1308594-12B	MW-6-081413		8/14/2013 2:00:00 PM			8/17/2013 08:11 PM
1308594-13B	MW-7-081413		8/14/2013 2:20:00 PM			8/17/2013 08:17 PM
1308594-14B	MW-8-081413		8/14/2013 2:40:00 PM			8/17/2013 08:22 PM
1308594-15B	MW-16-081413		8/14/2013 2:50:00 PM			8/17/2013 08:27 PM
Batch ID R152387 **Test Name:** Alkalinity-SM2320B						
1308594-16B	MW-17-081413	Water	8/14/2013 3:10:00 PM			8/18/2013 07:17 PM
1308594-17B	MW-13-081413		8/14/2013 3:25:00 PM			8/18/2013 07:22 PM
1308594-18B	DUP-2-081413		8/14/2013 11:59:00 PM			8/18/2013 07:27 PM

Work Order: 1308594
Client: Conestoga Rovers & Associates
Project: 039124-002 G.L. Erwin

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
Batch ID R152613 **Test Name:** Anions - EPA 300.0 (1993)						
1308594-01B	WW-1-081413	Water	8/14/2013 10:55:00 AM			8/21/2013 07:39 PM
1308594-02B	MW-11-081413		8/14/2013 11:05:00 AM			8/21/2013 08:22 PM
1308594-03B	MW-25-081413		8/14/2013 11:20:00 AM			8/21/2013 08:37 PM
1308594-04B	MW-10-081413		8/14/2013 12:00:00 PM			8/21/2013 09:21 PM
1308594-05B	MW-9-081413		8/14/2013 12:15:00 PM			8/21/2013 09:35 PM
1308594-06B	MW-22-081413		8/14/2013 12:30:00 PM			8/21/2013 09:50 PM
1308594-07B	MW-26-081413		8/14/2013 12:50:00 PM			8/21/2013 10:04 PM
1308594-08B	MW-5-081413		8/14/2013 1:00:00 PM			8/21/2013 10:19 PM
1308594-09B	MW-1-081413		8/14/2013 1:10:00 PM			8/21/2013 10:33 PM
1308594-10B	MW-2-081413		8/14/2013 1:20:00 PM			8/21/2013 10:48 PM
1308594-11B	MW-3-081413		8/14/2013 1:40:00 PM			8/21/2013 11:03 PM
1308594-12B	MW-6-081413		8/14/2013 2:00:00 PM			8/21/2013 11:17 PM
1308594-13B	MW-7-081413		8/14/2013 2:20:00 PM			8/21/2013 11:32 PM
1308594-14B	MW-8-081413		8/14/2013 2:40:00 PM			8/22/2013 12:15 AM
1308594-15B	MW-16-081413		8/14/2013 2:50:00 PM			8/22/2013 12:30 AM
1308594-16B	MW-17-081413		8/14/2013 3:10:00 PM			8/22/2013 12:44 AM
1308594-17B	MW-13-081413		8/14/2013 3:25:00 PM			8/22/2013 12:59 AM
1308594-18B	DUP-2-081413		8/14/2013 11:59:00 PM			8/22/2013 01:13 AM

Work Order: 1308594
Client: Conestoga Rovers & Associates
Project: 039124-002 G.L. Erwin

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
Batch ID R152623 **Test Name:** Total Dissolved Solids						
1308594-01B	WW-1-081413	Water	8/14/2013 10:55:00 AM			8/21/2013 09:10 AM
1308594-02B	MW-11-081413		8/14/2013 11:05:00 AM			8/21/2013 09:10 AM
1308594-03B	MW-25-081413		8/14/2013 11:20:00 AM			8/21/2013 09:10 AM
1308594-04B	MW-10-081413		8/14/2013 12:00:00 PM			8/21/2013 09:10 AM
1308594-05B	MW-9-081413		8/14/2013 12:15:00 PM			8/21/2013 09:10 AM
1308594-06B	MW-22-081413		8/14/2013 12:30:00 PM			8/21/2013 09:10 AM
1308594-07B	MW-26-081413		8/14/2013 12:50:00 PM			8/21/2013 09:10 AM
1308594-08B	MW-5-081413		8/14/2013 1:00:00 PM			8/21/2013 09:10 AM
1308594-09B	MW-1-081413		8/14/2013 1:10:00 PM			8/21/2013 09:10 AM
1308594-10B	MW-2-081413		8/14/2013 1:20:00 PM			8/21/2013 09:10 AM
1308594-11B	MW-3-081413		8/14/2013 1:40:00 PM			8/21/2013 09:10 AM
1308594-12B	MW-6-081413		8/14/2013 2:00:00 PM			8/21/2013 09:10 AM
1308594-13B	MW-7-081413		8/14/2013 2:20:00 PM			8/21/2013 09:10 AM
1308594-14B	MW-8-081413		8/14/2013 2:40:00 PM			8/21/2013 09:10 AM
1308594-15B	MW-16-081413		8/14/2013 2:50:00 PM			8/21/2013 09:10 AM
1308594-16B	MW-17-081413		8/14/2013 3:10:00 PM			8/21/2013 09:10 AM
1308594-17B	MW-13-081413		8/14/2013 3:25:00 PM			8/21/2013 09:10 AM
1308594-18B	DUP-2-081413		8/14/2013 11:59:00 PM			8/21/2013 09:10 AM

QC BATCH REPORT

Batch ID: **72387** Instrument ID **ICPMS04** Method: **SW6020** **(Dissolve)**

MBLK Sample ID: **MBLKW3-081913-72387** Units: **mg/L** Analysis Date: **8/19/2013 07:38 PM**

Client ID: Run ID: **ICPMS04_130819A** SeqNo: **3326974** Prep Date: **8/19/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	U	0.500								
Magnesium	U	0.200								
Potassium	U	0.200								
Sodium	U	0.200								

LCS Sample ID: **MLCSW3-081913-72387** Units: **mg/L** Analysis Date: **8/19/2013 07:43 PM**

Client ID: Run ID: **ICPMS04_130819A** SeqNo: **3326975** Prep Date: **8/19/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	5.166	0.500	5	0	103	80-120				
Magnesium	5.483	0.200	5	0	110	80-120				
Potassium	5.397	0.200	5	0	108	80-120				
Sodium	5.496	0.200	5	0	110	80-120				

MS Sample ID: **1308689-11CMS** Units: **mg/L** Analysis Date: **8/19/2013 09:47 PM**

Client ID: Run ID: **ICPMS04_130819A** SeqNo: **3327001** Prep Date: **8/19/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	5.035	0.500	5	-0.05388	102	75-125				
Magnesium	5.279	0.200	5	0.06302	104	75-125				
Potassium	5.364	0.200	5	0.05469	106	75-125				
Sodium	5.497	0.200	5	0.5554	98.8	75-125				

MSD Sample ID: **1308689-11CMSD** Units: **mg/L** Analysis Date: **8/19/2013 09:51 PM**

Client ID: Run ID: **ICPMS04_130819A** SeqNo: **3327002** Prep Date: **8/19/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	4.983	0.500	5	-0.05388	101	75-125	5.035	1.03	25	
Magnesium	5.152	0.200	5	0.06302	102	75-125	5.279	2.44	25	
Potassium	5.167	0.200	5	0.05469	102	75-125	5.364	3.75	25	
Sodium	5.32	0.200	5	0.5554	95.3	75-125	5.497	3.28	25	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308594
Project: 039124-002 G.L. Erwin

QC BATCH REPORT

Batch ID: **72387** Instrument ID **ICPMS04** Method: **SW6020** **(Dissolve)**

DUP Sample ID: **1308689-11CDUP** Units: **mg/L** Analysis Date: **8/19/2013 09:37 PM**

Client ID: Run ID: **ICPMS04_130819A** SeqNo: **3326999** Prep Date: **8/19/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	U	0.500					-0.05388	0	25	
Magnesium	U	0.200					0.06302	0	25	
Potassium	U	0.200					0.05469	0	25	
Sodium	0.3163	0.200					0.5554	54.9	25	R

The following samples were analyzed in this batch:

1308594-01A	1308594-02A	1308594-03A
1308594-04A	1308594-05A	1308594-06A
1308594-07A	1308594-08A	1308594-09A
1308594-10A	1308594-11A	1308594-12A
1308594-13A	1308594-14A	1308594-15A
1308594-16A	1308594-17A	1308594-18A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308594
Project: 039124-002 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152295** Instrument ID **ICS3000** Method: **E300** **(Dissolve)**

MBLK Sample ID: **WBLKW1-R152295** Units: **mg/L** Analysis Date: **8/15/2013 04:46 PM**
Client ID: Run ID: **ICS3000_130815A** SeqNo: **3323792** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	U	0.100								
Nitrogen, Nitrate (As N)	U	0.100								
Sulfate	U	0.500								
Surr: Selenate (surr)	5.119	0.100	*5*	*0*	*102*	*85-115*	*0*			

LCS Sample ID: **WLCSW1-R152295** Units: **mg/L** Analysis Date: **8/15/2013 05:07 PM**
Client ID: Run ID: **ICS3000_130815A** SeqNo: **3323793** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	3.827	0.100	4	0	95.7	90-110				
Nitrogen, Nitrate (As N)	3.838	0.100	4	0	96	90-110				
Sulfate	18.33	0.500	20	0	91.6	90-110				
Surr: Selenate (surr)	4.854	0.100	*5*	*0*	*97.1*	*85-115*	*0*			

MS Sample ID: **1308624-01AMS** Units: **mg/L** Analysis Date: **8/16/2013 01:38 AM**
Client ID: Run ID: **ICS3000_130815A** SeqNo: **3323822** Prep Date: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	10.87	0.500	10	0.267	106	80-120				
Nitrogen, Nitrate (As N)	12.99	0.500	10	2.823	102	80-120				
Sulfate	1296	2.50	50	1271	49.3	80-120				SEO
Surr: Selenate (surr)	25.28	0.500	*25*	*0*	*101*	*85-115*	*0*			

MSD Sample ID: **1308624-01AMSD** Units: **mg/L** Analysis Date: **8/16/2013 01:59 AM**
Client ID: Run ID: **ICS3000_130815A** SeqNo: **3323823** Prep Date: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	10.83	0.500	10	0.267	106	80-120	10.87	0.424	20	
Nitrogen, Nitrate (As N)	12.94	0.500	10	2.823	101	80-120	12.99	0.409	20	
Sulfate	1291	2.50	50	1271	39.3	80-120	1296	0.385	20	SEO
Surr: Selenate (surr)	25.24	0.500	*25*	*0*	*101*	*85-115*	*25.28*	*0.162*	*20*	

The following samples were analyzed in this batch:

1308594-01B	1308594-02B	1308594-03B
1308594-04B	1308594-05B	1308594-06B
1308594-07B	1308594-08B	1308594-09B
1308594-10B	1308594-11B	1308594-12B
1308594-13B	1308594-14B	1308594-15B
1308594-16B	1308594-17B	1308594-18B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308594
Project: 039124-002 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152375** Instrument ID **ManTech01** Method: **SM2320B** **(Dissolve)**

MBLK Sample ID: **WBLKW1-130817-R152375** Units: **mg/L** Analysis Date: **8/17/2013 06:31 PM**
Client ID: Run ID: **MANTECH01_130817A** SeqNo: **3324646** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	U	6.00								
Alkalinity, Carbonate (As CaCO3)	U	6.00								
Alkalinity, Hydroxide (As CaCO3)	U	6.00								
Alkalinity, Total (As CaCO3)	U	6.00								

LCS Sample ID: **WLCSW1-130817-R152375** Units: **mg/L** Analysis Date: **8/17/2013 06:37 PM**
Client ID: Run ID: **MANTECH01_130817A** SeqNo: **3324647** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	1085	6.00	1000	0	109	80-120				

DUP Sample ID: **1308667-01FDUP** Units: **mg/L** Analysis Date: **8/17/2013 06:53 PM**
Client ID: Run ID: **MANTECH01_130817A** SeqNo: **3324651** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	204.9	6.00					204.7	0.0879	0	
Alkalinity, Carbonate (As CaCO3)	U	6.00					0	0	0	
Alkalinity, Hydroxide (As CaCO3)	U	6.00					0	0	0	
Alkalinity, Total (As CaCO3)	204.9	6.00					204.7	0.0879	20	

The following samples were analyzed in this batch:

1308594-01B	1308594-02B	1308594-03B
1308594-04B	1308594-05B	1308594-06B
1308594-07B	1308594-08B	1308594-09B
1308594-10B	1308594-11B	1308594-12B
1308594-13B	1308594-14B	1308594-15B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308594
Project: 039124-002 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152387** Instrument ID **ManTech01** Method: **SM2320B** **(Dissolve)**

MBLK Sample ID: **WBLKW2-130618-R152387** Units: **mg/L** Analysis Date: **8/18/2013 06:45 PM**
Client ID: Run ID: **MANTECH01_130818B** SeqNo: **3325149** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	U	6.00								
Alkalinity, Carbonate (As CaCO3)	U	6.00								
Alkalinity, Hydroxide (As CaCO3)	U	6.00								
Alkalinity, Total (As CaCO3)	U	6.00								

LCS Sample ID: **WLCSW2-130618-R152387** Units: **mg/L** Analysis Date: **8/18/2013 06:50 PM**
Client ID: Run ID: **MANTECH01_130818B** SeqNo: **3325150** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	1074	6.00	1000	0	107	80-120				

DUP Sample ID: **1308676-01DDUP** Units: **mg/L** Analysis Date: **8/18/2013 07:04 PM**
Client ID: Run ID: **MANTECH01_130818B** SeqNo: **3325153** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	187.1	6.00					186.7	0.182	0	
Alkalinity, Carbonate (As CaCO3)	U	6.00					0	0	0	
Alkalinity, Hydroxide (As CaCO3)	U	6.00					0	0	0	
Alkalinity, Total (As CaCO3)	187.1	6.00					186.7	0.182	20	

The following samples were analyzed in this batch: 1308594-16B 1308594-17B 1308594-18B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308594
Project: 039124-002 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152613** Instrument ID **ICS2100** Method: **E300** **(Dissolve)**

MBLK Sample ID: **WBLKW2-R152613** Units: **mg/L** Analysis Date: **8/21/2013 06:26 PM**
Client ID: Run ID: **ICS2100_130821C** SeqNo: **3329398** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	0.304	0.500								J
Sulfate	U	0.500								
Surr: Selenate (surr)	5.497	0.100	*5*	*0*	*110*	*85-115*	*0*			

LCS Sample ID: **WLCSW2-R152613** Units: **mg/L** Analysis Date: **8/21/2013 06:41 PM**
Client ID: Run ID: **ICS2100_130821C** SeqNo: **3329399** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	21.83	0.500	20	0	109	90-110				
Sulfate	19.89	0.500	20	0	99.5	90-110				
Surr: Selenate (surr)	5.167	0.100	*5*	*0*	*103*	*85-115*	*0*			

MS Sample ID: **1308594-01BMS** Units: **mg/L** Analysis Date: **8/21/2013 07:53 PM**
Client ID: **WW-1-081413** Run ID: **ICS2100_130821C** SeqNo: **3329404** Prep Date: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	288.9	2.50	50	231.2	115	80-120				O
Sulfate	200.9	2.50	50	146	110	80-120				
Surr: Selenate (surr)	26.67	0.500	*25*	*0*	*107*	*85-115*	*0*			

MS Sample ID: **1308594-18BMS** Units: **mg/L** Analysis Date: **8/22/2013 01:28 AM**
Client ID: **DUP-2-081413** Run ID: **ICS2100_130821C** SeqNo: **3329427** Prep Date: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	5910	50.0	1000	5158	75.2	80-120				SO
Sulfate	1368	50.0	1000	282.4	109	80-120				
Surr: Selenate (surr)	543.2	10.0	*500*	*0*	*109*	*85-115*	*0*			

MSD Sample ID: **1308594-01BMSD** Units: **mg/L** Analysis Date: **8/21/2013 08:08 PM**
Client ID: **WW-1-081413** Run ID: **ICS2100_130821C** SeqNo: **3329405** Prep Date: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	276.4	2.50	50	231.2	90.4	80-120	288.9	4.44	20	O
Sulfate	190.5	2.50	50	146	89.1	80-120	200.9	5.32	20	
Surr: Selenate (surr)	24.33	0.500	*25*	*0*	*97.3*	*85-115*	*26.67*	*9.17*	*20*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308594
Project: 039124-002 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152613** Instrument ID **ICS2100** Method: **E300** **(Dissolve)**

MSD Sample ID: **1308594-18BMSD** Units: **mg/L** Analysis Date: **8/22/2013 01:42 AM**

Client ID: **DUP-2-081413** Run ID: **ICS2100_130821C** SeqNo: **3329428** Prep Date: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	6205	50.0	1000	5158	105	80-120	5910	4.87	20	O
Sulfate	1442	50.0	1000	282.4	116	80-120	1368	5.31	20	
Surr: Selenate (surr)	574.1	10.0	*500*	*0*	*115*	*85-115*	*543.2*	*5.53*	*20*	

The following samples were analyzed in this batch:

1308594-01B	1308594-02B	1308594-03B
1308594-04B	1308594-05B	1308594-06B
1308594-07B	1308594-08B	1308594-09B
1308594-10B	1308594-11B	1308594-12B
1308594-13B	1308594-14B	1308594-15B
1308594-16B	1308594-17B	1308594-18B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308594
Project: 039124-002 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152623** Instrument ID **Balance1** Method: **M2540C** **(Dissolve)**

MBLK Sample ID: **WBLK-082113-R152623** Units: **mg/L** Analysis Date: **8/21/2013 09:10 AM**
Client ID: Run ID: **BALANCE1_130821D** SeqNo: **3329598** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filt	U	10.0								

LCS Sample ID: **WLCS-082113-R152623** Units: **mg/L** Analysis Date: **8/21/2013 09:10 AM**
Client ID: Run ID: **BALANCE1_130821D** SeqNo: **3329599** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filt	1012	10.0	1000	0	101	85-115				

DUP Sample ID: **1308594-01BDUP** Units: **mg/L** Analysis Date: **8/21/2013 09:10 AM**
Client ID: **WW-1-081413** Run ID: **BALANCE1_130821D** SeqNo: **3329577** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filt	824	10.0					840	1.92	20	

DUP Sample ID: **1308691-01IDUP** Units: **mg/L** Analysis Date: **8/21/2013 09:10 AM**
Client ID: Run ID: **BALANCE1_130821D** SeqNo: **3329597** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filt	2724	10.0					2722	0.0734	20	

The following samples were analyzed in this batch:

1308594-01B	1308594-02B	1308594-03B
1308594-04B	1308594-05B	1308594-06B
1308594-07B	1308594-08B	1308594-09B
1308594-10B	1308594-11B	1308594-12B
1308594-13B	1308594-14B	1308594-15B
1308594-16B	1308594-17B	1308594-18B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 23-Aug-13

Client: Conestoga Rovers & Associates
Project: 039124-002 G.L. Erwin
WorkOrder: **1308594**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Units Reported	Description
mg/L	Milligrams per Liter

ALS Environmental

Sample Receipt Checklist

Client Name: **CRA - AUSTIN** Date/Time Received: **15-Aug-13 09:15**

Work Order: **1308594** Received by: **WTJ**

Checklist completed by William Jenkins (eSignature) 15-Aug-13 (Date) Reviewed by: Sonia West (eSignature) 16-Aug-13 (Date)

Matrices: WATER
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.3C/3.3C 2.5C/2.5C C/U	IR1	
Cooler(s)/Kit(s):	4296, 3656		
Date/Time sample(s) sent to storage:	8/15/13 10:45		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

ALS Environmental

Cincinnati, OH +1 513 733 5336
Everett, WA +1 425 356 2600
Fort Collins, CO +1 970 490 1511
Holland, MI +1 616 399 6070

Chain of Custody Form

Page 1 of 2

COC ID: 90419

1308594

CRA - AUSTIN: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin

ALS Project Manager:

Customer Information		Project Information	
Purchase Order		Project Name	G L Erwin
Work Order		Project Number	039124-002
Company Name	Conestoga-Rovers & Associates	Bill To Company	Conestoga Rovers & Associates
Send Report To	Todd Wells	Invoice Attn	Chris Knight
Address	2136 S Loop 250 West	Address	13091 Pond Springs Road, Suite A10
City/State/Zip	Midland, TX 79703	City/State/Zip	Austin, Texas 78729
Phone	(432) 686-0086	Phone	(512) 506-9803
Fax	(432) 686-0186	Fax	
e-Mail Address	TWells@craworld.com	e-Mail Address	cknight@craworld.com

A	Dissolved Metals (6020/7000) Ca, Mg, Na, K
B	Anions (300) Cl, F, SO4, Nitrate
C	Alkalinity (SM 2320B) Carbonate,Bicarbonate,Hydroxide,and Total
D	TDS
E	
F	
G	
H	
I	
J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	WW-1-081413	08-14-13	1055	W	—	2	X	X	X	X							
2	MW-11-081413		1105		—	2											
3	MW-25-081413		1120		—	2											
4	MW-10-081413		1200		—	2											
5	MW-9-081413		1215		—	2											
6	MW-22-081413		1230		—	2											
7	MW-26-081413		1250		—	2											
8	MW-5-081413		1300		—	2											
9	MW-1-081413		1310		—	2											
10	MW-2-081413		1320		—	2											

Sampler(s) Please Print & Sign: Stuart Mercer Celicio Lerma

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
Stuart Mercer	8-14-13	1715		10 Day TAT.
Relinquished by:	Date:	Time:	Receiver by (Laboratory):	8/15/13 09:15
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Cooler ID	Cooler Temp.

QC Packages (Check One Box Below)

☑ Level II Std QC ☐ TRRP CheckList

☐ Level III Std QC/Raw Data ☐ TRRP Level IV

☐ Level IV SW846/CLP

☐ Other / EDD

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

ALS Environmental

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Everett, WA +1 425 356 2600 | Holland, MI +1 616 399 6070

Chain of Custody Form

Page 2 of 2

COC ID: 90418

1308594

WV

CRA - AUSTIN: Conestoga Rovers & Associates

Project: 039124-002 G.L. Erwin

ALS Project Manager:

Customer Information		Project Information			
Purchase Order		Project Name	G L Erwin	A	Dissolved Metals (6020/7000) Ca, Mg, Na, K
Work Order		Project Number	039124-002	B	Anions (300) Cl, F, SO4, Nitrate
Company Name	Conestoga-Rovers & Associates	Bill To Company	Conestoga Rovers & Associates	C	Alkalinity (SM 2320B) Carbonate,Bicarbonate,Hydroxide,and Total
Send Report To	Todd Wells	Invoice Attn	Chris Knight	D	TDS
Address	2135 S Loop 250 West	Address	13091 Pond Springs Road, Suite A10	E	
				F	
City/State/Zip	Midland, TX 79703	City/State/Zip	Austin, Texas 78729	G	
Phone	(432) 686-0086	Phone	(512) 506-8803	H	
Fax	(432) 686-0186	Fax		I	
e-Mail Address	TWells@CRAWORLD.COM	e-Mail Address	cknight@craworld.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-3-081413	08-14-13	1340	W	—	2	X	X	X	X							
2	MW-6-081413		1400		—												
3	MW-7-081413		1420		—												
4	MW-8-081413		1440		—												
5	MW-16-081413		1450		—												
6	MW-17-081413		1510		—												
7	MW-13-081413		1525		—												
8	DUP-2-081413		—		—												
9																	
10																	

Sampler(s) Please Print & Sign: Stuart Meurer/Celicia Lerma

Shipment Method: Fedex

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ Other 2 WK Days ☐ 24 Hour

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
Stuart Meurer	8-14-13	1715		10 Day TAT.
Relinquished by:	Date:	Time:	Received by (Laboratory): 8/15/13 0915	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Cooler ID	Cooler Temp.

QC Package: (Check One Box)
☑ Level II Std QC/Raw Data ☐ TRRP Checklist
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other / EDD

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

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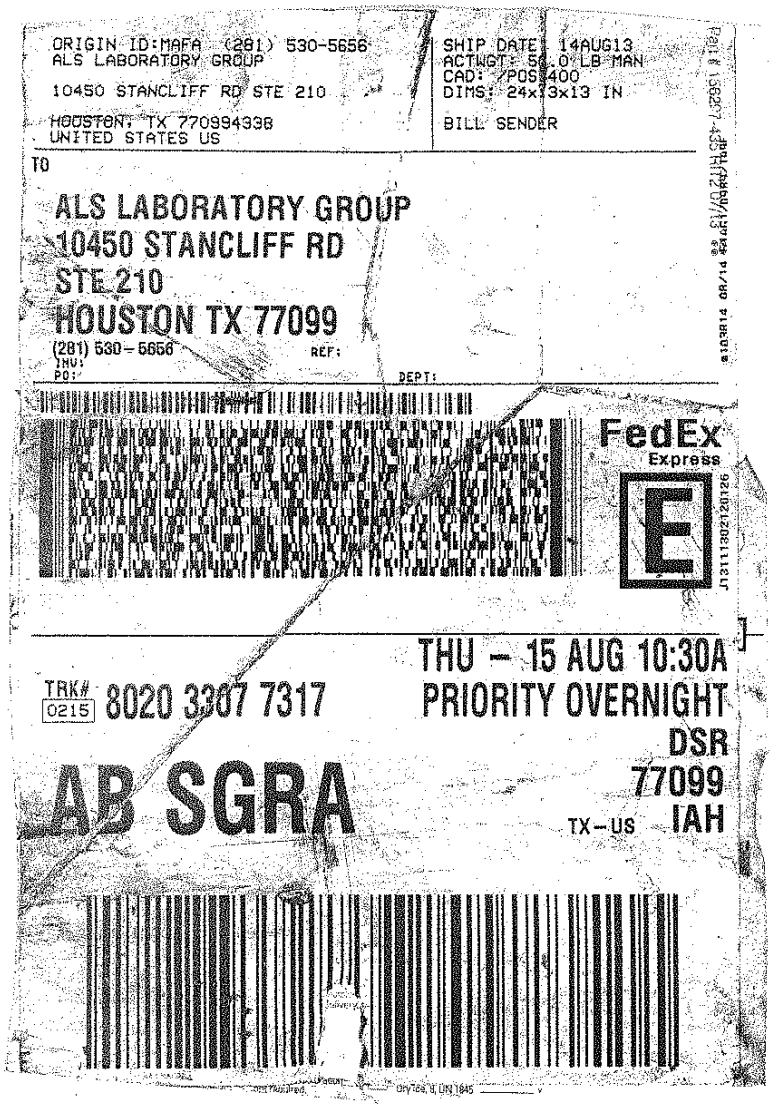
FedEx Express
ORIGIN ID:MAFA (281) 530-5656
ALS LABORATORY GROUP
10450 STANCLIFF RD STE 210
HOUSTON, TX 770994338
UNITED STATES US
SHIP DATE: 14AUG13
ACTWGT: 52.0 LB MAN
CAD: /POS1400
DIMS: 24x13x13 IN
BILL SENDER
TO
ALS LABORATORY GROUP
10450 STANCLIFF RD
STE 210
HOUSTON TX 77099
(281) 530-6660
INV:
PO:
REF:
DEPT:
THU - 15 AUG 10:30A
PRIORITY OVERNIGHT
TRK# 8020 3307 7409
0215
DSR
77099
IAH
TX-US
AB SGRA

SEAL
1700
8/15/13

ALS Environmental
Houston,
Tel. +1 281
Fax. +1 281 530 5887
CUSTO
Name:
Company:


ORIGIN ID:MAFA (281) 530-5656
ALS LABORATORY GROUP
10450 STANCLIFF RD STE 210
HOUSTON, TX 770994338
UNITED STATES US
SHIP DATE: 14AUG13
ACTWGT: 56.0 LB MAN
CAD: 7095400
DIMS: 24x13x13 IN
BILL SENDER
TO
ALS LABORATORY GROUP
10450 STANCLIFF RD
STE 210
HOUSTON TX 77099
(281) 530-5656
REF:
DEPT:
FedEx
Express
THU - 15 AUG 10:30A
PRIORITY OVERNIGHT
TRK# 0215 8020 3307 7317
DSR
77099
IAH
TX-US
AB SGRA


Broken By:
Date:
CUSTODY SEAL
Time:


Date:
Name:
Company:
ALS Environmental
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

29-Aug-2013

Todd Wells
Conestoga Rovers & Associates
13091 Pond Springs Road, Suite A100
Austin, Texas 78729

Tel: (512) 506-8803
Fax:

Re: 039124 G.L. Erwin Work Order: **1308643**

Dear Todd,

ALS Environmental received 9 samples on 16-Aug-2013 09:15 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 30.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Jumoke M. Lawal

Dane J. Wacasey

Certificate No: TX: T104704231-13-12

ALS Environmental

Date: 29-Aug-13

Client: Conestoga Rovers & Associates
Project: 039124 G.L. Erwin
Work Order: **1308643**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1308643-01	MW-14-081513	Water		8/15/2013 11:00	8/16/2013 09:15	☐
1308643-02	MW-12-081513	Water		8/15/2013 11:20	8/16/2013 09:15	☐
1308643-03	MW-15-081513	Water		8/15/2013 11:40	8/16/2013 09:15	☐
1308643-04	MW-19-081513	Water		8/15/2013 12:00	8/16/2013 09:15	☐
1308643-05	MW-21-081513	Water		8/15/2013 13:30	8/16/2013 09:15	☐
1308643-06	MW-20-081513	Water		8/15/2013 14:00	8/16/2013 09:15	☐
1308643-07	MW-24-081513	Water		8/15/2013 14:30	8/16/2013 09:15	☐
1308643-08	MW-23-081513	Water		8/15/2013 15:00	8/16/2013 09:15	☐
1308643-09	DUP-3-081513	Water		8/15/2013	8/16/2013 09:15	☐

Client:	Conestoga Rovers & Associates
Project:	039124 G.L. Erwin
Work Order:	1308643

Case Narrative

Batch R152416, Method 300_W, Sample MW-14-081513, MW-12-081513, MW-15-081513, MW-19-081513, DUP-3-081513: Samples were analyzed out of hold due to power outage affecting instrument, thus resulting in later analysis.

ALS Environmental

Date: *29-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124 G.L. Erwin **Work Order:** 1308643

Sample ID: MW-14-081513 **Lab ID:** 1308643-01

Collection Date: 8/15/2013 11:00 AM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **ALR**
Calcium	**1,470**		**25.0**	**mg/L**	50	8/20/2013 01:07 PM
Magnesium	**423**		**10.0**	**mg/L**	50	8/20/2013 01:07 PM
Potassium	**28.4**		**0.200**	**mg/L**	1	8/19/2013 09:32 PM
Sodium	**2,890**		**10.0**	**mg/L**	50	8/20/2013 01:07 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**8,030**		**100**	**mg/L**	200	8/27/2013 03:18 PM
Fluoride	**1.08**		**0.500**	**mg/L**	5	8/17/2013 03:24 PM
Nitrogen, Nitrate (As N)	**4.53**	H	**0.500**	**mg/L**	5	8/17/2013 03:24 PM
Sulfate	**708**		**100**	**mg/L**	200	8/27/2013 03:18 PM
Surr: Selenate (surr)	*98.3*		*85-115*	*%REC*	200	8/27/2013 03:18 PM
Surr: Selenate (surr)	*108*		*85-115*	*%REC*	5	8/17/2013 03:24 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**102**		**6.00**	**mg/L**	1	8/18/2013 07:32 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:32 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:32 PM
Alkalinity, Total (As CaCO3)	**102**		**6.00**	**mg/L**	1	8/18/2013 07:32 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**15,900**		**10.0**	**mg/L**	1	8/22/2013 10:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *29-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124 G.L. Erwin **Work Order:** 1308643

Sample ID: MW-12-081513 **Lab ID:** 1308643-02

Collection Date: 8/15/2013 11:20 AM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **ALR**
Calcium	**596**		**5.00**	**mg/L**	10	8/20/2013 01:12 PM
Magnesium	**203**		**2.00**	**mg/L**	10	8/20/2013 01:12 PM
Potassium	**13.3**		**0.200**	**mg/L**	1	8/19/2013 09:56 PM
Sodium	**180**		**2.00**	**mg/L**	10	8/20/2013 01:12 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**1,930**		**25.0**	**mg/L**	50	8/27/2013 05:06 PM
Fluoride	**0.792**		**0.200**	**mg/L**	2	8/17/2013 03:10 PM
Nitrogen, Nitrate (As N)	**3.82**	H	**0.200**	**mg/L**	2	8/17/2013 03:10 PM
Sulfate	**65.3**		**1.00**	**mg/L**	2	8/17/2013 03:10 PM
Surr: Selenate (surr)	*95.2*		*85-115*	*%REC*	50	8/27/2013 05:06 PM
Surr: Selenate (surr)	*112*		*85-115*	*%REC*	2	8/17/2013 03:10 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**86.9**		**6.00**	**mg/L**	1	8/18/2013 07:37 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:37 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:37 PM
Alkalinity, Total (As CaCO3)	**86.9**		**6.00**	**mg/L**	1	8/18/2013 07:37 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**4,550**		**10.0**	**mg/L**	1	8/22/2013 10:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *29-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124 G.L. Erwin **Work Order:** 1308643

Sample ID: MW-15-081513 **Lab ID:** 1308643-03

Collection Date: 8/15/2013 11:40 AM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **ALR**
Calcium	**327**		**5.00**	**mg/L**	10	8/20/2013 01:17 PM
Magnesium	**121**		**0.200**	**mg/L**	1	8/19/2013 10:01 PM
Potassium	**12.7**		**0.200**	**mg/L**	1	8/19/2013 10:01 PM
Sodium	**143**		**0.200**	**mg/L**	1	8/19/2013 10:01 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**1,010**		**12.5**	**mg/L**	25	8/27/2013 05:31 PM
Fluoride	**1.19**		**0.100**	**mg/L**	1	8/17/2013 02:55 PM
Nitrogen, Nitrate (As N)	**2.92**	H	**0.100**	**mg/L**	1	8/17/2013 02:55 PM
Sulfate	**92.7**		**0.500**	**mg/L**	1	8/17/2013 02:55 PM
Surr: Selenate (surr)	*95.1*		*85-115*	*%REC*	25	8/27/2013 05:31 PM
Surr: Selenate (surr)	*113*		*85-115*	*%REC*	1	8/17/2013 02:55 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**96.9**		**6.00**	**mg/L**	1	8/18/2013 07:42 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:42 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:42 PM
Alkalinity, Total (As CaCO3)	**96.9**		**6.00**	**mg/L**	1	8/18/2013 07:42 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**3,180**		**10.0**	**mg/L**	1	8/22/2013 10:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *29-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124 G.L. Erwin **Work Order:** 1308643

Sample ID: MW-19-081513 **Lab ID:** 1308643-04

Collection Date: 8/15/2013 12:00 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **ALR**
Calcium	**1,050**		**25.0**	**mg/L**	50	8/20/2013 01:22 PM
Magnesium	**376**		**10.0**	**mg/L**	50	8/20/2013 01:22 PM
Potassium	**28.1**		**0.200**	**mg/L**	1	8/19/2013 10:06 PM
Sodium	**710**		**10.0**	**mg/L**	50	8/20/2013 01:22 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**3,780**		**50.0**	**mg/L**	100	8/27/2013 05:56 PM
Fluoride	**0.896**		**0.500**	**mg/L**	5	8/17/2013 02:41 PM
Nitrogen, Nitrate (As N)	**3.84**	H	**0.500**	**mg/L**	5	8/17/2013 02:41 PM
Sulfate	**382**		**50.0**	**mg/L**	100	8/27/2013 05:56 PM
Surr: Selenate (surr)	*96.3*		*85-115*	*%REC*	100	8/27/2013 05:56 PM
Surr: Selenate (surr)	*113*		*85-115*	*%REC*	5	8/17/2013 02:41 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**94.5**		**6.00**	**mg/L**	1	8/18/2013 07:48 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:48 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:48 PM
Alkalinity, Total (As CaCO3)	**94.5**		**6.00**	**mg/L**	1	8/18/2013 07:48 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**8,740**		**10.0**	**mg/L**	1	8/22/2013 10:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *29-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124 G.L. Erwin **Work Order:** 1308643

Sample ID: MW-21-081513 **Lab ID:** 1308643-05

Collection Date: 8/15/2013 01:30 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **ALR**
Calcium	**100**		**0.500**	**mg/L**	1	8/19/2013 10:11 PM
Magnesium	**30.3**		**0.200**	**mg/L**	1	8/19/2013 10:11 PM
Potassium	**8.42**		**0.200**	**mg/L**	1	8/19/2013 10:11 PM
Sodium	**103**		**0.200**	**mg/L**	1	8/19/2013 10:11 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**180**		**2.50**	**mg/L**	5	8/27/2013 06:20 PM
Fluoride	**2.48**		**0.100**	**mg/L**	1	8/17/2013 01:42 PM
Nitrogen, Nitrate (As N)	**5.90**		**0.100**	**mg/L**	1	8/17/2013 01:42 PM
Sulfate	**123**		**2.50**	**mg/L**	5	8/27/2013 06:20 PM
Surr: Selenate (surr)	*97.3*		*85-115*	*%REC*	5	8/27/2013 06:20 PM
Surr: Selenate (surr)	*107*		*85-115*	*%REC*	1	8/17/2013 01:42 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**175**		**6.00**	**mg/L**	1	8/18/2013 07:53 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:53 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/18/2013 07:53 PM
Alkalinity, Total (As CaCO3)	**175**		**6.00**	**mg/L**	1	8/18/2013 07:53 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**798**		**10.0**	**mg/L**	1	8/22/2013 10:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *29-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124 G.L. Erwin **Work Order:** 1308643

Sample ID: MW-20-081513 **Lab ID:** 1308643-06

Collection Date: 8/15/2013 02:00 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **ALR**
Calcium	**435**		**5.00**	**mg/L**	10	8/20/2013 01:26 PM
Magnesium	**152**		**0.200**	**mg/L**	1	8/19/2013 10:16 PM
Potassium	**15.1**		**0.200**	**mg/L**	1	8/19/2013 10:16 PM
Sodium	**275**		**2.00**	**mg/L**	10	8/20/2013 01:26 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**1,470**		**12.5**	**mg/L**	25	8/27/2013 06:45 PM
Fluoride	**1.02**		**0.100**	**mg/L**	1	8/17/2013 01:57 PM
Nitrogen, Nitrate (As N)	**4.17**		**0.100**	**mg/L**	1	8/17/2013 01:57 PM
Sulfate	**121**		**12.5**	**mg/L**	25	8/27/2013 06:45 PM
Surr: Selenate (surr)	*95.7*		*85-115*	*%REC*	25	8/27/2013 06:45 PM
Surr: Selenate (surr)	*107*		*85-115*	*%REC*	1	8/17/2013 01:57 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**104**		**6.00**	**mg/L**	1	8/18/2013 08:01 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/18/2013 08:01 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/18/2013 08:01 PM
Alkalinity, Total (As CaCO3)	**104**		**6.00**	**mg/L**	1	8/18/2013 08:01 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**4,310**		**10.0**	**mg/L**	1	8/22/2013 10:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *29-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124 G.L. Erwin **Work Order:** 1308643

Sample ID: MW-24-081513 **Lab ID:** 1308643-07

Collection Date: 8/15/2013 02:30 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **ALR**
Calcium	**790**		**5.00**	**mg/L**	10	8/20/2013 01:31 PM
Magnesium	**234**		**2.00**	**mg/L**	10	8/20/2013 01:31 PM
Potassium	**24.8**		**0.200**	**mg/L**	1	8/19/2013 10:21 PM
Sodium	**261**		**2.00**	**mg/L**	10	8/20/2013 01:31 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**2,250**		**25.0**	**mg/L**	50	8/27/2013 11:38 PM
Fluoride	**1.21**		**0.200**	**mg/L**	2	8/17/2013 02:07 PM
Nitrogen, Nitrate (As N)	**3.66**		**0.200**	**mg/L**	2	8/17/2013 02:07 PM
Sulfate	**268**		**25.0**	**mg/L**	50	8/27/2013 11:38 PM
Surr: Selenate (surr)	*97.3*		*85-115*	*%REC*	50	8/27/2013 11:38 PM
Surr: Selenate (surr)	*110*		*85-115*	*%REC*	2	8/17/2013 02:07 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**94.0**		**6.00**	**mg/L**	1	8/18/2013 08:06 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/18/2013 08:06 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/18/2013 08:06 PM
Alkalinity, Total (As CaCO3)	**94.0**		**6.00**	**mg/L**	1	8/18/2013 08:06 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**5,540**		**10.0**	**mg/L**	1	8/22/2013 10:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *29-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124 G.L. Erwin **Work Order:** 1308643

Sample ID: MW-23-081513 **Lab ID:** 1308643-08

Collection Date: 8/15/2013 03:00 PM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **ALR**
Calcium	**156**		**0.500**	**mg/L**	1	8/19/2013 10:36 PM
Magnesium	**52.8**		**0.200**	**mg/L**	1	8/19/2013 10:36 PM
Potassium	**8.82**		**0.200**	**mg/L**	1	8/19/2013 10:36 PM
Sodium	**111**		**0.200**	**mg/L**	1	8/19/2013 10:36 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**458**		**5.00**	**mg/L**	10	8/28/2013 12:09 AM
Fluoride	**1.29**		**0.100**	**mg/L**	1	8/17/2013 02:28 PM
Nitrogen, Nitrate (As N)	**0.686**		**0.100**	**mg/L**	1	8/17/2013 02:28 PM
Sulfate	**93.0**		**0.500**	**mg/L**	1	8/17/2013 02:28 PM
Surr: Selenate (surr)	*98.9*		*85-115*	*%REC*	10	8/28/2013 12:09 AM
Surr: Selenate (surr)	*110*		*85-115*	*%REC*	1	8/17/2013 02:28 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**117**		**6.00**	**mg/L**	1	8/18/2013 08:11 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/18/2013 08:11 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/18/2013 08:11 PM
Alkalinity, Total (As CaCO3)	**117**		**6.00**	**mg/L**	1	8/18/2013 08:11 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**1,510**		**10.0**	**mg/L**	1	8/22/2013 10:10 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *29-Aug-13*

Client: Conestoga Rovers & Associates

Project: 039124 G.L. Erwin **Work Order:** 1308643

Sample ID: DUP-3-081513 **Lab ID:** 1308643-09

Collection Date: 8/15/2013 **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED METALS			**SW6020**		Prep Date: **8/19/2013**	Analyst: **ALR**
Calcium	**1,520**		**25.0**	**mg/L**	50	8/20/2013 01:36 PM
Magnesium	**431**		**10.0**	**mg/L**	50	8/20/2013 01:36 PM
Potassium	**29.5**		**0.200**	**mg/L**	1	8/19/2013 10:40 PM
Sodium	**2,950**		**10.0**	**mg/L**	50	8/20/2013 01:36 PM
ANIONS - EPA 300.0 (1993)			**E300**			Analyst: **EDG**
Chloride	**8,090**		**100**	**mg/L**	200	8/28/2013 12:35 AM
Fluoride	**0.970**		**0.500**	**mg/L**	5	8/17/2013 03:39 PM
Nitrogen, Nitrate (As N)	**3.99**	H	**0.500**	**mg/L**	5	8/17/2013 03:39 PM
Sulfate	**736**		**100**	**mg/L**	200	8/28/2013 12:35 AM
Surr: Selenate (surr)	*99.0*		*85-115*	*%REC*	200	8/28/2013 12:35 AM
Surr: Selenate (surr)	*111*		*85-115*	*%REC*	5	8/17/2013 03:39 PM
ALKALINITY-SM2320B			**SM2320B**			Analyst: **KL**
Alkalinity, Bicarbonate (As CaCO3)	**102**		**6.00**	**mg/L**	1	8/18/2013 08:16 PM
Alkalinity, Carbonate (As CaCO3)	U		6.00	mg/L	1	8/18/2013 08:16 PM
Alkalinity, Hydroxide (As CaCO3)	U		6.00	mg/L	1	8/18/2013 08:16 PM
Alkalinity, Total (As CaCO3)	**102**		**6.00**	**mg/L**	1	8/18/2013 08:16 PM
TOTAL DISSOLVED SOLIDS			**M2540C**			Analyst: **KAH**
Total Dissolved Solids (Residue, Filterable)	**16,600**		**10.0**	**mg/L**	1	8/19/2013 05:00 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Work Order: 1308643
Client: Conestoga Rovers & Associates
Project: 039124 G.L. Erwin

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
Batch ID 72388	**Test Name:** Dissolved Metals					
1308643-01A	MW-14-081513	Water	8/15/2013 11:00:00 AM		8/19/2013 10:00 AM	8/19/2013 09:32 PM
					8/19/2013 10:00 AM	8/20/2013 01:07 PM
1308643-02A	MW-12-081513		8/15/2013 11:20:00 AM		8/19/2013 10:00 AM	8/19/2013 09:56 PM
					8/19/2013 10:00 AM	8/20/2013 01:12 PM
1308643-03A	MW-15-081513		8/15/2013 11:40:00 AM		8/19/2013 10:00 AM	8/19/2013 10:01 PM
					8/19/2013 10:00 AM	8/20/2013 01:17 PM
1308643-04A	MW-19-081513		8/15/2013 12:00:00 PM		8/19/2013 10:00 AM	8/19/2013 10:06 PM
					8/19/2013 10:00 AM	8/20/2013 01:22 PM
1308643-05A	MW-21-081513		8/15/2013 1:30:00 PM		8/19/2013 10:00 AM	8/19/2013 10:11 PM
1308643-06A	MW-20-081513		8/15/2013 2:00:00 PM		8/19/2013 10:00 AM	8/19/2013 10:16 PM
					8/19/2013 10:00 AM	8/20/2013 01:26 PM
1308643-07A	MW-24-081513		8/15/2013 2:30:00 PM		8/19/2013 10:00 AM	8/19/2013 10:21 PM
					8/19/2013 10:00 AM	8/20/2013 01:31 PM
1308643-08A	MW-23-081513		8/15/2013 3:00:00 PM		8/19/2013 10:00 AM	8/19/2013 10:36 PM
1308643-09A	DUP-3-081513		8/15/2013		8/19/2013 10:00 AM	8/19/2013 10:40 PM
					8/19/2013 10:00 AM	8/20/2013 01:36 PM

Work Order: 1308643
Client: Conestoga Rovers & Associates
Project: 039124 G.L. Erwin

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
Batch ID R152387 **Test Name:** Alkalinity-SM2320B						
1308643-01B	MW-14-081513	Water	8/15/2013 11:00:00 AM			8/18/2013 07:32 PM
1308643-02B	MW-12-081513		8/15/2013 11:20:00 AM			8/18/2013 07:37 PM
1308643-03B	MW-15-081513		8/15/2013 11:40:00 AM			8/18/2013 07:42 PM
1308643-04B	MW-19-081513		8/15/2013 12:00:00 PM			8/18/2013 07:48 PM
1308643-05B	MW-21-081513		8/15/2013 1:30:00 PM			8/18/2013 07:53 PM
1308643-06B	MW-20-081513		8/15/2013 2:00:00 PM			8/18/2013 08:01 PM
1308643-07B	MW-24-081513		8/15/2013 2:30:00 PM			8/18/2013 08:06 PM
1308643-08B	MW-23-081513		8/15/2013 3:00:00 PM			8/18/2013 08:11 PM
1308643-09B	DUP-3-081513		8/15/2013			8/18/2013 08:16 PM
Batch ID R152411 **Test Name:** Anions - EPA 300.0 (1993)						
1308643-07B	MW-24-081513	Water	8/15/2013 2:30:00 PM			8/17/2013 02:07 PM
1308643-08B	MW-23-081513		8/15/2013 3:00:00 PM			8/17/2013 02:28 PM
Batch ID R152416 **Test Name:** Anions - EPA 300.0 (1993)						
1308643-01B	MW-14-081513	Water	8/15/2013 11:00:00 AM			8/17/2013 03:24 PM
1308643-02B	MW-12-081513		8/15/2013 11:20:00 AM			8/17/2013 03:10 PM
1308643-03B	MW-15-081513		8/15/2013 11:40:00 AM			8/17/2013 02:55 PM
1308643-04B	MW-19-081513		8/15/2013 12:00:00 PM			8/17/2013 02:41 PM
1308643-05B	MW-21-081513		8/15/2013 1:30:00 PM			8/17/2013 01:42 PM
1308643-06B	MW-20-081513		8/15/2013 2:00:00 PM			8/17/2013 01:57 PM
1308643-09B	DUP-3-081513		8/15/2013			8/17/2013 03:39 PM
Batch ID R152495 **Test Name:** Total Dissolved Solids						
1308643-09B	DUP-3-081513	Water	8/15/2013			8/19/2013 05:00 PM

Work Order: 1308643
Client: Conestoga Rovers & Associates
Project: 039124 G.L. Erwin

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
Batch ID R152653 **Test Name:** Total Dissolved Solids						
1308643-01B	MW-14-081513	Water	8/15/2013 11:00:00 AM			8/22/2013 10:10 AM
1308643-02B	MW-12-081513		8/15/2013 11:20:00 AM			8/22/2013 10:10 AM
1308643-03B	MW-15-081513		8/15/2013 11:40:00 AM			8/22/2013 10:10 AM
1308643-04B	MW-19-081513		8/15/2013 12:00:00 PM			8/22/2013 10:10 AM
1308643-05B	MW-21-081513		8/15/2013 1:30:00 PM			8/22/2013 10:10 AM
1308643-06B	MW-20-081513		8/15/2013 2:00:00 PM			8/22/2013 10:10 AM
1308643-07B	MW-24-081513		8/15/2013 2:30:00 PM			8/22/2013 10:10 AM
1308643-08B	MW-23-081513		8/15/2013 3:00:00 PM			8/22/2013 10:10 AM
Batch ID R152875 **Test Name:** Anions - EPA 300.0 (1993)						
1308643-01B	MW-14-081513	Water	8/15/2013 11:00:00 AM			8/27/2013 03:18 PM
1308643-02B	MW-12-081513		8/15/2013 11:20:00 AM			8/27/2013 05:06 PM
1308643-03B	MW-15-081513		8/15/2013 11:40:00 AM			8/27/2013 05:31 PM
1308643-04B	MW-19-081513		8/15/2013 12:00:00 PM			8/27/2013 05:56 PM
1308643-05B	MW-21-081513		8/15/2013 1:30:00 PM			8/27/2013 06:20 PM
1308643-06B	MW-20-081513		8/15/2013 2:00:00 PM			8/27/2013 06:45 PM
1308643-07B	MW-24-081513		8/15/2013 2:30:00 PM			8/27/2013 11:38 PM
1308643-08B	MW-23-081513		8/15/2013 3:00:00 PM			8/28/2013 12:09 AM
1308643-09B	DUP-3-081513		8/15/2013			8/28/2013 12:35 AM

QC BATCH REPORT

Batch ID: **72388** Instrument ID **ICP7500** Method: **SW6020** **(Dissolve)**

MBLK Sample ID: **MBLKW4-081913-72388** Units: **mg/L** Analysis Date: **8/19/2013 08:18 PM**

Client ID: Run ID: **ICP7500_130819A** SeqNo: **3326397** Prep Date: **8/19/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	U	0.500								
Magnesium	U	0.200								
Potassium	U	0.200								
Sodium	U	0.200								

LCS Sample ID: **MLCSW4-081913-72388** Units: **mg/L** Analysis Date: **8/19/2013 08:23 PM**

Client ID: Run ID: **ICP7500_130819A** SeqNo: **3326398** Prep Date: **8/19/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	5.317	0.500	5	0	106	80-120				
Magnesium	5.076	0.200	5	0	102	80-120				
Potassium	5.067	0.200	5	0	101	80-120				
Sodium	5.102	0.200	5	0	102	80-120				

MS Sample ID: **1308689-27CMS** Units: **mg/L** Analysis Date: **8/19/2013 08:42 PM**

Client ID: Run ID: **ICP7500_130819A** SeqNo: **3326402** Prep Date: **8/19/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	5.188	0.500	5	-0.01921	104	75-125				
Magnesium	5.006	0.200	5	0.02191	99.7	75-125				
Potassium	4.984	0.200	5	0.007204	99.5	75-125				
Sodium	5.09	0.200	5	0.1342	99.1	75-125				

MSD Sample ID: **1308689-27CMSD** Units: **mg/L** Analysis Date: **8/19/2013 08:47 PM**

Client ID: Run ID: **ICP7500_130819A** SeqNo: **3326403** Prep Date: **8/19/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	5.213	0.500	5	-0.01921	105	75-125	5.188	0.481	25	
Magnesium	4.978	0.200	5	0.02191	99.1	75-125	5.006	0.561	25	
Potassium	4.931	0.200	5	0.007204	98.5	75-125	4.984	1.07	25	
Sodium	5.082	0.200	5	0.1342	99	75-125	5.09	0.157	25	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308643
Project: 039124 G.L. Erwin

QC BATCH REPORT

Batch ID: **72388** Instrument ID **ICP7500** Method: **SW6020** **(Dissolve)**

DUP Sample ID: **1308689-27CDUP** Units: **mg/L** Analysis Date: **8/19/2013 08:32 PM**
Client ID: Run ID: **ICP7500_130819A** SeqNo: **3326400** Prep Date: **8/19/2013** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	U	0.500					-0.01921	0	25	
Magnesium	U	0.200					0.02191	0	25	
Potassium	U	0.200					0.007204	0	25	
Sodium	0.1293	0.200					0.1342	0	25	J

The following samples were analyzed in this batch:

1308643-01A	1308643-02A	1308643-03A
1308643-04A	1308643-05A	1308643-06A
1308643-07A	1308643-08A	1308643-09A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308643
Project: 039124 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152387** Instrument ID **ManTech01** Method: **SM2320B** **(Dissolve)**

MBLK Sample ID: **WBLKW2-130618-R152387** Units: **mg/L** Analysis Date: **8/18/2013 06:45 PM**
Client ID: Run ID: **MANTECH01_130818B** SeqNo: **3325149** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	U	6.00								
Alkalinity, Carbonate (As CaCO3)	U	6.00								
Alkalinity, Hydroxide (As CaCO3)	U	6.00								
Alkalinity, Total (As CaCO3)	U	6.00								

LCS Sample ID: **WLCSW2-130618-R152387** Units: **mg/L** Analysis Date: **8/18/2013 06:50 PM**
Client ID: Run ID: **MANTECH01_130818B** SeqNo: **3325150** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	1074	6.00	1000	0	107	80-120				

DUP Sample ID: **1308676-01DDUP** Units: **mg/L** Analysis Date: **8/18/2013 07:04 PM**
Client ID: Run ID: **MANTECH01_130818B** SeqNo: **3325153** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	187.1	6.00					186.7	0.182	0	
Alkalinity, Carbonate (As CaCO3)	U	6.00					0	0	0	
Alkalinity, Hydroxide (As CaCO3)	U	6.00					0	0	0	
Alkalinity, Total (As CaCO3)	187.1	6.00					186.7	0.182	20	

The following samples were analyzed in this batch:

1308643-01B	1308643-02B	1308643-03B
1308643-04B	1308643-05B	1308643-06B
1308643-07B	1308643-08B	1308643-09B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308643
Project: 039124 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152411** Instrument ID **ICS3000** Method: **E300** **(Dissolve)**

MBLK Sample ID: **WBLKW1-R152411** Units: **mg/L** Analysis Date: **8/17/2013 01:03 PM**
Client ID: Run ID: **ICS3000_130817A** SeqNo: **3325576** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	0.0589	0.100								J
Nitrogen, Nitrate (As N)	U	0.100								
Sulfate	0.4115	0.500								J
Surr: Selenate (surr)	4.941	0.100	*5*	*0*	*98.8*	*85-115*	*0*			

LCS Sample ID: **WLCSW1-R152411** Units: **mg/L** Analysis Date: **8/15/2013 05:07 PM**
Client ID: Run ID: **ICS3000_130817A** SeqNo: **3325575** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	3.827	0.100	4	0	95.7	90-110				
Nitrogen, Nitrate (As N)	3.838	0.100	4	0	96	90-110				
Sulfate	18.33	0.500	20	0	91.6	90-110				
Surr: Selenate (surr)	4.854	0.100	*5*	*0*	*97.1*	*85-115*	*0*			

LCS Sample ID: **WLCSW1-R152411** Units: **mg/L** Analysis Date: **8/17/2013 05:40 PM**
Client ID: Run ID: **ICS3000_130817A** SeqNo: **3325589** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	3.885	0.100	4	0	97.1	90-110				
Nitrogen, Nitrate (As N)	3.854	0.100	4	0	96.4	90-110				
Sulfate	19.3	0.500	20	0	96.5	90-110				
Surr: Selenate (surr)	4.863	0.100	*5*	*0*	*97.3*	*85-115*	*0*			

MS Sample ID: **1308460-01FMS** Units: **mg/L** Analysis Date: **8/17/2013 06:01 PM**
Client ID: Run ID: **ICS3000_130817A** SeqNo: **3325590** Prep Date: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	10.82	0.500	10	0.342	105	80-120				
Nitrogen, Nitrate (As N)	9.83	0.500	10	0.07	97.6	80-120				H
Sulfate	324.4	2.50	50	341	-33.2	80-120				SO
Surr: Selenate (surr)	25.81	0.500	*25*	*0*	*103*	*85-115*	*0*			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308643
Project: 039124 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152411** Instrument ID **ICS3000** Method: **E300** **(Dissolve)**

MSD Sample ID: **1308460-01FMSD** Units: **mg/L** Analysis Date: **8/17/2013 06:22 PM**

Client ID: Run ID: **ICS3000_130817A** SeqNo: **3325591** Prep Date: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	10.6	0.500	10	0.342	103	80-120	10.82	2.07	20	
Nitrogen, Nitrate (As N)	9.904	0.500	10	0.07	98.3	80-120	9.83	0.75	20	H
Sulfate	326.2	2.50	50	341	-29.4	80-120	324.4	0.574	20	SO
Surr: Selenate (surr)	25.95	0.500	*25*	*0*	*104*	*85-115*	*25.81*	*0.545*	*20*	

The following samples were analyzed in this batch: 1308643-07B 1308643-08B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308643
Project: 039124 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152416** Instrument ID **ICS2100** Method: **E300** **(Dissolve)**

MBLK Sample ID: **WBLKW1-R152416** Units: **mg/L** Analysis Date: **8/17/2013 04:37 PM**
Client ID: Run ID: **ICS2100_130817A** SeqNo: **3325643** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	U	0.100								
Nitrogen, Nitrate (As N)	U	0.100								
Sulfate	U	0.500								
Surr: Selenate (surr)	5.41	0.100	*5*	*0*	*108*	*85-115*	*0*			

LCS Sample ID: **WLCSW1-R152416** Units: **mg/L** Analysis Date: **8/17/2013 03:53 PM**
Client ID: Run ID: **ICS2100_130817A** SeqNo: **3325640** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	4.22	0.100	4	0	106	90-110				
Nitrogen, Nitrate (As N)	4.042	0.100	4	0	101	90-110				
Sulfate	21.51	0.500	20	0	108	90-110				
Surr: Selenate (surr)	5.068	0.100	*5*	*0*	*101*	*85-115*	*0*			

MS Sample ID: **1308643-06BMS** Units: **mg/L** Analysis Date: **8/17/2013 02:11 PM**
Client ID: **MW-20-081513** Run ID: **ICS2100_130817A** SeqNo: **3325633** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	2.778	0.100	2	1.022	87.8	80-120				
Nitrogen, Nitrate (As N)	6.319	0.100	2	4.173	107	80-120				
Sulfate	149.6	0.500	10	144.1	55.9	80-120				SEO

MSD Sample ID: **1308643-06BMSD** Units: **mg/L** Analysis Date: **8/17/2013 02:26 PM**
Client ID: **MW-20-081513** Run ID: **ICS2100_130817A** SeqNo: **3325634** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	2.922	0.100	2	1.022	95	80-120	2.778	5.05	20	
Nitrogen, Nitrate (As N)	6.664	0.100	2	4.173	125	80-120	6.319	5.31	20	S
Sulfate	157.5	0.500	10	144.1	134	80-120	149.6	5.11	20	SEO

The following samples were analyzed in this batch:

1308643-01B	1308643-02B	1308643-03B
1308643-04B	1308643-05B	1308643-06B
1308643-09B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308643
Project: 039124 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152495** Instrument ID **Balance1** Method: **M2540C** **(Dissolve)**

MBLK Sample ID: **WBLK-081913-R152495** Units: **mg/L** Analysis Date: **8/19/2013 05:00 PM**
Client ID: Run ID: **BALANCE1_130819D** SeqNo: **3327158** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	U	10.0								

LCS Sample ID: **WLCS-081913-R152495** Units: **mg/L** Analysis Date: **8/19/2013 05:00 PM**
Client ID: Run ID: **BALANCE1_130819D** SeqNo: **3327159** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	1010	10.0	1000	0	101	85-115				

DUP Sample ID: **1308536-05BDUP** Units: **mg/L** Analysis Date: **8/19/2013 05:00 PM**
Client ID: Run ID: **BALANCE1_130819D** SeqNo: **3327155** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	2452	10.0					2484	1.3	20	

The following samples were analyzed in this batch: 1308643-09B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308643
Project: 039124 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152653** Instrument ID **Balance1** Method: **M2540C** **(Dissolve)**

MBLK Sample ID: **WBLK-082213-R152653** Units: **mg/L** Analysis Date: **8/22/2013 10:10 AM**
Client ID: Run ID: **BALANCE1_130822C** SeqNo: **3330258** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	U	10.0								

LCS Sample ID: **WLCS-082213-R152653** Units: **mg/L** Analysis Date: **8/22/2013 10:10 AM**
Client ID: Run ID: **BALANCE1_130822C** SeqNo: **3330259** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	982	10.0	1000	0	98.2	85-115				

DUP Sample ID: **1308643-01BDUP** Units: **mg/L** Analysis Date: **8/22/2013 10:10 AM**
Client ID: **MW-14-081513** Run ID: **BALANCE1_130822C** SeqNo: **3330244** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	15640	10.0					15860	1.4	20	

DUP Sample ID: **1308776-01CDUP** Units: **mg/L** Analysis Date: **8/22/2013 10:10 AM**
Client ID: Run ID: **BALANCE1_130822C** SeqNo: **3330257** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	952	10.0					938	1.48	20	

The following samples were analyzed in this batch:

1308643-01B	1308643-02B	1308643-03B
1308643-04B	1308643-05B	1308643-06B
1308643-07B	1308643-08B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308643
Project: 039124 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152875** Instrument ID **ICS3000** Method: **E300** **(Dissolve)**

MBLK Sample ID: **WBLKW1-R152875** Units: **mg/L** Analysis Date: **8/27/2013 01:30 PM**
Client ID: Run ID: **ICS3000_130827A** SeqNo: **3335576** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								
Sulfate	U	0.500								
Surr: Selenate (surr)	5.298	0.100	*5*	*0*	*106*	*85-115*	*0*			

LCS Sample ID: **WLCSW1-R152875** Units: **mg/L** Analysis Date: **8/27/2013 01:54 PM**
Client ID: Run ID: **ICS3000_130827A** SeqNo: **3335577** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.7	0.500	20	0	98.5	90-110				
Sulfate	18.98	0.500	20	0	94.9	90-110				
Surr: Selenate (surr)	4.813	0.100	*5*	*0*	*96.3*	*85-115*	*0*			

MS Sample ID: **1308643-01BMS** Units: **mg/L** Analysis Date: **8/27/2013 03:43 PM**
Client ID: **MW-14-081513** Run ID: **ICS3000_130827A** SeqNo: **3335579** Prep Date: DF: **200**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9738	100	2000	8026	85.6	80-120				O
Sulfate	2539	100	2000	708.1	91.6	80-120				
Surr: Selenate (surr)	946.5	20.0	*1000*	*0*	*94.6*	*85-115*	*0*			

MS Sample ID: **1308916-08EMS** Units: **mg/L** Analysis Date: **8/28/2013 01:53 PM**
Client ID: Run ID: **ICS3000_130827A** SeqNo: **3335603** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	100.3	0.500	10	90.2	101	80-120				EO
Sulfate	17.55	0.500	10	7.418	101	80-120				
Surr: Selenate (surr)	5.386	0.100	*5*	*0*	*108*	*85-115*	*0*			

MSD Sample ID: **1308643-01BMSD** Units: **mg/L** Analysis Date: **8/27/2013 04:07 PM**
Client ID: **MW-14-081513** Run ID: **ICS3000_130827A** SeqNo: **3335580** Prep Date: DF: **200**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9670	100	2000	8026	82.2	80-120	9738	0.705	20	O
Sulfate	2542	100	2000	708.1	91.7	80-120	2539	0.116	20	
Surr: Selenate (surr)	942.7	20.0	*1000*	*0*	*94.3*	*85-115*	*946.5*	*0.4*	*20*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Work Order: 1308643
Project: 039124 G.L. Erwin

QC BATCH REPORT

Batch ID: **R152875** Instrument ID **ICS3000** Method: **E300** **(Dissolve)**

MSD Sample ID: **1308916-08EMSD** Units: **mg/L** Analysis Date: **8/28/2013 02:19 PM**

Client ID: Run ID: **ICS3000_130827A** SeqNo: **3335604** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	100	0.500	10	90.2	98.2	80-120	100.3	0.251	20	EO
Sulfate	17.6	0.500	10	7.418	102	80-120	17.55	0.313	20	
Surr: Selenate (surr)	5.373	0.100	*5*	*0*	*107*	*85-115*	*5.386*	*0.242*	*20*	

The following samples were analyzed in this batch:

1308643-01B	1308643-02B	1308643-03B
1308643-04B	1308643-05B	1308643-06B
1308643-07B	1308643-08B	1308643-09B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga Rovers & Associates
Project: 039124 G.L. Erwin
WorkOrder: **1308643**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Units Reported	Description
mg/L	Milligrams per Liter

ALS Environmental

Sample Receipt Checklist

Client Name: **CRA - AUSTIN** Date/Time Received: **16-Aug-13 09:15**

Work Order: **1308643** Received by: **WTJ**

Checklist completed by Robert D. Harris (eSignature) 16-Aug-13 (Date) Reviewed by: Bethany McDaniel (eSignature) 16-Aug-13 (Date)

Matrices: waters
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.2c/2.2c c/u	IR1	
Cooler(s)/Kit(s):	3077		
Date/Time sample(s) sent to storage:	8/16/13 10:10		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	_		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

ALS Environmental

Cincinnati, OH +1 513 733 5336
Everett, WA +1 425 356 2600
Fort Collins, CO +1 970 490 1511
Holland, MI +1 616 399 6070

Chain of Custody Form

Page 1 of 1

COC ID: 90417

1308643

CRA - AUSTIN: Conestoga Rovers & Associates

Project: 039124 G.L. Erwin

ALS Project Manager:

Customer Information		Project Information			
Purchase Order		Project Name	G L Erwin	A	Dissolved Metals (6020/7000) Ca, Mg, Na, K
Work Order		Project Number	039124-002	B	Anions (300) Cl, F, SO4, Nitrate
Company Name	Conestoga-Rovers & Associates	Bill To Company	Conestoga Rovers & Associates	C	Alkalinity (SM 2320B) Carbonate,Bicarbonate,Hydroxide,and Total
Send Report To	Todd Wells	Invoice Attn	Chris Knight	D	TDS
Address	2135 S Loop 250 West	Address	13091 Pond Springs Road, Suite A10	E	
				F	
City/State/Zip	Midland, TX 79703	City/State/Zip	Austin, Texas 78729	G	
Phone	(432) 686-0086	Phone	(512) 506-8803	H	
Fax	(432) 686-0186	Fax		I	
e-Mail Address	twells@craworld.com	e-Mail Address	cknight@craworld.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-14-081513	8-15-13	1100	W	—	2	X	X	X	X							
2	MW-12-081513		1120		—	2											
3	MW-15-081513		1140		—	2											
4	MW-19-081513		1200		—	2											
5	MW-21-081513		1330		—	2											
6	MW-20-081513		1400		—	2											
7	MW-24-081513		1430		—	2											
8	MW-23-081513		1500		—	2											
9	DUP-3-081513		—		—	2											
10																	

Sampler(s) Please Print & Sign: Stuart Mercer, Celicio Lerma

Shipment Method: Fedex

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

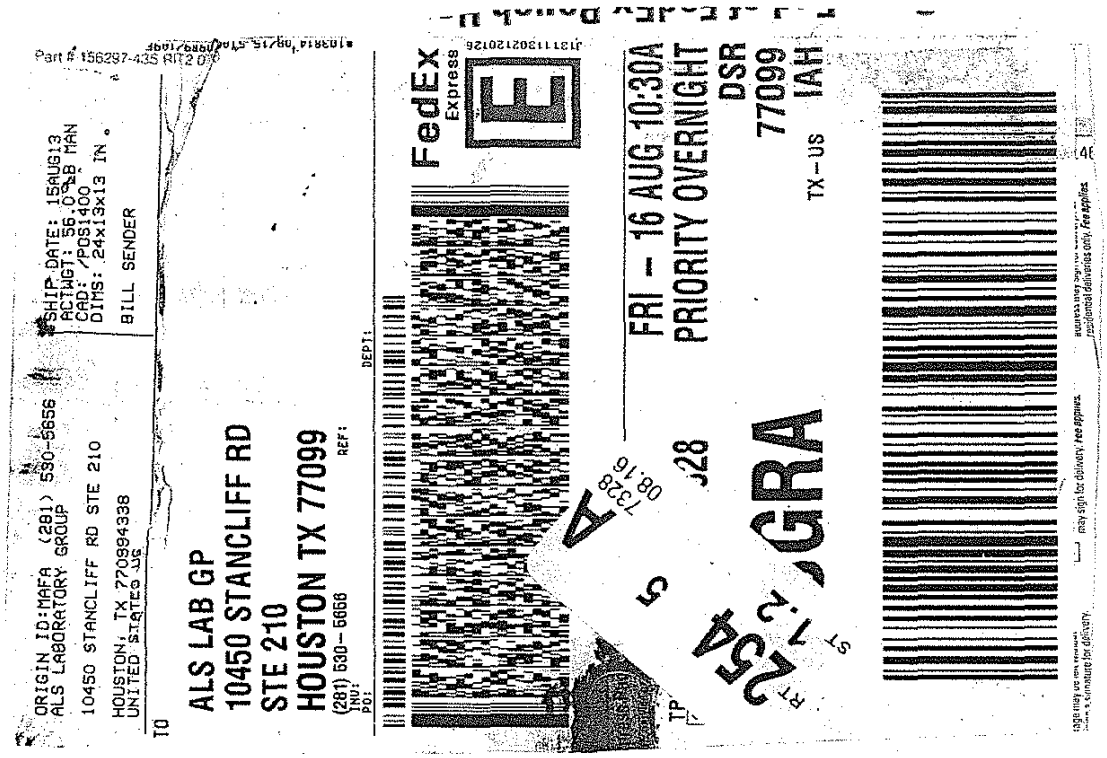
Relinquished by:	Date:	Time:	Received by:	Notes:
Stuart Mercer	8-15-13	1700	[signature] 8-16-13 0915	10 Day TAT.
Relinquished by:	Date:	Time:	Received by (Laboratory):	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Cooler ID	Cooler Temp.
3077	2.2

QC Package: (Check One Box Below)
- ☑ Level II Std QC
- ☐ Level III Std QC/Raw Data
- ☐ Level IV SW846/CLP
- ☐ Other / EDD _____
- ☐ TRRP CheckList
- ☐ TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.



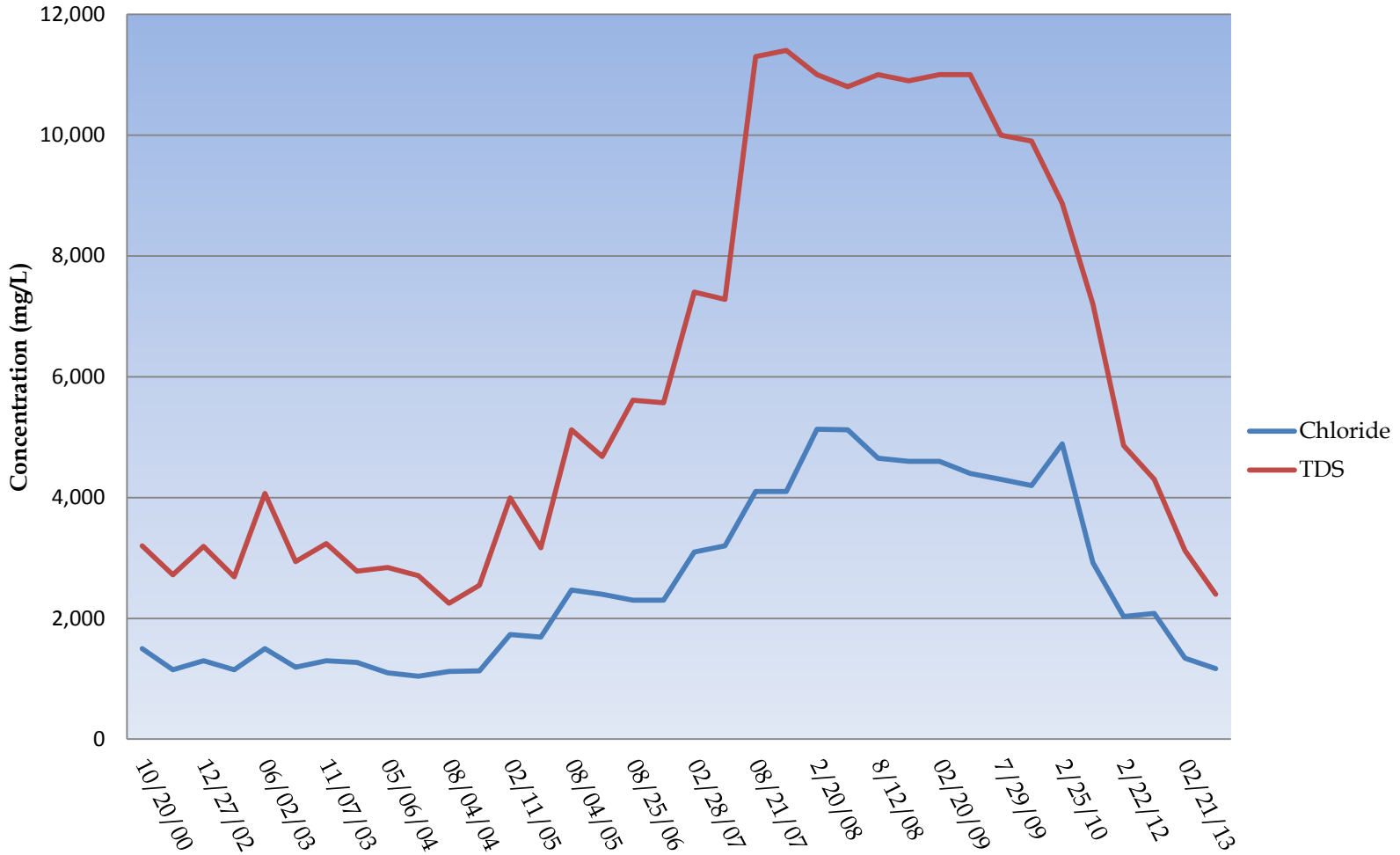
ALS Environmental
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

6072

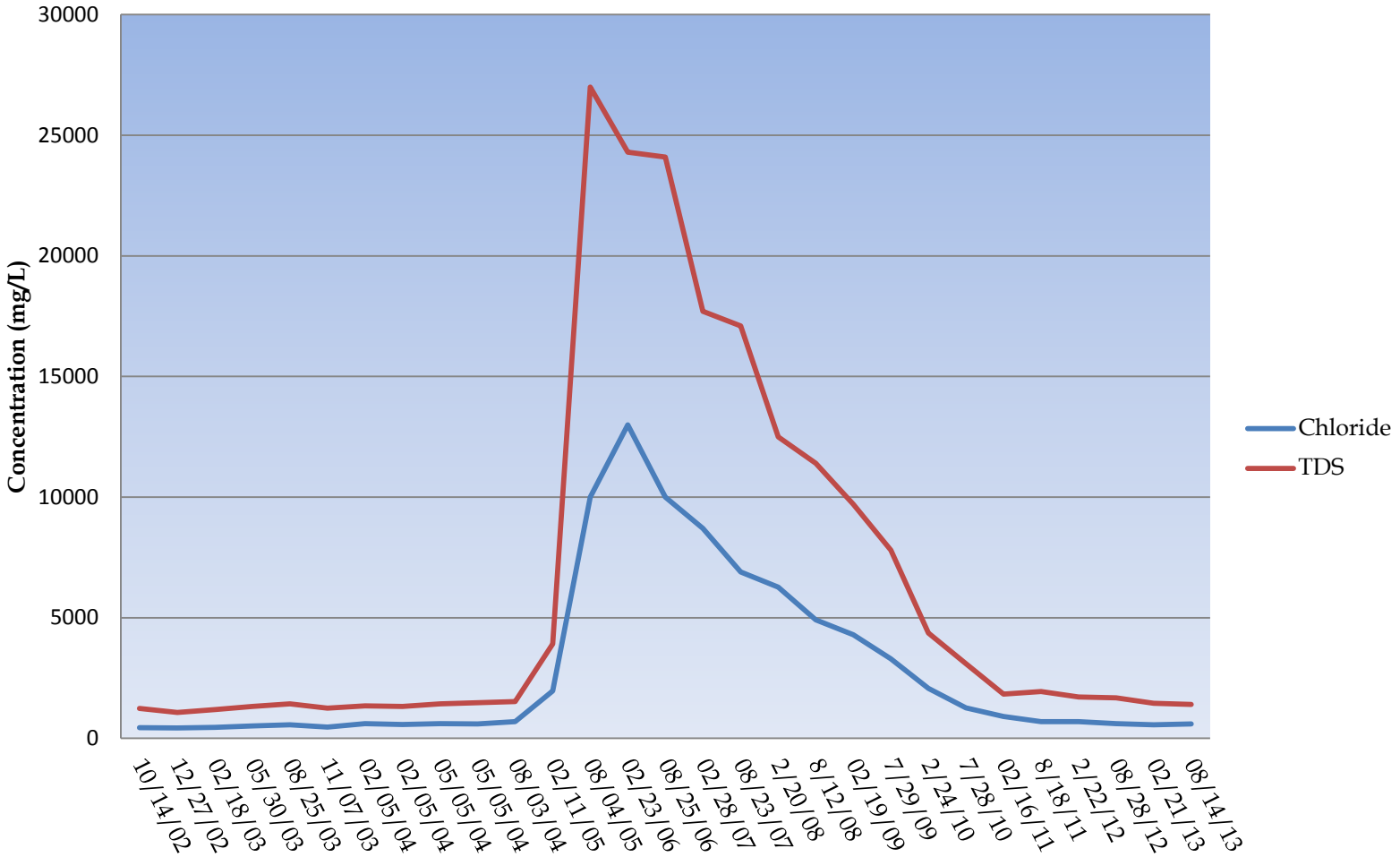
CUSTODY SEAL	Seal Broken By:
Date: 8-15-13 Time: 1700	
Name: Stuart Maurer	Date: 8/16/13
Company: CRA	

Appendix B
Well Graphs Chloride/TDS Concentration versus Time

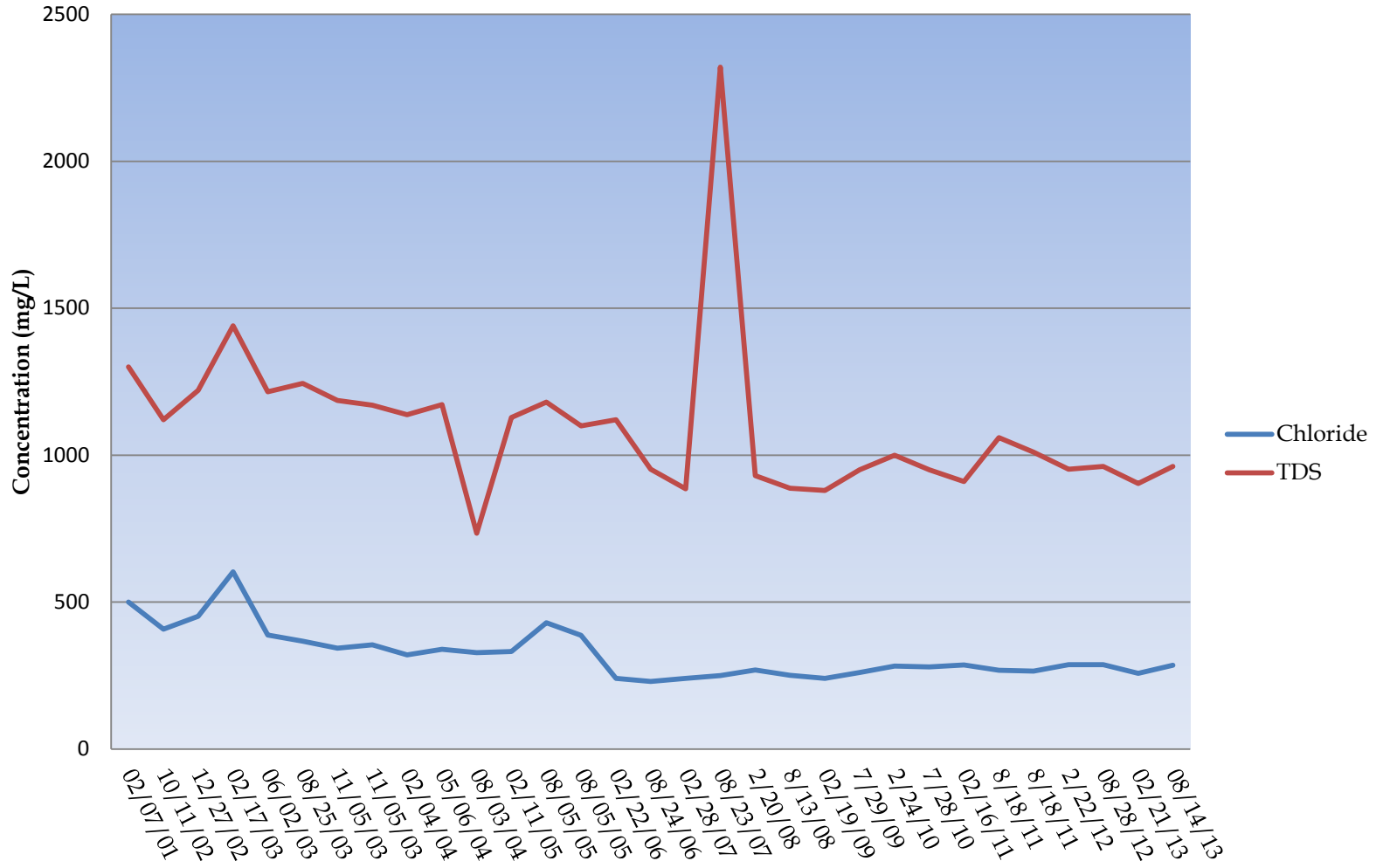
G.L. ERWIN "A & B" FEDERAL NCT 2 TANK BATTERY
SW/4, SE/4, SECTION 35, T 24 S, R 37 E
LEA COUNTY, NEW MEXICO
RECOVERY WELL (RW-1)



G.L. ERWIN "A & B" FEDERAL NCT 2 TANK BATTERY
SW/4, SE/4, SECTION 35, T 24 S, R 37 E
LEA COUNTY, NEW MEXICO
UPGRADIENT WELL (MW-9)



G.L. ERWIN "A & B" FEDERAL NCT 2 TANK BATTERY
SW/4, SE/4, SECTION 35, T 24 S, R 37 E
LEA COUNTY, NEW MEXICO
DOWNGRADIENT WELL (MW-7)



G.L. ERWIN "A & B" FEDERAL NCT 2 TANK BATTERY
SW/4, SE/4, SECTION 35, T 24 S, R 37 E
LEA COUNTY, NEW MEXICO
DOWNGRADIENT WELL (MW-14)