1R-289

Annual GW Monitoring report

DATE: 2008

CONESTOGA-ROVERS
& ASSOCIATES

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July 31, 2009 Reference No. 039123 (5)

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

Re: 2008 Annual Groundwater Monitoring Report
Cooper-Jal Unit South Injection Station
OGRID No. 4323
Lea County, New Mexico

Dear Mr. Hudson:

Enclosed are three final copies (one hard copy and two electronic copies) of the 2008 Annual Groundwater Monitoring Report for the Cooper-Jal Unit South Injection Station site located in Lea County, New Mexico, prepared by Conestoga-Rovers & Associates (CRA). CRA appreciates the opportunity to provide environmental consulting services for CEMC. If you have any questions regarding this correspondence, please contact me at (432) 686-0086.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Todd Wells

Todd Wells
Project Manager

Encl. 2008 Annual Groundwater Monitoring Report
Cooper-Jal Unit South Injection Station
OGRID No. 4323
NW/4, NW/4, SE/4, Section 24, T-24-S, R-36-E
Latitude: N 32° 12' 7.3" Longitude: W 103° 12' 59.9"
Lea County, New Mexico

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

2008 ANNUAL GROUNDWATER MONITORING REPORT

COOPER-JAL UNIT SOUTH INJECTION STATION
CASE NO. 1R289
OGRID NO. 4323
NW/4, NW/4, SE/4, SECTION 24, T-24-S, R-36-E
LATITUDE: N 32° 12′ 7.3″ LONGITUDE: W 103° 12′ 59.9″
LEA COUNTY, NEW MEXICO

2008 ANNUAL GROUNDWATER MONITORING REPORT

COOPER-JAL UNIT SOUTH INJECTION STATION
CASE NO. 1R289
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NW/4, NW/4, SE/4, SECTION 24, T-24-S, R-36-E
LATITUDE: N 32° 12′ 7.3″ LONGITUDE: W 103° 12′ 59.9″
LEA COUNTY, NEW MEXICO

Prepared For:
Mr. Matt Hudson
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
Upstream Business Unit
15 Smith Road, Room 5317
Midland, Texas 79705

Prepared by:
Conestoga-Rovers & Associates

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JULY 23, 2009
REF. NO. 039123 (5)

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1.0 INTRODUCTION

This Annual Groundwater Monitoring Report presents groundwater data collected during the 2008 reporting period by Conestoga-Rovers & Associates (CRA) on behalf of Chevron Environmental Management Company (CEMC) at the Cooper-Jal Unit South Injection Station (hereafter referred to as the "Site"). Groundwater sampling events were performed on May 14-15, 2008 and on November 3-6 and 12, 2008.

The Site is located on Lea County Road J7, approximately 5.5 miles northwest of Jal, New Mexico and situated in Unit Letter J, northwest quarter (NW/4) of the northwest quarter (NW/4) of the southeast quarter (SE/4), Section 24, Township 24 South, Range 36 East, Lea County, New Mexico. The Site is relatively flat and improved with bermed above-ground storage tanks (ASTs), hardened caliche roadways, and oil and gas production equipment that includes four production wells. Land use in the vicinity of the Site is undeveloped rangeland vegetated with indigenous grass, livestock ranching and oil and gas production. The topography slopes southeast toward Monument Draw located approximately 7.5 miles southeast of the Site. A Site Location Map is presented as FIGURE 1.

Site assessment activities were initiated in 1993 when Environmental Spill Control, Inc. (ESCI) of Hobbs, New Mexico performed a subsurface assessment of an unlined earthen emergency produced water overflow pit that was located adjacent to the west edge of the Site. During the investigation, five boreholes were installed to depths ranging from 15 feet to 100 feet below ground surface (bgs). The investigation revealed the presence of hydrocarbon-affected soil. In 1996, Texaco Exploration and Production, Inc. (Texaco) filed a notice of intent to close the pit with the New Mexico Oil Conservation Division (NMOCD). Approximately 1,248 cubic yards of hydrocarbon-affected material were removed from the pit. During the closure activities, the excavation was lined with approximately 1,091 cubic yards of imported clay and backfilled with 3,360 cubic yards of imported caliche. Texaco submitted the pit closure report to the NMOCD in December 1996.

In 1997, the NMOCD requested additional assessment activities to define the vertical extent of affected soil beneath the pit. Assessment activities performed by Highlander Environmental Corporation revealed elevated soil chloride concentrations. In October 1997, monitor well MW-1 was installed near the former pit. Groundwater samples collected from the well contained chloride concentrations above the New Mexico Water Quality Control Commission (NMWQCC) Human Health Standards for Groundwater. Subsequent assessment activities through May 1998 included the installation of 14 monitor wells. In 1998, electromagnetic (EM-34) terrain conductivity surveys were performed to identify areas of elevated soil chloride concentrations.

In June 1998, Texaco prepared a groundwater corrective action plan to mitigate chloride concentrations and to provide plume containment by extracting groundwater from the affected groundwater-bearing unit. Subsequent assessment activities performed in 1999 included the installation of wells MW-11, RW-1 and RW-2. Wells MW-12 and MW-13 were installed in 2001. Semi-annual groundwater monitoring activities have been performed by CRA since 2005 along with annual reporting to the NMOCD for this Site.

2.0 REGULATORY FRAMEWORK

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

Analyte	NMWQCC Standard for Groundwater (mg/L)
Chloride	250
Fluoride	1.6
Nitrate (NO_3 as N)	10
Sulfate (SO_4)	600
Total Dissolved Solids (TDS)	1,000

3.0 GROUNDWATER SAMPLING AND ANALYSIS

Groundwater at the Site is monitored with a network of 17 monitor wells and two recovery wells in accordance with the *Work Plan for Plume Delineation and Modification to Proposed Groundwater Monitoring Schedule* (Larson & Associates, November 18, 1998). Wells MW-8, MW-9, MW-9A, MW-10 and MW-11 are the only wells sampled during the first semi-annual monitoring event. The remaining 14 wells are sampled annually during the second semi-annual monitoring event. A Site Details Map is presented as FIGURE 2. Groundwater sampling events were performed on May 14-15, 2008 and on November 3-6 and 12, 2008.

The stratification of chloride-impacted groundwater is monitored with selectively screened wells in the affected groundwater-bearing unit. Wells MW-1 through MW-5 and MW-7 through MW-13 are screened across the basal 10 feet to 20 feet of the groundwater-bearing unit. These wells were drilled and completed to the Chinle Formation "Red Beds" underlying the Ogallala Aquifer and are referred to as the "deep wells" in this report. Wells MW-2A, MW-4A, MW-5A and MW-9A are screened across the water table interface with approximately five feet of screen above the water table and 15 feet of screen below the water table. These wells are referenced as the "shallow wells." Wells MW-6, MW-11, RW-1 and RW-2 are screened across the entire saturated zone of the groundwater-bearing unit and are referred to as "fully penetrating" wells.

Prior to purging the monitor wells, static fluid levels were measured with an electric interface probe to the nearest hundredth of a foot and recorded. Purging was considered complete when three well volumes had been removed or the well was purged dry. Geochemical field parameters including pH, temperature and conductivity were collected during the purging/sampling process. All non-disposable groundwater sampling equipment was decontaminated with a soap (Liquinox®) and potable water wash, a potable water rinse and a final deionized water rinse to minimize potential cross-contamination between each monitor well. Subsequent to the purging process, groundwater samples were collected using clean, disposable PVC bailers. Laboratory-supplied sample containers were then filled directly from the disposable PVC bailers.

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 the laboratory (TestAmerica Laboratories, Inc. located in Houston, Texas) for analysis of major cations, anions and TDS by various Environmental Protection Agency (EPA) Methods. The fluids recovered and generated during the sampling event were containerized in a dedicated polyethylene tank located onsite and subsequently managed at an NMOCD-permitted salt water disposal (SWD) facility by Nabors Well Services LTD. (Nabors).

3.1 POTENTIOMETRIC SURFACE AND GRADIENT

Groundwater elevation data are presented in TABLE I. Groundwater gradient maps for May 2008 and November 2008 are presented on FIGURES 3 and 4, respectively. Depth to groundwater ranged from 130.46 feet to 144.45 feet below top of casing on May 14, 2008 and from 130.41 feet to 144.36 feet below top of casing on November 3, 2008.

Although the Site's network of wells is completed at various intervals (shallow, deep and fully penetrating), the groundwater elevations appear to be consistent with historical levels with groundwater flow to the southeast. The gradient observed in 2008 was 0.003 feet/foot for both May and November events.

3.2 ANALYTICAL RESULTS

Analytical results are summarized in TABLE II. An isoconcentration map of the chloride concentration for the May 2008 groundwater monitoring event is presented as FIGURE 5. Chloride isoconcentration maps for the shallow and deep wells for November 2008 are presented as FIGURES 6 and 7, respectively.

The analytical results generally fall within historical ranges. During the May 2008 sampling event, two monitor wells (MW-9A and MW-10) exceeded the NMWQCC groundwater standards for chloride and TDS. In addition, two monitor wells (MW-9 and MW-11) exceeded the NMWQCC groundwater standard for fluoride. In November 2008, eight wells (MW-2, MW-4, MW-4A, MW-5, MW-7, MW-9A, MW-13 and RW-2) exceeded the NMWQCC groundwater standards for chloride and TDS. Recovery well RW-1 exceeded the NMWQCC groundwater standard for chloride. In addition, two wells (MW-1 and MW-9) exceeded the NMWQCC groundwater standard for fluoride. Two wells (MW-4 and MW-5) also exceeded the NMWQCC groundwater standard for sulfate. Nitrate concentrations were below NMWQCC groundwater standards during the 2008 sampling events. Copies of the certified analytical reports and chain-of-custody documentation are attached in APPENDIX A.

4.0 PLANNED ACTIVITIES

The semi-annual 2009 groundwater monitoring events are scheduled for May and November 2009. On October 1, 1999, Texaco Exploration and Production, Inc. filed applications with the New Mexico Office of the State Engineer (NMOSE) to Divert Underground Waters for proposed recovery wells RW-1 (CP-884) and RW-2 (CP-885). The objective for the application to divert underground water was to remove chloride-impacted groundwater as a corrective action. On June 16, 2008 the NMOSE approved both permits (CP-884 and CP-885) to Divert Underground Waters with allocations limited to a maximum of 32.5 acre-feet per annum consumptive use for each permit for the purpose of environmental remediation. Copies of the NMOSE approval letters for permits (CP-884 and CP-885), dated June 18, 2008, specific conditions of approval and permit applications are attached as Appendix B.

A pump test and well conductivity profiling are scheduled during the second quarter of 2009 to further evaluate the aquifer at the Site. Following the aquifer evaluation, groundwater remediation methods and system design will be evaluated and a choice of remedial action for the Site will be made at that time, as appropriate, to achieve the NMWQCC cleanup standards and meet regulatory obligations.

5.0 SUMMARY OF FINDINGS

Based on groundwater monitoring activities performed at the Site, CRA presents the following summary:

- Groundwater at the Site is monitored with a network of 17 monitor wells and two recovery wells. Wells MW-8, MW-9, MW-9A, MW-10 and MW-11 are sampled semi-annually. The remaining 14 wells are sampled annually during the second semi-annual sampling event.

- Depth to groundwater ranged from 130.46 feet to 144.45 feet below top of casing on May 14, 2008 and from 130.41 feet to 144.36 feet below top of casing on November 3, 2008. Groundwater flow at the Site is to the southeast at a gradient of 0.003 feet/foot.

- The analytical results generally fall within historical ranges with higher chloride concentrations in the basal portion of the Ogallala aquifer. During the May 2008 sampling event, two monitor wells (MW-9A and MW-10) exceeded the NMWQCC groundwater standards for chloride and TDS. In addition, two monitor wells (MW-9 and MW-11) exceeded the NMWQCC groundwater standard for fluoride. In November 2008, eight wells (MW-2, MW-4, MW-4A, MW-5, MW-7, MW-9A, MW-13 and RW-2) exceeded the NMWQCC groundwater standards for chloride and TDS. Recovery well RW-1 exceeded the NMWQCC groundwater standard for chloride. In addition, two wells (MW-1 and MW-9) exceeded the NMWQCC groundwater standard for fluoride. Two wells (MW-4 and MW-5) also exceeded the NMWQCC groundwater standard for sulfate. Nitrate concentrations were below NMWQCC groundwater standards during the 2008 sampling events.

- The semi-annual 2009 groundwater monitoring events are scheduled for May and November 2009. A pump test is scheduled for the second quarter of 2009 to further evaluate the aquifer at the Site. Following the pump test, groundwater remediation methods will be evaluated and a choice of remedial action for the chloride impacted Site will be made at that time, as appropriate, to achieve the NMWQCC cleanup standards and meet regulatory obligations.

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

Todd Wells
Project Manager

Thomas C. Larson
Senior Project Manager

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

32° 12' 7.13" N, 103° 13' 4.36" W

figure 1

SITE LOCATION MAP
COOPER-JAL UNIT SOUTH INJECTION STATION
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

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LEGEND

- MONITOR WELL LOCATION (DEEP)
- MONITOR WELL LOCATION (SHALLOW)
- COOPER-JAL OIL WELL LOCATION
- RECOVERY WELL LOCATION (FULLY PENETRATING)
- MONITOR WELL LOCATION (FULLY PENETRATING)

BASEMAP ADAPTED FROM LARSON & ASSOCIATES, INC. (AUGUST 18, 2005).

figure 2

SITE DETAILS MAP
COOPER-JAL UNIT SOUTH INJECTION STATION
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

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NOTES:

1. GROUNDWATER LEVEL ELEVATIONS WERE MEASURED BY CONESTOGA-ROVERS & ASSOCIATES ON MAY 14, 2008.
2. CONTOURS ARE FEET ABOVE MSL.
3. BASEMAP ADAPTED FROM LARSON & ASSOCIATES, INC. (AUGUST 18, 2005).

LEGEND

- MONITOR WELL LOCATION (DEEP)
- MONITOR WELL LOCATION (SHALLOW)
- COOPER-JAL OIL WELL LOCATION
- RECOVERY WELL LOCATION (FULLY PENETRATING)
- MONITOR WELL LOCATION (FULLY PENETRATING)
- 3094.38 GROUNDWATER LEVEL ELEVATION
- GROUNDWATER LEVEL ELEVATION CONTOUR (INTERVAL = 1 FT)
- DIRECTION OF GROUNDWATER FLOW

figure 3

GROUNDWATER GRADIENT MAP - MAY 2008
COOPER-JAL UNIT SOUTH INJECTION STATION
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

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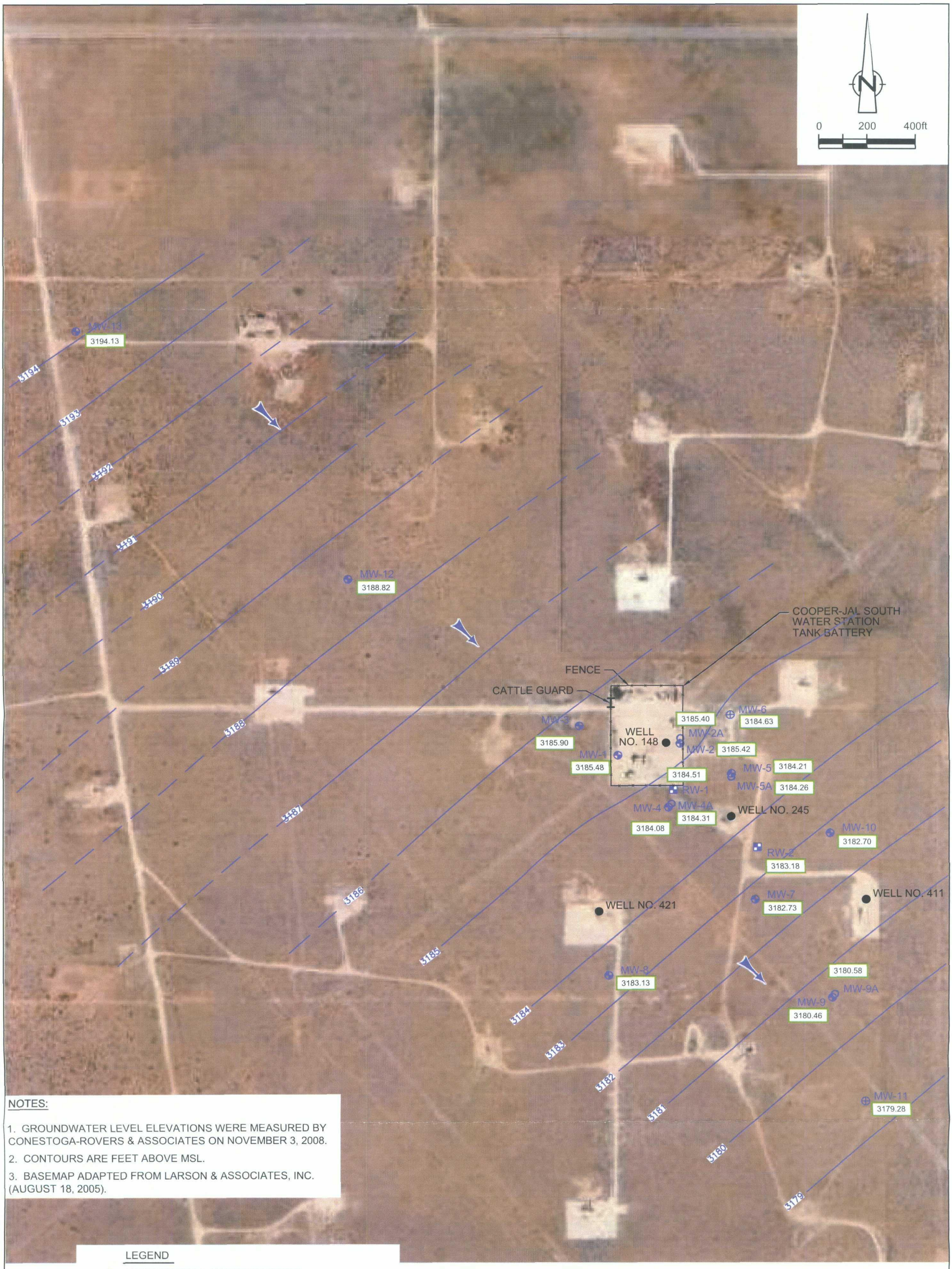

NOTES:

1. GROUNDWATER LEVEL ELEVATIONS WERE MEASURED BY CONESTOGA-ROVERS & ASSOCIATES ON NOVEMBER 3, 2008.
2. CONTOURS ARE FEET ABOVE MSL.
3. BASEMAP ADAPTED FROM LARSON & ASSOCIATES, INC. (AUGUST 18, 2005).

LEGEND

- MONITOR WELL LOCATION (DEEP)
- MONITOR WELL LOCATION (SHALLOW)
- COOPER-JAL OIL WELL LOCATION
- RECOVERY WELL LOCATION (FULLY PENETRATING)
- MONITOR WELL LOCATION (FULLY PENETRATING)
- 3094.38 GROUNDWATER LEVEL ELEVATION
- GROUNDWATER LEVEL ELEVATION CONTOUR (INTERVAL = 1 FT)
- DIRECTION OF GROUNDWATER FLOW

figure 4

GROUNDWATER GRADIENT MAP - NOVEMBER 2008
COOPER-JAL UNIT SOUTH INJECTION STATION
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

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NOTES:

1. GROUNDWATER SAMPLES WERE COLLECTED ON MAY 15, 2008.
2. CHLORIDE ANALYSIS BY EPA METHOD 300.0
3. INCLUDES SHALLOW, DEEP, AND FULLY PENETRATING/ SCREENED WELLS (5 TOTAL).
4. BASEMAP ADAPTED FROM LARSON & ASSOCIATES, INC. (AUGUST 18, 2005).

LEGEND

- MONITOR WELL LOCATION (DEEP)
- MONITOR WELL LOCATION (SHALLOW)
- COOPER-JAL OIL WELL LOCATION
- RECOVERY WELL LOCATION (FULLY PENETRATING)
- MONITOR WELL LOCATION (FULLY PENETRATING)
- 270 CHLORIDE CONCENTRATION (MG/L)
- CHLORIDE CONCENTRATION CONTOUR (INTERVAL = 250 MG/L)

figure 5

CHLORIDE ISOCONCENTRATION MAP - MAY 2008
COOPER-JAL UNIT SOUTH INJECTION STATION
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

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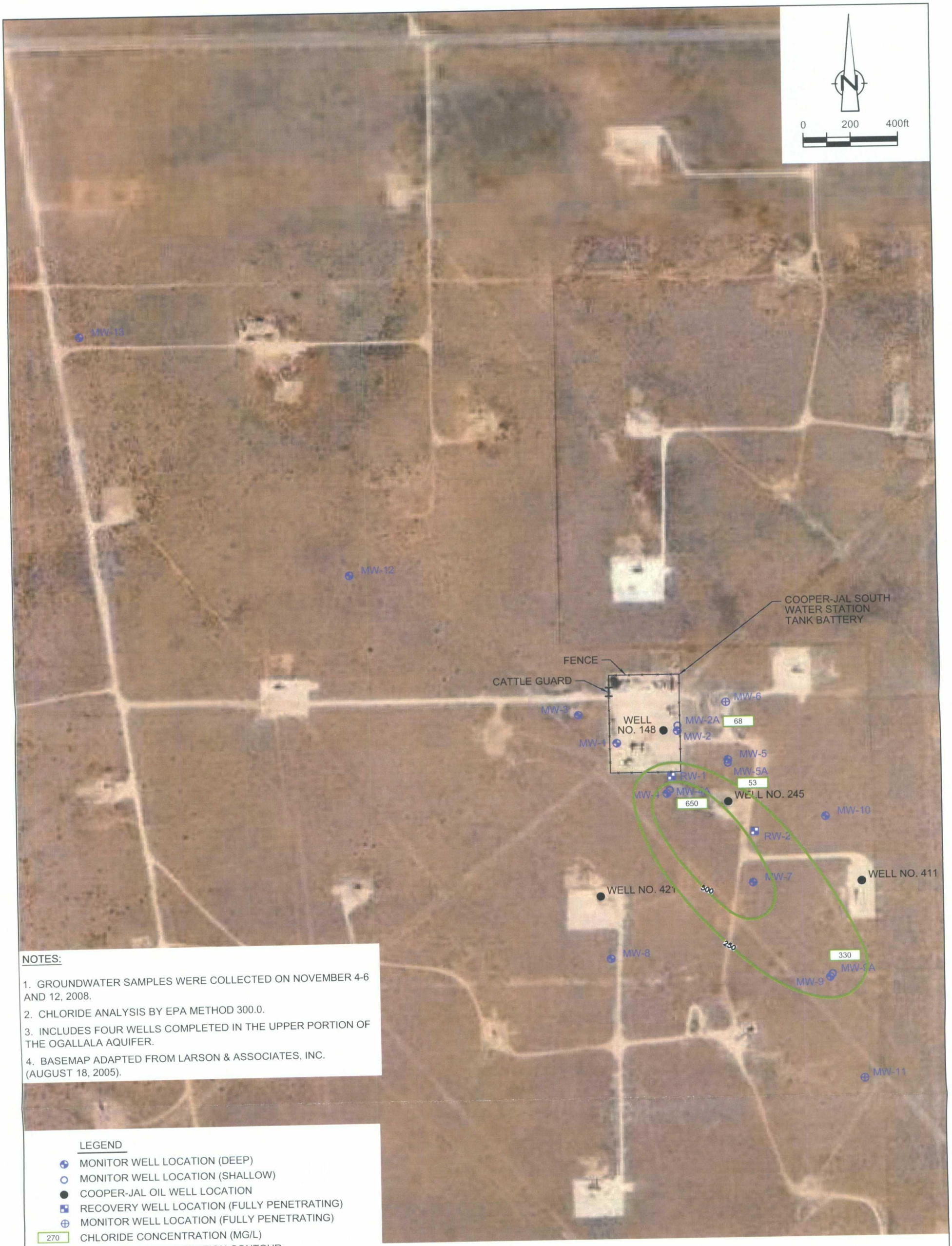

NOTES:

1. GROUNDWATER SAMPLES WERE COLLECTED ON NOVEMBER 4-6 AND 12, 2008.
2. CHLORIDE ANALYSIS BY EPA METHOD 300.0.
3. INCLUDES FOUR WELLS COMPLETED IN THE UPPER PORTION OF THE OGALLALA AQUIFER.
4. BASEMAP ADAPTED FROM LARSON & ASSOCIATES, INC. (AUGUST 18, 2005).

LEGEND

- MONITOR WELL LOCATION (DEEP)
- MONITOR WELL LOCATION (SHALLOW)
- COOPER-JAL OIL WELL LOCATION
- RECOVERY WELL LOCATION (FULLY PENETRATING)
- MONITOR WELL LOCATION (FULLY PENETRATING)
- 270 CHLORIDE CONCENTRATION (MG/L)
- CHLORIDE CONCENTRATION CONTOUR (INTERVAL = 250 MG/L)

figure 6

SHALLOW GROUNDWATER CHLORIDE ISOCONCENTRATION MAP - NOVEMBER 2008
COOPER-JAL UNIT SOUTH INJECTION STATION
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

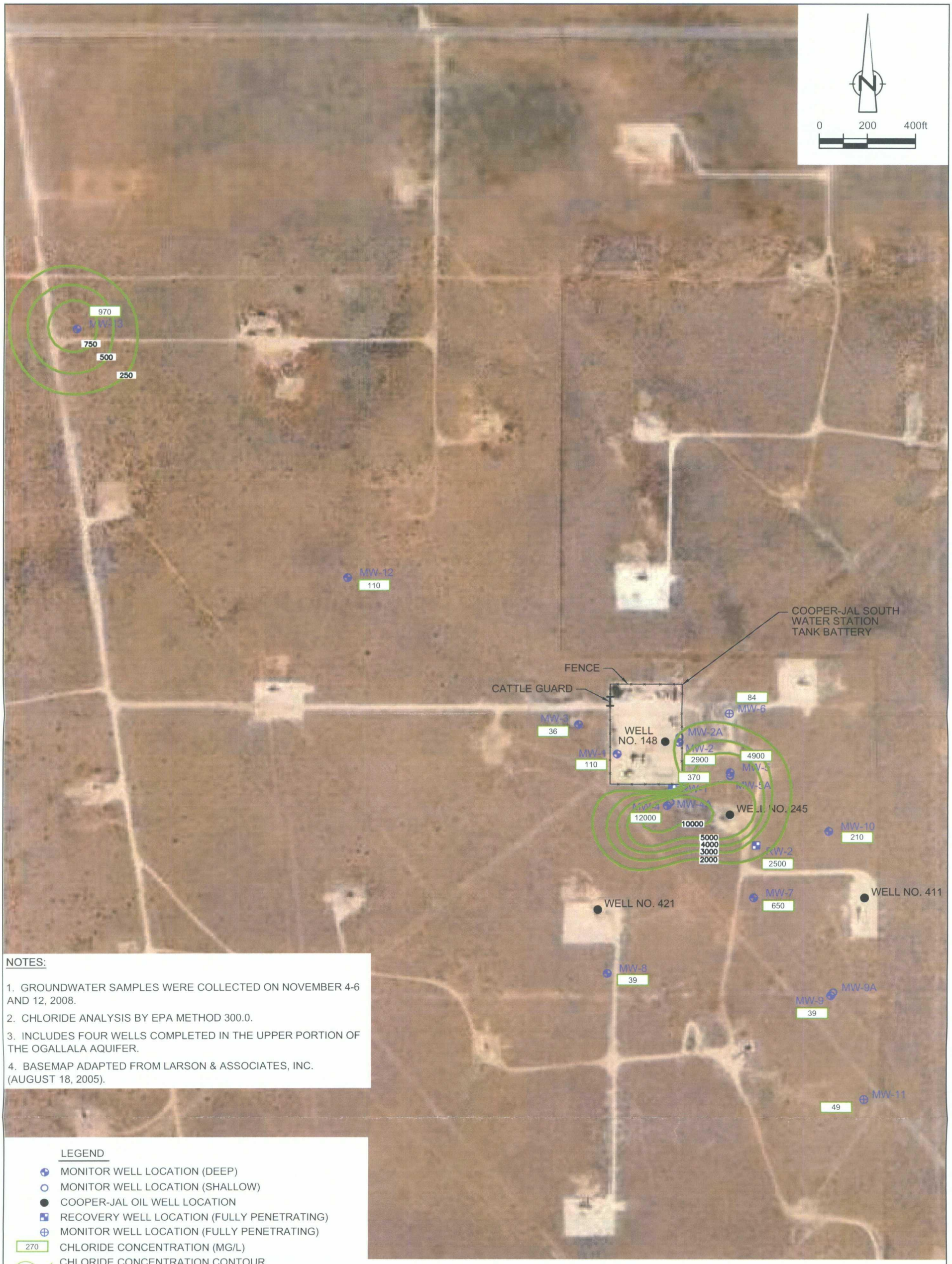

figure 7

DEEP GROUNDWATER CHLORIDE ISOCONCENTRATION MAP - NOVEMBER 2008
COOPER-JAL UNIT SOUTH INJECTION STATION
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

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TABLE I
GROUNDWATER GAUGING SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Well ID *TOC Elevation*	*Collection* Date	Depth to Groundwater (ft TOC)	Casing Diameter (in)	Groundwater Elevation (ft)	Well Depth (ft TOC)	Well Screen Interval *(ft bgs)*
MW-1	05/18/98	135.05	2	3185.12	172.38	153-173
3320.17	05/25/99	134.93	---	3185.24	---	---
	02/08/01	134.80	---	3185.37	---	---
	05/10/02	134.77	---	3185.40	---	---
	10/22/02	134.89	---	3185.28	---	---
	05/20/03	135.17	---	3185.00	---	---
	11/24/03	134.70	---	3185.47	---	---
	05/11/04	134.75	---	3185.42	---	---
	11/15/04	134.76	---	3185.41	---	---
	05/17/05	134.29	---	3185.88	---	---
	11/15/05	134.93	---	3185.24	---	---
	05/08/06	134.68	---	3185.49	---	---
	11/13/06	134.62	---	3185.55	---	---
	05/29/07	134.71	---	3185.46	---	---
	11/16/07	134.70	---	3185.47	---	---
	05/14/08	134.73	---	3185.44	---	---
	11/03/08	134.69	---	3185.48	---	---
MW-2	05/18/98	135.00	2	3184.86	170.60	163-173
3319.86	05/25/99	134.79	---	3185.07	---	---
	02/08/01	134.63	---	3185.23	---	---
	05/10/02	134.65	---	3185.21	---	---
	10/22/02	134.72	---	3185.14	---	---
	05/20/03	134.95	---	3184.91	---	---
	11/24/03	134.56	---	3185.30	---	---
	05/11/04	134.55	---	3185.31	---	---
	11/15/04	134.53	---	3185.33	---	---
	05/17/05	134.39	---	3185.47	---	---
	11/15/05	134.77	---	3185.09	---	---
	05/08/06	134.52	---	3185.34	---	---
	11/13/06	134.44	---	3185.42	---	---
	05/29/07	134.54	---	3185.32	---	---
	11/14/07	134.52	---	3185.34	---	---
	05/14/08	134.53	---	3185.33	---	---
	11/03/08	134.44	---	3185.42	---	---
MW-2A	05/18/98	134.80	2	3185.06	142.30	130-145
3319.86	05/25/99	134.73	---	3185.13	---	---
	02/08/01	134.58	---	3185.28	---	---
	05/10/02	134.50	---	3185.36	---	---
	10/22/02	134.66	---	3185.20	---	---
	05/20/03	135.80	---	3184.06	---	---
	11/24/03	134.60	---	3185.26	---	---
	05/11/04	134.53	---	3185.33	---	---
	11/15/04	134.58	---	3185.28	---	---
	05/17/05	134.47	---	3185.39	---	---
	11/15/05	134.74	---	3185.12	---	---
	05/08/06	134.46	---	3185.40	---	---
	11/13/06	134.39	---	3185.47	---	---
	05/29/07	134.50	---	3185.36	---	---
	11/14/07	134.48	---	3185.38	---	---
	05/14/08	134.49	---	3185.37	---	---
	11/03/08	134.46	---	3185.40	---	---

TABLE I
GROUNDWATER GAUGING SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Well ID *TOC Elevation*	Collection Date	Depth to Groundwater (ft TOC)	Casing Diameter (in)	Groundwater Elevation (ft)	Well Depth (ft TOC)	Well Screen Interval (ft bgs)
MW-3	05/18/98	132.65	2	3185.56	171.93	161-171
3318.21	05/25/99	132.52	---	3185.69	---	---
	02/08/01	132.40	---	3185.81	---	---
	05/10/02	132.40	---	3185.81	---	---
	10/22/02	132.49	---	3185.72	---	---
	05/20/03	132.75	---	3185.46	---	---
	11/24/03	132.29	---	3185.92	---	---
	05/11/04	132.38	---	3185.83	---	---
	11/15/04	132.46	---	3185.75	---	---
	05/17/05	132.32	---	3185.89	---	---
	11/15/05	132.55	---	3185.66	---	---
	05/08/06	132.32	---	3185.89	---	---
	11/13/06	132.27	---	3185.94	---	---
	05/29/07	132.36	---	3185.85	---	---
	11/16/07	132.34	---	3185.87	---	---
	05/14/08	132.36	---	3185.85	---	---
	11/03/08	132.31	---	3185.90	---	---
MW-4	05/18/98	136.01	2	3183.73	171.41	161-171
3319.74	05/25/99	135.57	---	3184.17	---	---
	02/08/01	135.87	---	3183.87	---	---
	05/10/02	135.67	---	3184.07	---	---
	10/22/02	135.90	---	3183.84	---	---
	05/20/03	136.00	---	3183.74	---	---
	11/24/03	135.70	---	3184.04	---	---
	05/11/04	135.34	---	3184.40	---	---
	11/15/04	135.76	---	3183.98	---	---
	05/17/05	135.69	---	3184.05	---	---
	11/15/05	135.85	---	3183.89	---	---
	05/08/06	135.60	---	3184.14	---	---
	11/13/06	135.59	---	3184.15	---	---
	05/29/07	135.75	---	3183.99	---	---
	11/14/07	135.62	---	3184.12	---	---
	05/14/08	135.76	---	3183.98	---	---
	11/03/08	135.66	---	3184.08	---	---
MW-4A	05/18/98	135.68	2	3183.90	146.00	128-143
3319.58	05/21/99	135.65	---	3183.93	---	---
	05/25/99	135.90	---	3183.68	---	---
	02/08/01	135.34	---	3184.24	---	---
	05/10/02	135.30	---	3184.28	---	---
	10/22/02	135.51	---	3184.07	---	---
	05/20/03	135.55	---	3184.03	---	---
	11/24/03	135.31	---	3184.27	---	---
	05/11/04	135.72	---	3183.86	---	---
	11/15/04	135.38	---	3184.20	---	---
	05/17/05	135.32	---	3184.26	---	---
	11/15/05	135.52	---	3184.06	---	---
	05/08/06	135.26	---	3184.32	---	---
	11/13/06	135.20	---	3184.38	---	---
	05/29/07	135.32	---	3184.26	---	---
	11/14/07	135.20	---	3184.38	---	---
	05/14/08	135.31	---	3184.27	---	---
	11/03/08	135.27	---	3184.31	---	---

TABLE I
GROUNDWATER GAUGING SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Well ID *TOC Elevation*	Collection Date	Depth to Groundwater (ft TOC)	Casing Diameter (in)	Groundwater Elevation (ft)	Well Depth (ft TOC)	Well Screen Interval (ft bgs)
MW-5	05/18/98	137.42	2	3183.68	173.65	161-171
3321.10	05/25/99	137.28	---	3183.82	---	---
	02/08/01	137.18	---	3183.92	---	---
	05/10/02	137.10	---	3184.00	---	---
	10/22/02	137.04	---	3184.06	---	---
	05/20/03	137.45	---	3183.65	---	---
	11/24/03	137.01	---	3184.09	---	---
	05/11/04	137.01	---	3184.09	---	---
	11/15/04	137.08	---	3184.02	---	---
	05/17/05	137.00	---	3184.10	---	---
	11/15/05	137.18	---	3183.92	---	---
	05/08/06	136.90	---	3184.20	---	---
	11/13/06	136.81	---	3184.29	---	---
	05/29/07	136.92	---	3184.18	---	---
	11/14/07	136.85	---	3184.25	---	---
	05/14/08	136.97	---	3184.13	---	---
	11/03/08	136.89	---	3184.21	---	---
MW-5A	05/18/98	137.20	2	3183.87	143.85	126-141
3321.07	05/25/99	137.11	---	3183.96	---	---
	02/08/01	136.99	---	3184.08	---	---
	05/10/02	136.90	---	3184.17	---	---
	10/22/02	137.17	---	3183.90	---	---
	05/20/03	137.24	---	3183.83	---	---
	11/24/03	136.91	---	3184.16	---	---
	05/11/04	136.88	---	3184.19	---	---
	11/15/04	136.92	---	3184.15	---	---
	05/17/05	136.83	---	3184.24	---	---
	11/15/05	137.06	---	3184.01	---	---
	05/08/06	136.80	---	3184.27	---	---
	11/13/06	136.74	---	3184.33	---	---
	05/29/07	136.82	---	3184.25	---	---
	11/14/07	136.88	---	3184.19	---	---
	05/14/08	136.83	---	3184.24	---	---
	11/03/08	136.81	---	3184.26	---	---
MW-6	05/18/98	136.73	2	3184.42	169.25	120-170
3321.15	05/25/99	136.61	---	3184.54	---	---
	02/08/01	136.50	---	3184.65	---	---
	05/10/02	136.40	---	3184.75	---	---
	10/22/02	136.57	---	3184.58	---	---
	05/20/03	136.85	---	3184.30	---	---
	11/24/03	136.38	---	3184.77	---	---
	05/11/04	136.41	---	3184.74	---	---
	11/15/04	136.08	---	3185.07	---	---
	05/17/05	136.58	---	3184.57	---	---
	11/15/05	136.82	---	3184.33	---	---
	05/08/06	136.58	---	3184.57	---	---
	11/13/06	136.49	---	3184.66	---	---
	05/29/07	136.61	---	3184.54	---	---
	11/15/07	136.59	---	3184.56	---	---
	05/14/08	136.58	---	3184.57	---	---
	11/03/08	136.52	---	3184.63	---	---

TABLE I
GROUNDWATER GAUGING SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Well ID *TOC Elevation*	Collection Date	Depth to Groundwater (ft TOC)	Casing Diameter (in)	Groundwater Elevation (ft)	Well Depth (ft TOC)	Well Screen Interval (ft bgs)
MW-7	05/18/98	136.19	2	3182.20	166.15	151-166
3318.39	05/25/99	135.98	---	3182.41	---	---
	02/08/01	135.87	---	3182.52	---	---
	05/10/02	135.67	---	3182.72	---	---
	10/22/02	135.89	---	3182.50	---	---
	05/20/03	136.12	---	3182.27	---	---
	11/24/03	135.71	---	3182.68	---	---
	05/11/04	135.74	---	3182.65	---	---
	11/15/04	135.78	---	3182.61	---	---
	05/17/05	135.68	---	3182.71	---	---
	11/15/05	135.90	---	3182.49	---	---
	05/08/06	135.64	---	3182.75	---	---
	11/13/06	135.58	---	3182.81	---	---
	05/29/07	135.73	---	3182.66	---	---
	11/15/07	135.64	---	3182.75	---	---
	05/14/08	135.68	---	3182.71	---	---
	11/03/08	135.66	---	3182.73	---	---
MW-8	05/18/98	134.36	2	3182.78	171.92	155-170
3317.14	05/25/99	134.21	---	3182.93	---	---
	02/08/01	134.08	---	3183.06	---	---
	05/10/02	133.95	---	3183.19	---	---
	10/22/02	134.18	---	3182.96	---	---
	05/20/03	134.38	---	3182.76	---	---
	11/24/03	133.99	---	3183.15	---	---
	05/11/04	134.02	---	3183.12	---	---
	11/15/04	134.11	---	3183.03	---	---
	05/17/05	133.97	---	3183.17	---	---
	11/15/05	134.21	---	3182.93	---	---
	05/08/06	133.94	---	3183.20	---	---
	11/13/06	133.9	---	3183.24	---	---
	05/29/07	134.02	---	3183.12	---	---
	11/15/07	133.76	---	3183.38	---	---
	05/15/08	133.98	---	3183.16	---	---
	11/03/08	134.01	---	3183.13	---	---
MW-9	05/18/98	132.89	2	3179.90	161.40	149-164
3312.79	05/25/99	132.68	---	3180.11	---	---
	02/08/01	132.52	---	3180.27	---	---
	05/10/02	137.20	---	3175.59	---	---
	10/22/02	132.56	---	3180.23	---	---
	05/20/03	132.75	---	3180.04	---	---
	11/24/03	132.35	---	3180.44	---	---
	05/11/04	132.39	---	3180.40	---	---
	11/15/04	132.43	---	3180.36	---	---
	05/17/05	132.26	---	3180.53	---	---
	11/15/05	132.60	---	3180.19	---	---
	05/08/06	132.26	---	3180.53	---	---
	11/13/06	132.19	---	3180.60	---	---
	05/29/07	132.32	---	3180.47	---	---
	11/14/07	132.34	---	3180.45	---	---
	05/15/08	132.29	---	3180.50	---	---
	11/03/08	132.33	---	3180.46	---	---

TABLE I
GROUNDWATER GAUGING SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Well ID *TOC Elevation*	Collection Date	Depth to Groundwater (ft TOC)	Casing Diameter (in)	Groundwater Elevation (ft)	Well Depth (ft TOC)	Well Screen Interval (ft bgs)
MW-9A	05/18/98	132.65	2	3179.91	144.15	127-142
3312.56	05/25/99	132.43	---	3180.13	---	---
	02/08/01	132.37	---	3180.19	---	---
	05/10/02	137.20	---	3175.36	---	---
	10/22/02	132.35	---	3180.21	---	---
	05/20/03	132.55	---	3180.01	---	---
	11/24/03	132.10	---	3180.46	---	---
	05/11/04	132.14	---	3180.42	---	---
	11/15/04	132.19	---	3180.37	---	---
	05/17/05	132.06	---	3180.50	---	---
	11/15/05	132.35	---	3180.21	---	---
	05/08/06	132.02	---	3180.54	---	---
	11/13/06	131.09	---	3181.47	---	---
	05/29/07	132.08	---	3180.48	---	---
	11/14/07	132.06	---	3180.50	---	---
	05/15/08	132.03	---	3180.53	---	---
	11/03/08	131.98	---	3180.58	---	---
MW-10	05/18/98	137.18	2	3182.12	164.15	151-166
3319.30	05/25/99	137.04	---	3182.26	---	---
	02/08/01	136.88	---	3182.42	---	---
	05/10/02	136.80	---	3182.50	---	---
	10/22/02	136.91	---	3182.39	---	---
	05/20/03	137.13	---	3182.17	---	---
	11/24/03	136.71	---	3182.59	---	---
	05/11/04	136.77	---	3182.53	---	---
	11/15/04	136.82	---	3182.48	---	---
	05/17/05	136.34	---	3182.96	---	---
	11/15/05	136.95	---	3182.35	---	---
	05/08/06	136.65	---	3182.65	---	---
	11/13/06	136.59	---	3182.71	---	---
	05/29/07	136.68	---	3182.62	---	---
	11/15/07	136.61	---	3182.69	---	---
	05/15/08	136.65	---	3182.65	---	---
	11/03/08	136.6	---	3182.70	---	---
MW-11	03/23/99	131.12	4	3178.57	165.71	125-165
3309.69	05/25/99	130.91	---	3178.78	---	---
	02/08/01	130.11	---	3179.58	---	---
	05/10/02	135.60	---	3174.09	---	---
	10/22/02	130.76	---	3178.93	---	---
	05/20/03	131.03	---	3178.66	---	---
	11/24/03	130.57	---	3179.12	---	---
	05/11/04	130.61	---	3179.08	---	---
	11/15/04	130.65	---	3179.04	---	---
	05/17/05	131.56	---	3178.13	---	---
	11/15/05	130.70	---	3178.99	---	---
	05/08/06	130.41	---	3179.28	---	---
	11/13/06	130.42	---	3179.27	---	---
	05/29/07	130.52	---	3179.17	---	---
	11/14/07	130.42	---	3179.27	---	---
	05/15/08	130.46	---	3179.23	---	---
	11/03/08	130.41	---	3179.28	---	---

TABLE I
GROUNDWATER GAUGING SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Well ID *TOC Elevation*	Collection Date	Depth to Groundwater (ft TOC)	Casing Diameter (in)	Groundwater Elevation (ft)	Well Depth (ft TOC)	Well Screen Interval (ft bgs)
MW-12	05/10/02	139.57	2	3188.86	165.50	156.68-171.65
3328.43	10/22/02	139.73	---	3188.70	---	---
	05/20/03	139.72	---	3188.71	---	---
	11/24/03	139.69	---	3188.74	---	---
	05/11/04	139.64	---	3188.79	---	---
	11/15/04	139.68	---	3188.75	---	---
	05/17/05	139.58	---	3188.85	---	---
	11/15/05	139.83	---	3188.60	---	---
	05/08/06	139.55	---	3188.88	---	---
	11/13/06	139.53	---	3188.90	---	---
	05/29/07	139.65	---	3188.78	---	---
	11/16/07	139.05	---	3189.38	---	---
	05/14/08	139.69	---	3188.74	---	---
	11/03/08	139.61	---	3188.82	---	---
MW-13	05/10/02	144.45	2	3194.04	167.40	156.68-171.65
3338.49	10/22/02	144.49	---	3194.00	---	---
	05/20/03	144.9	---	3193.59	---	---
	11/24/03	144.37	---	3194.12	---	---
	05/11/04	144.47	---	3194.02	---	---
	11/15/04	144.56	---	3193.93	---	---
	05/17/05	144.36	---	3194.13	---	---
	11/15/05	144.60	---	3193.89	---	---
	05/08/06	144.29	---	3194.20	---	---
	11/13/06	144.38	---	3194.11	---	---
	05/29/07	144.54	---	3193.95	---	---
	11/16/07	144.54	---	3193.95	---	---
	05/14/08	144.45	---	3194.04	---	---
	11/03/08	144.36	---	3194.13	---	---
RW-1	05/21/99	134.32	5	3184.18	171.25	130.41-174.37
3318.50	05/25/99	134.24	---	3184.26	---	---
	02/08/01	134.15	---	3184.35	---	---
	05/10/02	134.00	---	3184.50	---	---
	10/22/02	134.17	---	3184.33	---	---
	05/20/03	134.40	---	3184.10	---	---
	11/24/03	134.02	---	3184.48	---	---
	05/11/04	134.01	---	3184.49	---	---
	11/15/04	134.06	---	3184.44	---	---
	05/17/05	133.97	---	3184.53	---	---
	11/15/05	134.20	---	3184.30	---	---
	05/08/06	133.93	---	3184.57	---	---
	11/13/06	133.92	---	3184.58	---	---
	05/29/07	134.00	---	3184.50	---	---
	11/15/07	133.88	---	3184.62	---	---
	05/14/08	133.98	---	3184.52	---	---
	11/03/08	133.99	---	3184.51	---	---

TABLE I
GROUNDWATER GAUGING SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Well ID *TOC Elevation*	Collection Date	Depth to Groundwater (ft TOC)	Casing Diameter (in)	Groundwater Elevation (ft)	Well Depth (ft TOC)	Well Screen Interval (ft bgs)
RW-2	02/08/01	135.58	5	3183.04	154.63	134.22-172.73
3318.62	05/10/02	135.55	---	3183.07	---	---
	10/22/02	135.55	---	3183.07	---	---
	05/20/03	135.58	---	3183.04	---	---
	11/24/03	135.54	---	3183.08	---	---
	05/11/04	135.48	---	3183.14	---	---
	11/15/04	135.43	---	3183.19	---	---
	05/17/05	135.46	---	3183.16	---	---
	11/15/05	135.65	---	3182.97	---	---
	05/08/06	135.42	---	3183.20	---	---
	11/13/06	135.47	---	3183.15	---	---
	05/29/07	135.54	---	3183.08	---	---
	11/15/07	135.48	---	3183.14	---	---
	05/14/08	135.48	---	3183.14	---	---
	11/03/08	135.44	---	3183.18	---	---

Notes:

1. TOC - Top of Casing.
2. bgs - below ground surface.
3. A - Indicates shallow groundwater monitor well.

TABLE II
GROUNDWATER ANALYTICAL SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Carbonate Alkalinity	Bicarbonate Alkalinity	Total Alkalinity	Chloride	Fluoride	Nitrate N	Sulfate	Calcium	Magnesium	Potassium	Sodium	TDS
New Mexico Water Quality Control Commission Groundwater Standard					250	1.60	10	600					1,000
MW-1	9/16/97	--	--	280	8,500	--	--	1,100	520.0	630.0	50.00	4,300.0	15,000
	2/25/98	--	--	280	5,600	--	--	570	285.0	520.0	116.00	2,900.0	9,300
	2/14/01	<1.0	306	306	11,000	4.40	7.70	1,000	374.0	780.0	236.00	5,236.0	20,000
	5/17/02	<1.0	208	208	237	5.83	3.28	86.9	45.7	20.1	11.90	184.0	784
	10/23/02	--	--	--	168	--	--	96.8	--	--	--	--	696
	5/21/03	<1.0	290	290	6,600	<8.00	10.90	875	238.0	475.0	96.50	3,410.0	13,200
	11/25/03	<1.0	250	250	402	7.03	2.72	125	19.2	22.0	18.50	294.0	1,158
	5/12/04	<1.00	264	264	504	7.31	2.70	136	17.2	23.1	22.40	355.0	1,328
	11/16/04	<1.00	232	232	384	4.94	3.30	103	29.2	22.7	25.40	373.0	952
	11/16/05	<10.0	262	262	1,210 D1	3.0	2.4	215 D1	85.400	92.600	23.000	847.000	2,640 N
	11/14/06	<10	200	200	96	4.2	2.0	76	13.200	6.490	15.600	172.000	624
	11/16/07	<10.0	255	255	4,250 D1	3.7	3.90 D1	602 D1	154.000	187.000	54.000	2100.000 D1	10,900
	11/4/08	<5.0	190	190	110	6.3	1.6	83	10	5.8	7.9	180	590
MW-2	2/25/98	--	--	210	5,900	--	--	760	840.0	380.0	30.00	2,650.0	9,400
	4/9/98	--	--	290	8,200	--	--	990	1,100.0	490.0	29.00	3,430.0	15,000
	2/14/01	<1.0	184	184	7,400	2.30	4.10	870	1,025.0	488.0	48.50	3,189.0	15,000
	5/17/02	<1.0	160	160	3,200	1.72	3.18	483	587.0	239.0	35.60	1,160.0	6,040
	10/23/02	--	--	--	2,920	--	--	451	--	--	--	--	6,770
	5/22/03	<1.0	158	158	2,550	2.04	3.87	386	448.0	176.0	20.00	1,020.0	5,880
	11/25/03	<1.0	160	160	3,330	<4.00	5.63	446	555.0	227.0	32.00	1,120.0	6,760
	5/12/04	<1.00	146	146	1,750	<2.00	2.78	246	308.0	112.0	29.70	549.0	3,965
	11/16/04	<1.00	120	120	430	<1.00	2.13	56.9	104.0	29.4	22.40	158.0	832
	11/16/05	<10.0	171	171	4,720 D1	0.72	2.6	645 D1	594.000	209.000	20.800	3,290.000	10,000 N
	11/14/06	<10	160	160	3,500	0.78 N	2.1	470	535.000	212.000	21.000	1,5400.000	8,260
	11/14/07	<10.0	178	178	3,280 D1	0.76	1.93	462 D1	449.000	152.000	16.200	1310.000 D1	9,110
	11/4/08	<5.0	150	150	2,900	<1.0	1.1	430	380	160	26	1,200	5,600
MW-2A	2/26/98	--	--	190	280	--	--	330	144.0	36.0	5.70	215.0	1,200
	2/14/01	<1.0	162	162	44	1.30	2.30	76	64.4	16.7	7.02	45.5	390
	5/15/02	<1.0	176	176	36.6	<1.00	2.34	79.1	57.6	13.9	4.35	43.8	435
	10/23/02	--	--	--	44.3	--	--	97	--	--	--	--	425
	5/22/03	<1.0	168	168	40.5	<1.00	2.18	75.5	67.2	14.3	3.76	47.9	418
	11/25/03	<1.0	166	166	43.1	1.00	2.23	77.4	51.7	14.4	3.98	43.8	452
	5/12/04	<1.00	176	176	44.8	<1.00	2.24	76.5	62.9	15.0	3.66	43.6	440
	11/16/04	<1.00	164	164	52.5	1.22	2.78	75.4	68.8	15.3	3.98	49.1	428
	11/16/05	<10.0	151	151	56.8	0.60	2.3	75.1 D1	157.000	18.000	4.200	49.800	630 N
	11/14/06	<10	180	180	49	0.55	1.6	76	69.800	15.600	3.470	49.900	488
	11/14/07	<10.0	170	170	74.6	0.58	1.51	66.8 D1	666.00	15.300	<5.000	45.400	504
	11/4/08	<5.0	220	220	68	0.49	1.4	74	67	15	3.2	42	470

TABLE II
GROUNDWATER ANALYTICAL SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Carbonate Alkalinity	Bicarbonate Alkalinity	Total Alkalinity	Chloride	Fluoride	Nitrate - N	Sulfate	Calcium	Magnesium	Potassium	Sodium	TDS
New Mexico Water Quality Control Commission Groundwater Standard					250	1.60	10	600					1,000
MW-3	2/27/98	--	--	190	452	--	--	406	200.0	50.0	11.00	237.0	1,500
	2/14/01	<1.0	158	158	34	1.60	2.40	100	54.5	19.0	7.61	48.6	440
	5/17/02	<1.0	158	158	30.6	1.56	2.35	102	55.6	18.4	5.04	50.0	433
	10/23/02	--	--	--	35.4	--	--	104	--	--	--	--	419
	5/22/03	<1.0	156	156	30.6	1.17	2.25	96.3	53.2	17.8	5.39	54.6	435
	11/25/03	<1.0	160	160	31.4	1.35	2.30	103	46.5	18.0	5.19	51.7	440
	5/12/04	<1.00	164	164	32.3	1.20	2.38	101	52.2	16.8	4.77	47.5	448
	11/16/04	<1.00	166	166	35.1	1.53	2.77	95.4	56.3	23.6	12.70	58.9	424
	11/17/05	<10.0	171	171	96.3	0.97	2.2	108 D1	89.200	22.100	8.870	93.400	840 N
	11/15/06	<10	170	170	30	0.92 N	1.7	96	51.300	17.300	4.300	57.200	505
	11/16/07	<10.0	170	170	39.7	0.93	1.58	88.2 D1	50.800	16.300	<5.000	50.600	570
	11/6/08	<5.0	150	150	36	1.1	1.4	97	50	17	4.0	48	430
MW-4	2/27/98	--	--	230	12,000	--	--	1,300	1,700.0	880.0	48.00	5,300.0	22,000
	4/9/98	--	--	240	13,000	--	--	1,500	1,740.0	840.0	42.00	5,400.0	23,000
	2/14/01	<1.0	232	232	15,000	1.80	6.80	1,500	--	--	--	--	29,000
	5/17/02	<1.0	232	232	11,300	2.01	6.09	1,380	1,610.0	814.0	60.90	4,310.0	22,600
	10/23/02	--	--	--	11,300	--	--	1,320	--	--	--	--	23,200
	5/22/03	<1.0	220	220	11,300	<10.00	12.30	1,370	1,450.0	659.0	47.30	4,140.0	62,500
	11/26/03	<1.0	218	218	12,100	<8.00	12.30	1,400	1830.0	889.0	62.00	4,620.0	54,450
	5/11/04	<1.00	214	214	14,200	<8.00	8.97	1,560	1800.0	829.0	60.70	4,850.0	65,450
	11/17/04	<1.00	222	222	13,600	<20.00	31.50	1,410	2020.0	972.0	73.60	5,900.0	25,200
	11/17/05	<10.0	181	181	9,440 D1	0.82	0.20	45.8 D1	849.000	387.000	28.100	3,880.000	24,300 N
	11/15/06	<10	260	260	14,000	<5.0 C	5.2	1,400	1,760.000	897.000	58.800	6,150.000	28,700
	11/14/07	<10.0	255	255	14,800 D1	0.54	7.15 D1	1,410 D1	1170.000	382.000	48.000	4760.000 D1	36,300
	11/12/08	<5.0	200	200	12,000	1.2	0.33	1,300	1,500	840	82	4,800	22,000
MW-4A	2/27/98	--	--	180	1,600	--	--	410	470.0	130.0	11.00	620.0	3,300
	2/14/01	<1.0	154	154	1,600	1.40	2.80	210	--	--	--	--	4,000
	5/15/02	<1.0	156	156	577	<1.00	2.23	121	200.0	49.5	10.30	125.0	1,610
	10/23/02	--	--	--	478	--	--	114	--	--	--	--	1,430
	5/22/03	<1.0	154	154	844	<1.00	2.43	160	279.0	58.9	10.10	248.0	2,200
	11/26/03	<1.0	158	158	1,060	<4.00	5.82	182	337.0	79.3	15.20	329.0	2,585
	5/11/04	<1.00	156	156	984	<2.00	3.30	179	297.0	66.5	11.50	279.0	2,300
	11/17/04	<1.00	164	164	1,110	<2.00	4.62	186	369.0	75.4	14.90	413.0	2,235
	11/16/05	<10.0	181	181	827 D1	<0.5	2.2	160 D1	335.000	64.400	9.230	382.000	2,340 N
	11/15/06	<10	620	620	960	<0.50	2.6	170	227.000	53.500	8.100	406.000	2,870
	11/14/07	<10.0	311	311	845 D1	0.35	3.60 D1	167 D1	205.000	44.900	7.330	334.000	2,650
	11/12/08	<5.0	640	640	650	0.32	2.2	170	160	37	9.9	290	1,700

TABLE II
GROUNDWATER ANALYTICAL SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Carbonate Alkalinity	Bicarbonate Alkalinity	Total Alkalinity	Chloride	Fluoride	Nitrate - N	Sulfate	Calcium	Magnesium	Potassium	Sodium	TDS
New Mexico Water Quality Control Commission Groundwater Standard					250	1.60	10	600					1,000
MW-5	2/26/98	--	--	180	6,600	--	--	910	1,400.0	470.0	31.00	2,400.0	12,000
	2/14/01	<1.0	166	166	7,700	1.80	4.10	910	--	--	--	--	18,000
	5/17/02	<1.0	156	156	4,040	1.53	4.56	586	757.0	319.0	60.90	1,260.0	8,340
	10/23/02	--	--	--	3,900	--	--	94.8	--	--	--	--	422
	5/22/03	<1.0	158	158	3,170	<4.00	6.52	550	644.0	215.0	49.90	1,240.0	7,860
	11/25/03	<1.0	168	168	5,120	<4.00	6.77	739	978.0	365.0	54.90	1,680.0	11,940
	5/11/04	<1.00	160	160	6,760	<3.00	4.65	1,030	1,180.0	417.0	40.30	2,120.0	20,380
	11/17/04	<1.00	172	172	6,750	<10	16.60	786	1,210.0	486.0	40.60	2,300.0	11,980
	11/17/05	<10.0	161	161	2,140 D1	0.79	0.16	334 D1	339.000	126.000	10.800	791.000	7,120 N
	11/14/06	<10	160	160	2,000	0.60	1.5	300	437.000	173.000	14.200	918.000	4,420
	11/14/07	<10.0	161	161	5,790 D1	0.37	4.01 D1	668 D1	812.000	240.000	23.300	1850.000 D1	16,300
	11/6/08	<5.0	160	160	4,900	0.78	0.32	540	660	310	35	1,600	9,700
MW-5A	2/26/98	--	--	170	190	--	--	180	107.0	23.0	3.50	117.0	740
	2/15/01	<1.0	164	164	140	1.20	2.10	130	90.2	27.9	8.70	74.6	670
	5/15/02	<1.0	182	182	53.5	<1.00	2.23	84.4	63.2	16.1	4.69	43.6	475
	10/23/02	--	--	--	50	--	--	616	--	--	--	--	8,670
	5/22/03	<1.0	158	158	32.5	<1.00	2.10	69.9	55.5	13.8	3.41	41.5	416
	11/25/03	<1.0	332	332	34.1	1.05	2.20	75.5	60.9	14.6	4.08	45.0	422
	5/11/04	<1.00	164	164	38.8	<1.00	2.25	75.8	60.9	15.0	3.40	43.2	484
	11/17/04	<1.00	152	152	39.6	1.37	2.66	74.3	58.1	13.6	3.83	48.5	430
	11/16/05	<10.0	191	191	40.2	0.82	2.1	75.2 D1	176.000	17.800	4.220	45.300	570 N
	11/14/06	<10	240	240	47	0.64	1.5	79	90.400	16.100	3.580	51.400	588
	11/14/07	<10.0	227	227	54.4	0.66	1.45	68.7 D1	73.700	14.000	<5.000	44.200	528
	11/6/08	<5.0	350	350	53	0.70	1.3	72	76	15	3.4	43	450
MW-6	2/26/98	--	--	200	260	--	--	400	180.0	44.0	6.20	205.0	1,200
	2/14/01	<1.0	158	158	59	1.70	2.20	99	67.5	22.1	7.67	52.3	470
	5/17/02	<1.0	162	162	37.8	1.62	2.14	99.3	63.1	19.6	5.12	48.6	427
	10/23/02	--	--	--	46.1	--	--	109	--	--	--	--	331
	5/22/03	<1.0	162	162	40.3	1.24	2.13	94.4	61.7	17.4	4.23	51.9	464
	11/25/03	<1.0	154	154	53.6	1.40	2.18	98	53.6	18.7	4.97	51.7	482
	5/11/04	<1.00	156	156	54.4	1.23	2.19	97	59.0	18.1	4.22	47.8	506
	11/16/04	<1.00	162	162	57.9	1.64	2.68	99.8	66.6	19.6	5.16	57.0	464
	11/17/05	<10.0	201	201	101	0.97	0.35	97.8 D1	103.000	20.200	4.100	59.100	730 N
	11/15/06	<10	750	750	68	0.99	1.5	93	64.600	20.400	4.230	57.100	507
	11/15/07	<10.0	284	284	162	51	1.35	96.3 D1	84.100	25.200	<5.000	62.100	630
	11/6/08	<5.0	220	220	84	1.2	1.2	95	67	21	4.3	53	490

TABLE II
GROUNDWATER ANALYTICAL SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Carbonate Alkalinity	Bicarbonate Alkalinity	Total Alkalinity	Chloride	Fluoride	Nitrate - N	Sulfate	Calcium	Magnesium	Potassium	Sodium	TDS
New Mexico Water Quality Control Commission Groundwater Standard					250	1.60	10	600					1,000
MW-7	5/14/98	--	--	230	430	--	--	340	214.0	66.0	13.00	165.0	1,200
	2/14/01	<1.0	150	150	510	1.70	2.40	150	--	--	--	--	1,500
	5/16/02	<1.0	150	150	75.7	1.59	2.27	97.4	68.6	23.2	6.63	54.3	501
	10/22/02	--	--	--	88.6	--	--	109	--	--	--	--	490
	5/22/03	<1.0	140	140	173	1.17	2.14	88.9	85.5	28.2	6.18	64.6	631
	11/26/03	<1.0	136	136	189	1.29	2.23	93.5	95.7	31.0	7.91	63.6	704
	5/13/04	<1.00	130	130	267	1.11	2.18	94.7	107.0	34.7	6.59	62.9	914
	11/16/04	<1.00	130	130	367	1.49	2.72	97.3	142.0	49.3	8.61	87.9	870
	11/17/05	<10.0	121	121	456 D1	0.53	0.28	106 D1	412.000	64.700	12.100	100.000	1,440 N
	11/15/06	<10	240	240	550	0.63	1.5	110	202.000	70.300	7.400	102.000	2,100
	11/15/07	<10.0	189	189	458 D1	1.20	1.39	176 D1	144.000	59.500	9.950	148.000	1,880
	11/12/08	<5.0	110	110	650	0.84	1.2	140	210	76	12	120	1,600
MW-8	5/13/98	--	--	200	270	--	--	390	190.0	60.0	12.00	170.0	1,200
	2/14/01	<1.0	156	156	49	1.80	2.50	100	59.9	21.5	7.84	52.9	400
	5/16/02	<1.0	158	158	32.9	1.57	2.33	101	56.6	19.2	5.20	49.5	432
	10/22/02	--	--	--	40.8	--	--	104	--	--	--	--	392
	5/22/03	8	160	168	33.2	1.40	2.32	98.3	53.9	18.3	9.31	46.4	410
	11/26/03	<1.0	142	142	31.7	1.59	2.38	95.6	55.3	18.2	5.31	50.2	443
	5/12/04	<1.00	154	154	36.3	1.39	2.38	101	53.0	17.3	4.56	48.1	435
	11/16/04	<1.00	170	170	39.8	1.94	2.94	103	57.8	18.6	5.63	56.4	435
	5/17/05	4	152	156	41	1.64	2.94	105	61.0	18.6	5.78	47.3	434
	11/17/05	<10.0	171	171	113	1.1	<0.05	115 D1	83.400	21.700	5.740	102.000	750 N
	5/9/06	<10	160	160	210	0.89	1.4	200	72.700	33.300	7.120	125.000	896
	11/14/06	<10	150	150	230	1.1	1.2	200	74.200	38.300	9.610	162.000	912
	5/30/07	<10	141	141	62	1.2	1.74	120	54.100	19.100	<5	59.300	500
	11/15/07	<10.0	159	159	43.1	1.33	1.56	94.2 D1	52.100	17.200	<5.000	49.800	540
	5/15/08	<1.53	151	151	40.7	1.40	1.78	99.6 D1	51.7	16.8	4.10	54.8 D1	427
	11/12/08	<5.0	140	140	39	1.4	1.5	97	52	17	<2.6	46	350
MW-9	5/14/98	--	--	190	350	--	--	470	207.0	61.0	12.00	200.0	1,300
	2/15/01	<1.0	156	156	35	2.60	2.40	110	60.4	19.8	7.47	47.0	430
	5/16/02	<1.0	160	160	31.7	2.22	2.28	99.4	60.8	17.6	5.32	50.1	440
	10/23/02	--	--	--	39	--	--	102	--	--	--	--	436
	5/22/03	<1.0	160	160	31	1.75	2.19	93.3	52.2	15.8	4.75	50.2	455
	11/26/03	<1.0	150	150	31.8	1.99	2.34	99.8	57.7	16.6	4.69	46.3	452
	5/12/04	<1.00	164	164	33.6	1.79	2.29	99.2	54.8	16.0	4.27	43.5	467
	11/16/04	8	154	162	367	1.49	2.72	97.3	63.2	17.8	5.59	55.5	433
	5/17/05	4	154	154	44.2	2.43	3.05	117	58.8	16.7	5.94	44.1	434
	11/17/05	<10.0	161	161	83.5	1.3	0.14	111 D1	149.000	26.200	7.430	80.400	790 N
	5/9/06	<10	170	170	37	1.8	1.8	99	52.700	15.000	3.210	45.500	428
	11/15/06	<10	150	150	210	1.1	1.2	190	70.500	35.800	8.640	152.000	905
	5/30/07	<10	153	153	35	2.1	1.69	110	52.200	15.800	<5	44.700	464
	11/14/07	<10.0	151	151	186	1.49	1.48	156 D1	74.100	39.400	8.730	141.000	808
	5/15/08	<1.53	174	174	42.5	2.38	1.72	105 D1	55.6	17.0	3.99	54.1 D1	467
	11/4/08	<5.0	160	160	39	2.1	1.4	98	54	16	3.7	47	440

TABLE II
GROUNDWATER ANALYTICAL SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Carbonate Alkalinity	Bicarbonate Alkalinity	Total Alkalinity	Chloride	Fluoride	Nitrate - N	Sulfate	Calcium	Magnesium	Potassium	Sodium	TDS
New Mexico Water Quality Control Commission Groundwater Standard					250	1.60	10	600					1,000
MW-9A	5/14/98	--	--	280	600	--	--	770	338.0	96.0	12.00	334.0	2,200
	2/15/01	<1.0	142	142	85	1.40	2.20	71	71.6	19.2	6.94	46.0	400
	5/15/02	<1.0	136	136	148	<1.00	2.18	65.3	62.9	16.1	4.62	46.8	445
	10/23/02	--	--	--	168	--	--	75.5	--	--	--	--	651
	5/22/03	<1.0	126	126	207	<1.00	2.09	62.1	102.0	25.2	4.80	55.7	672
	11/26/03	<1.0	118	118	216	1.14	2.26	62.7	107.0	25.1	5.31	53.2	648
	5/12/04	<1.00	122	122	242	<1.00	2.10	64.7	105.0	26.2	5.11	26.2	950
	11/16/04	<1.00	114	114	296	1.24	2.74	67.5	130.0	33.1	6.24	70.3	826
	5/17/05	<1.00	112	112	354	1.04	2.85	77.1	131.0	31.7	6.39	60.5	828
	11/17/05	<10.0	121	121	310 D1	0.82	0.31	74.7 D1	337.000	41.400	8.080	74.500	1,520 N
	5/9/06	<10	670	670	270	0.67	1.6	78	111.000	27.100	3.880	58.700	992
	11/15/06	<10	1,600	1,600	290	0.62	1.6	72	126.000	33.400	4.740	68.400	1,280
	5/30/07	<10	586	586	400	0.7	1.69	83	153.000	36.900	<5	71.800	1,450
	11/14/07	<10.0	605	605	285 D1	0.62	1.52	64.7 D1	153.000	35.400	5.030	70.700	1,430
	5/15/08	<1.53	738	738	380 D1	0.45	1.62	86.8 D1	146	35.5	5.45	77.2 D1	1,390
	11/4/08	<5.0	370	370	330	<1.0	1.2	84	130	32	5.1	66	1,000
MW-10	5/14/98	--	--	240	360	--	--	450	211.0	62.0	11.00	190.0	1,400
	2/15/01	<1.0	140	140	190	2.00	2.30	97	108.0	32.3	8.20	61.0	660
	5/17/02	<1.0	152	152	204	1.93	2.19	99.1	109.0	31.7	7.60	62.4	713
	10/22/02	--	--	--	213	--	--	108	--	--	--	--	758
	5/22/03	<1.0	152	152	213	1.45	2.17	96.6	109.0	29.9	8.65	74.2	764
	11/26/03	<1.0	152	152	220	1.54	2.26	103	120.0	35.7	6.96	64.0	752
	5/13/04	<1.00	158	158	232	1.39	2.23	102	114.0	31.6	5.95	57.2	802
	11/17/04	<1.00	170	170	245	1.73	2.78	104	121.0	35.7	7.07	70.3	764
	5/17/05	<1.00	150	150	233	1.77	2.80	106	113.0	32.3	6.83	60.2	776
	11/17/05	<10.0	151	151	205 D1	1.2	0.26	111 D1	482.000	47.400	13.100	82.400	970 N
	5/9/06	<10	190	190	180	1.4	1.6	98	93.300	27.100	4.310	60.400	724
	11/16/06	<10	320	320	190	1.2	1.6	92	101.000	30.000	4.750	64.100	900
	5/30/07	<10	340	340	200	1.4	1.68	110	101.000	28.600	<5	62.400	820
	11/15/07	<10.0	189	189	251 D1	1.44	1.44	152 D1	104.000	33.400	6.010	84.700	1,010
	5/15/08	<1.53	374	374	342 D1	1.47	1.28	257 D1	106	52.9	11.7	165 D1	1,140
	11/6/08	<5.0	150	150	210	1.5	1.3	89	110	32	5.4	64	730

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CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Carbonate Alkalinity	Bicarbonate Alkalinity	Total Alkalinity	Chloride	Fluoride	Nitrate - N	Sulfate	Calcium	Magnesium	Potassium	Sodium	TDS
New Mexico Water Quality Control Commission Groundwater Standard					250	1.60	10	600					1,000
MW-11	1/22/99	30	<1.0	30	46	2.30	4.20	94	33.0	7.0	9.10	58.0	370
	2/15/01	<1.0	156	156	37	2.40	2.40	120	64.0	19.1	7.83	50.1	360
	5/16/02	<1.0	160	160	31.9	2.13	2.33	98.8	63.5	17.2	4.83	47.0	414
	10/23/02	--	--	--	37.2	--	--	102	--	--	--	--	447
	5/22/03	12	154	166	32.3	1.74	2.28	96.7	62.3	0.0	4.63	47.6	437
	11/26/03	<1.0	160	160	32.4	1.83	2.23	96.4	59.2	16.6	4.67	48.6	448
	5/12/04	<1.00	164	164	34.6	1.71	2.38	97.7	54.8	15.7	4.28	46.2	457
	11/16/04	<1.00	160	160	39	2.17	2.81	100	65.2	16.8	5.14	54.3	454
	5/17/05	4	158	162	43.1	1.87	2.82	94.6	68.4	16.9	6.45	44.0	429
	11/17/05	<10.0	161	161	58.1	1.5	2.1	91.3 D1	75.000	17.700	4.550	64.700	700 N
	5/9/06	<10	180	180	37	1.8	1.7	100	54.100	16.200	3.260	46.900	456
	11/14/06	<10	170	170	34	1.8	1.8	110	58.000	18.200	4.130	53.400	532
	5/30/07	<10	142	142	36	1.9	1.79	120	54.000	16.700	<5	50.800	456
	11/14/07	<10.0	189	189	42.3	1.98	1.54	95.6 D1	57.200	17.400	<5.000	52.400	452
	5/15/08	<1.53	177	177	72.4 D1	1.86	1.71	141	58.0	19.4	4.93	66.5 D1	544
	11/4/08	<5.0	170	170	49	1.5	1.3	90	60	16	3.6	47	440
MW-12	5/15/02	<1.0	160	160	58.3	1.09	2.44	91.3	53.5	15.9	5.52	50.3	462
	10/23/02	--	--	--	65	--	--	102	--	--	--	--	477
	5/22/03	<1.0	148	148	91.1	1.04	2.30	87.7	74.2	21.0	4.89	57.6	516
	11/25/03	<1.0	142	142	93.1	1.18	2.36	90.9	74.7	20.9	5.41	52.5	548
	5/12/04	<1.00	458	458	72.9	1.04	2.35	86.7	58.1	19.0	5.92	51.8	489
	11/15/04	<1.00	184	184	79.8	1.39	2.83	88.8	59.7	21.5	16.50	77.4	512
	11/17/05	<10.0	151	151	109	0.93	0.12	94.6 D1	193.000	26.600	13.400	87.500	700 N
	11/16/06	<10	270	270	120	0.71	1.7	84	82.300	27.000	4.820	62.200	620
	11/16/07	<10.0	170	170	258 D1	1.21	1.55	191 D1	77.200	42.700	11.000	154.000	1,270
	11/6/08	<5.0	130	130	110	0.89	1.4	79	61	20	4.5	52	460
MW-13	5/13/02	<1.0	100	100	517	<1.00	1.61	437	116.0	76.0	19.40	269.0	1,596
	10/23/02	--	--	--	549	--	--	370	--	--	--	--	1,740
	5/22/03	<1.0	186	186	944	<2.00	2.33	361	289.0	101.0	15.30	458.0	3,060
	11/25/03	<1.0	226	226	1,460	<2.00	2.22	372	369.0	117.0	20.00	478.0	3,445
	5/12/04	<1.00	234	234	1,550	<4.00	4.58	369	384.0	114.0	18.60	485.0	4,240
	11/15/04	<1.00	226	226	1,870	<2.00	4.92	384	510.0	164.0	16.50	627.0	3,600
	11/17/05	<10.0	201	201	722 D1	1.0	2.5	206 D1	786.000	91.600	19.700	276.000	2,350 N
	11/16/06	<10	1,500	1,500	2,000	<0.50 N	2.7	500 N	529.000	176.000	14.200	493.000	5,060
	11/16/07	<10.0	236	236	2,000 D1	0.33	3.05 D1	312 D1	361.000	105.000	11.400	553.000 D1	6,320
	11/6/08	<5.0	180	180	970	0.98	1.8	280	240	96	17	370	2,400

TABLE II
GROUNDWATER ANALYTICAL SUMMARY
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT INJECTION STATION
LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Carbonate Alkalinity	Bicarbonate Alkalinity	Total Alkalinity	Chloride	Fluoride	Nitrate - N	Sulfate	Calcium	Magnesium	Potassium	Sodium	TDS
New Mexico Water Quality Control Commission Groundwater Standard					250	1.60	10	600					1,000
RW-1	5/27/99	0	224	224	8,700	2.70	7.00	840	679.0	521.0	34.00	3,290	14,000
	5/22/03	<1.0	190	190	2,410	2.46	4.23	345	162.0	145.0	25.40	1,180.0	5,260
	11/26/03	<1.0	184	184	1,990	<4.00	20.00	324	199.0	147.0	38.60	1,080.0	5,050
	5/11/04	<1.00	148	148	491	1.32	2.65	109	66.3	23.4	11.20	252.0	1,224
	11/17/04	<1.00	160	160	633	1.65	3.23	121	89.7	43.5	18.00	382.0	1,314
	11/17/05	<10.0	221	221	895 D1	1.0	1.4	166 D1	122.000	70.900	8.400	493.000	2,380 N
	11/16/06	<10	380	380	11,000	<0.50	<20 HC	1,100	539.000	694.000	43.300	5,580.000	22,000
	11/15/07	<10.0	359	359	2,380 D1	1.26	3.74 D1	252 D1	141.000	137.000	16.000	1100.000 D1	5,280
DUP	11/15/07	<10.0	208	208	2,620 D1	1.24	3.85 D1	316 D1	136.000	133.000	15.500	1040.000 D1	5,360
	11/12/08	<5.0	210	210	370	0.82	1.9	97	66	34	5.0	190	920
RW-2	5/22/03	324	<4.00	780	1,580	<2.00	2.43	23.9	1,060.0	<0.500	20.20	258.0	4,310
	11/26/03	64	<4.00	704	1,480	<5.00	5.81	38.3	988.0	<0.500	23.80	240.0	3,535
	5/13/04	36.0	<4.00	578	1,770	<3.00	3.19	67	898.0	<0.500	21.60	260.0	4,175
	11/17/04	104.0	<4.00	692	2,280	<10.0	<10.0	116	1180.0	<0.500	18.50	415.0	3,915
	11/17/05	281	<10.0	422	1,770 D1	0.89	0.60	175 D1	861.000	16.600	13.100	361.000	7,350 N
	11/16/06	49	150	199	2,500	0.57	1.9	370	978.000	48.800	18.000	437.000	5,270
	11/15/07	170	37.8	208	1,680 D1	0.49	1.52	166 D1	586.000	<5.000	11.200	245.000	5,590
	11/12/08	150	<5.0	390	2,500	<0.50	0.24	250	1,200	<0.38	6.0	400	4,800

Notes:

1. Shaded cells indicate New Mexico Water Quality Control Commission (NMWQCC) exceedance.
2. Results shown in mg/L.
3. N - See narrative in laboratory report for a detailed explanation.
4. D1 - The analysis was performed at a dilution due to the high analyte concentration.
5. H - The analysis was performed past holding time.
6. C - Elevated detection limit due to matrix effect.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

JOB NUMBER: 354242
Project ID: COOPER JAL LEA COUNTY NM

Prepared For:

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

Attention: Todd Wells

Date: 06/03/2008

Signature

06/03/08
Date

Name: Sachin G. Kudchadkar

Title: Project Manager III

E-Mail: sachin.kudchadkar@testamericainc.com

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6310 Rothway Drive
Houston, TX 77040

PHONE: 713-690-4444

TOTAL NO. OF PAGES 44

SAMPLE INFORMATION
Date: 06/03/2008

Job Number.: 354242
Customer...: Conestoga-Rovers and Associates
Attn.....: Todd Wells

Project Number.....: 99007835
Customer Project ID....: COOPER JAL LEA COUNTY NM
Project Description....: Chevron

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
354242-1	MW-8	Water	05/15/2008	14:40	05/16/2008	09:29
354242-2	MW-9	Water	05/15/2008	13:50	05/16/2008	09:29
354242-3	MW-9A	Water	05/15/2008	13:35	05/16/2008	09:29
354242-4	MW-10	Water	05/15/2008	14:10	05/16/2008	09:29
354242-5	MW-11	Water	05/15/2008	12:40	05/16/2008	09:29
354242-6	DUPE	Water	05/15/2008	00:00	05/16/2008	09:29

LABORATORY TEST RESULTS

Job Number: 354242

Date:06/03/2008

ER: Conestoga-Rovers and Associates

PROJECT: COOPER JAL LEA COUNT

ATTN: Todd Wells

Customer Sample ID: MW-8
Date Sampled.....: 05/15/2008
Time Sampled.....: 14:40
Sample Matrix.....: Water

Laboratory Sample ID: 354242-1
Date Received.....: 05/16/2008
Time Received.....: 09:29

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete					1		199632		05/28/08 1550	rim
6010B	Metals Analysis (ICAP Trace)											
	Calcium (Ca), Diss.	51.7			0.02185	2.000	1	mg/L	199712		05/29/08 1017	srp
	Magnesium (Mg), Diss.	16.8			0.01604	2.000	1	mg/L	199712		05/29/08 1017	srp
	Potassium (K), Diss.	4.10			0.08121	2.000	1	mg/L	199712		05/29/08 1017	srp
	Sodium (Na), Diss.	54.8			0.2000	20.00	10	mg/L	199712		05/29/08 1240	srp
20 B	Alkalinity, Total as CaCO3, Water	151			1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
20 B	Bicarbonate (HCO3), Water	151			1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
20 B	Carbonate (CO3), Water	1.53	U		1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
540C	Solids, Total Dissolved (TDS), Water	427			1.533	10	1	mg/L	199101		05/16/08 1600	daw
00.0	Ion Chromatography Analysis											
	Chloride, Water	40.7			0.15	0.50	1	mg/L	199085		05/16/08 1407	sur
	Fluoride (F), Water	1.40			0.10	0.30	1	mg/L	199085		05/16/08 1407	sur
	Sulfate (SO4), Water	99.6			3.4	5.0	10	mg/L	199085		05/16/08 1422	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold											
	Nitrogen, Nitrate as N (NO3-N), Water	1.78			0.19	0.20	1	mg/L	199085		05/16/08 1407	sur
	Nitrogen, Nitrite as N (NO2-N), Water	0.065	U		0.065	0.20	1	mg/L	199085		05/16/08 1407	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 354242

Date:06/03/2008

ER:: Conestoga-Rovers and Associates

PROJECT: COOPER JAL LEA COUNT

ATTN: Todd Wells

Customer Sample ID: MW-9
Date Sampled.....: 05/15/2008
Time Sampled.....: 13:50
Sample Matrix.....: Water

Laboratory Sample ID: 354242-2
Date Received.....: 05/16/2008
Time Received.....: 09:29

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete					1		199632		05/28/08 1550	rim
6010B	Metals Analysis (ICAP Trace)											
	Calcium (Ca), Diss.	55.6			0.02185	2.000	1	mg/L	199712		05/29/08 1032	srp
	Magnesium (Mg), Diss.	17.0			0.01604	2.000	1	mg/L	199712		05/29/08 1032	srp
	Potassium (K), Diss.	3.99			0.08121	2.000	1	mg/L	199712		05/29/08 1032	srp
	Sodium (Na), Diss.	54.1			0.2000	20.00	10	mg/L	199712		05/29/08 1255	srp
20 B	Alkalinity, Total as CaCO3, Water	174			1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
20 B	Bicarbonate (HCO3), Water	174			1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
20 B	Carbonate (CO3), Water	1.53	U		1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
540C	Solids, Total Dissolved (TDS), Water	467			1.533	10	1	mg/L	199101		05/16/08 1600	daw
00.0	Ion Chromatography Analysis											
	Chloride, Water	42.5			0.15	0.50	1	mg/L	199085		05/16/08 1745	sur
	Fluoride (F), Water	2.38			0.10	0.30	1	mg/L	199085		05/16/08 1745	sur
	Sulfate (SO4), Water	105			3.4	5.0	10	mg/L	199085		05/16/08 1801	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold											
	Nitrogen, Nitrate as N (NO3-N), Water	1.72			0.19	0.20	1	mg/L	199085		05/16/08 1745	sur
	Nitrogen, Nitrite as N (NO2-N), Water	0.065	U		0.065	0.20	1	mg/L	199085		05/16/08 1745	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 354242

Date:06/03/2008

ER: Conestoga-Rovers and Associates | PROJECT: COOPER JAL LEA COUNT | ATTN: Todd Wells

Customer Sample ID: MW-9A
Date Sampled.....: 05/15/2008
Time Sampled.....: 13:35
Sample Matrix.....: Water

Laboratory Sample ID: 354242-3
Date Received.....: 05/16/2008
Time Received.....: 09:29

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete					1		199632		05/28/08 1550	rim
6010B	Metals Analysis (ICAP Trace)											
	Calcium (Ca), Diss.	146			0.02185	2.000	1	mg/L	199712		05/29/08 1056	srp
	Magnesium (Mg), Diss.	35.5			0.01604	2.000	1	mg/L	199712		05/29/08 1056	srp
	Potassium (K), Diss.	5.45			0.08121	2.000	1	mg/L	199712		05/29/08 1056	srp
	Sodium (Na), Diss.	77.2			0.2000	20.00	10	mg/L	199712		05/29/08 1314	srp
20 B	Alkalinity, Total as CaCO3, Water	738			1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
20 B	Bicarbonate (HCO3), Water	738			1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
20 B	Carbonate (CO3), Water	1.53	U		1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
540C	Solids, Total Dissolved (TDS), Water	1390			1.533	10	1	mg/L	199101		05/16/08 1600	daw
00.0	Ion Chromatography Analysis											
	Chloride, Water	380			1.5	5.0	10	mg/L	199085		05/16/08 1453	sur
	Fluoride (F), Water	0.45			0.10	0.30	1	mg/L	199085		05/16/08 1438	sur
	Sulfate (SO4), Water	86.8			3.4	5.0	10	mg/L	199085		05/16/08 1453	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold											
	Nitrogen, Nitrate as N (NO3-N), Water	1.62			0.19	0.20	1	mg/L	199085		05/16/08 1438	sur
	Nitrogen, Nitrite as N (NO2-N), Water	0.065	U		0.065	0.20	1	mg/L	199085		05/16/08 1438	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 354242

Date:06/03/2008

ER: Conestoga-Rovers and Associates | PROJECT: COOPER JAL LEA COUNT | ATTN: Todd Wells

Customer Sample ID: MW-10
Date Sampled.....: 05/15/2008
Time Sampled.....: 14:10
Sample Matrix.....: Water

Laboratory Sample ID: 354242-4
Date Received.....: 05/16/2008
Time Received.....: 09:29

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete					1		199632		05/28/08 1550	rim
6010B	Metals Analysis (ICAP Trace)											
	Calcium (Ca), Diss.	106			0.02185	2.000	1	mg/L	199712		05/29/08 1100	srp
	Magnesium (Mg), Diss.	52.9			0.01604	2.000	1	mg/L	199712		05/29/08 1100	srp
	Potassium (K), Diss.	11.7			0.08121	2.000	1	mg/L	199712		05/29/08 1100	srp
	Sodium (Na), Diss.	165			0.2000	20.00	10	mg/L	199712		05/29/08 1318	srp
20 B	Alkalinity, Total as CaCO3, Water	374			1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
20 B	Bicarbonate (HCO3), Water	374			1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
20 B	Carbonate (CO3), Water	1.53	U		1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
540C	Solids, Total Dissolved (TDS), Water	1140			1.533	10	1	mg/L	199101		05/16/08 1600	daw
00.0	Ion Chromatography Analysis											
	Chloride, Water	342			1.5	5.0	10	mg/L	199085		05/16/08 1556	sur
	Fluoride (F), Water	1.47			0.10	0.30	1	mg/L	199085		05/16/08 1540	sur
	Sulfate (SO4), Water	257			3.4	5.0	10	mg/L	199085		05/16/08 1556	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold											
	Nitrogen, Nitrate as N (NO3-N), Water	1.28			0.19	0.20	1	mg/L	199085		05/16/08 1540	sur
	Nitrogen, Nitrite as N (NO2-N), Water	0.065	U		0.065	0.20	1	mg/L	199085		05/16/08 1540	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 354242

Date:06/03/2008

ER: Conestoga-Rovers and Associates

PROJECT: COOPER JAL LEA COUNT

ATTN: Todd Wells

Customer Sample ID: MW-11
Date Sampled.....: 05/15/2008
Time Sampled.....: 12:40
Sample Matrix.....: Water

Laboratory Sample ID: 354242-5
Date Received.....: 05/16/2008
Time Received.....: 09:29

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete					1		199632		05/28/08 1550	rim
6010B	Metals Analysis (ICAP Trace)											
	Calcium (Ca), Diss.	58.0			0.02185	2.000	1	mg/L	199712		05/29/08 1104	srp
	Magnesium (Mg), Diss.	19.4			0.01604	2.000	1	mg/L	199712		05/29/08 1104	srp
	Potassium (K), Diss.	4.93			0.08121	2.000	1	mg/L	199712		05/29/08 1104	srp
	Sodium (Na), Diss.	66.5			0.2000	20.00	10	mg/L	199712		05/29/08 1331	srp
20 B	Alkalinity, Total as CaCO3, Water	177			1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
20 B	Bicarbonate (HCO3), Water	177			1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
20 B	Carbonate (CO3), Water	1.53	U		1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
540C	Solids, Total Dissolved (TDS), Water	544			1.533	10	1	mg/L	199101		05/16/08 1600	daw
00.0	Ion Chromatography Analysis											
	Chloride, Water	72.4			1.5	5.0	10	mg/L	199085		05/16/08 1659	sur
	Fluoride (F), Water	1.86			0.10	0.30	1	mg/L	199085		05/16/08 1643	sur
	Sulfate (SO4), Water	141			3.4	5.0	10	mg/L	199085		05/16/08 1659	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold											
	Nitrogen, Nitrate as N (NO3-N), Water	1.71			0.19	0.20	1	mg/L	199085		05/16/08 1643	sur
	Nitrogen, Nitrite as N (NO2-N), Water	0.065	U		0.065	0.20	1	mg/L	199085		05/16/08 1643	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 354242

Date:06/03/2008

ER: Conestoga-Rovers and Associates

PROJECT: COOPER JAL LEA COUNT

ATTN: Todd Wells

Customer Sample ID: DUPE
Date Sampled.....: 05/15/2008
Time Sampled.....: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 354242-6
Date Received.....: 05/16/2008
Time Received.....: 09:29

METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
3005A	Acid Digestion, Diss.	Complete					1		199632		05/28/08 1550	rim
6010B	Metals Analysis (ICAP Trace)											
	Calcium (Ca), Diss.	51.3			0.02185	2.000	1	mg/L	199712		05/29/08 1107	srp
	Magnesium (Mg), Diss.	16.8			0.01604	2.000	1	mg/L	199712		05/29/08 1107	srp
	Potassium (K), Diss.	4.19			0.08121	2.000	1	mg/L	199712		05/29/08 1107	srp
	Sodium (Na), Diss.	55.3			0.2000	20.00	10	mg/L	199712		05/29/08 1335	srp
20 B	Alkalinity, Total as CaCO3, Water	151			1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
20 B	Bicarbonate (HCO3), Water	151			1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
20 B	Carbonate (CO3), Water	1.53	U		1.53	5.0	1	mg/L	199280		05/21/08 1425	sng
540C	Solids, Total Dissolved (TDS), Water	443			1.533	10	1	mg/L	199101		05/16/08 1600	daw
00.0	Ion Chromatography Analysis											
	Chloride, Water	41.6			0.15	0.50	1	mg/L	199085		05/16/08 1714	sur
	Fluoride (F), Water	1.44			0.10	0.30	1	mg/L	199085		05/16/08 1714	sur
	Sulfate (SO4), Water	102			3.4	5.0	10	mg/L	199085		05/16/08 1730	sur
0 Rev2.	Ion Chromatography Analysis - Short Hold											
	Nitrogen, Nitrate as N (NO3-N), Water	1.75			0.19	0.20	1	mg/L	199085		05/16/08 1714	sur
	Nitrogen, Nitrite as N (NO2-N), Water	0.065	U		0.065	0.20	1	mg/L	199085		05/16/08 1714	sur

* In Description = Dry Wgt.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN: Todd Wells

Test Method.....: SM 2320 B
Method Description.: Alkalinity
Parameter.....: Alkalinity, Total as CaCO3
Units.....: mg/L CaCO3
Batch(s)...: 199280
Analyst...: sng
Test Code.: ALK

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	354238-12		4112.41			4112.41	0.0	20		05/21/2008	1425
MS	354438-6	WC4081A	396.32		250.000000	181.18	86.1	75-125		05/21/2008	1425
MB	199280--21		1.89							05/21/2008	1425
DU	354242-5		179.29			177.40	1.1	20		05/21/2008	1425
MS	354238-12	WC4081A	6598.98		2500.000000	4112.41	99.5	75-125		05/21/2008	1425
DU	354438-6		181.18			181.18	0.0	20		05/21/2008	1425
MB	199280--21		1.89							05/21/2008	1425
LCS	199280--21	WC4050	943.62		1000.0		94.4	90.0-110.		05/21/2008	1425
DU	354100-1		535.98			534.09	0.4	20		05/21/2008	1425
MS	354100-1	WC4081A	764.33		250.000000	534.09	92.1	75-125		05/21/2008	1425
LCS	199280--21	WC4050	943.62		1000.0		94.4	90.0-110.		05/21/2008	1425
MS	354242-5	WC4081A	407.64		250.000000	177.40	92.1	75-125		05/21/2008	1425

Test Method.....: SM 2320 B
Method Description.: Alkalinity
Parameter.....: Bicarbonate (HCO3)
Units.....: mg/L CaCO3
Batch(s)...: 199280
Analyst...: sng
Test Code.: HCO3

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	354242-5		179.29			177.40	1.1	20		05/21/2008	1425
DU	354438-6		181.18			181.18	0.0	20		05/21/2008	1425
MB	199280--21		1.89							05/21/2008	1425
DU	354100-1		535.98			534.09	0.4	20		05/21/2008	1425
MB	199280--21		1.89							05/21/2008	1425

Test Method.....: SM 2320 B
Method Description.: Alkalinity
Parameter.....: Carbonate (CO3)
Units.....: mg/L CaCO3
Batch(s)...: 199280
Analyst...: sng
Test Code.: CO3

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	354100-1		0			0	0	5		05/21/2008	1425
MB	199280--21		0							05/21/2008	1425
MB	199280--21		0							05/21/2008	1425
DU	354242-5		0			0	0	5		05/21/2008	1425
DU	354438-6		0			0	0	5		05/21/2008	1425

Test Method.....: SM 2540C
Method Description.: Solids, Total Dissolved (TDS)
Parameter.....: Solids, Total Dissolved (TDS)
Units.....: mg/L
Batch(s)...: 199101
Analyst...: daw
Test Code.: TDS

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
DU	354200-1		473.00			452.00	4.5	10.0		05/16/2008	1600
LCS	199101--21	WCS49472	1749.00		1800		97.2	90.0-110.		05/16/2008	1600
MB	199101--21		1.00							05/16/2008	1600

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN: Todd Wells

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim

Test Method.....: EPA300.0 Rev2.1 Units.....: mg/L Analyst...: sur
Method Description.: Ion Chromatography Analysis - Short Hold Batch(s)...: 199085

CCB	Continuing Calibration Blank				05/16/2008 16:

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

CCB	Continuing Calibration Blank				05/16/2008 19(

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Fluoride (F)	0						
Chloride	0.2136						
Bromide (Br)	0						
Sulfate (SO4)	0						
Nitrogen, Nitrate as N (NO3-N)	0						
Nitrogen, Nitrite as N (NO2-N)	0						
Nitrate + Nitrite as N	0.000						

CCB	Continuing Calibration Blank				05/16/2008 22:

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

CCB	Continuing Calibration Blank				05/17/2008 01

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

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN: Todd Wells

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				05/17/2008	03

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS49460			05/16/2008	16

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Fluoride (F)	9.9246		10.00		99.2		90.0-110.0
Chloride	19.951		20.00		99.8		90.0-110.0
Sulfate (SO4)	19.586		20.00		97.9		90.0-110.0
Bromide (Br)	20.048		20.00		100.2		90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.479		10.0		104.8		90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.7887		10.0		97.9		90.0-110.0
Nitrate + Nitrite as N	20.268						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS49460			05/16/2008	18

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Fluoride (F)	10.281		10.00		102.8		90.0-110.0
Chloride	19.881		20.00		99.4		90.0-110.0
Sulfate (SO4)	19.568		20.00		97.8		90.0-110.0
Bromide (Br)	19.967		20.00		99.8		90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.426		10.0		104.3		90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.7738		10.0		97.7		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS49460			05/16/2008	21

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sulfate (SO4)	19.831		20.00		99.2		90.0-110.0
Chloride	19.931		20.00		99.7		90.0-110.0
Fluoride (F)	10.297		10.00		103.0		90.0-110.0
Bromide (Br)	19.973		20.00		99.9		90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.457		10.0		104.6		90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.7878		10.0		97.9		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS49460			05/17/2008	00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Fluoride (F)	10.205		10.00		102.0		90.0-110.0
Chloride	19.880		20.00		99.4		90.0-110.0
Bromide (Br)	19.995		20.00		100.0		90.0-110.0
Sulfate (SO4)	19.498		20.00		97.5		90.0-110.0

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN: Todd Wells

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	WCS49460			05/17/2008	00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Nitrogen, Nitrate as N (NO3-N)	10.448		10.0		104.5		90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.7654		10.0		97.7		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	WCS49460			05/17/2008	03

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sulfate (SO4)	19.930		20.00		99.7		90.0-110.0
Bromide (Br)	20.112		20.00		100.6		90.0-110.0
Fluoride (F)	10.472		10.00		104.7		90.0-110.0
Chloride	20.096		20.00		100.5		90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.503		10.0		105.0		90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.8444		10.0		98.4		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
DU	Method Duplicate		354242-3	10	05/16/2008	15

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Fluoride (F), Water	0.1289			0.1160	0.0129		0.3000
Sulfate (SO4), Water	8.5416			8.6775	1.6		20
Chloride, Water	38.038			37.983	0.1		20
Bromide (Br), Water	0.1382			0.1747	0.0365		0.6000
Nitrogen, Nitrate as N (NO3-N), Water	0.2309			0.2222	0.0087		0.2500
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0		0
Nitrate + Nitrite as N, Water	0.231			0.222	0.009		0.400

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
DU	Method Duplicate		354208-1	10	05/16/2008	20

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Chloride, Water	3.4258			3.3398	2.5		20
Sulfate (SO4), Water	1.3804			1.4406	0.0602		0.5000
Bromide (Br), Water	0			0	0		1
Fluoride (F), Water	0			0	0		0
Nitrogen, Nitrate as N (NO3-N), Water	0.1030			0.1048	0.0018		0.2500
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0		0
Nitrate + Nitrite as N, Water	0.103			0.105	0.002		0.400

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
DU	Method Duplicate		354161-1	1000	05/17/2008	00

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sulfate (SO4), Water	24.787			24.911	0.5		20
Fluoride (F), Water	0.1467			0.1425	0.0042		0.3000
Bromide (Br), Water	0			0	0		1
Chloride, Water	1.2257			1.1918	0.0339		0.5000
Nitrogen, Nitrate as N (NO3-N), Water	0			0	0		0
Nitrogen, Nitrite as N (NO2-N), Water	0			0	0		0
Nitrate + Nitrite as N, Water	0.000			0.000	0.000		0.400

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				05/16/2008	132

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	WCS49460			05/16/2008	130

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Bromide (Br)	19.936		20.00		99.7		90.0-110.0
Chloride	19.925		20.00		99.6		90.0-110.0
Fluoride (F)	9.9173		10.00		99.2		90.0-110.0
Sulfate (SO4)	19.753		20.00		98.8		90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.385		10.0		103.8		90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.7802		10.0		97.8		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	WCS49460			05/16/2008	135

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Fluoride (F)	9.7907		10.00		97.9		90.0-110.0
Sulfate (SO4)	19.773		20.00		98.9		90.0-110.0
Chloride	20.051		20.00		100.3		90.0-110.0
Bromide (Br)	20.096		20.00		100.5		90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.559		10.0		105.6		90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.9210		10.0		99.2		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	WCS49460		10	05/16/2008	224

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Bromide (Br)	20.005		20.00		100.0		90.0-110.0
Chloride	19.954		20.00		99.8		90.0-110.0
Fluoride (F)	10.324		10.00		103.2		90.0-110.0
Sulfate (SO4)	19.428		20.00		97.1		90.0-110.0
Nitrogen, Nitrate as N (NO3-N)	10.453		10.0		104.5		90.0-110.0
Nitrogen, Nitrite as N (NO2-N)	9.8044		10.0		98.0		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				05/16/2008	133

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

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MB	Method Blank				05/16/2008	13:

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

MB	Method Blank				05/16/2008	22:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sulfate (SO4)	0						
Bromide (Br)	0						
Fluoride (F)	0						
Chloride	0.2024						
Nitrogen, Nitrate as N (NO3-N)	0						
Nitrogen, Nitrite as N (NO2-N)	0						
Nitrate + Nitrite as N	0.000						

MS	Matrix Spike	WCS48935	354242-3	10	05/16/2008	15:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sulfate (SO4), Water	17.985		10.000000	8.6775	93.1		90-110
Fluoride (F), Water	1.5747		2.000000	0.1160	72.9		90-110
Bromide (Br), Water	9.8910		10.000000	0.1747	97.2		90-110
Chloride, Water	45.337		10.000000	37.983	73.5		90-110
Nitrogen, Nitrate as N (NO3-N), Water	2.2017		2.000000	0.2222	99.0		90-110
Nitrogen, Nitrite as N (NO2-N), Water	1.9131		2.000000	0	95.7		90-110
Nitrate + Nitrite as N, Water	4.115		0.000000	0.222			

MS	Matrix Spike	WCS48935	354208-1	10	05/16/2008	20:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sulfate (SO4), Water	11.022		10.000000	1.4406	95.8		90-110
Fluoride (F), Water	1.6264		2.000000	0	81.3		90-110
Chloride, Water	12.973		10.000000	3.3398	96.3		90-110
Bromide (Br), Water	9.7306		10.000000	0	97.3		90-110
Nitrogen, Nitrate as N (NO3-N), Water	2.0828		2.000000	0.1048	98.9		90-110
Nitrogen, Nitrite as N (NO2-N), Water	1.6815		2.000000	0	84.1		90-110
Nitrate + Nitrite as N, Water	3.764		0.000000	0.105			

MS	Matrix Spike	WCS48935	354161-1	1000	05/17/2008	0:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Fluoride (F), Water	1.9584		2.000000	0.1425	90.8		90-110
Bromide (Br), Water	9.8956		10.000000	0	99.0		90-110
Sulfate (SO4), Water	33.637		10.000000	24.911	87.3		90-110
Chloride, Water	10.476		10.000000	1.1918	92.8		90-110
Nitrogen, Nitrate as N (NO3-N), Water	2.0599		2.000000	0	103.0		90-110
Nitrogen, Nitrite as N (NO2-N), Water	1.6771		2.000000	0	83.9		90-110
Nitrate + Nitrite as N, Water	3.737		0.000000	0.000			

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

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

Test Method.....: SW-846 6010B Units.....: mg/L Analyst...: srp
Method Description.: Metals Analysis (ICAP Trace) Batch(s)...: 199658 199673 199712

CCB	Continuing Calibration Blank				05/29/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00090						
Magnesium (Mg)	-0.00159						
Potassium (K)	0.03309						
Sodium (Na)	0.00737						

CCB	Continuing Calibration Blank				05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00476						
Magnesium (Mg)	-0.00684						
Potassium (K)	0.06081						
Sodium (Na)	0.00561						

CCB	Continuing Calibration Blank				05/29/2008	11

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00427						
Magnesium (Mg)	-0.00574						
Potassium (K)	0.07322						
Sodium (Na)	0.04501						

CCB	Continuing Calibration Blank				05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.01035						
Magnesium (Mg)	-0.02173						
Potassium (K)	-0.02607						
Sodium (Na)	0.02432						

CCB	Continuing Calibration Blank				05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.01078						
Magnesium (Mg)	-0.01940						
Potassium (K)	-0.08439						
Sodium (Na)	0.01097						

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCB	Continuing Calibration Blank				05/29/2008	13:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.01170						
Magnesium (Mg)	-0.02066						
Potassium (K)	-0.08484						
Sodium (Na)	0.00447						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.55539		12.50		100.4		90.0-110.0
Magnesium (Mg)	4.89795		5.000		98.0		90.0-110.0
Potassium (K)	12.06550		12.50		96.5		90.0-110.0
Sodium (Na)	12.58963		12.50		100.7		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.51331		12.50		100.1		90.0-110.0
Magnesium (Mg)	4.81142		5.000		96.2		90.0-110.0
Potassium (K)	12.30102		12.50		98.4		90.0-110.0
Sodium (Na)	12.92193		12.50		103.4		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	11

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.67684		12.50		101.4		90.0-110.0
Magnesium (Mg)	4.78373		5.000		95.7		90.0-110.0
Potassium (K)	12.40094		12.50		99.2		90.0-110.0
Sodium (Na)	12.70210		12.50		101.6		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	12:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.46840		12.50		99.7		90.0-110.0
Magnesium (Mg)	4.79450		5.000		95.9		90.0-110.0
Potassium (K)	12.37214		12.50		99.0		90.0-110.0
Sodium (Na)	12.79256		12.50		102.3		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.42762		12.50		99.4		90.0-110.0
Magnesium (Mg)	4.77421		5.000		95.5		90.0-110.0
Potassium (K)	12.36356		12.50		98.9		90.0-110.0
Sodium (Na)	12.96962		12.50		103.8		90.0-110.0

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	13:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.41986		12.50		99.4		90.0-110.0
Magnesium (Mg)	4.93421		5.000		98.7		90.0-110.0
Potassium (K)	12.46522		12.50		99.7		90.0-110.0
Sodium (Na)	13.30707		12.50		106.5		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH1	Calibration check standard 1	MS050708T1			05/29/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	0.09533		0.1000		95.3		80.0-120.0
Magnesium (Mg)	0.09164		0.1000		91.6		80.0-120.0
Potassium (K)	0.61666		0.60000		102.8		80.0-120.0
Sodium (Na)	0.65671		0.60000		109.5		80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH3	Standard check for ICAP	MS041408T3			05/29/2008	08(

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	20.20541		20.00		101.0		95.0-105.0
Magnesium (Mg)	19.72490		20.00		98.6		95.0-105.0
Potassium (K)	19.79903		20.00		99.0		95.0-105.0
Sodium (Na)	19.68125		20.00		98.4		95.0-105.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB	Extraction Blank		199632		05/29/2008	10:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	-0.00231						
Magnesium (Mg), Diss.	0.00276						
Potassium (K), Diss.	0.10852						
Sodium (Na), Diss.	0.01005						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				05/29/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	0.00103						
Magnesium (Mg)	-0.00097						
Potassium (K)	-0.02695						
Sodium (Na)	0.00452						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	MS052708CC			05/29/2008	08(

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.59388		12.50		100.8		90.0-110.0
Magnesium (Mg)	4.90919		5.000		98.2		90.0-110.0
Potassium (K)	12.00958		12.50		96.1		90.0-110.0
Sodium (Na)	12.38603		12.50		99.1		90.0-110.0

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
ISA	Interference Check Sample A	MS040808IA			05/29/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	494.77603		500.0		99.0		80-120
Magnesium (Mg)	546.43884		500.0		109.3		80-120
Potassium (K)	0.20911		0.0				
Sodium (Na)	0.04385		0.0				

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
ISB	Interference Check Sample B	MS040808IB			05/29/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	502.67565		510.0		98.6		80.0-120.0
Magnesium (Mg)	562.39306		510.0		110.3		80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
LCS	Laboratory Control Sample	MSPIKEW	199632		05/29/2008	10(

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Water	10.24334		10.00		102.4		80.0-120.0
Magnesium (Mg), Water	9.79534		10.00		98.0		80.0-120.0
Potassium (K), Water	9.99814		10.00		100.0		80.0-120.0
Sodium (Na), Water	10.53637		10.00		105.4		80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MB	Method Blank		199632		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Water	-0.01249						
Magnesium (Mg), Water	-0.00068						
Potassium (K), Water	0.09661						
Sodium (Na), Water	-0.00537						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MD	Method Duplicate		354242-1		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	51.68273	51.67058		51.67058	0.0		20
Magnesium (Mg), Diss.	16.77605	16.75135		16.75135	0.1		20
Potassium (K), Diss.	4.12157	4.10070		4.10070	0.02087		2.00000

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MD	Method Duplicate		354242-2		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	55.23128	55.61986		55.61986	0.7		20
Magnesium (Mg), Diss.	16.81045	16.96228		16.96228	0.9		20
Potassium (K), Diss.	3.98999	3.99458		3.99458	0.00459		2.00000

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		354242-1	10	05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	5.48350	5.48244		5.48244	0.00106		2.00000

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		354242-2	10	05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	5.39143	5.40508		5.40508	0.01365		2.00000

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	354242-1		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	57.52444		10.00	51.67058	58.5		75-125
Magnesium (Mg), Diss.	24.98847		10.00	16.75135	82.4		75-125
Potassium (K), Diss.	14.14281		10.00	4.10070	100.4		75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	354242-2		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	66.71949		10.00	55.61986	111.0		75-125
Magnesium (Mg), Diss.	27.43823		10.00	16.96228	104.8		75-125
Potassium (K), Diss.	15.34918		10.00	3.99458	113.5		75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	354242-1	10	05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	6.22633		1.000000	5.48244	74.4		75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	354242-2	10	05/29/2008	13

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	6.68598		10.00	5.40508	12.8		75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSPIKEW	354242-1		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	62.38913	57.52444	10.00	51.67058	107.2		75-125
					58.8		20
Magnesium (Mg), Diss.	27.41726	24.98847	10.00	16.75135	106.7		75-125
					25.7		20
Potassium (K), Diss.	15.22028	14.14281	10.00	4.10070	111.2		75-125
					10.2		20

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MSD	Matrix Spike Duplicate	MSPIKEW	354242-2		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	65.91276	66.71949	10.00	55.61986	102.9		75-125
					7.6		20
Magnesium (Mg), Diss.	26.93963	27.43823	10.00	16.96228	99.8		75-125
					4.9		20
Potassium (K), Diss.	15.07207	15.34918	10.00	3.99458	110.8		75-125
					2.4		20

MSD	Matrix Spike Duplicate	MSPIKEW	354242-1	10	05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	6.53246	6.22633	1.000000	5.48244	105.0		75-125
					34.1		20

MSD	Matrix Spike Duplicate	MSPIKEW	354242-2	10	05/29/2008	13

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	6.67477	6.68598	10.00	5.40508	12.7		75-125
					0.8		20

PDS	Post Digestion Spike	MSPIKE3	354242-1		05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	60.94198		10.00	51.67058	92.7		75-125
Magnesium (Mg), Diss.	26.81998		10.00	16.75135	100.7		75-125
Potassium (K), Diss.	15.15862		10.00	4.10070	110.6		75-125

SO	Calibration Blank				05/29/2008	0

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	0.00267						
Magnesium (Mg)	0.00934						
Potassium (K)	0.23878						
Sodium (Na)	0.02152						

SD	Serial Dilution		354242-1	5	05/29/2008	1

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	10.11188			51.67058	2.2		10.0
Magnesium (Mg), Diss.	3.28491			16.75135	2.0		10.0
Potassium (K), Diss.	0.72551			4.10070	11.5		10.0
Sodium (Na), Diss.	10.36567			41.82718	23.9		10.0

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
STD	Spiked Blank Duplicate				05/29/2008	07

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	0.26482						
Magnesium (Mg)	0.42311						
Potassium (K)	2.14701						
Sodium (Na)	5.66228						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				05/29/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00090						
Magnesium (Mg)	-0.00159						
Potassium (K)	0.03309						
Sodium (Na)	0.00737						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00476						
Magnesium (Mg)	-0.00684						
Potassium (K)	0.06081						
Sodium (Na)	0.00561						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				05/29/2008	11

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00427						
Magnesium (Mg)	-0.00574						
Potassium (K)	0.07322						
Sodium (Na)	0.04501						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.01035						
Magnesium (Mg)	-0.02173						
Potassium (K)	-0.02607						
Sodium (Na)	0.02432						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.01078						
Magnesium (Mg)	-0.01940						
Potassium (K)	-0.08439						
Sodium (Na)	0.01097						

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCB	Continuing Calibration Blank				05/29/2008	13:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.01170						
Magnesium (Mg)	-0.02066						
Potassium (K)	-0.08484						
Sodium (Na)	0.00447						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCB	Continuing Calibration Blank				05/29/2008	14

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00644						
Magnesium (Mg)	-0.00903						
Potassium (K)	0.01116						
Sodium (Na)	0.00331						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCB	Continuing Calibration Blank				05/29/2008	14

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00831						
Magnesium (Mg)	-0.01519						
Potassium (K)	-0.03785						
Sodium (Na)	0.00071						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.55539		12.50		100.4		90.0-110.0
Magnesium (Mg)	4.89795		5.000		98.0		90.0-110.0
Potassium (K)	12.06550		12.50		96.5		90.0-110.0
Sodium (Na)	12.58963		12.50		100.7		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.51331		12.50		100.1		90.0-110.0
Magnesium (Mg)	4.81142		5.000		96.2		90.0-110.0
Potassium (K)	12.30102		12.50		98.4		90.0-110.0
Sodium (Na)	12.92193		12.50		103.4		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	11

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.67684		12.50		101.4		90.0-110.0
Magnesium (Mg)	4.78373		5.000		95.7		90.0-110.0
Potassium (K)	12.40094		12.50		99.2		90.0-110.0
Sodium (Na)	12.70210		12.50		101.6		90.0-110.0

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	12:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.46840		12.50		99.7		90.0-110.0
Magnesium (Mg)	4.79450		5.000		95.9		90.0-110.0
Potassium (K)	12.37214		12.50		99.0		90.0-110.0
Sodium (Na)	12.79256		12.50		102.3		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	12:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.42762		12.50		99.4		90.0-110.0
Magnesium (Mg)	4.77421		5.000		95.5		90.0-110.0
Potassium (K)	12.36356		12.50		98.9		90.0-110.0
Sodium (Na)	12.96962		12.50		103.8		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	13:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.41986		12.50		99.4		90.0-110.0
Magnesium (Mg)	4.93421		5.000		98.7		90.0-110.0
Potassium (K)	12.46522		12.50		99.7		90.0-110.0
Sodium (Na)	13.30707		12.50		106.5		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	14(

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.62805		12.50		101.0		90.0-110.0
Magnesium (Mg)	4.91179		5.000		98.2		90.0-110.0
Potassium (K)	12.29995		12.50		98.4		90.0-110.0
Sodium (Na)	12.97927		12.50		103.8		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	14:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.69861		12.50		101.6		90.0-110.0
Magnesium (Mg)	4.93050		5.000		98.6		90.0-110.0
Potassium (K)	12.24966		12.50		98.0		90.0-110.0
Sodium (Na)	13.02047		12.50		104.2		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH1	Calibration check standard 1	MS050708T1			05/29/2008	08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	0.09533		0.1000		95.3		80.0-120.0
Magnesium (Mg)	0.09164		0.1000		91.6		80.0-120.0
Potassium (K)	0.61666		0.60000		102.8		80.0-120.0
Sodium (Na)	0.65671		0.60000		109.5		80.0-120.0

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CH3	Standard check for ICAP	MS041408T3			05/29/2008	08(

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	20.20541		20.00		101.0		95.0-105.0
Magnesium (Mg)	19.72490		20.00		98.6		95.0-105.0
Potassium (K)	19.79903		20.00		99.0		95.0-105.0
Sodium (Na)	19.68125		20.00		98.4		95.0-105.0

EB	Extraction Blank		199632		05/29/2008 10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	-0.00231						
Magnesium (Mg), Diss.	0.00276						
Potassium (K), Diss.	0.10852						
Sodium (Na), Diss.	0.01005						

ICB	Initial Calibration Blank				05/29/2008 08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	0.00103						
Magnesium (Mg)	-0.00097						
Potassium (K)	-0.02695						
Sodium (Na)	0.00452						

ICV	Initial Calibration Verification	MS052708CC			05/29/2008 08(

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.59388		12.50		100.8		90.0-110.0
Magnesium (Mg)	4.90919		5.000		98.2		90.0-110.0
Potassium (K)	12.00958		12.50		96.1		90.0-110.0
Sodium (Na)	12.38603		12.50		99.1		90.0-110.0

ISA	Interference Check Sample A	MS040808IA			05/29/2008 08:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	494.77603		500.0		99.0		80-120
Magnesium (Mg)	546.43884		500.0		109.3		80-120
Potassium (K)	0.20911		0.0				
Sodium (Na)	0.04385		0.0				

ISB	Interference Check Sample B	MS040808IB			05/29/2008 08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	502.67565		510.0		98.6		80.0-120.0
Magnesium (Mg)	562.39306		510.0		110.3		80.0-120.0

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	MSPIKEW	199632		05/29/2008	10(

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Water	10.24334		10.00		102.4		80.0-120.0
Magnesium (Mg), Water	9.79534		10.00		98.0		80.0-120.0
Potassium (K), Water	9.99814		10.00		100.0		80.0-120.0
Sodium (Na), Water	10.53637		10.00		105.4		80.0-120.0

MB	Method Blank		199632		05/29/2008	10(

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Water	-0.01249						
Magnesium (Mg), Water	-0.00068						
Potassium (K), Water	0.09661						
Sodium (Na), Water	-0.00537						

MD	Method Duplicate		354242-1		05/29/2008	10:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	51.68273	51.67058		51.67058	0.0		20
Magnesium (Mg), Diss.	16.77605	16.75135		16.75135	0.1		20
Potassium (K), Diss.	4.12157	4.10070		4.10070	0.02087		2.00000

MD	Method Duplicate		354242-2		05/29/2008	10:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	55.23128	55.61986		55.61986	0.7		20
Magnesium (Mg), Diss.	16.81045	16.96228		16.96228	0.9		20
Potassium (K), Diss.	3.98999	3.99458		3.99458	0.00459		2.00000

MDX			354242-1		05/29/2008	12(

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	5.15750						
Magnesium (Mg), Diss.	1.66375						
Potassium (K), Diss.	0.31414						
Sodium (Na), Diss.	5.48350						

MDX			354242-2		05/29/2008	12:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	5.63736						
Magnesium (Mg), Diss.	1.63013						
Potassium (K), Diss.	0.31859						
Sodium (Na), Diss.	5.39143						

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MS	Matrix Spike	MSPIKEW	354242-1		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	57.52444		10.00	51.67058	58.5		75-125
Magnesium (Mg), Diss.	24.98847		10.00	16.75135	82.4		75-125
Potassium (K), Diss.	14.14281		10.00	4.10070	100.4		75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MS	Matrix Spike	MSPIKEW	354242-2		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	66.71949		10.00	55.61986	111.0		75-125
Magnesium (Mg), Diss.	27.43823		10.00	16.96228	104.8		75-125
Potassium (K), Diss.	15.34918		10.00	3.99458	113.5		75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MSD	Matrix Spike Duplicate	MSPIKEW	354242-1		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	62.38913	57.52444	10.00	51.67058	107.2		75-125
					58.8		20
Magnesium (Mg), Diss.	27.41726	24.98847	10.00	16.75135	106.7		75-125
					25.7		20
Potassium (K), Diss.	15.22028	14.14281	10.00	4.10070	111.2		75-125
					10.2		20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MSD	Matrix Spike Duplicate	MSPIKEW	354242-2		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	65.91276	66.71949	10.00	55.61986	102.9		75-125
					7.6		20
Magnesium (Mg), Diss.	26.93963	27.43823	10.00	16.96228	99.8		75-125
					4.9		20
Potassium (K), Diss.	15.07207	15.34918	10.00	3.99458	110.8		75-125
					2.4		20

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MSX			354242-1		05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	5.86277						
Magnesium (Mg), Diss.	2.53092						
Potassium (K), Diss.	1.27737						
Sodium (Na), Diss.	6.22633						

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSX			354242-2		05/29/2008	13(

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	6.72246						
Magnesium (Mg), Diss.	2.69581						
Potassium (K), Diss.	1.36126						
Sodium (Na), Diss.	6.68598						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PDS	Post Digestion Spike	MSPIKE3	354242-1		05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	60.94198		10.00	51.67058	92.7		75-125
Magnesium (Mg), Diss.	26.81998		10.00	16.75135	100.7		75-125
Potassium (K), Diss.	15.15862		10.00	4.10070	110.6		75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PDS	Post Digestion Spike	MSPIKE3	354242-1	10	05/29/2008	14

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	15.55409		10.00	5.48244	100.7		75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
SO	Calibration Blank				05/29/2008	07

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	0.00267						
Magnesium (Mg)	0.00934						
Potassium (K)	0.23878						
Sodium (Na)	0.02152						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
SD	Serial Dilution		354242-1	5	05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	10.11188			51.67058	2.2		10.0
Magnesium (Mg), Diss.	3.28491			16.75135	2.0		10.0
Potassium (K), Diss.	0.72551			4.10070	11.5		10.0
Sodium (Na), Diss.	10.36567			41.82718	23.9		10.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
SD	Serial Dilution		354242-1	50	05/29/2008	14

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	1.14193			5.48244	4.1		10.0

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
STD	Spiked Blank Duplicate				05/29/2008	07

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	0.26482						
Magnesium (Mg)	0.42311						
Potassium (K)	2.14701						
Sodium (Na)	5.66228						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
X10			354242-2		05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	5.70191						
Magnesium (Mg), Diss.	1.65859						
Potassium (K), Diss.	0.33032						
Sodium (Na), Diss.	5.40508						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
X10			354242-3		05/29/2008	13

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	14.81003						
Magnesium (Mg), Diss.	3.51309						
Potassium (K), Diss.	0.43287						
Sodium (Na), Diss.	7.72343						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCB	Continuing Calibration Blank				05/29/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00090						
Magnesium (Mg)	-0.00159						
Potassium (K)	0.03309						
Sodium (Na)	0.00737						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCB	Continuing Calibration Blank				05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00476						
Magnesium (Mg)	-0.00684						
Potassium (K)	0.06081						
Sodium (Na)	0.00561						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCB	Continuing Calibration Blank				05/29/2008	11

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00427						
Magnesium (Mg)	-0.00574						
Potassium (K)	0.07322						
Sodium (Na)	0.04501						

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.01035						
Magnesium (Mg)	-0.02173						
Potassium (K)	-0.02607						
Sodium (Na)	0.02432						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.01078						
Magnesium (Mg)	-0.01940						
Potassium (K)	-0.08439						
Sodium (Na)	0.01097						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				05/29/2008	13

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.01170						
Magnesium (Mg)	-0.02066						
Potassium (K)	-0.08484						
Sodium (Na)	0.00447						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				05/29/2008	14

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00644						
Magnesium (Mg)	-0.00903						
Potassium (K)	0.01116						
Sodium (Na)	0.00331						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				05/29/2008	14

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00831						
Magnesium (Mg)	-0.01519						
Potassium (K)	-0.03785						
Sodium (Na)	0.00071						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				05/29/2008	15

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	-0.00386						
Magnesium (Mg)	-0.02496						
Potassium (K)	-0.11126						
Sodium (Na)	-0.00023						

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.55539		12.50		100.4		90.0-110.0
Magnesium (Mg)	4.89795		5.000		98.0		90.0-110.0
Potassium (K)	12.06550		12.50		96.5		90.0-110.0
Sodium (Na)	12.58963		12.50		100.7		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.51331		12.50		100.1		90.0-110.0
Magnesium (Mg)	4.81142		5.000		96.2		90.0-110.0
Potassium (K)	12.30102		12.50		98.4		90.0-110.0
Sodium (Na)	12.92193		12.50		103.4		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	11

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.67684		12.50		101.4		90.0-110.0
Magnesium (Mg)	4.78373		5.000		95.7		90.0-110.0
Potassium (K)	12.40094		12.50		99.2		90.0-110.0
Sodium (Na)	12.70210		12.50		101.6		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.46840		12.50		99.7		90.0-110.0
Magnesium (Mg)	4.79450		5.000		95.9		90.0-110.0
Potassium (K)	12.37214		12.50		99.0		90.0-110.0
Sodium (Na)	12.79256		12.50		102.3		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.42762		12.50		99.4		90.0-110.0
Magnesium (Mg)	4.77421		5.000		95.5		90.0-110.0
Potassium (K)	12.36356		12.50		98.9		90.0-110.0
Sodium (Na)	12.96962		12.50		103.8		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	13

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.41986		12.50		99.4		90.0-110.0
Magnesium (Mg)	4.93421		5.000		98.7		90.0-110.0
Potassium (K)	12.46522		12.50		99.7		90.0-110.0
Sodium (Na)	13.30707		12.50		106.5		90.0-110.0

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	140

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.62805		12.50		101.0		90.0-110.0
Magnesium (Mg)	4.91179		5.000		98.2		90.0-110.0
Potassium (K)	12.29995		12.50		98.4		90.0-110.0
Sodium (Na)	12.97927		12.50		103.8		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	142

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.69861		12.50		101.6		90.0-110.0
Magnesium (Mg)	4.93050		5.000		98.6		90.0-110.0
Potassium (K)	12.24966		12.50		98.0		90.0-110.0
Sodium (Na)	13.02047		12.50		104.2		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS052708CC			05/29/2008	145

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.17876		12.50		97.4		90.0-110.0
Magnesium (Mg)	4.87154		5.000		97.4		90.0-110.0
Potassium (K)	12.32654		12.50		98.6		90.0-110.0
Sodium (Na)	13.54699		12.50		108.4		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH1	Calibration check standard 1	MS050708T1			05/29/2008	081

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	0.09533		0.1000		95.3		80.0-120.0
Magnesium (Mg)	0.09164		0.1000		91.6		80.0-120.0
Potassium (K)	0.61666		0.60000		102.8		80.0-120.0
Sodium (Na)	0.65671		0.60000		109.5		80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH1	Calibration check standard 1	MS050708T1			05/29/2008	144

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	0.08328		0.1000		83.3		80.0-120.0
Potassium (K)	0.50439		0.60000		84.1		80.0-120.0
Sodium (Na)	0.71816		0.60000		119.7		80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH3	Standard check for ICAP	MS041408T3			05/29/2008	080

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	20.20541		20.00		101.0		95.0-105.0
Magnesium (Mg)	19.72490		20.00		98.6		95.0-105.0
Potassium (K)	19.79903		20.00		99.0		95.0-105.0
Sodium (Na)	19.68125		20.00		98.4		95.0-105.0

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
EB	Extraction Blank		199632		05/29/2008	10:

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	-0.00231						
Magnesium (Mg), Diss.	0.00276						
Potassium (K), Diss.	0.10852						
Sodium (Na), Diss.	0.01005						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
ICB	Initial Calibration Blank				05/29/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	0.00103						
Magnesium (Mg)	-0.00097						
Potassium (K)	-0.02695						
Sodium (Na)	0.00452						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
ICV	Initial Calibration Verification	MS052708CC			05/29/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	12.59388		12.50		100.8		90.0-110.0
Magnesium (Mg)	4.90919		5.000		98.2		90.0-110.0
Potassium (K)	12.00958		12.50		96.1		90.0-110.0
Sodium (Na)	12.38603		12.50		99.1		90.0-110.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
ISA	Interference Check Sample A	MS040808IA			05/29/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	494.77603		500.0		99.0		80-120
Magnesium (Mg)	546.43884		500.0		109.3		80-120
Potassium (K)	0.20911		0.0				
Sodium (Na)	0.04385		0.0				

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
ISA	Interference Check Sample A	MS040808IA			05/29/2008	14

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	479.79360		500.0		96.0		80-120
Magnesium (Mg)	551.14129		500.0		110.2		80-120
Potassium (K)	0.04916		0.0				
Sodium (Na)	0.03625		0.0				

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
ISB	Interference Check Sample B	MS040808IB			05/29/2008	08

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	502.67565		510.0		98.6		80.0-120.0
Magnesium (Mg)	562.39306		510.0		110.3		80.0-120.0

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISB	Interference Check Sample B	MS040808IB			05/29/2008	14

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	491.45367		510.0		96.4		80.0-120.0
Magnesium (Mg)	563.99609		510.0		110.6		80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	MSPIKEW	199632		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Water	10.24334		10.00		102.4		80.0-120.0
Magnesium (Mg), Water	9.79534		10.00		98.0		80.0-120.0
Potassium (K), Water	9.99814		10.00		100.0		80.0-120.0
Sodium (Na), Water	10.53637		10.00		105.4		80.0-120.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank		199632		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Water	-0.01249						
Magnesium (Mg), Water	-0.00068						
Potassium (K), Water	0.09661						
Sodium (Na), Water	-0.00537						

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		354242-1		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	51.68273	51.67058		51.67058	0.0		20
Magnesium (Mg), Diss.	16.77605	16.75135		16.75135	0.1		20
Potassium (K), Diss.	4.12157	4.10070		4.10070	0.02087		2.00000

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		354242-2		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	55.23128	55.61986		55.61986	0.7		20
Magnesium (Mg), Diss.	16.81045	16.96228		16.96228	0.9		20
Potassium (K), Diss.	3.98999	3.99458		3.99458	0.00459		2.00000

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		354242-1	10	05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	5.48350	5.48244		5.48244	0.00106		2.00000

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MD	Method Duplicate		354242-2	10	05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	5.39143	5.40508		5.40508	0.01365		2.00000

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MS	Matrix Spike	MSPIKEW	354242-1		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	57.52444		10.00	51.67058	58.5		75-125
Magnesium (Mg), Diss.	24.98847		10.00	16.75135	82.4		75-125
Potassium (K), Diss.	14.14281		10.00	4.10070	100.4		75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MS	Matrix Spike	MSPIKEW	354242-2		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	66.71949		10.00	55.61986	111.0		75-125
Magnesium (Mg), Diss.	27.43823		10.00	16.96228	104.8		75-125
Potassium (K), Diss.	15.34918		10.00	3.99458	113.5		75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MS	Matrix Spike	MSPIKEW	354242-1	10	05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	6.22633		1.000000	5.48244	74.4		75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MS	Matrix Spike	MSPIKEW	354242-2	10	05/29/2008	13

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	6.68598		1.000000	5.40508	128.1		75-125

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
MSD	Matrix Spike Duplicate	MSPIKEW	354242-1		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	62.38913	57.52444	10.00	51.67058	107.2		75-125
					58.8		20
Magnesium (Mg), Diss.	27.41726	24.98847	10.00	16.75135	106.7		75-125
					25.7		20
Potassium (K), Diss.	15.22028	14.14281	10.00	4.10070	111.2		75-125
					10.2		20

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MSD	Matrix Spike Duplicate	MSPIKEW	354242-2		05/29/2008	10

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	65.91276	66.71949	10.00	55.61986	102.9		75-125
					7.6		20
Magnesium (Mg), Diss.	26.93963	27.43823	10.00	16.96228	99.8		75-125
					4.9		20
Potassium (K), Diss.	15.07207	15.34918	10.00	3.99458	110.8		75-125
					2.4		20

MSD	Matrix Spike Duplicate	MSPIKEW	354242-1	10	05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	6.53246	6.22633	1.000000	5.48244	105.0		75-125
					34.1		20

MSD	Matrix Spike Duplicate	MSPIKEW	354242-2	10	05/29/2008	13

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	6.67477	6.68598	1.000000	5.40508	127.0		75-125
					0.9		20

PDS	Post Digestion Spike	MSPIKE3	354242-1		05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	60.94198		10.00	51.67058	92.7		75-125
Magnesium (Mg), Diss.	26.81998		10.00	16.75135	100.7		75-125
Potassium (K), Diss.	15.15862		10.00	4.10070	110.6		75-125

PDS	Post Digestion Spike	MSPIKE3	354242-1	10	05/29/2008	14

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	15.55409		10.00	5.48244	100.7		75-125

SO	Calibration Blank				05/29/2008	07

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	0.00267						
Magnesium (Mg)	0.00934						
Potassium (K)	0.23878						
Sodium (Na)	0.02152						

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

QUALITY CONTROL RESULTS

Job Number.: 354242 Report Date.: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates. PROJECT: COOPER JAL LEA COUNTY NM ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
SD	Serial Dilution		354242-1	5	05/29/2008	12

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca), Diss.	10.11188			51.67058	2.2		10.0
Magnesium (Mg), Diss.	3.28491			16.75135	2.0		10.0
Potassium (K), Diss.	0.72551			4.10070	11.5		10.0
Sodium (Na), Diss.	10.36567			41.82718	23.9		10.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
SD	Serial Dilution		354242-1	50	05/29/2008	14

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Sodium (Na), Diss.	1.14193			5.48244	4.1		10.0

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Tim
STD	Spiked Blank Duplicate				05/29/2008	07

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits
Calcium (Ca)	0.26482						
Magnesium (Mg)	0.42311						
Potassium (K)	2.14701						
Sodium (Na)	5.66228						

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

REPORT COMMENTS

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

General Information:

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

Explanation of Qualifiers:

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

Explanation of General QC Outliers:

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

observed above the RL in the associated samples.
G - Marginal outlier within 1% of acceptance criteria.
r - RPD value is outside method acceptance criteria.
C - Poor RPD values observed due to the non-homogenous nature of the sample.
O - Sample required dilution due to matrix interference.
D - Sample reported from a dilution.
d - Spike and/or surrogate diluted.
E - The reported concentration exceeds the instrument calibration.
F - The analyte is outside QC limits and was not detected in any associated samples in the analytical batch.
H - Continuing Calibration Verification (CCV) standard is not associated with the samples reported.
q - See the subcontract final report for qualifier explanation.
W - The MS/MSD recoveries are outside QC acceptance criteria because the amount spiked is much less than the amount found in the sample.
K - High recovery will not affect the quality of reported results.
Z - See case narrative.

Explanation of Organic QC Outliers:

e - Method blank analysis yielded phthalate concentrations above the RL. Phthlates are recognized potential laboratory contaminants. Its presence in the sample up to five times the amount reported in the blank may be attributed to laboratory contamination.
S - Sample reanalyzed/reextracted due to poor surrogate recovery. Reanalysis confirmed original analysis indicating a possible matrix interference.
T - Sample analysis yielded poor surrogate recovery.
R - The RPD between the two GC columns is greater than 40% and no anomalies are present. The higher result is reported as per EPA Method 8000B.
I - The RPD between the two GC columns is greater than 40% and anomalies are present. The lower of the two results has been reported.
X - Gaseous compound. In-house QC limits are advisory.
Y - Ketone compounds have poor purge efficiency. In-house QC limits are advisory.
f - Surrogate not associated with reported analytes.

Explanation of Inorganic QC Outliers:

Q - Method blank analysis yielded target analytes above the RL. Associated sample results are greater than 10 times the concentrations observed in the method blank.
V - The RPD control limit for sample results less than 5 times the RL is +/- the RL value. Sample and duplicate results are within method acceptance criteria.
e - Serial dilution failed due to matrix interference.
g - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficent for the MSA is greater than or equal to 0.995.
s - BOD/cBOD seed value is not within method acceptance criteria. Due to the nature of the test method, the sample cannot be reanalyzed.
l - BOD/cBOD LCS value is not within method acceptance criteria. Due to the nature of the test method, sample cannot be reanalyzed.
N - Spiked sample recovery is not within control limits.
n - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficient for the MSA is less than 0.995.
* - Duplicate analysis is not within control limits.

Abbreviations:

Batch - Designation given to identify a specific extraction, digestion, preparation, or analysis set.
CCV - Continuing Calibration Verification
CRA - Low level standard check - GFAA, Mercury
CRI - Low level standard check - ICP
Dil Fac - Dilution Factor - Secondary dilution analysis

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

Method References:

(1) EPA 600/4-79-020 Methods for the Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-94-111 Methods for the Determination of MEtals in Environmental Samples, Supplement I, May 1994.
(3) EPA SW846 Test Methods for Evaluating Solid Waste, Third Edition, September 1986; Update I July 1992; Update II, September 1994, Update IIA August 1993; Update IIB, January 1995; Update III, December 1996, Update IVA January 1998, Update IVB November 2000.
(4) Standard Methods for the Examination of Water and Wastewater, 16th Edition (1985), 17th Edition (1989), 18th Edition (1992), 19th Edition (1995), 20th Edition (1998).
(5) HACH Water Analysis Handbook 3rd Edition (1997).
(6) Federal Register, July 1, 1990 (40 CFR Part 136 Appendix A).
(7) Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, 2nd Edition, January 1997.

(9) Diagnosis and Improvement of Saline and Alkali Soils, Agriculture Handbook No. 60, United States Department of Agriculture, 1954.

LABORATORY CHRONICLE

Job Number: 354242 Date: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNT ATTN: Todd Wells

Lab ID: 354242-1 Client ID: MW-8 Date Recvd: 05/16/2008 Sample Date: 05/15/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTIO
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	199632		05/28/2008 1550	
SM 2320 B	Alkalinity	1	199280		05/21/2008 1425	
EPA 300.0	Ion Chromatography Analysis	1	199085		05/16/2008 1407	
EPA 300.0	Ion Chromatography Analysis	1	199085		05/16/2008 1422	10
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	199085		05/16/2008 1407	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	199712	199632	05/29/2008 1017	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	199712	199632	05/29/2008 1240	10
N/A	Sample Filtration	1	199605		05/28/2008 1300	
SM 2540C	Solids, Total Dissolved (TDS)	1	199101		05/16/2008 1600	

Lab ID: 354242-2 Client ID: MW-9 Date Recvd: 05/16/2008 Sample Date: 05/15/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTIO
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	199632		05/28/2008 1550	
SM 2320 B	Alkalinity	1	199280		05/21/2008 1425	
EPA 300.0	Ion Chromatography Analysis	1	199085		05/16/2008 1745	
EPA 300.0	Ion Chromatography Analysis	1	199085		05/16/2008 1801	10
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	199085		05/16/2008 1745	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	199712	199632	05/29/2008 1032	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	199712	199632	05/29/2008 1255	10
N/A	Sample Filtration	1	199605		05/28/2008 1300	
SM 2540C	Solids, Total Dissolved (TDS)	1	199101		05/16/2008 1600	

Lab ID: 354242-3 Client ID: MW-9A Date Recvd: 05/16/2008 Sample Date: 05/15/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTIO
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	199632		05/28/2008 1550	
SM 2320 B	Alkalinity	1	199280		05/21/2008 1425	
EPA 300.0	Ion Chromatography Analysis	1	199085		05/16/2008 1438	
EPA 300.0	Ion Chromatography Analysis	1	199085		05/16/2008 1453	10
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	199085		05/16/2008 1438	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	199712	199632	05/29/2008 1056	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	199712	199632	05/29/2008 1314	10
N/A	Sample Filtration	1	199605		05/28/2008 1300	
SM 2540C	Solids, Total Dissolved (TDS)	1	199101		05/16/2008 1600	

Lab ID: 354242-4 Client ID: MW-10 Date Recvd: 05/16/2008 Sample Date: 05/15/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTIO
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	199632		05/28/2008 1550	
SM 2320 B	Alkalinity	1	199280		05/21/2008 1425	
EPA 300.0	Ion Chromatography Analysis	1	199085		05/16/2008 1540	
EPA 300.0	Ion Chromatography Analysis	1	199085		05/16/2008 1556	10
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	199085		05/16/2008 1540	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	199712	199632	05/29/2008 1100	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	199712	199632	05/29/2008 1318	10
N/A	Sample Filtration	1	199605		05/28/2008 1300	
SM 2540C	Solids, Total Dissolved (TDS)	1	199101		05/16/2008 1600	

Lab ID: 354242-5 Client ID: MW-11 Date Recvd: 05/16/2008 Sample Date: 05/15/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTIO
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	199632		05/28/2008 1550	
SM 2320 B	Alkalinity	1	199280		05/21/2008 1425	
EPA 300.0	Ion Chromatography Analysis	1	199085		05/16/2008 1643	
EPA 300.0	Ion Chromatography Analysis	1	199085		05/16/2008 1659	10
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	199085		05/16/2008 1643	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	199712	199632	05/29/2008 1104	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	199712	199632	05/29/2008 1331	10

LABORATORY CHRONICLE

Job Number: 354242 Date: 06/03/2008

CUSTOMER: Conestoga-Rovers and Associates PROJECT: COOPER JAL LEA COUNT ATTN: Todd Wells

Lab ID: 354242-5 Client ID: MW-11 Date Recvd: 05/16/2008 Sample Date: 05/15/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED		DILUTION
N/A	Sample Filtration	1	199605		05/28/2008	1300	
SM 2540C	Solids, Total Dissolved (TDS)	1	199101		05/16/2008	1600	

Lab ID: 354242-6 Client ID: DUPE Date Recvd: 05/16/2008 Sample Date: 05/15/2008

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED		DILUTION
SW-846 3005A	Acid Digest. for ICP - Total Recoverable	1	199632		05/28/2008	1550	
SM 2320 B	Alkalinity	1	199280		05/21/2008	1425	
EPA 300.0	Ion Chromatography Analysis	1	199085		05/16/2008	1714	
EPA 300.0	Ion Chromatography Analysis	1	199085		05/16/2008	1730	10
EPA300.0 Rev2.	Ion Chromatography Analysis - Short Hold	1	199085		05/16/2008	1714	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	199712	199632	05/29/2008	1107	
SW-846 6010B	Metals Analysis (ICAP Trace)	1	199712	199632	05/29/2008	1335	10
N/A	Sample Filtration	1	199605		05/28/2008	1300	
SM 2540C	Solids, Total Dissolved (TDS)	1	199101		05/16/2008	1600	

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

35424L

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
CRA	Todd Wells	5-15-08	070839
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 1
2135 S. Loop 250 W.	(432) 686-0086 (432) 686-0186	Houston	
City / State / Zip Code	**Site Contact**	**Lab Contact**	**Analysis (Attach list if more space is needed)**
Midland / TX / 79703	T. Wells	Sachin Kudchadkar	
Project Name and Location (State)	**Carrier/Waybill Number**		
Cooper-Jal Lea County, NM			
Contract/Purchase Order/Quote No.			
4012444			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Ice	6010 B	2320 B	300.0	2540 C	Special Instructions/ Conditions of Receipt
MW-8	5-15-08	1440		X			X						X	X	X	X	X	
MW-9	5-15-08	1350		X			X						X	X	X	X	X	
MW-9A	5-15-08	1335		X			X						X	X	X	X	X	
MW-10	5-15-08	1410		X			X						X	X	X	X	X	
MW-11	5-15-08	1240		X			X						X	X	X	X	X	
Dupe	5-15-08	—		X			X						X	X	X	X	X	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Todd Wells	5-15-08	1730	1. Received By	5/15/08	1729
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 600-3434-1

Job Description: Cooper Jal NM

For:
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Attention: Mr. Todd Wells

Approved for release.
Sachin G Kudchadkar
Project Manager II
11/17/2008 9:37 AM

Sachin G Kudchadkar
Project Manager II
sachin.kudchadkar@testamericainc.com
11/17/2008

TestAmerica Houston Certifications and Approvals: TX NELAP T104704223-06-TX, ARDEQ 88-0759, LADEQ 01967, OKDEQ 9503, UT DOH GULF

EXECUTIVE SUMMARY - Detections

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3434-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
600-3434-1	**MW-3**					
Chloride		36		0.40	mg/L	300.0
Nitrate as N		1.4		0.20	mg/L	300.0
Fluoride		1.1		0.30	mg/L	300.0
Sulfate		97		5.0	mg/L	300.0
Alkalinity		150		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		150		5.0	mg/L	SM 2320B
Total Dissolved Solids		430		10	mg/L	SM 2540C
Dissolved						
Calcium		50	B	1.0	mg/L	6010B
Potassium		4.0		1.0	mg/L	6010B
Magnesium		17		1.0	mg/L	6010B
Sodium		48	B	10	mg/L	6010B
600-3434-2	**MW-5**					
Chloride		4900		40	mg/L	300.0
Nitrate as N		0.32		0.20	mg/L	300.0
Fluoride		0.78	J	1.5	mg/L	300.0
Sulfate		540		50	mg/L	300.0
Alkalinity		160		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		160		5.0	mg/L	SM 2320B
Total Dissolved Solids		9700		40	mg/L	SM 2540C
Dissolved						
Calcium		660	B	1.0	mg/L	6010B
Potassium		35		1.0	mg/L	6010B
Magnesium		310		1.0	mg/L	6010B
Sodium		1600	B	100	mg/L	6010B
600-3434-3	**MW-5A**					
Chloride		53		4.0	mg/L	300.0
Nitrate as N		1.3		0.20	mg/L	300.0
Fluoride		0.70		0.30	mg/L	300.0
Sulfate		72		5.0	mg/L	300.0
Alkalinity		350		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		350		5.0	mg/L	SM 2320B
Total Dissolved Solids		450		10	mg/L	SM 2540C
Dissolved						
Calcium		76	B	1.0	mg/L	6010B
Potassium		3.4		1.0	mg/L	6010B
Magnesium		15		1.0	mg/L	6010B
Sodium		43	B	10	mg/L	6010B

EXECUTIVE SUMMARY - Detections

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3434-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
600-3434-4	**MW-6**					
Chloride		84		4.0	mg/L	300.0
Nitrate as N		1.2		0.20	mg/L	300.0
Fluoride		1.2		0.30	mg/L	300.0
Sulfate		95		5.0	mg/L	300.0
Alkalinity		220		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		220		5.0	mg/L	SM 2320B
Total Dissolved Solids		490		10	mg/L	SM 2540C
Dissolved						
Calcium		67	B	1.0	mg/L	6010B
Potassium		4.3		1.0	mg/L	6010B
Magnesium		21		1.0	mg/L	6010B
Sodium		53	B	10	mg/L	6010B
600-3434-5	**MW-10**					
Chloride		210		4.0	mg/L	300.0
Nitrate as N		1.3		0.20	mg/L	300.0
Fluoride		1.5		0.30	mg/L	300.0
Sulfate		89		5.0	mg/L	300.0
Alkalinity		150		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		150		5.0	mg/L	SM 2320B
Total Dissolved Solids		730		10	mg/L	SM 2540C
Dissolved						
Calcium		110	B	1.0	mg/L	6010B
Potassium		5.4		1.0	mg/L	6010B
Magnesium		32		1.0	mg/L	6010B
Sodium		64	B	10	mg/L	6010B
600-3434-6	**WM-12**					
Chloride		110		4.0	mg/L	300.0
Nitrate as N		1.4		0.20	mg/L	300.0
Fluoride		0.89		0.30	mg/L	300.0
Sulfate		79		5.0	mg/L	300.0
Alkalinity		130		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		130		5.0	mg/L	SM 2320B
Total Dissolved Solids		460		10	mg/L	SM 2540C
Dissolved						
Calcium		61	B	1.0	mg/L	6010B
Potassium		4.5		1.0	mg/L	6010B
Magnesium		20		1.0	mg/L	6010B
Sodium		52	B	10	mg/L	6010B

EXECUTIVE SUMMARY - Detections

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3434-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
600-3434-7	**MW-13**					
Chloride		970		40	mg/L	300.0
Nitrate as N		1.8		0.20	mg/L	300.0
Fluoride		0.98		0.30	mg/L	300.0
Sulfate		280		50	mg/L	300.0
Alkalinity		180		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		180		5.0	mg/L	SM 2320B
Total Dissolved Solids		2400		10	mg/L	SM 2540C
Dissolved						
Calcium		240	B	1.0	mg/L	6010B
Potassium		17		1.0	mg/L	6010B
Magnesium		96		1.0	mg/L	6010B
Sodium		370	B	20	mg/L	6010B

METHOD SUMMARY

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3434-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
Metals (ICP)	TAL HOU	SW846 6010B	
Sample Filtration	TAL HOU		FILTRATION
Preparation, Total Metals	TAL HOU		SW846 3010A
Anions, Ion Chromatography	TAL HOU	MCAWW 300.0	
Anions, Ion Chromatography	TAL HOU	MCAWW 300.0	
Alkalinity	TAL HOU	SM SM 2320B	
Solids, Total Dissolved (TDS)	TAL HOU	SM SM 2540C	

Lab References:

TAL HOU = TestAmerica Houston

Method References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3434-1

Method	Analyst	Analyst ID
SW846 6010B	Patel, Silen R	SRP
MCAWW 300.0	Puranik, Surendra U	SUP
SM SM 2320B	Gregory, Sharita N	SNG
SM SM 2540C	Watson, Don A	DAW

SAMPLE SUMMARY

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3434-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
600-3434-1	MW-3	Water	11/06/2008 1345	11/07/2008 0856
600-3434-2	MW-5	Water	11/06/2008 1140	11/07/2008 0856
600-3434-3	MW-5A	Water	11/06/2008 1210	11/07/2008 0856
600-3434-4	MW-6	Water	11/06/2008 1055	11/07/2008 0856
600-3434-5	MW-10	Water	11/06/2008 1259	11/07/2008 0856
600-3434-6	WM-12	Water	11/06/2008 1430	11/07/2008 0856
600-3434-7	MW-13	Water	11/06/2008 1515	11/07/2008 0856

SAMPLE RESULTS

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3434-1

Client Sample ID: **MW-3**
Lab Sample ID: **600-3434-1**

Date Sampled: 11/06/2008 1345
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1020	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Calcium	50	B	mg/L	0.022	1.0	1.0
Potassium	4.0		mg/L	0.13	1.0	1.0
Magnesium	17		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1409	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Sodium	48	B	mg/L	0.20	10	10
Method: 300.0			Date Analyzed:		11/07/2008 1611	
Chloride	36		mg/L	0.10	0.40	1.0
Nitrate as N	1.4		mg/L	0.050	0.20	1.0
Fluoride	1.1		mg/L	0.10	0.30	1.0
Method: 300.0			Date Analyzed:		11/07/2008 1631	
Sulfate	97		mg/L	2.0	5.0	10

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3434-1

Client Sample ID: **MW-3**
Lab Sample ID: **600-3434-1**

Date Sampled: 11/06/2008 1345
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/12/2008 1730	
Alkalinity	150		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	150		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/07/2008 1500	
Total Dissolved Solids	430		mg/L	10	10	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3434-1

Client Sample ID: **MW-5**
Lab Sample ID: **600-3434-2**

Date Sampled: 11/06/2008 1140
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1023	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Calcium	660	B	mg/L	0.022	1.0	1.0
Potassium	35		mg/L	0.13	1.0	1.0
Magnesium	310		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1446	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Sodium	1600	B	mg/L	2.0	100	100
Method: 300.0			Date Analyzed:		11/07/2008 2352	
Nitrate as N	0.32		mg/L	0.050	0.20	1.0
Fluoride	0.78	J	mg/L	0.50	1.5	5.0
Method: 300.0			Date Analyzed:		11/08/2008 0032	
Chloride	4900		mg/L	10	40	100
Sulfate	540		mg/L	20	50	100

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3434-1

Client Sample ID: **MW-5**
Lab Sample ID: **600-3434-2**

Date Sampled: 11/06/2008 1140
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/12/2008 1730	
Alkalinity	160		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	160		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/07/2008 1500	
Total Dissolved Solids	9700		mg/L	40	40	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3434-1

Client Sample ID: **MW-5A**
Lab Sample ID: **600-3434-3**

Date Sampled: 11/06/2008 1210
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1027	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Calcium	76	B	mg/L	0.022	1.0	1.0
Potassium	3.4		mg/L	0.13	1.0	1.0
Magnesium	15		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1449	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Sodium	43	B	mg/L	0.20	10	10
Method: 300.0			Date Analyzed:		11/07/2008 1651	
Nitrate as N	1.3		mg/L	0.050	0.20	1.0
Fluoride	0.70		mg/L	0.10	0.30	1.0
Method: 300.0			Date Analyzed:		11/07/2008 1711	
Chloride	53		mg/L	1.0	4.0	10
Sulfate	72		mg/L	2.0	5.0	10

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3434-1

Client Sample ID: **MW-5A**
Lab Sample ID: **600-3434-3**

Date Sampled: 11/06/2008 1210
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/12/2008 1730	
Alkalinity	350		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	350		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/07/2008 1500	
Total Dissolved Solids	450		mg/L	10	10	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3434-1

Client Sample ID: **MW-6**
Lab Sample ID: **600-3434-4**

Date Sampled: 11/06/2008 1055
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1031	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Calcium	67	B	mg/L	0.022	1.0	1.0
Potassium	4.3		mg/L	0.13	1.0	1.0
Magnesium	21		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1453	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Sodium	53	B	mg/L	0.20	10	10
Method: 300.0			Date Analyzed:		11/07/2008 1731	
Nitrate as N	1.2		mg/L	0.050	0.20	1.0
Fluoride	1.2		mg/L	0.10	0.30	1.0
Method: 300.0			Date Analyzed:		11/07/2008 1831	
Chloride	84		mg/L	1.0	4.0	10
Sulfate	95		mg/L	2.0	5.0	10

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3434-1

Client Sample ID: **MW-6**
Lab Sample ID: **600-3434-4**

Date Sampled: 11/06/2008 1055
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/12/2008 1730	
Alkalinity	220		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	220		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/07/2008 1500	
Total Dissolved Solids	490		mg/L	10	10	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3434-1

Client Sample ID: **MW-10**
Lab Sample ID: **600-3434-5**

Date Sampled: 11/06/2008 1259
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1034	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Calcium	110	B	mg/L	0.022	1.0	1.0
Potassium	5.4		mg/L	0.13	1.0	1.0
Magnesium	32		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1457	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Sodium	64	B	mg/L	0.20	10	10
Method: 300.0			Date Analyzed:		11/08/2008 0052	
Nitrate as N	1.3		mg/L	0.050	0.20	1.0
Fluoride	1.5		mg/L	0.10	0.30	1.0
Method: 300.0			Date Analyzed:		11/08/2008 0112	
Chloride	210		mg/L	1.0	4.0	10
Sulfate	89		mg/L	2.0	5.0	10

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3434-1

Client Sample ID: **MW-10**
Lab Sample ID: **600-3434-5**

Date Sampled: 11/06/2008 1259
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/12/2008 1730	
Alkalinity	150		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	150		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/07/2008 1500	
Total Dissolved Solids	730		mg/L	10	10	1.0

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Midland, TX 79703

Job Number: 600-3434-1

Client Sample ID: **WM-12**
Lab Sample ID: **600-3434-6**

Date Sampled: 11/06/2008 1430
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1038	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Calcium	61	B	mg/L	0.022	1.0	1.0
Potassium	4.5		mg/L	0.13	1.0	1.0
Magnesium	20		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1500	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Sodium	52	B	mg/L	0.20	10	10
Method: 300.0			Date Analyzed:		11/07/2008 1931	
Nitrate as N	1.4		mg/L	0.050	0.20	1.0
Fluoride	0.89		mg/L	0.10	0.30	1.0
Method: 300.0			Date Analyzed:		11/07/2008 1951	
Chloride	110		mg/L	1.0	4.0	10
Sulfate	79		mg/L	2.0	5.0	10

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Job Number: 600-3434-1

Client Sample ID: **WM-12**
Lab Sample ID: **600-3434-6**

Date Sampled: 11/06/2008 1430
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/12/2008 1730	
Alkalinity	130		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	130		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/07/2008 1500	
Total Dissolved Solids	460		mg/L	10	10	1.0

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Job Number: 600-3434-1

Client Sample ID: **MW-13**
Lab Sample ID: **600-3434-7**

Date Sampled: 11/06/2008 1515
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1042	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Calcium	240	B	mg/L	0.022	1.0	1.0
Potassium	17		mg/L	0.13	1.0	1.0
Magnesium	96		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1504	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Sodium	370	B	mg/L	0.40	20	20
Method: 300.0			Date Analyzed:		11/07/2008 2011	
Nitrate as N	1.8		mg/L	0.050	0.20	1.0
Fluoride	0.98		mg/L	0.10	0.30	1.0
Method: 300.0			Date Analyzed:		11/07/2008 2051	
Chloride	970		mg/L	10	40	100
Sulfate	280		mg/L	20	50	100

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Midland, TX 79703

Job Number: 600-3434-1

Client Sample ID: **MW-13**
Lab Sample ID: **600-3434-7**

Date Sampled: 11/06/2008 1515
Date Received: 11/07/2008 0856
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/12/2008 1730	
Alkalinity	180		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	180		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/07/2008 1500	
Total Dissolved Solids	2400		mg/L	10	10	1.0

DATA REPORTING QUALIFIERS

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3434-1

Lab Section	Qualifier	Description
Metals		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General Chemistry		
	F	Duplicate RPD exceeds the control limit
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

QUALITY CONTROL RESULTS

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3434-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 600-5626					
LCS 600-5626/2-A	Lab Control Spike	T	Water	3010A	
MB 600-5626/1-A	Method Blank	T	Water	3010A	
LB 600-5616/1-B	TCLP SPLPE Leachate Blank	D	Water	3010A	
600-3434-1	MW-3	D	Water	3010A	
600-3434-2	MW-5	D	Water	3010A	
600-3434-3	MW-5A	D	Water	3010A	
600-3434-4	MW-6	D	Water	3010A	
600-3434-5	MW-10	D	Water	3010A	
600-3434-6	WM-12	D	Water	3010A	
600-3434-7	MW-13	D	Water	3010A	
Analysis Batch:600-5669					
LCS 600-5626/2-A	Lab Control Spike	T	Water	6010B	600-5626
MB 600-5626/1-A	Method Blank	T	Water	6010B	600-5626
LB 600-5616/1-B	TCLP SPLPE Leachate Blank	D	Water	6010B	600-5626
600-3434-1	MW-3	D	Water	6010B	600-5626
600-3434-2	MW-5	D	Water	6010B	600-5626
600-3434-3	MW-5A	D	Water	6010B	600-5626
600-3434-4	MW-6	D	Water	6010B	600-5626
600-3434-5	MW-10	D	Water	6010B	600-5626
600-3434-6	WM-12	D	Water	6010B	600-5626
600-3434-7	MW-13	D	Water	6010B	600-5626

Report Basis
D = Dissolved
T = Total

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3434-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:600-5439					
LCS 600-5439/24	Lab Control Spike	T	Water	300.0	
MB 600-5439/25	Method Blank	T	Water	300.0	
600-3434-1	MW-3	T	Water	300.0	
600-3434-2	MW-5	T	Water	300.0	
600-3434-3	MW-5A	T	Water	300.0	
600-3434-4	MW-6	T	Water	300.0	
600-3434-4DU	Duplicate	T	Water	300.0	
600-3434-4MS	Matrix Spike	T	Water	300.0	
600-3434-5	MW-10	T	Water	300.0	
600-3434-6	WM-12	T	Water	300.0	
600-3434-7	MW-13	T	Water	300.0	
Analysis Batch:600-5440					
LCS 600-5440/4	Lab Control Spike	T	Water	300.0	
MB 600-5440/3	Method Blank	T	Water	300.0	
600-3434-1	MW-3	T	Water	300.0	
600-3434-2	MW-5	T	Water	300.0	
600-3434-3	MW-5A	T	Water	300.0	
600-3434-4	MW-6	T	Water	300.0	
600-3434-4DU	Duplicate	T	Water	300.0	
600-3434-4MS	Matrix Spike	T	Water	300.0	
600-3434-5	MW-10	T	Water	300.0	
600-3434-6	WM-12	T	Water	300.0	
600-3434-7	MW-13	T	Water	300.0	
Analysis Batch:600-5446					
LCS 600-5446/2	Lab Control Spike	T	Water	SM 2540C	
MB 600-5446/1	Method Blank	T	Water	SM 2540C	
600-3434-1	MW-3	T	Water	SM 2540C	
600-3434-2	MW-5	T	Water	SM 2540C	
600-3434-3	MW-5A	T	Water	SM 2540C	
600-3434-3DU	Duplicate	T	Water	SM 2540C	
600-3434-4	MW-6	T	Water	SM 2540C	
600-3434-5	MW-10	T	Water	SM 2540C	
600-3434-6	WM-12	T	Water	SM 2540C	
600-3434-7	MW-13	T	Water	SM 2540C	

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3434-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:600-5663					
LCS 600-5663/2	Lab Control Spike	T	Water	SM 2320B	
MB 600-5663/1	Method Blank	T	Water	SM 2320B	
600-3434-1	MW-3	T	Water	SM 2320B	
600-3434-2	MW-5	T	Water	SM 2320B	
600-3434-3	MW-5A	T	Water	SM 2320B	
600-3434-4	MW-6	T	Water	SM 2320B	
600-3434-5	MW-10	T	Water	SM 2320B	
600-3434-6	WM-12	T	Water	SM 2320B	
600-3434-7	MW-13	T	Water	SM 2320B	

Report Basis
T = Total

Surrogate Recovery Report

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3434-1

Method Blank - Batch: 600-5626

Method: 6010B
Preparation: 3010A

Lab Sample ID: MB 600-5626/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/13/2008 0848
Date Prepared: 11/12/2008 1640

Analysis Batch: 600-5669
Prep Batch: 600-5626
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T111308
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Calcium	0.022	U	0.022	1.0
Potassium	0.13	U	0.13	1.0
Magnesium	0.019	U	0.019	1.0
Sodium	0.020	U	0.020	1.0

TCLP SPLPE Leachate Blank - Batch: 600-5626

Method: 6010B
Preparation: 3010A
Dissolved

Lab Sample ID: LB 600-5616/1-B
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/13/2008 0910
Date Prepared: 11/12/2008 1640

Analysis Batch: 600-5669
Prep Batch: 600-5626
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T111308
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Calcium	0.031	J	0.022	1.0
Potassium	0.13	U	0.13	1.0
Magnesium	0.019	U	0.019	1.0
Sodium	0.067	J	0.020	1.0

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3434-1

Lab Control Spike - Batch: 600-5626

Method: 6010B
Preparation: 3010A

Lab Sample ID: LCS 600-5626/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/13/2008 0852
Date Prepared: 11/12/2008 1640

Analysis Batch: 600-5669
Prep Batch: 600-5626
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T111308
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Calcium	10.0	10.3	103	80 - 120	
Potassium	10.0	10.1	101	80 - 120	
Magnesium	10.0	10.2	102	80 - 120	
Sodium	10.0	10.0	100	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3434-1

Method Blank - Batch: 600-5439

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 600-5439/25
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/07/2008 1531
Date Prepared: N/A

Analysis Batch: 600-5439
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS20000
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloride	0.10	U	0.10	0.40
Fluoride	0.10	U	0.10	0.30
Sulfate	0.20	U	0.20	0.50

Lab Control Spike - Batch: 600-5439

Method: 300.0
Preparation: N/A

Lab Sample ID: LCS 600-5439/24
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/07/2008 1551
Date Prepared: N/A

Analysis Batch: 600-5439
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS20000
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride	20.0	19.4	97	90 - 110	
Fluoride	10.0	10.6	106	90 - 110	
Sulfate	20.0	19.0	95	90 - 110	

Matrix Spike - Batch: 600-5439

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3434-4
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/07/2008 1911
Date Prepared: N/A

Analysis Batch: 600-5439
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS20000
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chloride	84		100	177	93	90 - 110	
Fluoride	1.0	U	20.0	22.2	111	90 - 110	F
Sulfate	95		100	306	211	90 - 110	F

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3434-1

Duplicate - Batch: 600-5439

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3434-4
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/07/2008 1851
Date Prepared: N/A

Analysis Batch: 600-5439
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS20000
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chloride	84		84.2	0	20	
Fluoride	1.0	U	1.0	NC	20	U
Sulfate	95		94.9	0	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3434-1

Method Blank - Batch: 600-5440

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 600-5440/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/07/2008 1531
Date Prepared: N/A

Analysis Batch: 600-5440
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Nitrate as N	0.050	U	0.050	0.20

Lab Control Spike - Batch: 600-5440

Method: 300.0
Preparation: N/A

Lab Sample ID: LCS 600-5440/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/07/2008 1551
Date Prepared: N/A

Analysis Batch: 600-5440
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	10.0	9.94	99	90 - 110	

Matrix Spike - Batch: 600-5440

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3434-4
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/07/2008 1911
Date Prepared: N/A

Analysis Batch: 600-5440
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	1.2	20.0	20.7	98	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3434-1

Duplicate - Batch: 600-5440

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3434-4
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/07/2008 1851
Date Prepared: N/A

Analysis Batch: 600-5440
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Nitrate as N	1.2	0.920	27	20	J F

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3434-1

Method Blank - Batch: 600-5663

Method: SM 2320B
Preparation: N/A

Lab Sample ID: MB 600-5663/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/12/2008 1730
Date Prepared: N/A

Analysis Batch: 600-5663
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Alkalinity	2.5	U	2.5	2.5
Bicarbonate Alkalinity as CaCO3	2.5	U	2.5	2.5
Carbonate Alkalinity as CaCO3	2.5	U	2.5	2.5
Hydroxide Alkalinity	2.5	U	2.5	2.5

Lab Control Spike - Batch: 600-5663

Method: SM 2320B
Preparation: N/A

Lab Sample ID: LCS 600-5663/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/12/2008 1730
Date Prepared: N/A

Analysis Batch: 600-5663
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity	1000	951	95	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3434-1

Method Blank - Batch: 600-5446

Method: SM 2540C
Preparation: N/A

Lab Sample ID: MB 600-5446/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/07/2008 1500
Date Prepared: N/A

Analysis Batch: 600-5446
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Result	Qual	RL	RL
Total Dissolved Solids	10	U	10	10

Lab Control Spike - Batch: 600-5446

Method: SM 2540C
Preparation: N/A

Lab Sample ID: LCS 600-5446/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/07/2008 1500
Date Prepared: N/A

Analysis Batch: 600-5446
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Dissolved Solids	1800	1750	97	90 - 110	

Duplicate - Batch: 600-5446

Method: SM 2540C
Preparation: N/A

Lab Sample ID: 600-3434-3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/07/2008 1500
Date Prepared: N/A

Analysis Batch: 600-5446
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids	450	453	0	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

3434

Client	Project Manager	Date	Chain of Custody Number
CRA	Todd Wells	11/6/08	090535

Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page
2135 S. Loop 250 W.	432-686-0086 / 432-686-0186		Page 1 of 1

City	State	Zip Code	Site Contact	Lab Contact
Midland	TX	79703	Matt Hudson	Sachin K.

Project Name and Location (State)	Carrier/Waybill Number
Cooper Jal - Jal N.M.	8597 5210 2841

Contract/Purchase Order/Quote No.: 039123

Analysis (Attach list if more space is needed)

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	TICE	Dissolved (Ca, K, Mg, Na)	Alkalinity	Carbonate / Bicarbonate	Fluoride	Sulfate, Nitrogen	Chloride	TDS	Temp
MW-3 11608	11/6/08	1345		X			X						X	X	X	X	X	X	X	X	
MW-5 11608		1140		X			X						X	X	X	X	X	X	X	X	
MW 5A 11608		1210		X			X						X	X	X	X	X	X	X	X	
MW-6 11608		1055		X			X						X	X	X	X	X	X	X	X	
MW-10 11608		1259		X			X						X	X	X	X	X	X	X	X	
MW-12 11608		1430		X			X						X	X	X	X	X	X	X	X	
MW-13 11608		1515		X			X						X	X	X	X	X	X	X	X	
Dup 11608	11/6/08	—		X			X						X	X	X	X	X	X	X	X	
Temp		—		X			X						X								X

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Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 10 DAYS

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
	11/6/08	1700			
2. Relinquished By	Date	Time	2. Received By	Date	Time
				11-7-08	0856
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

11/17/2008

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

Login Sample Receipt Check List

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3434-1

Login Number: 3434

List Source: TestAmerica Houston

Creator: Clarke, Michael (Mike) C

List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 600-3328-1

Job Description: Analytical Chevron

For:
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Attention: Mr. Todd Wells

Approved for release.
Sachin G Kudchadkar
Project Manager II
11/17/2008 9:37 AM

Sachin G Kudchadkar
Project Manager II
sachin.kudchadkar@testamericainc.com
11/17/2008

TestAmerica Houston Certifications and Approvals: TX NELAP T104704223-06-TX, ARDEQ 88-0759, LADEQ 01967, OKDEQ 9503, UT DOH GULF

TestAmerica Laboratories, Inc.
TestAmerica Houston 6310 Rothway Street, Houston, TX 77040
Tel (713) 690-4444 Fax (713) 690-5646 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

EXECUTIVE SUMMARY - Detections

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
600-3328-1	**MW-1 11408**					
Chloride		110		4.0	mg/L	300.0
Nitrate as N		1.6		0.20	mg/L	300.0
Fluoride		6.3		0.30	mg/L	300.0
Sulfate		83		5.0	mg/L	300.0
Alkalinity		190		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		190		5.0	mg/L	SM 2320B
Total Dissolved Solids		590		10	mg/L	SM 2540C
Dissolved						
Sodium		180	B	10	mg/L	6010B
Potassium		7.9		1.0	mg/L	6010B
Calcium		10	B	1.0	mg/L	6010B
Magnesium		5.8		1.0	mg/L	6010B
600-3328-2	**MW-2 11408**					
Chloride		2900		40	mg/L	300.0
Nitrate as N		1.1		1.0	mg/L	300.0
Sulfate		430		5.0	mg/L	300.0
Alkalinity		150		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		150		5.0	mg/L	SM 2320B
Total Dissolved Solids		5600		20	mg/L	SM 2540C
Dissolved						
Sodium		1200	B	100	mg/L	6010B
Potassium		26		1.0	mg/L	6010B
Calcium		380	B	1.0	mg/L	6010B
Magnesium		160		1.0	mg/L	6010B
600-3328-3	**MW-2A 11408**					
Chloride		68	^	4.0	mg/L	300.0
Nitrate as N		1.4		0.20	mg/L	300.0
Fluoride		0.49	^	0.30	mg/L	300.0
Sulfate		74		5.0	mg/L	300.0
Alkalinity		220		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		220		5.0	mg/L	SM 2320B
Total Dissolved Solids		470		10	mg/L	SM 2540C
Dissolved						
Sodium		42	B	10	mg/L	6010B
Potassium		3.2		1.0	mg/L	6010B
Calcium		67	B	1.0	mg/L	6010B
Magnesium		15		1.0	mg/L	6010B

EXECUTIVE SUMMARY - Detections

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3328-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
600-3328-4	**MW-9 11408**					
Chloride		39	^	0.40	mg/L	300.0
Nitrate as N		1.4		0.20	mg/L	300.0
Fluoride		2.1	^	0.30	mg/L	300.0
Sulfate		98		5.0	mg/L	300.0
Alkalinity		160		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		160		5.0	mg/L	SM 2320B
Total Dissolved Solids		440		10	mg/L	SM 2540C
Dissolved						
Sodium		47	B	10	mg/L	6010B
Potassium		3.7		1.0	mg/L	6010B
Calcium		54	B	1.0	mg/L	6010B
Magnesium		16		1.0	mg/L	6010B
600-3328-5	**MW-9A 11408**					
Chloride		330	^	4.0	mg/L	300.0
Nitrate as N		1.2		0.20	mg/L	300.0
Sulfate		84		5.0	mg/L	300.0
Alkalinity		370		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		370		5.0	mg/L	SM 2320B
Total Dissolved Solids		1000		10	mg/L	SM 2540C
Dissolved						
Sodium		66	B	10	mg/L	6010B
Potassium		5.1		1.0	mg/L	6010B
Calcium		130	B	1.0	mg/L	6010B
Magnesium		32		1.0	mg/L	6010B
600-3328-6	**MW-11 11408**					
Chloride		49	^	4.0	mg/L	300.0
Nitrate as N		1.3		0.20	mg/L	300.0
Fluoride		1.5	J ^	3.0	mg/L	300.0
Sulfate		90		5.0	mg/L	300.0
Alkalinity		170		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		170		5.0	mg/L	SM 2320B
Total Dissolved Solids		440		10	mg/L	SM 2540C
Dissolved						
Sodium		47	B	10	mg/L	6010B
Potassium		3.6		1.0	mg/L	6010B
Calcium		60	B	1.0	mg/L	6010B
Magnesium		16		1.0	mg/L	6010B

METHOD SUMMARY

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3328-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
Metals (ICP)	TAL HOU	SW846 6010B	
Sample Filtration	TAL HOU		FILTRATION
Preparation, Total Metals	TAL HOU		SW846 3010A
Anions, Ion Chromatography	TAL HOU	MCAWW 300.0	
Anions, Ion Chromatography	TAL HOU	MCAWW 300.0	
Alkalinity	TAL HOU	SM SM 2320B	
Solids, Total Dissolved (TDS)	TAL HOU	SM SM 2540C	

Lab References:

TAL HOU = TestAmerica Houston

Method References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3328-1

Method	Analyst	Analyst ID
SW846 6010B	Patel, Silen R	SRP
MCAWW 300.0	Puranik, Surendra U	SUP
SM SM 2320B	Gregory, Sharita N	SNG
SM SM 2540C	Watson, Don A	DAW

SAMPLE SUMMARY

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
600-3328-1	MW-1 11408	Water	11/04/2008 1350	11/05/2008 0917
600-3328-2	MW-2 11408	Water	11/04/2008 1205	11/05/2008 0917
600-3328-3	MW-2A 11408	Water	11/04/2008 1310	11/05/2008 0917
600-3328-4	MW-9 11408	Water	11/04/2008 1540	11/05/2008 0917
600-3328-5	MW-9A 11408	Water	11/04/2008 1615	11/05/2008 0917
600-3328-6	MW-11 11408	Water	11/04/2008 1445	11/05/2008 0917

SAMPLE RESULTS

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3328-1

Client Sample ID: **MW-1 11408**
Lab Sample ID: **600-3328-1**

Date Sampled: 11/04/2008 1350
Date Received: 11/05/2008 0917
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 0936	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Potassium	7.9		mg/L	0.13	1.0	1.0
Calcium	10	B	mg/L	0.022	1.0	1.0
Magnesium	5.8		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1336	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Sodium	180	B	mg/L	0.20	10	10
Method: 300.0			Date Analyzed:		11/06/2008 1112	
Nitrate as N	1.6		mg/L	0.050	0.20	1.0
Fluoride	6.3		mg/L	0.10	0.30	1.0
Method: 300.0			Date Analyzed:		11/06/2008 1132	
Chloride	110		mg/L	1.0	4.0	10
Sulfate	83		mg/L	2.0	5.0	10

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3328-1

Client Sample ID: **MW-1 11408**
Lab Sample ID: **600-3328-1**

Date Sampled: 11/04/2008 1350
Date Received: 11/05/2008 0917
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:	11/12/2008 1730		
Alkalinity	190		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	190		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:	11/05/2008 1500		
Total Dissolved Solids	590		mg/L	10	10	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3328-1

Client Sample ID: **MW-2 11408**
Lab Sample ID: **600-3328-2**

Date Sampled: 11/04/2008 1205
Date Received: 11/05/2008 0917
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 0950	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Potassium	26		mg/L	0.13	1.0	1.0
Calcium	380	B	mg/L	0.022	1.0	1.0
Magnesium	160		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1351	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Sodium	1200	B	mg/L	2.0	100	100
Method: 300.0			Date Analyzed:		11/06/2008 1152	
Nitrate as N	1.1		mg/L	0.25	1.0	5.0
Method: 300.0			Date Analyzed:		11/06/2008 1212	
Fluoride	1.0	U	mg/L	1.0	3.0	10
Sulfate	430		mg/L	2.0	5.0	10
Method: 300.0			Date Analyzed:		11/06/2008 1232	
Chloride	2900		mg/L	10	40	100

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3328-1

Client Sample ID: **MW-2 11408**
Lab Sample ID: **600-3328-2**

Date Sampled: 11/04/2008 1205
Date Received: 11/05/2008 0917
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/12/2008 1730	
Alkalinity	150		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	150		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/05/2008 1500	
Total Dissolved Solids	5600		mg/L	20	20	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3328-1

Client Sample ID: **MW-2A 11408**
Lab Sample ID: **600-3328-3**

Date Sampled: 11/04/2008 1310
Date Received: 11/05/2008 0917
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 0954	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Potassium	3.2		mg/L	0.13	1.0	1.0
Calcium	67	B	mg/L	0.022	1.0	1.0
Magnesium	15		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1355	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Sodium	42	B	mg/L	0.20	10	10
Method: 300.0			Date Analyzed:		11/05/2008 1951	
Nitrate as N	1.4		mg/L	0.050	0.20	1.0
Method: 300.0			Date Analyzed:		11/06/2008 1332	
Fluoride	0.49	^	mg/L	0.10	0.30	1.0
Method: 300.0			Date Analyzed:		11/06/2008 1352	
Chloride	68	^	mg/L	1.0	4.0	10
Sulfate	74		mg/L	2.0	5.0	10

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3328-1

Client Sample ID: **MW-2A 11408**
Lab Sample ID: **600-3328-3**

Date Sampled: 11/04/2008 1310
Date Received: 11/05/2008 0917
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:	11/12/2008 1730		
Alkalinity	220		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	220		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:	11/05/2008 1500		
Total Dissolved Solids	470		mg/L	10	10	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3328-1

Client Sample ID: **MW-9 11408**
Lab Sample ID: **600-3328-4**

Date Sampled: 11/04/2008 1540
Date Received: 11/05/2008 0917
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 0958	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Potassium	3.7		mg/L	0.13	1.0	1.0
Calcium	54	B	mg/L	0.022	1.0	1.0
Magnesium	16		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1358	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Sodium	47	B	mg/L	0.20	10	10
Method: 300.0			Date Analyzed:		11/05/2008 2031	
Nitrate as N	1.4		mg/L	0.050	0.20	1.0
Method: 300.0			Date Analyzed:		11/06/2008 1612	
Chloride	39	^	mg/L	0.10	0.40	1.0
Fluoride	2.1	^	mg/L	0.10	0.30	1.0
Method: 300.0			Date Analyzed:		11/06/2008 1632	
Sulfate	98		mg/L	2.0	5.0	10

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3328-1

Client Sample ID: **MW-9 11408**
Lab Sample ID: **600-3328-4**

Date Sampled: 11/04/2008 1540
Date Received: 11/05/2008 0917
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/12/2008 1730	
Alkalinity	160		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	160		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/05/2008 1500	
Total Dissolved Solids	440		mg/L	10	10	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3328-1

Client Sample ID: **MW-9A 11408**
Lab Sample ID: **600-3328-5**

Date Sampled: 11/04/2008 1615
Date Received: 11/05/2008 0917
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1001	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Potassium	5.1		mg/L	0.13	1.0	1.0
Calcium	130	B	mg/L	0.022	1.0	1.0
Magnesium	32		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1402	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Sodium	66	B	mg/L	0.20	10	10
Method: 300.0			Date Analyzed:		11/06/2008 1452	
Nitrate as N	1.2		mg/L	0.050	0.20	1.0
Method: 300.0			Date Analyzed:		11/06/2008 1512	
Chloride	330	^	mg/L	1.0	4.0	10
Fluoride	1.0	U ^	mg/L	1.0	3.0	10
Sulfate	84		mg/L	2.0	5.0	10

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3328-1

Client Sample ID: **MW-9A 11408**
Lab Sample ID: **600-3328-5**

Date Sampled: 11/04/2008 1615
Date Received: 11/05/2008 0917
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/12/2008 1730	
Alkalinity	370		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	370		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/05/2008 1500	
Total Dissolved Solids	1000		mg/L	10	10	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3328-1

Client Sample ID: **MW-11 11408**
Lab Sample ID: **600-3328-6**

Date Sampled: 11/04/2008 1445
Date Received: 11/05/2008 0917
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1005	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Potassium	3.6		mg/L	0.13	1.0	1.0
Calcium	60	B	mg/L	0.022	1.0	1.0
Magnesium	16		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/13/2008 1406	
Prep Method: 3010A			Date Prepared:		11/12/2008 1640	
Sodium	47	B	mg/L	0.20	10	10
Method: 300.0			Date Analyzed:		11/06/2008 1412	
Nitrate as N	1.3		mg/L	0.050	0.20	1.0
Method: 300.0			Date Analyzed:		11/06/2008 1432	
Chloride	49	^	mg/L	1.0	4.0	10
Fluoride	1.5	J ^	mg/L	1.0	3.0	10
Sulfate	90		mg/L	2.0	5.0	10

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3328-1

Client Sample ID: **MW-11 11408**
Lab Sample ID: **600-3328-6**

Date Sampled: 11/04/2008 1445
Date Received: 11/05/2008 0917
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/12/2008 1730	
Alkalinity	170		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	170		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/05/2008 1500	
Total Dissolved Solids	440		mg/L	10	10	1.0

DATA REPORTING QUALIFIERS

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3328-1

Lab Section	Qualifier	Description
Metals		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General Chemistry		
	F	Duplicate RPD exceeds the control limit
	^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA or MRL standard: Instrument related QC exceeds the control limits.
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

QUALITY CONTROL RESULTS

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 600-5626					
LCS 600-5626/2-A	Lab Control Spike	T	Water	3010A	
MB 600-5626/1-A	Method Blank	T	Water	3010A	
LB 600-5616/1-B	TCLP SPLPE Leachate Blank	D	Water	3010A	
600-3328-1	MW-1 11408	D	Water	3010A	
600-3328-1DU	Duplicate	D	Water	3010A	
600-3328-1MS	Matrix Spike	D	Water	3010A	
600-3328-1MSD	Matrix Spike Duplicate	D	Water	3010A	
600-3328-2	MW-2 11408	D	Water	3010A	
600-3328-3	MW-2A 11408	D	Water	3010A	
600-3328-4	MW-9 11408	D	Water	3010A	
600-3328-5	MW-9A 11408	D	Water	3010A	
600-3328-6	MW-11 11408	D	Water	3010A	
Analysis Batch:600-5669					
LCS 600-5626/2-A	Lab Control Spike	T	Water	6010B	600-5626
MB 600-5626/1-A	Method Blank	T	Water	6010B	600-5626
LB 600-5616/1-B	TCLP SPLPE Leachate Blank	D	Water	6010B	600-5626
600-3328-1	MW-1 11408	D	Water	6010B	600-5626
600-3328-1DU	Duplicate	D	Water	6010B	600-5626
600-3328-1MS	Matrix Spike	D	Water	6010B	600-5626
600-3328-1MSD	Matrix Spike Duplicate	D	Water	6010B	600-5626
600-3328-2	MW-2 11408	D	Water	6010B	600-5626
600-3328-3	MW-2A 11408	D	Water	6010B	600-5626
600-3328-4	MW-9 11408	D	Water	6010B	600-5626
600-3328-5	MW-9A 11408	D	Water	6010B	600-5626
600-3328-6	MW-11 11408	D	Water	6010B	600-5626

Report Basis
D = Dissolved
T = Total

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3328-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:600-5316					
LCS 600-5316/2	Lab Control Spike	T	Water	SM 2540C	
MB 600-5316/1	Method Blank	T	Water	SM 2540C	
600-3328-1	MW-1 11408	T	Water	SM 2540C	
600-3328-2	MW-2 11408	T	Water	SM 2540C	
600-3328-3	MW-2A 11408	T	Water	SM 2540C	
600-3328-4	MW-9 11408	T	Water	SM 2540C	
600-3328-5	MW-9A 11408	T	Water	SM 2540C	
600-3328-6	MW-11 11408	T	Water	SM 2540C	
Analysis Batch:600-5346					
LCS 600-5346/18	Lab Control Spike	T	Water	300.0	
MB 600-5346/19	Method Blank	T	Water	300.0	
600-3328-1	MW-1 11408	T	Water	300.0	
600-3328-2	MW-2 11408	T	Water	300.0	
600-3328-3	MW-2A 11408	T	Water	300.0	
600-3328-4	MW-9 11408	T	Water	300.0	
600-3328-5	MW-9A 11408	T	Water	300.0	
600-3328-5DU	Duplicate	T	Water	300.0	
600-3328-5MS	Matrix Spike	T	Water	300.0	
600-3328-6	MW-11 11408	T	Water	300.0	
Analysis Batch:600-5348					
LCS 600-5348/4	Lab Control Spike	T	Water	300.0	
MB 600-5348/3	Method Blank	T	Water	300.0	
600-3328-1	MW-1 11408	T	Water	300.0	
600-3328-2	MW-2 11408	T	Water	300.0	
600-3328-5	MW-9A 11408	T	Water	300.0	
600-3328-5DU	Duplicate	T	Water	300.0	
600-3328-5MS	Matrix Spike	T	Water	300.0	
600-3328-6	MW-11 11408	T	Water	300.0	
Analysis Batch:600-5384					
LCS 600-5384/4	Lab Control Spike	T	Water	300.0	
MB 600-5384/3	Method Blank	T	Water	300.0	
600-3328-3	MW-2A 11408	T	Water	300.0	
600-3328-4	MW-9 11408	T	Water	300.0	
600-3328-5DU	Duplicate	T	Water	300.0	
600-3328-5MS	Matrix Spike	T	Water	300.0	

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:600-5663					
LCS 600-5663/2	Lab Control Spike	T	Water	SM 2320B	
MB 600-5663/1	Method Blank	T	Water	SM 2320B	
600-3328-1	MW-1 11408	T	Water	SM 2320B	
600-3328-2	MW-2 11408	T	Water	SM 2320B	
600-3328-3	MW-2A 11408	T	Water	SM 2320B	
600-3328-4	MW-9 11408	T	Water	SM 2320B	
600-3328-5	MW-9A 11408	T	Water	SM 2320B	
600-3328-6	MW-11 11408	T	Water	SM 2320B	

Report Basis
T = Total

Surrogate Recovery Report

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Method Blank - Batch: 600-5626

Method: 6010B
Preparation: 3010A

Lab Sample ID: MB 600-5626/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/13/2008 0848
Date Prepared: 11/12/2008 1640

Analysis Batch: 600-5669
Prep Batch: 600-5626
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T111308
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Sodium	0.020	U	0.020	1.0
Potassium	0.13	U	0.13	1.0
Calcium	0.022	U	0.022	1.0
Magnesium	0.019	U	0.019	1.0

TCLP SPLPE Leachate Blank - Batch: 600-5626

Method: 6010B
Preparation: 3010A
Dissolved

Lab Sample ID: LB 600-5616/1-B
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/13/2008 0910
Date Prepared: 11/12/2008 1640

Analysis Batch: 600-5669
Prep Batch: 600-5626
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T111308
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Sodium	0.067	J	0.020	1.0
Potassium	0.13	U	0.13	1.0
Calcium	0.031	J	0.022	1.0
Magnesium	0.019	U	0.019	1.0

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Lab Control Spike - Batch: 600-5626

Method: 6010B
Preparation: 3010A

Lab Sample ID: LCS 600-5626/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/13/2008 0852
Date Prepared: 11/12/2008 1640

Analysis Batch: 600-5669
Prep Batch: 600-5626
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T111308
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sodium	10.0	10.0	100	80 - 120	
Potassium	10.0	10.1	101	80 - 120	
Calcium	10.0	10.3	103	80 - 120	
Magnesium	10.0	10.2	102	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-5626

Method: 6010B
Preparation: 3010A
Dissolved

MS Lab Sample ID:	600-3328-1	Analysis Batch:	600-5669	Instrument ID:	TJA ICP 61E
Client Matrix:	Water	Prep Batch:	600-5626	Lab File ID:	T111308
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	11/13/2008 0943			Final Weight/Volume:	50 mL
Date Prepared:	11/12/2008 1640				

MSD Lab Sample ID:	600-3328-1	Analysis Batch:	600-5669	Instrument ID:	TJA ICP 61E
Client Matrix:	Water	Prep Batch:	600-5626	Lab File ID:	T111308
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	11/13/2008 0947			Final Weight/Volume:	50 mL
Date Prepared:	11/12/2008 1640				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Sodium	76	69	75 - 125	0	20	4	4
Potassium	120	120	75 - 125	0	20		
Calcium	102	102	75 - 125	0	20		
Magnesium	102	102	75 - 125	0	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-5626

Method: 6010B
Preparation: 3010A
Dissolved

MS Lab Sample ID:	600-3328-1	Analysis Batch:	600-5669	Instrument ID:	TJA ICP 61E
Client Matrix:	Water	Prep Batch:	600-5626	Lab File ID:	T111308
Dilution:	10			Initial Weight/Volume:	50 mL
Date Analyzed:	11/13/2008 1344			Final Weight/Volume:	50 mL
Date Prepared:	11/12/2008 1640				

MSD Lab Sample ID:	600-3328-1	Analysis Batch:	600-5669	Instrument ID:	TJA ICP 61E
Client Matrix:	Water	Prep Batch:	600-5626	Lab File ID:	T111308
Dilution:	10			Initial Weight/Volume:	50 mL
Date Analyzed:	11/13/2008 1347			Final Weight/Volume:	50 mL
Date Prepared:	11/12/2008 1640				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Sodium	125	100	75 - 125	1	20	4	4
Potassium	106	98	75 - 125	5	20		
Calcium	102	100	75 - 125	1	20		
Magnesium	102	99	75 - 125	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Duplicate - Batch: 600-5626

Method: 6010B
Preparation: 3010A
Dissolved

Lab Sample ID: 600-3328-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/13/2008 0939
Date Prepared: 11/12/2008 1640

Analysis Batch: 600-5669
Prep Batch: 600-5626
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T111308
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Sodium	160	161	2	20	
Potassium	7.9	7.77	2	20	
Calcium	10	10.0	1	20	
Magnesium	5.8	5.69	2	20	

Duplicate - Batch: 600-5626

Method: 6010B
Preparation: 3010A
Dissolved

Lab Sample ID: 600-3328-1
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/13/2008 1340
Date Prepared: 11/12/2008 1640

Analysis Batch: 600-5669
Prep Batch: 600-5626
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T111308
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Sodium	180		176	1	20	
Potassium	7.0	J	6.51	7	20	J
Calcium	10		9.99	3	20	J
Magnesium	5.8	J	5.67	3	20	J

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Method Blank - Batch: 600-5346

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 600-5346/19
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/06/2008 1032
Date Prepared: N/A

Analysis Batch: 600-5346
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS20000
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloride	0.10	U	0.10	0.40
Fluoride	0.10	U	0.10	0.30
Sulfate	0.20	U	0.20	0.50

Lab Control Spike - Batch: 600-5346

Method: 300.0
Preparation: N/A

Lab Sample ID: LCS 600-5346/18
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/06/2008 1052
Date Prepared: N/A

Analysis Batch: 600-5346
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS20000
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride	20.0	19.3	96	90 - 110	
Fluoride	10.0	10.6	106	90 - 110	
Sulfate	20.0	18.9	95	90 - 110	

Matrix Spike - Batch: 600-5346

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3328-5
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/06/2008 1552
Date Prepared: N/A

Analysis Batch: 600-5346
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS20000
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chloride	330		100	398	65	90 - 110	F
Fluoride	1.0	U	20.0	21.5	108	90 - 110	^
Sulfate	84		100	176	92	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Duplicate - Batch: 600-5346

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3328-5
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/06/2008 1532
Date Prepared: N/A

Analysis Batch: 600-5346
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS20000
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chloride	330		326	2	20	
Fluoride	1.0	U	1.0	NC	20	U ^
Sulfate	84		81.8	2	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Method Blank - Batch: 600-5348

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 600-5348/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/06/2008 1032
Date Prepared: N/A

Analysis Batch: 600-5348
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Nitrate as N	0.050	U	0.050	0.20

Lab Control Spike - Batch: 600-5348

Method: 300.0
Preparation: N/A

Lab Sample ID: LCS 600-5348/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/06/2008 1052
Date Prepared: N/A

Analysis Batch: 600-5348
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	10.0	9.91	99	90 - 110	

Matrix Spike - Batch: 600-5348

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3328-5
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/06/2008 1552
Date Prepared: N/A

Analysis Batch: 600-5348
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	1.2	20.0	20.8	98	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Duplicate - Batch: 600-5348

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3328-5
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/06/2008 1532
Date Prepared: N/A

Analysis Batch: 600-5348
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Nitrate as N	0.91	J	0.920	1	20	J

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Method Blank - Batch: 600-5384

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 600-5384/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/05/2008 1651
Date Prepared: N/A

Analysis Batch: 600-5384
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Nitrate as N	0.050	U	0.050	0.20

Lab Control Spike - Batch: 600-5384

Method: 300.0
Preparation: N/A

Lab Sample ID: LCS 600-5384/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/05/2008 1711
Date Prepared: N/A

Analysis Batch: 600-5384
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	10.0	9.93	99	90 - 110	

Matrix Spike - Batch: 600-5384

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3328-5
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/05/2008 2208
Date Prepared: N/A

Analysis Batch: 600-5384
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	1.3	20.0	0.960	-2	90 - 110	J F

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Duplicate - Batch: 600-5384

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3328-5
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/05/2008 2148
Date Prepared: N/A

Analysis Batch: 600-5384
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Nitrate as N	1.3	0.960	30	20	J F

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Method Blank - Batch: 600-5663

Method: SM 2320B
Preparation: N/A

Lab Sample ID: MB 600-5663/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/12/2008 1730
Date Prepared: N/A

Analysis Batch: 600-5663
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Alkalinity	2.5	U	2.5	2.5
Bicarbonate Alkalinity as CaCO3	2.5	U	2.5	2.5
Carbonate Alkalinity as CaCO3	2.5	U	2.5	2.5
Hydroxide Alkalinity	2.5	U	2.5	2.5

Lab Control Spike - Batch: 600-5663

Method: SM 2320B
Preparation: N/A

Lab Sample ID: LCS 600-5663/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/12/2008 1730
Date Prepared: N/A

Analysis Batch: 600-5663
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity	1000	951	95	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Method Blank - Batch: 600-5316

Method: SM 2540C
Preparation: N/A

Lab Sample ID: MB 600-5316/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/05/2008 1500
Date Prepared: N/A

Analysis Batch: 600-5316
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Result	Qual	RL	RL
Total Dissolved Solids	10	U	10	10

Lab Control Spike - Batch: 600-5316

Method: SM 2540C
Preparation: N/A

Lab Sample ID: LCS 600-5316/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/05/2008 1500
Date Prepared: N/A

Analysis Batch: 600-5316
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Dissolved Solids	1800	1800	100	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

3328

11/17/2008

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
CRA	Todd Wells	11/4/08	090533
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
2135 S. Loop 250 W.	432-686-0086 / 432-686-0186		
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Midland, ~~TX~~ / TX / 79703	MATT Hudson	Sachin Kudchadkar	
Project Name and Location (State)	**Carrier/Waybill Number**		
Cooper Jal Jal N.M.	8608 3754 8656		
Contract/Purchase Order/Quote No.			
039123			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	TCLP	Analysis: Temp	8260B (MOD) Local Methods	300.0 28D - 300 ES	SO4	Cl	2540 C Calcd	Total dissolved Solids	6010B (MOD)	Custom List	Special Instructions/ Conditions of Receipt
MW-1 11408	11-4-08	1350		X			X						X	X	X	X	X	X	X	X	X	X	X	
MW-2 11408	11-4-08	1205		X			X						X	X	X	X	X	X	X	X	X	X	X	
MW-2A 11408	11-4-08	1310		X			X						X	X	X	X	X	X	X	X	X	X	X	
MW-9 11408	11-4-08	1540		X			X						X	X	X	X	X	X	X	X	X	X	X	
MW-9A 11408	11-4-08	1615		X			X						X	X	X	X	X	X	X	X	X	X	X	
MW-11 11408	11-4-08	1445		X			X						X	X	X	X	X	X	X	X	X	X	X	
Temp	—	—		X			X						X	X										

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Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 10 days

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
	11-4-08	1700		11-5-08	9:17
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

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

Login Sample Receipt Check List

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3328-1

Login Number: 3328

List Source: TestAmerica Houston

Creator: Trenery, Michael J

List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 600-3706-1

Job Description: Cooper Jal NM

For:
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Attention: Mr. Todd Wells

Approved for release.
Sachin G Kudchadkar
Project Manager II
12/2/2008 9:13 AM

Sachin G Kudchadkar
Project Manager II
sachin.kudchadkar@testamericainc.com
12/02/2008

TestAmerica Houston Certifications and Approvals: TX NELAP T104704223-06-TX, ARDEQ 88-0759, LADEQ 01967, OKDEQ 9503, UT DOH GULF

EXECUTIVE SUMMARY - Detections

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3706-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
600-3706-1	**MW-4 111208R**					
Chloride		12000		400	mg/L	300.0
Nitrate as N		0.33		0.20	mg/L	300.0
Fluoride		1.2	J	3.0	mg/L	300.0
Sulfate		1300		50	mg/L	300.0
Alkalinity		200		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		200		5.0	mg/L	SM 2320B
Total Dissolved Solids		22000		100	mg/L	SM 2540C
Dissolved						
Calcium		1500	B	20	mg/L	6010B
Potassium		82		1.0	mg/L	6010B
Magnesium		840		20	mg/L	6010B
Sodium		4800	B	500	mg/L	6010B
600-3706-2	**MW-4A 111208R**					
Chloride		650		40	mg/L	300.0
Nitrate as N		2.2		0.20	mg/L	300.0
Fluoride		0.32		0.30	mg/L	300.0
Sulfate		170		5.0	mg/L	300.0
Alkalinity		640		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		640		5.0	mg/L	SM 2320B
Total Dissolved Solids		1700		10	mg/L	SM 2540C
Dissolved						
Calcium		160	B	1.0	mg/L	6010B
Potassium		9.9		1.0	mg/L	6010B
Magnesium		37		1.0	mg/L	6010B
Sodium		290	B	20	mg/L	6010B
600-3706-3	**MW-7 111208R**					
Chloride		650		40	mg/L	300.0
Nitrate as N		1.2		0.20	mg/L	300.0
Fluoride		0.84		0.30	mg/L	300.0
Sulfate		140		5.0	mg/L	300.0
Alkalinity		110		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		110		5.0	mg/L	SM 2320B
Total Dissolved Solids		1600		10	mg/L	SM 2540C
Dissolved						
Calcium		210	B	1.0	mg/L	6010B
Potassium		12		1.0	mg/L	6010B
Magnesium		76		1.0	mg/L	6010B
Sodium		120	B	20	mg/L	6010B

EXECUTIVE SUMMARY - Detections

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3706-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
600-3706-4	**MW-8 111208R**					
Chloride		39		0.40	mg/L	300.0
Nitrate as N		1.5		0.20	mg/L	300.0
Fluoride		1.4		0.30	mg/L	300.0
Sulfate		97		5.0	mg/L	300.0
Alkalinity		140		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		140		5.0	mg/L	SM 2320B
Total Dissolved Solids		350		10	mg/L	SM 2540C
Dissolved						
Calcium		52	B	20	mg/L	6010B
Magnesium		17	J	20	mg/L	6010B
Sodium		46	B	20	mg/L	6010B
600-3706-5	**RW-1 111208R**					
Chloride		370		4.0	mg/L	300.0
Nitrate as N		1.9		0.20	mg/L	300.0
Fluoride		0.82		0.30	mg/L	300.0
Sulfate		97		5.0	mg/L	300.0
Alkalinity		210		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity as CaCO3		210		5.0	mg/L	SM 2320B
Total Dissolved Solids		920		10	mg/L	SM 2540C
Dissolved						
Calcium		66	B	20	mg/L	6010B
Potassium		5.0	J	20	mg/L	6010B
Magnesium		34		20	mg/L	6010B
Sodium		190	B	20	mg/L	6010B
600-3706-6	**RW-2 111208R**					
Chloride		2500		40	mg/L	300.0
Nitrate as N		0.24		0.20	mg/L	300.0
Sulfate		250		5.0	mg/L	300.0
Alkalinity		390		5.0	mg/L	SM 2320B
Carbonate Alkalinity as CaCO3		150		5.0	mg/L	SM 2320B
Hydroxide Alkalinity		240		5.0	mg/L	SM 2320B
Total Dissolved Solids		4800		20	mg/L	SM 2540C
Dissolved						
Calcium		1200	B	20	mg/L	6010B
Potassium		6.0	J	20	mg/L	6010B
Sodium		400	B	20	mg/L	6010B

METHOD SUMMARY

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3706-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
Metals (ICP)	TAL HOU	SW846 6010B	
Sample Filtration	TAL HOU		FILTRATION
Preparation, Total Metals	TAL HOU		SW846 3010A
Anions, Ion Chromatography	TAL HOU	MCAWW 300.0	
Anions, Ion Chromatography	TAL HOU	MCAWW 300.0	
Alkalinity	TAL HOU	SM SM 2320B	
Solids, Total Dissolved (TDS)	TAL HOU	SM SM 2540C	

Lab References:

TAL HOU = TestAmerica Houston

Method References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3706-1

Method	Analyst	Analyst ID
SW846 6010B	Patel, Silen R	SRP
SW846 6010B	Richter, Travis W	TWR
MCAWW 300.0	Puranik, Surendra U	SUP
SM SM 2320B	Gregory, Sharita N	SNG
SM SM 2540C	Watson, Don A	DAW

SAMPLE SUMMARY

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3706-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
600-3706-1	MW-4 111208R	Water	11/12/2008 1300	11/13/2008 0905
600-3706-2	MW-4A 111208R	Water	11/12/2008 1325	11/13/2008 0905
600-3706-3	MW-7 111208R	Water	11/12/2008 1500	11/13/2008 0905
600-3706-4	MW-8 111208R	Water	11/12/2008 1130	11/13/2008 0905
600-3706-5	RW-1 111208R	Water	11/12/2008 1405	11/13/2008 0905
600-3706-6	RW-2 111208R	Water	11/12/2008 1215	11/13/2008 0905

SAMPLE RESULTS

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3706-1

Client Sample ID: **MW-4 111208R**
Lab Sample ID: **600-3706-1**

Date Sampled: 11/12/2008 1300
Date Received: 11/13/2008 0905
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/25/2008 1613	
Prep Method: 3010A			Date Prepared:		11/25/2008 0948	
Potassium	82		mg/L	0.13	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/26/2008 1115	
Prep Method: 3010A			Date Prepared:		11/25/2008 0948	
Calcium	1500	B	mg/L	0.44	20	20
Magnesium	840		mg/L	0.38	20	20
Method: Dissolved-6010B			Date Analyzed:		11/26/2008 1157	
Prep Method: 3010A			Date Prepared:		11/25/2008 0948	
Sodium	4800	B	mg/L	10	500	500
Method: 300.0			Date Analyzed:		11/13/2008 1400	
Nitrate as N	0.33		mg/L	0.050	0.20	1.0
Fluoride	1.2	J	mg/L	1.0	3.0	10
Method: 300.0			Date Analyzed:		11/13/2008 1420	
Sulfate	1300		mg/L	20	50	100
Method: 300.0			Date Analyzed:		11/13/2008 1440	
Chloride	12000		mg/L	100	400	1000

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3706-1

Client Sample ID: **MW-4 111208R**
Lab Sample ID: **600-3706-1**

Date Sampled: 11/12/2008 1300
Date Received: 11/13/2008 0905
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/20/2008 1040	
Alkalinity	200		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	200		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/15/2008 1045	
Total Dissolved Solids	22000		mg/L	100	100	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3706-1

Client Sample ID: **MW-4A 111208R**
Lab Sample ID: **600-3706-2**

Date Sampled: 11/12/2008 1325
Date Received: 11/13/2008 0905
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/25/2008 1628	
Prep Method: 3010A			Date Prepared:		11/25/2008 0948	
Calcium	160	B	mg/L	0.022	1.0	1.0
Potassium	9.9		mg/L	0.13	1.0	1.0
Magnesium	37		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/26/2008 1131	
Prep Method: 3010A			Date Prepared:		11/25/2008 0948	
Sodium	290	B	mg/L	0.40	20	20
Method: 300.0			Date Analyzed:		11/13/2008 1500	
Nitrate as N	2.2		mg/L	0.050	0.20	1.0
Fluoride	0.32		mg/L	0.10	0.30	1.0
Method: 300.0			Date Analyzed:		11/13/2008 1520	
Sulfate	170		mg/L	2.0	5.0	10
Method: 300.0			Date Analyzed:		11/13/2008 1540	
Chloride	650		mg/L	10	40	100

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3706-1

Client Sample ID: **MW-4A 111208R**
Lab Sample ID: **600-3706-2**

Date Sampled: 11/12/2008 1325
Date Received: 11/13/2008 0905
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/20/2008 1040	
Alkalinity	640		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	640		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/15/2008 1045	
Total Dissolved Solids	1700		mg/L	10	10	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3706-1

Client Sample ID: **MW-7 111208R**
Lab Sample ID: **600-3706-3**

Date Sampled: 11/12/2008 1500
Date Received: 11/13/2008 0905
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/25/2008 1631	
Prep Method: 3010A			Date Prepared:		11/25/2008 0948	
Calcium	210	B	mg/L	0.022	1.0	1.0
Potassium	12		mg/L	0.13	1.0	1.0
Magnesium	76		mg/L	0.019	1.0	1.0
Method: Dissolved-6010B			Date Analyzed:		11/26/2008 1135	
Prep Method: 3010A			Date Prepared:		11/25/2008 0948	
Sodium	120	B	mg/L	0.40	20	20
Method: 300.0			Date Analyzed:		11/13/2008 1640	
Nitrate as N	1.2		mg/L	0.050	0.20	1.0
Fluoride	0.84		mg/L	0.10	0.30	1.0
Method: 300.0			Date Analyzed:		11/13/2008 1700	
Sulfate	140		mg/L	2.0	5.0	10
Method: 300.0			Date Analyzed:		11/13/2008 1720	
Chloride	650		mg/L	10	40	100

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3706-1

Client Sample ID: **MW-7 111208R**
Lab Sample ID: **600-3706-3**

Date Sampled: 11/12/2008 1500
Date Received: 11/13/2008 0905
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/20/2008 1040	
Alkalinity	110		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	110		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/15/2008 1045	
Total Dissolved Solids	1600		mg/L	10	10	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3706-1

Client Sample ID: **MW-8 111208R**
Lab Sample ID: **600-3706-4**

Date Sampled: 11/12/2008 1130
Date Received: 11/13/2008 0905
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/26/2008 1139	
Prep Method: 3010A			Date Prepared:		11/25/2008 0948	
Calcium	52	B	mg/L	0.44	20	20
Potassium	2.6	U	mg/L	2.6	20	20
Magnesium	17	J	mg/L	0.38	20	20
Sodium	46	B	mg/L	0.40	20	20
Method: 300.0			Date Analyzed:		11/13/2008 1740	
Chloride	39		mg/L	0.10	0.40	1.0
Nitrate as N	1.5		mg/L	0.050	0.20	1.0
Fluoride	1.4		mg/L	0.10	0.30	1.0
Method: 300.0			Date Analyzed:		11/13/2008 1800	
Sulfate	97		mg/L	2.0	5.0	10

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3706-1

Client Sample ID: **MW-8 111208R**
Lab Sample ID: **600-3706-4**

Date Sampled: 11/12/2008 1130
Date Received: 11/13/2008 0905
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/20/2008 1040	
Alkalinity	140		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	140		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/15/2008 1045	
Total Dissolved Solids	350		mg/L	10	10	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3706-1

Client Sample ID: **RW-1 111208R**
Lab Sample ID: **600-3706-5**

Date Sampled: 11/12/2008 1405
Date Received: 11/13/2008 0905
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/26/2008 1142	
Prep Method: 3010A			Date Prepared:		11/25/2008 0948	
Calcium	66	B	mg/L	0.44	20	20
Potassium	5.0	J	mg/L	2.6	20	20
Magnesium	34		mg/L	0.38	20	20
Sodium	190	B	mg/L	0.40	20	20
Method: 300.0			Date Analyzed:		11/13/2008 1900	
Fluoride	0.82		mg/L	0.10	0.30	1.0
Method: 300.0			Date Analyzed:		11/13/2008 1920	
Chloride	370		mg/L	1.0	4.0	10
Nitrate as N	1.9		mg/L	0.050	0.20	1.0
Sulfate	97		mg/L	2.0	5.0	10

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3706-1

Client Sample ID: **RW-1 111208R**
Lab Sample ID: **600-3706-5**

Date Sampled: 11/12/2008 1405
Date Received: 11/13/2008 0905
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/20/2008 1040	
Alkalinity	210		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	210		mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	5.0	U	mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/15/2008 1045	
Total Dissolved Solids	920		mg/L	10	10	1.0

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3706-1

Client Sample ID: **RW-2 111208R**
Lab Sample ID: **600-3706-6**

Date Sampled: 11/12/2008 1215
Date Received: 11/13/2008 0905
Client Matrix: Water

Analyte	Result/Qualifier		Unit	MDL	RL	Dilution
Method: Dissolved-6010B			Date Analyzed:		11/26/2008 1146	
Prep Method: 3010A			Date Prepared:		11/25/2008 0948	
Calcium	1200	B	mg/L	0.44	20	20
Potassium	6.0	J	mg/L	2.6	20	20
Magnesium	0.38	U	mg/L	0.38	20	20
Sodium	400	B	mg/L	0.40	20	20
Method: 300.0			Date Analyzed:		11/13/2008 2020	
Nitrate as N	0.24		mg/L	0.050	0.20	1.0
Fluoride	0.50	U	mg/L	0.50	1.5	5.0
Method: 300.0			Date Analyzed:		11/13/2008 2040	
Sulfate	250		mg/L	2.0	5.0	10
Method: 300.0			Date Analyzed:		11/13/2008 2100	
Chloride	2500		mg/L	10	40	100

Mr. Todd Wells
Conestoga-Rovers & Associates, Inc.
2135 South Loop 250 West
Midland, TX 79703

Job Number: 600-3706-1

Client Sample ID: **RW-2 111208R**
Lab Sample ID: **600-3706-6**

Date Sampled: 11/12/2008 1215
Date Received: 11/13/2008 0905
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	RL	Dilution
Method: SM 2320B			Date Analyzed:		11/20/2008 1040	
Alkalinity	390		mg/L	5.0	5.0	1.0
Bicarbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	5.0	1.0
Carbonate Alkalinity as CaCO3	150		mg/L	5.0	5.0	1.0
Hydroxide Alkalinity	240		mg/L	5.0	5.0	1.0
Method: SM 2540C			Date Analyzed:		11/15/2008 1045	
Total Dissolved Solids	4800		mg/L	20	20	1.0

DATA REPORTING QUALIFIERS

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3706-1

Lab Section	Qualifier	Description
Metals		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General Chemistry		
	F	Duplicate RPD exceeds the control limit
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

QUALITY CONTROL RESULTS

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 600-6260					
LB 600-6260/1-C	TCLP SPLPE Leachate Blank	D	Water		
Prep Batch: 600-6333					
LCS 600-6333/2-A	Lab Control Spike	T	Water	3010A	
MB 600-6329/1-B	Method Blank	D	Water	3010A	
MB 600-6333/1-A	Method Blank	T	Water	3010A	
LB 600-6260/1-C	TCLP SPLPE Leachate Blank	D	Water	3010A	600-6260
600-3706-1	MW-4 111208R	D	Water	3010A	
600-3706-1DU	Duplicate	D	Water	3010A	
600-3706-1MS	Matrix Spike	D	Water	3010A	
600-3706-1MSD	Matrix Spike Duplicate	D	Water	3010A	
600-3706-2	MW-4A 111208R	D	Water	3010A	
600-3706-3	MW-7 111208R	D	Water	3010A	
600-3706-4	MW-8 111208R	D	Water	3010A	
600-3706-5	RW-1 111208R	D	Water	3010A	
600-3706-6	RW-2 111208R	D	Water	3010A	
Analysis Batch:600-6373					
LCS 600-6333/2-A	Lab Control Spike	T	Water	6010B	600-6333
MB 600-6329/1-B	Method Blank	D	Water	6010B	600-6333
MB 600-6333/1-A	Method Blank	T	Water	6010B	600-6333
LB 600-6260/1-C	TCLP SPLPE Leachate Blank	D	Water	6010B	600-6333
600-3706-1	MW-4 111208R	D	Water	6010B	600-6333
600-3706-1DU	Duplicate	D	Water	6010B	600-6333
600-3706-1MS	Matrix Spike	D	Water	6010B	600-6333
600-3706-1MSD	Matrix Spike Duplicate	D	Water	6010B	600-6333
600-3706-2	MW-4A 111208R	D	Water	6010B	600-6333
600-3706-3	MW-7 111208R	D	Water	6010B	600-6333
Analysis Batch:600-6419					
600-3706-1	MW-4 111208R	D	Water	6010B	600-6333
600-3706-1DU	Duplicate	D	Water	6010B	600-6333
600-3706-1MS	Matrix Spike	D	Water	6010B	600-6333
600-3706-1MSD	Matrix Spike Duplicate	D	Water	6010B	600-6333
600-3706-2	MW-4A 111208R	D	Water	6010B	600-6333
600-3706-3	MW-7 111208R	D	Water	6010B	600-6333
600-3706-4	MW-8 111208R	D	Water	6010B	600-6333
600-3706-5	RW-1 111208R	D	Water	6010B	600-6333
600-3706-6	RW-2 111208R	D	Water	6010B	600-6333

Report Basis

D = Dissolved

T = Total

Client: Conestoga-Rovers & Associates, Inc. Job Number: 600-3706-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:600-5732					
LCS 600-5732/43	Lab Control Spike	T	Water	300.0	
MB 600-5732/3	Method Blank	T	Water	300.0	
600-3706-1	MW-4 111208R	T	Water	300.0	
600-3706-2	MW-4A 111208R	T	Water	300.0	
600-3706-3	MW-7 111208R	T	Water	300.0	
600-3706-4	MW-8 111208R	T	Water	300.0	
600-3706-4DU	Duplicate	T	Water	300.0	
600-3706-4MS	Matrix Spike	T	Water	300.0	
600-3706-5	RW-1 111208R	T	Water	300.0	
600-3706-6	RW-2 111208R	T	Water	300.0	
Analysis Batch:600-5745					
LCS 600-5745/4	Lab Control Spike	T	Water	300.0	
MB 600-5745/3	Method Blank	T	Water	300.0	
600-3706-1	MW-4 111208R	T	Water	300.0	
600-3706-2	MW-4A 111208R	T	Water	300.0	
600-3706-3	MW-7 111208R	T	Water	300.0	
600-3706-4	MW-8 111208R	T	Water	300.0	
600-3706-4DU	Duplicate	T	Water	300.0	
600-3706-4MS	Matrix Spike	T	Water	300.0	
600-3706-5	RW-1 111208R	T	Water	300.0	
600-3706-6	RW-2 111208R	T	Water	300.0	
Analysis Batch:600-5880					
LCS 600-5880/2	Lab Control Spike	T	Water	SM 2540C	
MB 600-5880/1	Method Blank	T	Water	SM 2540C	
600-3706-1	MW-4 111208R	T	Water	SM 2540C	
600-3706-2	MW-4A 111208R	T	Water	SM 2540C	
600-3706-3	MW-7 111208R	T	Water	SM 2540C	
600-3706-4	MW-8 111208R	T	Water	SM 2540C	
600-3706-5	RW-1 111208R	T	Water	SM 2540C	
600-3706-6	RW-2 111208R	T	Water	SM 2540C	
600-3706-6DU	Duplicate	T	Water	SM 2540C	
Analysis Batch:600-6104					
LCS 600-6104/2	Lab Control Spike	T	Water	SM 2320B	
MB 600-6104/1	Method Blank	T	Water	SM 2320B	
600-3706-1	MW-4 111208R	T	Water	SM 2320B	
600-3706-2	MW-4A 111208R	T	Water	SM 2320B	
600-3706-3	MW-7 111208R	T	Water	SM 2320B	
600-3706-4	MW-8 111208R	T	Water	SM 2320B	
600-3706-5	RW-1 111208R	T	Water	SM 2320B	
600-3706-6	RW-2 111208R	T	Water	SM 2320B	

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch

Report Basis

T = Total

Surrogate Recovery Report

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

Method Blank - Batch: 600-6333

Method: 6010B
Preparation: 3010A

Lab Sample ID: MB 600-6333/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/25/2008 1514
Date Prepared: 11/25/2008 0948

Analysis Batch: 600-6373
Prep Batch: 600-6333
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T112508
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Calcium	0.022	U	0.022	1.0
Potassium	0.13	U	0.13	1.0
Magnesium	0.019	U	0.019	1.0
Sodium	0.020	U	0.020	1.0

TCLP SPLPE Leachate Blank - Batch: 600-6333

Method: 6010B
Preparation: 3010A
Dissolved

Lab Sample ID: LB 600-6260/1-C
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/25/2008 1522
Date Prepared: 11/25/2008 0948
Date Leached: 11/20/2008 1600

Analysis Batch: 600-6373
Prep Batch: 600-6333
Units: mg/L

Leachate Batch: 600-6260

Instrument ID: TJA ICP 61E
Lab File ID: T112508
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Calcium	0.022	U	0.022	1.0
Potassium	0.13	U	0.13	1.0
Magnesium	0.019	U	0.019	1.0
Sodium	0.020	U	0.020	1.0

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

Method Blank - Batch: 600-6333

Method: 6010B
Preparation: 3010A
Dissolved

Lab Sample ID: MB 600-6329/1-B
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/25/2008 1609
Date Prepared: 11/25/2008 0948

Analysis Batch: 600-6373
Prep Batch: 600-6333
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T112508
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Calcium	0.024	J	0.022	1.0
Potassium	0.13	U	0.13	1.0
Magnesium	0.019	U	0.019	1.0
Sodium	0.46	J	0.020	1.0

Lab Control Spike - Batch: 600-6333

Method: 6010B
Preparation: 3010A

Lab Sample ID: LCS 600-6333/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/25/2008 1518
Date Prepared: 11/25/2008 0948

Analysis Batch: 600-6373
Prep Batch: 600-6333
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T112508
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Calcium	10.0	9.61	96	80 - 120	
Potassium	10.0	10.4	104	80 - 120	
Magnesium	10.0	9.40	94	80 - 120	
Sodium	10.0	10.2	102	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-6333

Method: 6010B
Preparation: 3010A
Dissolved

MS Lab Sample ID:	600-3706-1	Analysis Batch:	600-6373	Instrument ID:	TJA ICP 61E
Client Matrix:	Water	Prep Batch:	600-6333	Lab File ID:	T112508
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	11/25/2008 1620			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 0948				

MSD Lab Sample ID:	600-3706-1	Analysis Batch:	600-6373	Instrument ID:	TJA ICP 61E
Client Matrix:	Water	Prep Batch:	600-6333	Lab File ID:	T112508
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	11/25/2008 1624			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 0948				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Calcium	225	148	75 - 125	1	20	4	4
Potassium	198	177	75 - 125	2	20	4	4
Magnesium	202	69	75 - 125	2	20	4	4
Sodium	198	178	75 - 125	0	20	4	4

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-6333

Method: 6010B
Preparation: 3010A
Dissolved

MS Lab Sample ID:	600-3706-1	Analysis Batch:	600-6419	Instrument ID:	TJA ICP 61E
Client Matrix:	Water	Prep Batch:	600-6333	Lab File ID:	T112608
Dilution:	20			Initial Weight/Volume:	50 mL
Date Analyzed:	11/26/2008 1122			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 0948				

MSD Lab Sample ID:	600-3706-1	Analysis Batch:	600-6419	Instrument ID:	TJA ICP 61E
Client Matrix:	Water	Prep Batch:	600-6333	Lab File ID:	T112608
Dilution:	20			Initial Weight/Volume:	50 mL
Date Analyzed:	11/26/2008 1126			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 0948				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Calcium	248	-50	75 - 125	2	20	4	4
Potassium	134	114	75 - 125	4	20	4	4
Magnesium	180	6	75 - 125	2	20	4	4

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 600-6333

Method: 6010B
Preparation: 3010A
Dissolved

MS Lab Sample ID:	600-3706-1	Analysis Batch:	600-6419	Instrument ID:	TJA ICP 61E
Client Matrix:	Water	Prep Batch:	600-6333	Lab File ID:	T112608
Dilution:	500			Initial Weight/Volume:	50 mL
Date Analyzed:	11/26/2008 1204			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 0948				

MSD Lab Sample ID:	600-3706-1	Analysis Batch:	600-6419	Instrument ID:	TJA ICP 61E
Client Matrix:	Water	Prep Batch:	600-6333	Lab File ID:	T112608
Dilution:	500			Initial Weight/Volume:	50 mL
Date Analyzed:	11/26/2008 1208			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 0948				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Calcium	417	-89	75 - 125	3	20	4	4
Potassium	-1010	-1030	75 - 125	NC	20	U F	U F
Magnesium	229	-59	75 - 125	3	20	4	4
Sodium	1580	267	75 - 125	3	20	4	4

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

Duplicate - Batch: 600-6333

Method: 6010B
Preparation: 3010A
Dissolved

Lab Sample ID: 600-3706-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/25/2008 1617
Date Prepared: 11/25/2008 0948

Analysis Batch: 600-6373
Prep Batch: 600-6333
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T112508
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Calcium	990	1000	1	20	
Potassium	82	81.0	2	20	
Magnesium	760	770	1	20	
Sodium	1200	1180	1	20	

Duplicate - Batch: 600-6333

Method: 6010B
Preparation: 3010A
Dissolved

Lab Sample ID: 600-3706-1
Client Matrix: Water
Dilution: 20
Date Analyzed: 11/26/2008 1119
Date Prepared: 11/25/2008 0948

Analysis Batch: 600-6419
Prep Batch: 600-6333
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T112608
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Calcium	1500	1480	0	20	
Potassium	40	40.0	1	20	
Magnesium	840	838	0	20	

Duplicate - Batch: 600-6333

Method: 6010B
Preparation: 3010A
Dissolved

Lab Sample ID: 600-3706-1
Client Matrix: Water
Dilution: 500
Date Analyzed: 11/26/2008 1201
Date Prepared: 11/25/2008 0948

Analysis Batch: 600-6419
Prep Batch: 600-6333
Units: mg/L

Instrument ID: TJA ICP 61E
Lab File ID: T112608
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Calcium	1600		1540	1	20	
Potassium	65	U	65	NC	20	U
Magnesium	840		818	2	20	
Sodium	4800		4790	0	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

Duplicate - Batch: 600-6333

Method: 6010B
Preparation: 3010A
Dissolved

Lab Sample ID:	600-3706-1	Analysis Batch:	600-6419	Instrument ID:	TJA ICP 61E
Client Matrix:	Water	Prep Batch:	600-6333	Lab File ID:	T112608
Dilution:	500	Units:	mg/L	Initial Weight/Volume:	50 mL
Date Analyzed:	11/26/2008 1201			Final Weight/Volume:	50 mL
Date Prepared:	11/25/2008 0948				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

Method Blank - Batch: 600-5732

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 600-5732/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/13/2008 1320
Date Prepared: N/A

Analysis Batch: 600-5732
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS20000
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Chloride	0.10	U	0.10	0.40
Fluoride	0.10	U	0.10	0.30
Sulfate	0.20	U	0.20	0.50

Lab Control Spike - Batch: 600-5732

Method: 300.0
Preparation: N/A

Lab Sample ID: LCS 600-5732/43
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/13/2008 1340
Date Prepared: N/A

Analysis Batch: 600-5732
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS20000
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride	20.0	19.3	96	90 - 110	
Fluoride	10.0	10.6	106	90 - 110	
Sulfate	20.0	19.0	95	90 - 110	

Matrix Spike - Batch: 600-5732

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3706-4
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/13/2008 1840
Date Prepared: N/A

Analysis Batch: 600-5732
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS20000
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chloride	34		100	128	94	90 - 110	
Fluoride	1.2	J	20.0	22.2	105	90 - 110	
Sulfate	97		100	190	93	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

Duplicate - Batch: 600-5732

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3706-4
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/13/2008 1820
Date Prepared: N/A

Analysis Batch: 600-5732
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS20000
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chloride	34		33.4	1	20	
Fluoride	1.2	J	1.17	0	20	J
Sulfate	97		96.3	1	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

Method Blank - Batch: 600-5745

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 600-5745/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/13/2008 1320
Date Prepared: N/A

Analysis Batch: 600-5745
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Nitrate as N	0.050	U	0.050	0.20

Lab Control Spike - Batch: 600-5745

Method: 300.0
Preparation: N/A

Lab Sample ID: LCS 600-5745/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/13/2008 1340
Date Prepared: N/A

Analysis Batch: 600-5745
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	10.0	9.93	99	90 - 110	

Matrix Spike - Batch: 600-5745

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3706-4
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/13/2008 1840
Date Prepared: N/A

Analysis Batch: 600-5745
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N	1.5	20.0	21.5	100	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

Duplicate - Batch: 600-5745

Method: 300.0
Preparation: N/A

Lab Sample ID: 600-3706-4
Client Matrix: Water
Dilution: 10
Date Analyzed: 11/13/2008 1820
Date Prepared: N/A

Analysis Batch: 600-5745
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Nitrate as N	1.5	1.11	28	20	J F

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

Method Blank - Batch: 600-6104

Method: SM 2320B
Preparation: N/A

Lab Sample ID: MB 600-6104/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/20/2008 1040
Date Prepared: N/A

Analysis Batch: 600-6104
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL	RL
Alkalinity	2.5	U	2.5	2.5
Bicarbonate Alkalinity as CaCO3	2.5	U	2.5	2.5
Carbonate Alkalinity as CaCO3	2.5	U	2.5	2.5
Hydroxide Alkalinity	2.5	U	2.5	2.5

Lab Control Spike - Batch: 600-6104

Method: SM 2320B
Preparation: N/A

Lab Sample ID: LCS 600-6104/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/20/2008 1040
Date Prepared: N/A

Analysis Batch: 600-6104
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 5 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity	1000	919	92	90 - 110	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

Method Blank - Batch: 600-5880

Method: SM 2540C
Preparation: N/A

Lab Sample ID: MB 600-5880/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/15/2008 1045
Date Prepared: N/A

Analysis Batch: 600-5880
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Result	Qual	RL	RL
Total Dissolved Solids	10	U	10	10

Lab Control Spike - Batch: 600-5880

Method: SM 2540C
Preparation: N/A

Lab Sample ID: LCS 600-5880/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/15/2008 1045
Date Prepared: N/A

Analysis Batch: 600-5880
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Dissolved Solids	1800	1750	97	90 - 110	

Duplicate - Batch: 600-5880

Method: SM 2540C
Preparation: N/A

Lab Sample ID: 600-3706-6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/15/2008 1045
Date Prepared: N/A

Analysis Batch: 600-5880
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 100 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids	4800	4830	0	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

3706

Client	Project Manager	Date	Chain of Custody Number
CRA	Todd Wells	11/12/08	090538

Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page
2135 S. Loop 250 W.	432-686-0086 / 432-686-0186		Page 1 of 1

City	State	Zip Code	Site Contact	Lab Contact
Midland	TX	79703	MATT Hudson	Sachin K.

Project Name and Location (State)	Carrier/Waybill Number
Cooper-Jal Jale N.M.	

Contract/Purchase Order/Quote No.: 039123

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	TCE	6010 B	8260 B	300.0	2540 C	Temp	Special Instructions/ Conditions of Receipt
MW-4 111208R	11-12	1300		X			X						X	X	X	X	X		
MW-4A 111208R	11-12	1325		X			X						X	X	X	X	X		
MW-7 111208R	11-12	1500		X			X						X	X	X	X	X		
MW-8 111208R	11-12	1130		X			X						X	X	X	X	X		
RW-1 111208R	11-12	1405		X			X						X	X	X	X	X		
RW-2 111208R	11-12	1215		X			X						X	X	X	X	X		
Temp	—	—		X			X						X					X	

Page 39 of 40

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 10 DAYS

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
	11/12/08	1645			
2. Relinquished By	Date	Time	2. Received By	Date	Time
			Michael Clarke	11-13-08	0905
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

12/02/2008

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

Login Sample Receipt Check List

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 600-3706-1

Login Number: 3706

List Source: TestAmerica Houston

Creator: Clarke, Michael (Mike) C

List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

STATE OF NEW MEXICO

OFFICE OF THE STATE ENGINEER

ROSWELL

JOHN R. D'ANTONIO, JR. P.E.
State Engineer

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
(505) 622-6521

June 18, 2008

Texaco Exploration and Production, Inc.
% Mark Larson
P.O. Box 730
Hobbs, NM 88240-0730

REF: CP-884

Greetings:

Enclosed is your copy of the above numbered permit, which has been approved subject to the conditions set forth on the approval page thereof.

Proof of Completion of Well(s) will be filed in this office after completion and installation of equipment, but in no event later than 06/30/2010. Proof of Completion of Well forms shall be mailed upon request.

Your rights under this permit will expire on 06/30/2010, unless Proof of Completion of Well(s) is filed or an Application for Extension of Time is received in this office on or before that date.

Sincerely,

for Andy Morley
(575) 622-6521, ext 113

Enclosure

cc: Santa Fe Office

NEW MEXICO STATE ENGINEER
APPLICATION TO DIVERT (GROUND)

SPECIFIC CONDITIONS OF APPROVAL

PCW Proof of Completion of Works must be filed on or before 6/30/2010

1. This application is approved as follows:

Permit Number: CP-884

Water Source: Capitan Shallow Groundwater

Point(s) of Diversion:

Well No.	Subdivision	Section	Township	Range
CP-884	NW1/4NW1/4SE1/4	24	24 S.	36 E.

Purpose of Use: Environmental Remediation

Place of Use:

Subdivision	Section	Township	Range
NW1/4NW1/4SE1/4	24	24 S.	36 E.

Amount of Water: Up to 32.5 acre-feet per annum (consumptive use)

2. The diversion of water under this permit shall be limited to a maximum of 32.5 acre-feet per annum, consumptive use, for Environmental Remediation purposes measured at the well.

3. Depth of well shall not exceed the thickness of the Capitan Reef formation.

4. The proposed new well CP-884 shall be drilled at least 660 feet from all wells of other ownership.

5. A totalizing meter of a type approved by and installed in a manner and at a location acceptable to the Office of the State Engineer shall be installed before the first branch of the discharge line from well CP-884. The District II Office shall be advised of the make, model, serial number, installation date and initial reading of the meter prior to any appropriation of water under this permit.

6. Records of the total amount of water diverted from all wells shall be submitted to the State Engineer Office in Roswell on or before the 10th day of January, April, July and October of each year.

NEW MEXICO STATE ENGINEER
APPLICATION TO DIVERT (GROUND)

7. Upon completion of the remediation or monitoring operation purposes, the well shall be plugged (Article 4) or otherwise maintained so that no water may be diverted from said well unless a permit authorizing the use of the well is approved by the State Engineer in accordance with the other articles of these Rules and Regulations.

8. A driller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon Request.

9. The permittee shall utilize the highest technology available to ensure conservation of water to the maximum extent practical.

10. The diversion of water specified under this permit for pollution control shall not establish a water right or relieve the permittee of any liability for detriment to or impairment of existing water rights.

11. This permit shall not be exercised to the detriment of valid existing water rights, shall not be contrary to the conservation of water within the State of New Mexico, and shall not be detrimental to the public welfare of the State of New Mexico.

NEW MEXICO STATE ENGINEER
APPLICATION TO DIVERT (GROUND)

ACTION OF STATE ENGINEER

Notice of Intention Rcvd: | Date Rcvd. Corrected:
Formal Application Rcvd: 11/09/1999 | Pub. of Notice Ordered: 01/19/2000
Date Returned - Correction: | Affidavit of Pub. Filed: 03/14/2000

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 18th day of Jun A.D., 2008

John R. D Antonio, Jr., P.E., State Engineer

By: Ken Fresquez, District II Supervisor

File Number: CP-884

Revised August 1967

IMPORTANT—READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM

2-09704
75.

APPLICATION FOR PERMIT

To ~~Appropriate~~ Divert the Underground Waters of the State of New Mexico

Date Received 11-9-99 File No. CP-884

1. Name of applicant Texaco Exploration and Production, Inc.
   Mailing address P. O. Box 730
   City and State Hobbs, NM 88240-0370
2. Source of water supply Shallow Water Aquifer, located in Capitan
   (artesian or shallow water aquifer) (name of underground basin)
3. The well is to be located in the NW ¼ NW ¼ SE ¼, Section 24 Township 24 South
   Range 36 East N.M.P.M., or Tract No. ____ of Map No. ____ of the ____ District,
   on land owned by ~~Fred Pool Company~~ Ludean Cantrell.
4. Description of well: name of driller RW-2, Scarborough Drilling, Inc., Lamesa, Texas;
   Outside Diameter of casing 5" inches; Approximate depth to be drilled 175' feet;
5. Quantity of water to be appropriated and beneficially used 32.5 acre feet,
   (consumptive use, diversion)
   for Environmental Remediation purposes.
6. Acreage to be irrigated or place of use ____ acres.

Subdivision	Section	Township	Range	Acres	Owner

7. Additional statements or explanations Pursuant to New Mexico Oil Conservation Division (NMOCD), Environmental Bureau direction, and after correspondence between applicant and the Bureau, a plan has been approved to initiate corrective action. The action will include recovering water from said well, equipped with pumping equipment, and disposal of produced water in applicant's disposal system.

I, Mark J. Larson (for Applicant), affirm that the foregoing statements are true to the best of my knowledge and belief and that development shall not commence until approval of the permit has been obtained.

Texaco Exploration and Production, ~~Petitioner~~,

By: _____.

VICKIE A. INMAN
Notary Public, State of Texas
My Comm. Expires 4-14-2002

Subscribed and sworn to before me this 26th day of October, A.D., 1999.

My commission expires 4-14-2002

_____
Notary Public

T# 172258

Number of this permit _____

ACTION OF STATE ENGINEER

After notice pursuant to statute and by authority vested in me, this application is approved provided it is not exercised to the detriment of any others having existing rights; further provided that all rules and regulations of the State Engineer pertaining to the drilling of shallow wells be complied with; and further subject to the following conditions: _____

see attached conditions of approval

Proof of completion of well shall be filed on or before June 30, 2010 , XX

Proof of application of water to beneficial use shall be filed on or before N/A , XX

Witness my hand and seal this 18th day of June , A.D., XX 2008

John R. D'Antonio, Jr., P.E., State Engineer

By: _____

Kenneth M. Fresquez, District II Manager

INSTRUCTIONS

This form shall be executed, preferably typewritten, in triplicate and shall be accompanied by a filing fee of $25.00. Each of triplicate copies must be properly signed and attested.

A separate application for permit must be filed for each well used.

Secs. 1–4—Fill out all blanks fully and accurately.

Sec. 5—Irrigation use shall be stated in acre feet of water per acre per annum to be applied on the land. If for municipal or other purposes, state total quantity in acre feet to be used annually.

Sec. 6—Describe only the lands to be irrigated or where water will be used. If on unsurveyed lands describe by legal subdivision "as projected" from the nearest government survey corners, or describe by metes and bounds and tie survey to some permanent, easily located natural object.

Sec. 7—If lands are irrigated from any other source, explain in this section. Give any other data necessary to fully describe water right sought.

STATE OF NEW MEXICO

OFFICE OF THE STATE ENGINEER

ROSWELL

JOHN R. D'ANTONIO, JR. P.E.
State Engineer

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
(505) 622-6521

June 18, 2008

Texaco Exploration and Production, Inc.
% Mark Larson
P.O. Box 730
Hobbs, NM 88240-0730

REF: CP-885

Greetings:

Enclosed is your copy of the above numbered permit, which has been approved subject to the conditions set forth on the approval page thereof.

Proof of Completion of Well(s) will be filed in this office after completion and installation of equipment, but in no event later than 06/30/2010. Proof of Completion of Well forms shall be mailed upon request.

Your rights under this permit will expire on 06/30/2010, unless Proof of Completion of Well(s) is filed or an Application for Extension of Time is received in this office on or before that date.

Sincerely,

mjo

for Andy Morley
(575) 622-6521, ext 113

Enclosure

cc: Santa Fe Office

NEW MEXICO STATE ENGINEER
APPLICATION TO DIVERT (GROUND)

SPECIFIC CONDITIONS OF APPROVAL

PCW Proof of Completion of Works must be filed on or before 6/30/2010

1. This application is approved as follows:

Permit Number: CP-885

Water Source: Capitan Shallow Groundwater

Point(s) of Diversion:

Well No.	Subdivision	Section	Township	Range
CP-885	NW1/4NW1/4SE1/4	24	24 S.	36 E.

Purpose of Use: Environmental Remediation

Place of Use:

Subdivision	Section	Township	Range
NW1/4NW1/4SE1/4	24	24 S.	36 E.

Amount of Water: Up to 32.5 acre-feet per annum (consumptive use)

2. The diversion of water under this permit shall be limited to a maximum of 32.5 acre-feet per annum, consumptive use, for Environmental Remediation purposes measured at the well.

3. Depth of well shall not exceed the thickness of the Capitan Reef formation.

4. The proposed new well CP-885 shall be drilled at least 660 feet from all wells of other ownership.

5. A totalizing meter of a type approved by and installed in a manner and at a location acceptable to the Office of the State Engineer shall be installed before the first branch of the discharge line from well CP-885. The District II Office shall be advised of the make, model, serial number, installation date and initial reading of the meter prior to any appropriation of water under this permit.

6. Records of the total amount of water diverted from all wells shall be submitted to the State Engineer Office in Roswell on or before the 10th day of January, April, July and October of each year.

NEW MEXICO STATE ENGINEER
APPLICATION TO DIVERT (GROUND)

7. Upon completion of the remediation or monitoring operation purposes, the well shall be plugged (Article 4) or otherwise maintained so that no water may be diverted from said well unless a permit authorizing the use of the well is approved by the State Engineer in accordance with the other articles of these Rules and Regulations.

8. A driller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon Request.

9. The permittee shall utilize the highest technology available to ensure conservation of water to the maximum extent practical.

10. The diversion of water specified under this permit for pollution control shall not establish a water right or relieve the permittee of any liability for detriment to or impairment of existing water rights.

11. This permit shall not be exercised to the detriment of valid existing water rights, shall not be contrary to the conservation of water within the State of New Mexico, and shall not be detrimental to the public welfare of the State of New Mexico.

NEW MEXICO STATE ENGINEER
APPLICATION TO DIVERT (GROUND)

ACTION OF STATE ENGINEER

Notice of Intention Rcvd: | Date Rcvd. Corrected:
Formal Application Rcvd: 11/09/1999 | Pub. of Notice Ordered: 01/19/2000
Date Returned - Correction: | Affidavit of Pub. Filed: 03/14/2000

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 16th day of Jun A.D., 2008

John R. D'Antonio, Jr., P.E., State Engineer

By: Ken Fresquez, District III Supervisor

File Number: CP-885

Revised August 1967

IMPORTANT—READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM

2-09704
15.

APPLICATION FOR PERMIT

To ~~Appropriate~~ Divert the Underground Waters of the State of New Mexico

Date Received 11-9-99 File No. CP-885

1. Name of applicant Texaco Exploration and Production, Inc.
   Mailing address P. O. Box 730
   City and State Hobbs, NM 88240-0730
2. Source of water supply Shallow Water Aquifer, located in Capitan
   (artesian or shallow water aquifer) (name of underground basin)
3. The well is to be located in the NW ¼ NW ¼ SE ¼, Section 24 Township 24 South
   Range 36 East N.M.P.M., or Tract No. ____ of Map No. ____ of the ~~Capitan~~ District,
   on land owned by ~~XXXXXXXXXXXXXX~~ Ludean Cantrell.
4. Description of well: name of driller RW-1, Scarborough Drilling, Inc., Lamesa, Texas;
   Outside Diameter of casing 5" inches; Approximate depth to be drilled 175' feet;
5. Quantity of water to be appropriated and beneficially used 32.5 acre feet,
   (consumptive use, diversion)
   for Environmental Remediation purposes.
6. Acreage to be irrigated or place of use ____ acres.

Subdivision	Section	Township	Range	Acres	Owner

7. Additional statements or explanations Pursuant to New Mexico Oil Conservation Division (NMOCD), Environmental Bureau direction and after correspondence between applicant and the Bureau, a plan has been approved to initiate corrective action. The action will include recovering water from said well, equipped with pumping equipment, and disposal of produced water in applicant's injection system.

I, Mark J. Larson (for Applicant), affirm that the foregoing statements are true to the best of my knowledge and belief and that development shall not commence until approval of the permit has been obtained.

Texaco Exploration and Production, Inc., ~~Permittee~~,

By: _____.

VICKIE A. INMAN
Notary Public, State of Texas
My Comm. Expires 4-14-2002

Subscribed and sworn to before me this 26th day of October, A.D., 19 99.

My commission expires 4-14-2002

Vickie A. Inman
Notary Public

T#172263

Number of this permit _____

ACTION OF STATE ENGINEER

After notice pursuant to statute and by authority vested in me, this application is approved provided it is not exercised to the detriment of any others having existing rights; further provided that all rules and regulations of the State Engineer pertaining to the drilling of shallow wells be complied with; and further subject to the following conditions: _____

see attached conditions of approval

Proof of completion of well shall be filed on or before June 30, 2010 , XX

Proof of application of water to beneficial use shall be filed on or before N/A , XX

Witness my hand and seal this 16th day of June , A.D., XX 2008 .

John R. D'Antonio, Jr., P.E., State Engineer

By: _____

Kenneth M. Fresquez, District II Manager

INSTRUCTIONS

This form shall be executed, preferably typewritten, in triplicate and shall be accompanied by a filing fee of $25.00. Each of triplicate copies must be properly signed and attested.

A separate application for permit must be filed for each well used.

Secs. 1–4—Fill out all blanks fully and accurately.

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Sec. 6—Describe only the lands to be irrigated or where water will be used. If on unsurveyed lands describe by legal subdivision "as projected" from the nearest government survey corners, or describe by metes and bounds and tie survey to some permanent, easily located natural object.

Sec. 7—If lands are irrigated from any other source, explain in this section. Give any other data necessary to fully describe water right sought.