1R – 254

AGWMR

06/26/2008

Chevron

Matthew P. Hudson
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June 26, 2008

Mr. Glenn von Gonten
New Mexico Oil Conservation Division
1220 So. St. Francis Drive
Santa Fe, New Mexico 87505

Subject: 2007 Annual Groundwater Monitoring Reports

Dear Glenn:

Please find enclosed one copy each of the 2007 Annual Groundwater Monitoring Reports for the following sites:

- **1R-254: G.E. Erwin "A and B" Federal NCT-2 Tank Battery, Lea County, NM**
- **1R-255: J.R. Philips Tank Battery No. 2, Lea County, NM**
- **1R-258: Former New Mexico State "F" Tank Battery, Lea County, NM**
- **1R-289: Cooper-Jal Unit South Injection Station, Lea County, NM**

Should you have any questions regarding these reports, please contact me at (713) 372-1046.

Sincerely,

Matthew P. Hudson

Enclosures

cc: Patricia Caperton, NMOCD-Hobbs (electronic copies of reports)
Luke Markham, Conestoga-Rovers & Associates
James Ornelas, Conestoga-Rovers & Associates
Todd Wells, Conestoga-Rovers & Associates

2007 ANNUAL GROUNDWATER MONITORING REPORT

G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY
CASE NO. 1R254
OGRID NO. 4323
SW/4, SE/4, SECTION 35, T-24-S, R-37-E
LATITUDE: N 32° 10′ 11.9″ LONGITUDE: W 103° 07′ 46.9″
LEA COUNTY, NEW MEXICO

Prepared For:
Mr. Matt Hudson
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
Upstream Business Unit
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Prepared by:
Conestoga-Rovers & Associates

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JUNE 16, 2008
REF. NO. 039124 (4)

TABLE OF CONTENTS

PAGE

1.0 INTRODUCTION 1

2.0 REGULATORY FRAMEWORK 3

3.0 2007 GROUNDWATER MONITORING 4
3.1 POTENTIOMETRIC SURFACE AND GRADIENT 4
3.2 ANALYTICAL RESULTS 4

4.0 GROUNDWATER INVESTIGATION ACTIVITIES 6
4.1 FIELD METHODOLOGIES 6
4.2 GROUNDWATER ASSESSMENT RESULTS 6

5.0 CORRECTIVE ACTION 8

6.0 SUMMARY 9

7.0 PLANNED ACTIVITIES 10

LIST OF FIGURES

FIGURE 1 SITE LOCATION MAP

FIGURE 2 SITE DETAILS MAP

FIGURE 3 GROUNDWATER GRADIENT MAP – FEBRUARY 2007

FIGURE 4 GROUNDWATER GRADIENT MAP – AUGUST 2007

FIGURE 5 CHLORIDE CONCENTRATION MAP– FEBRUARY AND AUGUST 2007

FIGURE 6 CHLORIDE ISOCONCENTRATION MAP – FEBRUARY 2007

FIGURE 7 CHLORIDE ISOCONCENTRATION MAP – AUGUST 2007

LIST OF TABLES

TABLE I GROUNDWATER GAUGING SUMMARY

TABLE II GROUNDWATER ANALYTICAL SUMMARY

LIST OF APPENDICIES

APPENDIX A	NEW MEXICO OFFICE OF THE STATE ENGINEER PERMIT CP 00886
APPENDIX B	NMOCD CORRESPONDENCE DATED FEBRUARY 2, 1999
APPENDIX C	CERTIFIED LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION
APPENDIX D	NEW MEXICO OFFICE OF THE STATE ENGINEER MONITOR WELL RECORDS
APPENDIX E	CRA SOIL BORING LOGS AND MONITOR WELL DETAILS
APPENDIX F	TOPOGRAPHIC SURVEY OF MONITOR WELLS

1.0 INTRODUCTION

This Annual Groundwater Monitoring Report presents groundwater data collected during the 2007 reporting period at the G.L. Erwin "A & B" Federal NCT-2 Tank Battery (hereafter referred to as the "Site"). On February 27-28, March 1 and August 21-23, 2007, Conestoga-Rovers & Associates (CRA) conducted the semi-annual groundwater monitoring events on behalf of Chevron Environmental Management Company (CEMC), as successor to Texaco Exploration and Production, Inc. (Texaco).

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

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

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

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

2.0 REGULATORY FRAMEWORK

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

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

3.0 2007 GROUNDWATER MONITORING

Groundwater at the Site is monitored semi-annually with a network of 24 monitor wells according to the *Work Plan for Plume Delineation and Modification to Proposed Groundwater Monitoring Schedule* submitted by LA to the NMOCD Santa Fe office on November 18, 1998. The workplan was approved on February 2, 1999. A copy of the NMOCD approval letter is provided in APPENDIX B.

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

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

3.1 POTENTIOMETRIC SURFACE AND GRADIENT

Groundwater elevation data are presented in TABLE I and generally fall within historical ranges. Groundwater gradient maps for February and August 2007 are presented in FIGURES 3 and 4, respectively. Depth to groundwater ranged from 59.03-feet to 85.73-feet below top of casing on February 27, 2007 and from 58.84-feet to 85.26-feet below top of casing on August 23, 2007. Groundwater flow at the Site is to the southeast at a gradient of 0.015-ft/ft.

3.2 ANALYTICAL RESULTS

The 2007 analytical results generally fall within historical ranges, and are summarized in TABLE II. All wells sampled in 2007 had at least one COC (Chloride, Fluoride, Nitrate-N, Sulfate or Total Dissolved Solids) that exceeded NMWQCC standards and are shown on FIGURE 5. Isopleth maps approximating chloride concentrations for both February and August 2007 events are shown on FIGURES 6 and 7, respectively.

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

- Chloride was detected at concentrations above the NMWQCC standard (250 mg/L) in 19 wells sampled in February 2007, 20 wells in August 2007;
- Fluoride was detected at concentrations above the NMWQCC standard (1.60 mg/L) in 10 wells in February and in seven wells in August 2007;
- Nitrate was detected at concentrations above the NMWQCC standard (10 mg/L) in one well during the August event;
- Sulfate was detected at concentrations above the NMWQCC standard (600 mg/L) in two wells in February and in three wells in August 2007; and
- Total Dissolved Solids were detected at concentrations above the NMWQCC standard (1,000mg/L) in 18 wells during the February event and 20 wells in August 2007.

Two duplicate samples were collected from RW-1 during the February 2007 and the August 2007 events. Duplicate constituents were detected without any significant deviations. Copies of the certified analytical reports and chain-of-custody documentation are attached in APPENDIX C.

4.0 GROUNDWATER INVESTIGATION ACTIVITIES

In November 2007, two groundwater monitoring wells, MW-21 and MW-22, were installed at the Site. The wells were installed to further evaluate the horizontal extent of affected groundwater at the Site. The respective well locations are presented in FIGURE 2. Monitor Well-22 was positioned at an upgradient location, while MW-21 was located downgradient from other site groundwater monitor wells.

4.1 FIELD METHODOLOGIES

Prior to mobilizing the drilling equipment to the Site, the boring location areas were marked and a utility notification made at least 48-hour prior to mobilization. A post-hole digger was utilized to clear each boring location to a depth of approximately 5-feet bgs and approximately 10-inches in diameter.

An air-rotary rig, operated by a licensed State of New Mexico water well driller, White Drilling of Clyde, Texas, was utilized to advance the borings to depths ranging from 66.5 to 97-feet bgs to assess the nature and extent of chloride impacts at the site.

The two borings were converted into two-inch groundwater monitoring wells (MW-21, MW-22) at each location utilizing 30 feet of screen on MW-21, 20 feet of screen on MW-22 and PVC casing to three feet above the ground surface. The two monitoring wells, MW-21 and MW-22, were terminated 97 and 66.5 feet below the ground surface respectively. General well specifications included: two-inch diameter PVC casing/screens with gravel-packed screened intervals, 30 feet of screen on MW-21 and 20 feet of screen on MW-22, bentonite seals above the gravel pack, and above ground surface completions with concrete pads. The wells were developed by bailing and purge water was containerized in properly labeled, polyethylene tank.

4.2 GROUNDWATER ASSESSMENT RESULTS

Groundwater was encountered approximately 71 feet bgs in MW-21 and approximately 62 feet bgs in MW-22. New Mexico Office of the State Engineer Monitor Well Records are provided in APPENDIX D and CRA Soil Boring Logs and Monitor Well Details are in APPENDIX E.

Depth to groundwater and related measurements and information pertaining to the monitoring wells are presented in TABLE I – Groundwater Gauging Summary. A Topographic Survey of Monitor Wells, utilized to calculate top of casing (TOC) elevations and depth to groundwater elevations, is presented in APPENDIX F. The survey was performed by West Company of Midland, Inc. on December 10, 2007.

Groundwater samples were collected after three monitor well casing volumes were removed from each well. Samples from both monitoring wells and a duplicate were shipped to TestAmerica, Inc of Houston, Texas using EPA-approved chain-of-custody procedures. The water samples were analyzed for chloride, major cations, anions and TDS by Environmental Protection Agency (EPA) Methods 300.0 and 6010, SM 2320B, and 2540C. The fluids recovered during the sampling event were containerized and

subsequently disposed at an OCD-permitted salt water disposal (SWD) facility by Nabors.

Groundwater COCs detected above the NMWQCC standards for MW-21 and MW-22 are highlighted in TABLE II and are listed below:

- Chloride was detected at concentrations of 482 mg/L in MW-21 and 1,020 mg/L in MW-22, above the NMWQCC standard (250 mg/L) in November 2007;

- Total Dissolved Solids were detected at concentrations of 1,440 mg/L in MW-21 and 2,330 mg/L in MW-22, above the NMWQCC standard (1,000 mg/L) in November 2007.

One duplicate sample was collected from MW-21 during the November 2007 event. Duplicate constituents were detected without any significant deviations. Copies of the certified analytical reports and chain-of-custody documentation are attached in APPENDIX C.

5.0 CORRECTIVE ACTION

Pumping activities for the groundwater recovery system on RW-1 were initiated in September 2007. Excluding brief periods for routine maintenance, the groundwater recovery system in RW-1 operated continuously from September to December 2007.

Operation and maintenance (O&M) activities were performed on a weekly basis. As of February 18, 2008, approximately 1599 barrels of groundwater have been recovered from RW-1.

6.0 SUMMARY

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

- Groundwater at the Site is monitored semi-annually with a network of 26 monitor wells;
- Depth to groundwater ranged from 59.03-feet to 85.73-feet below top of casing on February 27, 2007 and from 58.84-feet to 85.26-feet below top of casing on August 23, 2007. Groundwater flow at the Site is to the southeast at a gradient of 0.015-ft/ft;
- The analytical results generally fall within historical ranges. All wells sampled in 2007 had at least one COC (Chloride, Fluoride, Nitrate-N, Sulfate or Total Dissolved Solids) that exceeded NMOCD standards; and
- On November 19, 2007, MW-21 was installed downgradient of MW-19 and MW-22 was installed upgradient of MW-9. Total Dissolved Solids and Chloride levels were detected at concentrations above NMWQCC standards in both monitor wells.
- In September 2007, pumping activities for the groundwater recovery system on RW-1 were initiated. Excluding brief periods for routine maintenance, the groundwater recovery system in RW-1 operated continuously from September to December 2007. As of February 18, 2008, approximately 1599 barrels of groundwater have been recovered from RW-1.

7.0 PLANNED ACTIVITIES

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

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

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

Todd Wells

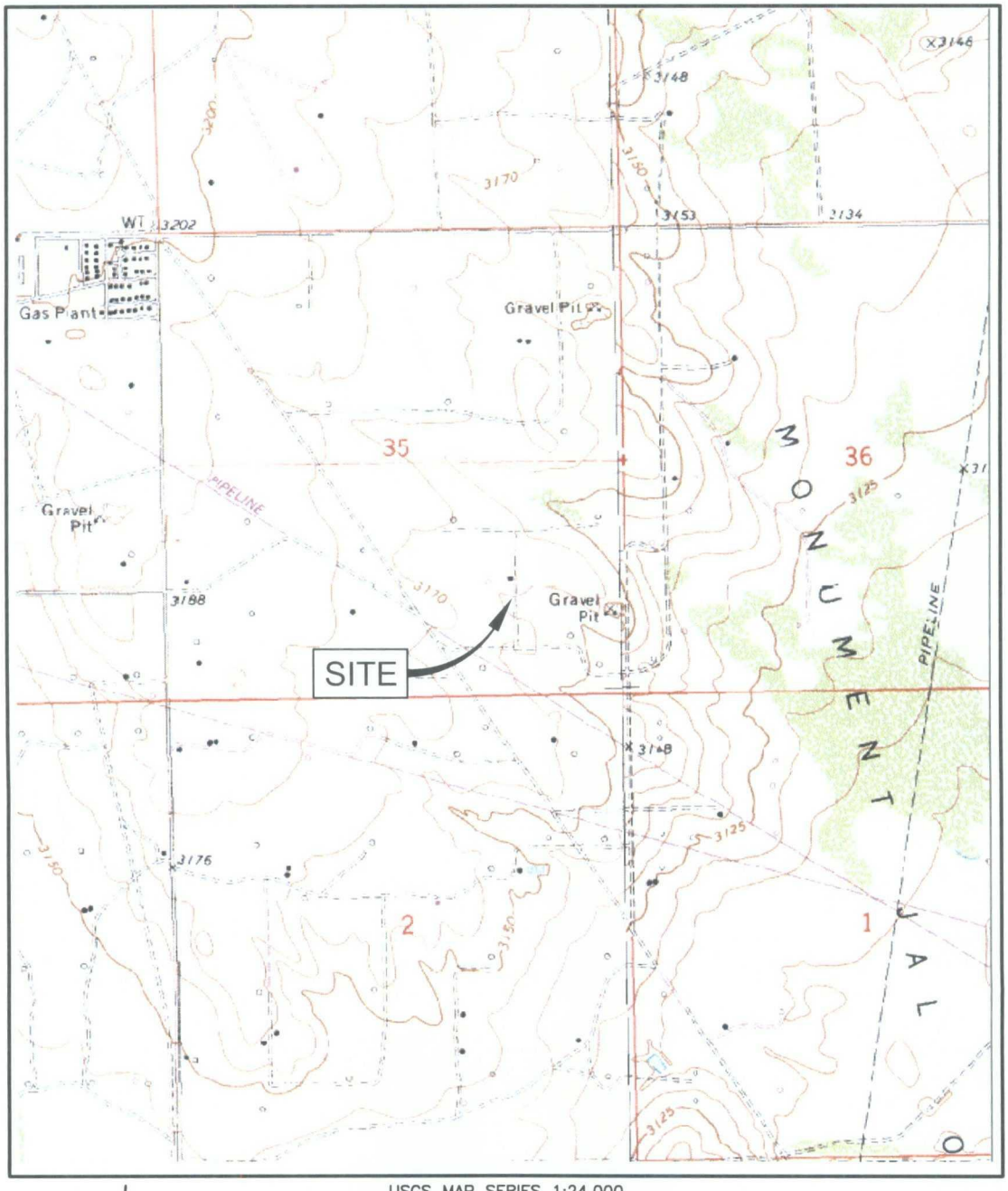
Todd Wells
Project Manager

Thomas C. Larson
Operations Manager

JAL NW QUADRANGLE
NEW MEXICO

LAT= 32° 10' 11.9" N
LONG= 103° 07' 46.9" W

PHOTOREVISED 1977



USGS MAP SERIES 1:24,000
CONTOUR INTERVAL 5 FEET

N

0 2000 4000ft

figure 1

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

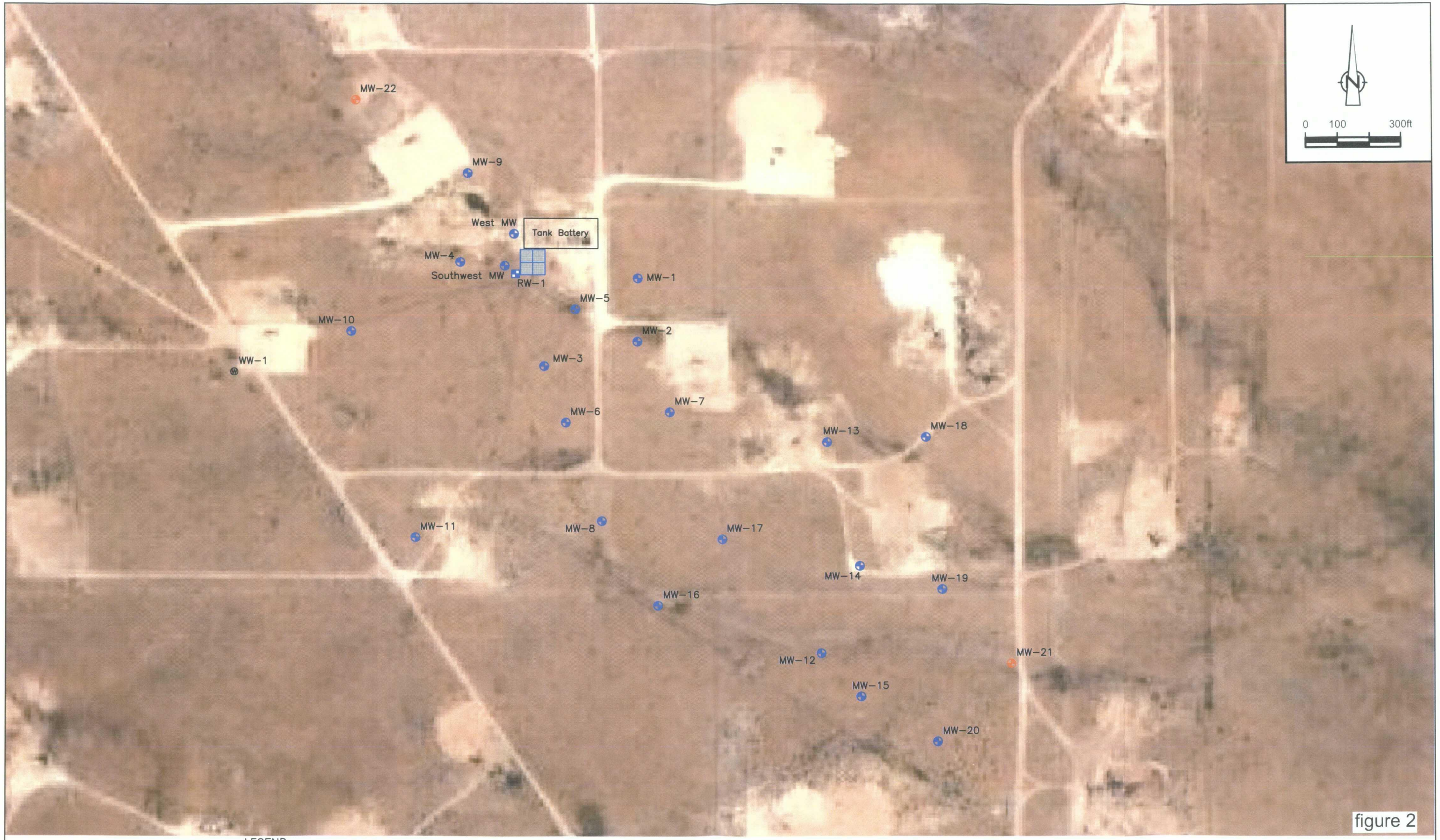


figure 2

LEGEND

- Monitor Well Location
- Recovery Well Location
- Monitor Well Location Installed November 2007
- Water Well Location
- Groundwater Recovery System

NOTES:

1. Monitor Well locations and top of casing elevations are based on a professional survey conducted by Piper Surveying Company in February and July 1998, October 2001, October 2003, and December 2004.
2. Pump and treat groundwater recovery system was installed in September 2006.
3. Monitor Wells MW-21 and MW-22 were installed on November 19, 2007 and top of casing elevations are based on a professional survey conducted by West Company in December 2007.

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

039124-07(004)GN-MD002 SD MAR 06/2008

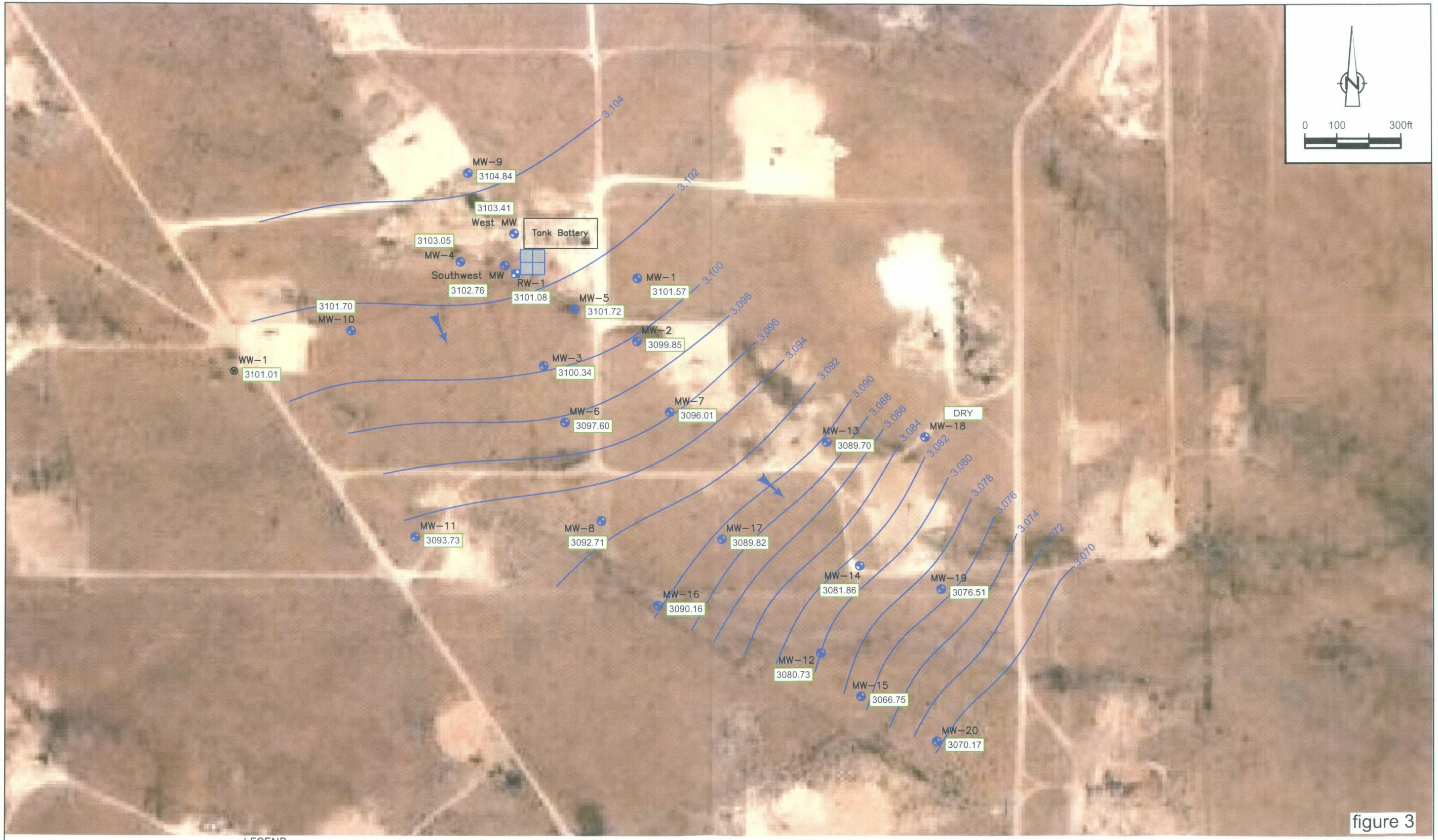


figure 3

LEGEND

- Monitor Well Location
- Recovery Well Location
- Water Well Location
- Direction of Groundwater Flow
- Groundwater Recovery System
- 3094.38 Groundwater Level Elevation
- Groundwater Level Elevation Contour

NOTES:

1. Groundwater level elevations were collected February 27, 2007.
2. Contours are at two-foot intervals.
3. Elevation for monitor well (MW-15) was not used to determine groundwater contours.

GROUNDWATER GRADIENT MAP - FEBRUARY 2007
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

039124-07(004)GN-MD003 GG 0207 MAR 06/2008

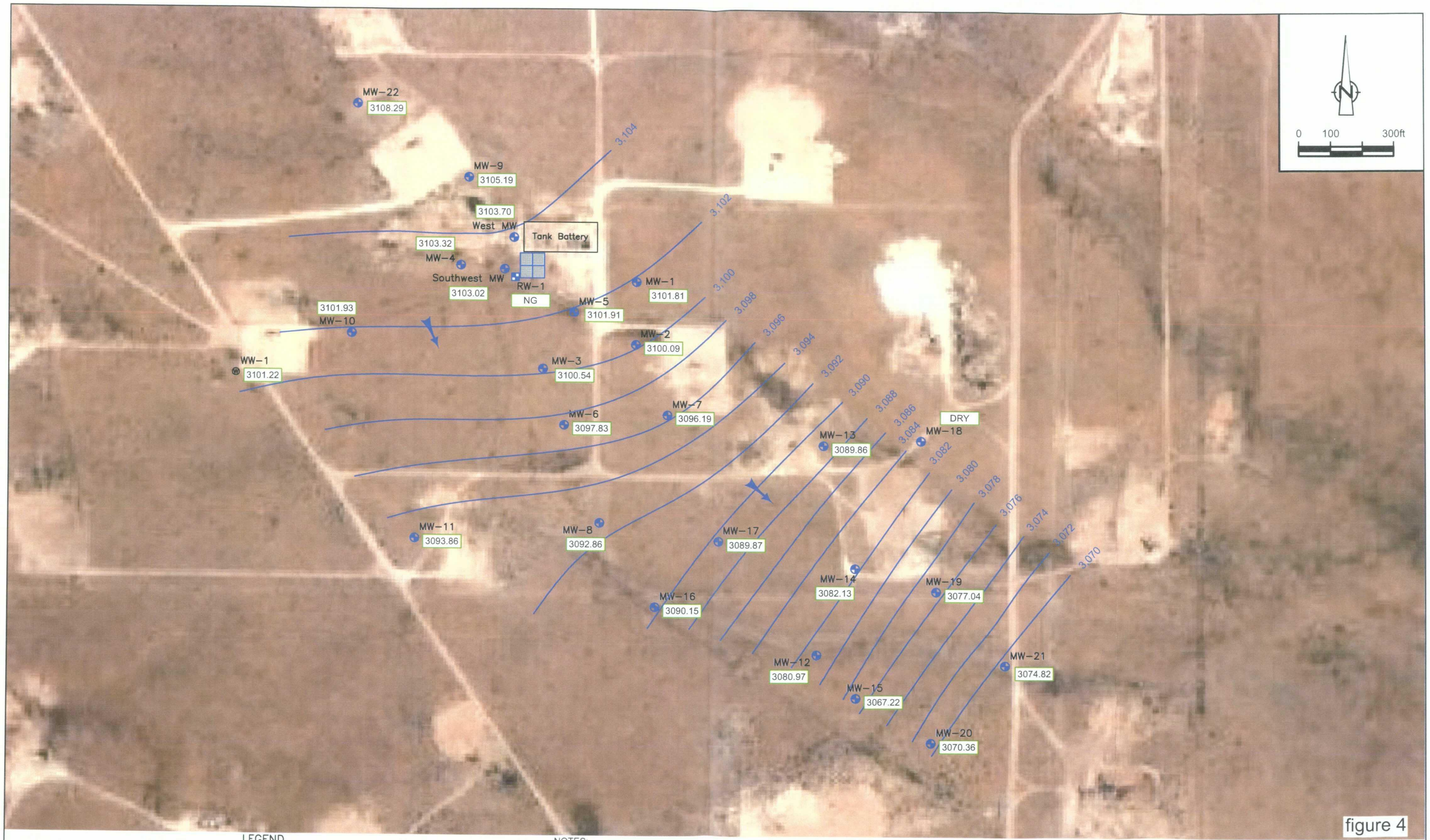


figure 4

LEGEND

- Monitor Well Location
- Recovery Well Location
- Water Well Location
- Direction of Groundwater Flow
- Groundwater Recovery System
- 3094.38 Groundwater Level Elevation
- Groundwater Level Elevation Contour

NOTES:

1. Groundwater level elevations were collected August 23, 2007, except for MW-21 and MW-22 which were collected November 20, 2007.
2. Monitor wells MW-21 and MW-22 were installed on November 19, 2007.
3. Elevations for monitor wells MW-15, MW-21, and MW-22 were not used to determine groundwater contours.
4. Contours are at two-foot intervals.

GROUNDWATER GRADIENT MAP - AUGUST 2007
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

039124-07(004)GN-MD004 GG 0807 MAR 11/2008

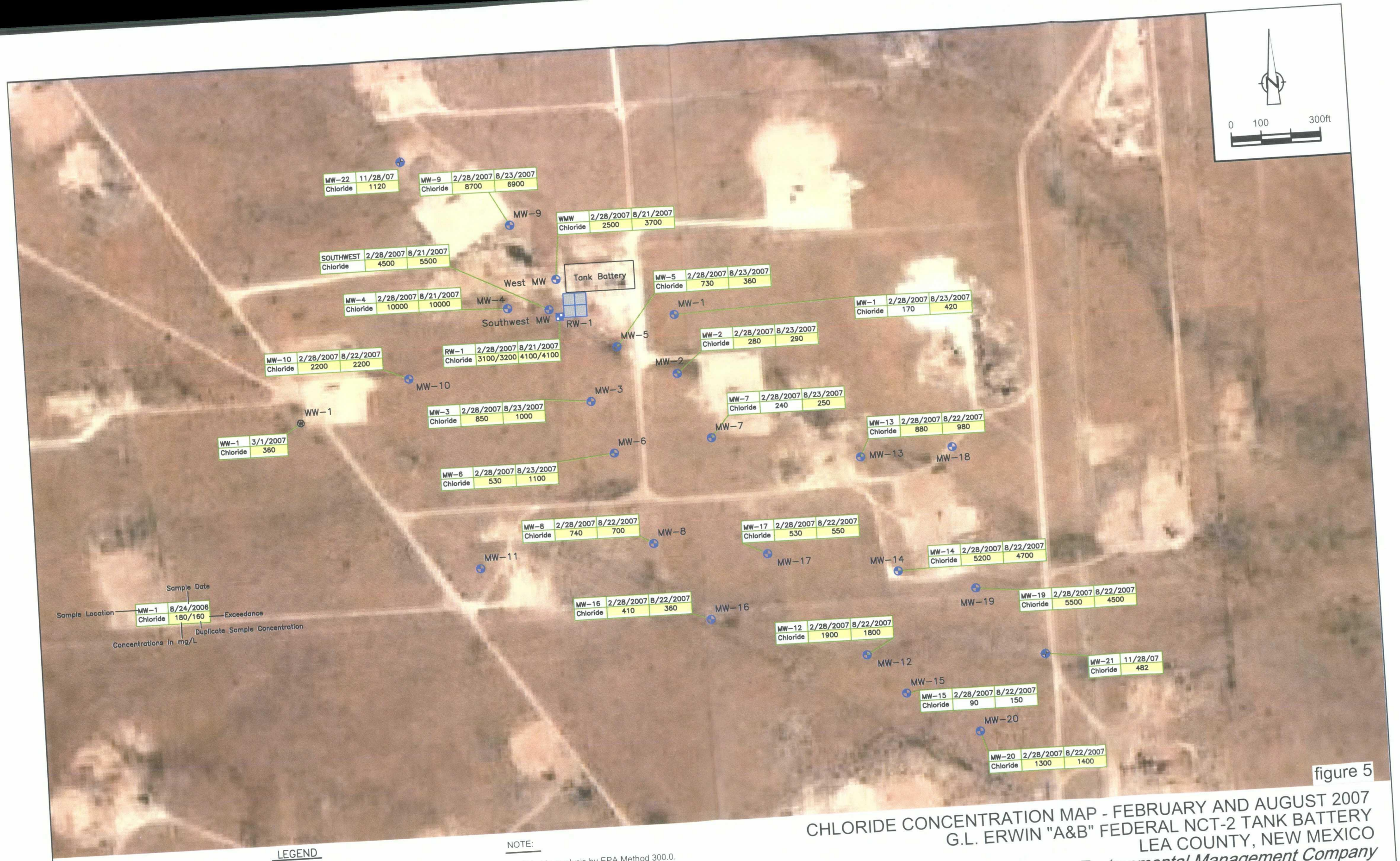


figure 5

CHLORIDE CONCENTRATION MAP - FEBRUARY AND AUGUST 2007
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

039124-07(004)GN-MD005 FEB_AUG07 Cl MAR 06/2008

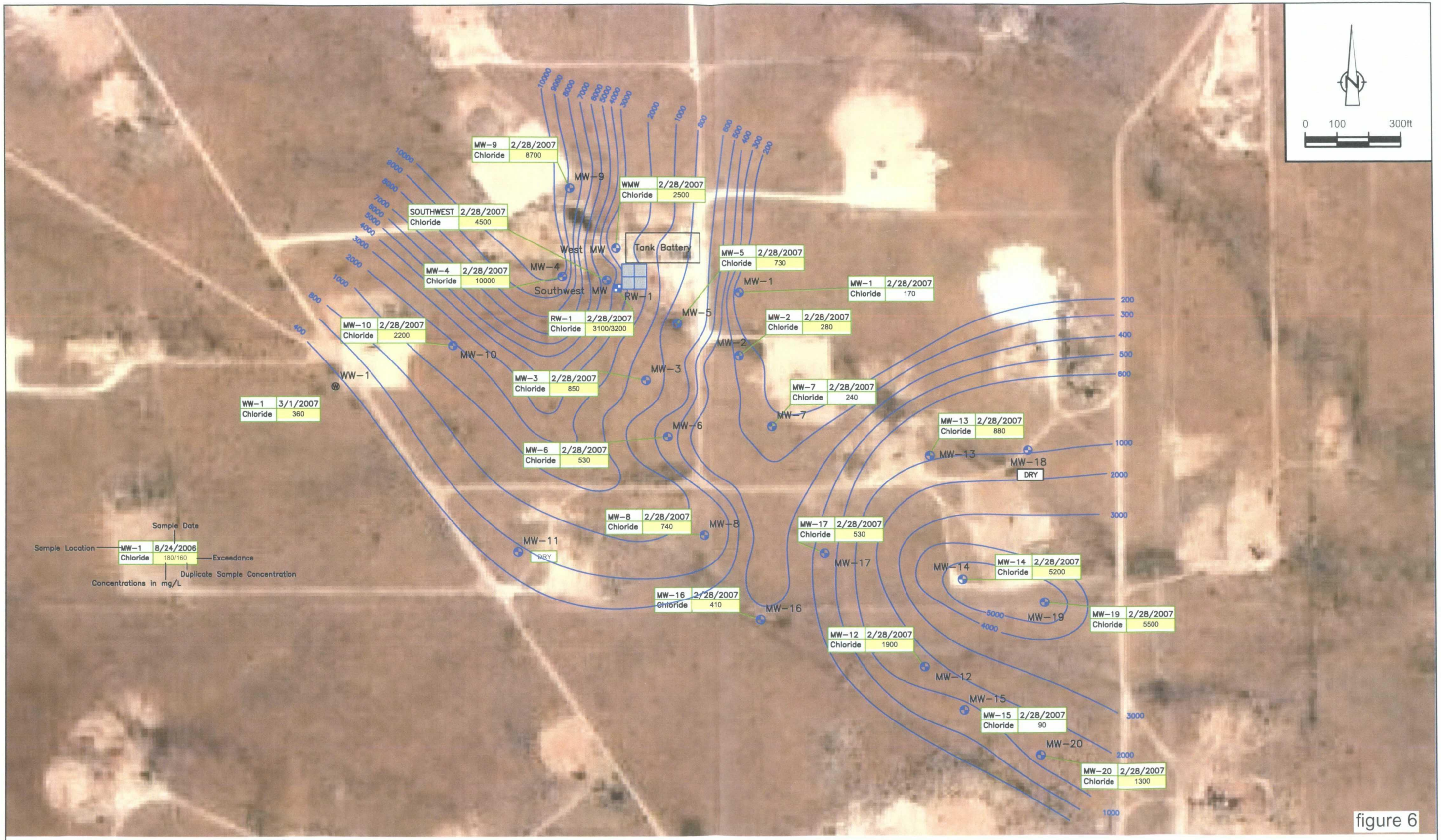


figure 6

LEGEND

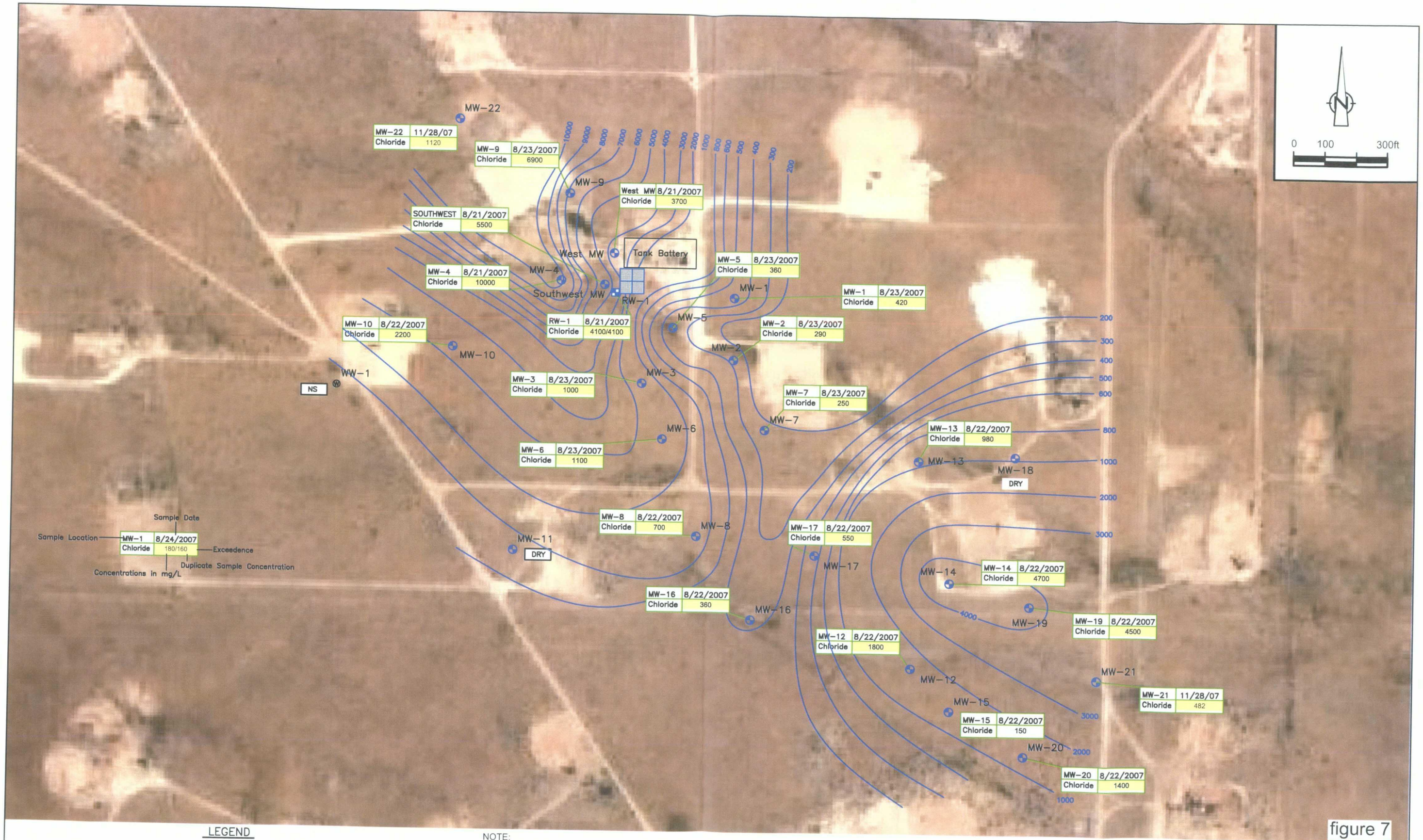
- Monitor Well Location
- Recovery Well Location
- Water Well Location
- Direction of Groundwater Flow
- Groundwater Recovery System
- Chloride Contour (Interval varies as depicted on map)

NOTE:

1. Chloride analysis by EPA Method 300.0.
2. Groundwater samples were collected on February 27 & 28 and March 1, 2007.

CHLORIDE ISOCONCENTRATION MAP - FEBRUARY 2007
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

039124-07(004)GN-MD006 CI 0207 MAR 06/2008



LEGEND

- Monitor Well Location
- Recovery Well Location
- Water Well Location
- Groundwater Recovery System
- Chloride Contour (Interval varies as depicted on map)

NOTE:

1. Chloride analysis by EPA Method 300.0.
2. Monitor Wells MW-21 and MW-22 were installed on November 19, 2007.
3. Groundwater samples were collected on August 21-23, 2007, except MW-21 and MW-22 which were collected on November 28, 2007.
4. Cholride concentrations for Monitor Wells MW-21 and MW-22 were not used to determine chloride contours.

figure 7

CHLORIDE ISOCONCENTRATION MAP - AUGUST 2007
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

039124-07(004)GN-MD007 CI 0807 MAR 07/2008

TABLE I

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

WELL *TOC elev* [1]	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL[2])	Screen interval (bgs[3])
MW-01	2/4/1998	2	87.70	64.15	---	---	3097.54	
3,161.69	2/7/2001			61.40	---	---	3100.29	
	4/30/2002			61.43	---	---	3100.26	
	10/11/2002			61.43	---	---	3100.26	
	12/26/2002			61.43	---	---	3100.26	
	2/17/2003			61.42	---	---	3100.27	
	5/29/2003			61.58	---	---	3100.11	
	8/22/2003			61.37	---	---	3100.32	
	11/5/2003			61.35	---	---	3100.34	
	2/3/2004			61.34	---	---	3100.35	
	5/5/2004			61.13	---	---	3100.56	55'-85'
	8/2/2004			61.08	---	---	3100.61	
	11/23/2004			60.61	---	---	3101.08	
	2/9/2005			60.46	---	---	3101.23	
	8/4/2005			60.62	---	---	3101.07	
	2/22/2006		84.60	60.30	---	---	3101.39	
	8/24/2006		84.6	60.46	---	---	3101.23	
	2/27/2007			60.12	---	---	3,101.57	
	8/23/2007			59.88	---	---	3,101.81	
MW-02	2/4/1998	2	72.94	61.33	---	---	3098.56	
3,159.89	2/7/2001			61.45	---	---	3098.44	
	4/30/2002			61.47	---	---	3098.42	
	10/11/2002			61.46	---	---	3098.43	
	12/26/2002			61.52	---	---	3098.37	
	2/17/2003			61.53	---	---	3098.36	
	5/29/2003			61.48	---	---	3098.41	
	8/22/2003			61.41	---	---	3098.48	
	11/5/2003			61.38	---	---	3098.51	
	2/3/2004			61.35	---	---	3098.54	
	5/5/2004			61.20	---	---	3098.69	50'-70'
	8/2/2004			61.11	---	---	3098.78	
	11/23/2004			60.52	---	---	3099.37	
	2/9/2005			60.45	---	---	3099.44	
	8/4/2005			66.60	---	---	3093.29	
	2/22/2006		72.81	60.26	---	---	3099.63	
	8/24/2006		72.81	60.42	---	---	3099.47	
	2/27/2007			60.04	---	---	3,099.85	
	8/23/2007			59.80	---	---	3,100.09	
MW-03	2/4/1998	2	73.26	65.18	---	---	3098.90	
3,164.08	2/7/2001			65.22	---	---	3098.86	
	4/30/2002			65.11	---	---	3098.97	
	10/11/2002			65.14	---	---	3098.94	
	12/26/2002			65.15	---	---	3098.93	
	2/17/2003			65.15	---	---	3098.93	
	5/29/2003			65.19	---	---	3098.89	
	8/22/2003			65.09	---	---	3098.99	
	11/5/2003			65.09	---	---	3098.99	
	2/3/2004			65.06	---	---	3099.02	
	5/5/2004			64.97	---	---	3099.11	50'-70'
	8/2/2004			64.54	---	---	3099.54	
	11/23/2004			64.47	---	---	3099.61	
	2/9/2005			64.18	---	---	3099.90	
	8/4/2005			64.30	---	---	3099.78	
	2/22/2006		73.14	63.93	---	---	3100.15	
	8/24/2006		73.14	64.09	---	---	3099.99	
	2/27/2007			63.74	---	---	3100.34	
	8/23/2007			63.54	---	---	3,100.54	

TABLE I

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

WELL *TOC elev* [1]	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL[2])	Screen interval (bgs[3])
MW-04	2/4/1998	2	73.31	63.94	---	---	3101.71	
3,165.65	10/19/2000			63.80	---	---	3101.85	
	2/7/2001			63.78	---	---	3101.87	
	4/30/2002			63.72	---	---	3101.93	
	10/11/2002			63.74	---	---	3101.91	
	12/26/2002			63.74	---	---	3101.91	
	2/17/2003			63.74	---	---	3101.91	
	5/29/2003			63.83	---	---	3101.82	
	8/22/2003			63.71	---	---	3101.94	
	11/5/2003			63.68	---	---	3101.97	
	2/3/2004			63.64	---	---	3102.01	50'-70'
	5/5/2004			63.55	---	---	3102.10	
	8/2/2004			63.45	---	---	3102.20	
	11/23/2004			62.91	---	---	3102.74	
	2/9/2005			62.83	---	---	3102.82	
	8/4/2005			63.12	---	---	3102.53	
	2/23/2006		73.11	62.80	---	---	3102.85	
	8/25/2006		73.11	62.97	---	---	3102.68	
	2/27/2007			62.60	---	---	3,103.05	
	8/23/2007			62.33	---	---	3,103.32	
MW-05	2/4/1998	2	73.10	60.33	---	---	3100.42	
3,160.75	10/19/2000			60.25	---	---	3100.50	
	2/7/2001			60.58	---	---	3100.17	
	4/30/2002			62.27	---	---	3098.48	
	10/11/2002			60.29	---	---	3100.46	
	12/26/2002			60.29	---	---	3100.46	
	2/17/2003			60.30	---	---	3100.45	
	5/29/2003			60.33	---	---	3100.42	
	8/22/2003			60.24	---	---	3100.51	
	11/5/2003			60.24	---	---	3100.51	
	2/3/2004			60.20	---	---	3100.55	50'-70'
	5/5/2004			60.04	---	---	3100.71	
	8/2/2004			59.97	---	---	3100.78	
	11/23/2004			59.51	---	---	3101.24	
	2/9/2005			59.32	---	---	3101.43	
	8/4/2005			59.55	---	---	3101.20	
	2/22/2006		72.95	59.22	---	---	3101.53	
	8/24/2006		72.95	59.39	---	---	3101.36	
	2/27/2007			59.03	---	---	3,101.72	
	8/23/2007			58.84	---	---	3,101.91	
MW-06	2/7/2001	2	77.24	68.00	---	---	3096.18	
3,164.18	4/30/2002			68.10	---	---	3096.08	
	10/11/2002			68.04	---	---	3096.14	
	12/26/2002			68.03	---	---	3096.15	
	2/17/2003			68.03	---	---	3096.15	
	5/29/2003			68.38	---	---	3095.80	
	8/22/2003			67.99	---	---	3096.19	
	11/5/2003			67.99	---	---	3096.19	
	2/3/2004			67.92	---	---	3096.26	
	5/5/2004			67.88	---	---	3096.30	59'-74'
	8/2/2004			67.78	---	---	3096.40	
	11/23/2004			67.31	---	---	3096.87	
	2/9/2005			67.17	---	---	3097.01	
	8/4/2005			63.13	---	---	3101.05	
	2/22/2006		77.00	66.72	---	---	3097.46	
	8/24/2006		77	66.93	---	---	3097.25	
	2/27/2007			66.58	---	---	3,097.60	
	8/27/2007			66.35	---	---	3,097.83	

TABLE I

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

WELL *TOC elev* [1]	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL[2])	Screen interval (bgs[3])
MW-07	2/7/2001	2	73.45	67.25	---	---	3094.81	
3,162.06	4/30/2002			67.50	---	---	3094.56	
	10/11/2002			67.53	---	---	3094.53	
	12/26/2002			67.53	---	---	3094.53	
	2/17/2003			67.53	---	---	3094.53	
	5/29/2003			67.61	---	---	3094.45	
	8/22/2003			67.49	---	---	3094.57	
	11/5/2003			67.47	---	---	3094.59	
	2/3/2004			67.46	---	---	3094.60	
	5/5/2004			67.44	---	---	3094.62	55'-70'
	8/2/2004			67.34	---	---	3094.72	
	11/23/2004			67.02	---	---	3095.04	
	2/9/2005			67.74	---	---	3094.32	
	8/4/2005			66.62	---	---	3095.44	
	2/22/2006		72.56	66.31	---	---	3095.75	
	8/24/2006		72.56	66.37	---	---	3095.69	
	2/27/2007			66.05	---	---	3,096.01	
	8/23/2007			65.87	---	---	3,096.19	
MW-08	2/3/1999	2	70.66	68.21	---	---	3091.45	
3,159.66	2/7/2001			68.30	---	---	3091.36	
	4/30/2002			68.42	---	---	3091.24	
	10/11/2002			68.30	---	---	3091.36	
	12/26/2002			68.30	---	---	3091.36	
	2/17/2003			68.30	---	---	3091.36	
	5/29/2003			68.36	---	---	3091.30	
	8/22/2003			68.26	---	---	3091.40	
	11/5/2003			68.26	---	---	3091.40	
	2/3/2004			68.24	---	---	3091.42	
	5/5/2004			68.24	---	---	3091.42	50'-70'
	8/2/2004			68.17	---	---	3091.49	
	11/23/2004			67.72	---	---	3091.94	
	2/9/2005			67.41	---	---	3092.25	
	8/4/2005			67.39	---	---	3092.27	
	2/22/2006		73.40	67.04	---	---	3092.62	
	8/24/2006		73.4	67.29	---	---	3092.37	
	2/27/2007			66.87	---	---	3,092.79	
	8/23/2007			66.77	---	---	3,092.89	
MW-09	4/30/2002	2	70.39	63.65	---	---	3103.42	
3,167.07	10/11/2002			63.59	---	---	3103.48	
	12/26/2002			63.59	---	---	3103.48	
	2/17/2003			63.60	---	---	3103.47	
	5/29/2003			63.73	---	---	3103.34	
	8/22/2003			63.56	---	---	3103.51	
	11/5/2003			63.55	---	---	3103.52	
	2/3/2004			63.47	---	---	3103.60	
	5/5/2004			63.27	---	---	3103.80	
	8/2/2004			63.24	---	---	3103.83	55'-70'
	11/23/2004			62.40	---	---	3104.67	
	2/9/2005			62.50	---	---	3104.57	
	8/4/2005			62.89	---	---	3104.18	
	2/23/2006		69.60	62.48	---	---	3104.59	
	8/25/2006		69.6	62.68	---	---	3104.39	
	2/27/2007			62.23	---	---	3,104.84	
	8/23/2007			61.88	---	---	3,105.19	

TABLE I

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

WELL *TOC elev* [1]	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL[2])	Screen interval (bgs[3])
MW-10	4/30/2002	2	69.16	70.35	---	---	3100.64	
3,170.99	10/11/2002			70.49	---	---	3100.50	
	12/26/2002			70.50	---	---	3100.49	
	2/17/2003			70.50	---	---	3100.49	
	5/29/2003			70.37	---	---	3100.62	
	8/22/2003			70.47	---	---	3100.52	
	11/5/2003			70.49	---	---	3100.50	
	2/3/2004			70.43	---	---	3100.56	
	5/5/2004			70.38	---	---	3100.61	
	8/2/2004			70.26	---	---	3100.73	54'-69'
	11/23/2004			69.78	---	---	3101.21	
	2/9/2005			NG	---	---	---	
	8/4/2005			69.89	---	---	3101.10	
	2/22/2006		71.95	69.59	---	---	3101.40	
	8/25/2006		71.95	69.65	---	---	3101.34	
	2/27/2007			69.29	---	---	3,101.70	
	8/23/2007			69.06	---	---	3,101.93	
MW-11	4/30/2002	2	72.78	DRY	---	---	DRY	
3,168.24	10/11/2002			DRY	---	---	DRY	
	12/26/2002			DRY	---	---	DRY	
	2/17/2003			DRY	---	---	DRY	
	5/29/2003			DRY	---	---	DRY	
	8/22/2003			DRY	---	---	DRY	
	11/5/2003			DRY	---	---	DRY	
	2/3/2004			DRY	---	---	DRY	
	5/5/2004			DRY	---	---	DRY	
	8/2/2004			DRY	---	---	DRY	58'-73'
	11/23/2004			DRY	---	---	DRY	
	2/9/2005			DRY	---	---	DRY	
	8/4/2005			61.91	---	---	3106.33	
	2/22/2006		75.45	74.71	---	---	3093.53	
	8/24/2006		75.45	74.71	---	---	3093.53	
	2/27/2007			74.51	---	---	3,093.73	
	8/23/2007			74.38	---	---	3,093.86	
MW-12	4/30/2002	2	74.37	72.80	---	---	3079.68	
3,152.48	10/11/2002			72.81	---	---	3079.67	
	12/26/2002			72.82	---	---	3079.66	
	2/17/2003			72.82	---	---	3079.66	
	5/29/2003			72.77	---	---	3079.71	
	8/22/2003			72.81	---	---	3079.67	
	11/5/2003			72.81	---	---	3079.67	
	2/3/2004			72.83	---	---	3079.65	
	5/5/2004			72.78	---	---	3079.70	
	8/2/2004			72.81	---	---	3079.67	59'-74'
	11/23/2004			72.69	---	---	3079.79	
	2/9/2005			72.83	---	---	3079.65	
	8/4/2005			72.48	---	---	3080.00	
	2/22/2006		77.60	72.15	---	---	3080.33	
	8/24/2006		77.6	71.91	---	---	3080.57	
	2/27/2007			71.75	---	---	3,080.73	
	8/23/2007			71.51	---	---	3,080.97	

TABLE I

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

WELL *TOC elev* [1]	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL[2])	Screen interval (bgs[3])
MW-18	11/23/2004	2	76.98	DRY	---	---	DRY	
3,151.08	2/9/2005			DRY	---	---	DRY	
	8/4/2005			DRY	---	---	DRY	
	2/22/2006		78.43	DRY	---	---	DRY	54.5'-74.5
	8/24/2006		78.43	DRY	---	---	DRY	
	2/27/2007			DRY	---	---	DRY	
	8/23/2007			DRY	---	---	DRY	
MW-19	11/23/2004	2	104.41	72.63	---	---	3075.16	
3,147.79	2/9/2005			72.36	---	---	3075.43	
	8/4/2005			72.18	---	---	3075.61	
	2/22/2006		105.55	71.83	---	---	3075.96	82.5'-102.5'
	8/24/2006		105.55	71.57	---	---	3076.22	
	2/27/2007			71.28	---	---	3,076.51	
	8/23/2007			70.75	---	---	3,077.04	
MW-20	11/23/2004	2	94.94	81.81	---	---	3069.75	
3,151.56	2/9/2005			81.85	---	---	3069.71	
	8/4/2005			81.81	---	---	3069.75	
	2/22/2006		92.23	81.71	---	---	3069.85	72.5'-92.5'
	8/24/2006		92.23	81.66	---	---	3069.90	
	2/27/2007			81.39	---	---	3,070.17	
	8/23/2007			81.20	---	---	3,070.36	
MW-21	11/20/2007	2	99.00	71.05	---	---	3,074.82	
3,145.87								67'-97'
MW-22	11/20/2007	2	68.95	62.35	---	---	3,108.29	
3,170.64								46.5'-66.5'
WW-1	4/30/2002			70.21	---	---	3100.00	
3,170.21	10/11/2002			69.71	---	---	3100.50	
	12/26/2002			69.70	---	---	3100.51	
	2/17/2003			69.70	---	---	3100.51	
	5/29/2003			67.37	---	---	3102.84	
	8/22/2003			70.27	---	---	3099.94	
	11/5/2003			70.23	---	---	3099.98	
	2/3/2004			70.31	---	---	3099.90	
	5/5/2004			70.23	---	---	3099.98	
	8/2/2004			69.47	---	---	3100.74	--
	11/23/2004			69.92	---	---	3100.29	
	2/9/2005			69.75	---	---	3100.46	
	8/4/2005			69.89	---	---	3100.32	
	2/22/2006			69.51	---	---	3100.70	
	8/25/2006		192	69.50	---	---	3100.71	
	2/27/2007			69.20	---	---	3,101.01	
	8/23/2007			68.99	---	---	3,101.22	
West MW	8/22/1997	2	70.43	62.58	---	---	3101.86	
3,164.44	2/4/1998			62.50	---	---	3101.94	
	10/19/2000			62.37	---	---	3102.07	
	2/7/2001			62.43	---	---	3102.01	
	4/30/2002			62.37	---	---	3102.07	
	10/11/2002			62.35	---	---	3102.09	
	12/26/2002			62.34	---	---	3102.10	
	2/17/2003			62.34	---	---	3102.10	
	5/29/2003			62.22	---	---	3102.22	
	8/22/2003			62.35	---	---	3102.09	
	11/5/2003			62.31	---	---	3102.13	
	2/3/2004			62.27	---	---	3102.17	--
	5/5/2004			62.11	---	---	3102.33	
	8/2/2004			62.01	---	---	3102.43	
	11/23/2004			61.40	---	---	3103.04	
	2/9/2005			61.30	---	---	3103.14	
	8/4/2005			61.61	---	---	3102.83	
	2/23/2006		67.28	61.24	---	---	3103.20	
	8/25/2006		67.28	61.43	---	---	3103.01	
	2/27/2007			61.03	---	---	3,103.41	
	8/23/2007			60.74	---	---	3,103.70	

TABLE I

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

WELL *TOC elev*[1]	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL[2])	Screen interval (bgs[3])
Southwest MW	8/22/1997	2	70.45	63.25	---	---	3101.29	
3,164.54	2/4/1998			63.21	---	---	3101.33	
	10/19/2000			63.06	---	---	3101.48	
	2/7/2001			63.10	---	---	3101.44	
	4/30/2002			63.06	---	---	3101.48	
	10/11/2002			62.72	---	---	3101.82	
	12/26/2002			62.70	---	---	3101.84	
	2/17/2003			62.70	---	---	3101.84	
	5/29/2003			62.92	---	---	3101.62	
	8/22/2003			63.04	---	---	3101.50	
	11/5/2003			63.03	---	---	3101.51	
	2/3/2004			62.99	---	---	3101.55	--
	5/5/2004			62.90	---	---	3101.64	
	8/2/2004			62.71	---	---	3101.83	
	11/23/2004			62.17	---	---	3102.37	
	2/9/2005			62.05	---	---	3102.49	
	8/4/2005			62.33	---	---	3102.21	
	2/23/2006		70.16	61.98	---	---	3102.56	
	8/25/2006		70.16	62.17	---	---	3102.37	
	2/27/2007			61.78	---	---	3,102.76	
	8/23/2007			61.52	---	---	3,103.02	
RW-1	1/14/1999	4	76.30	50.85	---	---	3112.67	
3,163.52	10/19/2000			62.33	---	---	3101.19	
	4/30/2002			62.28	---	---	3101.24	
	10/11/2002			62.27	---	---	3101.25	
	12/26/2002			62.26	---	---	3101.26	
	2/17/2003			62.26	---	---	3101.26	
	5/29/2003			62.34	---	---	3101.18	
	8/22/2003			62.25	---	---	3101.27	
	11/5/2003			62.25	---	---	3101.27	
	2/3/2004			62.20	---	---	3101.32	53'-73'
	5/5/2004			62.12	---	---	3101.40	
	8/2/2004			61.96	---	---	3101.56	
	11/23/2004			61.46	---	---	3102.06	
	2/9/2005			61.30	---	---	3102.22	
	8/4/2005			61.51	---	---	3102.01	
	2/23/2006		75.45	61.20	---	---	3102.32	
	8/25/2006		75.45	61.36	---	---	3102.16	
	2/27/2007			62.44	---	---	3,101.08	
	8/23/2007			NG	---	---	---	

Notes:
[1]TOC - Top of Casing
[2]MSL - Mean Sea Level
[3]BGS - Below ground surface
[4]NG - Not Gauged
[5]Professional Survey conducted by Piper Surveying Company in February & July 1998, October 2001, October 2003, & December 2004.

TABLE II

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

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Standard (mg/L)				250	1.60	10.00	600.0	---	---	---	---	1000	---	---
MW-1	8/22/97	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/17/98	<2.0	220	233	--	--	92	--	--	--	--	812	276	--
	2/7/01	<1.0	136	440	2.1	2.8	70	15.7	55.8	11.4	115	1200	--	--
	05/03/02	<1.0	144	428	1.6	3.06	72.5	103	38.7	8.68	105	--	--	<1.00
	10/11/02	<0.1	155	230	---	---	109	69.3	24.8	7.45	125	737	---	<0.10
	12/27/02	<0.1	149	248	---	---	109	76.6	27.4	5.16	129	728	---	<0.10
	2/18/03	<0.1	147	213	---	---	114	59.1	21.4	5.06	116	713	---	<0.10
	6/2/03	<1.0	132	434	1.77	2.99	73.3	135	47.8	8.62	118	1320	---	<1.00
	8/25/03	<1.0	144	279	1.76	3.39	73.3	92.7	31.3	7.17	118	856	---	<1.00
	11/5/03	<1.0	162	330	1.94	3.42	78.9	110	37.7	9.03	114	994	---	<1.00
	2/4/04	<1.0	142	390	1.92	3.25	71.1	117	43.2	10.2	113	940	---	<1.00
	5/6/04	<1.00	260	403	1.9	4.8	135	60.2	18.3	8.93	302	1316	---	<1.00
	8/3/04	<0.1	155	222	---	---	83.2	64.1	30.8	6.41	127	431	---	<0.10
Dup	8/3/04	<0.1	158	301	---	---	104	101	45.5	672	436	605	---	<0.10
	2/11/05	<1.00	146	289	2.68	4.3	79.2	97.9	33.5	8.18	108	840	---	<1.00
	8/5/05	<1.00	156	245	2.08	4.34	89.6	75.5	26.7	6.99	125	856	---	<1.00
	2/22/06	<10.0	160	180	1.6	3.5	83	55.9	18.7	5.19	104	707	---	<10.0
Dup	2/22/06	<10.0	170	160	1.6	3.5	85	57.9	20	5.23	102	840	---	<10.0
	8/24/06	<10.0	300	180	<2.5	3.11	81	57.4	19.3	4.36	107	660	-	<10.0
	2/28/07	<10	170	170	1.8	3.6	81	54.6	18.2	<5	103	650	---	<10
	8/23/07	<10	138	420	1.4	2.8	76	102	34.8	5.37	101	1810	--	138
MW-2	8/22/97	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/17/98	<2.0	360	423	--	--	141	--	--	--	--	1257	124	--
	2/7/01	<1.0	234	570	2.7	5	130	124	40.7	10.9	359	1500	--	--
	05/03/02	<1.0	262	349	2.28	5.36	148	21	6.18	8.52	315	--	--	<1.00
	10/11/02	10	250	337	---	---	176	18.1	4.92	7.49	329	1120	---	<0.10
	12/27/02	12	238	319	---	---	142	17.8	5.16	6.1	339	1110	---	<0.10
	2/18/03	<0.1	228	310	---	---	178	19.4	6.02	6.3	331	1070	---	<0.10
	6/2/03	<1.0	206	769	2.05	4.43	115	176	52.6	9.94	383	1955	---	<1.00
	8/25/03	<1.0	242	374	2.07	5.14	142	36.1	10.8	8.49	333	1240	---	<1.00
	11/5/03	<1.0	232	498	2.21	5.13	145	68.7	21.1	10.1	327	1354	---	<1.00
	2/4/04	<1.0	230	450	2.06	4.97	131	76.1	25.2	10.7	324	1424	---	<1.00
	5/6/04	<1.00	150	341	1.79	3.23	75.3	108	38.5	8.38	102	984	---	<1.00
	8/3/04	<0.1	236	496	---	---	144	50.8	34.7	11	472	811	---	<0.10
	2/11/05	<1.00	220	604	2.79	5.48	130	103	34.5	11.3	324	1462	---	<1.00
	8/5/05	<1.00	228	404	2.24	5.7	154	34.5	10.3	10.7	341	1120	---	<1.00
	2/22/06	<10.0	250	320	1.7	5.1	150	19.5	5.84	6.15	259	1150	---	<10.0
	8/24/06	<10.0	250	290	<2.5	3.78	140	26.3	7.7	4.23	298	1610	---	<10.0
	2/28/07	<10.0	260	280	2.1	5.4	140	20.9	6.01	6.74	278	950	---	<10.0
	8/23/07	<10.0	226	290	1.7	5.3	140	19	5.6	<5	303	1280	---	226

TABLE II

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

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Standard (mg/L)				250	1.60	10.00	600.0	---	---	---	---	1000	---	---
MW-3	8/22/97	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/17/98	<2.0	410	983	--	--	173	--	--	--	--	2261	232	--
	2/7/01	8.0	278	890	3.4	7.3	200	56.7	18.7	20.4	648	2100	---	--
	05/02/02	<1.0	298	735	2.84	7.57	213	27.5	8.39	24.7	42.8	--	--	<1.00
	05/03/02	<1.0	146	767	2.9	7.39	207	37.9	11.5	25.5	28.2	--	--	<1.00
	10/11/02	<0.1	288	753	---	---	272	29	9.18	20.6	622	1960	---	<0.10
	12/27/02	<0.1	288	727	---	---	231	27	7.34	19.9	698	1950	---	<0.10
	2/18/03	<0.1	277	762	---	---	180	25.2	7.84	16.4	580	1950	---	<0.10
	6/2/03	<1.0	270	802	3.07	8.06	203	64.9	20	18.5	728	2720	---	<1.00
	8/26/03	<1.0	282	799	3	7.99	198	54.9	18	16.4	597	2320	---	<1.00
	11/6/03	<1.0	286	746	2.92	7.26	214	37.4	11.1	24.9	577	2092	---	<1.00
Dup	11/6/03	<1.0	132	521	1.85	2.92	98.1	120	39.5	9.15	200	1392	---	<1.00
	2/4/04	<1.0	296	755	2.74	7.36	205	42.7	13.1	27.1	546	2275	---	<1.00
	5/7/04	<1.00	300	774	2.57	7.02	197	38.8	11.2	22.2	528	2140	---	<1.00
	8/3/04	<0.1	291	798	---	---	155	21.5	16.7	25.8	794	1640	---	<0.10
	2/11/05	<1.00	292	879	4.61	9.47	196	47	14.5	19.1	590	2240	---	<1.00
	8/4/05	<1.00	282	922	2.86	8.17	217	48	14.7	21.1	630	1950	---	<1.00
	2/22/06	<10.0	250	1100	1.6	8.5	190	46.8	15.3	15.1	446	3860	---	<10.0
	8/24/06	<10.0	260	750	2.6	6.43	190	25.3	7.68	11.9	565	1990	-	<10.0
	2/28/07	<10.0	270	850	2.2	8.5	190	30.7	9.02	18	516	1800	---	<10.0
	8/23/07	<10.0	204	1000	1.5	9.5	190	228	80	<50	673	2330	--	204
MW-4	8/22/97	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/17/98	<2.0	510	372	--	--	136	--	--	--	--	1268	---	--
	2/7/01	<1.0	286	1200	1.7	4.7	100	248	84.7	24	506	2600	--	--
	05/03/02	<1.0	250	868	1	4.72	163	137	48.4	40.7	441	--	--	<1.00
	10/14/02	<0.1	342	381	--	--	124	9.39	2.48	38.4	405	1220	--	<0.10
Dup	10/14/02	<0.1	358	372	--	--	116	8.82	2.38	37.4	409	1260	--	<0.10
	12/27/02	<0.1	288	505	---	---	114	21.2	4.42	50.6	461	1450	---	<0.10
Dup	12/27/02	<0.1	158	115	--	--	139	55.5	23	4.94	94.4	594	--	<0.10
	2/18/03	<0.1	264	691	---	---	118	32.2	7.5	59	474	1610	---	<0.10
	5/30/03	<1.0	236	1020	<2.00	5.53	79.6	113	29.7	59.8	664	2670	---	<1.00
	8/25/03	<1.0	192	1170	<2.00	5.43	72.9	143	35	82.1	616	2935	---	<1.00
	11/7/03	<1.0	194	1620	<2.00	5.48	76.6	228	61.4	83.6	629	3035	---	<1.00
	2/5/04	<1.0	170	1730	<2.00	5.93	79	277	75.9	108	630	3380	---	<1.00
	5/6/04	<1.00	158	2150	<3.00	5.94	88.2	407	99.9	99.7	593	4090	---	<1.00
	8/3/04	<0.1	150	2730	---	---	125	632	191	124	832	6810	---	<0.10
	2/11/05	<1.00	136	4520	<1.00	5.19	127	1060	289	156	983	9030	---	<1.00
	8/4/05	<1.00	132	6580	<1.00	5.34	166	1650	375	142	1440	13200	---	<1.00
	2/23/06	<10.0	130	9100	<2.5	10	220	1510	326	141	1070	17900	---	<10.0
	8/25/06	<10.0	140	12000	<5	6.13	290	1550	364	136	1890	17500	-	<10.0
	2/28/07	<10.0	170	10000	<250	<200	<2000	1550	310	160	1520	21800	---	<10.0
	8/21/07	<10.0	167	10000	0.3	9	490	1630	443	112	3080	26000	--	167

TABLE II

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

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Standard (mg/L)				250	1.60	10.00	600.0	---	---	---	---	1000	---	---
MW-5	8/22/97	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/17/98	<2.0	360	408	--	--	151	--	--	--	--	1219	116	--
	2/7/01	<1.0	214	570	1.6	4.8	140	123	40.8	20.3	331	1500	--	--
	05/03/02	<1.0	238	335	0.96	5.36	162	37.3	11.1	27.3	287	--	--	<1.00
	10/11/02	<0.1	232	337	---	---	173	31.8	10	20.7	305	1100	---	<0.10
	12/27/02	<0.1	232	337	---	---	171	31.3	8.55	20.6	319	1210	---	<0.10
	2/18/03	<0.1	210	319	---	---	176	27.2	8.48	16.5	231	1110	---	<0.10
	6/2/03	<1.0	196	588	1.23	4.86	142	132	40.5	21.2	364	1644	---	<0.10
	8/26/03	<1.0	210	447	1.32	4.85	141	95.1	29	23.4	291	1480	---	<1.00
	11/6/03	<1.0	214	456	1.43	5.11	152	94	29.3	24.8	282	1430	---	<1.00
	2/4/04	<1.0	206	504	1.38	5.31	147	95.1	31.4	27.3	289	1410	---	<1.00
	5/7/04	<1.00	222	381	1.02	5.98	151	55.9	16.3	25.7	301	1250	---	<1.00
Dup	5/7/04	<1.00	242	330	1.04	5.75	152	50.7	14.6	27.4	292	1168	---	<1.00
	8/3/04	<0.1	229	461	---	---	155	47.9	31.3	31.1	435	968	---	<0.10
	2/11/05	<1.0	288	408	2.58	8.36	243	46.2	13.3	30.6	433	1598	---	<1.0
	8/4/05	<1.00	256	423	1.83	6.82	201	60.5	18.6	20.3	354	1334	---	<1.00
DUP1	8/4/05	<1.00	242	394	1.82	6.74	200	49.2	14.8	21.5	341	1220	---	<1.00
	2/22/06	<10.0	220	800	1.3	6.6	160	222	69.4	14	274	2670	---	<10.0
	8/24/06	<10.0	190	930	<5	5.09	140	145	47.6	13.1	295	1,280	-	<10.0
	2/28/07	<10.0	300	730	3.5	5.2	340	36.9	10.6	18.4	301	1310	---	<10.0
	8/23/07	<10.0	115	360	1.8	5.2	170	50.1	18.4	16.4	291	2500	--	115
MW-6	2/7/01	<1.0	200	1800	3.3	5.4	140	323	108	18.8	657	3800	--	--
	05/02/02	<1.0	264	503	3.68	7.04	183	24.9	7.29	17.4	475	--	---	<1.00
	10/14/02	<0.1	262	620	--	--	206	18.6	5.34	17.5	556	1670	--	<0.10
	12/27/02	36	218	620	--	--	192	21.2	6.08	13.6	584	1650	---	<0.10
	2/18/03	16	238	638	---	---	298	22.1	6.43	11.8	524	1700	---	<0.10
	6/2/03	<1.0	244	772	3.24	6.62	181	68.7	23.3	14.4	614	2040	---	<1.00
	8/26/03	<1.0	246	607	2.95	6.65	179	35.9	11.6	12.2	525	2370	---	<1.00
	11/6/03	<1.0	250	649	3.28	6.89	191	46	13.9	18.1	503	1932	---	<1.00
	2/4/04	<1.0	266	713	3.15	7.2	189	48.9	15.4	19.9	517	2210	---	<1.00
	5/7/04	<1.00	266	696	2.92	6.74	182	54.8	16.1	16	503	2095	---	<1.00
	8/3/04	<0.1	260	718	---	---	240	22.7	21.7	21.7	825	1430	---	<0.10
	2/11/05	<1.00	270	660	3.76	7.84	192	30.1	9.13	19.5	531	1774	---	<1.00
	8/4/05	<1.00	268	764	3.16	7.83	206	56.6	18.8	15.3	576	1650	---	<1.00
	2/22/06	<10.0	270	610	2.4	7.9	180	23.9	7.41	10.9	380	1570	---	<10.0
	8/24/06	<10.0	260	590	3	5.96	170	108	35	9.38	448	1,880	-	<10.0
	2/28/07	<10.0	280	530	3	7.8	170	21	6.14	12.8	397	1550	---	<10.0
	8/23/07	<10.0	265	1100	2.3	7.6	150	29.8	11.7	8.35	440	3970	--	265

TABLE II

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

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Standard (mg/L)				250	1.60	10.00	600.0	---	---	---	---	1000	---	---
MW-7	2/7/01	<1.0	238	500	3.2	4.1	100	80.3	27.3	10.4	326	1300	---	---
	05/02/02	<1.0	244	466	2.94	4.18	106	46.6	17	8.42	307	---	---	<1.00
	10/11/02	<0.1	242	408	---	---	128	39.7	13.5	6.7	316	1120	---	<0.10
	12/27/02	<0.1	232	452	---	---	109	56.2	19.2	5.82	353	1220	---	<0.10
	2/17/03	<0.1	200	603	---	---	134	90.6	30.9	5.86	339	1440	---	<0.10
	6/2/03	<1.0	242	388	3.23	4.33	115	39.5	12.5	6.16	370	1216	---	<1.00
	8/25/03	<1.0	232	367	2.77	4.07	105	39.3	12.3	7.14	309	1244	---	<1.00
	11/5/03	<1.0	240	343	3.08	4.16	117	36.6	11.4	7.67	304	1186	---	<1.00
Dup	11/5/03	<1.0	238	355	3.04	4.19	117	34.7	10.8	7.63	298	1170	---	<1.00
	2/4/04	<1.0	262	320	3.1	4.25	112	30.7	9.87	7.95	298	1138	---	<1.00
	5/6/04	<1.00	260	339	2.9	4	112	35.2	10.3	6.81	282	1172	---	<1.00
	8/3/04	<0.1	248	328	---	---	126	22.8	12.1	7.55	436	734	---	<0.10
	2/11/05	<1.00	238	332	3.76	4.65	123	31.5	9.99	7.75	296	1128	---	<1.00
	8/5/05	<1.00	240	430	3.1	4.36	144	58.2	19.2	8.43	325	1180	---	<1.00
DUP2	8/5/05	<1.00	236	387	3.14	4.3	144	38.7	12.5	6.51	315	1100	---	<1.00
	2/22/06	<10.0	290	240	2.6	3.3	120	30.6	9.98	4.89	227	1120	---	<10.0
	8/24/06	<10.0	260	230	3.1	2.97	110	23.3	7.82	2.96	245	952	-	<10.0
	2/28/07	<10.0	270	240	3.3	3.6	100	21.3	6.57	<5	230	885	---	<10.0
	8/23/07	<10.0	261	250	2.7	3.2	110	18.8	8	<5	247	2320	--	261
MW-8	2/7/01	20	240	900	3.2	6.6	160	79.4	24.5	12.7	604	2100	--	--
	05/02/02	<1.0	236	818	2.65	6.68	168	94.5	29.2	13	527	--	---	<1.00
	10/14/02	<0.1	250	842	---	---	194	52.4	20.4	10.8	597	1920	---	<0.10
	12/27/02	<0.1	233	833	---	---	173	59.8	20	8.64	627	2000	---	<0.10
	2/18/03	<0.1	213	833	---	---	185	53	17.6	7.13	489	1930	---	<0.10
	6/2/03	<1.0	244	777	3.29	6.82	173	60	18.9	9.47	650	1968	---	<1.00
	8/25/03	<1.0	244	738	2.85	6.42	159	59.4	17.3	11.4	534	1996	---	<1.00
	11/7/03	<1.0	248	722	3.27	6.65	171	58.1	17.9	12.2	525	1972	---	<1.00
	2/4/04	<1.0	254	764	3.77	7.85	161	55.2	18.2	13.2	522	2038	---	<1.00
	5/6/04	8	262	774	3.36	7.43	164	56.2	16.9	10.7	501	1968	---	<1.00
	8/4/04	<0.1	246	771	---	---	222	28.6	21.5	11	707	1530	---	<0.10
	2/11/05	<1.00	238	818	4.28	8.46	167	58.3	19	13.2	543	2080	---	<1.00
	8/5/05	<1.00	236	888	3.29	7.66	184	71.5	23.3	11.7	574	2230	---	<1.00
	2/22/06	<10.0	230	810	2.4	7.9	170	55.1	18	8.05	390	1740	---	<10.0
	8/24/06	<10.0	280	710	3.2	5.51	170	51.2	16.5	6	470	926	-	<10.0
	2/28/07	<10.0	260	740	3.3	7.3	170	68.3	20.7	8.59	381	1780	---	<10.0
	8/22/07	<10.0	259	700	3	7.4	170	49.1	18.5	5.35	449	1980	--	259

TABLE II

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

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Standard (mg/L)				250	1.60	10.00	600.0	---	---	---	---	1000	---	---
MW-9	05/01/02	<1.0	142	439	1.88	3.26	106	98.8	35.8	9.93	188	---	---	<1.00
	10/14/02	<0.1	137	443	---	---	119	88.4	33.1	10.4	216	1240	---	<0.10
	12/27/02	<0.1	124	434	---	---	120	93.8	33.8	6.22	192	1080	---	<0.10
	2/18/03	<0.1	105	461	---	---	126	99.3	34.1	5.62	200	1190	---	<0.10
	5/30/03	<1.0	122	514	1.82	3.01	102	113	37.9	7.98	240	1324	---	<1.00
	8/25/03	<1.0	114	562	1.58	2.98	95.2	120	39.2	9.45	219	1428	---	<1.00
	11/7/03	<1.0	132	468	1.68	2.86	96.2	119	39	9.18	200	1250	---	<1.00
	2/5/04	<1.0	124	610	2.32	4.18	97.7	125	41.1	10.3	221	1345	---	<1.00
Dup	2/5/04	<1.0	120	581	1.23	2.19	53.6	132	43.9	10.1	203	1325	---	<1.00
	5/5/04	<1.00	122	616	1.39	2.68	91	142	50	9.65	212	1428	---	<1.00
Dup	5/5/04	<1.00	124	599	1.43	2.72	92.2	144	46.7	9.82	223	1476	---	<1.00
	8/3/04	<0.1	110	691	---	---	115	184	62.9	10.5	279	1530	---	<0.10
	2/11/05	<1.00	98	1960	3.63	5.36	103	495	164	21.5	388	3920	---	<1.00
	8/4/05	<1.00	218	10000	1.54	5.15	224	2280	686	42.8	1390	27000	---	<1.00
	2/23/06	<10.0	110	13000	<2.5	19	430	2050	438	47.8	1450	24300	---	<10.0
	8/25/06	<10.0	260	10,000	<2.5	3.75	360	1,330	360	38.3	1,920	24,100	-	<10.0
	2/28/07	<10.0	140	8700	<0.5	4.6	430	1180	276	46.9	1510	17700	---	<10.0
	8/23/07	<10.0	157	6900	<0.1	3.7	400	934	283	<50	2290	17100	--	157
MW-10	10/14/02	<0.1	204	71	--	--	145	42.3	22.8	7.77	87.3	593	--	<0.10
	12/27/02	<0.1	196	70	---	---	149	68.4	23.1	7.69	92.8	529	---	<0.10
	2/18/03	<0.1	184	65	---	---	159	67.1	22.8	3.04	90.7	552	---	<0.10
	6/2/03	<1.0	198	55.7	1.6	4.31	134	75.7	22.4	4.95	80.4	624	---	<1.00
	8/26/03	<1.0	188	56.1	1.58	4.1	125	70.6	23.4	6.29	72.3	688	---	<1.00
	11/7/03	<1.0	200	70.9	1.69	4.19	131	70.2	23.5	5.8	69.3	638	---	<1.00
	2/5/04	<1.0	196	101	1.68	4.22	121	75.8	25.7	6.29	73.8	674	---	<1.00
	5/7/04	<1.00	174	186	1.4	3.8	111	92.9	30.1	6.34	78.3	736	---	<1.00
	8/3/04	<0.1	144	328	---	---	118	106	49.5	7.7	106	796	---	<0.10
	2/11/05	<1.0	112	1110	3.44	5.86	93.1	357	115	14	157	2295	---	<1.00
	8/4/05	<1.00	112	1500	1.32	4.02	94.5	419	139	11.5	186	3420	---	<1.00
	2/22/06	<10.0	89	2000	<0.50	6.5	98	520	158	13.8	180	6180	---	<10.0
	8/25/06	<10.0	110	2,200	<2.5	3.24	97	660	201	13.7	253	7,520	---	<10.0
	2/28/07	<10.0	360	2200	0.8	4.2	100	601	168	16.9	224	6140	---	<10.0
	8/22/07	<10.0	74.9	2200	0.5	6	110	585	189	<50	270	7270	--	74.9

TABLE II

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

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Standard (mg/L)				250	1.60	10.00	600.0	---	---	---	---	1000	---	---
MW-11	4/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/11/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/26/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/17/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/29/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/22/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/5/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/3/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/5/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/2/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/23/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/9/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/4/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/22/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/28/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/22/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12	05/02/02	<1.0	88	1120	1.37	4.09	45.3	431	153	17.7	123	--	---	<1.00
	10/11/02	<0.1	93	1370	---	---	47.5	438	161	15.4	127	2860	---	<0.10
	12/27/02	<0.1	78	1520	---	---	49.3	507	181	14.1	151	3460	---	<0.10
	2/17/03	<0.1	68	1530	---	---	52.4	461	170	13.3	136	3980	---	<0.10
	6/2/03	<1.0	72	1380	<2.00	5.06	45.8	491	157	15.3	151	3250	---	<1.00
	8/26/03	<1.0	66	1550	<2.00	4.94	45.9	525	178	14.8	156	3855	---	<1.00
	11/6/03	<1.0	80	1610	2.25	4.81	50.3	568	189	20.1	159	3860	---	<1.00
	2/5/04	<1.0	74	1680	2.19	5.13	46	525	181	21.6	160	2910	---	<1.00
	5/7/04	<1.0	70	1620	<3.00	5.13	53.6	541	178	18.5	152	3085	---	<1.0
	8/3/04	<0.1	66	1680	---	---	55.2	680	252	31.1	211	4300	---	<0.10
	2/11/05	<1.00	82	1770	2.04	6.08	47.7	503	176	17.8	138	3080	---	<1.00
	8/5/05	<1.00	72	1800	1.66	4.69	48.6	547	194	15.2	149	4180	---	<1.00
	2/22/06	<10.0	73	1700	0.7	6.7	48	415	135	14.9	129	4890	---	<10.0
	8/24/06	<10.0	87	1,700	0.93	3.06	48	463	157	12.2	140	6,190	---	<10.0
	2/28/07	<10.0	95	1900	1.3	6.9	65	521	154	16.1	155	5840	---	<10.0
	8/22/07	<10.0	108	1800	0.7	6	52	476	151	11.9	143	6470	--	108

TABLE II

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

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Standard (mg/L)				250	1.60	10.00	600.0	---	---	---	---	1000	---	---
MW-13	05/02/02	<1.0	122	277	2.31	4.38	131	125	44.3	10.2	65.6	--	---	<1.00
	10/11/02	<0.1	115	337	---	---	124	135	46.5	9.47	88.6	1210	---	<0.10
	12/27/02	<0.1	104	408	---	---	132	160	55.2	9.71	84.5	1260	---	<0.10
	2/17/03	<0.1	80	443	---	---	144	152	54.9	8.88	108	1370	---	<0.10
	6/2/03	<1.0	102	421	2.27	4.43	122	153	56	11	90.9	1260	---	<1.00
	8/26/03	<1.0	92	500	2.1	4.23	115	179	66	12	95.6	1360	---	<1.00
	11/6/03	<1.0	98	492	2.25	4.42	125	193	68.6	14.3	91.5	1434	---	<1.00
	2/5/04	<1.0	96	543	2.3	4.56	120	179	65.6	15.4	98.3	1220	---	<1.00
	5/7/04	<1.00	98	496	2.04	4.14	116	184	62.2	12.8	89.3	1278	---	<1.00
	8/3/04	<0.1	95	532	---	---	116	225	77.3	15	111	1410	---	<0.10
	2/11/05	<1.00	100	491	2.19	5.36	117	171	61.7	13.3	92.3	1260	---	<1.00
	8/5/05	<1.00	96	759	2.29	5.11	125	217	70.8	12.7	103	1550	---	<1.00
	2/22/06	<10.0	89	590	1.7	4.8	120	177	61.2	11.5	91.8	2090	---	<10.0
	8/24/06	<10.0	150	760	<2.5	3.58	120	228	78.7	10.9	107	2,590	---	<10.0
	2/28/07	<10.0	90	880	2	5.2	140	262	84.8	14.6	113	3060	---	<10.0
	8/22/07	<10.0	129	980	1.6	4	130	279	94.7	11.6	122	3480	---	129
MW-14	11/5/03	<1.0	100	3500	<4.00	6.58	525	951	324	45.3	732	7315	---	<1.00
	2/4/04	<1.0	74	3910	<3.00	6.01	559	966	320	46.1	840	7720	---	<1.0
	5/6/04	<1.00	86	3970	<4.00	5.54	594	997	350	42.5	836	9560	---	<1.00
	8/4/04	<0.1	78	4430	---	---	895	1350	455	60.3	1220	11500	---	<0.10
	2/11/05	<1.00	80	6120	3.5	5.99	752	1180	370	56.8	1250	8860	---	<1.00
	8/5/05	<1.00	86	6480	1.84	5.04	882	1230	400	46.3	1440	9570	---	<1.00
	2/22/06	<10.0	81	5300	<0.50	11	700	914	253	34.1	885	12100	---	<10.0
Dup	2/22/06	<10.0	82	5000	<0.50	<40	690	916	253	34	884	11600	---	<10.0
	8/24/06	<10.0	85	5,600	<5	3.74	690	942	266	27.8	1370	11,300	---	<10.0
	2/28/07	<10.0	95	5200	<0.5	4.3	620	758	193	36.9	1060	12400	---	<10.0
	8/22/07	<10.0	92.2	4700	0.3	3.9	610	823	249	<50	1420	11700	---	92.2
MW-15	11/5/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/3/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/5/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/2/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/23/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/9/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/4/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/22/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/28/07	<10.0	170	90	2.2	2.2	71	57.3	19.8	6.03	52.9	575	---	<10.0
	8/22/07	<10.0	146	150	1.8	2.1	65	66.4	24.1	5.98	60.2	652	---	146

TABLE II

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

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Standard (mg/L)				250	1.60	10.00	600.0	---	---	---	---	1000	---	---
MW-16	11/6/03	<1.0	188	863	1.79	5.65	150	183	55.6	14.2	372	2100	---	<1.00
	2/4/04	<1.0	174	937	2.19	6.59	123	235	76.8	15.2	299	2200	---	<1.00
	5/7/04	<1.00	172	953	<2.00	5.91	123	240	73.8	12.7	313	2280	---	<1.00
	8/3/04	<0.1	158	1010	---	---	159	250	87.5	13.5	382	2560	---	<0.10
	2/11/05	<1.00	180	944	2.4	7.24	151	198	62.4	10.9	344	2260	---	<1.00
	8/5/05	<1.00	230	568	1.99	5.14	146	134	46.9	8.7	249	1420	---	<1.00
	2/22/06	<10.0	180	590	1.3	5.2	110	120	39.1	7.17	207	1770	---	<10.0
	8/24/06	<10.0	490	500	<2.5	3.17	89	123	40.6	4.93	207	1,460	---	<10.0
	2/28/07	<10.0	220	410	1.6	4.6	110	71.8	22.2	6.46	228	1200	---	<10.0
	8/22/07	<10.0	296	360	1.4	3.6	87	83	29.9	<5	215	1280	---	296
MW-17	11/5/03	<1.0	154	587	2.06	3.85	104	177	58.2	12.5	184	1556	---	<1.00
	2/4/04	<1.0	158	650	2.01	3.93	93.1	158	52.5	12.2	205	1416	---	<1.00
Dup	2/4/04	<1.0	172	557	2.08	4.03	95.7	162	52.6	12.1	204	1496	---	<1.00
	5/6/04	<1.00	162	604	1.77	3.57	91.2	182	57.7	10.9	176	1416	---	<1.00
	8/4/04	<0.1	141	638	---	---	132	207	81	12.7	221	1660	---	<0.10
	2/11/05	<1.00	174	572	2.94	4.61	101	134	45.9	11	229	1470	---	<1.00
	8/5/05	<1.00	172	626	2.16	4.37	106	169	53.5	9.5	220	1750	---	<1.00
	2/22/06	<10.0	150	580	1.5	4	97	123	40.1	8.04	187	1810	---	<10.0
	8/24/2006	<10.0	200	560	<2.5	3.06	100	140	46.1	5.94	178	1,700	---	<10.0
DUP	8/24/06	<10.0	320	530	<2.5	2.94	100	135	46.5	5.76	175	1,700	---	<10.0
	2/28/07	<10.0	180	530	2.2	4.1	130	94.9	30.3	7.06	213	1240	---	<10.0
	8/22/07	<10.0	177	550	1.8	4.3	130	113	41.4	5.97	200	1310	---	177
MW-18	11/23/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/9/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/4/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/22/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/28/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19	11/23/04	<1.00	86	7000	<10.0	17.3	582	2020	678	52.4	1590	12900	---	<1.00
	2/11/05	<1.00	92	5200	1.3	5.12	502	1340	522	61.3	974	22000	---	<1.00
	8/5/05	<1.00	82	4850	1.76	4.7	450	1200	422	50.6	793	9750	---	<1.00
DUP3	8/5/05	<1.00	80	5170	1.87	4.83	462	1270	463	51	814	15800	---	<1.00
	2/22/06	<10.0	75	3900	<0.50	8.9	400	870	271	32.6	464	8830	---	<10.0
	8/24/06	<10.0	250	3,900	<5	3.01	390	902	293	28.8	582	10,900	---	<10.0
	2/28/07	<10.0	92	5500	<0.5	4.4	600	901	247	37	658	12700	---	<10.0
	8/22/07	<10.0	82.6	440	0.3	3.1	440	1040	367	<50	686	11600	---	82.6
MW-20	11/23/04	<1.00	82	606	2.49	2.9	79.7	176	62.6	13.6	104	985	---	<1.00
	2/11/05	<1.00	88	745	1.86	4.34	73.8	227	77.5	15	117	1480	---	<1.00
	8/5/05	<1.00	80	1170	1.76	4.55	84.5	326	116	14.7	162	2640	---	<1.00
	2/22/06	<10.0	110	1100	0.98	5.5	83	295	103	13.5	145	3000	---	<10.0
	8/24/06	<10.0	1,100	1,100	<2.5	3.39	84	288	101	11.2	160	3,590	---	<10.0
	2/28/07	<10.0	110	1300	1.4	5.1	95	332	107	14.6	165	4500	---	<10.0

TABLE II

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

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Standard (mg/L)				250	1.60	10.00	600.0	---	---	---	---	1000	---	---
	8/22/2007	<10.0	419	1400	0.8	5.7	100	346	119	11.9	203	4100	---	419
MW-21	11/28/07	1.14	415	482			128	173	64.4	18.3	115	1440	---	1.14
Dup	11/28/07	1.14	380	452			127	167	62.0	16.9	115	1430	---	1.14
MW-22	11/28/07	1.14	2950	1020			169	286	96.7	12.1	229	2330	---	1.14

TABLE II

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

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Standard (mg/L)				250	1.60	10.00	600.0	---	---	---	---	1000	---	---
West	8/22/97	--	--	250	--	--	--	--	--	--	--	--	--	--
	2/17/98	<2.0	370	237	--	--	134	--	--	--	--	975	96	--
	2/7/01	<1.0	236	340	2	4.5	120	39.7	12.5	33.2	264	1000	--	--
	05/03/02	<1.0	214	329	1.39	4.36	116	41.9	11.9	40.9	234	--	---	<1.00
	10/14/02	<0.1	210	337	--	--	127	39.3	9.37	35.6	290	986	--	<0.10
	12/27/02	<0.1	198	337	---	---	134	43.1	12.5	33.2	263	997	--	<0.10
	2/18/03	<0.1	190	354	---	---	141	33.6	9.78	23.9	152	1010	---	<0.10
	5/30/03	<1.0	202	353	1.54	4.16	116	48.4	13.3	35.1	283	1050	---	<1.00
	8/25/03	<1.0	194	351	1.5	4.08	112	49.4	13.2	38.4	265	1066	---	<1.00
	11/7/03	<1.0	204	327	1.65	3.98	115	51.3	13.8	38.8	235	1100	---	<1.00
	2/5/04	<1.0	196	345	1.66	4.09	112	51.6	14.6	41.4	235	1074	---	<1.00
	5/6/04	<1.00	200	339	1.44	3.83	115	53.6	14	37.3	241	1040	---	<1.00
	8/3/04	<0.1	186	337	---	---	147	41.7	20.1	49.1	297	717	---	<0.10
	2/11/05	<1.00	186	417	2.44	4.47	117	75.9	21.4	43.9	241	1128	---	<1.00
	8/4/05	<1.00	150	526	1.54	4.16	129	87	23.6	42.2	280	1104	---	<1.00
	2/23/06	<10.0	150	800	0.76	4	110	149	44.3	47.1	257	2390	---	<10.0
	8/25/06	<10.0	150	1,500	<2.5	2.78	97	315	87.6	67.7	400	4,840	---	<10.0
	2/28/07	<10.0	120	2500	0.86	6.6	120	515	130	98.7	410	7600	---	<10.0
	8/21/07	<10.0	99.8	3700	0.2	4.31	180	844	251	72.7	665	12700	---	99.8
Southwest	8/22/97	--	--	3300	--	--	--	---	--	--	--	--	--	--
	2/17/98	<2.0	420	2170	--	--	255	--	--	--	--	4719	712	--
	2/7/01	<1.0	326	1900	2.2	5	350	197	59.1	---	1078	4100	--	--
	05/03/02	<1.0	272	1490	1.38	4.51	301	200	65	46.4	744	--	--	<1.00
	10/14/02	<0.1	330	1330	--	--	360	110	32.5	61.5	929	3020	--	<0.10
	12/27/02	<0.1	308	1280	---	---	319	107	31.9	66.8	980	3040	--	<0.10
	2/18/03	<0.1	289	1290	---	---	300	104	31.3	63	918	2910	---	<0.10
Dup	2/18/03	<0.1	298	1310	---	---	299	108	32.2	58.3	812	3040	---	<0.10
	6/2/03	<1.0	304	1420	2.34	5.83	282	161	45.7	49.1	935	4070	---	<1.00
Dup	6/2/03	<1.0	290	1370	2.12	5.65	287	169	54.5	45	899	3420	---	<1.00
	8/25/03	<1.0	310	1190	2.25	6.1	272	117	33.6	49.7	774	3205	---	<1.00
Dup	8/25/03	<1.0	200	1260	<2.00	5.61	75.5	159	41.8	79	591	3270	---	<1.00
	11/7/03	<1.0	300	1240	2.29	5.77	255	129	35.4	48.5	727	3275	---	<1.00
	2/5/04	<1.0	300	1240	2.37	6.17	238	109	33.1	52.2	716	2860	---	<1.00
	5/6/04	<1.00	294	1310	<3.00	6.38	231	158	30.8	53.2	780	3180	---	<1.00
	8/3/04	<0.1	276	1400	---	---	264	75.1	45.2	82.4	1660	2550	---	<0.10
	2/11/05	<1.00	260	2920	1.33	9.61	230	323	94.5	84.4	1240	5575	---	<1.00
	8/4/05	<1.00	226	5290	1.55	11.7	325	691	201	101	1980	12000	---	<1.00
	2/23/06	<10.0	300	3000	<2.5	11	450	373	108	77.1	896	6300	---	<10.0
	8/25/06	<10.0	300	3,100	<5.0	5.99	600	415	117	74.9	1240	7,600	---	<10.0
	2/28/07	<10.0	310	4500	0.51	8.8	670	511	130	93.7	994	9120	---	<10.0
	8/21/07	<10.0	265	5500	0.1	11.7	860	879	242	82.6	2040	14900	---	265

TABLE II

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

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Standard (mg/L)				250	1.60	10.00	600.0	---	---	---	---	1000	---	---
RW-1	10/20/00	<1.0	330	1,500	1.7	5.2	330	107	29.6	50	843	3200	--	--
	10/14/02	<0.1	327	1150	--	--	340	60.3	25.5	64.3	820	2720	--	<0.10
	12/27/02	<0.1	294	1300	--	--	330	123	40.3	56.8	933	3190	--	<0.10
	2/18/03	<0.1	300	1150	---	---	316	79.7	25.7	53	721	2690	---	<0.10
	6/2/03	<1.0	276	1500	2.05	5.34	275	194	67.21	40.8	923	4070	---	<1.00
	8/25/03	<1.0	298	1190	2.01	6.15	278	117	32.7	46.1	705	2940	---	<1.00
	11/7/03	<1.0	298	1300	2.13	5.56	266	166	48.1	51.7	106	3240	---	<1.00
	2/5/04	<1.0	292	1270	2.22	5.92	246	148	44.7	53.8	704	2780	---	<1.00
	5/6/04	<1.00	310	1100	<3.00	6.62	235	104	28.3	53.8	635	2840	---	<1.00
Dup	5/6/04	<1.00	288	1040	<3.00	6.64	243	90	24.1	44.5	642	2705	---	<1.00
	8/4/04	<0.1	284	1120	---	---	290	44.8	33	86.9	785	2250	---	<0.10
Dup	8/4/04	<0.1	288	1130	---	---	274	45	31.6	84	961	2550	---	<0.10
	2/11/05	<1.00	262	1730	3.59	8.93	217	172	51.5	84	910	3995	---	<1.00
Dup	2/11/05	<1.00	268	1690	2	8.59	224	159	46.4	81	813	3170	---	<1.00
	8/4/05	<1.00	252	2470	1.26	5.8	188	262	76.1	87.5	1090	5120	---	<1.00
	2/23/06	<10.0	290	2400	<2.5	8.9	350	234	67.6	70.4	762	4680	---	<10.0
	8/25/06	<10.0	290	2300	<5	4.41	440	281	77.3	68.5	1040	5610	---	<10.0
DUP	8/25/06	<10.0	300	2,300	<5	4.6	450	272	77.3	67.1	1030	5,570	---	<10.0
	2/28/07	<10.0	300	3100	<0.5	3.5	590	353	97.7	82.2	848	7400	---	<10.0
Dup	2/28/07	<10.0	290	3200	<0.5	3.5	600	416	115	83.4	878	7280	---	<10.0
	8/21/07	<10.0	265	4100	0.3	3.54	620	656	193	72.6	1640	11300	---	265
Dup	8/21/07	<10.0	263	4100	0.1	3.38	600	655	192	72.5	1630	11400	---	263
WW-1	05/01/02	<1.0	172	97.2	1.64	4.05	137	51.4	23.4	8.23	84.9	---	---	<1.00
	10/10/02	<0.1	168	106	---	---	124	52.7	22.2	9.99	106	605	---	<0.10
	12/27/02	<0.1	157	111	--	--	134	55	22.5	5.3	96	572	--	<0.10
	2/18/03	<0.1	152	115	---	---	137	53.8	22.1	6.38	93.5	601	---	<0.10
	6/2/03	<1.0	154	127	1.69	3.77	119	59.5	24.1	7.14	118	621	---	<1.00
	8/25/03	<1.0	148	136	1.7	3.72	111	63	24	8.43	104	652	---	<1.00
	11/7/03	<1.0	156	149	1.8	3.62	111	62.3	24.4	8.3	95.5	669	---	<1.00
	2/4/04	<1.0	156	185	1.81	3.79	102	68.2	25.5	8.7	92.4	709	---	<1.00
	5/5/04	<1.00	148	204	1.54	3.48	99.7	71.9	26.5	8.25	120	695	---	<1.00
	8/4/04	<0.1	132	222	---	---	114	92.3	37.9	9.89	139	471	---	<0.10
	8/4/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/23/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/1/07	<10	130	360	1.5	3.2	77	101	30.7	5.94	103	1060	---	<10.0
	8/21/07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:

1. mg/L: Milligrams per liter
2. <: Concentration below test method detection limit
3. - -: No data available
4. RW: Recovery well
5. All analyses prior to 10/14/02 conducted by TraceAnalysis, Inc., Lubbock, TX
6. Analyses from 10/14/02 conducted by Environmental Lab of Texas, Odessa, TX
7. Analyses from 5/30/03 and following conducted by Trace Analysis Inc., Lubbock, TX

TABLE II

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

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
NMWQCC Standard (mg/L)				250	1.60	10.00	600.0	---	---	---	---	1000	---	---

8. Analyses from 8/24/06 and 8/25/06, conducted by Pace Analytical, St. Rose, LA and Greenbay, WI Laboratories
9. Highlight: Result exceeds NMWQCC standard
10. WW: Water well
11. NS: Not sampled
12. Bold indicates detection above method detection limit

APPENDIX A

NEW MEXICO OFFICE OF THE STATE ENGINEER APPLICATION FOR PERMIT
(#CP 00886)

John R. D Antonio, Jr., P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 172265
File Nbr: CP 00886

Sep. 09, 2004

MARK LARSON
TEXACO EXPLORATION & PROD. INC
P.O. BOX 730
HOBBS, NM 88240-0730

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 09/30/2006. Proof of Completion of Well forms shall be mailed upon request.

Your rights under this permit will expire on 09/30/2006, 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,

Johnny R. Hernandez
(505)622-6467

Enclosure
cc: Santa Fe Office

ronappcw

NEW MEXICO STATE ENGINEER OFFICE
APPLICATION TO APPROPRIATE

SPECIFIC CONDITIONS OF APPROVAL

1B Depth of the well shall not exceed the thickness of the Ogallala formation.

5B A totalizing meter shall be installed before the first branch of the discharge line from the well and the installation shall be acceptable to the State Engineer; the Engineer shall be advised of the make, model, serial number, date of installation, and initial reading of the meter prior to appropriation of water; pumping records shall be submitted to the District Supervisor on or before the 10th of Jan., April, July, and Oct. of each year for the 3 preceeding calendar months.

7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

C Driller's well record must be filed with the State Engineer within 10 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.

PCW The Point of Diversion CP 00886 must be completed and the Proof of Completion of Works filed on or before 09/30/2006.

This well shall be located at least 660 feet from all water wells of other ownership.

1. This application is approved as follows:

PERMIT NO: CP-886

SOURCE: Shallow Ground Water

POINT OF DIVERSION:
SW1/4SE1/4 Sec. 35, Twp 24S, Rge 37E, NMPM

PURPOSE OF USE: Environmental Remediation

PLACE OF USE:
SW1/4SE1/4 Sec. 35, Twp 24S, Rge 37E, NMPM

AMOUNT OF WATER:
Up to 6.5 acre-feet per annum for Environmental Remediation purposes.

Revised August 1967

IMPORTANT–READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM

APPLICATION FOR PERMIT

2-09704
75.

To ~~Appropriate~~ Divert the Underground Waters of the State of New Mexico

Date Received 11-9-99 File No. CP-886

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 SW ¼ SE ¼ ¼, Section 35 Township 24 South Range 37 East N.M.P.M., or Tract No. of Map No. of the Capitan District, on land owned by Joyce Marie Willis et.ux.
4. Description of well: name of driller RW-1, Scarborough Drilling, Inc., Lamesa, Texas; Outside Diameter of casing 6 inches; Approximate depth to be drilled 73 feet;
5. Quantity of water to be appropriated and beneficially used 6.50 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 well.

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: [signature]

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

[signature]
Notary Public

Fil 172265

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 _____ 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 September 30, 2006 ,XX

Proof of application of water to beneficial use shall be filed on or before _____ ,XX.

Witness my hand and seal this 9th day of September , A.D.XXX 2004 .

John R. D'Antonio, Jr., P.E., State Engineer

By: _____

Art Mason, District II Supervisor

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.

APPENDIX B

NMOCD CORRESPONDENCE DATED FEBRUARY 2, 1999

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

February 2, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z-274-520-612

Mr. Rodney Bailey
Texaco E&P Inc.
205 E. Bender
Hobbs, New Mexico 88240

RE: G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY
LEA COUNTY, NEW MEXICO

Dear Mr. Bailey:

The New Mexico Oil Conservation Division (OCD) has reviewed Texaco Exploration & Development's (Texaco) November 18, 1998 "WORK PLAN FOR PLUME DELINEATION AND MODIFICATION TO PROPOSED GROUNDWATER MONITORING SCHEDULE, TEXACO EXPLORATION AND PRODUCTION, INC., G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY, LEA COUNTY, NEW MEXICO". This document which was submitted on behalf of Texaco by their consultant Highlander Environmental Corp. contains the Texaco's proposed work plan for additional investigation of the extent of ground water contamination related to the G.L. Irwin "A&B" Federal NCT-2 Tank Battery located in Unit O, Section 35, T24S, R37E NMPM, Lea County, New Mexico. The document also contains Texaco's proposed modifications to the site ground water monitoring plan.

The above referenced investigation work plan and proposed ground water monitoring plan modifications are **approved** with the following conditions:

1. Texaco will complete the new monitor wells as follows:

   a. An appropriately sized gravel pack will be set in the annulus around the well screen from the bottom of the hole to 2-3 feet above the top of the well screen.

b. A 2-3 foot bentonite plug will be placed above the gravel pack.

c. The remainder of the hole will be grouted to the surface with cement containing 3 - 5% bentonite.

d. A concrete pad and locking well cover will be placed at the surface.

e. The well will be developed after construction using EPA approved procedures.

2. No less than 48 hours after the wells are developed, ground water from all monitor wells at each site will be purged, sampled and analyzed for concentrations of major cations and anions, total dissolved solids (TDS) EPA approved methods and quality assurance/quality control (QA/QC).

3 All wastes generated during the investigation will be disposed of at an OCD approved facility.

4. Texaco will submit the results of the additional investigations to the OCD in the annual report. The report will include the following investigative information:

a. A description of the investigation activities which occurred including conclusions and recommendations.

b. A geologic/lithologic log and well completion diagram for each monitor well.

c. A water table map showing the location of the pit, monitor wells, recovery wells and any other pertinent site features as well as the direction and magnitude of the hydraulic gradient created using the water table elevation from each monitor well.

d. Summary tables of all past and present ground water quality sampling results and copies of all recent laboratory analytical data sheets and associated QA/QC data.

e. The disposition of all wastes generated.

Please be advised that OCD approval does not relieve Texaco of liability should the investigation actions fail to adequately define the extent of contamination related to Texaco's activities, or if contamination exists which is outside the scope of the work plan. In addition, OCD approval does not relieve Texaco of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions, please contact me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrologist
Environmental Bureau

xc: Chris Williams, OCD Hobbs District Office
Mark J. Larson, Highlander Environmental Corp.

APPENDIX C

CERTIFIED LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Pace Analytical®
New Orleans Laboratory

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

September 17, 2007

James Ornelas
CRA MIDLAND
2135 S. Loop 250 W.
Midland, TX 79701

RE: Project: 2073027
RE: Project ID: G.L. ERWIN/039124

Dear James Ornelas:

Enclosed are the analytical results for sample(s) received by the laboratory on August 22, 2007. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Cindy Olavesen

Cindy Olavesen

ACCREDITED IN ACCORDANCE WITH nelac

REPORT OF LABORATORY ANALYSIS

Pace Analytical
New Orleans Laboratory

Sample Cross Reference Report

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client: CRA MIDLAND

Project: G.L. ERWIN/039124

Project No.: 2073027

Client Sample ID	Lab ID	Matrix	Collection Date/Time		Received Date/Time	
MW482107	20546693	Water	08/21/2007	12:48	08/22/2007	10:00
RW182107	20546710	Water	08/21/2007	13:10	08/22/2007	10:00
MWSW82107	20546716	Water	08/21/2007	12:45	08/22/2007	10:00
MWW82107	20546722	Water	08/21/2007	13:25	08/22/2007	10:00
DUP1	20546725	Water	08/21/2007	12:48	08/22/2007	10:00

9/17/2007 16:17:26

New Orleans Laboratory Certifications
Louisiana Dept. of Environmental Quality (LELAP) - 02006
Arkansas Dept. of Environmental Quality - 88-0681
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023
Florida Dept. of Health (NELAC) - E87595
Kansas Dept. of Health Environment - E-10266
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270
Pennsylvania DEP (NELAC) 68-04202

Pace Analytical
New Orleans Laboratory

Project Narrative

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Project: 2073027

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Pace Analytical®
New Orleans Laboratory

Project Narrative

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Project: 2073027

Analytical Method	Batch	Sample used for QC
EPA 6010	90543	Batch sample from another client
SM 2540C	90443	Batch sample from another client
SM 2320B	90476	Batch sample from another client
SM 4500-NO3 F	90389	Batch sample from another client
SM 4500-NO3 F	90682	Batch sample from another client

9/17/2007 16:17:58

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from the a different client was used.

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Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: MW482107 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20546693 **Project No.:** 2073027

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/21/07 **Received:** 08/22/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90543	10	1630000	D1	ug/L	50000	28-Aug-07	04-Sep-07 08:08	MHB1	
Magnesium, Dissolved	EPA 6010	90543	10	443000	D2	ug/L	50000	28-Aug-07	04-Sep-07 08:08	MHB1	
Potassium, Dissolved	EPA 6010	90543	10	112000	D2	ug/L	50000	28-Aug-07	04-Sep-07 08:08	MHB1	
Sodium, Dissolved	EPA 6010	90543	10	3080000	D1	ug/L	50000	28-Aug-07	04-Sep-07 08:08	MHB1	

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

9/17/2007 16:18:01

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Kansas Dept. of Health_Environment - E-10266
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270
Pennsylvania DEP (NELAC) 68-04202

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Phone: 504.469.0333
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LELAP # 02006

Client ID: RW182107 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20546710 **Project No.:** 2073027

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/21/07 **Received:** 08/22/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90543	10	656000	D1	ug/L	50000	28-Aug-07	04-Sep-07 08:14	MHB1	
Magnesium, Dissolved	EPA 6010	90543	10	193000	D2	ug/L	50000	28-Aug-07	04-Sep-07 08:14	MHB1	
Potassium, Dissolved	EPA 6010	90543	10	72600	D2	ug/L	50000	28-Aug-07	04-Sep-07 08:14	MHB1	
Sodium, Dissolved	EPA 6010	90543	10	1640000	D1	ug/L	50000	28-Aug-07	04-Sep-07 08:14	MHB1	

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
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DF denotes Dilution Factor of final sample.
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
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Phone: 504.469.0333
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LELAP # 02006

Client ID: MWSW82107 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20546716 **Project No.:** 2073027

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/21/07 **Received:** 08/22/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90543	10	879000	D1	ug/L	50000	28-Aug-07	04-Sep-07 08:19	MHB1	
Magnesium, Dissolved	EPA 6010	90543	10	242000	D2	ug/L	50000	28-Aug-07	04-Sep-07 08:19	MHB1	
Potassium, Dissolved	EPA 6010	90543	10	82600	D2	ug/L	50000	28-Aug-07	04-Sep-07 08:19	MHB1	
Sodium, Dissolved	EPA 6010	90543	10	2040000	D1	ug/L	50000	28-Aug-07	04-Sep-07 08:19	MHB1	

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
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DF denotes Dilution Factor of final sample.
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
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(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

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Phone: 504.469.0333
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LELAP # 02006

Client ID: MWW82107 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20546722 **Project No.:** 2073027

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/21/07 **Received:** 08/22/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90543	10	844000	D1	ug/L	50000	28-Aug-07	04-Sep-07 08:24	MHB1	
Magnesium, Dissolved	EPA 6010	90543	10	251000	D2	ug/L	50000	28-Aug-07	04-Sep-07 08:24	MHB1	
Potassium, Dissolved	EPA 6010	90543	10	72700	D2	ug/L	50000	28-Aug-07	04-Sep-07 08:24	MHB1	
Sodium, Dissolved	EPA 6010	90543	10	665000	D1	ug/L	50000	28-Aug-07	04-Sep-07 08:24	MHB1	

4 parameter(s) reported

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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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Phone: 504.469.0333
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LELAP # 02006

Client ID: DUP1 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20546725 **Project No.:** 2073027

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/21/07 **Received:** 08/22/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90543	10	655000	D1	ug/L	50000	28-Aug-07	04-Sep-07 08:29	MHB1	
Magnesium, Dissolved	EPA 6010	90543	10	192000	D2	ug/L	50000	28-Aug-07	04-Sep-07 08:29	MHB1	
Potassium, Dissolved	EPA 6010	90543	10	72500	D2	ug/L	50000	28-Aug-07	04-Sep-07 08:29	MHB1	
Sodium, Dissolved	EPA 6010	90543	10	1630000	D1	ug/L	50000	28-Aug-07	04-Sep-07 08:29	MHB1	

4 parameter(s) reported

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For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
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Report of Laboratory Analysis

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Phone: 504.469.0333
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LELAP # 02006

Client ID: MW482107 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20546693 **Project No.:** 2073027

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/21/07 **Received:** 08/22/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	167.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Total	SM 2320B	90476	1	167.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	167.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Nitrogen, Nitrate	SM 4500-NO3	90782	1	9.00		mg/L	0.100	29-Aug-07	29-Aug-07 17:03		
Nitrogen, Nitrite	SM 4500-NO3	90389	1	ND		mg/L	0.100	22-Aug-07	22-Aug-07 15:31	TAE	
Total Dissolved Solids	SM 2540C	90443	1	26000		mg/L	4.00	23-Aug-07	23-Aug-07 13:30	SMS2	

7 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
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For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
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Phone: 504.469.0333
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LELAP # 02006

Client ID: RW182107 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20546710 **Project No.:** 2073027

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/21/07 **Received:** 08/22/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	265.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity, Total	SM 2320B	90476	1	265.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	265.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Nitrogen, Nitrate	SM 4500-NO3	90782	1	3.54		mg/L	0.100	29-Aug-07	29-Aug-07	17:04	
Nitrogen, Nitrite	SM 4500-NO3	90389	1	ND		mg/L	0.100	22-Aug-07	22-Aug-07	15:31 TAE	
Total Dissolved Solids	SM 2540C	90443	1	11300		mg/L	4.00	23-Aug-07	23-Aug-07	13:30 SMS2	

7 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
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Report of Laboratory Analysis

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Phone: 504.469.0333
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LELAP # 02006

Client ID: MWSW82107 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20546716 **Project No.:** 2073027

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/21/07 **Received:** 08/22/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	265.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Total	SM 2320B	90476	1	265.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	265.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Nitrogen, Nitrate	SM 4500-NO3	90782	1	11.7		mg/L	0.100	29-Aug-07	29-Aug-07 17:05		
Nitrogen, Nitrite	SM 4500-NO3	90389	1	ND		mg/L	0.100	22-Aug-07	22-Aug-07 15:31	TAE	
Total Dissolved Solids	SM 2540C	90443	1	14900		mg/L	4.00	23-Aug-07	23-Aug-07 13:30	SMS2	

7 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
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Report of Laboratory Analysis

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Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: MWW82107 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20546722 **Project No.:** 2073027

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/21/07 **Received:** 08/22/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	99.8		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Total	SM 2320B	90476	1	99.8		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	99.8		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Nitrogen, Nitrate	SM 4500-NO3	90782	1	4.31		mg/L	0.100	29-Aug-07	29-Aug-07 17:06		
Nitrogen, Nitrite	SM 4500-NO3	90389	1	ND		mg/L	0.100	22-Aug-07	22-Aug-07 15:31	TAE	
Total Dissolved Solids	SM 2540C	90443	1	12700		mg/L	4.00	23-Aug-07	23-Aug-07 13:30	SMS2	

7 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
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Report of Laboratory Analysis

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St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: DUP1 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20546725 **Project No.:** 2073027

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/21/07 **Received:** 08/22/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	263.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity, Total	SM 2320B	90476	1	263.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	263.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Nitrogen, Nitrate	SM 4500-NO3	90782	1	3.38		mg/L	0.100	29-Aug-07	29-Aug-07	17:07	
Nitrogen, Nitrite	SM 4500-NO3	90389	1	ND		mg/L	0.100	22-Aug-07	22-Aug-07	15:31 TAE	
Total Dissolved Solids	SM 2540C	90443	1	11400		mg/L	4.00	23-Aug-07	23-Aug-07	13:30 SMS2	

7 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
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For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
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New Orleans Laboratory

Report of Quality Control

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Phone: 504.469.0333
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LELAP # 02006

Project: 2073027

Parameter	Batch	Blank	ARL	Units	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	MSD RPD	DUP RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Calcium, Diss	90543	ND	000	ug/L	10000	8789	88	10000	61100.00	164000	163900	29 *	28 *	0		73 - 115	75 - 125	20	Q3
Magnesium, D	90543	ND	000	ug/L	10000	8841	88	10000	81450.00	89260	86920	78	55 *	3		73 - 116	75 - 125	20	
Potassium, Dis	90543	ND	000	ug/L	10000	9172	92	10000	9819.00	17710	17480	79	77	1		73 - 114	75 - 125	20	
Sodium, Disso	90543	ND	000	ug/L	10000	9509	95	10000	00200.00	200600	201400	4 *	12 *	0		64 - 122	75 - 125	20	Q3

* denotes recovery outside of QC limits.
ARL denotes Adjusted Reporting Limit, corrected for sample size, dilution and moisture content as applicable.
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

9/17/2007 16:18:08

New Orleans Laboratory Certifications
Louisiana Dept. of Environmental Quality (LELAP) - 02006
Arkansas Dept. of Environmental Quality - 88-0681
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023
Florida Dept. of Health (NELAC) - E87595
Kansas Dept. of Health_Environment - E-10266
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270
Pennsylvania DEP (NELAC) 68-04202

Pace Analytical
New Orleans Laboratory

Report of Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Project: 2073027

Parameter	Batch	Blank	ARL	Units	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	MSD RPD	DUP RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Nitrogen, Nitri	90389	ND	0.100	mg/L	0.2	0.2043	102	1.25	0.02	0.8072		63 *			0	90 - 110	80 - 120	20	Q1
Total Dissolve	90443	ND	4.00	mg/L	100	108	108		2010.00						2	80 - 120	-	20	
Alkalinity, Tot	90476			mg/L	50	49.92	100		1113.00						1	90 - 110	-	20	

* denotes recovery outside of QC limits.
ARL denotes Adjusted Reporting Limit, corrected for sample size, dilution and moisture content as applicable.
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

9/17/2007 16:18:11

New Orleans Laboratory Certifications
Louisiana Dept. of Environmental Quality (LELAP) - 02006
Arkansas Dept. of Environmental Quality - 88-0681
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023
Florida Dept. of Health (NELAC) - E87595
Kansas Dept. of Health_Environment - E-10266
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270
Pennsylvania DEP (NELAC) 68-04202

Pace Analytical
New Orleans Laboratory

Report Qualifiers

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Project: 2073027

Qualifier	Qualifier Description
D1	The analysis was performed at a dilution due to the high analyte concentration.
D2	The analysis was performed at a dilution due to the presence of matrix interferences.
Q1	The matrix spike recoveries are poor. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample recovery.
Q3	The matrix spike recoveries are poor due to the presence of this analyte in the sample at a concentration greater than 4 times the spiked amount. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

20546693

Page: 1 of 1

119531

Section A — Required Client Information:

Company: CRA
Address: 2135 S. Loop 250 W. Midland, TX 79703
Email To:
Phone: 432-686-0086 Fax: 686-0186
Requested Due Date/TAT: STD

Section B — Required Project Information:

Report To: James Orneles
Copy To:
Purchase Order No.:
Project Name: G. L. ERWIN
Project Number: 039124

Section C — Invoice Information:

Attention: Art Greeley
Company Name: CRA - DALLAS
Address: 2270 Springlake Road DALLAS TX 75234
Pace Quote Reference:
Pace Project Manager: Cindy OLAVESSEN
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: NM

Section D — Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: Dissolved CH_4, Mg, Ca, SO_4, Fluoride, Nitrate, TDS, Alk	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW 4 82107	WT	G			8-21	1248		3	Y							X	1 1 1		20546693
2	RW 1 82107	WT	G			8-21	1310		3	Y							X	1 1 1		710
3	MW SW 82107	WT	G			8-21	1305		3	X							X	1 1 1		716
4	MW W 82107	WT	G			8-21	1325		3	X							X	1 1 1		722
5	DUP 1	WT	G			8-21	—		3	Y							X	1 1 1		725
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] CRA	8-21-07	1540							
	Fed Ex 8-22-07		1000	[signature] Pace	8-22-07	1000	4.0	4	4	4

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joe Mireles
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 8/21/07

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical®

1241 Bellevue Street, Suite 9
Green Bay, WI 54302
920-469-2436, Fax: 920-469-8827

Analytical Report Number: 887696

Client: PACE ANALYTICAL SERVICES, INC.

Lab Contact: Eric Wied

Project Name: CRA

Project Number: 2073027

Lab Sample Number	Field ID	Matrix	Collection Date
887696-001	MW482107 20546693	WATER	08/21/07 12:48
887696-002	RW182107 20546710	WATER	08/21/07 13:10
887696-003	MWSW82107 20546716	WATER	08/21/07 13:45
887696-004	MWW82107 20546722	WATER	08/21/07 13:25
887696-005	DUP1 20546725	WATER	08/21/07

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc. The sample results relate only to the analytes of interest tested.

Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

REPORT OF LABORATORY ANALYSIS

ACCREDITED IN ACCORDANCE WITH NELAC

E. Wied

Approval Signature

09.04.07

Date

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887696

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2073027
Field ID : MW482107 20546693

Matrix Type : WATER
Collection Date : 08/21/07
Report Date : 09/04/07
Lab Sample Number : 887696-001

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	10000	1000	200	mg/L		08/31/07 02:05 PM	EPA 300.0	EPA 300.0
						Prep Date/Time: 08/29/07 02:42 PM		Anl By: GLL
Sulfate	490	80	20	mg/L		08/30/07 03:49 PM	EPA 300.0	EPA 300.0
						Prep Date/Time: 08/29/07 02:42 PM		Anl By: GLL

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887696

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2073027
Field ID : RW182107 20546710

Matrix Type : WATER
Collection Date : 08/21/07
Report Date : 09/04/07
Lab Sample Number : 887696-002

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	4100	500	100	mg/L		08/30/07 04:25 PM	EPA 300.0	EPA 300.0
						Prep Date/Time: 08/29/07 02:42 PM	**Anl By:** GLL	
Sulfate	620	40	10	mg/L		08/30/07 04:38 PM	EPA 300.0	EPA 300.0
						Prep Date/Time: 08/29/07 02:42 PM	**Anl By:** GLL	

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887696

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2073027
Field ID : MWSW82107 20546716

Matrix Type : WATER
Collection Date : 08/21/07
Report Date : 09/04/07
Lab Sample Number : 887696-003

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	5500	500	100	mg/L		08/30/07 05:14 PM	EPA 300.0	EPA 300.0
						Prep Date/Time: 08/29/07 02:42 PM		Anl By: GLL
Sulfate	860	400	100	mg/L		08/30/07 05:14 PM	EPA 300.0	EPA 300.0
						Prep Date/Time: 08/29/07 02:42 PM		Anl By: GLL

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887696

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2073027
Field ID : MWW82107 20546722

Matrix Type : WATER
Collection Date : 08/21/07
Report Date : 09/04/07
Lab Sample Number : 887696-004

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	3700	500	100	mg/L		08/30/07 05:26 PM	EPA 300.0	EPA 300.0
						Prep Date/Time: 08/29/07 02:42 PM		Anl By: GLL
Sulfate	180	40	10	mg/L		08/30/07 05:38 PM	EPA 300.0	EPA 300.0
						Prep Date/Time: 08/29/07 02:42 PM		Anl By: GLL

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887696

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2073027
Field ID : DUP1 20546725

Matrix Type : WATER
Collection Date : 08/21/07
Report Date : 09/04/07
Lab Sample Number : 887696-005

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	4100	500	100	mg/L		08/30/07 05:51 PM	EPA 300.0	EPA 300.0
						Prep Date/Time: 08/29/07 02:42 PM		Anl By: GLL
Sulfate	600	80	20	mg/L		08/30/07 06:03 PM	EPA 300.0	EPA 300.0
						Prep Date/Time: 08/29/07 02:42 PM		Anl By: GLL

Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
G	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
H	All	Preservation, extraction or analysis performed past holding time.
HF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
J	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
M	Organic	Sample pH was greater than 2
N	All	Spiked sample recovery not within control limits.
O	Organic	Sample received overweight.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
Z	Organics	This compound was separated in the CCV standard but it did not meet the resolution criteria as set forth in SW846.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
+	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
8	Inorganic	Sample was received unpreserved. Sample was preserved either at the time of receipt or at the time of sample preparation.
9	Inorganic	Sample was received with insufficient preservation. Acid was added either at the time of receipt or at the time of sample preparation.

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302

Analysis Summary by Laboratory

Test Group Name	887696-001	887696-002	887696-003	887696-004	887696-005
CHLORIDE	B	B	B	B	B
SULFATE	B	B	B	B	B

Code	TX Certification
B	Not Certified

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436
Fax: 920-469-8827

QC Summary

Batch: 887696
Lab Section: WETCHEM
QC Batch Number: 24261
Prep Method: EPA 300.0
Analytical Method: EPA 300.0

QC Type	Client Sample ID	Lab Sample ID
MB	WCG2280-053MB	WCG2280-053MB
LCS	WCG2280-053MBLCS	WCG2280-053MBLCS
MS	887702-001MS	887702-001MS
MS	MW482107 20546693MS	887696-001MS
MSD	887702-001MSD	887702-001MSD
MSD	MW482107 20546693MS	887696-001MSD

Client Sample ID	Lab Sample ID	MB ID
MW482107 20546693	887696-001	MB
MWSW82107 20546716	887696-003	MB
DUP1 20546725	887696-005	MB

Client Sample ID	Lab Sample ID	MB ID
RW182107 20546710	887696-002	MB
MWW82107 20546722	887696-004	MB

Test Name	Method Blank Result Conc	LCS Spiked Conc	LCS Recovery Conc	LCS Recovery %	LCS Recovery C	LCSD Spiked Conc	LCSD Recovery Conc	LCSD Recovery %	LCSD Recovery C	LCS/LCSD RPD %	LCS/LCSD RPD C	LCS/LCSD Control Limits LCL %	LCS/LCSD Control Limits UCL %	LCS/LCSD Control Limits RPD %	Parent Sample Number	Parent Result Conc	MS Spiked Conc	MS Recovery Conc	MS Recovery %	MS Recovery C	MSD Spiked Conc	MSD Recovery Conc	MSD Recovery %	MSD Recovery C	MS/MSD RPD %	MS/MSD RPD C	MS/MSD Control Limits LCL %	MS/MSD Control Limits UCL %	MS/MSD Control Limits RPD %
Chloride	< 5	20.0000	18.6	92.9		—	—	—		—		90	110	20	887696-001	16032.0	4000.00	14064	101.6		4000.00	14060	101.4		0.0		90	110	20
Sulfate	< 4	16.00	15.5	96.6		—	—	—		—		90	110	20	887696-001	486.2	320.0	814.4	102.6		320.0	805.4	99.8		1.1		90	110	20
Chloride	< 5	20.0	18.6	92.9		—	—	—		—		90	110	20	887702-001	26.7	20.0	45.1	92.2		20.0	45	91.8		0.6		90	110	20
Sulfate	< 4	16.000	15.5	96.6		—	—	—		—		90	110	20	887702-001	2277.0	1600.0	3854	98.6		1600.0	3814	96.1		1.0		90	110	20

Conc = mg/L unless otherwise noted
C = QC Code, see Qualifer Sheet
Parent Result is reported down to MDL in order to allow Validation of this worksheet
The %R and RPD results are calculated from raw data values with more significant figures than are reported on this form.

Report Date: 9/4/2007
QC Batch Number: 24261

Sample Condition Upon Receipt

Pace Analytical

Client Name: PACE Project # 887696

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: 6724 6342 9207

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals Intact: ☑ yes ☐ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer Used JB Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 1.0°C Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 8/28/07 KJ

Temp should be above freezing to 6°C Comments: 8/28/07

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.	
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.	
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.	
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.	
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.	
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.	
Rush Turn Around Time Requested:	☑Yes ☐No ☐N/A	7.	DUE 9/5/07
Sufficient Volume:	☑Yes ☐No ☐N/A	8.	
Correct Containers Used:	☑Yes ☐No ☐N/A	9.	
-Pace Containers Used:	☑Yes ☐No ☐N/A		
Containers Intact:	☑Yes ☐No ☐N/A	10.	
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.	
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.	
-Includes date/time/ID/Analysis Matrix:	W		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.	
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.	
Trip Blank Present:	☐Yes ☐No ☑N/A	16.	
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A		
Pace Trip Blank Lot # (if purchased):			

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] **Date:** 08-28-07

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

20546693

Page: 1 of 1

1119531

Section A Required Client Information:
- Company: CRA
- Address: 2135 S. Loop 250 W. Midland, TX 79703
- Email To:
- Phone: 432-686-0086 Fax: 686-0186
- Requested Due Date/TAT: STD

Section B Required Project Information:
- Report To: James Ornelas
- Copy To:
- Purchase Order No.:
- Project Name: G.L. Erwin
- Project Number: 039124

Section C Invoice Information:
- Attention: Art Greeley
- Company Name: CRA - Dallas
- Address: 2270 Springlake Road Dallas TX 75234
- Pace Quote Reference:
- Pace Project Manager: Cindy Olavessen
- Pace Profile #:

REGULATORY AGENCY: NPDES / GROUND WATER / DRINKING WATER / UST / RCRA / OTHER

Site Location STATE: NM

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): Dissolved Ca, K, Mg, Na; Cl, SO4, Floride, Nitrate; TDS, Alk

ITEM #	SAMPLE ID		MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	Composite Start DATE	Composite Start TIME	Composite End/Grab DATE	Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other ICE	Analysis Test Y/N	Dissolved Ca, K, Mg, Na	Cl, SO4, Floride, Nitrate	TDS, Alk	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW4 82107	001	WT	G			8-21	1248		3	Y							X		1	1	1		20546693 1-250
2	RW1 82107	002	WT	G			8-21	1310		3	Y							X		1	1	1		710
3	MW SW 82107	003	WT	G			8-21	1345		3	X							X		1	1	1		716
4	MW W 82107	004	WT	G			8-21	1325		3	X							X		1	1	1		722
5	Dup 1	005	WT	G			8-21	—		3	Y							X		1	1	1		725
6																								
7																								
8																								
9																								
10																								
11																								
12																								

887696

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	[signature] / CRA	8-21-07	1540							
	Fed Ex	8-22-07	1000	[signature] / Pace	8-22-07	1000	4.0	Y	Y	Y
	Ron Bailey	8/27/07	1700	FedEx						
	FED EX	8/28/07	1000	K. Rahm	8/28/07	1000	1.0°C	Y	Y	Y

SAMPLER NAME AND SIGNATURE
- PRINT Name of SAMPLER: Joe Mireles
- SIGNATURE of SAMPLER: [signature]
- DATE Signed (MM/DD/YY): 8/21/07

2

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Central Analytical Laboratories
2315 N. Causeway Blvd. Suite 150, Metairie, LA 70001
(504) 297-3400 Toll Free: (866) 388-3400 Fax: (504) 297-3410

DELIVER TO: **Pace Analytical Services, Inc.**
1000 Riverbend Blvd
Suite F
St. Rose, LA 70087
Attn: Karen Brown

REPORT OF ANALYSIS

ANALYSES PERFORMED BY
Central Analytical Laboratories

Report Date : 9/14/2007
Report Number : 08231136
EPN#2073027

Central Analytical Laboratories

Client: Pace Analytical Services, Inc. **Report Number:** 08231136

Sample Description Summary

Sample Description	Matrix	Collection Date/Time		CAL Sample ID	Submittal Date/Time	
MW4 82107 / 20546693	WATER	8/21/2007	12:48	CE23793	8/23/2007	10:30
RW1 82107 / 20546710	WATER	8/21/2007	13:10	CE23794	8/23/2007	10:30
MWSW 82107 / 20546716	WATER	8/21/2007	13:45	CE23795	8/23/2007	10:30
MWW 82107 / 20546722	WATER	8/21/2007	13:25	CE23796	8/23/2007	10:30
Dup-1 / 20546725	WATER	8/21/2007	12:48	CE23797	8/23/2007	10:30

Central Analytical Laboratories

Louisiana Environmental Laboratory

LELAP

Certificate No. 01996

Client: Pace Analytical Services, Inc. **Report Number:** 08231136

Sample analyses are performed according to U. S. Environmental Protection Agency approved methods, or other methods cited in this report. Any deviations from, additions to, or exclusions from the designated test method are noted in the "CASE NARRATIVE". Unless noted in the "CASE NARRATIVE", all quality contr criteria were within method control limits.

Results contained herein apply only to the item(s) tested.

If chain of custody documentation was provided, it is documented as an attachment to this report.

Central Analytical Laboratories reserves the right to subcontact those tests for which we are not capable or accredited. Tests which are subcontracted are indicated on the Test Report as "SUB" under the Analyst head

Unless client requests otherwise, all samples will be stored for thirty days after the issue of an Analytical Repo

Central Analytical Laboratories is accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP). The results shown in this report are certified to be in accordance with the terms of LAC 33:I unless otherwise stated. Analyses for which Central Analytical Laboratories is not accredited, or which have been subcontracted to an unaccredited laboratory are noted in this report; such results are not covered b our accreditation.

This report shall not be reproduced except in full, without written approval by Central Analytical Laboratories. All results are considered confidential by Central Analytical Laboratories.

John M. Reuther
Laboratory Manager

Central Analytical Laboratories

Client: Pace Analytical Services, Inc. Report Number : 08231136

CASE NARRATIVE

INORGANIC QUALITY CONTROL

Holding Times: All holding times were within method criteria.

Method Blanks: All method blanks were found to be within quality control criteria for the method.

Spike/Duplicate: Spike and Duplicate recoveries were found to be within acceptable limits of precision and accuracy.

Laboratory Quality Control Samples: All analyses met the quality control criteria of the method.

Calibration Verifications: All criteria established for the method were met.

Analysis Comments: CAL is not LELAC approved for 300.0 fluoride testing.

ORGANIC QUALITY CONTROL

Holding Times: All holding times were within method criteria.

Method Blanks: All method blanks were found to be within quality control criteria for the method.

Spike/Duplicate: Spike and Duplicate recoveries were found to be within acceptable limits of precision and accuracy.

Laboratory Quality Control Samples: All analyses met the quality control criteria of the method.

Calibration Verifications: All criteria established for the method were met.

Analysis Comments:

Central Analytical Laboratories

Analysis Results

Description:	MW4 82107 / 20546693	**Sampled By:**	NM
CAL Number:	CE23793	**Sample Date:**	8/21/2007
Submit Date:	8/23/2007	**Sample Time:**	12:48 PM
Submit Time:	10:30 AM	**Sample Type:**	WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	0.3	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description:	RW1 82107 / 20546710	**Sampled By:**	NM
CAL Number:	CE23794	**Sample Date:**	8/21/2007
Submit Date:	8/23/2007	**Sample Time:**	1:10 PM
Submit Time:	10:30 AM	**Sample Type:**	WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical. Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	0.3	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description: MWSW 82107 / 20546716
CAL Number: CE23795
Submit Date: 8/23/2007
Submit Time: 10:30 AM

Sampled By: NM
Sample Date: 8/21/2007
Sample Time: 1:45 PM
Sample Type: WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	0.1	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description:	MWW 82107 / 20546722	**Sampled By:**	NM
CAL Number:	CE23796	**Sample Date:**	8/21/2007
Submit Date:	8/23/2007	**Sample Time:**	1:25 PM
Submit Time:	10:30 AM	**Sample Type:**	WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	0.2	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description: Dup-1 / 20546725
CAL Number: CE23797
Submit Date: 8/23/2007
Submit Time: 10:30 AM

Sampled By: NM
Sample Date: 8/21/2007
Sample Time: 12:48 PM
Sample Type: WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	0.1	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

08231136

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www.pacelabs.com

SUBCONTRACTING CHAIN-OF-CUSTODY

Pace Analytical Services, Inc.
1000 Riverbend Blvd., Suite F
St. Rose, LA 70087
Phone: 504.469.0333
Fax: 504.469.0555

Due Date: 9-5-07 Freight Carrier: CAL Custody Seals: Intact / Broken / Missing

Subcontractor: CAL Airbill #: Samples: Intact / Broken / Missing

Contact: EPN #: 2073027 Cooler Temperature (°C):

	PACE SAMPLE ID	CLIENT SAMPLE ID	SAMPLE DATE/TIME		MATRIX	SAMPLE #	ANALYTE/ METHOD	SAMPLE COMMENTS
CE23793	20546693	MWY 82107	8-21-07	1248	WT	1		Fluoride
-94	6710	RW 82107		1310		1		
-95	6716	MWSW 82107		1345		1		
-96	6722	MWW 82107		1325		1		
-97	6725	Dup-1		1248		1		

Relinquished by:	Date/Time	Received by:	Project Comments/Remarks:
[signature]	8-23-07 1000	[signature] 8-23-07 1000	Rec'd on ice 3°-4°C
Relinquished by: [signature]	Date/Time 8-23-07 1030	Received by: K. Anderson 8-23-07 10:30	
Relinquished by:	Date/Time	Received for subcontractor by:	

REPORT RESULTS TO THE ADDRESS ABOVE TO THE ATTENTION OF KAREN BROWN. If the hardcopy results cannot be delivered by the above due date, please contact Karen Brown at the above number.

FNO-SM-003:1

Pace Analytical®
New Orleans Laboratory

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
Saint Rose, LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

September 17, 2007

James Ornelas
CRA MIDLAND
2135 S. Loop 250 W.
Midland, TX 79701

RE: Project: 2073064
RE: Project ID: G.L. ERWIN/039124

Dear James Ornelas:

Enclosed are the analytical results for sample(s) received by the laboratory on August 23, 2007. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Cindy Olavesen

Cindy Olavesen

ACCREDITED IN ACCORDANCE WITH nelac

REPORT OF LABORATORY ANALYSIS

Pace Analytical
New Orleans Laboratory

Sample Cross Reference Report

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client: CRA MIDLAND

Project: G.L. ERWIN/039124

Project No.: 2073064

Client Sample ID	Lab ID	Matrix	Collection Date/Time		Received Date/Time	
MW882207	20547019	Water	08/22/2007	11:35	08/23/2007	10:00
MW1082207	20547020	Water	08/22/2007	13:25	08/23/2007	10:00
MW1282207	20547021	Water	08/22/2007	10:50	08/23/2007	10:00
MW1382207	20547022	Water	08/22/2007	13:10	08/23/2007	10:00
MW1482207	20547023	Water	08/22/2007	12:25	08/23/2007	10:00
MW1582207	20547024	Water	08/22/2007	10:35	08/23/2007	10:00
MW1682207	20547025	Water	08/22/2007	11:15	08/23/2007	10:00
MW1782207	20547026	Water	08/22/2007	12:00	08/23/2007	10:00
MW1982207	20547027	Water	08/22/2007	12:50	08/23/2007	10:00
MW2082207	20547028	Water	08/22/2007	10:25	08/23/2007	10:00

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Project Narrative

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Project: **2073064**

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

MS or MSD recoveries outside of QC limits are qualified in the Report of Quality Control section.

Pace Analytical
New Orleans Laboratory

Project Narrative

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Project: 2073064

Analytical Method	Batch	Sample used for QC
EPA 6010	90686	Project sample MW882207
SM 2320B	90476	Batch sample from another client
SM 2540C	90497	Batch sample from another client
SM 2540C	90557	Batch sample from another client
SM 2540C	90706	Batch sample from another client

For the sample used as the original for the DUP or MS/MSD for the batch:

Project sample means a sample from this project was used.
Client sample means a sample from the same client but in a different project was used.
Batch sample means a sample from the a different client was used.

Pace Analytical*
New Orleans Laboratory

Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: MW882207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547019 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90686	1	49100		ug/L	5000	06-Sep-07	06-Sep-07 10:21	MHB1	
Magnesium, Dissolved	EPA 6010	90686	1	18500		ug/L	5000	06-Sep-07	06-Sep-07 10:21	MHB1	
Potassium, Dissolved	EPA 6010	90686	1	5350		ug/L	5000	06-Sep-07	06-Sep-07 10:21	MHB1	
Sodium, Dissolved	EPA 6010	90686	1	449000		ug/L	5000	06-Sep-07	06-Sep-07 10:21	MHB1	

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

9/17/2007 16:31:56

New Orleans Laboratory Certifications
Louisiana Dept. of Environmental Quality (LELAP) - 02006
Arkansas Dept. of Environmental Quality - 88-0681
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023
Florida Dept. of Health (NELAC) - E87595
Kansas Dept. of Health_Environment - E-10266
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270
Pennsylvania DEP (NELAC) 68-04202

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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: MW1082207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547020 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90686	10	585000	D2	ug/L	50000	06-Sep-07	07-Sep-07 09:09	MHB1	
Magnesium, Dissolved	EPA 6010	90686	10	189000	D2	ug/L	50000	06-Sep-07	07-Sep-07 09:09	MHB1	
Potassium, Dissolved	EPA 6010	90686	10	ND	D2	ug/L	50000	06-Sep-07	07-Sep-07 09:09	MHB1	
Sodium, Dissolved	EPA 6010	90686	10	270000	D2	ug/L	50000	06-Sep-07	07-Sep-07 09:09	MHB1	

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

9/17/2007 16:31:57

New Orleans Laboratory Certifications
Louisiana Dept. of Environmental Quality (LELAP) - 02006
Arkansas Dept. of Environmental Quality - 88-0681
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023
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Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: MW1282207 **Client:** CRA MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547021 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90686	1	476000		ug/L	5000	06-Sep-07	06-Sep-07 10:59	MHB1	
Magnesium, Dissolved	EPA 6010	90686	1	151000		ug/L	5000	06-Sep-07	06-Sep-07 10:59	MHB1	
Potassium, Dissolved	EPA 6010	90686	1	11900		ug/L	5000	06-Sep-07	06-Sep-07 10:59	MHB1	
Sodium, Dissolved	EPA 6010	90686	1	143000		ug/L	5000	06-Sep-07	06-Sep-07 10:59	MHB1	

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

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New Orleans Laboratory

Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: MW1382207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547022 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90686	1	279000		ug/L	5000	06-Sep-07	06-Sep-07 11:04	MHB1	
Magnesium, Dissolved	EPA 6010	90686	1	94700		ug/L	5000	06-Sep-07	06-Sep-07 11:04	MHB1	
Potassium, Dissolved	EPA 6010	90686	1	11600		ug/L	5000	06-Sep-07	06-Sep-07 11:04	MHB1	
Sodium, Dissolved	EPA 6010	90686	1	122000		ug/L	5000	06-Sep-07	06-Sep-07 11:04	MHB1	

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

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Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: MW1482207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547023 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90686	10	823000	D2	ug/L	50000	06-Sep-07	07-Sep-07 09:14	MHB1	
Magnesium, Dissolved	EPA 6010	90686	10	249000	D2	ug/L	50000	06-Sep-07	07-Sep-07 09:14	MHB1	
Potassium, Dissolved	EPA 6010	90686	10	ND	D2	ug/L	50000	06-Sep-07	07-Sep-07 09:14	MHB1	
Sodium, Dissolved	EPA 6010	90686	10	1420000	D1	ug/L	50000	06-Sep-07	07-Sep-07 09:14	MHB1	

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

9/17/2007 16:31:57

New Orleans Laboratory Certifications
Louisiana Dept. of Environmental Quality (LELAP) - 02006
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Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023
Florida Dept. of Health (NELAC) - E87595
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Pace Analytical
New Orleans Laboratory

Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: MW1582207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547024 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90686	1	66400		ug/L	5000	06-Sep-07	06-Sep-07 11:15	MHB1	
Magnesium, Dissolved	EPA 6010	90686	1	24100		ug/L	5000	06-Sep-07	06-Sep-07 11:15	MHB1	
Potassium, Dissolved	EPA 6010	90686	1	5980		ug/L	5000	06-Sep-07	06-Sep-07 11:15	MHB1	
Sodium, Dissolved	EPA 6010	90686	1	60200		ug/L	5000	06-Sep-07	06-Sep-07 11:15	MHB1	

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

9/17/2007 16:31:57

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Louisiana Dept. of Environmental Quality (LELAP) - 02006
Arkansas Dept. of Environmental Quality - 88-0681
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023
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Kansas Dept. of Health .Environment - E-10266
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Pace Analytical
New Orleans Laboratory

Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: MW1682207
Client: CRA_MIDLAND
Project: G.L. ERWIN/039124
Site: None
Lab ID: 20547025
Project No.: 2073064
Description: None
Matrix: Water
%Moisture: n/a
Collected: 08/22/07
Received: 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90686	1	83000		ug/L	5000	06-Sep-07	06-Sep-07 11:21	MHB1	
Magnesium, Dissolved	EPA 6010	90686	1	29900		ug/L	5000	06-Sep-07	06-Sep-07 11:21	MHB1	
Potassium, Dissolved	EPA 6010	90686	1	ND		ug/L	5000	06-Sep-07	06-Sep-07 11:21	MHB1	
Sodium, Dissolved	EPA 6010	90686	1	215000		ug/L	5000	06-Sep-07	06-Sep-07 11:21	MHB1	

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

9/17/2007 16:31:57

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LELAP # 02006

Client ID: MW1782207 **Client:** CRA MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547026 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90686	1	113000		ug/L	5000	06-Sep-07	06-Sep-07 11:27	MHB1	
Magnesium, Dissolved	EPA 6010	90686	1	41400		ug/L	5000	06-Sep-07	06-Sep-07 11:27	MHB1	
Potassium, Dissolved	EPA 6010	90686	1	5970		ug/L	5000	06-Sep-07	06-Sep-07 11:27	MHB1	
Sodium, Dissolved	EPA 6010	90686	1	200000		ug/L	5000	06-Sep-07	06-Sep-07 11:27	MHB1	

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
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(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

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Client ID: MW1982207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547027 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90686	10	1040000	D1	ug/L	50000	06-Sep-07	07-Sep-07 09:22	MHB1	
Magnesium, Dissolved	EPA 6010	90686	10	367000	D2	ug/L	50000	06-Sep-07	07-Sep-07 09:22	MHB1	
Potassium, Dissolved	EPA 6010	90686	10	ND	D2	ug/L	50000	06-Sep-07	07-Sep-07 09:22	MHB1	
Sodium, Dissolved	EPA 6010	90686	10	686000	D1	ug/L	50000	06-Sep-07	07-Sep-07 09:22	MHB1	

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
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(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

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Client ID: MW2082207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547028 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	90686	1	346000		ug/L	5000	06-Sep-07	06-Sep-07 11:50	MHB1	
Magnesium, Dissolved	EPA 6010	90686	1	119000		ug/L	5000	06-Sep-07	06-Sep-07 11:50	MHB1	
Potassium, Dissolved	EPA 6010	90686	1	11900		ug/L	5000	06-Sep-07	06-Sep-07 11:50	MHB1	
Sodium, Dissolved	EPA 6010	90686	1	203000		ug/L	5000	06-Sep-07	06-Sep-07 11:50	MHB1	

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

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Client ID: MW882207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547019 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	259.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Total	SM 2320B	90476	1	259.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	259.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Total Dissolved Solids	SM 2540C	90497	1	1980		mg/L	4.00	24-Aug-07	24-Aug-07 10:20	SMS2	

5 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

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Client ID: MW1082207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547020 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	74.9		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity, Total	SM 2320B	90476	1	74.9		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	74.9		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Total Dissolved Solids	SM 2540C	90497	1	7270		mg/L	4.00	24-Aug-07	24-Aug-07	10:20 SMS2	

5 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

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Client ID: MW1282207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547021 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	108.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity, Total	SM 2320B	90476	1	108.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	108.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Total Dissolved Solids	SM 2540C	90497	1	6470		mg/L	4.00	24-Aug-07	24-Aug-07	10:20 SMS2	

5 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

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LELAP # 02006

Client ID: MW1382207 **Client:** CRA MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547022 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	129.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity, Total	SM 2320B	90476	1	129.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	129.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Total Dissolved Solids	SM 2540C	90557	1	3480		mg/L	4.00	25-Aug-07	25-Aug-07	13:00 SMS2	

5 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

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LELAP # 02006

Client ID: MW1482207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547023 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	92.2		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Total	SM 2320B	90476	1	92.2		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	92.2		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Total Dissolved Solids	SM 2540C	90706	1	11700		mg/L	4.00	29-Aug-07	29-Aug-07 12:50	SMS2	

5 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

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Client ID: MW1582207 **Client:** CRA MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547024 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	146.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Total	SM 2320B	90476	1	146.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	146.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Total Dissolved Solids	SM 2540C	90557	1	652.		mg/L	4.00	25-Aug-07	25-Aug-07 13:00	SMS2	

5 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

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Client ID: MW1682207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547025 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	296.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity, Total	SM 2320B	90476	1	296.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	296.		mg/L	10.0	24-Aug-07	24-Aug-07	12:00 MHM	
Total Dissolved Solids	SM 2540C	90557	1	1280		mg/L	4.00	25-Aug-07	25-Aug-07	13:00 SMS2	

5 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

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Client ID: MW1782207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547026 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	177.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Total	SM 2320B	90476	1	177.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	177.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Total Dissolved Solids	SM 2540C	90557	1	1310		mg/L	4.00	25-Aug-07	25-Aug-07 13:00	SMS2	

5 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

9/17/2007 16:32:01

New Orleans Laboratory Certifications
Louisiana Dept. of Environmental Quality (LELAP) - 02006
Arkansas Dept. of Environmental Quality - 88-0681
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023
Florida Dept. of Health (NELAC) - E87595
Kansas Dept. of Health_Environment - E-10266
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270
Pennsylvania DEP (NELAC) 68-04202

Report of Laboratory Analysis

Pace Analytical
New Orleans Laboratory

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: MW1982207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547027 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	82.6		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Total	SM 2320B	90476	1	82.6		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	82.6		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Total Dissolved Solids	SM 2540C	90706	1	11600		mg/L	4.00	29-Aug-07	29-Aug-07 12:50	SMS2	

5 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

9/17/2007 16:32:01

New Orleans Laboratory Certifications
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Report of Laboratory Analysis

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: MW2082207 **Client:** CRA_MIDLAND

Project: G.L. ERWIN/039124 **Site:** None

Lab ID: 20547028 **Project No.:** 2073064

Description: None **Matrix:** Water **%Moisture:** n/a

Collected: 08/22/07 **Received:** 08/23/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	90476	1	ND		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Hydroxide (CaC	SM 2320B	90476	1	419.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity, Total	SM 2320B	90476	1	419.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Alkalinity,Bicarbonate (CaC	SM 2320B	90476	1	419.		mg/L	10.0	24-Aug-07	24-Aug-07 12:00	MHM	
Total Dissolved Solids	SM 2540C	90557	1	4100		mg/L	4.00	25-Aug-07	25-Aug-07 13:00	SMS2	

5 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
PF other than 1 denotes sample Prep Factor which accounts for a non-routine sample size.
DF denotes Dilution Factor of final sample.
Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable.
Qu lists qualifiers. Specific qualifiers are defined at the end of the report.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

9/17/2007 16:32:01

New Orleans Laboratory Certifications
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Pace Analytical
New Orleans Laboratory

Report of Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Project: 2073064

Parameter	Batch	Blank	ARL	Units	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	MSD RPD	DUP RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Calcium, Diss	90686	ND	000	ug/L	10000	9635	96	10000	49060.00	55940	55740	69 *	67 *	0		73 - 115	75 - 125	20	Q3
Magnesium, D	90686	ND	000	ug/L	10000	9832	98	10000	18470.00	26300	26110	78	76	1		73 - 116	75 - 125	20	
Potassium, Dis	90686	ND	000	ug/L	10000	9612	96	10000	5351.00	13830	13900	85	86	1		73 - 114	75 - 125	20	
Sodium, Disso	90686	ND	000	ug/L	10000	9662	97	10000	49500.00	442800	442200	0 *	0 *	0		64 - 122	75 - 125	20	Q3

* denotes recovery outside of QC limits.
ARL denotes Adjusted Reporting Limit, corrected for sample size, dilution and moisture content as applicable.
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

9/17/2007 16:32:04

New Orleans Laboratory Certifications
Louisiana Dept. of Environmental Quality (LELAP) - 02006
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Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023
Florida Dept. of Health (NELAC) - E87595
Kansas Dept. of Health .Environment - E-10266
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270
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Pace Analytical*
New Orleans Laboratory

Report of Quality Control

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Project: 2073064

Parameter	Batch	Blank	ARL	Units	LCS Spike	LCS Found	LCS %Rec	MS Spike	Sample Found	MS Found	MSD Found	MS %Rec	MSD %Rec	MSD RPD	DUP RPD	QC Limits LCS	QC Limits MS/MSD	Max RPD	Qu
Alkalinity, Tot	90476			mg/L	50	49.92	100		1113.00						1	90 - 110	-	20	
Total Dissolve	90497	ND	4.00	mg/L	100	116	116		1230.00						1	80 - 120	-	20	
Total Dissolve	90557	ND	4.00	mg/L	100	100	100		1072.00						2	80 - 120	-	20	
Total Dissolve	90706	ND	4.00	mg/L	100	112	112		344.00						0	80 - 120	-	20	

* denotes recovery outside of QC limits.
ARL denotes Adjusted Reporting Limit, corrected for sample size, dilution and moisture content as applicable.
MS/MSD RPD is calculated via SW-846 rules on the basis of spiked sample concentrations rather than spike recoveries.

9/17/2007 16:32:07

New Orleans Laboratory Certifications
Louisiana Dept. of Environmental Quality (LELAP) - 02006
Arkansas Dept. of Environmental Quality - 88-0681
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023
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Kansas Dept. of Health Environment - E-10266
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Pennsylvania DEP (NELAC) 68-04202

Pace Analytical
New Orleans Laboratory

Report Qualifiers

Pace Analytical Services, Inc.
1000 Riverbend Blvd. Suite F
St. Rose , LA 70087

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Project: 2073064

Qualifier	Qualifier Description
D1	The analysis was performed at a dilution due to the high analyte concentration.
D2	The analysis was performed at a dilution due to the presence of matrix interferences.
Q3	The matrix spike recoveries are poor due to the presence of this analyte in the sample at a concentration greater than 4 times the spiked amount. Acceptable method performance for this analyte has been demonstrated by the laboratory control sample.

New Orleans Laboratory Certifications
Louisiana Dept. of Environmental Quality (LELAP) - 02006
Arkansas Dept. of Environmental Quality - 88-0681
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023
Florida Dept. of Health (NELAC) - E87595
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Pennsylvania DEP (NELAC) 68-04202

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

2073064

Page: 1 of 1

1119532

Section A Required Client Information:

Company:	CRA
Address:	2135 S. Loop 250 W. Midland, TX
Email To:	
Phone:	432-686-0086
Fax:	686-0186
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	James Ornelas
Copy To:	
Purchase Order No.:	
Project Name:	G.L. ERWIN
Project Number:	039124

Section C Invoice Information:

Attention:	Art Greely
Company Name:	CRA - Dallas
Address:	2270 Springlake Rd, Dallas, TX 75234
Pace Quote Reference:	
Pace Project Manager:	Cindy Olavessen
Pace Profile #:	

REGULATORY AGENCY

NPDES / GROUND WATER / DRINKING WATER / UST / RCRA / OTHER

Site Location STATE: NM

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test	Dissolved Ca, K, Mg, Na	TDS Alk	Residual Chlorine (Y/N)	Pace Project No./Lab I.D.
1	MW8 82207	WT	G	~~8-22~~	~~1135~~	8-22	1135		2	Y							Y		1	1		20547019
2	MW10 82207	↓	↓			8-22	1325		2	X							X		1	1		020
3	MW12 82207					8-22	1050		2	Y							X		1	1		021
4	MW13 82207					8-22	1310		2	X							Y		1	1		022
5	MW14 82207					8-22	1225		2	X							X		1	1		023
6	MW15 82207					8-22	1035		2	X							X		1	1		024
7	MW16 82207					8-22	1115		2	X							X		1	1		025
8	MW17 82207					8-22	1200		2	X							X		1	1		026
9	MW19 82207					8-22	1250		2	Y							Y		1	1		027
10	MW20 82207					8-22	1025		2	Y							Y		1	1		028
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Joe Mireles / CRA	8-22-07	1630							
	[signature]			[signature]	8/23/07	1000	35	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joe Mireles

SIGNATURE of SAMPLER: Joe Mireles

DATE Signed (MM/DD/YY): 8/22/07

Pace Analytical®

1241 Bellevue Street, Suite 9
Green Bay, WI 54302
920-469-2436, Fax: 920-469-8827

Analytical Report Number: 887558

Client: PACE ANALYTICAL SERVICES, INC.

Lab Contact: Eric Wied

Project Name: CRA

Project Number:

Lab Sample Number	Field ID	Matrix	Collection Date
887558-001	MW8 82207	WATER	08/22/07 11:35
887558-002	MW10 82207	WATER	08/22/07 13:25
887558-003	MW12 82207	WATER	08/22/07 10:50
887558-004	MW13 82207	WATER	08/22/07 13:10
887558-005	MW14 82207	WATER	08/22/07 12:25
887558-006	MW15 82207	WATER	08/22/07 10:35
887558-007	MW16 82207	WATER	08/22/07 11:15
887558-008	MW17 82207	WATER	08/22/07 12:00
887558-009	MW19 82207	WATER	08/22/07 12:50
887558-010	MW20 82207	WATER	08/22/07 10:25

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc. The sample results relate only to the analytes of interest tested.

Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

REPORT OF LABORATORY ANALYSIS

ACCREDITED IN ACCORDANCE WITH nelac

E. Wied

Approval Signature

08-29-07

Date

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887558

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number :
Field ID : MW8 82207

Matrix Type : WATER
Collection Date : 08/22/07
Report Date : 08/28/07
Lab Sample Number : 887558-001

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	700	100	20	mg/L		08/24/07 04:20 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Nitrogen, Nitrate	7.4	2.0	5	mg/L		08/24/07 09:01 AM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Sulfate	170	20	5	mg/L		08/24/07 09:01 AM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887558

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number :
Field ID : MW10 82207

Matrix Type : WATER
Collection Date : 08/22/07
Report Date : 08/28/07
Lab Sample Number : 887558-002

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	2200	500	100	mg/L		08/24/07 10:54 AM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Nitrogen, Nitrate	6.0	0.40	1	mg/L		08/23/07 05:44 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Sulfate	110	40	10	mg/L		08/24/07 11:08 AM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887558

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number :
Field ID : MW12 82207

Matrix Type : WATER
Collection Date : 08/22/07
Report Date : 08/28/07
Lab Sample Number : 887558-003

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	1800	500	100	mg/L		08/24/07 11:51 AM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Nitrogen, Nitrate	6.0	0.40	1	mg/L		08/23/07 05:58 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Sulfate	52	4.0	1	mg/L		08/23/07 05:58 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887558

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number :
Field ID : MW13 82207

Matrix Type : WATER
Collection Date : 08/22/07
Report Date : 08/28/07
Lab Sample Number : 887558-004

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	980	100	20	mg/L		08/27/07 11:26 AM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Nitrogen, Nitrate	4.0	0.40	1	mg/L		08/23/07 06:12 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Sulfate	130	40	10	mg/L		08/24/07 12:05 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887558

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number :
Field ID : MW14 82207

Matrix Type : WATER
Collection Date : 08/22/07
Report Date : 08/28/07
Lab Sample Number : 887558-005

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	4700	500	100	mg/L		08/24/07 12:19 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Nitrogen, Nitrate	3.9	0.40	1	mg/L		08/23/07 06:54 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Sulfate	610	80	20	mg/L		08/24/07 12:34 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887558

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number :
Field ID : MW15 82207

Matrix Type : WATER
Collection Date : 08/22/07
Report Date : 08/28/07
Lab Sample Number : 887558-006

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	150	50	10	mg/L		08/24/07 12:48 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Nitrogen, Nitrate	2.1	0.40	1	mg/L		08/23/07 07:09 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Sulfate	65	4.0	1	mg/L		08/23/07 07:09 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL

Pace Analytical Services, Inc.

Analytical Report Number: 887558

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number :
Field ID : MW16 82207

Matrix Type : WATER
Collection Date : 08/22/07
Report Date : 08/28/07
Lab Sample Number : 887558-007

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	360	50	10	mg/L		08/24/07 01:02 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Nitrogen, Nitrate	3.6	0.40	1	mg/L		08/23/07 07:23 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Sulfate	87	40	10	mg/L		08/24/07 01:02 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887558

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number :
Field ID : MW17 82207

Matrix Type : WATER
Collection Date : 08/22/07
Report Date : 08/28/07
Lab Sample Number : 887558-008

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	550	50	10	mg/L		08/24/07 01:16 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Nitrogen, Nitrate	4.3	0.40	1	mg/L		08/23/07 07:37 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Sulfate	130	40	10	mg/L		08/24/07 01:16 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887558

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number :
Field ID : MW19 82207

Matrix Type : WATER
Collection Date : 08/22/07
Report Date : 08/28/07
Lab Sample Number : 887558-009

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	4500	500	100	mg/L		08/24/07 01:30 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Nitrogen, Nitrate	3.1	0.40	1	mg/L		08/23/07 07:51 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Sulfate	440	40	10	mg/L		08/24/07 01:44 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 887558

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number :
Field ID : MW20 82207

Matrix Type : WATER
Collection Date : 08/22/07
Report Date : 08/28/07
Lab Sample Number : 887558-010

INORGANICS

Test	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chloride	1400	250	50	mg/L		08/24/07 01:59 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Nitrogen, Nitrate	5.7	0.40	1	mg/L		08/23/07 08:05 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL
Sulfate	100	40	10	mg/L	N	08/24/07 03:10 PM	EPA 300.0	EPA 300.0
						Prep Date/Time:		**Anl By:** GLL

Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
G	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
H	All	Preservation, extraction or analysis performed past holding time.
HF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
J	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
M	Organic	Sample pH was greater than 2
N	All	Spiked sample recovery not within control limits.
O	Organic	Sample received overweight.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
Z	Organics	This compound was separated in the CCV standard but it did not meet the resolution criteria as set forth in SW846.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
+	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
8	Inorganic	Sample was received unpreserved. Sample was preserved either at the time of receipt or at the time of sample preparation.
9	Inorganic	Sample was received with insufficient preservation. Acid was added either at the time of receipt or at the time of sample preparation.

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302

Analysis Summary by Laboratory

Test Group Name	887558-001	887558-002	887558-003	887558-004	887558-005	887558-006	887558-007	887558-008	887558-009	887558-010
CHLORIDE	B	B	B	B	B	B	B	B	B	B
NITROGEN, NITRATE	B	B	B	B	B	B	B	B	B	B
SULFATE	B	B	B	B	B	B	B	B	B	B

Code	NM Certification
B	Not Certified

Pace Analytical

Sample Condition Upon Receipt

Client Name: CRA Project # 887558

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other Ziplocks

Thermometer Used JJB **Type of Ice:** Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 1.0 **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C **Comments:** MW

Date and initials of person examining contents: 3-23-07 CF

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☒Yes ☐No ☐N/A	6. Nitrate
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	7.
Sufficient Volume:	☒Yes ☐No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☒Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☐Yes ☐No ☒N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	15.
Trip Blank Present:	☐Yes ☒No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] **Date:** 08-23-07

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

15

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www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1119532

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: CRA	Report To: James Ornelas	Attention: Art Greely
Address: 2135 S. Loop 250 West Midland, TX	Copy To:	Company Name: CRA - Dallas
		Address: 2270 Spring Lake Rd Dallas, TX 75234
Email To:	Purchase Order No.:	Pace Quote Reference:
Phone: 432-686-0086 Fax: 686-0186	Project Name: G.L. Erwin	Pace Project Manager: Cindy Olavessen
Requested Due Date/TAT:	Project Number: 039124	Pace Profile #:

REGULATORY AGENCY: NPDES / GROUND WATER / DRINKING WATER / UST / RCRA / OTHER

Site Location STATE: NM

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID		MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	Composite Start DATE	Composite Start TIME	Composite End/Grab DATE	Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other ICE	Analysis Test: Cl, SO4, Floride, Nitrate	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW8 82207	001	WT	G			8-22	1135		1	X							X	1		1-250 ml p A
2	MW10 82207	002	↓	↓			8-22	1325		1	X							X	1		↓
3	MW12 82207	003					8-22	1050		1	X							X	1		
4	MW13 82207	004					8-22	1310		1	X							X	1		
5	MW14 82207	005					8-22	1225		1	X							X	1		
6	MW15 82207	006					8-22	1035		1	X							X	1		
7	MW16 82207	007					8-22	1115		1	X							X	1		
8	MW17 82207	008					8-22	1200		1	X							X	1		
9	MW19 82207	009					8-22	1250		1	X							X	1		
10	MW20 82207	010					8-22	1025		1	X							X	1		
11																					
12																					

√MWY
887558

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	[signature] / CRA	8-22-07	1630							
	FedEx	8-23-07	0830	[signature] Pace	8-23-07	0830	1.0	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joe Miceles

SIGNATURE of SAMPLER: [signature]

DATE Signed: [illegible]

ORIGINAL

Central Analytical Laboratories
2315 N. Causeway Blvd. Suite 150, Metairie, LA 70001
(504) 297-3400 Toll Free: (866) 388-3400 Fax: (504) 297-3410

DELIVER TO: **Pace Analytical Services, Inc.**
1000 Riverbend Blvd
Suite F
St. Rose, LA 70087
Attn: Karen Brown

REPORT OF ANALYSIS

ANALYSES PERFORMED BY
Central Analytical Laboratories

Report Date : 9/14/2007
Report Number : 08241230
EPN#2073064

Central Analytical Laboratories

Client: Pace Analytical Services, Inc. **Report Number:** 08241230

Sample Description Summary

Sample Description	Matrix	Collection Date/Time		CAL Sample ID	Submittal Date/Time	
MW882207 / 20547019	WATER	8/22/2007	11:35	CE24018	8/24/2007	12:00
MW1082207 / 20547020	WATER	8/22/2007	13:25	CE24019	8/24/2007	12:00
MW1282207 / 20547021	WATER	8/22/2007	10:50	CE24020	8/24/2007	12:00
MW1382207 / 20547022	WATER	8/22/2007	13:10	CE24021	8/24/2007	12:00
MW1482207 / 20547023	WATER	8/22/2007	12:25	CE24022	8/24/2007	12:00
MW1582207 / 20547024	WATER	8/22/2007	10:35	CE24023	8/24/2007	12:00
MW1682207 / 20547025	WATER	8/22/2007	11:15	CE24024	8/24/2007	12:00
MW1782207 / 20547026	WATER	8/22/2007	12:00	CE24025	8/24/2007	12:00
MW1982207 / 2054727	WATER	8/22/2007	12:50	CE24026	8/24/2007	12:00
MW2082207 / 20547028	WATER	8/22/2007	10:25	CE24027	8/24/2007	12:00

Central Analytical Laboratories

Louisiana Environmental Laboratory
LELAP
Certficate No. 01996

Client: Pace Analytical Services, Inc. Report Number: 08241230

Sample analyses are performed according to U. S. Environmental Protection Agency approved methods, or other methods cited in this report. Any deviations from, additions to, or exclusions from the designated test method are noted in the "CASE NARRATIVE". Unless noted in the "CASE NARRATIVE", all quality contr criteria were within method control limits.

Results contained herein apply only to the item(s) tested.

If chain of custody documentation was provided, it is documented as an attachment to this report.

Central Analytical Laboratories reserves the right to subcontact those tests for which we are not capable or accredited. Tests which are subcontracted are indicated on the Test Report as "SUB" under the Analyst head

Unless client requests otherwise, all samples will be stored for thirty days after the issue of an Analytical Repo

Central Analytical Laboratories is accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP). The results shown in this report are certified to be in accordance with the terms of LAC 33:I unless otherwise stated. Analyses for which Central Analytical Laboratories is not accredited, or which have been subcontracted to an unaccredited laboratory are noted in this report; such results are not covered b our accreditation.

This report shall not be reproduced except in full, without written approval by Central Analytical Laboratories. All results are considered confidential by Central Analytical Laboratories.

John M. Reuther
Laboratory Manager

Client: Pace Analytical Services, Inc. Report Number : 08241230

CASE NARRATIVE

INORGANIC QUALITY CONTROL

Holding Times: All holding times were within method criteria.

Method Blanks: All method blanks were found to be within quality control criteria for the method.

Spike/Duplicate: Spike and Duplicate recoveries were found to be within acceptable limits of precision and accuracy.

Laboratory Quality Control Samples: All analyses met the quality control criteria of the method.

Calibration Verifications: All criteria established for the method were met.

Analysis Comments: CAL is not LELAC approved for 300.0 fluoride testing.

ORGANIC QUALITY CONTROL

Holding Times: All holding times were within method criteria.

Method Blanks: All method blanks were found to be within quality control criteria for the method.

Spike/Duplicate: Spike and Duplicate recoveries were found to be within acceptable limits of precision and accuracy.

Laboratory Quality Control Samples: All analyses met the quality control criteria of the method.

Calibration Verifications: All criteria established for the method were met.

Analysis Comments:

Central Analytical Laboratories

Analysis Results

Description:	MW882207 / 20547019	**Sampled By:**	RB
CAL Number:	CE24018	**Sample Date:**	8/22/2007
Submit Date:	8/24/2007	**Sample Time:**	11:35 AM
Submit Time:	12:00 PM	**Sample Type:**	WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	3.0	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description:	MW1082207 / 20547020	**Sampled By:**	RB
CAL Number:	CE24019	**Sample Date:**	8/22/2007
Submit Date:	8/24/2007	**Sample Time:**	1:25 PM
Submit Time:	12:00 PM	**Sample Type:**	WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	0.5	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description: MW1282207 / 20547021
CAL Number: CE24020
Submit Date: 8/24/2007
Submit Time: 12:00 PM

Sampled By: RB
Sample Date: 8/22/2007
Sample Time: 10:50 AM
Sample Type: WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	0.7	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description:	MW1382207 / 20547022	**Sampled By:**	RB
CAL Number:	CE24021	**Sample Date:**	8/22/2007
Submit Date:	8/24/2007	**Sample Time:**	1:10 PM
Submit Time:	12:00 PM	**Sample Type:**	WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	1.6	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description: MW1482207 / 20547023
CAL Number: CE24022
Submit Date: 8/24/2007
Submit Time: 12:00 PM

Sampled By: RB
Sample Date: 8/22/2007
Sample Time: 12:25 PM
Sample Type: WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	0.3	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description: MW1582207 / 20547024
CAL Number: CE24023
Submit Date: 8/24/2007
Submit Time: 12:00 PM

Sampled By: RB
Sample Date: 8/22/2007
Sample Time: 10:35 AM
Sample Type: WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	1.8	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description: MW1682207 / 20547025
CAL Number: CE24024
Submit Date: 8/24/2007
Submit Time: 12:00 PM

Sampled By: RB
Sample Date: 8/22/2007
Sample Time: 11:15 AM
Sample Type: WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	1.4	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description:	MW1782207 / 20547026	**Sampled By:**	RB
CAL Number:	CE24025	**Sample Date:**	8/22/2007
Submit Date:	8/24/2007	**Sample Time:**	12:00 PM
Submit Time:	12:00 PM	**Sample Type:**	WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	1.8	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description: MW1982207 / 2054727
CAL Number: CE24026
Submit Date: 8/24/2007
Submit Time: 12:00 PM

Sampled By: RB
Sample Date: 8/22/2007
Sample Time: 12:50 PM
Sample Type: WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	0.3	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description: MW2082207 / 20547028
CAL Number: CE24027
Submit Date: 8/24/2007
Submit Time: 12:00 PM

Sampled By: RB
Sample Date: 8/22/2007
Sample Time: 10:25 AM
Sample Type: WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	0.8	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

08241230

SUBCONTRACTING CHAIN-OF-CUSTODY

Pace Analytical™
www.pacelabs.com

Pace Analytical Services, Inc.
1000 Riverbend Blvd., Suite F
St. Rose, LA 70087
Phone: 504.469.0333
Fax: 504.469.0555

Due Date: 09/06/07 Freight Carrier: ________ Custody Seals: Intact / Broken / Missing

Subcontractor: ________ Airbill #: ________ Samples: Intact / Broken / Missing

Contact: CAL EPN #: 2073064 Cooler Temperature (°C): ________

	PACE SAMPLE ID	CLIENT SAMPLE ID	SAMPLE DATE/TIME	MATRIX	SAMPLE #	ANALYTE/ METHOD	SAMPLE COMMENTS
CE24018	20547019	MW882207	8/22/07 11:35	W	1		Flouride
-19	7020	MW1082207	↓ 13:25	↓	↓		↓
-20	7021	MW1282207	10:50				
-21	7022	MW1382207	(13:10) → 13:00				
-22	7023	MW1482207	12:25				
-23	7024	MW1582207	10:35				
-24	7025	MW1682207	11:15				
-25	7026	MW1782207	12:00				
-26	7027	MW1982207	12:50				
-27	7028	MW2082207	10:25				

Relinquished by:	Date/Time	Received by:
[signature]	8/24/07 11:45	[signature] 8-24-07 11:45
Relinquished by: [signature]	Date/Time 8-24-07 1200	Received by: K. Anderson 8-24-07 12pm
Relinquished by:	Date/Time	Received for subcontractor by:

Project Comments/Remarks:

Rec'd on ice 3°-5°C

***REPORT RESULTS TO THE ADDRESS ABOVE TO THE ATTENTION OF KAREN BROWN.** If the hardcopy results cannot be delivered by the above due date, please contact Karen Brown at the above number.*

Central Analytical Laboratories
2315 N. Causeway Blvd. Suite 150, Metairie, LA 70001
(504) 297-3400 Toll Free: (866) 388-3400 Fax: (504) 297-3410

DELIVER TO: **Pace Analytical Services, Inc.**
1000 Riverbend Blvd
Suite F
St. Rose, LA 70087
Attn: Karen Brown

REPORT OF ANALYSIS

ANALYSES PERFORMED BY
Central Analytical Laboratories

Report Date : 9/14/2007
Report Number : 08281412
EPN#2073126

Client: Pace Analytical Services, Inc. **Report Number:** 08281412

Sample Description Summary

Sample Description	Matrix	Collection Date/Time		CAL Sample ID	Submittal Date/Time	
MW1 82307 / 2054730	WATER	8/23/2007	10:10	CE24429	8/28/2007	13:15
MW2 82307 / 2054732	WATER	8/23/2007	10:15	CE24430	8/28/2007	13:15
MW3 82307 / 2054733	WATER	8/23/2007	11:05	CE24431	8/28/2007	13:15
MW5 82307 / 2054734	WATER	8/23/2007	11:20	CE24432	8/28/2007	13:15
MW6 82307 / 2054735	WATER	8/23/2007	10:35	CE24433	8/28/2007	13:15
MW7 82307 / 2054736	WATER	8/23/2007	10:45	CE24434	8/28/2007	13:15
MW9 82307 / 2054737	WATER	8/23/2007	13:45	CE24435	8/28/2007	13:15

Central Analytical Laboratories

Louisiana Environmental Laboratory

LELAP

Certficate No. 01996

Client: Pace Analytical Services, Inc. Report Number: 08281412

Sample analyses are performed according to U. S. Environmental Protection Agency approved methods, or other methods cited in this report. Any deviations from, additions to, or exclusions from the designated test method are noted in the "CASE NARRATIVE". Unless noted in the "CASE NARRATIVE", all quality contr criteria were within method control limits.

Results contained herein apply only to the item(s) tested.

If chain of custody documentation was provided, it is documented as an attachment to this report.

Central Analytical Laboratories reserves the right to subcontact those tests for which we are not capable or accredited. Tests which are subcontracted are indicated on the Test Report as "SUB" under the Analyst head

Unless client requests otherwise, all samples will be stored for thirty days after the issue of an Analytical Repo

Central Analytical Laboratories is accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP). The results shown in this report are certified to be in accordance with the terms of LAC 33:I unless otherwise stated. Analyses for which Central Analytical Laboratories is not accredited, or which have been subcontracted to an unaccredited laboratory are noted in this report; such results are not covered l our accreditation.

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John M. Reuther
Laboratory Manager

Client: Pace Analytical Services, Inc. Report Number : 08281412

CASE NARRATIVE

INORGANIC QUALITY CONTROL

Holding Times: All holding times were within method criteria.

Method Blanks: All method blanks were found to be within quality control criteria for the method.

Spike/Duplicate: Spike and Duplicate recoveries were found to be within acceptable limits of precision and accuracy.

Laboratory Quality Control Samples: All analyses met the quality control criteria of the method.

Calibration Verifications: All criteria established for the method were met.

Analysis Comments: CAL is not LELAC approved for 300.0 fluoride testing.

ORGANIC QUALITY CONTROL

Holding Times: All holding times were within method criteria.

Method Blanks: All method blanks were found to be within quality control criteria for the method.

Spike/Duplicate: Spike and Duplicate recoveries were found to be within acceptable limits of precision and accuracy.

Laboratory Quality Control Samples: All analyses met the quality control criteria of the method.

Calibration Verifications: All criteria established for the method were met.

Analysis Comments:

Central Analytical Laboratories

Analysis Results

Description:	MW1 82307 / 2054730	**Sampled By:**	NM
CAL Number:	CE24429	**Sample Date:**	8/23/2007
Submit Date:	8/28/2007	**Sample Time:**	10:10 AM
Submit Time:	1:15 PM	**Sample Type:**	WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date		End Date
Fluoride	1.4	mg/L	0.1	300.0	FS	9/6/2007	15:30	9/10/2007

Report Date : 9/14/2007

Central Analytical Laboratories

Analysis Results

Description: MW2 82307 / 2054732
CAL Number: CE24430
Submit Date: 8/28/2007
Submit Time: 1:15 PM

Sampled By: NM
Sample Date: 8/23/2007
Sample Time: 10:15 AM
Sample Type: WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	1.7	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description:	MW3 82307 / 2054733	**Sampled By:**	NM
CAL Number:	CE24431	**Sample Date:**	8/23/2007
Submit Date:	8/28/2007	**Sample Time:**	11:05 AM
Submit Time:	1:15 PM	**Sample Type:**	WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date		End Date
Fluoride	1.5	mg/L	0.1	300.0	FS	9/6/2007	15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description: MW5 82307 / 2054734
CAL Number: CE24432
Submit Date: 8/28/2007
Submit Time: 1:15 PM

Sampled By: NM
Sample Date: 8/23/2007
Sample Time: 11:20 AM
Sample Type: WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	1.8	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description: MW6 82307 / 2054735
CAL Number: CE24433
Submit Date: 8/28/2007
Submit Time: 1:15 PM

Sampled By: NM
Sample Date: 8/23/2007
Sample Time: 10:35 AM
Sample Type: WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	2.3	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description: MW7 82307 / 2054736
CAL Number: CE24434
Submit Date: 8/28/2007
Submit Time: 1:15 PM

Sampled By: NM
Sample Date: 8/23/2007
Sample Time: 10:45 AM
Sample Type: WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date		End Date
Fluoride	2.7	mg/L	0.1	300.0	FS	9/6/2007	15:30	9/10/2007

Central Analytical Laboratories

Analysis Results

Description: MW9 82307 / 2054737
CAL Number: CE24435
Submit Date: 8/28/2007
Submit Time: 1:15 PM

Sampled By: NM
Sample Date: 8/23/2007
Sample Time: 1:45 PM
Sample Type: WATER

Methodology: Standard Methods for the Examination of Water and Wastewater, APHA, 20th Edition
Methods for Chemical Analysis of Water and Waste, EPA-600/4-79-020, March 1983
Test Methods for Evaluating Solid Waste, Physical, Chemical Methods, EPA SW-846, Third Edition, July 1992

Analyte	Result	Units	MDL	Method	Analyst	Start Date	End Date
Fluoride	Not detected	mg/L	0.1	300.0	FS	9/6/2007 15:30	9/10/2007

Report Date : 9/14/2007

08281412

Pace Analytical™
www.pacelabs.com

SUBCONTRACTING CHAIN-OF-CUSTODY

Pace Analytical Services, Inc.
1000 Riverbend Blvd., Suite F
St. Rose, LA 70087
Phone: 504.469.0333
Fax: 504.469.0555

Due Date: 09/07/07 **Freight Carrier:** CAL **Custody Seals:** Intact / Broken / Missing

Subcontractor: CAL **Airbill #:** _____ **Samples:** Intact / Broken / Missing

Contact: _____ **EPN #:** 20731216 **Cooler Temperature (°C):** _____

PACE SAMPLE ID	CLIENT SAMPLE ID	SAMPLE DATE/TIME	MATRIX	SAMPLE #	ANALYTE/ METHOD	SAMPLE COMMENTS
20547430	MW1 82307	8/23/07 10:10	W	1		fluoride EE24429
20547432	MW2 82307	10:15				-30
20547433	MW3 82307	11:05				-31
20547434	MW5 82307	11:20				-32
20547435	MW6 82307	10:35				-33
20547436	MW7 82307	10:45				-34
20547437	MW9 82307	13:45				

Relinquished by:	Date/Time	Received by:	Project Comments/Remarks:
[signature]	1255 8-28-07	[signature] 12:55 8-28-07	Rec'd on ice 3°-4°C
[signature]	8-28-07	K. Anderson 13:15 8.28.07	
Relinquished by:	Date/Time	Received for subcontractor by:	

REPORT RESULTS TO THE ADDRESS ABOVE TO THE ATTENTION OF KAREN BROWN. If the hardcopy results cannot be delivered by the above due date, please contact Karen Brown at the above number.

STL

ANALYTICAL REPORT

JOB NUMBER: 346081
Project ID: G.L ERWIN

Prepared For:

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

Attention: James Ornelas

Date: 12/07/2007

Signature

12/07/07
Date

Name: Sachin G. Kudchadkar

Title: Project Manager III

E-Mail: sachin.kudchadkar@testamericainc.com

TestAmerica Laboratories, Inc
6310 Rothway Drive
Houston, TX 77040

PHONE: 713-690-4444

TOTAL NO. OF PAGES 24

STL

12/07/2007

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

Reference:
Project : G.L ERWIN
Project No. : 346081
Date Received : 11/29/2007
TestAmerica Job : 346081

Dear James Ornelas:

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

1. MW21112807
2. MW22112807
3. DUP112807

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

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

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

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

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

We look forward to working with you on future projects.

Sincerely,

Sachin G. Kudchadkar
Project Manager

SAMPLE INFORMATION
Date: 12/07/2007

Job Number.: 346081
Customer...: Conestoga-Rovers and Associates
Attn.....: James Ornelas

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

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
346081-1	MW21112807	Water	11/28/2007	12:20	11/29/2007	09:14
346081-2	MW22112807	Water	11/28/2007	12:30	11/29/2007	09:14
346081-3	DUP112807	Water	11/28/2007	00:00	11/29/2007	09:14

LABORATORY TEST RESULTS

Job Number: 346081

Date:12/07/2007

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

Customer Sample ID: MW21112807
Date Sampled.....: 11/28/2007
Time Sampled.....: 12:20
Sample Matrix.....: Water

Laboratory Sample ID: 346081-1
Date Received.....: 11/29/2007
Time Received.....: 09:14

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3010A	Acid Digestion, Diss.	Complete					1		190164		12/05/07 0815	rim
SW-846 6010B	Metals Analysis (ICAP Trace)											
	Calcium (Ca), Diss.	173			0.02185	2.000	1	mg/L	190242		12/06/07 1052	srp
	Magnesium (Mg), Diss.	64.4			0.01604	2.000	1	mg/L	190242		12/06/07 1052	srp
	Potassium (K), Diss.	18.3			0.08121	2.000	1	mg/L	190242		12/06/07 1052	srp
	Sodium (Na), Diss.	115			0.2000	20.00	10	mg/L	190242		12/06/07 0846	srp
SM 2320 B	Alkalinity, Total as CaCO3, Water	415			1.14	5.0	1	mg/L	190118		12/04/07 1100	enc
SM 2320 B	Bicarbonate (HCO3), Water	415			1.14	5.0	1	mg/L	190118		12/04/07 1100	enc
SM 2320 B	Carbonate (CO3), Water	1.14	U		1.14	5.0	1	mg/L	190118		12/04/07 1100	enc
SM 2320 B	Hydroxide (OH), Water	1.14	U		1.14	5.0	1	mg/L	190118		12/04/07 1100	enc
SM2540 C	Solids, Total Dissolved (TDS), Water	1440			0.153	10	1	mg/L	189987		11/30/07 1730	tws
EPA 300.0	Ion Chromatography Analysis											
	Chloride, Water	482			15	50	100.00	mg/L	189931		11/30/07 0145	sur
	Sulfate (SO4), Water	128			3.4	5.0	10.000	mg/L	189931		11/30/07 0123	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 346081

Date:12/07/2007

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

Customer Sample ID: MW22112807
Date Sampled.....: 11/28/2007
Time Sampled.....: 12:30
Sample Matrix.....: Water

Laboratory Sample ID: 346081-2
Date Received.....: 11/29/2007
Time Received.....: 09:14

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3010A	Acid Digestion, Diss.	Complete					1		190164		12/05/07 0815	rim
SW-846 6010B	Metals Analysis (ICAP Trace)											
	Calcium (Ca), Diss.	286			0.02185	2.000	1	mg/L	190242		12/06/07 1109	srp
	Magnesium (Mg), Diss.	96.7			0.01604	2.000	1	mg/L	190242		12/06/07 1109	srp
	Potassium (K), Diss.	12.1			0.08121	2.000	1	mg/L	190242		12/06/07 1109	srp
	Sodium (Na), Diss.	229			0.2000	20.00	10	mg/L	190242		12/06/07 0900	srp
SM 2320 B	Alkalinity, Total as CaCO3, Water	2950			1.14	5.0	1	mg/L	190275		12/06/07 1330	enc
SM 2320 B	Bicarbonate (HCO3), Water	2950			1.14	5.0	1	mg/L	190275		12/06/07 1330	enc
SM 2320 B	Carbonate (CO3), Water	1.14	U		1.14	5.0	1	mg/L	190275		12/06/07 1330	enc
SM 2320 B	Hydroxide (OH), Water	1.14	U		1.14	5.0	1	mg/L	190275		12/06/07 1330	enc
SM2540 C	Solids, Total Dissolved (TDS), Water	2330			0.153	10	1	mg/L	189987		11/30/07 1730	tws
EPA 300.0	Ion Chromatography Analysis											
	Chloride, Water	1020			15	50	100.00	mg/L	189931		11/30/07 0423	sur
	Sulfate (SO4), Water	169			3.4	5.0	10.000	mg/L	189931		11/30/07 0400	sur

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 346081

Date:12/07/2007

CUSTOMER: Conestoga-Rovers and Associates

PROJECT: G.L ERWIN

ATTN: James Ornelas

Customer Sample ID: DUP112807
Date Sampled.....: 11/28/2007
Time Sampled.....: 00:00
Sample Matrix.....: Water

Laboratory Sample ID: 346081-3
Date Received.....: 11/29/2007
Time Received.....: 09:14

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
SW-846 3010A	Acid Digestion, Diss.	Complete					1		190164		12/05/07 0815	rim
SW-846 6010B	Metals Analysis (ICAP Trace)											
	Calcium (Ca), Diss.	167			0.02185	2.000	1	mg/L	190242		12/06/07 1113	srp
	Magnesium (Mg), Diss.	62.0			0.01604	2.000	1	mg/L	190242		12/06/07 1113	srp
	Potassium (K), Diss.	16.9			0.08121	2.000	1	mg/L	190242		12/06/07 1113	srp
	Sodium (Na), Diss.	115			0.2000	20.00	10	mg/L	190242		12/06/07 0904	srp
SM 2320 B	Alkalinity, Total as CaCO3, Water	380			1.14	5.0	1	mg/L	190118		12/04/07 1100	enc
SM 2320 B	Bicarbonate (HCO3), Water	380			1.14	5.0	1	mg/L	190118		12/04/07 1100	enc
SM 2320 B	Carbonate (CO3), Water	1.14	U		1.14	5.0	1	mg/L	190118		12/04/07 1100	enc
SM 2320 B	Hydroxide (OH), Water	1.14	U		1.14	5.0	1	mg/L	190118		12/04/07 1100	enc
SM2540 C	Solids, Total Dissolved (TDS), Water	1430			0.153	10	1	mg/L	189987		11/30/07 1730	tws
EPA 300.0	Ion Chromatography Analysis											
	Chloride, Water	452			1.5	5.0	10.000	mg/L	189931		11/30/07 0508	sur
	Sulfate (SO4), Water	127			3.4	5.0	10.000	mg/L	189931		11/30/07 0508	sur

* In Description = Dry Wgt.

QUALITY CONTROL RESULTS

Job Number.: 346081 Report Date.: 12/07/2007

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

Test Method.....: SM 2320 B Analyst...: enc
Method Description.: Alkalinity Units.....: mg/L CaCO3 Test Code.: ALK
Parameter.....: Alkalinity, Total as CaCO3 Batch(s)...: 190118 190275

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MB	190118--21		1.90							12/04/2007	1100
LCS	190118--21	WC3900A	970.26		1000.0		97.0	90.0-110.		12/04/2007	1100
MS	346032-1	WC3916	378.59		250.000000	144.59	93.6	75-125		12/04/2007	1100
DU	346032-1		146.49			144.59	1.3	20		12/04/2007	1100
MS	346081-2	WC3916	5504.47		2500.000000	2948.82	102.2	75-125		12/06/2007	1330
MS	346318-1	WC3916	386.20		250.000000	146.49	95.9	75-125		12/06/2007	1330
LCS	190275--21	WC3900A	970.26		1000.0		97.0	90.0-110.		12/06/2007	1330
DU	346318-1		150.29			146.49	2.6	20		12/06/2007	1330
MS	346408-13	WC3916	610.69		250.000000	372.88	95.1	75-125		12/06/2007	1330
DU	346081-2		2948.82			2948.82	0.0	20		12/06/2007	1330
DU	346408-13		376.69			372.88	1.0	20		12/06/2007	1330
MB	190275--21		1.90							12/06/2007	1330

Test Method.....: SM 2320 B Analyst...: enc
Method Description.: Alkalinity Units.....: mg/L CaCO3 Test Code.: HCO3
Parameter.....: Bicarbonate (HCO3) Batch(s)...: 190118 190275

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MB	190118--21		1.90							12/04/2007	1100
MS	346081-2	WC3916	5504.47		2500.000000	2948.82	102.2	75-125		12/06/2007	1330
MB	190275--21		1.90							12/06/2007	1330
DU	346081-2		2948.82			2948.82	0.0	20		12/06/2007	1330

Test Method.....: SM 2320 B Analyst...: enc
Method Description.: Alkalinity Units.....: mg/L CaCO3 Test Code.: CO3
Parameter.....: Carbonate (CO3) Batch(s)...: 190118 190275

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MB	190118--21		0							12/04/2007	1100
MB	190275--21		0							12/06/2007	1330
DU	346081-2		0			0	0	5		12/06/2007	1330

Test Method.....: SM 2320 B Analyst...: enc
Method Description.: Alkalinity Units.....: mg/L CaCO3 Test Code.: OH
Parameter.....: Hydroxide (OH) Batch(s)...: 190118 190275

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
MB	190118--21		0							12/04/2007	1100
MB	190275--21		0							12/06/2007	1330
DU	346081-2		0			0	0	5		12/06/2007	1330

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

QUALITY CONTROL RESULTS

Job Number.: 346081

Report Date.: 12/07/2007

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

Test Method.....: SM2540 C
Method Description.: Solids, Total Dissolved (TDS)
Parameter.....: Solids, Total Dissolved (TDS)
Units.....: mg/L
Batch(s)...: 189987
Analyst...: tws
Test Code.: TDS

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F	Date	Time
LCS	189987--21	WCS46891	1747.00		1800		97.1	90.0-110.		11/30/2007	1730
DU	346036-1		318.00			337.00	5.8	10.0		11/30/2007	1730
MB	189987--21		-3.00							11/30/2007	1730

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

QUALITY CONTROL RESULTS

Job Number.: 346081

Report Date.: 12/07/2007

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

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

Test Method.....: EPA 300.0 Units.....: mg/L Analyst...: sur
Method Description.: Ion Chromatography Analysis Batch(s)...: 189931

CCB	Continuing Calibration Blank				11/29/2007	1752

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	0.0491						90.0-110.0	
Fluoride (F)	n.a.						90.0-110.0	

CCB	Continuing Calibration Blank				11/29/2007	2200

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	0.0234						90.0-110.0	
Fluoride (F)	n.a.						90.0-110.0	
Sulfate (SO4)	n.a.						90.0-110.0	

CCB	Continuing Calibration Blank				11/30/2007	0230

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	n.a.						90.0-110.0	
Fluoride (F)	n.a.						90.0-110.0	
Sulfate (SO4)	n.a.						90.0-110.0	

CCB	Continuing Calibration Blank				11/30/2007	0745

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	0.1976						90.0-110.0	
Sulfate (SO4)	n.a.						90.0-110.0	

CCV	Continuing Calibration Verification	WCS47307			11/29/2007	1730

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	19.8160		20.00		99.1			
Fluoride (F)	10.7761		10.00		107.8			

CCV	Continuing Calibration Verification	WCS47307			11/29/2007	2138

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	19.7959		20.00		99.0			
Fluoride (F)	10.8844		10.00		108.8			

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

QUALITY CONTROL RESULTS

Job Number.: 346081 Report Date.: 12/07/2007

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS47307			11/30/2007	0208

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	19.8256		20.00		99.1			
Fluoride (F)	11.0083		10.00		110.1			G
Sulfate (SO4)	19.2408		20.00		96.2			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	WCS47307			11/30/2007	0723

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	20.6062		20.00		103.0			
Sulfate (SO4)	19.8520		20.00		99.3			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
DU	Method Duplicate		346067-1	100.0	11/29/2007	2030

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride, Water	2.3089			2.4158	0.1069			
Fluoride (F), Water	0.0125			0.0089	0.0036			
Sulfate (SO4), Water	2.4208			2.4620	0.0412			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
DU	Method Duplicate		346052-1	10.0	11/30/2007	0015

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride, Water	2.6298			2.6781	1.8			
Fluoride (F), Water	0.0138			0.0147	0.0009			
Sulfate (SO4), Water	1.0895			1.1002	0.0107			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
DU	Method Duplicate		346081-3	100.0	11/30/2007	0553

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride, Water	4.2740			4.3226	1.1			
Sulfate (SO4), Water	1.0772			1.0840	0.0068			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				11/29/2007	1345

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	0.0099						90.0-110.0	
Fluoride (F)	n.a.						90.0-110.0	

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

QUALITY CONTROL RESULTS

Job Number.: 346081 — Report Date.: 12/07/2007

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	WCS47307			11/29/2007	1322

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	19.5573		20.00		97.8			
Fluoride (F)	10.6658		10.00		106.7			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	WCS47307			11/29/2007	1430

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	19.5416		20.00		97.7			
Fluoride (F)	10.6915		10.00		106.9			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	WCS47307			11/30/2007	0315

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	19.8523		20.00		99.3			
Fluoride (F)	11.0108		10.00		110.1			G
Sulfate (SO4)	19.4829		20.00		97.4			

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				11/29/2007	1407

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	n.a.							
Fluoride (F)	n.a.							

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank				11/30/2007	0253

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride	n.a.							
Fluoride (F)	n.a.							
Sulfate (SO4)	n.a.							

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS47308	346067-1	100.0	11/29/2007	2053

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride, Water	11.6509		10.000000	2.4158	92.4			
Fluoride (F), Water	2.0256		2.000000	0.0089	100.8			
Sulfate (SO4), Water	11.4382		10.000000	2.4620	89.8			A

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

QUALITY CONTROL RESULTS

Job Number.: 346081 Report Date.: 12/07/2007

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	WCS47308	346052-1	10.0	11/30/2007	0038

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride, Water	12.0868		10.000000	2.6781	94.1		20	
Fluoride (F), Water	2.0430		2.000000	0.0147	101.4			
Sulfate (SO4), Water	10.4082		10.000000	1.1002	93.1			

MS	Matrix Spike	WCS47308	346081-3	100.0	11/30/2007	0615

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Chloride, Water	13.6838		10.000000	4.3226	93.6		20	
Sulfate (SO4), Water	10.4708		10.000000	1.0840	93.9			

Test Method.....: SW-846 6010B Units.....: mg/L Analyst...: srp
Method Description.: Metals Analysis (ICAP Trace) Batch(s)...: 190242

CCB	Continuing Calibration Blank				12/06/2007	0807

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00058							
Magnesium (Mg)	0.01141							
Potassium (K)	0.05527							
Sodium (Na)	0.00513							

CCB	Continuing Calibration Blank				12/06/2007	0915

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00772							
Magnesium (Mg)	0.01425							
Potassium (K)	0.09917							
Sodium (Na)	0.05100							

CCB	Continuing Calibration Blank				12/06/2007	0955

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00883							
Magnesium (Mg)	0.01087							
Potassium (K)	0.07051							
Sodium (Na)	0.07200							

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

QUALITY CONTROL RESULTS

Job Number.: 346081 Report Date.: 12/07/2007

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				12/06/2007	1010

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00390							
Magnesium (Mg)	0.01427							
Potassium (K)	0.11627							
Sodium (Na)	0.05229							

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				12/06/2007	1120

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.01385							
Magnesium (Mg)	0.00281							
Potassium (K)	0.01643							
Sodium (Na)	0.03063							

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCB	Continuing Calibration Blank				12/06/2007	1139

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00744							
Magnesium (Mg)	0.00988							
Potassium (K)	0.05877							
Sodium (Na)	0.02124							

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS120307CC			12/06/2007	0804

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	12.50380		12.50		100.0		90.0-110.0	
Magnesium (Mg)	4.98533		5.000		99.7		90.0-110.0	
Potassium (K)	11.97808		12.50		95.8		90.0-110.0	
Sodium (Na)	11.89599		12.50		95.2		90.0-110.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS120307CC			12/06/2007	0911

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	12.56735		12.50		100.5		90.0-110.0	
Magnesium (Mg)	4.97548		5.000		99.5		90.0-110.0	
Potassium (K)	12.23197		12.50		97.9		90.0-110.0	
Sodium (Na)	12.05824		12.50		96.5		90.0-110.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS120307CC			12/06/2007	0952

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	12.48539		12.50		99.9		90.0-110.0	
Magnesium (Mg)	4.92086		5.000		98.4		90.0-110.0	
Potassium (K)	12.21464		12.50		97.7		90.0-110.0	
Sodium (Na)	12.21065		12.50		97.7		90.0-110.0	

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

QUALITY CONTROL RESULTS

Job Number.: 346081 Report Date.: 12/07/2007

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS120307CC			12/06/2007	1006

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	12.57056		12.50		100.6		90.0-110.0	
Magnesium (Mg)	4.97683		5.000		99.5		90.0-110.0	
Potassium (K)	12.29302		12.50		98.3		90.0-110.0	
Sodium (Na)	12.20222		12.50		97.6		90.0-110.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS120307CC			12/06/2007	1117

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	12.48465		12.50		99.9		90.0-110.0	
Magnesium (Mg)	4.95137		5.000		99.0		90.0-110.0	
Potassium (K)	12.06353		12.50		96.5		90.0-110.0	
Sodium (Na)	12.04693		12.50		96.4		90.0-110.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CCV	Continuing Calibration Verification	MS120307CC			12/06/2007	1135

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	12.56984		12.50		100.6		90.0-110.0	
Magnesium (Mg)	4.99260		5.000		99.9		90.0-110.0	
Potassium (K)	12.13097		12.50		97.0		90.0-110.0	
Sodium (Na)	12.18653		12.50		97.5		90.0-110.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH1	Calibration check standard 1	MS113007T1			12/06/2007	0753

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.11962		0.1000		119.6		50.0-150.0	
Magnesium (Mg)	0.12368		0.1000		123.7		50.0-150.0	
Potassium (K)	0.69804		0.60000		116.3		50.0-150.0	
Sodium (Na)	0.56235		0.60000		93.7		50.0-150.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH1	Calibration check standard 1	MS113007T1			12/06/2007	1124

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.10793		0.1000		107.9		50.0-150.0	
Magnesium (Mg)	0.10948		0.1000		109.5		50.0-150.0	
Potassium (K)	0.64093		0.60000		106.8		50.0-150.0	
Sodium (Na)	0.58633		0.60000		97.7		50.0-150.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CH3	Standard check for ICAP	MS113007T3			12/06/2007	0742

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	20.04420		20.00		100.2		95.0-105.0	
Magnesium (Mg)	20.03889		20.00		100.2		95.0-105.0	
Potassium (K)	20.13381		20.00		100.7		95.0-105.0	
Sodium (Na)	20.03085		20.00		100.2		95.0-105.0	

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

QUALITY CONTROL RESULTS

Job Number.: 346081 Report Date.: 12/07/2007

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB	Extraction Blank		190164		12/06/2007	0842

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.	0.03744							
Magnesium (Mg), Diss.	0.03936							
Potassium (K), Diss.	0.21769							
Sodium (Na), Diss.	0.03660							

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
EB	Extraction Blank		190164		12/06/2007	0908

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), TCLP	0.08193							
Magnesium (Mg), TCLP	0.04296							
Potassium (K), TCLP	0.32811							

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICB	Initial Calibration Blank				12/06/2007	0749

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00875							
Magnesium (Mg)	0.01739							
Potassium (K)	0.10259							
Sodium (Na)	0.01066							

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ICV	Initial Calibration Verification	MS120307CC			12/06/2007	0745

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	12.45792		12.50		99.7		90.0-110.0	
Magnesium (Mg)	4.92964		5.000		98.6		90.0-110.0	
Potassium (K)	11.99433		12.50		96.0		90.0-110.0	
Sodium (Na)	11.88859		12.50		95.1		90.0-110.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISA	Interference Check Sample A	MS112707IA			12/06/2007	0756

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	451.80166		500.0		90.4		80-120	
Magnesium (Mg)	514.24139		500.0		102.8		80-120	
Potassium (K)	0.16040		0.0					
Sodium (Na)	0.19647		0.0					

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISA	Interference Check Sample A	MS112707IA			12/06/2007	1128

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	448.40249		500.0		89.7		80-120	
Magnesium (Mg)	512.06036		500.0		102.4		80-120	
Potassium (K)	0.10672		0.0					
Sodium (Na)	0.22018		0.0					

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

QUALITY CONTROL RESULTS

Job Number.: 346081 — Report Date.: 12/07/2007

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISB	Interference Check Sample B	MS112707IB			12/06/2007	0800

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	455.12390		510.0		89.2		80.0-120.0	
Magnesium (Mg)	520.48034		510.0		102.1		80.0-120.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
ISB	Interference Check Sample B	MS112707IB			12/06/2007	1131

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	453.23342		510.0		88.9		80.0-120.0	
Magnesium (Mg)	519.48339		510.0		101.9		80.0-120.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	MSPIKEW	190164		12/06/2007	0838

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Water	10.63841		10.00		106.4		80.0-120.0	
Magnesium (Mg), Water	10.54547		10.00		105.5		80.0-120.0	
Potassium (K), Water	10.41582		10.00		104.2		80.0-120.0	
Sodium (Na), Water	10.14247		10.00		101.4		80.0-120.0	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		346081-1	10	12/06/2007	0849

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Sodium (Na), Diss.	11.46280			11.48789	0.2		20	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		346242-3		12/06/2007	0930

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), TCLP	6.95691	6.88075		6.88075	0.07616		2.00000	
Magnesium (Mg), TCLP	1.74126	1.72413		1.72413	0.01713		2.00000	
Potassium (K), TCLP	1.63624	1.59685		1.59685	0.03939		2.00000	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MD	Method Duplicate		346081-1		12/06/2007	1056

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.	172.05694	172.52481		172.52481	0.3		20	
Magnesium (Mg), Diss.	64.17037	64.36124		64.36124	0.3		20	
Potassium (K), Diss.	18.13532	18.27521		18.27521	0.8		20	

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

QUALITY CONTROL RESULTS

Job Number.: 346081

Report Date.: 12/07/2007

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	MSPIKEW	346081-1	10	12/06/2007	0853

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Sodium (Na), Diss.	12.34738		1.000000	11.48789	85.9		75-125	

MS	Matrix Spike	MSPIKEW	346242-3		12/06/2007	0933

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), TCLP	17.23638		10.00	6.88075	103.6		75-125	
Magnesium (Mg), TCLP	11.70447		10.00	1.72413	99.8		75-125	
Potassium (K), TCLP	23.71652		10.00	1.59685	221.2		75-125	a

MS	Matrix Spike	MSPIKEW	346081-1		12/06/2007	1102

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.	179.68327		10.00	172.52481	71.6		75-125	
Magnesium (Mg), Diss.	73.66859		10.00	64.36124	93.1		75-125	
Potassium (K), Diss.	30.65133		10.00	18.27521	123.8		75-125	

MSD	Matrix Spike Duplicate	MSPIKEW	346081-1	10	12/06/2007	0857

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Sodium (Na), Diss.	12.39227		1.000000	11.48789	90.4		75-125	

MSD	Matrix Spike Duplicate	MSPIKEW	346242-3		12/06/2007	0937

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), TCLP	16.55063	17.23638	10.00	6.88075	96.7		75-125	
					6.9		20	
Magnesium (Mg), TCLP	11.01978	11.70447	10.00	1.72413	93.0		75-125	
					7.1		20	
Potassium (K), TCLP	22.25480	23.71652	10.00	1.59685	206.6		75-125	a
					6.8		20	
Sodium (Na), TCLP	829.10504	837.44061	10.00	843.38562	-142.8		75-125	
					82.4		20	C

MSD	Matrix Spike Duplicate	MSPIKEW	346081-1		12/06/2007	1106

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.	179.80984	179.68327	10.00	172.52481	72.9		75-125	
					1.8		20	
Magnesium (Mg), Diss.	73.76194	73.66859	10.00	64.36124	94.0		75-125	
					1.0		20	
Potassium (K), Diss.	30.54336	30.65133	10.00	18.27521	122.7		75-125	
					0.9		20	

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

QUALITY CONTROL RESULTS

Job Number.: 346081 Report Date.: 12/07/2007

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

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PB	Prep. Blank		190164		12/06/2007	0835

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Water	0.01088							
Magnesium (Mg), Water	0.01833							
Potassium (K), Water	0.12720							
Sodium (Na), Water	0.01153							

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PB	Prep. Blank		190164		12/06/2007	0948

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Liquid	0.00917							
Magnesium (Mg), Liquid	-0.00589							
Potassium (K), Liquid	0.01788							
Sodium (Na), Liquid	0.14156							

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
PDS	Post Digestion Spike	MSPIKE3	346081-1		12/06/2007	0959

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.	27.80472		10.00	172.52481	-1447.2		75-125	
Magnesium (Mg), Diss.	16.32615		10.00	64.36124	-480.4		75-125	
Potassium (K), Diss.	11.66150		10.00	18.27521	-66.1		75-125	A
Sodium (Na), Diss.	21.68278		10.00	117.35914	-956.8		75-125	

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
SD	Calibration Blank				12/06/2007	0734

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	0.00422							
Magnesium (Mg)	0.03368							
Potassium (K)	0.42278							
Sodium (Na)	0.21134							

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
SD	Serial Dilution		346081-1	5	12/06/2007	1003

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca), Diss.	3.63976			172.52481	89.5		10.0	e
Magnesium (Mg), Diss.	1.29294			64.36124	90.0		10.0	e
Potassium (K), Diss.	0.26907			18.27521	92.6		10.0	e
Sodium (Na), Diss.	2.32352			117.35914	90.1		10.0	e

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
STD	Spiked Blank Duplicate				12/06/2007	0738

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Calcium (Ca)	3.12851							
Magnesium (Mg)	1.34819							
Potassium (K)	2.78975							
Sodium (Na)	17.14502							

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

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 12/07/2007

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 and p-Cresol co-elute. The result of the two is reported as either m&p-cresol or as 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.

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: 346081 Date: 12/07/2007

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

Lab ID: 346081-1 Client ID: MW21112807 Date Recvd: 11/29/2007 Sample Date: 11/28/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	190164		12/05/2007 0815	
SM 2320 B	Alkalinity	1	190118		12/04/2007 1100	
EPA 300.0	Ion Chromatography Analysis	1	189931		11/30/2007 0123	10.000
EPA 300.0	Ion Chromatography Analysis	1	189931		11/30/2007 0145	100.00
SW-846 6010B	Metals Analysis (ICAP Trace)	1	190242	190164	12/06/2007 0846	10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	190242	190164	12/06/2007 1052	
N/A	Sample Filtration	1	190123		12/05/2007 0800	
SM2540 C	Solids, Total Dissolved (TDS)	1	189987		11/30/2007 1730	

Lab ID: 346081-2 Client ID: MW22112807 Date Recvd: 11/29/2007 Sample Date: 11/28/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	190164		12/05/2007 0815	
SM 2320 B	Alkalinity	1	190275		12/06/2007 1330	
EPA 300.0	Ion Chromatography Analysis	1	189931		11/30/2007 0400	10.000
EPA 300.0	Ion Chromatography Analysis	1	189931		11/30/2007 0423	100.00
SW-846 6010B	Metals Analysis (ICAP Trace)	1	190242	190164	12/06/2007 0900	10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	190242	190164	12/06/2007 1109	
N/A	Sample Filtration	1	190123		12/05/2007 0800	
SM2540 C	Solids, Total Dissolved (TDS)	1	189987		11/30/2007 1730	

Lab ID: 346081-3 Client ID: DUP112807 Date Recvd: 11/29/2007 Sample Date: 11/28/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3010A	Acid Digestion Aqueous/Extracts FLAA/ICP	1	190164		12/05/2007 0815	
SM 2320 B	Alkalinity	1	190118		12/04/2007 1100	
EPA 300.0	Ion Chromatography Analysis	1	189931		11/30/2007 0508	10.000
SW-846 6010B	Metals Analysis (ICAP Trace)	1	190242	190164	12/06/2007 0904	10
SW-846 6010B	Metals Analysis (ICAP Trace)	1	190242	190164	12/06/2007 1113	
N/A	Sample Filtration	1	190123		12/05/2007 0800	
SM2540 C	Solids, Total Dissolved (TDS)	1	189987		11/30/2007 1730	

087303

STL

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: CRA	PROJECT NAME/NUMBER: O.L. ERWIN / 039124
SEND REPORT TO: James Ornelas	**BILLING INFORMATION**
ADDRESS: 2135 S. Loop 250 W. Midland, TX	BILL TO:
	ADDRESS:
PHONE: 432-686-0066	PHONE:
FAX: 686-0186	FAX: PO NO:

LAB JOB NO. 346081

SAMPLE NO	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER	PRESERV.	NUMBER OF CONTAINERS	ANALYSIS/METHOD REQUEST: 2540C / 300	6010B - Dissolved	Temp	REMARKS/PRECAUTIONS
	MW2112807	11-26-07	1220	water	500 Plastic	ice	3	X	X	X	
	MW22112807	11-26-07	1230	water	↓	ice	3	X	X	X	
	DUP112807	11-26-07	—	water	↓	ice	3	X	X	X	
	Temp	—	—	water	125 plastic	ice	1			X	

SAMPLER: Joe Mireles / Todd Wells

SHIPMENT METHOD: Fedex

AIRBILL NO.:

REQUIRED TURNAROUND* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☐ 5 DAYS ☐ 10 DAYS ☒ ROUTINE ☐ OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: Joe Mireles	11-28-07	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: Joe Mireles / CRA	TIME 1745	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	1. RECEIVED BY:	DATE	1. RECEIVED BY:	DATE
SIGNATURE:		SIGNATURE:	11-29-07	SIGNATURE:	
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

*RUSH TURNAROUND MAY REQUIRE SURCHARGE

STL8222H-600 (0803)

STL Houston
6310 Rothway Drive
Houston, TX 77040

rpjsckl | Job Sample Receipt Checklist Report | V2

Job Number.: 346081 Location.: 57216 Check List Number.: 1 Description.:
Customer Job ID.....: Job Check List Date.: 11/29/2007 Date of the Report..: 11/29/2007
Project Number.: 99007700 Project Description.: ANALYTICAL Project Manager.....: sgk
Customer.....: Conestoga-Rovers and Associates Contact.: James Ornelas

Questions ?	(Y/N)	Comments
Chain of Custody Received?	Y	
...If "yes", completed properly?	Y	
Custody seal on shipping container?	Y	
...If "yes", custody seal intact?	Y	
Custody seals on sample containers?	N	
...If "yes", custody seal intact?		
Samples chilled?	Y	
Temperature of cooler acceptable? (4 deg C +/- 2).	Y	2.6 5.7 3.9
...If "no", is sample an air matrix?(no temp req.)		
Thermometer ID	Y	463
Samples received intact (good condition)?	Y	
Volatile samples acceptable? (no headspace)	Y	
Correct containers used?	Y	
Adequate sample volume provided?	Y	
Samples preserved correctly?	Y	
Samples received within holding-time?	Y	
Agreement between COC and sample labels?	Y	
Radioactivity at or below background levels?	Y	
Additional		
Comments		
Sample Custodian Signature/Date	Y	MT

11-29-07

Pace Analytical®

1241 Bellevue Street, Suite 9
Green Bay, WI 54302
920-469-2436, Fax: 920-469-8827

Analytical Report Number: 881227

Client: PACE ANALYTICAL SERVICES, INC.

Lab Contact: Brian Basten

Project Name: CRA

Project Number: 2067176

Lab Sample Number	Field ID	Matrix	Collection Date
881227-001	MW 1 22807 20504715	WATER	02/28/07 12:37
881227-002	MW 2 22807 20504716	WATER	02/28/07 12:30
881227-003	MW 3 22807 20504717	WATER	02/28/07 12:47
881227-004	MW 4 22807 20504718	WATER	02/28/07 13:10
881227-005	MW 5 22807 20504719	WATER	02/28/07 12:53
881227-006	MW 6 22807 20504720	WATER	02/28/07 12:45
881227-007	MW 7 22807 20504721	WATER	02/28/07 12:25
881227-008	MW 8 22807 20504722	WATER	02/28/07 12:15
881227-009	MW 9 22807 20504723	WATER	02/28/07 11:15
881227-010	MW 10 22807 20504724	WATER	02/28/07 13:05
881227-011	MW 12 22807 20504725	WATER	02/28/07 11:50
881227-012	MW 13 22807 20504726	WATER	02/28/07 12:21
881227-013	MW 14 22807 20504727	WATER	02/28/07 11:57
881227-014	MW 15 22807 20504728	WATER	02/28/07 11:45
881227-015	MW 16 22807 20504729	WATER	02/28/07 12:10
881227-016	MW 17 22807 20504730	WATER	02/28/07 12:02
881227-017	MW 19 22807 20504731	WATER	02/28/07 11:27
881227-018	MW 20 22807 20504732	WATER	02/28/07 11:35
881227-019	MW WEST 22807 20504733	WATER	02/28/07 13:20
881227-020	SW1 22807 20504734	WATER	02/28/07 13:30
881227-021	RW1 22807 20504735	WATER	02/28/07 13:40
881227-022	DUP 22807 20504736	WATER	02/28/07
881227-023	WW 13107 20505133	WATER	03/01/07 12:00

Approval Signature

3-14-07
Date

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 1 22807 20504715

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-001

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		170	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Chloride		170	25	5	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		1.8	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		3.6	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		81	20	5	mg/L		03/02/07	EPA 300.0	EPA 300.0

Pace Analytical Services, Inc.

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Green Bay, WI 54302
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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 2 22807 20504716

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-002

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		260	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Chloride		280	50	10	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		2.1	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		5.4	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		140	40	10	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 3 22807 20504717

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-003

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		270	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Chloride		850	50	10	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		2.2	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		8.5	4.0	10	mg/L		03/02/07	EPA 300.0	EPA 300.0
Sulfate		190	40	10	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 4 22807 20504718

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-004

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		170	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Chloride		10000	2500	500	mg/L		03/06/07	EPA 300.0	EPA 300.0
Fluoride	<	250	250	500	mg/L		03/06/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	<	200	200	500	mg/L		03/06/07	EPA 300.0	EPA 300.0
Sulfate	<	2000	2000	500	mg/L		03/06/07	EPA 300.0	EPA 300.0

Pace Analytical Services, Inc.

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 5 22807 20504719

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-005

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		300	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Chloride		730	50	10	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		3.5	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		5.2	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		340	40	10	mg/L		03/02/07	EPA 300.0	EPA 300.0

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 6 22807 20504720

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-006

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		280	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Chloride		530	50	10	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		3.0	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		7.8	4.0	10	mg/L		03/02/07	EPA 300.0	EPA 300.0
Sulfate		170	40	10	mg/L		03/02/07	EPA 300.0	EPA 300.0

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 7 22807 20504721

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-007

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		270	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Chloride		240	25	5	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		3.3	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		3.6	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		100	20	5	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 8 22807 20504722

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-008

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		260	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Chloride		740	50	10	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		3.3	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		7.3	4.0	10	mg/L		03/02/07	EPA 300.0	EPA 300.0
Sulfate		170	40	10	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 9 22807 20504723

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-009

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		140	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Chloride		8700	500	100	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride	<	0.50	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		4.6	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		430	40	10	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 10 22807 20504724

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-010

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		360	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/05/07	SM 2320B	SM 2320B
Chloride		2200	500	100	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		0.80	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		4.2	4.0	10	mg/L	N	03/02/07	EPA 300.0	EPA 300.0
Sulfate		100	40	10	mg/L		03/02/07	EPA 300.0	EPA 300.0

Pace Analytical Services, Inc.

Analytical Report Number: 881227

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Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 12 22807 20504725

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-011

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		95	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Chloride		1900	250	50	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		1.3	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		6.9	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		65	4.0	1	mg/L		03/01/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 13 22807 20504726

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-012

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		90	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Chloride		880	100	20	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		2.0	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		5.2	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		140	80	20	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 14 22807 20504727

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-013

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		95	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Chloride		5200	500	100	mg/L		03/05/07	EPA 300.0	EPA 300.0
Fluoride	<	0.50	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		4.3	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		620	200	50	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 15 22807 20504728

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-014

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		170	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Chloride		90	25	5	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		2.2	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		2.2	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		71	20	5	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

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Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 16 22807 20504729

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-015

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		220	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Chloride		410	25	5	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		1.6	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		4.6	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		110	20	5	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 17 22807 20504730

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-016

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		180	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Chloride		530	50	10	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		2.2	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		4.1	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		130	40	10	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 19 22807 20504731

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-017

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		92	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Chloride		5500	500	100	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride	<	0.50	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		4.4	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		600	400	100	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW 20 22807 20504732

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-018

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		110	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Chloride		1300	100	20	mg/L		03/05/07	EPA 300.0	EPA 300.0
Fluoride		1.4	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		5.1	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		95	40	10	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : MW WEST 22807 20504733

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-019

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		120	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Chloride		2500	500	100	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		0.86	0.50	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		6.6	0.40	1	mg/L		03/01/07	EPA 300.0	EPA 300.0
Sulfate		120	20	5	mg/L		03/02/07	EPA 300.0	EPA 300.0

Pace Analytical Services, Inc.

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : SW1 22807 20504734

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-020

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		310	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Chloride		4500	250	50	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride		0.51	0.50	1	mg/L	N	03/01/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		8.8	4.0	10	mg/L		03/02/07	EPA 300.0	EPA 300.0
Sulfate		670	200	50	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : RW1 22807 20504735

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-021

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		300	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Chloride		3100	500	100	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride	<	0.50	0.50	1	mg/L		03/02/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		3.5	0.40	1	mg/L		03/02/07	EPA 300.0	EPA 300.0
Sulfate		590	400	100	mg/L		03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : DUP 22807 20504736

Matrix Type : WATER
Collection Date : 02/28/07
Report Date : 03/14/07
Lab Sample Number : 881227-022

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		290	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Chloride		3200	500	100	mg/L		03/02/07	EPA 300.0	EPA 300.0
Fluoride	<	0.50	0.50	1	mg/L	N	03/02/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		3.5	0.40	1	mg/L	N	03/02/07	EPA 300.0	EPA 300.0
Sulfate		600	400	100	mg/L	N	03/02/07	EPA 300.0	EPA 300.0

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Analytical Report Number: 881227

Client : PACE ANALYTICAL SERVICES, INC.
Project Name : CRA
Project Number : 2067176
Field ID : WW 13107 20505133

Matrix Type : WATER
Collection Date : 03/01/07
Report Date : 03/14/07
Lab Sample Number : 881227-023

INORGANICS

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Bicarbonate Alkalinity		130	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		03/06/07	SM 2320B	SM 2320B
Chloride		360	25	5	mg/L		03/03/07	EPA 300.0	EPA 300.0
Fluoride		1.5	0.50	1	mg/L		03/02/07	EPA 300.0	EPA 300.0
Nitrogen, Nitrate		3.2	0.40	1	mg/L		03/02/07	EPA 300.0	EPA 300.0
Sulfate		77	20	5	mg/L		03/03/07	EPA 300.0	EPA 300.0

Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
G	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
H	All	Preservation, extraction or analysis performed past holding time.
HF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
J	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
M	Organic	Sample pH was greater than 2
N	All	Spiked sample recovery not within control limits.
O	Organic	Sample received overweight.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
Z	Organics	This compound was separated in the check standard but it did not meet the resolution criteria as set forth in SW846.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
+	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
8	Inorganic	Sample was received unpreserved. Sample was preserved either at the time of receipt or at the time of sample preparation.
9	Inorganic	Sample was received with insufficient preservation. Acid was added either at the time of receipt or at the time of sample preparation.

Test Group Name	881227-001	881227-002	881227-003	881227-004	881227-005	881227-006	881227-007	881227-008	881227-009	881227-010	881227-011	881227-012	881227-013	881227-014	881227-015	881227-016	881227-017	881227-018	881227-019	881227-020	881227-021	881227-022	881227-023
ALKALINITY AS CACO3	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
ALKALINITY, BICARB/CARB	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
CHLORIDE	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
FLUORIDE	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
NITROGEN, NITRATE	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
SULFATE	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B

Code	NM Certification
B	Not Certified

Pace Analytical

Sample Condition Upon Receipt

481237

Client Name: Conestoga Rovers Project # ~~881240~~ 88

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other _____

Thermometer Used JTB Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 1.5° Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: LM 3-2-07

Comments:

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	7.
Sufficient Volume:	☒Yes ☐No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☒No ☐N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☒Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WW		
All containers needing preservation have been checked.	☐Yes ☐No ☒N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	15.
Trip Blank Present:	☐Yes ☒No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 3-5-07

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

27

Pace Analytical®

Green Bay

CHAIN-OF-CUSTODY / Analytical Request Document

28

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

1017297

Section A
Required Client Information:

Company	Conestoga - Rovers & Assoc.
Address	2135 S. Loop 250 W.
	Midland, TX. 79703
Email To:	jornelas@craworld.com
Phone	432-686-0086
Fax	432-686-0186
Requested Due Date/TAT:	Standard

Section B
Required Project Information:

Report To:	James Ornelas
Copy To:	
Purchase Order No.:	
Project Name:	G. L. Erwin Tank Battery
Project Number:	039124

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ Other_____

SITE LOCATION

☐GA ☐IL ☐IN ☐MI ☐MN ☐NC ☐OH ☐SC ☐WI ☒OTHER N.M.

Section D
Required Client Information

SAMPLE ID

One Character per box.
(A-Z, 0-9 / .-)
Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION °C	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	ICE	Filtered (Y/N) / Requested Analysis: Alkalinity SM 2320 B (Bicarbonate, Carbonate)	Chloride 300.0	Fluoride 300.0	Sulfate 300.0	Nitrate 300.0	Residual Chlorine (Y/N)	Pace Project Number / Lab I.D
1	MW1 22807 001	WT	G	2-28	1237			20.0	1	X								X	X	X	X	X	X	X	881227
2	MW2 22807 002	WT	G	2-28	1230				1	X								X	X	X	X	X	X	X	1-500 mL POLY
3	MW3 22807 003	WT	G	2-28	1247				1	X								X	X	X	X	X	X	X	
4	MW4 22807 004	WT	G	2-28	1310				1	X								X	X	X	X	X	X	X	
5	MW5 22807 005	WT	G	2-28	1253				1	X								X	X	X	X	X	X	X	
6	MW6 22807 006	WT	G	2-28	1245				1	X								X	X	X	X	X	X	X	
7	MW7 22807 007	WT	G	2-28	1225				1	X								X	X	X	X	X	X	X	
8	MW8 22807 008	WT	G	2-28	1215				1	X								X	X	X	X	X	X	X	
9	MW9 22807 009	WT	G	2-28	1115				1	X								X	X	X	X	X	X	X	
10	MW10 22807 010	WT	G	2-28	1305				1	X								X	X	X	X	X	X	X	
11	MW12 22807 011	WT	G	2-28	1150				1	X								X	X	X	X	X	X	X	
12	MW13 22807 012	WT	G	2-28	1221				1	X								X	X	X	X	X	X	X	

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
CRA	2/28	1600	FED EX		
FED EX	3/1/07	920	KQ	3/1/07	1220

SAMPLE CONDITION

Temp in °C	Received on Ice Y/N	Custody Sealed Cooler Y/N	Samples Intact Y/N
2.0	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Cory Coleman

SIGNATURE of SAMPLER:

DATE Signed (MM / DD / YY): 2-29-07

SEE REVERSE SIDE FOR INSTRUCTIONS

ORIGINAL

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Analytical® — Green Bay

Page: 2 of 2 — 1017298

Section A
Required Client Information:

- Company: CRA
- Address: 2135 S. Loop 250 W.
- Midland, Tx. 79703
- Email To:
- Phone: 432-686-6086
- Fax: 432-686-9786
- Requested Due Date/TAT:

Section B
Required Project Information:

- Report To: James Ornelas
- Copy To:
- Purchase Order No.:
- Project Name: G. L. Ervin Tank Battery
- Project Number: 039124

Section C
Invoice Information:

- Attention:
- Company Name:
- Address:
- Pace Quote Reference:
- Pace Project Manager:
- Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ Other

SITE LOCATION: ☐GA ☐IL ☐IN ☐MI ☐MN ☐NC ☐OH ☐SC ☐WI ☒OTHER N.M

Pace Project Number: 881227

Section D — Required Client Information

SAMPLE ID — One Character per box. (A-Z, 0-9 / .-) Samples IDs MUST BE UNIQUE

Valid Matrix Codes — MATRIX / CODE: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

Requested Analysis: Alkalinity SM 2320 B (Hydroxide, Bicarbonate, Carbonate); Chloride 300.0; Fluoride 300.0; Sulfate 300.0; Nitrate 300.0; Temp; Residual Chlorine (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION °C	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other ICE	Alkalinity	Hydroxide/Bicarbonate	Carbonate	Chloride	Fluoride	Sulfate	Nitrate	Temp	Lab I.D
1	MW14 22807 013	WT	G	2-28	1157			20.0	1	X							X	X	X	X	X	X	X	X		1-500 mL Poly
2	MW15 22807 014	WT	G	2-28	1145				1	X							X	X	X	X	X	X	X	X		
3	MW16 22807 015	WT	G	2-28	1210				1	X							X	X	X	X	X	X	X	X		
4	MW17 22807 016	WT	G	2-28	1202				1	X							X	X	X	X	X	X	X	X		
5	MW19 22807 017	WT	G	2-28	1127				1	X							X	X	X	X	X	X	X	X		
6	MW20 22807 018	WT	G	2-28	1135				1	X							X	X	X	X	X	X	X	X		
7	MWWest 22807 019	WT	G	2-28	1320				1	X							X	X	X	X	X	X	X	X		
8	SW1 22807 020	WT	G	2-28	1330				1	X							X	X	X	X	X	X	X	X		
9	RW1 22807 021	WT	G	2-28	1340				1	X							X	X	X	X	X	X	X	X		
10	DUP 22807 022	WT	G	2-28	—				1	X							X	X	X	X	X	X	X	X	■	
11	~~Trip CC~~																X									
12	Temp	—	—	—	—				1	X							X								X	

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] / CRA	2-28	1600	FED EX		
FED EX	3/1/07	920	[signature]	3/1/07	920

SAMPLE CONDITION: Temp in °C: 2.0; Received on Ice (Y/N): ○; Custody Sealed Cooler (Y/N): ○; Samples Intact (Y/N): ○

SAMPLER NAME AND SIGNATURE

- PRINT Name of SAMPLER: Cory Coleman
- SIGNATURE of SAMPLER: [signature]
- DATE Signed (MM / DD / YY): 2-28-07

SEE REVERSE SIDE FOR INSTRUCTIONS

ORIGINAL

ALL Q020rev.3 31Mar05

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # ~~581240~~ 7-2-07 381227

Company Name: Conestoga Rovers
Phone #: (432) 686-0086
Address: (Street, City, Zip) 2135 S Loop 250 West
Fax #: (432) 686-0186
Contact Person: James Orendas
Invoice to: (If different from above)
Project #: 039124
Project Name: CBMC GL Erwin
Project Location:
Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
~~001~~ 381227-023	WW13107	1	500mL	X									X	3/1	1200

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Alkalinity SM2320B (Hydroxide, Bicarbonate, Carbonate)	Chloride, Fluoride, Sulfate	Nitrate EPA Method 300.0	Turn Around Time if different from standard	Hold
															X	X	1-500mL		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
	3/1	1645	Fed Ex		
Fed Ex	3-2-07	0855	LeAnne Markham	3-2-07	0855
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:

LAB USE ONLY

Intact Y / N
Headspace Y / N
Temp 1.5° °
Log-in Review

REMARKS:

☐ Check If Special Reporting Limits Are Needed

Carrier #

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

ORIGINAL COPY

APPENDIX D

NEW MEXICO OFFICE OF THE STATE ENGINEER MONITOR WELL RECORDS

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Chevron Environment Management Co. Work Phone: _____
Contact: Matt Hudson Home Phone: _____
Address: 1400 Smith St., HDU 140/1900-1A
City: Houston State: TX Zip: 77002

2. LOCATION OF WELL (A,B,C,or D required,E or F if known)

A. ____ 1/4 ____ 1/4 ____ 1/4 Section: 35 Township: 24S Range: 37E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 09 m 58.8 s Longitude: 103 d 07 m 30.8 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): William Stephens

3. DRILLING CONTRACTOR

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD: GL Erwin B NCI-2 #11 MW-21

Drilling began: 11/19/07 ; Completed: 11/19/07 ; Type tools: Air Rotary ;
Size of hole: 6 1/4 in.; Total depth of well: 97.0 ft.;
Completed well is: shallow (shallow, artesian);
Depth to water upon completion of well: Dry ft.

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: GL Erwin B NCI-2 #11 MW-21

Depth in Feet From	Depth in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
2.0	Sch. 40	4.0	0.0	67.0	67.0			
2.0	Sch. 40	4.0	67.0	97.0	30.0		67.0	97.0

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
97.0	64.0	6 1/4	13.0		8/16 sand
64.0	15.0	6 1/4	13.0		Bentonite Pellets
15.0	0.0	6 1/4	9.0	2.9955	Cement

8. PLUGGING RECORD

Plugging Contractor: _____

Address: _____

Plugging Method: _____

Date Well Plugged: _____

Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			
5			

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: GL Erwin B NCI-2 #11 MW-21

Depth in feet From	To	Thickness in feet	Color and Type of Material Encountered
0.0	1.0	1.0	Brown sand w/caliche.
1.0	6.0	5.0	Caliche.
6.0	77.0	71.0	Tan sand.
77.0	80.0	3.0	Reddish tan sandy clay w/gravel.
80.0	97.0	17.0	Reddish tan sandy clay.

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. **ADDITIONAL STATEMENTS OR EXPLANATIONS:GL Erwin B NCI-2 #11 MW-21**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

_____ 12/19/07
Driller (mm/dd/year)

==========

FOR STATE ENGINEER USE ONLY

Quad ____ **;FWL** ____ **;FSL** ____ **;Use** _____ **;Location No.** _____

File Number: _____ Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Chevron Environment Management Co. Work Phone: _____
Contact: Matt Hudson Home Phone: _____
Address: 1400 Smith St., HDU 140/1900-1A
City: Houston State: TX Zip: 77002

2. LOCATION OF WELL (A,B,C,or D required,E or F if known)

A. ____ 1/4 ____ 1/4 ____ 1/4 Section: 35 Township: 24S Range: 37E N.M.P.M.
in Lea County.

B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____

C. Latitude: 32 d 10 m 16.9 s Longitude: 103 d 07 m 54.5 s

D. East _____ (m), North _____ (m), UTM Zone 13, NAD _____ (27 or 83)

E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey

F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.

G. Other: _____

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): William Stephens ✓

3. DRILLING CONTRACTOR

License Number: WD-1456
Name: White Drilling Company, Inc. Work Phone: 325-893-2950
Agent: John W. White Home Phone: 325-893-2950
Mailing Address: P.O. Box 906
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD: GL Erwin B NCI-2 #11 MW-22

Drilling began: 11/19/07 ; Completed: 11/19/07 ; Type tools: Air Rotary ;
Size of hole: 6 1/4 in.; Total depth of well: 66.5 ft.;
Completed well is: shallow (shallow, artesian);
Depth to water upon completion of well: 62.6 ft.

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA: GL Erwin B NCI-2 #11 MW-22

Depth in Feet From	Depth in Feet To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)
62.6	66.5	3.9	Tan sand w/gravel.	

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
2.0	Sch. 40	4.0	0.0	46.5	46.5			
2.0	Sch. 40	4.0	46.5	66.5	20.0		46.5	66.5

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of mud	Cubic Feet of Cement	Method of Placement
66.5	43.5	6 1/4	11.0		8/16 sand
43.5	15.0	6 1/4	10.0		Bentonite Pellets
15.0	0.0	6 1/4	9.0	2.9955	Cement

8. PLUGGING RECORD

Plugging Contractor: _____

Address: _____

Plugging Method: _____

Date Well Plugged: _____

Plugging approved by: _____

State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			
5			

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE: GL Erwin B NCI-2 #11 MW-22

Depth in feet From	To	Thickness in feet	Color and Type of Material Encountered
0.0	1.5	1.5	Brown sand w/caliche.
1.5	8.0	6.5	Caliche.
8.0	10.0	2.0	Tannish pink streaks of chert & sand.
10.0	20.0	10.0	Tannish pink sand.
20.0	45.0	25.0	Red tan sand.
45.0	51.0	6.0	Tan sandstone.
51.0	55.0	4.0	Pink sandstone (chert) very hard.
55.0	59.0	4.0	Moist reddish tan sand.
59.0	66.5	7.5	Tan sand w/gravel.

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. **ADDITIONAL STATEMENTS OR EXPLANATIONS:GL Erwin B NCI-2 #11 MW-22**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

_____ 12/19/07
Driller (mm/dd/year)

==========

FOR STATE ENGINEER USE ONLY

Quad ____ ;FWL ____ ;FSL ____ ;Use _____ ;Location No. _____

File Number: _____ Trn Number: _____

APPENDIX E

CRA SOIL BORING LOGS AND MONITOR WELL DETAILS

SOIL BORING LOG

Project: G.L. ERWIN TANK BATTERY A & B
LEA COUNTY, NEW MEXICO

Client: CHEVRON ENVIROMENTAL
MANAGEMENT COMPANY

No. MW-21

File No.: 039124
Date: 11/19/07
Drilling Co.: WHITE DRILLING
Supervisor: JOHN WHITE
Type Rig: AIR ROTARY
Logged by: JAMES ORNELAS

LABORATORY TEST DATA (Results Reported in mg/kg)					FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 1430 Finish Time: 1600
										Topsoil: Light brown, unconsolidated, dry
										Caliche: 10YR, 8/2, very pale orange, *indurated*, dry
							5			
										Sand: 5YR, 8/4, moderate orange pink, very fine to fine grained, subrounded to rounded, quartz sand, dry
							10			
							15			
							20			
							25			
							30			
							35			
							40			

Split Spoon Sampler

Cuttings

No Recovery

Stratification is Inferred And May Not be Exact.
Soil Classification Based on Visual-Manual Procedure

Water First Noted

Level after ____ min

Analyzed Sample

SOIL BORING LOG

Project: G.L. ERWIN TANK BATTERY A & B
LEA COUNTY, NEW MEXICO

Client: CHEVRON ENVIROMENTAL
MANAGEMENT COMPANY

No. MW-21
CONT'D

File No.: 039124
Date: 11/19/07
Drilling Co.: WHITE DRILLING
Supervisor: JOHN WHITE
Type Rig: AIR ROTARY
Logged by: JAMES ORNELAS

LABORATORY TEST DATA (Results Reported in mg/kg)					FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: Finish Time:
							45			
							50			
							55			
							60			
							65			
							70			Sand: 5YR, 5/6, light brown, very fine to fine grained, subrounded to rounded, quartz sand, dry
							75			Sandy Clay: 5YR, 5/6, light brown, 10% interbedded gravel.
							80			

Split Spoon Sampler

Cuttings

No Recovery

Stratification is Inferred And May Not be Exact.
Soil Classification Based on Visual-Manual Procedure

Water First Noted

Level after ____ min

Analyzed Sample

SOIL BORING LOG

Project: G.L. ERWIN TANK BATTERY A & B
LEA COUNTY, NEW MEXICO

Client: CHEVRON ENVIROMENTAL
MANAGEMENT COMPANY

No. MW-21
CONT'D

File No.: 039124
Date: 11/19/07
Drilling Co.: WHITE DRILLING
Supervisor: JOHN WHITE
Type Rig: AIR ROTARY
Logged by: JAMES ORNELAS

LABORATORY TEST DATA (Results Reported in mg/kg)					FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: Finish Time: 1600
							85			Sandy Clay: 5YR, 3/4, moderate brown, moist plastic, fine-grained sand.
							90			
							95			
							100			Shale: Plastic, 5YR, 5/2, light olive gray
							105			
							11			
							115			
							120			

Split Spoon Sampler

Cuttings

No Recovery

Stratification is Inferred And May Not be Exact.
Soil Classification Based on Visual-Manual Procedure

Water First Noted

Level after ____ min

Analyzed Sample

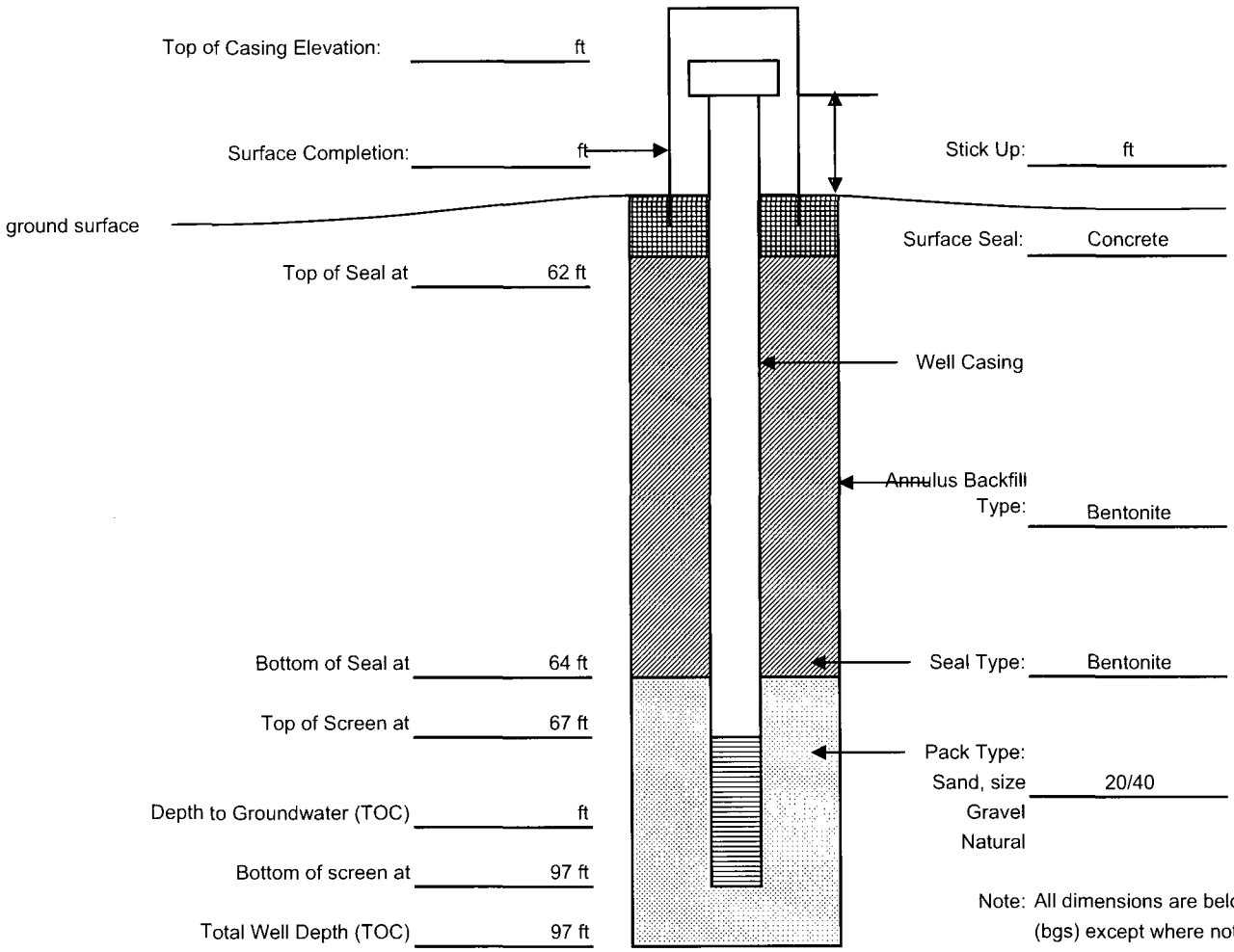
MONITORING WELL CONSTRUCTION DETAIL

Project: G.L. ERWIN TANK BATTERY A & B
LEA COUNTY, NEW MEXICO

Client: CHEVRON ENVIROMENTAL
MANAGEMENT COMPANY

No. MW-21
CONT'D

File File No.: 039124
Dat Date: 11/19/2007
Dril Drilling Co.: WHITE DRILLING
Supervisor: JOHN WHITE
Typ Type Rig: AIR ROTARY
Log Logged by: JAMES ORNELAS



Screen Type: ☒ slotted ☐ perforated other:

Screen Material: ☐ stainless steel ☒ PVC other:

Screen Length: 30' Screen Diameter: 2" Screen Slot Size: 0.020'

Well Casing Material: PVC Well Casing Diameter: 2"

Development - Method: N/A Hole Diameter: 7 7/8"

Duration/Volume:

SOIL BORING LOG

Project: G.L. ERWIN TANK BATTERY A & B
LEA COUNTY, NEW MEXICO

Client: CHEVRON ENVIROMENTAL
MANAGEMENT COMPANY

No. MW-22

File No.: 039124
Date: 11/19/07
Drilling Co.: WHITE DRILLING
Supervisor: JOHN WHITE
Type Rig: AIR ROTARY
Logged by: JAMES ORNELAS

LABORATORY TEST DATA (Results Reported in mg/kg)					FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: 1230 Finish Time: 1350
										Topsoil: Light brown, unconsolidated, dry
										Caliche: 10YR, 8/2, very pale orange, indurated, dry
							5			
							10			Sand: 10R, 7/4, moderate orange pink, very fine to fine grained, quartz sand, poorly sorted, rounded, loose, dry
							15			
							20			Sand: 10YR 6/6 moderate reddish orange, very fine to fine grained, quartz sand, poorly sorted, rounded, loose, dry
							25			
							30			
							35			
							40			

Split Spoon Sampler

Cuttings

No Recovery

Stratification is Inferred And May Not be Exact.
Soil Classification Based on Visual-Manual Procedure

Water First Noted

Level after ____ min

Analyzed Sample

SOIL BORING LOG

Project: G.L. ERWIN TANK BATTERY A & B
LEA COUNTY, NEW MEXICO

Client: CHEVRON ENVIROMENTAL
MANAGEMENT COMPANY

No. MW-22
CONT'D

File No.: 039124
Date: 11/19/07
Drilling Co.: WHITE DRILLING
Supervisor: JOHN WHITE
Type Rig: AIR ROTARY
Logged by: JAMES ORNELAS

LABORATORY TEST DATA (Results Reported in mg/kg)					FIELD DATA				BORING DATA	
Benzene	Toluene	Ethyl-benzene	Xylenes	Total TPH (C6-C35)	Photo-Ionization Detection Reading (ppm)	Sampling	Depth (feet)	Water Level	Screen Interval	Start Time: Finish Time: 1350
							45			
							50			Sandstone: 5YR, 8/4, moderate orange pink, very hard
							55			Sand: 5YR, 5/6, light brown sand, subrounded to rounded poorly sorted quart sand, fine to coarse grained, moist
							60			Sandy Gravel: 5YR, 6/4, light brown, very fine to fine grained quartz sand, moist
							65			Shale: 5YR, 4/4, moderate brown, moist, plasitc
							70			
							75			
							80			

Split Spoon Sampler

Cuttings

No Recovery

Stratification is Inferred And May Not be Exact.
Soil Classification Based on Visual-Manual Procedure

Water First Noted

Level after ____ min

Analyzed Sample

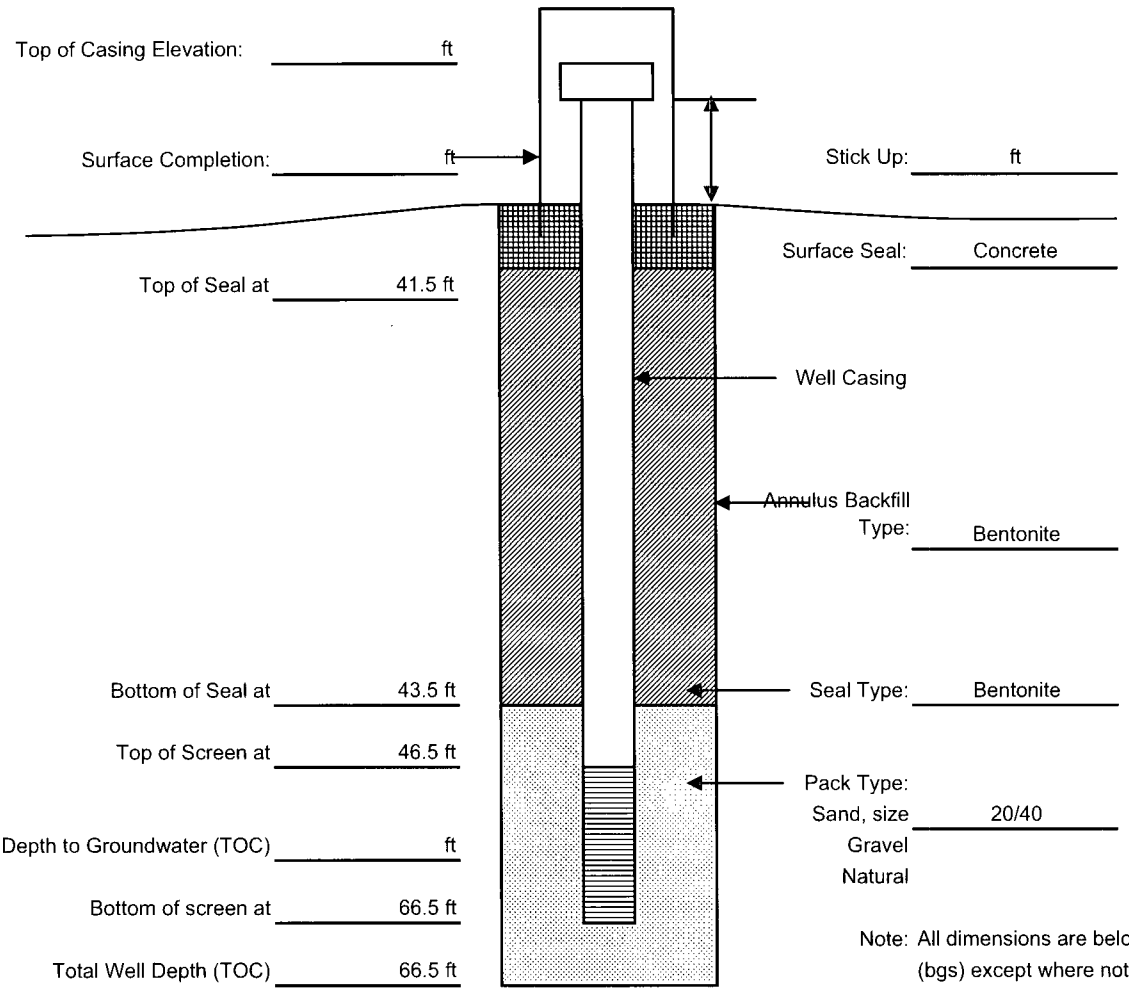
MONITORING WELL CONSTRUCTION DETAIL

Project: G.L. ERWIN TANK BATTERY A & B
LEA COUNTY, NEW MEXICO

Client: CHEVRON ENVIROMENTAL
MANAGEMENT COMPANY

No. MW-22
CONT'D

File File No.: 039124
Dat Date: 11/19/2007
Dril Drilling Co.: WHITE DRILLING
Supervisor: JOHN WHITE
Typ Type Rig: AIR ROTARY
Log Logged by: JAMES ORNELAS



Note: All dimensions are below ground surface (bgs) except where noted.

Screen Type: ☒ slotted ☐ perforated other:

Screen Material: ☐ stainless steel ☒ PVC other:

Screen Length: 20' Screen Diameter: 2" Screen Slot Size: 0.020'

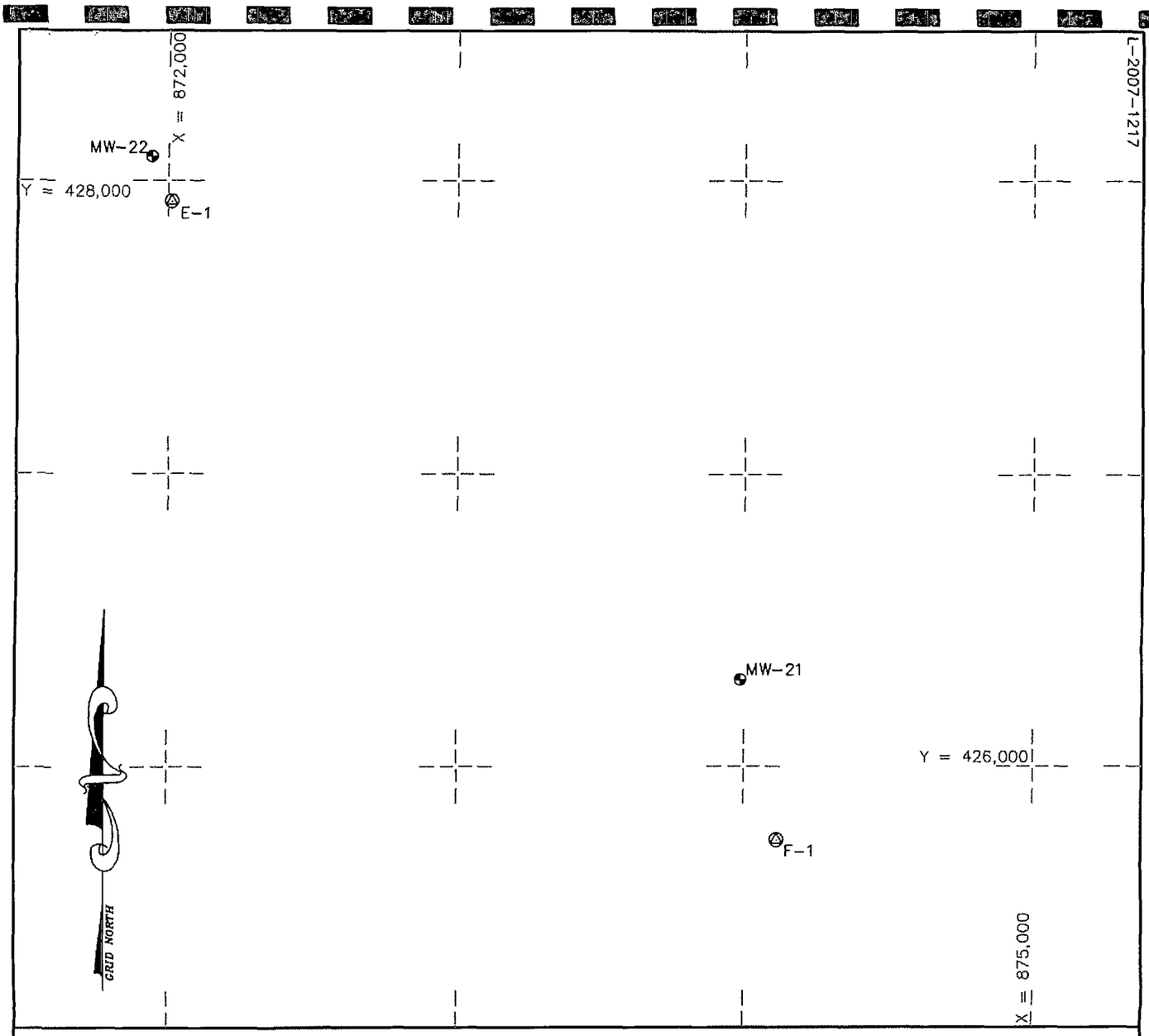
Well Casing Material: PVC Well Casing Diameter: 2"

Development - Method: N/A Hole Diameter: 7 7/8"

Duration/Volume:

APPENDIX F

TOPOGRAPHIC SURVEY OF MONITOR WELLS



DESCRIPTION	NORTHING (Y)	EASTING (X)	LATITUDE	LONGITUDE	ELEVATION TOP OF CASING	ELEVATION CONCRETE PAD	ELEVATION NATURAL GROUND
MW-21	426,296.4	873,987.3	32°09'58.44" N	103°07'29.12" W	3,145.87	3,143.31	3,142.8
MW-22	428,081.1	871,941.0	32°10'16.32" N	103°07'52.69" W	3,170.64	3,168.06	3,167.3
E-1	427,927.5	872,011.5	32°10'14.79" N	103°07'51.89" W			3,166.8
F-1	425,750.7	874,113.4	32°09'53.02" N	103°07'27.72" W			3,148.6

Date Surveyed: December 3, 2007
Weather: Cool & Breezy

NOTE:

1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927.

2) Elevations shown hereon reference the National Geodetic Vertical Datum of 1929.

3) Geodetic Coordinates shown hereon references the North American Datum of 1927, (Clarke Spheroid of 1866). Reference Stations – "ODESSA RRP2" – CORS (DF5393), "McDONALD VLBI" – CORS (AF9514) and "ROSWELL" – CORS (DG6517).

LEGEND

- – Denotes Monitor Well
- – Denotes Static GPS Control Station

500 0 500 1000
Graphic Scale in Feet

I HEREBY CERTIFY THAT THIS PLAT WAS MADE FROM NOTES TAKEN IN THE FIELD IN A BONA FIDE SURVEY MADE UNDER MY SUPERVISION.

NEW MEXICO 12185

MACON McDONALD NEW MEXICO P.L.S. No. 12185

WEST COMPANY
of Midland, Inc.
110 W. LOUISIANA, STE. 110
MIDLAND TEXAS, 79701
(432) 687-0865 – (432) 687-0868 FAX

CONESTOGA-ROVERS & ASSOCIATES

Topographic Survey of

MONITOR WELLS

Located near
The City of Jal
Lea County, New Mexico

Drawn By: LVA	Date: December 10, 2007
Scale: 1"=500'	Field Book: 376 / 21-24
Revision Date:	Quadrangles: Jal NE & Jal NW
W.O. No: 2007-1217	Dwg. No.: L-2007-1217