

1R - 254

## REPORTS

DATE:

3/07/2007



1R254

**Matthew P. Hudson**  
Remediation Project  
Manager

**Abandonment Business  
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**RECEIVED**

March 6, 2007

**MAR 07 2007**

Mr. Wayne Price  
New Mexico Oil Conservation Division  
1220 So. St. Francis Drive  
Santa Fe, New Mexico 87505

**Oil Conservation Division  
Environmental Bureau**

**Subject: 2006 Annual Groundwater Monitoring Report  
G.L. Erwin "A & B" Federal NCT-2 Tank Battery, Lea County, New Mexico  
OGRID No. 4323**

Dear Mr. Price:

Please find enclosed one copy of the above-referenced report. This report provides information and details on the groundwater monitoring activities completed by Conestoga-Rovers and Associates (CRA) during 2006.

Should you have any questions concerning this report or the on-going work, please call myself at (281) 561-3466 or James Ornelas with CRA at (432) 686-0086.

Sincerely,

Matthew P. Hudson

Enclosure

cc: Patricia Caperton, NMOCD (electronic copy)  
James Ornelas, CRA (cover letter only)



1 R 254

RECEIVED

MAR 07 2007

**2006 ANNUAL GROUNDWATER MONITORING**  
**REPORT**

Oil Conservation Division  
Environmental Bureau

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



## **2006 ANNUAL GROUNDWATER MONITORING REPORT**

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

**OGRID NO. 4323**

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

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

**LEA COUNTY, NEW MEXICO**

**Prepared For:**

**Mr. Matt Hudson**

**CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY**

**Abandonment Business Unit**

**11111 S. Wilcrest Drive**

**Houston, Texas 77099**

**Prepared by:  
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**MARCH 2, 2007  
REF. NO. 039124 (3)**



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APPLICATION FOR PERMIT (#CP 00886)

## 1.0 INTRODUCTION

This Annual Groundwater Monitoring Report presents groundwater data collected during the 2006 reporting period at the G.L. Erwin "A & B" Federal NCT-2 Tank Battery (hereafter referred to as the "Site"). On February 21-23 and August 24 and 25, 2006, Conestoga-Rovers & Associates (CRA) conducted the semi-annual groundwater monitoring events on behalf of Chevron North America Exploration and Production Company (Chevron), 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 monitor 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 B. 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. Currently, the Site is monitored semi-annually by CRA.

## 2.0 REGULATORY FRAMEWORK

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

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

### 3.0 2006 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 A.

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 2006 are presented in FIGURES 3 and 4, respectively. Depth to groundwater ranged from 59.22-feet to 86.54-feet below top of casing on February 22, 2006 and from 59.39-feet to 86.34-feet below top of casing on August 24, 2006. Groundwater flow at the Site is to the southeast at a gradient of 0.015-ft/ft.

#### 3.2 ANALYTICAL RESULTS

The 2006 analytical results generally fall within historical ranges, and are summarized in TABLE II. All wells sampled in 2006 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 2006 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 18 wells sampled in both February and August 2006;
- Fluoride was detected at concentrations above the NMWQCC standard (1.60 mg/L) in six wells in February and in four wells in August 2006;
- Nitrate was detected at concentrations above the NMWQCC standard (10 mg/L) in two wells during the February event;
- Sulfate was detected at concentrations above the NMWQCC standard (600 mg/L) in one well during both the February and August events; and
- Total Dissolved Solids were detected at concentrations above the NMWQCC standard (1,000mg/L) in 19 wells during the February event and in 17 wells during the August event.

Two duplicate samples were collected from MW-1 and MW-14 during the February 2006 event and two duplicate samples were collected from RW-1 and MW-17 during the August 2006, respectively. Duplicate constituents were detected without any significant deviations. Copies of the certified analytical reports and chain-of-custody documentation are attached in APPENDIX B.

#### 4.0 CORRECTIVE ACTION

In November 1999, Texaco submitted a correction action proposal to the NMOSE to recover groundwater from recovery well (RW-1). On September 9, 2004, the NMOSE issued Permit CP 00886 to Divert Underground Waters from recovery well RW-1.

In September 2006, a groundwater recovery system which included an electrical submersible pump, a totalizing meter, a 300-barrel (bbl) fiberglass storage tank, and a transfer pump was installed at RW-1. The groundwater recovery rate in RW-1 is approximately 1 gallon per minute. Recovered groundwater is pumped to the 300-barrel storage tank then to the produced water tank at the adjacent G.L. Erwin "A & B" Federal NCT-2 Tank Battery. Initial meter readings were collected on September 26, 2006. On September 29, 2006, a meter installation and inspection form and a proof of well completion for RW-1 were submitted to the NMOSE Roswell district office. A copy of the correspondence is provided in APPENDIX C.



## 5.0 SUMMARY

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

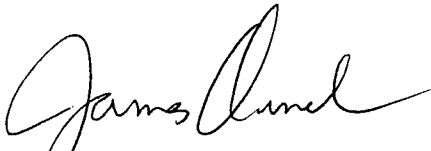
- Groundwater at the Site is monitored semi-annually with a network of 24 monitor wells;
- Depth to groundwater ranged from 59.22-feet to 86.54-feet below top of casing on February 22, 2006 and from 59.39-feet to 86.34-feet below top of casing on August 24, 2006. Groundwater flow at the Site is to the southeast at a gradient of 0.015-ft/ft;
- The analytical results generally fall within historical ranges. All wells sampled in 2006 had at least one COC (Chloride, Fluoride, Nitrate-N, Sulfate or Total Dissolved Solids) that exceeded NMOCD standards; and
- In September 2006, a groundwater recovery system which included an electrical submersible pump, a totalizing meter, a 300-barrel (bbl) fiberglass storage tank, and a transfer pump was installed at RW-1. A meter installation and inspection form and a proof of well completion for RW-1 were submitted to the NMOSE Roswell district office in advance of the September 30, 2006 permit rights expiration deadline.


6.0 PLANNED ACTIVITIES

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

- Continue to perform semi-annual groundwater monitoring and sampling events;
- Continue to recover groundwater from RW-1; and
- Propose installation of one monitor well upgradient of MW-9 and one monitor well downgradient of MW-19.

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

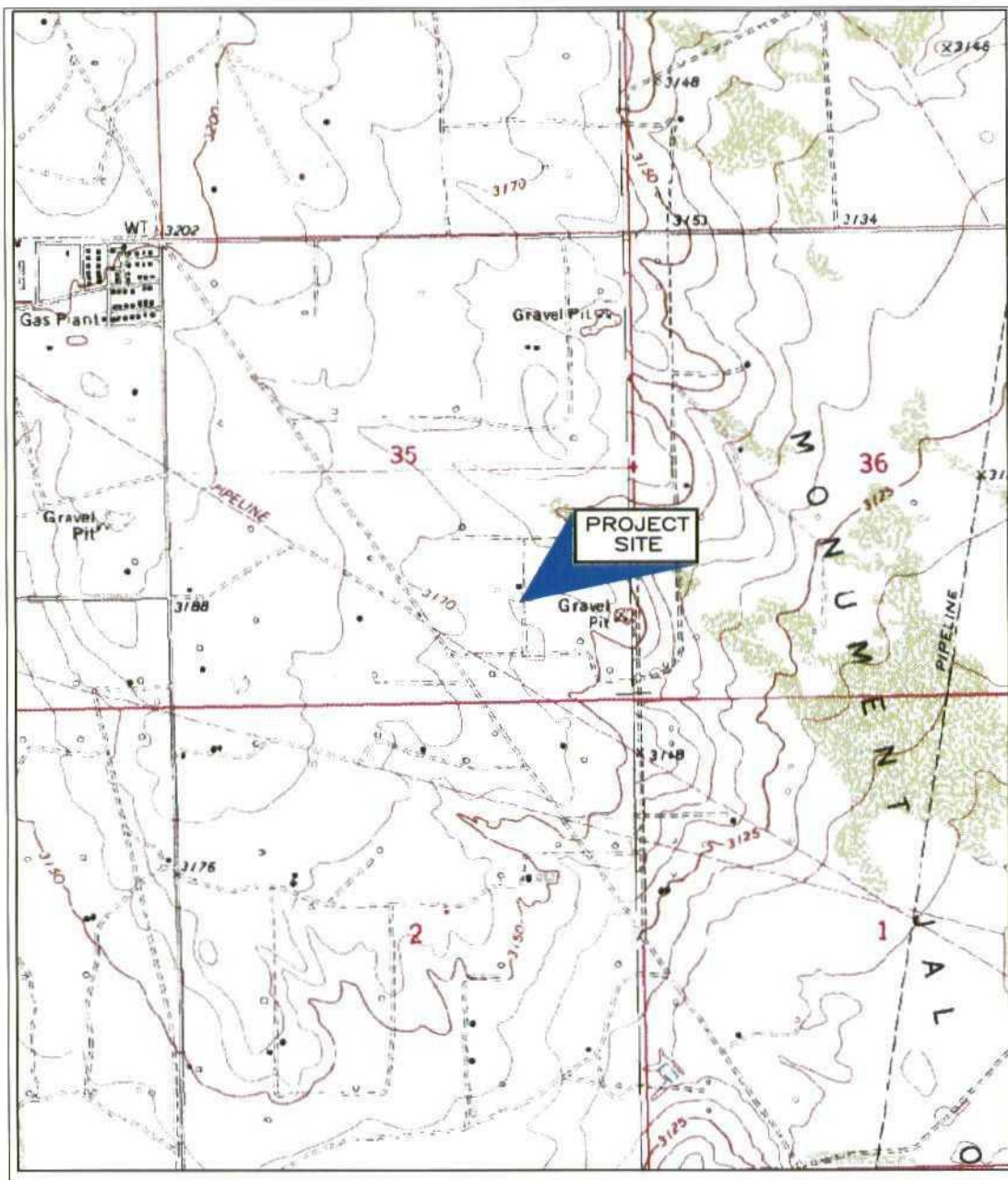
  
James Ornelas  
Project Manager

  
Thomas C. Larson  
Operations Manager

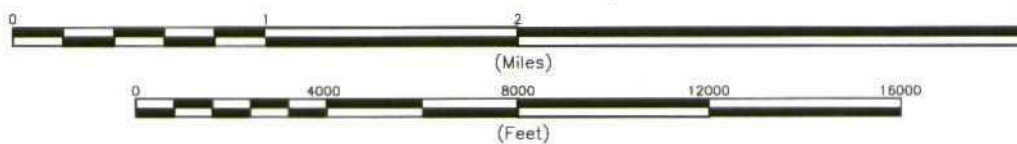
# JAL NW QUADRANGLE NEW MEXICO

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

PHOTOREVISED 1977



USGS MAP SERIES 1:24,000



CONTOUR INTERVAL 5 FEET



NORTH



## SITE LOCATION MAP

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, T-24-S, R-37-E LEA COUNTY, NM

JOB No.  
039124

FIGURE  
1





# LEGEND

- MW-8 Monitor Well Location
- RW-1 Recovery Well Location
- WW-1 Water Well Location
- Groundwater Recovery System

## NOTE:

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.

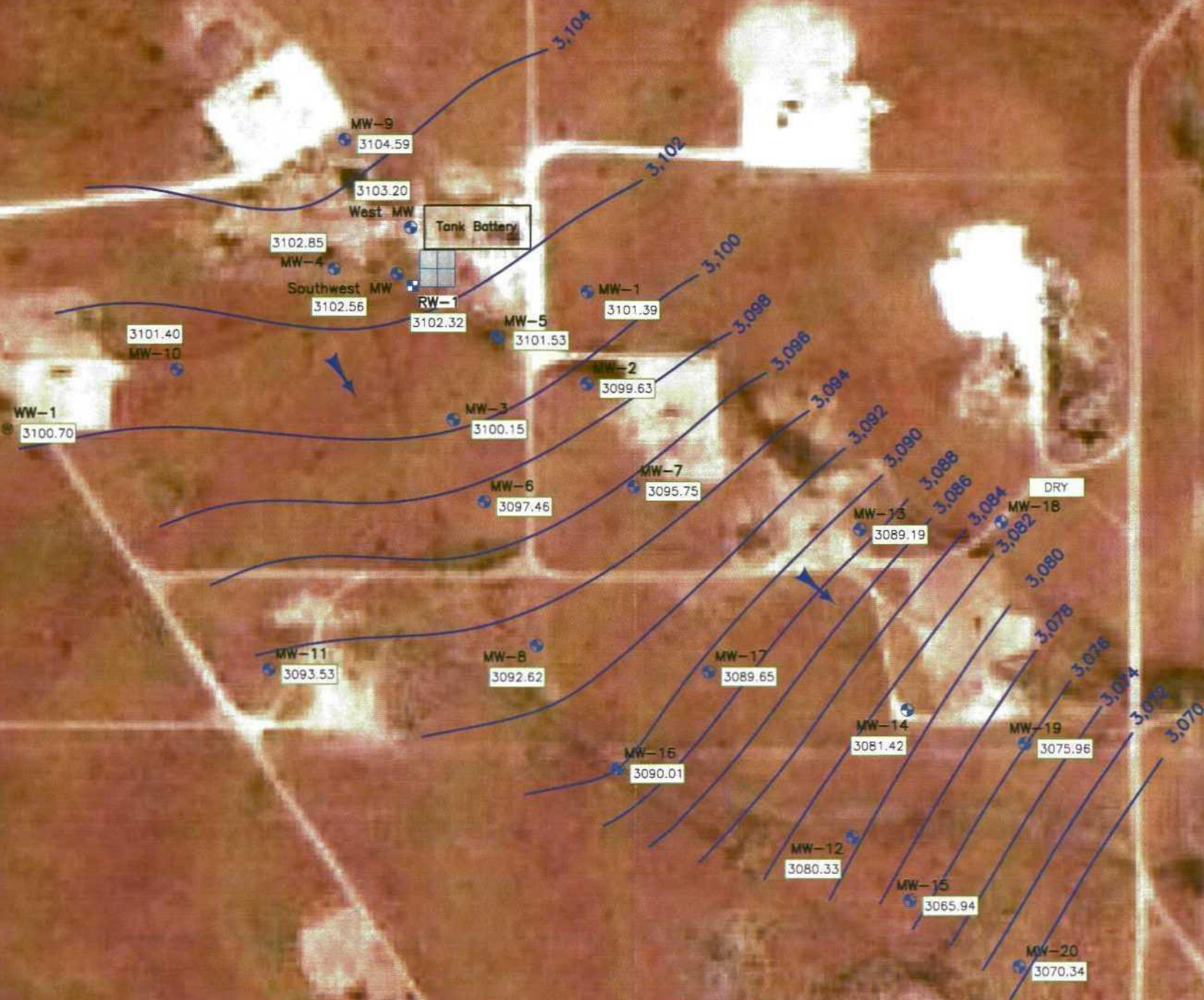
## SITE DETAILS MAP

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, T-24-S, R-37-E LEA COUNTY, NEW MEXICO

JOB No.  
039124  
FIGURE  
2







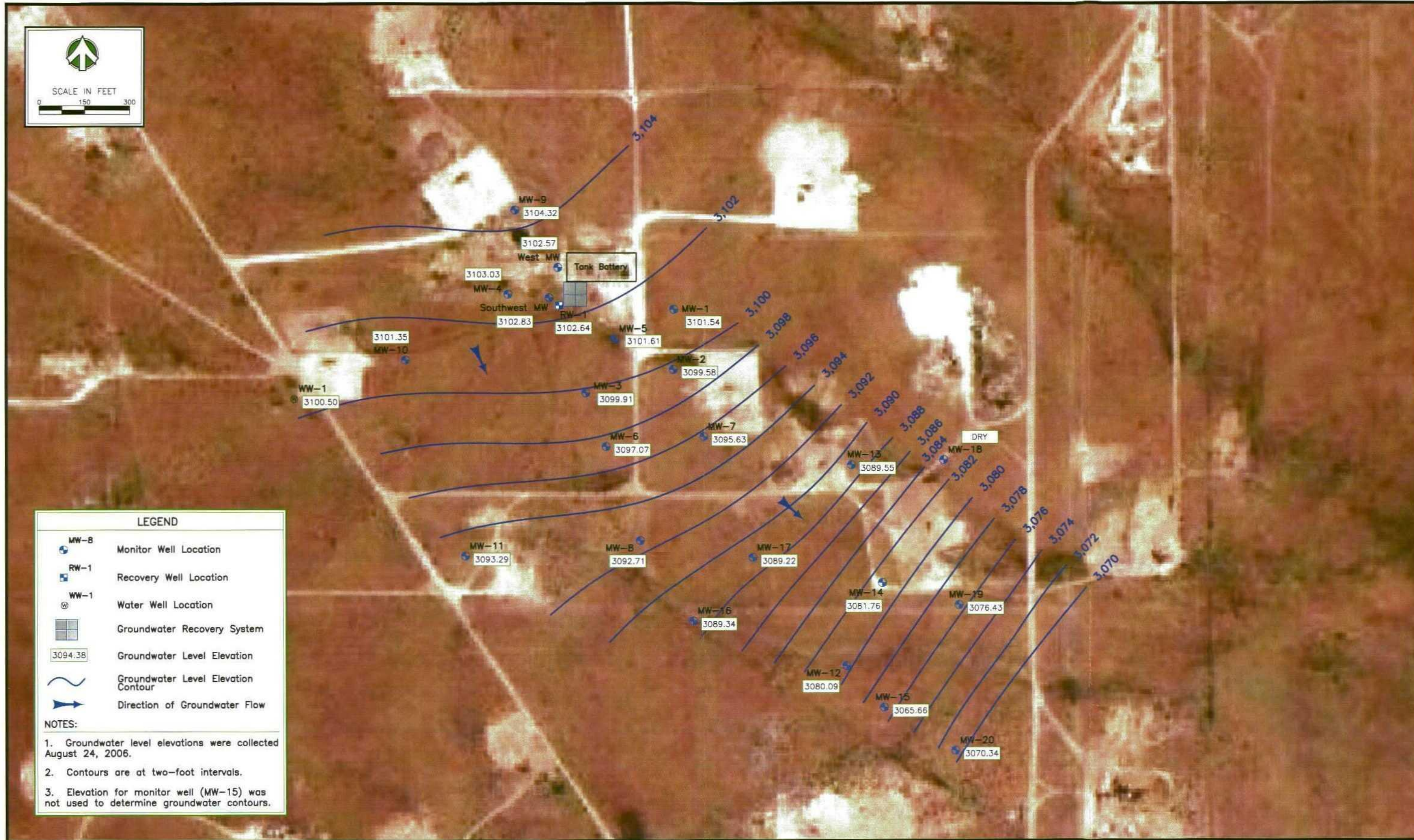
039124 2006 SLR 022007



GROUNDWATER GRADIENT MAP — FEBRUARY 2006  
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, T-24-S, R-37-E LEA COUNTY, NEW MEXICO

JOB No.  
039124  
FIGURE  
3





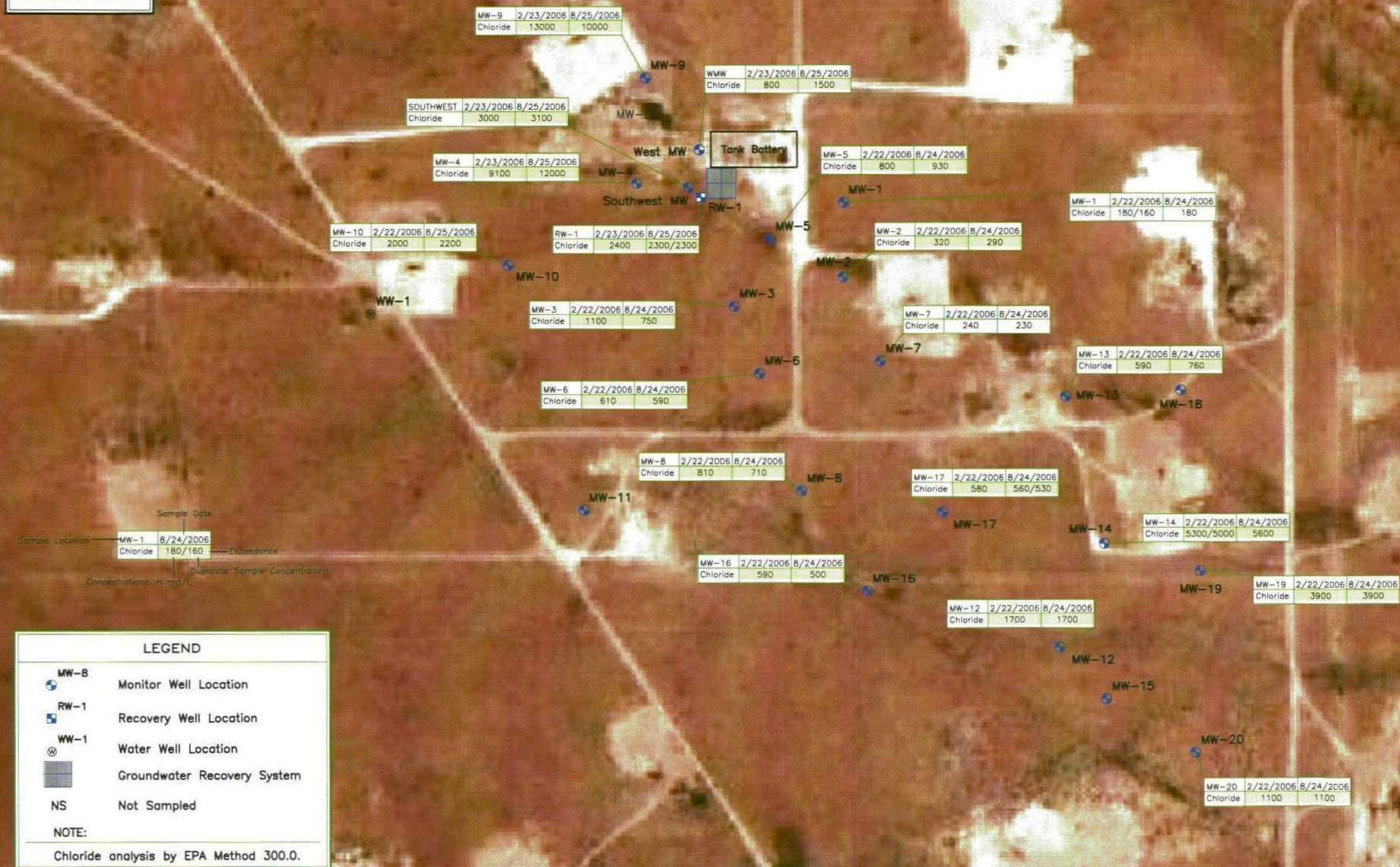
039124 2006 SLR 022007



GROUNDWATER GRADIENT MAP - AUGUST 2006  
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, T-24-S, R-37-E LEA COUNTY, NEW MEXICO

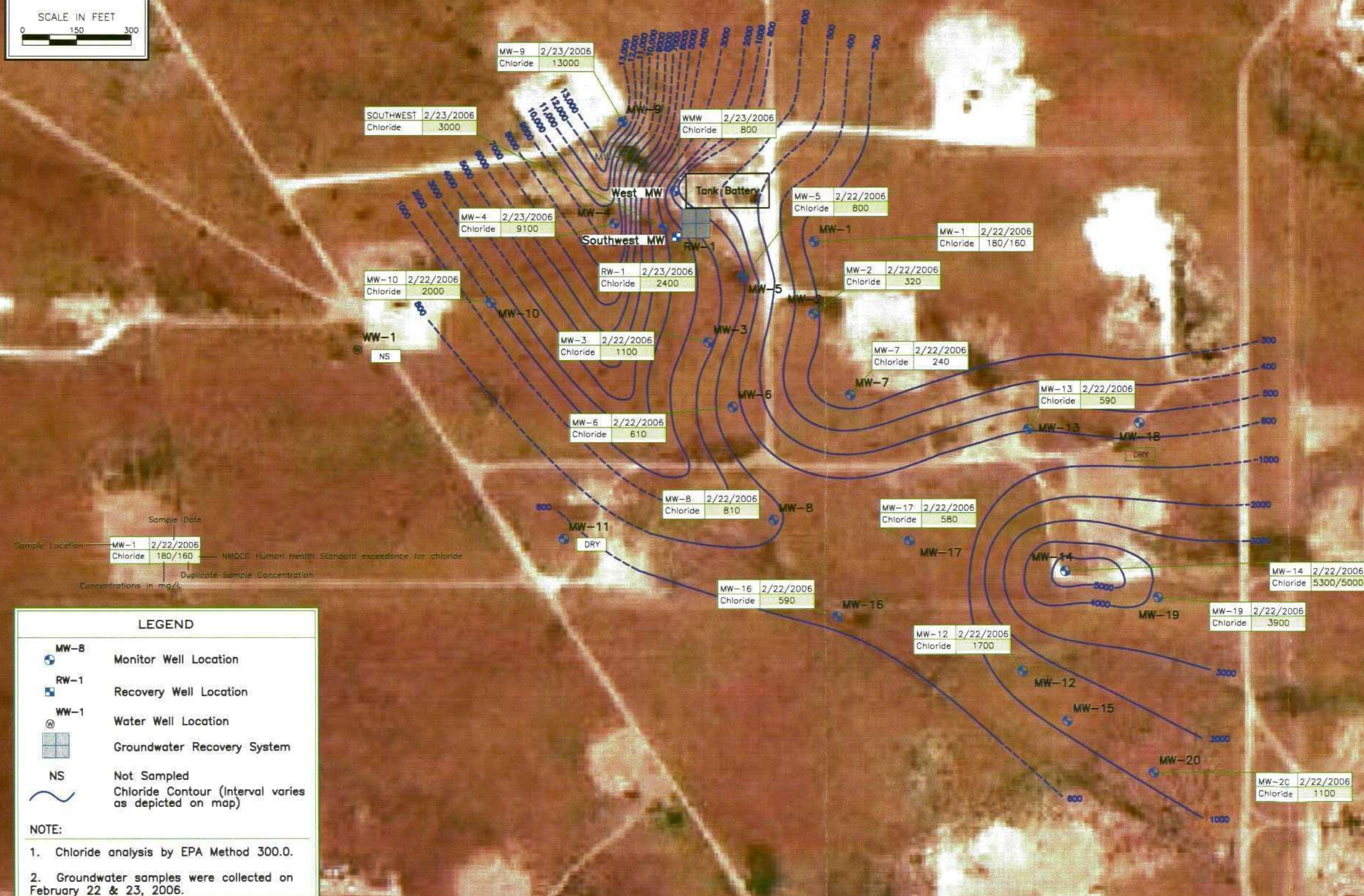
JOB No.  
039124  
FIGURE  
4





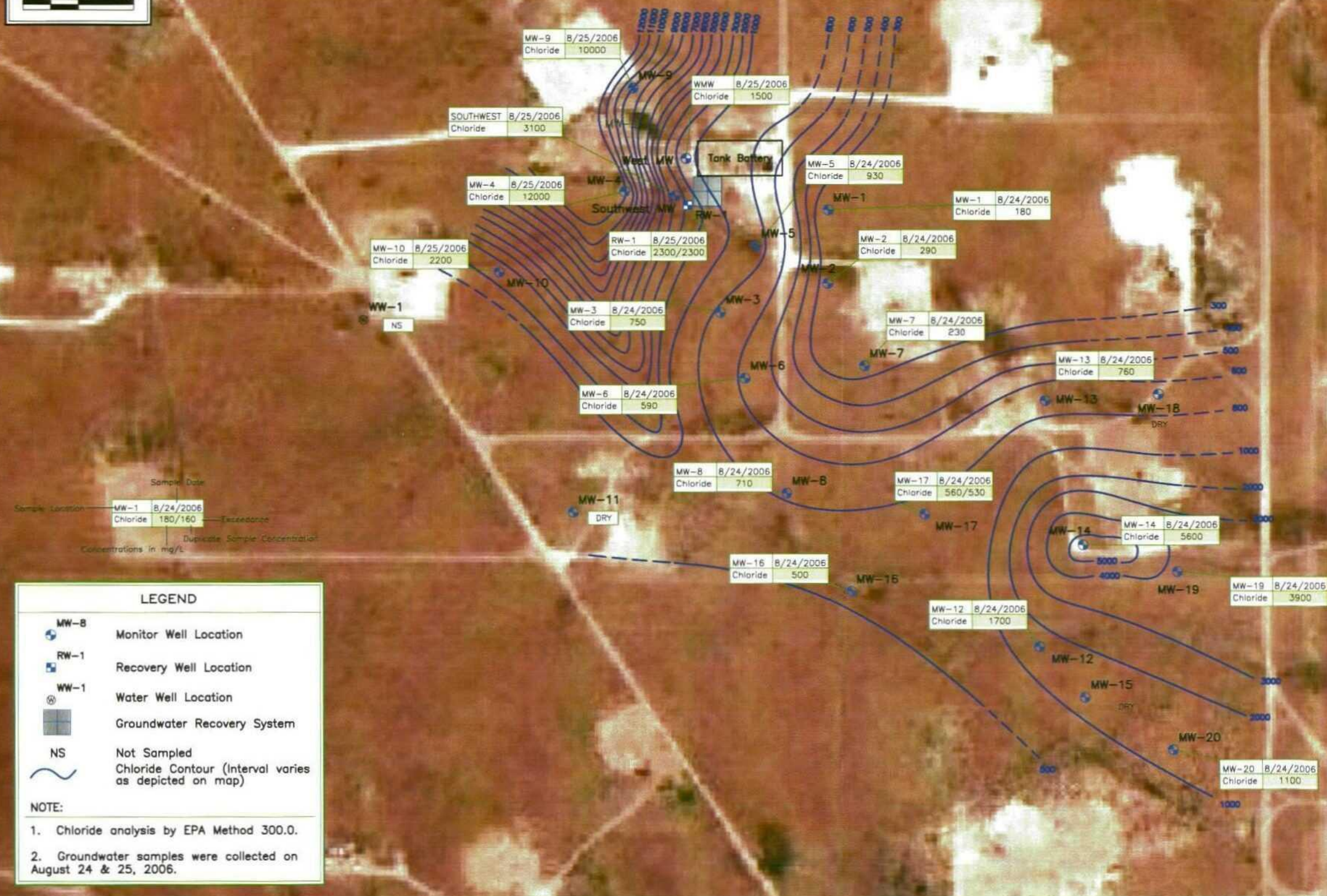
CHLORIDE CONCENTRATION MAP - FEBRUARY AND AUGUST 2006  
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, T-24-S, R-37-E LEA COUNTY, NEW MEXICO





CHLORIDE ISOCONCENTRATION MAP — FEBRUARY 2006  
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, T-24-S, R-37-E LEA COUNTY, NEW MEXICO





# CHLORIDE ISOCONCENTRATION MAP - AUGUST 2006

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A&B" FEDERAL NCT-2 TANK BATTERY  
SW/4, SE/4, SECTION 35, T-24-S, R-37-E LEA COUNTY, NEW MEXICO

JOB No.  
039124  
FIGURE  
7



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

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )
MW-01 3,161.69	2/4/1998	2	87.70	64.15	---	---	3097.54	55'-85'
	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	
	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	
MW-02 3,159.89	2/22/2006	2	84.60	60.30	---	---	3101.39	50'-70'
	8/24/2006		84.6	60.46	---	---	3101.54	
	2/4/1998		72.94	61.33	---	---	3098.56	
	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	
	8/2/2004			61.11	---	---	3098.78	
	11/23/2004			60.52	---	---	3099.37	
	2/9/2005			60.45	---	---	3099.44	
MW-03 3,164.08	8/4/2005			66.60	---	---	3093.29	
	2/22/2006		72.81	60.26	---	---	3099.63	
	8/24/2006		72.81	60.42	---	---	3099.58	
	2/4/1998	2	73.26	65.18	---	---	3098.90	50'-70'
	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	
	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	---	---	3099.91	

TABLE I

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

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )
MW-04 3,165.65	2/4/1998	2	73.31	63.94	---	---	3101.71	50'-70'
	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	
	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	
MW-05 3,160.75	2/23/2006	2	73.11	62.80	---	---	3102.85	50'-70'
	8/25/2006		73.11	62.97	---	---	3103.03	
	2/4/1998		73.10	60.33	---	---	3100.42	
	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	
	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	
MW-06 3,164.18	8/4/2005			59.55	---	---	3101.20	
	2/22/2006		72.95	59.22	---	---	3101.53	
	8/24/2006		72.95	59.39	---	---	3101.61	
	2/7/2001	2	77.24	68.00	---	---	3096.18	59'-74'
	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	
	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	---	---	3097.07	

TABLE I

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

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )
MW-07 3,162.06	2/7/2001	2	73.45	67.25	---	---	3094.81	55'-70'
	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	
	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	---	---	3095.63	
MW-08 3,159.66	2/3/1999	2	70.66	68.21	---	---	3091.45	50'-70'
	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	
	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	---	---	3092.71	
MW-09 3,167.07	4/30/2002	2	70.39	63.65	---	---	3103.42	55'-70'
	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	
	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	---	---	3104.32	

TABLE I

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

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )
MW-10 3,170.99	4/30/2002	2	69.16	70.35	---	---	3100.64	54'-69'
	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	
	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	---	---	3101.35	
MW-11 3,168.24	4/30/2002	2	72.78	DRY	---	---	DRY	58'-73'
	10/11/2002			DRY	---	---	DRY	
	12/26/2002			DRY	---	---	DRY	
	2/17/2003			DRY	---	---	DRY	
	5/29/2003			DRY	---	---	DRY	
	8/22/2003			DRY	---	---	DRY	
	11/5/2003			DRY	---	---	DRY	
	2/3/2004			DRY	---	---	DRY	
	5/5/2004			DRY	---	---	DRY	
	8/2/2004			DRY	---	---	DRY	
	11/23/2004			DRY	---	---	DRY	
	2/9/2005			DRY	---	---	DRY	
	8/4/2005			61.91	---	---	3106.33	
	2/22/2006		75.45	74.71	---	---	3093.53	
	8/24/2006		75.45	74.71	---	---	3093.29	
MW-12 3,152.48	4/30/2002	2	74.37	72.80	---	---	3079.68	59'-74'
	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	
	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	---	---	3080.09	

TABLE I

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

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )
MW-13 3,154.92	4/30/2002	2	67.90	66.97	---	---	3087.95	53'-68'
	10/11/2002			66.38	---	---	3088.54	
	12/26/2002			66.37	---	---	3088.55	
	2/17/2003			66.37	---	---	3088.55	
	5/29/2003			66.68	---	---	3088.24	
	8/22/2003			67.06	---	---	3087.86	
	11/5/2003			67.36	---	---	3087.56	
	2/3/2004			67.11	---	---	3087.81	
	5/5/2004			67.05	---	---	3087.87	
	8/2/2004			67.21	---	---	3087.71	
	11/23/2004			66.82	---	---	3088.10	
	2/9/2005			66.50	---	---	3088.42	
	8/4/2005			66.11	---	---	3088.81	
	2/22/2006		70.54	65.73	---	---	3089.19	
	8/24/2006		70.54	65.45	---	---	3089.55	
MW-14 3,151.91	11/5/2003	2	92.43	71.60	---	---	3080.31	79.5'-89.5'
	2/3/2004			71.62	---	---	3080.29	
	5/5/2004			71.67	---	---	3080.24	
	8/2/2004			71.69	---	---	3080.22	
	11/23/2004			71.60	---	---	3080.31	
	2/9/2005			71.30	---	---	3080.61	
	8/4/2005			70.90	---	---	3081.01	
	2/22/2006		92.30	70.49	---	---	3081.42	
	8/24/2006		92.3	70.24	---	---	3081.76	
MW-15 3,152.48	11/5/2003	2	87.45	DRY	---	---	DRY	64.5'-84.5'
	2/3/2004			DRY	---	---	DRY	
	5/5/2004			DRY	---	---	DRY	
	8/2/2004			DRY	---	---	DRY	
	11/23/2004			DRY	---	---	DRY	
	2/9/2005			DRY	---	---	DRY	
	8/4/2005			86.91	---	---	3065.57	
	2/22/2006		87.40	86.54	---	---	3065.94	
	8/24/2006		87.4	86.34	---	---	3065.66	
MW-16 3,157.25	11/5/2003	2	77.22	65.68	---	---	3091.57	59.5'-74.5'
	2/3/2004			68.67	---	---	3088.58	
	5/5/2004			68.69	---	---	3088.56	
	8/2/2004			68.65	---	---	3088.60	
	11/23/2004			68.10	---	---	3089.15	
	2/9/2005			67.53	---	---	3089.72	
	8/4/2005			67.77	---	---	3089.48	
	2/22/2006		74.42	67.24	---	---	3090.01	
	8/24/2006		74.42	67.66	---	---	3089.34	
MW-17 3,158.37	11/5/2003	2	79.37	69.51	---	---	3088.86	57'-77'
	2/3/2004			69.53	---	---	3088.84	
	5/5/2004			69.52	---	---	3088.85	
	8/2/2004			70.12	---	---	3088.25	
	11/23/2004			69.31	---	---	3089.06	
	2/9/2005			69.04	---	---	3089.33	
	8/4/2005			68.90	---	---	3089.47	
	2/22/2006		80.10	68.72	---	---	3089.65	
	8/24/2006		80.1	68.78	---	---	3089.22	

TABLE I

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

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )
MW-18 3,151.08	11/23/2004	2	76.98	DRY	---	---	DRY	54.5'-74.5'
	2/9/2005			DRY	---	---	DRY	
	8/4/2005			DRY	---	---	DRY	
	2/22/2006		78.43	DRY	---	---	DRY	
	8/24/2006		78.43	DRY	---	---	DRY	
MW-19 3,147.79	11/23/2004	2	104.41	72.63	---	---	3075.16	82.5'-102.5'
	2/9/2005			72.36	---	---	3075.43	
	8/4/2005			72.18	---	---	3075.61	
	2/22/2006		105.55	71.83	---	---	3075.96	
	8/24/2006		105.55	71.57	---	---	3076.43	
MW-20 3,151.56	11/23/2004	2	94.94	81.81	---	---	3069.75	72.5'-92.5'
	2/9/2005			81.85	---	---	3069.71	
	8/4/2005			81.81	---	---	3069.75	
	2/22/2006		92.23	81.71	---	---	3069.85	
	8/24/2006		92.23	81.66	---	---	3070.34	
WW-1 3,170.21	4/30/2002			70.21	---	---	3100.00	-
	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	---	---	3100.5	
West MW 3,164.44	8/22/1997	2	70.43	62.58	---	---	3101.86	--
	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	---	---	3102.57	

TABLE I

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

WELL TOC elev <sup>1</sup>	DATE	Well Diameter (inches)	Total Depth (ft below TOC)	Depth to Water (ft below TOC)	Depth to LNAPL (ft below TOC)	LNAPL Thickness (ft)	Corrected Groundwater Elevation (ft above MSL <sup>2</sup> )	Screen interval (bgs <sup>3</sup> )
Southwest MW 3,164.54	8/22/1997	2	70.45	63.25	---	---	3101.29	--
	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	
RW-1 3,163.52	2/23/2006	4	70.16	61.98	---	---	3102.56	53'-73'
	8/25/2006		70.16	62.17	---	---	3102.83	
	1/14/1999		76.30	50.85	---	---	3112.67	
	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	
	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	---	---	3102.64	

Notes:

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



GROUNDWATER ANALYTICAL SUMMARY  
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY  
G.L. ERWIN "A & B" FEDERAL NCT-2 TANK BATTERY  
SW¼, SE¼, SECTION 35, TOWNSHIP 24 SOUTH, RANGE 37 EAST  
LEA COUNTY, NEW MEXICO

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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)	Hydrosulfide (mg/L)
		NMWQCC Standard (mg/L)												
MW-3	08/22/97	—	—	250	1.60	10.00	600.0	—	—	—	—	1000	—	—
	02/17/98	<2.0	410	983	—	—	173	—	—	—	—	—	232	—
	02/07/01	8.0	278	890	3.40	7.3	200	56.7	18.7	20.4	648	2,100	—	—
	05/02/02	<1.0	298	735	2.44	7.57	213	27.5	8.39	24.7	42.8	—	—	<1.00
	05/03/02	<1.0	146	767	2.90	7.39	207	37.9	11.5	25.5	28.2	—	—	<1.00
	10/11/02	<0.1	288	753	—	—	272	29	9.18	20.6	622	1,960	—	<0.10
	12/27/02	<0.1	288	727	—	—	231	27	7.34	19.9	698	1,950	—	<0.10
	02/18/03	<0.1	277	762	—	—	180	25.2	7.84	16.4	580	1,950	—	<0.10
	06/02/03	<1.0	270	802	3.07	8.06	203	64.9	20	18.5	728	2,720	—	<1.00
	08/26/03	<1.0	282	799	3.00	7.99	198	54.9	18	16.4	597	2,320	—	<1.00
	11/06/03	<1.0	286	746	2.92	7.26	214	37.4	11.1	24.9	577	2,092	—	<1.00
	11/06/03	<1.0	132	821	1.85	2.92	98.1	120	39.5	9.15	200	1,392	—	<1.00
	02/04/04	<1.0	296	755	2.74	7.36	205	42.7	13.1	27.1	546	2,275	—	<1.00
	05/07/04	<1.00	300	774	2.57	7.02	197	38.8	11.2	22.2	528	2,140	—	<1.00
	08/03/04	<0.1	291	798	—	—	155	21.5	16.7	25.8	794	1,640	—	<0.10
	02/11/05	<1.00	292	879	4.61	9.47	196	47	14.5	19.1	590	2,240	—	<1.00
	08/04/05	<1.00	282	922	2.86	8.17	217	48	14.7	21.1	630	1,950	—	<1.00
	02/22/06	<10.0	250	1,100	1.60	8.5	190	46.8	15.3	15.1	446	3,860	—	<10.0
	08/24/06	<10	260	750	2.6	6.43	190	25.3	7.68	11.9	565	1,990	—	<10.0
MW-4	08/22/97	—	—	—	—	—	—	—	—	—	—	—	—	—
	02/17/98	<2.0	510	372	—	—	136	—	—	—	—	1,268	—	—
	02/07/01	<1.0	286	1,200	1.70	4.7	100	248	84.7	24	506	2,600	—	—
	05/03/02	<1.0	250	868	1.00	4.72	163	137	48.4	40.7	441	—	—	<1.00
	10/14/02	<0.1	342	381	—	—	124	9.4	2.48	38.4	405	1,220	—	<0.10
	10/14/02	<0.1	358	372	—	—	116	8.8	2.38	37.4	409	1,260	—	<0.10
	12/27/02	<0.1	288	505	—	—	114	21.2	4.42	50.6	461	1,450	—	<0.10
	12/27/02	<0.1	158	115	—	—	139	55.5	23	4.94	94.4	594	—	<0.10
	02/18/03	<0.1	264	691	—	—	118	32.2	7.5	59	474	1,610	—	<0.10
	05/30/03	<1.0	236	1,020	<2.00	5.53	79.6	113	29.7	59.8	664	2,670	—	<1.00
	08/25/03	<1.0	192	1,170	<2.00	5.43	72.9	143	35	82.1	616	2,935	—	<1.00
	11/07/03	<1.0	194	1,620	<2.00	5.48	76.6	228	61.4	83.6	629	3,035	—	<1.00
	02/05/04	<1.0	170	1,730	<2.00	5.93	79	277	75.9	108	630	3,380	—	<1.00
	05/06/04	<1.00	158	2,150	<3.00	5.94	88.2	407	99.9	99.7	593	4,090	—	<1.00
	08/03/04	<0.1	150	2,730	—	—	125	632	191	124	832	6,810	—	<0.10
	02/11/05	<1.00	136	4,520	<1.00	5.19	127	1060	289	156	983	9,030	—	<1.00
	08/04/05	<1.00	132	6,580	<1.00	5.34	166	1650	375	142	1440	13,200	—	<1.00
	02/23/06	<10.0	130	9,100	<2.5	10	220	1510	326	141	1070	17,900	—	<10.0
	08/25/06	<10.0	140	12,000	<5	6.13	290	1350	364	136	1890	17,500	—	<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)
	NMWC Standard			250	1.60	10.00	600.0	—	—	—	—	1000	—	—
MW-5	08/22/97	—	—	—	—	—	—	—	—	—	—	—	—	—
	02/17/98	<2.0	360	408	—	—	151	—	—	—	—	1,219	116	—
	02/07/01	<1.0	214	570	1.60	4.8	140	123	40.8	20.3	331	1,500	—	—
	05/03/02	<1.0	238	335	0.96	5.36	162	37.3	11.1	27.3	287	—	—	<1.00
	10/11/02	<0.1	232	337	—	—	173	31.8	10	20.7	305	1,100	—	<0.10
	12/27/02	<0.1	232	337	—	—	171	31.3	8.55	20.6	319	1,210	—	<0.10
	02/18/03	<0.1	210	319	—	—	176	27.2	8.48	16.5	231	1,110	—	<0.10
	06/02/03	<1.0	196	588	1.23	4.86	142	132	40.5	21.2	364	1,644	—	<0.10
	08/26/03	<1.0	210	447	1.32	4.85	141	95.1	29	23.4	291	1,480	—	<1.00
	11/06/03	<1.0	214	456	1.43	5.11	152	94	29.3	24.8	282	1,430	—	<1.00
	02/04/04	<1.0	206	504	1.38	5.31	147	95.1	31.4	27.3	289	1,410	—	<1.00
	05/07/04	<1.00	222	381	1.02	5.98	151	55.9	16.3	25.7	301	1,250	—	<1.00
	05/07/04	<1.00	242	330	1.04	5.75	152	50.7	14.6	27.4	292	1,168	—	<1.00
	08/03/04	<0.1	229	461	—	—	135	47.9	31.3	31.1	435	968	—	<0.10
	02/11/05	<1.0	288	408	2.58	8.36	243	46.2	13.3	30.6	433	1,598	—	<1.0
DUP1	08/04/05	<1.00	256	423	1.83	6.82	201	60.5	18.6	20.3	354	1,334	—	<1.00
	08/04/05	<1.00	242	394	1.82	6.74	200	49.2	14.8	21.5	341	1,220	—	<1.00
	02/22/06	<10.0	220	800	1.30	6.6	160	222	69.4	14	274	2,670	—	<10.0
	08/24/06	<10.0	190	930	<5	5.09	140	145	47.6	13.1	295	1,280	—	<10.0
MW-6	02/07/01	<1.0	200	1800	3.3	5.4	140	323	108	18.8	657	3,800	—	—
	05/02/02	<1.0	264	503	3.68	7.04	183	24.9	7.29	17.4	475	—	—	<1.00
	10/14/02	<0.1	262	620	—	—	206	18.6	5.34	17.5	556	1,670	—	<0.10
	12/27/02	36.00	218	620	—	—	192	21.2	6.08	13.6	584	1,650	—	<0.10
	02/18/03	16.00	238	638	—	—	298	22.1	6.43	11.8	524	1,700	—	<0.10
	06/02/03	<1.0	244	772	3.24	6.62	151	68.7	23.3	14.4	614	2,040	—	<1.00
	08/26/03	<1.0	246	607	2.95	6.65	179	35.9	11.6	12.2	525	2,370	—	<1.00
	11/06/03	<1.0	250	649	3.28	6.89	191	46	13.9	18.1	503	1,932	—	<1.00
	02/04/04	<1.0	266	713	3.15	7.2	189	48.9	15.4	19.9	517	2,210	—	<1.00
	05/07/04	<1.00	266	696	2.92	6.74	182	54.8	16.1	16	503	2,095	—	<1.00
	08/03/04	<0.1	260	718	—	—	240	22.7	21.7	21.7	825	1,430	—	<0.10
	02/11/05	<1.00	270	660	3.76	7.84	192	30.1	9.13	19.5	531	1,774	—	<1.00
	08/04/05	<1.00	268	764	3.16	7.83	206	56.6	18.8	15.3	576	1,650	—	<1.00
	02/22/06	<10.0	270	610	2.40	7.9	180	23.9	7.41	10.9	380	1,570	—	<10.0
	08/24/06	<10.0	260	590	3	5.96	170	108	35	9.38	448	1,880	—	<10.0

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)	Hydroside (mg/L)
		NMWQCC Standard (mg/L)												
MW-7	02/07/01	<1.0	238	500	1.60	10.00	600.0	80.3	27.3	10.4	326	1,300	—	—
	05/02/02	<1.0	244	466	2.94	4.18	106	46.6	17	8.42	307	—	—	<1.00
	10/11/02	<0.1	242	408	—	—	128	39.7	13.5	6.7	316	1,120	—	<0.10
	12/27/02	<0.1	232	452	—	—	109	56.2	19.2	5.52	353	1,220	—	<0.10
	02/17/03	<0.1	200	603	—	—	134	90.6	30.9	5.86	339	1,440	—	<0.10
	06/02/03	<1.0	242	388	3.23	4.33	115	39.5	12.5	6.16	370	1,216	—	<1.00
	08/25/03	<1.0	232	367	2.77	4.07	105	39.3	12.3	7.14	309	1,244	—	<1.00
	11/05/03	<1.0	240	343	3.08	4.16	117	36.6	11.4	7.67	304	1,186	—	<1.00
	02/04/04	<1.0	238	355	3.04	4.19	117	34.7	10.8	7.63	298	1,170	—	<1.00
	05/06/04	<1.0	262	320	3.10	4.25	112	30.7	9.87	7.95	298	1,138	—	<1.00
DUP2	05/06/04	<1.00	260	339	2.90	4	112	35.2	10.3	6.81	282	1,172	—	<1.00
	08/03/04	<0.1	248	328	—	—	126	22.8	12.1	7.55	436	734	—	<0.10
	02/11/05	<1.00	238	332	3.76	4.65	123	31.5	9.99	7.75	296	1,128	—	<1.00
	08/05/05	<1.00	240	430	3.10	4.36	144	58.2	19.2	8.43	325	1,180	—	<1.00
	08/05/05	<1.00	236	387	3.14	4.30	144	38.7	12.5	6.51	315	1,100	—	<1.00
	02/22/06	<10.0	290	240	2.60	3.3	120	30.6	9.98	4.89	227	1,120	—	<10.0
	08/24/06	<10.0	260	230	3.1	2.97	110	23.3	7.82	2.96	245	952	—	<10.0
	02/07/01	20	240	900	3.20	6.6	160	79.4	24.5	12.7	604	2,100	—	—
	05/02/02	<1.0	236	818	2.65	6.68	168	94.5	29.2	13	527	—	—	<1.00
	10/14/02	<0.1	250	842	—	—	194	52.4	20.4	10.8	597	1,920	—	<0.10
MW-8	12/27/02	<0.1	213	833	—	—	173	59.8	20	8.64	627	2,000	—	<0.10
	02/18/03	<0.1	213	833	—	—	185	53	17.6	7.13	489	1,930	—	<0.10
	06/02/03	<1.0	244	777	3.29	6.82	173	60	18.9	9.47	650	1,968	—	<1.00
	08/25/03	<1.0	244	738	2.85	6.42	159	58.4	17.3	11.4	534	1,996	—	<1.00
	11/07/03	<1.0	248	722	3.27	6.65	171	58.1	17.9	12.2	525	1,972	—	<1.00
	02/04/04	<1.0	254	764	3.77	7.85	161	55.2	18.2	13.2	522	2,038	—	<1.00
	05/06/04	8.00	262	774	3.36	7.43	164	56.2	16.9	10.7	501	1,968	—	<1.00
	08/04/04	<0.1	246	771	—	—	222	28.6	21.5	11	707	1,530	—	<0.10
	02/11/05	<1.00	238	818	4.28	8.46	167	58.3	19	13.2	543	2,080	—	<1.00
	08/05/05	<1.00	236	888	3.29	7.66	184	71.5	23.3	11.7	574	2,230	—	<1.00
	02/22/06	<10.0	230	810	2.40	7.9	170	55.1	18	8.05	390	1,740	—	<10.0
	08/24/06	<10.0	280	710	3.2	5.51	170	51.2	16.5	6	470	926	—	<10.0

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	1,240	—	<0.10
	12/27/02	<0.1	124	434	—	—	120	93.8	33.8	6.22	192	1,080	—	<0.10
	02/18/03	<0.1	105	461	—	—	126	99.3	34.1	5.62	200	1,190	—	<0.10
	05/30/03	<1.0	122	514	1.82	3.01	102	113	37.9	7.98	240	1,324	—	<1.00
	08/25/03	<1.0	114	562	1.58	2.98	95.2	120	39.2	9.45	219	1,428	—	<1.00
	11/07/03	<1.0	132	468	1.68	2.86	96.2	119	39	9.18	200	1,250	—	<1.00
	02/05/04	<1.0	124	610	2.32	4.18	97.7	125	41.1	10.3	221	1,345	—	<1.00
	02/05/04	<1.0	120	581	1.23	2.19	53.6	132	43.9	10.1	203	1,325	—	<1.00
	05/05/04	<1.00	122	616	1.39	2.68	91	142	50	9.65	212	1,428	—	<1.00
Dup	05/05/04	<1.00	124	599	1.43	2.72	92.2	144	46.7	9.82	223	1,476	—	<1.00
	05/05/04	<1.00	110	691	—	—	115	184	62.9	10.5	279	1,530	—	<0.10
	08/03/04	<0.1	98	1,960	3.63	5.36	103	495	164	21.5	388	3,920	—	<1.00
	02/11/05	<1.00	218	10,000	1.54	5.15	224	2,280	686	42.8	1,390	27,000	—	<1.00
	08/04/05	<1.00	110	13,000	<2.5	19	430	2,050	438	47.8	1,450	24,300	—	<1.00
	02/23/06	<10.0	260	10,000	<2.5	3.75	360	1,330	360	38.3	1,920	24,100	—	<10.0
	08/25/06	<10.0												
MW-10	10/14/02	<0.1	204	71	—	—	145	42.3	22.8	7.77	87.3	593	—	<0.10
	12/27/02	<0.1	196	70	—	—	149	68.4	23.1	7.69	92.8	529	—	<0.10
	02/18/03	<0.1	184	65	—	—	159	67.1	22.8	3.04	90.7	552	—	<0.10
	06/02/03	<1.0	198	55.7	1.60	4.31	134	75.7	22.4	4.95	80.4	624	—	<1.00
	08/26/03	<1.0	188	56.1	1.58	4.1	125	70.6	23.4	6.29	72.3	688	—	<1.00
	11/07/03	<1.0	200	70.9	1.69	4.19	131	70.2	23.5	5.8	69.3	638	—	<1.00
	02/05/04	<1.0	196	101	1.68	4.22	121	75.8	25.7	6.29	73.8	674	—	<1.00
	05/07/04	<1.00	174	186	1.40	3.8	111	92.9	30.1	6.34	78.3	736	—	<1.00
	08/03/04	<0.1	144	328	—	—	118	106	49.5	7.7	106	796	—	<0.10
	02/11/05	<1.0	112	1,110	3.44	5.86	93.1	387	115	14	157	2,295	—	<1.00
Dup	08/04/05	<1.00	112	1,500	1.32	4.02	94.5	419	139	11.5	186	3,420	—	<1.00
	02/22/06	<10.0	89	2,000	<0.50	6.5	98	520	158	13.8	180	6,180	—	<10.0
	08/25/06	<10.0	110	2,200	<2.5	3.24	97	660	201	13.7	253	7,520	—	<10.0



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			250	1.60	10.00	600.0	—	—	—	—	1000	—	—
MW-11	04/30/02	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
	02/17/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	05/29/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/22/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/05/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/03/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	05/05/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/02/04	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
	02/09/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/04/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/22/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12	05/02/02	<1.0	88	1,120	1.37	4.09	45.3	431	183	17.7	123	—	—	<1.00
	10/11/02	<0.1	93	1,370	—	—	47.5	438	161	15.4	127	2,860	—	<0.10
	12/27/02	<0.1	78	1,520	—	—	49.3	507	181	14.1	151	3,460	—	<0.10
	02/17/03	<0.1	68	1,530	—	—	52.4	461	170	13.3	136	3,980	—	<0.10
	06/02/03	<1.0	72	1,380	<2.00	5.06	45.8	491	157	15.3	151	3,250	—	<1.00
	08/26/03	<1.0	66	1,550	<2.00	4.94	45.9	525	178	14.8	156	3,855	—	<1.00
	11/06/03	<1.0	80	1,610	2.25	4.81	50.3	568	189	20.1	159	3,860	—	<1.00
	02/05/04	<1.0	74	1,680	2.19	5.13	46	525	181	21.6	160	2,910	—	<1.00
	05/07/04	<1.0	70	1,620	<3.00	5.13	53.6	541	178	18.5	152	3,085	—	<1.0
	08/03/04	<0.1	66	1,660	—	—	55.2	680	252	31.1	211	4,300	—	<0.10
	02/11/05	<1.00	82	1,770	2.04	6.08	47.7	503	176	17.8	138	3,080	—	<1.00
	08/05/05	<1.00	72	1,800	1.66	4.69	48.6	547	194	15.2	149	4,180	—	<1.00
	02/22/06	<10.0	73	1,700	0.70	6.7	48	415	135	14.9	129	4,590	—	<10.0
	08/24/06	<10.0	57	1,700	0.93	3.06	48	463	157	12.2	140	6,190	—	<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)	Hydride (mg/L)
		NMWQC 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	1,210	—	<0.10
	12/27/02	<0.1	104	408	—	—	132	160	55.2	9.71	84.5	1,260	—	<0.10
	02/17/03	<0.1	80	443	—	—	144	152	54.9	8.88	108	1,370	—	<0.10
	06/02/03	<1.0	102	421	2.27	4.43	122	153	56	11	90.9	1,260	—	<1.00
	08/26/03	<1.0	92	500	2.10	4.23	115	179	66	12	95.6	1,360	—	<1.00
	11/06/03	<1.0	98	492	2.25	4.42	125	193	68.6	14.3	91.5	1,434	—	<1.00
	02/05/04	<1.0	96	543	2.30	4.56	120	179	65.6	15.4	98.3	1,220	—	<1.00
	05/07/04	<1.00	98	496	2.04	4.14	116	184	62.2	12.8	89.3	1,278	—	<1.00
	08/03/04	<0.1	95	532	—	—	116	225	77.3	15	111	1,410	—	<0.10
	02/11/05	<1.00	100	491	2.19	5.36	117	171	61.7	13.3	92.3	1,260	—	<1.00
	08/05/05	<1.00	96	759	2.29	5.11	125	217	70.8	12.7	103	1,550	—	<1.00
	02/22/06	<10.0	89	590	1.70	4.8	120	177	61.2	11.5	91.8	2,090	—	<10.0
	08/24/06	<10.0	150	760	<2.5	3.58	120	228	78.7	10.9	107	2,590	—	<10.0
MW-14	11/05/03	<1.0	100	3,500	<4.00	6.58	525	951	324	45.3	732	7,315	—	<1.00
	02/04/04	<1.0	74	3,910	<3.00	6.01	559	966	320	46.1	840	7,720	—	<1.0
	05/06/04	<1.00	86	3,970	<4.00	5.54	594	997	350	42.5	836	9,560	—	<1.00
	08/04/04	<0.1	78	4,430	—	—	895	1,350	455	60.3	1,220	11,500	—	<0.10
	02/11/05	<1.00	80	6,120	3.50	5.99	752	1,180	370	56.8	1,250	8,860	—	<1.00
	08/05/05	<1.00	86	6,480	1.84	5.04	882	1,230	400	46.3	1,440	9,570	—	<1.00
	02/22/06	<10.0	81	5,300	<0.50	11	700	914	253	34.1	885	12,100	—	<10.0
	02/22/06	<10.0	82	5,000	<0.50	<40	690	916	253	34	884	11,600	—	<10.0
	08/24/06	<10.0	85	5,600	<5	3.74	690	942	266	27.8	1370	11,300	—	<10.0
	11/05/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-15	02/03/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	05/05/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/02/04	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
	02/09/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/04/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dup	02/22/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/24/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

TABLE II

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

Well Number	Sample Date	Carbonate (mg/L)	Bicarbonate (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Nitrate - N (mg/L)	Sulfate (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	TDS (mg/L)	Hardness (mg/L)	Hydroxide (mg/L)
	NMWC Standard (mg/L)			250	1.60	10.00	600.0	—	—	—	—	1000	—	—
MW-16  Dup	11/06/03	<1.0	188	863	1.79	5.65	150	183	55.6	14.2	372	2,100	—	<1.00
	02/04/04	<1.0	174	937	2.19	6.59	123	235	76.8	15.2	299	2,200	—	<1.00
	05/07/04	<1.00	172	953	<2.00	5.91	123	240	73.8	12.7	313	2,280	—	<1.00
	08/03/04	<0.1	158	1,010	—	—	139	250	87.5	13.5	382	2,560	—	<0.10
	02/11/05	<1.00	180	944	2.40	7.24	151	198	62.4	10.9	344	2,260	—	<1.00
	08/05/05	<1.00	230	568	1.99	5.14	146	134	46.9	8.7	249	1,420	—	<1.00
	02/22/06	<10.0	180	590	1.30	5.2	110	120	39.1	7.17	207	1,770	—	<10.0
	08/24/06	<10.0	490	500	<2.5	3.17	89	123	40.6	4.93	207	1,460	—	<10.0
MW-17  Dup	11/05/03	<1.0	154	587	2.06	3.85	104	177	58.2	12.5	184	1,556	—	<1.00
	02/04/04	<1.0	158	650	2.01	3.93	93.1	158	52.5	12.2	205	1,416	—	<1.00
	02/04/04	<1.0	172	557	2.08	4.03	95.7	162	52.6	12.1	204	1,496	—	<1.00
	05/06/04	<1.00	162	604	1.77	3.57	91.2	182	57.7	10.9	176	1,416	—	<1.00
	08/04/04	<0.1	141	638	—	—	132	207	81	12.7	221	1,660	—	<0.10
	02/11/05	<1.00	174	572	2.94	4.61	101	134	45.9	11	229	1,470	—	<1.00
	08/05/05	<1.00	172	626	2.16	4.37	106	169	53.5	9.5	220	1,750	—	<1.00
	02/22/06	<10.0	150	580	1.50	4.0	97	123	40.1	8.04	187	1,810	—	<10.0
DUP	8/24/2006	<10.0	200	560	<2.5	3.06	100	140	46.1	5.94	178	1,700	—	<10.0
	08/24/06	<10.0	320	530	<2.5	2.94	100	135	46.5	5.76	175	1,700	—	<10.0
MW-18	11/23/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/09/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/04/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/22/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-19  DUP	11/23/04	<1.00	86	7,000	<10.0	17.3	582	2,020	678	52.4	1590	12,900	—	<1.00
	02/11/05	<1.00	92	5,200	1.30	5.12	502	1,340	522	61.3	974	22,000	—	<1.00
	08/05/05	<1.00	82	4,850	1.76	4.7	450	1,200	422	50.6	793	9,750	—	<1.00
	08/05/05	<1.00	80	3,170	1.87	4.83	462	1,270	463	51.0	814	15,800	—	<1.00
	02/22/06	<10.0	75	3,900	<0.50	8.9	400	870	271	32.6	464	8,830	—	<10.0
	08/24/06	<10.0	250	3,900	<5	3.01	390	902	293	28.8	582	10,900	—	<10.0
MW-20	11/23/04	<1.00	82	606	2.49	2.9	79.7	176	62.6	13.6	104	985	—	<1.00
	02/11/05	<1.00	88	745	1.86	4.34	73.8	227	77.5	15	117	1,480	—	<1.00
	08/05/05	<1.00	80	1,170	1.76	4.55	84.5	326	116	14.7	162	2,640	—	<1.00
	02/22/06	<10.0	110	1,100	0.98	5.5	83	295	103	13.5	145	3,000	—	<10.0
	08/24/06	<10.0	1,100	1,100	<2.5	3.39	84	288	101	11.2	160	3,590	—	<10.0



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)														
West	08/22/97	—	—	250	1.60	10.00	600.0	—	—	—	—	1000	—	—
	02/17/98	<2.0	370	237	—	—	134	—	—	—	—	975	96	—
	02/07/01	<1.0	236	340	2.00	4.5	120	39.7	12.5	33.2	264	1,000	—	—
	05/03/02	<1.0	214	329	1.39	4.36	116	41.9	11.9	40.9	234	—	—	<1.00
	10/14/02	<0.1	210	337	—	—	127	39.3	9.37	35.6	290	986	—	<0.10
	12/27/02	<0.1	198	337	—	—	134	43.1	12.5	33.2	263	997	—	<0.10
	02/18/03	<0.1	190	354	—	—	141	33.6	9.78	23.9	152	1,010	—	<0.10
	05/30/03	<1.0	202	353	1.54	4.16	116	48.4	13.3	35.1	283	1,050	—	<1.00
	08/25/03	<1.0	194	351	1.50	4.08	112	49.4	13.2	38.4	265	1,066	—	<1.00
	11/07/03	<1.0	204	327	1.65	3.98	115	51.3	13.8	38.8	235	1,100	—	<1.00
	02/05/04	<1.0	196	345	1.66	4.09	112	51.6	14.6	41.4	235	1,074	—	<1.00
	05/06/04	<1.00	200	339	1.44	3.83	115	53.6	14	37.3	241	1,040	—	<1.00
	08/03/04	<0.1	186	337	—	—	147	41.7	20.1	49.1	297	717	—	<0.10
	02/11/05	<1.00	186	417	2.44	4.47	117	75.9	21.4	43.9	241	1,128	—	<1.00
	08/04/05	<1.00	150	526	1.54	4.16	129	87	23.6	42.2	280	1,104	—	<1.00
	02/23/06	<10.0	150	800	0.76	4	110	149	44.3	47.1	257	2,390	—	<10.0
	08/25/06	<10.0	150	1,500	<2.5	2.78	97	315	87.6	67.7	400	4,840	—	<10.0
Southwest	08/22/97	—	—	3,300	—	—	—	—	—	—	—	—	712	—
	02/17/98	<2.0	420	2,170	—	—	255	—	—	—	—	4,719	—	—
	02/07/01	<1.0	326	1,900	2.20	5	350	197	59.1	—	1,078	4,100	—	<1.00
	05/03/02	<1.0	272	1,490	1.38	4.51	301	200	65	46.4	744	—	—	<0.10
	10/14/02	<0.1	330	1,330	—	—	360	110	32.5	61.5	929	3,020	—	<0.10
	12/27/02	<0.1	308	1,280	—	—	319	107	31.9	66.8	980	3,040	—	<0.10
	02/18/03	<0.1	289	1,290	—	—	300	104	31.3	63	918	2,910	—	<0.10
	06/02/03	<0.1	298	1,310	—	—	299	108	32.2	58.3	812	3,040	—	<0.10
	06/02/03	<0.1	304	1,420	2.34	5.83	282	161	45.7	49.1	935	4,070	—	<1.00
	06/02/03	<1.0	290	1,370	2.12	5.65	287	169	54.5	45	899	3,420	—	<1.00
	08/25/03	<1.0	310	1,190	2.25	6.1	272	117	33.6	49.7	774	3,205	—	<1.00
	08/25/03	<1.0	200	1,260	<2.00	5.61	75.5	159	41.8	79	591	3,270	—	<1.00
	11/07/03	<1.0	300	1,240	2.29	5.77	255	129	35.4	48.5	727	3,275	—	<1.00
	02/05/04	<1.0	300	1,240	2.37	6.17	238	109	33.1	52.2	716	2,860	—	<1.00
	05/06/04	<1.00	294	1,310	<3.00	6.38	231	158	30.8	53.2	780	3,180	—	<1.00
	08/03/04	<0.1	276	1,400	—	—	264	75.1	45.2	82.4	1,660	2,550	—	<0.10
	02/11/05	<1.00	260	2,920	1.33	9.61	230	323	94.5	84.4	1,240	5,575	—	<1.00
	08/04/05	<1.00	226	3,290	1.55	11.7	325	691	201	101	1,980	12,000	—	<1.00
	02/23/06	<10.0	300	3,000	<2.5	11	450	373	108	77.1	896	6,300	—	<10.0
	08/25/06	<10.0	300	3,100	<5.0	5.99	600	415	117	74.9	1240	7,600	—	<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)
	NMWOCC Standard (mg/L)			250	1.60	10.00	600.0	—	—	—	—	1000	—	—
RW-1	10/20/00	<1.0	330	1,500	1.70	5.2	330	107	29.6	50	843	3,200	—	—
	10/14/02	<0.1	327	1,150	—	—	340	60.3	25.5	64.3	820	2,720	—	<0.10
	12/27/02	<0.1	294	1,300	—	—	330	123	40.3	56.8	933	3,190	—	<0.10
	02/18/03	<0.1	300	1,150	—	—	316	79.7	25.7	53	721	2,690	—	<0.10
	06/02/03	<0.1	276	1,500	2.05	5.34	275	194	67.21	40.8	923	4,070	—	<1.00
	08/25/03	<1.0	298	1,190	2.01	6.15	278	117	32.7	46.1	705	2,940	—	<1.00
	11/07/03	<1.0	298	1,300	2.13	5.56	266	166	48.1	51.7	106	3,240	—	<1.00
	02/05/04	<1.0	292	1,270	2.22	5.92	246	148	44.7	53.8	704	2,780	—	<1.00
	05/06/04	<1.00	310	1,100	<3.00	6.62	235	104	28.3	53.8	635	2,840	—	<1.00
	05/06/04	<1.00	288	1,040	<3.00	6.64	243	90	24.1	44.5	642	2,705	—	<1.00
Dup	08/04/04	<0.1	284	1,120	—	—	290	44.8	33	86.9	785	2,250	—	<0.10
	08/04/04	<0.1	288	1,130	—	—	274	45	31.6	84	961	2,550	—	<0.10
Dup	02/11/05	<1.00	262	1,730	3.59	8.93	217	172	51.5	84	910	3,995	—	<1.00
	02/11/05	<1.00	268	1,690	2.00	8.59	224	159	46.4	81	813	3,170	—	<1.00
Dup	08/04/05	<1.00	252	2,470	1.26	5.8	188	262	76.1	87.5	1,090	5,120	—	<1.00
	02/23/06	<10.0	290	2,400	<2.5	8.9	350	234	67.6	70.4	762	4,680	—	<10.0
DUP	08/25/06	<1.0	290	2,300	<5	4.41	440	281	77.3	68.5	1040	5610	—	<10.0
	08/25/06	<10.0	300	2,300	<5	4.6	450	272	77.3	67.1	1030	5,570	—	<10.0
WW-1	05/01/02	<1.0	172	97.2	1.64	4.05	137	51.4	23.4	8.23	84.9	—	—	<1.00
	10/10/02	<0.1	168	106	—	—	124	52.7	22.2	9.99	106	605	—	<0.10
	12/27/02	<0.1	157	111	—	—	134	55	22.5	5.3	96	572	—	<0.10
	02/18/03	<0.1	152	115	—	—	137	53.8	22.1	6.38	93.5	601	—	<0.10
	06/02/03	<1.0	154	127	1.69	3.77	119	59.5	24.1	7.14	118	621	—	<1.00
	08/25/03	<1.0	148	136	1.70	3.72	111	63	24	8.43	104	652	—	<1.00
	11/07/03	<1.0	156	149	1.80	3.62	111	62.3	24.4	8.3	95.5	669	—	<1.00
	02/04/04	<1.0	156	185	1.81	3.79	102	68.2	25.5	8.7	92.4	709	—	<1.00
	05/05/04	<1.00	148	204	1.54	3.48	99.7	71.9	26.5	8.25	120	695	—	<1.00
	08/04/04	<0.1	132	222	—	—	114	92.3	37.9	9.89	139	471	—	<0.10
08/04/05	08/04/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	02/23/06	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.
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 NMWOCC standard.
10. WW: Water well.
11. NS: Note sampled.

APPENDIX A

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:

- I. 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.

Mr. Rodney G. Bailey  
February 2, 1999  
Page 2

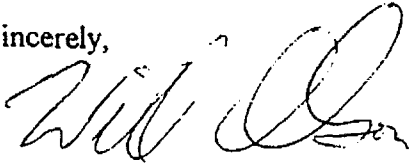
- b. A 2-3 foot bentonite plug will be placed above the gravel pack.
  - c. The remainder of the hole will be grouted to the surface with cement containing 3-5% bentonite.
  - d. A concrete pad and locking well cover will be placed at the surface.
  - e. The well will be developed after construction 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.

Mr. Rodney G. Bailey  
February 2, 1999  
Page 3

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

Sincerely,

A handwritten signature in dark ink, appearing to read "Will Olson", written in a cursive style.

William C. Olson  
Hydrologist  
Environmental Bureau

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

APPENDIX B

CERTIFIED LABORATORY REPORTS AND CHAIN-OF-CUSTODY  
DOCUMENTATION



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

Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

March 03, 2006

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

RE: Project: 2057796  
RE: Project ID: GL. ERWIN TANK BATTERY

Dear James Ornelas:

Enclosed are the analytical results for sample(s) received by the laboratory on February 23, 2006. 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



**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.



**Pace Analytical Services, Inc.**

1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087

Phone: 504.469.0333

Fax: 504.469.0555

LELAP # 02006



Report of Laboratory Analysis  
Project Number: 2057796



# 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

**Pace Analytical\***  
New Orleans Laboratory

Client: CRA

Project: GL. ERWIN TANK BATTERY

Project No.: 2057796

Sample ID	Lab ID	Matrix	Collection Date/Time		Received Date/Time	
MW-20	20432103	Water	02/22/2006	10:09	02/24/2006	10:15
MW-19	20432104	Water	02/22/2006	11:30	02/24/2006	10:15
MW-17	20432105	Water	02/22/2006	11:59	02/24/2006	10:15
MW-16	20432106	Water	02/22/2006	12:10	02/24/2006	10:15
MW-14	20432107	Water	02/22/2006	11:05	02/24/2006	10:15
MW-13	20432108	Water	02/22/2006	11:41	02/24/2006	10:15
MW-12	20432109	Water	02/22/2006	10:34	02/24/2006	10:15
MW-10	20432110	Water	02/22/2006	12:39	02/24/2006	10:15
MW-8	20432111	Water	02/22/2006	12:24	02/24/2006	10:15
MW-7	20432112	Water	02/22/2006	12:57	02/24/2006	10:15
MW-6	20432113	Water	02/22/2006	13:54	02/24/2006	10:15
MW-5	20432114	Water	02/22/2006	14:25	02/24/2006	10:15
MW-3	20432115	Water	02/22/2006	14:00	02/24/2006	10:15
MW-2	20432116	Water	02/22/2006	13:13	02/24/2006	10:15
MW-1	20432117	Water	02/22/2006	13:38	02/24/2006	10:15
DUP-1	20432118	Water	02/22/2006		02/24/2006	10:15
DUP-2	20432119	Water	02/22/2006		02/24/2006	10:15
MW-9	20432120	Water	02/23/2006	11:05	02/24/2006	10:15
MW-4	20432121	Water	02/23/2006	11:30	02/24/2006	10:15
MW-WEST	20432122	Water	02/23/2006	11:50	02/24/2006	10:15
MW-SW	20432123	Water	02/23/2006	14:33	02/24/2006	10:15
RW-1	20432124	Water	02/23/2006	11:50	02/24/2006	10:15
MW-20	20432156	Water	02/22/2006	10:09	02/23/2006	09:25
MW-19	20432157	Water	02/22/2006	11:30	02/23/2006	09:25
MW-17	20432158	Water	02/22/2006	11:59	02/23/2006	09:25
MW-16	20432159	Water	02/22/2006	12:10	02/23/2006	09:25
MW-14	20432160	Water	02/22/2006	11:05	02/23/2006	09:25
MW-13	20432161	Water	02/22/2006	11:41	02/23/2006	09:25
MW-12	20432162	Water	02/22/2006	10:34	02/23/2006	09:25
MW-10	20432163	Water	02/22/2006	12:39	02/23/2006	09:25
MW-8	20432164	Water	02/22/2006	12:24	02/23/2006	09:25
MW-7	20432165	Water	02/22/2006	12:57	02/23/2006	09:25
MW-6	20432166	Water	02/22/2006	13:54	02/23/2006	09:25
MW-5	20432167	Water	02/22/2006	14:25	02/23/2006	09:25
MW-3	20432168	Water	02/22/2006	14:00	02/23/2006	09:25

3/3/2006 07:06:57

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - LA050004  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004  
Florida Dept. of Health (NELAC) - E87595  
Kansas Dept. of Health Environment - E-10266  
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

# 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

**Pace Analytical\***

New Orleans Laboratory

Client: CRA

Project: GL. ERWIN TANK BATTERY

Project No.: 2057796

Sample ID	Lab ID	Matrix	Collection Date/Time		Received Date/Time	
MW-2	20432169	Water	02/22/2006	13:13	02/23/2006	09:25
MW-1	20432170	Water	02/22/2006	13:38	02/23/2006	09:25
DUP-1	20432171	Water	02/22/2006		02/23/2006	09:25
DUP-2	20432172	Water	02/22/2006		02/23/2006	09:25
MW-9	20432321	Water	02/23/2006	11:05	02/24/2006	09:15
MW-4	20432322	Water	02/23/2006	11:30	02/24/2006	09:15
MW-WEST	20432323	Water	02/23/2006	11:50	02/24/2006	09:15
MW-SW	20432324	Water	02/23/2006	14:33	02/24/2006	09:15
RW-1	20432325	Water	02/23/2006	11:50	02/24/2006	09:15

3/3/2006 07:06:57

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - LA050004  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004  
Florida Dept. of Health (NELAC) - E87595  
Kansas Dept. of Health Environment - E-10266  
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-20

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432103

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	295000		ug/L	500.	24-Feb-06	02-Mar-06 11:45	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	103000		ug/L	500.	24-Feb-06	02-Mar-06 11:45	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	13500		ug/L	500.	24-Feb-06	02-Mar-06 11:45	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	145000		ug/L	500.	24-Feb-06	02-Mar-06 11:45	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

3/3/2006 07:06:57

New Orleans Laboratory Certifications

Louisiana Dept. of Environmental Quality (LELAP) - 02006

Arkansas Dept. of Environmental Quality - LA050004

Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004

Florida Dept. of Health (NELAC) - E87595

Kansas Dept. of Health Environment - E-10266

U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-19

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432104

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	870000		ug/L	500.	24-Feb-06	02-Mar-06 11:49	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	271000		ug/L	500.	24-Feb-06	02-Mar-06 11:49	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	32600		ug/L	500.	24-Feb-06	02-Mar-06 11:49	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	464000		ug/L	500.	24-Feb-06	02-Mar-06 11:49	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - LA050004  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004  
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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# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-17

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432105

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	123000		ug/L	500.	24-Feb-06	02-Mar-06 11:53	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	40100		ug/L	500.	24-Feb-06	02-Mar-06 11:53	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	8040		ug/L	500.	24-Feb-06	02-Mar-06 11:53	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	187000		ug/L	500.	24-Feb-06	02-Mar-06 11:53	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

3/3/2006 07:06:57

New Orleans Laboratory Certifications

Louisiana Dept. of Environmental Quality (LELAP) - 02006

Arkansas Dept. of Environmental Quality - LA050004

Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004

Florida Dept. of Health (NELAC) - E87595

Kansas Dept. of Health Environment - E-10266

U.S. Dept. of Agriculture Foreign Soil Permit - S-47270



# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-16

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432106

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	120000		ug/L	500.	24-Feb-06	02-Mar-06 11:57	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	39100		ug/L	500.	24-Feb-06	02-Mar-06 11:57	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	7170		ug/L	500.	24-Feb-06	02-Mar-06 11:57	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	207000		ug/L	500.	24-Feb-06	02-Mar-06 11:57	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - LA050004  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004  
Florida Dept. of Health (NELAC) - E87595  
Kansas Dept. of Health Environment - E-10266  
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

3/3/2006 07:06:57

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-14

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432107

Project No.: 2057796

Description: None

Matrix: Water

% Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	914000		ug/L	500.	24-Feb-06	02-Mar-06 12:01	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	253000		ug/L	500.	24-Feb-06	02-Mar-06 12:01	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	34100		ug/L	500.	24-Feb-06	02-Mar-06 12:01	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	885000		ug/L	500.	24-Feb-06	02-Mar-06 12:01	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

3/3/2006 07:06:57

New Orleans Laboratory Certifications

Louisiana Dept. of Environmental Quality (LELAP) - 02006

Arkansas Dept. of Environmental Quality - LA050004

Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004

Florida Dept. of Health (NELAC) - E87595

Kansas Dept. of Health Environment - E-10266

U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-13

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432108

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	177000		ug/L	500.	24-Feb-06	02-Mar-06 12:05	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	61200		ug/L	500.	24-Feb-06	02-Mar-06 12:05	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	11500		ug/L	500.	24-Feb-06	02-Mar-06 12:05	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	91800		ug/L	500.	24-Feb-06	02-Mar-06 12:05	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

3/3/2006 07:06:57

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - LA050004  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004  
Florida Dept. of Health (NELAC) - E87595  
Kansas Dept. of Health Environment - E-10266  
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-12

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432109

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	415000		ug/L	500.	24-Feb-06	02-Mar-06 12:09	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	135000		ug/L	500.	24-Feb-06	02-Mar-06 12:09	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	14900		ug/L	500.	24-Feb-06	02-Mar-06 12:09	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	129000		ug/L	500.	24-Feb-06	02-Mar-06 12:09	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

3/3/2006 07:06:57

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - LA050004  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004  
Florida Dept. of Health (NELAC) - E87595  
Kansas Dept. of Health Environment - E-10266  
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-10

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432110

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	520000		ug/L	500.	24-Feb-06	02-Mar-06 12:14	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	158000		ug/L	500.	24-Feb-06	02-Mar-06 12:14	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	13800		ug/L	500.	24-Feb-06	02-Mar-06 12:14	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	180000		ug/L	500.	24-Feb-06	02-Mar-06 12:14	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

New Orleans Laboratory Certifications

Louisiana Dept. of Environmental Quality (LELAP) - 02006

Arkansas Dept. of Environmental Quality - LA050004

Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004

Florida Dept. of Health (NELAC) - E87595

Kansas Dept. of Health Environment - E-10266

U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

3/3/2006 07:06:57

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-8

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432111

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	55100		ug/L	500.	24-Feb-06	02-Mar-06 12:18	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	18000		ug/L	500.	24-Feb-06	02-Mar-06 12:18	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	8050		ug/L	500.	24-Feb-06	02-Mar-06 12:18	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	390000		ug/L	500.	24-Feb-06	02-Mar-06 12:18	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

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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.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

3/3/2006 07:06:57

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Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004

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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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-7

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432112

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting		Prep.	Analysis	Reg. Limit
							Limit				
Calcium, Dissolved	EPA 6010	69746	1	30600		ug/L	500.		24-Feb-06	02-Mar-06 12:23	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	9980		ug/L	500.		24-Feb-06	02-Mar-06 12:23	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	4890		ug/L	500.		24-Feb-06	02-Mar-06 12:23	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	227000		ug/L	500.		24-Feb-06	02-Mar-06 12:23	KJR (1)

4 parameter(s) reported

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DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
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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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
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Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004  
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St. Rose, LA 70087

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-6

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432113

Project No.: 2057796

Description: None

Matrix: Water

% Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	23900		ug/L	500.	24-Feb-06	02-Mar-06 12:36	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	7410		ug/L	500.	24-Feb-06	02-Mar-06 12:36	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	10900		ug/L	500.	24-Feb-06	02-Mar-06 12:36	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	380000		ug/L	500.	24-Feb-06	02-Mar-06 12:36	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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.  
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(1b) Flash point less than 140 degrees F is hazardous for ignitability.  
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New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
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Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004  
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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# Report of Laboratory Analysis

**Pace Analytical Services, Inc.**

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St. Rose, LA 70087

Phone: 504.469.0333

Fax: 504.469.0555

LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-5

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432114

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	222000		ug/L	500.	24-Feb-06	02-Mar-06 12:40	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	69400		ug/L	500.	24-Feb-06	02-Mar-06 12:40	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	14000		ug/L	500.	24-Feb-06	02-Mar-06 12:40	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	274000		ug/L	500.	24-Feb-06	02-Mar-06 12:40	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

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Arkansas Dept. of Environmental Quality - LA050004

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Florida Dept. of Health (NELAC) - E87595

Kansas Dept. of Health Environment - E-10266

U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

# Report of Laboratory Analysis

**Pace Analytical Services, Inc.**

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St. Rose, LA 70087

Phone: 504.469.0333

Fax: 504.469.0555

LELAP # 02006

**Pace Analytical®**  
New Orleans Laboratory

Client ID: MW-3

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432115

Project No.: 2057796

Description: None

Matrix: Water

% Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	46800		ug/L	500.	24-Feb-06	02-Mar-06 12:44	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	15300		ug/L	500.	24-Feb-06	02-Mar-06 12:44	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	15100		ug/L	500.	24-Feb-06	02-Mar-06 12:44	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	446000		ug/L	500.	24-Feb-06	02-Mar-06 12:44	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

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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.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

3/3/2006 07:06:57

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Arkansas Dept. of Environmental Quality - LA050004

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Kansas Dept. of Health Environment - E-10266

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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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-2

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432116

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	19500		ug/L	500.	24-Feb-06	02-Mar-06 12:48	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	5840		ug/L	500.	24-Feb-06	02-Mar-06 12:48	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	6150		ug/L	500.	24-Feb-06	02-Mar-06 12:48	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	259000		ug/L	500.	24-Feb-06	02-Mar-06 12:48	KJR (1)

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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Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

3/3/2006 07:06:57

**New Orleans Laboratory Certifications**

Louisiana Dept. of Environmental Quality (LELAP) - 02006

Arkansas Dept. of Environmental Quality - LA050004

Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004

Florida Dept. of Health (NELAC) - E87595

Kansas Dept. of Health Environment - E-10266

U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-1

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432117

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	55900		ug/L	500.	24-Feb-06	02-Mar-06 12:52	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	18700		ug/L	500.	24-Feb-06	02-Mar-06 12:52	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	5190		ug/L	500.	24-Feb-06	02-Mar-06 12:52	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	104000		ug/L	500.	24-Feb-06	02-Mar-06 12:52	KJR (1)

4 parameter(s) reported

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Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

3/3/2006 07:06:57

New Orleans Laboratory Certifications

Louisiana Dept. of Environmental Quality (LELAP) - 02006

Arkansas Dept. of Environmental Quality - LA050004

Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004

Florida Dept. of Health (NELAC) - E87595

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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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: DUP-1

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432118

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	916000		ug/L	500.	24-Feb-06	02-Mar-06 12:56	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	253000		ug/L	500.	24-Feb-06	02-Mar-06 12:56	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	34000		ug/L	500.	24-Feb-06	02-Mar-06 12:56	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	884000		ug/L	500.	24-Feb-06	02-Mar-06 12:56	KJR (1)

4 parameter(s) reported

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DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

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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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Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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New Orleans Laboratory Certifications

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Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004

Florida Dept. of Health (NELAC) - E87595

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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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: DUP-2

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432119

Project No.: 2057796

Description: None

Matrix: Water

% Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	57900		ug/L	500.	24-Feb-06	02-Mar-06 13:00	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	20000		ug/L	500.	24-Feb-06	02-Mar-06 13:00	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	5230		ug/L	500.	24-Feb-06	02-Mar-06 13:00	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	102000		ug/L	500.	24-Feb-06	02-Mar-06 13:00	KJR (1)

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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3/3/2006 07:06:58



# Report of Laboratory Analysis

Pace Analytical Services, Inc.

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St. Rose, LA 70087

Phone: 504.469.0333

Fax: 504.469.0555

LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-9

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432120

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/23/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	2050000		ug/L	500.	24-Feb-06	02-Mar-06 13:04	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	438000		ug/L	500.	24-Feb-06	02-Mar-06 13:04	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	47800		ug/L	500.	24-Feb-06	02-Mar-06 13:04	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	1450000		ug/L	500.	24-Feb-06	02-Mar-06 13:04	KJR (1)

4 parameter(s) reported

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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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# Report of Laboratory Analysis

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St. Rose, LA 70087

Phone: 504.469.0333

Fax: 504.469.0555

LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-4

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432121

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/23/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	1510000		ug/L	500.	24-Feb-06	02-Mar-06 13:08	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	326000		ug/L	500.	24-Feb-06	02-Mar-06 13:08	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	141000		ug/L	500.	24-Feb-06	02-Mar-06 13:08	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	1070000		ug/L	500.	24-Feb-06	02-Mar-06 13:08	KJR (1)

4 parameter(s) reported

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3/3/2006 07:06:58

**New Orleans Laboratory Certifications**

Louisiana Dept. of Environmental Quality (LELAP) - 02006

Arkansas Dept. of Environmental Quality - LA050004

Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004

Florida Dept. of Health (NELAC) - E87595

Kansas Dept. of Health Environment - E-10266

U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-WEST

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432122

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/23/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69746	1	149000		ug/L	500.	24-Feb-06	02-Mar-06 11:20	KJR (1)
Magnesium, Dissolved	EPA 6010	69746	1	44300		ug/L	500.	24-Feb-06	02-Mar-06 11:20	KJR (1)
Potassium, Dissolved	EPA 6010	69746	1	47100		ug/L	500.	24-Feb-06	02-Mar-06 11:20	KJR (1)
Sodium, Dissolved	EPA 6010	69746	1	257000		ug/L	500.	24-Feb-06	02-Mar-06 11:20	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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# Report of Laboratory Analysis

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Phone: 504.469.0333

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-SW

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432123

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/23/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69747	1	373000		ug/L	500.	24-Feb-06	02-Mar-06 13:47	KJR (1)
Magnesium, Dissolved	EPA 6010	69747	1	108000		ug/L	500.	24-Feb-06	02-Mar-06 13:47	KJR (1)
Potassium, Dissolved	EPA 6010	69747	1	77100		ug/L	500.	24-Feb-06	02-Mar-06 13:47	KJR (1)
Sodium, Dissolved	EPA 6010	69747	1	896000		ug/L	500.	24-Feb-06	02-Mar-06 13:47	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: RW-1

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432124

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/23/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	69747	1	234000		ug/L	500.	24-Feb-06	02-Mar-06 13:30	KJR (1)
Magnesium, Dissolved	EPA 6010	69747	1	67600		ug/L	500.	24-Feb-06	02-Mar-06 13:30	KJR (1)
Potassium, Dissolved	EPA 6010	69747	1	70400		ug/L	500.	24-Feb-06	02-Mar-06 13:30	KJR (1)
Sodium, Dissolved	EPA 6010	69747	1	762000		ug/L	500.	24-Feb-06	02-Mar-06 13:30	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-20

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432103

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	3000		mg/L	10.0	24-Feb-06	24-Feb-06 13:30	SMS2 (1)

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-19

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432104

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	8830		mg/L	10.0	24-Feb-06	24-Feb-06 13:30	SMS2 (1)

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

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(1b) Flash point less than 140 degrees F is hazardous for ignitability.

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-17

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432105

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	1810		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-16

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432106

Project No.: 2057796

Description: None

Matrix: Water

% Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	1770		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-14

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432107

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	12100		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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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Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-13

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432108

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	2090		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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.

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-12

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432109

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	4890		mg/L	10.0	24-Feb-06	24-Feb-06 13:30	SMS2 (1)

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-10

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432110

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	6180		mg/L	10.0	24-Feb-06	24-Feb-06 13:30	SMS2 (1)

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

**Client ID:** MW-8

**Client:** CRA

**Project:** GL ERWIN TANK BATTERY

**Site:** None

**Lab ID:** 20432111

**Project No.:** 2057796

**Description:** None

**Matrix:** Water

**%Moisture:** n/a

**Collected:** 02/22/06

**Received:** 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	1740		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-7

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432112

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	1120		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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.

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-6

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432113

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	1570		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

3/3/2006 07:06:59

New Orleans Laboratory Certifications

Louisiana Dept. of Environmental Quality (LELAP) - 02006

Arkansas Dept. of Environmental Quality - LA050004

Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004

Florida Dept. of Health (NELAC) - E87595

Kansas Dept. of Health Environment - E-10266

U.S. Dept. of Agriculture Foreign Soil Permit - S-47270



# 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

**Pace Analytical\***  
**New Orleans Laboratory**

**Client ID:** MW-5

**Client:** CRA

**Project:** GL. ERWIN TANK BATTERY

**Site:** None

**Lab ID:** 20432114

**Project No.:** 2057796

**Description:** None

**Matrix:** Water

**% Moisture:** n/a

**Collected:** 02/22/06

**Received:** 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	2670		mg/L	10.0	24-Feb-06	24-Feb-06 13:30	SMS2 (1)

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

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3/3/2006 07:06:59

**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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-3

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432115

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	3860		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

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St. Rose, LA 70087

Phone: 504.469.0333

Fax: 504.469.0555

LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-2

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432116

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	1150		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-1

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432117

Project No.: 2057796

Description: None

Matrix: Water

% Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	707.		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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3/3/2006 07:06:59

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: DUP-1

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432118

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	11600		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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.

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Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

3/3/2006 07:06:59

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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: DUP-2

Client: CRA

Project: GL ERWIN TANK BATTERY

Site: None

Lab ID: 20432119

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/22/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	840.		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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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# Report of Laboratory Analysis

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Phone: 504.469.0333

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LELAP # 02006

**Pace Analytical\***  
**New Orleans Laboratory**

**Client ID:** MW-9

**Client:** CRA

**Project:** GL. ERWIN TANK BATTERY

**Site:** None

**Lab ID:** 20432120

**Project No.:** 2057796

**Description:** None

**Matrix:** Water

**%Moisture:** n/a

**Collected:** 02/23/06

**Received:** 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	24300		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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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3/3/2006 07:06:59

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# Report of Laboratory Analysis

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Phone: 504.469.0333

Fax: 504.469.0555

LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-4

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432121

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/23/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	17900		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - LA050004  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA050004  
Florida Dept. of Health (NELAC) - E87595  
Kansas Dept. of Health Environment - E-10266  
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

3/3/2006 07:06:59

# 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

**Pace Analytical\***  
New Orleans Laboratory

**Client ID:** MW-WEST

**Client:** CRA

**Project:** GL. ERWIN TANK BATTERY

**Site:** None

**Lab ID:** 20432122

**Project No.:** 2057796

**Description:** None

**Matrix:** Water

**%Moisture:** n/a

**Collected:** 02/23/06

**Received:** 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69740	1	2390		mg/L	10.0	24-Feb-06	24-Feb-06 13:30 SMS2 (1)	

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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.

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Arkansas Dept. of Environmental Quality - LA050004

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Florida Dept. of Health (NELAC) - E87595

Kansas Dept. of Health Environment - E-10266

U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

3/3/2006 07:06:59

# Report of Laboratory Analysis

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1000 Riverbend Blvd. Suite F

St. Rose, LA 70087

Phone: 504.469.0333

Fax: 504.469.0555

LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-SW

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432123

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/23/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69774	1	6300		mg/L	10.0	27-Feb-06	27-Feb-06 15:15	LJL (1)

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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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St. Rose, LA 70087

Phone: 504.469.0333

Fax: 504.469.0555

LELAP # 02006

**Pace Analytical\***

*New Orleans Laboratory*

Client ID: RW-1

Client: CRA

Project: GL. ERWIN TANK BATTERY

Site: None

Lab ID: 20432124

Project No.: 2057796

Description: None

Matrix: Water

%Moisture: n/a

Collected: 02/23/06

Received: 02/24/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Total Dissolved Solids	SM 2540C	69774	1	4680		mg/L	10.0	27-Feb-06	27-Feb-06 15:15	LJL (1)

1 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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.

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U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

3/3/2006 07:06:59

# 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

**Pace Analytical\***  
New Orleans Laboratory

**Project No.:** 2057796

Parameter	Batch	Blank	ARL	Units	LCS	LCS	LCS	LCS	MS	MS	MSD	(1)MS	DUP	QC Limits		RPD	Qu
					Spike	% Rec	% Rec	RPD	Spike	% Rec	% Rec	RPD	RPD	LCS	MS/MSD	Max	
Calcium, Diss	69746	ND	500.	ug/L	10000	90			10000	56 *	74 *	1		73 - 115	75 - 125	20	
Magnesium, D	69746	ND	500.	ug/L	10000	91			10000	67 *	56 *	2		73 - 116	75 - 125	20	
Potassium, Dis	69746	ND	500.	ug/L	10000	92			10000	82	89	1		73 - 114	75 - 125	20	
Sodium, Disso	69746	560.	500.	ug/L	10000	91			10000	33 *	55 *	1		64 - 122	75 - 125	20	
Calcium, Diss	69747	ND	500.	ug/L	10000	88			10000	0 *	12 *	3		73 - 115	75 - 125	20	
Magnesium, D	69747	ND	500.	ug/L	10000	89			10000	62 *	42 *	3		73 - 116	75 - 125	20	
Potassium, Dis	69747	ND	500.	ug/L	10000	95			10000	69 *	89	3		73 - 114	75 - 125	20	
Sodium, Disso	69747	2300	500.	ug/L	10000	110			10000	0 *	0 *	2		64 - 122	75 - 125	20	

3/3/2006 07:06:59

ARL denotes Adjusted Reporting Limit, corrected for sample size, dilution and moisture content as applicable.

\* denotes recovery outside of QC limits.

(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.

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# Report of Quality Control

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St. Rose, LA 70087

Phone: 504.469.0333

Fax: 504.469.0555

LELAP # 02006

## Wet Chemistry Quality Control Results

Project No.: 2057796

Parameter	Batch	Blank	ARL	Units	LCS	LCS	LCSD	LCS	MS	MS	MSD	(1)MS	DUP	QC Limits	RPD	Qu
					Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	RPD	RPD	LCS	MS/MSD	Max
Total Dissolve	69774	ND	10.0	mg/L	100	102							5	80 - 120	-	20
Total Dissolve	69740	ND	10.0	mg/L	100	110							0	80 - 120	-	20

3/3/2006 07:07:00

ARL denotes Adjusted Reporting Limit, corrected for sample size, dilution and moisture content as applicable.

\* denotes recovery outside of QC limits.

(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.

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U.S. Dept. of Agriculture Foreign Soil Permit - S-47270





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

## Analytical Report Number: 869289

Client: PACE ANALYTICAL SERVICES, INC.

Lab Contact: Brian Basten

Project Name: G.L. ERWIN TANK BATTERY

Project Number: 2057796

Lab Sample Number	Field ID	Matrix	Collection Date
869289-001	MW20 20432156	WATER	02/22/06 10:09
869289-002	MW19 20432157	WATER	02/22/06 11:30
869289-003	MW17 20432158	WATER	02/22/06 11:59
869289-004	MW16 20432159	WATER	02/22/06 12:10
869289-005	MW14 20432160	WATER	02/22/06 11:05
869289-006	MW13 20432161	WATER	02/22/06 11:41
869289-007	MW12 20432162	WATER	02/22/06 10:34
869289-008	MW10 20432163	WATER	02/22/06 12:39
869289-009	MW8 20432164	WATER	02/22/06 12:24
869289-010	MW7 20432165	WATER	02/22/06 12:57
869289-011	MW6 20432166	WATER	02/22/06 13:54
869289-012	MW5 20432167	WATER	02/22/06 14:25
869289-013	MW3 20432168	WATER	02/22/06 14:00
869289-014	MW2 20432169	WATER	02/22/06 13:13
869289-015	MW1 20432170	WATER	02/22/06 13:38
869289-016	DUP1 20432171	WATER	02/22/06
869289-017	DUP2 20432172	WATER	02/22/06

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.

Approval Signature

Date

3-3-06



**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW20 20432156

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-001

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	110	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Chloride	1100	100	20	mg/L		02/23/06	EPA 300.0	EPA 300.0
Fluoride	0.98	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	5.5	0.40	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	83	20	5	mg/L		02/23/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW19 20432157

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-002

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	75	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Chloride	3900	500	100	mg/L		02/23/06	EPA 300.0	EPA 300.0
Fluoride	< 0.50	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	8.9	2.0	5	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	400	40	10	mg/L		02/23/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW17 20432158

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-003

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	150	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Chloride	580	50	10	mg/L		02/23/06	EPA 300.0	EPA 300.0
Fluoride	1.5	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	4.0	0.40	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	97	20	5	mg/L		02/23/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW16 20432159

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-004

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	180	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Chloride	590	50	10	mg/L		02/23/06	EPA 300.0	EPA 300.0
Fluoride	1.3	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	5.2	0.40	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	110	20	5	mg/L		02/23/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW14 20432160

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-005

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	81	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Chloride	5300	500	100	mg/L		02/23/06	EPA 300.0	EPA 300.0
Fluoride	< 0.50	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	11	2.0	5	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	700	80	20	mg/L		02/23/06	EPA 300.0	EPA 300.0



**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW13 20432161

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-006

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	89	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Chloride	590	50	10	mg/L		02/23/06	EPA 300.0	EPA 300.0
Fluoride	1.7	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	4.8	0.40	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	120	20	5	mg/L		02/23/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW12 20432162

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-007

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	73	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Chloride	1700	120	25	mg/L		02/23/06	EPA 300.0	EPA 300.0
Fluoride	0.70	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	6.7	0.40	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	48	4.0	1	mg/L		02/23/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW10 20432163

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-008

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	89	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Chloride	2000	250	50	mg/L		02/23/06	EPA 300.0	EPA 300.0
Fluoride	< 0.50	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	6.5	0.40	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	98	20	5	mg/L		02/23/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW8 20432164

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-009

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	230	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Chloride	810	100	20	mg/L		02/23/06	EPA 300.0	EPA 300.0
Fluoride	2.4	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	7.9	0.40	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	170	20	5	mg/L		02/23/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW7 20432165

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-010

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	290	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Chloride	240	25	5	mg/L		02/23/06	EPA 300.0	EPA 300.0
Fluoride	2.6	0.50	1	mg/L	N	02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	3.3	0.40	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	120	20	5	mg/L		02/23/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW6 20432166

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-011

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	270	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Chloride	610	50	10	mg/L		02/23/06	EPA 300.0	EPA 300.0
Fluoride	2.4	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	7.9	0.40	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	180	40	10	mg/L		02/23/06	EPA 300.0	EPA 300.0



**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW5 20432167

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-012

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	220	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Chloride	800	50	10	mg/L		02/23/06	EPA 300.0	EPA 300.0
Fluoride	1.3	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	6.6	0.40	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	160	20	5	mg/L		02/23/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW3 20432168

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-013

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	250	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Chloride	1100	100	20	mg/L		02/24/06	EPA 300.0	EPA 300.0
Fluoride	1.6	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	8.5	2.0	5	mg/L		02/24/06	EPA 300.0	EPA 300.0
Sulfate	190	20	5	mg/L		02/24/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW2 20432169

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-014

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	250	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Chloride	320	25	5	mg/L		02/24/06	EPA 300.0	EPA 300.0
Fluoride	1.7	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	5.1	0.40	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	150	20	5	mg/L		02/24/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

**Client :** PACE ANALYTICAL SERVICES, INC.

**Project Name :** G.L. ERWIN TANK BATTERY

**Project Number :** 2057796

**Field ID :** MW1 20432170

**Matrix Type :** WATER

**Collection Date :** 02/22/06

**Report Date :** 03/03/06

**Lab Sample Number :** 869289-015

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	160	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Chloride	180	25	5	mg/L		02/24/06	EPA 300.0	EPA 300.0
Fluoride	1.6	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	3.5	0.40	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	83	20	5	mg/L		02/24/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : DUP1 20432171

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-016

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	82	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Chloride	5000	500	100	mg/L		02/24/06	EPA 300.0	EPA 300.0
Fluoride	< 0.50	0.50	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	< 40	40	100	mg/L		02/24/06	EPA 300.0	EPA 300.0
Sulfate	690	80	20	mg/L		02/24/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869289**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : G.L. ERWIN TANK BATTERY

Project Number : 2057796

Field ID : DUP2 20432172

Matrix Type : WATER

Collection Date : 02/22/06

Report Date : 03/03/06

Lab Sample Number : 869289-017

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	170	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Chloride	160	25	5	mg/L		02/24/06	EPA 300.0	EPA 300.0
Fluoride	1.6	0.50	1	mg/L	N	02/23/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	3.5	0.40	1	mg/L		02/23/06	EPA 300.0	EPA 300.0
Sulfate	85	20	5	mg/L		02/24/06	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	Inorganic	Sample received unpreserved. Sample was either preserved at the time of receipt or at the time of sample preparation.
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.



**Pace Analytical  
Services, Inc.**

**Analysis Summary by Laboratory**

1241 Bellevue Street  
Green Bay, WI 54302

Test Group Name	869289-001	869289-002	869289-003	869289-004	869289-005	869289-006	869289-007	869289-008	869289-009	869289-010	869289-011	869289-012	869289-013	869289-014	869289-015	869289-016	869289-017
ALKALINITY HYDROXIDE	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
CHLORIDE	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
NITROGEN, NITRATE	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

Code	Facility	Address	TX Certification
B	Green Bay Lab (Bellevue St)	1241 Bellevue Street, Suite 9 Green Bay, WI 54302	Not Certified



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

### Analytical Report Number: 869328

Client: PACE ANALYTICAL SERVICES, INC.

Lab Contact: Brian Basten

Project Name: GL ERWIN TANK BATTERY

Project Number: 2057796

Lab Sample Number	Field ID	Matrix	Collection Date
869328-001	MW 9 20432321	WATER	02/23/06 11:05
869328-002	MW 4 20432322	WATER	02/23/06 11:30
869328-003	MW WEST 20432323	WATER	02/23/06 11:50
869328-004	MW SW 20432324	WATER	02/23/06 14:33
869328-005	RW 1 20432325	WATER	02/23/06 11:50

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.

Approval Signature

Date

3-3-06

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869328**

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

**Client :** PACE ANALYTICAL SERVICES, INC.

**Project Name :** GL ERWIN TANK BATTERY

**Project Number :** 2057796

**Field ID :** MW 9 20432321

**Matrix Type :** WATER

**Collection Date :** 02/23/06

**Report Date :** 03/03/06

**Lab Sample Number :** 869328-001

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	110	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Chloride	13000	1000	200	mg/L		02/27/06	EPA 300.0	EPA 300.0
Fluoride	< 2.5	2.5	5	mg/L		02/24/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	19	2.0	5	mg/L		02/24/06	EPA 300.0	EPA 300.0
Sulfate	430	40	10	mg/L		02/27/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869328**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : GL ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW 4 20432322

Matrix Type : WATER

Collection Date : 02/23/06

Report Date : 03/03/06

Lab Sample Number : 869328-002

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	130	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Chloride	9100	500	100	mg/L		02/24/06	EPA 300.0	EPA 300.0
Fluoride	< 2.5	2.5	5	mg/L		02/24/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	10	2.0	5	mg/L		02/24/06	EPA 300.0	EPA 300.0
Sulfate	220	20	5	mg/L		02/24/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869328**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : GL ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW WEST 20432323

Matrix Type : WATER

Collection Date : 02/23/06

Report Date : 03/03/06

Lab Sample Number : 869328-003

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	150	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Chloride	800	50	10	mg/L		02/24/06	EPA 300.0	EPA 300.0
Fluoride	0.76	0.50	1	mg/L		02/24/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	4.0	0.40	1	mg/L		02/24/06	EPA 300.0	EPA 300.0
Sulfate	110	40	10	mg/L		02/24/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869328**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : GL ERWIN TANK BATTERY

Project Number : 2057796

Field ID : MW SW 20432324

Matrix Type : WATER

Collection Date : 02/23/06

Report Date : 03/03/06

Lab Sample Number : 869328-004

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	300	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Chloride	3000	250	50	mg/L		02/24/06	EPA 300.0	EPA 300.0
Fluoride	< 2.5	2.5	5	mg/L		02/24/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	11	2.0	5	mg/L		02/24/06	EPA 300.0	EPA 300.0
Sulfate	450	40	10	mg/L		02/24/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 869328**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : GL ERWIN TANK BATTERY

Project Number : 2057796

Field ID : RW 1 20432325

Matrix Type : WATER

Collection Date : 02/23/06

Report Date : 03/03/06

Lab Sample Number : 869328-005

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Alkalinity Hydroxide	< 10	10	1	mg/L		02/27/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	290	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		02/28/06	SM 2320B	SM 2320B
Chloride	2400	250	50	mg/L		02/24/06	EPA 300.0	EPA 300.0
Fluoride	< 2.5	2.5	5	mg/L		02/24/06	EPA 300.0	EPA 300.0
Nitrogen, Nitrate	8.9	2.0	5	mg/L		02/24/06	EPA 300.0	EPA 300.0
Sulfate	350	20	5	mg/L		02/24/06	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	Inorganic	Sample received unpreserved. Sample was either preserved at the time of receipt or at the time of sample preparation.
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.

**Pace Analytical  
Services, Inc.**

**Analysis Summary by Laboratory**

1241 Bellevue Street  
Green Bay, WI 54302

Test Group Name	869328-001	869328-002	869328-003	869328-004	869328-005
ALKALINITY HYDROXIDE	B	B	B	B	B
ALKALINITY, BICARB/CARB	B	B	B	B	B
CHLORIDE	B	B	B	B	B
FLUORIDE	B	B	B	B	B
NITROGEN, NITRATE	B	B	B	B	B
SULFATE	B	B	B	B	B

Code	Facility	Address	TX Certification
B	Green Bay Lab (Bellevue St)	1241 Bellevue Street, Suite 9 Green Bay, WI 54302	Not Certified





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

Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

September 14, 2006

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

RE: Project: 2062234  
RE: Project ID: CEMC GL. ERWIN/039124

Dear James Ornelas:

Enclosed are the analytical results for sample(s) received by the laboratory on August 26, 2006. 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



**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

**Pace Analytical Services, Inc.**

1000 Riverbend Blvd. Suite F

St. Rose, LA 70087

Phone: 504.469.0333

Fax: 504.469.0555

LELAP # 02006



## Report of Laboratory Analysis

Project Number: 2062234



# 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

**Pace Analytical\***  
New Orleans Laboratory

Client: CRA

Project: CEMC GL. ERWIN/039124

Project No.: 2062234

Sample ID	Lab ID	Matrix	Collection Date/Time		Received Date/Time	
MW-182406	20468454	Water	08/24/2006	15:55	08/26/2006	08:30
MW-282406	20468455	Water	08/24/2006	16:00	08/26/2006	08:30
MW-382406	20468456	Water	08/24/2006	16:45	08/26/2006	08:30
MW-482506	20468457	Water	08/25/2006	11:10	08/26/2006	08:30
MW-582406	20468458	Water	08/24/2006	16:55	08/26/2006	08:30
MW-682406	20468459	Water	08/24/2006	14:35	08/26/2006	08:30
MW-782406	20468460	Water	08/24/2006	15:05	08/26/2006	08:30
MW-882406	20468461	Water	08/24/2006	14:30	08/26/2006	08:30
MW-982506	20468462	Water	08/25/2006	10:30	08/26/2006	08:30
MW-1082507	20468463	Water	08/25/2006	12:45	08/26/2006	08:30
MW-1282406	20468464	Water	08/24/2006	13:10	08/26/2006	08:30
MW-1382406	20468465	Water	08/24/2006	15:10	08/26/2006	08:30
MW-1482406	20468466	Water	08/24/2006	13:20	08/26/2006	08:30
MW-1682406	20468467	Water	08/24/2006	13:45	08/26/2006	08:30
MW-1782406	20468468	Water	08/24/2006	13:50	08/26/2006	08:30
MW-1982406	20468469	Water	08/24/2006	12:20	08/26/2006	08:30
MW-2082406	20468470	Water	08/24/2006	12:35	08/26/2006	08:30
WMW82506	20468471	Water	08/25/2006	10:15	08/26/2006	08:30
SW82506	20468472	Water	08/25/2006	11:15	08/26/2006	08:30
RW-182506	20468473	Water	08/25/2006	12:30	08/26/2006	08:30
DUP182406	20468474	Water	08/24/2006		08/26/2006	08:30
DUP282506	20468476	Water	08/25/2006		08/26/2006	08:30

9/14/2006 14:24:17

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

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-182406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468454

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	57.4		mg/L	0.500	05-Sep-06	07-Sep-06 16:07	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	19.3		mg/L	0.500	05-Sep-06	07-Sep-06 16:07	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	4.36		mg/L	0.500	05-Sep-06	07-Sep-06 16:07	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	107.		mg/L	0.500	05-Sep-06	07-Sep-06 16:07	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

9/14/2006 14:24:17

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



# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-282406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468455

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	26.3		mg/L	0.500	05-Sep-06	07-Sep-06 16:25	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	7.70		mg/L	0.500	05-Sep-06	07-Sep-06 16:25	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	4.23		mg/L	0.500	05-Sep-06	07-Sep-06 16:25	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	298.		mg/L	0.500	05-Sep-06	07-Sep-06 16:25	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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

9/14/2006 14:24:17

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-382406

Client: CRA

Project: CEMC GL ERWIN/039124

Site: None

Lab ID: 20468456

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	25.3		mg/L	0.500	05-Sep-06	07-Sep-06 16:29	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	7.68		mg/L	0.500	05-Sep-06	07-Sep-06 16:29	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	11.9		mg/L	0.500	05-Sep-06	07-Sep-06 16:29	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	565.		mg/L	0.500	05-Sep-06	07-Sep-06 16:29	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

**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

9/14/2006 14:24:17

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-482506

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468457

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	1550		mg/L	0.500	05-Sep-06	07-Sep-06 17:41	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	364.		mg/L	0.500	05-Sep-06	07-Sep-06 17:41	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	136.		mg/L	0.500	05-Sep-06	07-Sep-06 17:41	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	1890		mg/L	0.500	05-Sep-06	07-Sep-06 17:41	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-582406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468458

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	145.		mg/L	0.500	05-Sep-06	07-Sep-06 16:33	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	47.6		mg/L	0.500	05-Sep-06	07-Sep-06 16:33	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	13.1		mg/L	0.500	05-Sep-06	07-Sep-06 16:33	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	295.		mg/L	0.500	05-Sep-06	07-Sep-06 16:33	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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.

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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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LELAP # 02006

**Pace Analytical\***

**New Orleans Laboratory**

Client ID: MW-682406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468459

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	108.		mg/L	0.500	05-Sep-06	07-Sep-06 16:37	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	35.0		mg/L	0.500	05-Sep-06	07-Sep-06 16:37	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	9.38		mg/L	0.500	05-Sep-06	07-Sep-06 16:37	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	448.		mg/L	0.500	05-Sep-06	07-Sep-06 16:37	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-782406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468460

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	23.3		mg/L	0.500	05-Sep-06	07-Sep-06 16:50	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	7.82		mg/L	0.500	05-Sep-06	07-Sep-06 16:50	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	2.96		mg/L	0.500	05-Sep-06	07-Sep-06 16:50	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	245.		mg/L	0.500	05-Sep-06	07-Sep-06 16:50	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

New Orleans Laboratory Certifications

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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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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-882406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468461

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting	Prep.	Analysis	Reg.
							Limit			
Calcium, Dissolved	EPA 6010	76457	1	51.2		mg/L	0.500	05-Sep-06	07-Sep-06 16:54	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	16.5		mg/L	0.500	05-Sep-06	07-Sep-06 16:54	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	6.00		mg/L	0.500	05-Sep-06	07-Sep-06 16:54	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	470.		mg/L	0.500	05-Sep-06	07-Sep-06 16:54	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
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Arkansas Dept. of Environmental Quality - 88-0681  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-982506

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468462

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	1330		mg/L	0.500	05-Sep-06	07-Sep-06 17:45	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	360.		mg/L	0.500	05-Sep-06	07-Sep-06 17:45	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	38.3		mg/L	0.500	05-Sep-06	07-Sep-06 17:45	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	1920		mg/L	0.500	05-Sep-06	07-Sep-06 17:45	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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.  
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Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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Arkansas Dept. of Environmental Quality - 88-0681  
Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-1082507

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468463

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	660.		mg/L	0.500	05-Sep-06	07-Sep-06 17:49	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	201.		mg/L	0.500	05-Sep-06	07-Sep-06 17:49	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	13.7		mg/L	0.500	05-Sep-06	07-Sep-06 17:49	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	253.		mg/L	0.500	05-Sep-06	07-Sep-06 17:49	KJR (1)

4 parameter(s) reported

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Reporting Limit is corrected for sample size, dilution and moisture content if applicable.

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(1b) Flash point less than 140 degrees F is hazardous for ignitibility.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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Arkansas Dept. of Environmental Quality - 88-0681

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Florida Dept. of Health (NELAC) - E87595

Kansas Dept. of Health Environment - E-10266

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-1282406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468464

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	463.		mg/L	0.500	05-Sep-06	07-Sep-06 16:58	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	157.		mg/L	0.500	05-Sep-06	07-Sep-06 16:58	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	12.2		mg/L	0.500	05-Sep-06	07-Sep-06 16:58	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	140.		mg/L	0.500	05-Sep-06	07-Sep-06 16:58	KJR (1)

4 parameter(s) reported

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DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

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(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.

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Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-1382406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468465

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	228.		mg/L	0.500	05-Sep-06	07-Sep-06 17:02	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	78.7		mg/L	0.500	05-Sep-06	07-Sep-06 17:02	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	10.9		mg/L	0.500	05-Sep-06	07-Sep-06 17:02	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	107.		mg/L	0.500	05-Sep-06	07-Sep-06 17:02	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
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Qu lists qualifiers. Specific qualifiers are defined at the end of the report.  
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# Report of Laboratory Analysis

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Phone: 504.469.0333

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-1482406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468466

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	942.		mg/L	0.500	05-Sep-06	07-Sep-06 17:06	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	266.		mg/L	0.500	05-Sep-06	07-Sep-06 17:06	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	27.8		mg/L	0.500	05-Sep-06	07-Sep-06 17:06	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	1370		mg/L	0.500	05-Sep-06	07-Sep-06 17:06	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
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Reporting 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.  
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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-1682406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468467

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	123.		mg/L	0.500	05-Sep-06	07-Sep-06 17:10	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	40.6		mg/L	0.500	05-Sep-06	07-Sep-06 17:10	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	4.93		mg/L	0.500	05-Sep-06	07-Sep-06 17:10	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	207.		mg/L	0.500	05-Sep-06	07-Sep-06 17:10	KJR (1)

4 parameter(s) reported

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-1782406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468468

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	140.		mg/L	0.500	05-Sep-06	07-Sep-06 17:15	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	46.1		mg/L	0.500	05-Sep-06	07-Sep-06 17:15	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	5.94		mg/L	0.500	05-Sep-06	07-Sep-06 17:15	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	178.		mg/L	0.500	05-Sep-06	07-Sep-06 17:15	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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) pff less than 2.0 or greater than 12.5 is hazardous for corrosivity.

(1b) Flash point less than 140 degrees F is hazardous for ignitability.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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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

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-1982406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468469

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	902.		mg/L	0.500	05-Sep-06	07-Sep-06 17:19	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	293.		mg/L	0.500	05-Sep-06	07-Sep-06 17:19	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	28.8		mg/L	0.500	05-Sep-06	07-Sep-06 17:19	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	582.		mg/L	0.500	05-Sep-06	07-Sep-06 17:19	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023

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# Report of Laboratory Analysis

Pace Analytical Services, Inc.

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Phone: 504.469.0333

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-2082406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468470

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	288.		mg/L	0.500	05-Sep-06	07-Sep-06 17:24	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	101.		mg/L	0.500	05-Sep-06	07-Sep-06 17:24	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	11.2		mg/L	0.500	05-Sep-06	07-Sep-06 17:24	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	160.		mg/L	0.500	05-Sep-06	07-Sep-06 17:24	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
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Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023  
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# Report of Laboratory Analysis

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Phone: 504.469.0333

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: WMW82506

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468471

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	315.		mg/L	0.500	05-Sep-06	07-Sep-06 17:53	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	87.6		mg/L	0.500	05-Sep-06	07-Sep-06 17:53	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	67.7		mg/L	0.500	05-Sep-06	07-Sep-06 17:53	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	400.		mg/L	0.500	05-Sep-06	07-Sep-06 17:53	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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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

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: SW82506

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468472

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	415.		mg/L	0.500	05-Sep-06	07-Sep-06 17:57	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	117.		mg/L	0.500	05-Sep-06	07-Sep-06 17:57	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	74.9		mg/L	0.500	05-Sep-06	07-Sep-06 17:57	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	1240		mg/L	0.500	05-Sep-06	07-Sep-06 17:57	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
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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  
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Fax: 504.469.0555

LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: RW-182506

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468473

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76458	1	281.		mg/L	0.500	05-Sep-06	07-Sep-06 18:02	KJR (1)
Magnesium, Dissolved	EPA 6010	76458	1	77.3		mg/L	0.500	05-Sep-06	07-Sep-06 18:02	KJR (1)
Potassium, Dissolved	EPA 6010	76458	1	68.5		mg/L	0.500	05-Sep-06	07-Sep-06 18:02	KJR (1)
Sodium, Dissolved	EPA 6010	76458	1	1040		mg/L	0.500	05-Sep-06	07-Sep-06 18:02	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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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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# Report of Laboratory Analysis

**Pace Analytical Services, Inc.**

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: DUP182406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468474

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76457	1	135.		mg/L	0.500	05-Sep-06	07-Sep-06 17:29	KJR (1)
Magnesium, Dissolved	EPA 6010	76457	1	46.5		mg/L	0.500	05-Sep-06	07-Sep-06 17:29	KJR (1)
Potassium, Dissolved	EPA 6010	76457	1	5.76		mg/L	0.500	05-Sep-06	07-Sep-06 17:29	KJR (1)
Sodium, Dissolved	EPA 6010	76457	1	175.		mg/L	0.500	05-Sep-06	07-Sep-06 17:29	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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

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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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: DUP282506

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468476

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Calcium, Dissolved	EPA 6010	76458	1	272.		mg/L	0.500	05-Sep-06	07-Sep-06 18:06	KJR (1)
Magnesium, Dissolved	EPA 6010	76458	1	77.3		mg/L	0.500	05-Sep-06	07-Sep-06 18:06	KJR (1)
Potassium, Dissolved	EPA 6010	76458	1	67.1		mg/L	0.500	05-Sep-06	07-Sep-06 18:06	KJR (1)
Sodium, Dissolved	EPA 6010	76458	1	1030		mg/L	0.500	05-Sep-06	07-Sep-06 18:06	KJR (1)

4 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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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  
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St. Rose, LA 70087

Phone: 504.469.0333

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-182406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468454

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	3.11		mg/L	0.500	29-Aug-06	29-Aug-06 15:09	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	660.		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

New Orleans Laboratory Certifications

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Arkansas Dept. of Environmental Quality - 88-0681

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Phone: 504.469.0333

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LELAP # 02006

**Pace Analytical\***

New Orleans Laboratory

Client ID: MW-282406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468455

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	3.78		mg/L	0.500	29-Aug-06	29-Aug-06 15:13	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	1610		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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Kansas Dept. of Health Environment - E-10266  
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# Report of Laboratory Analysis

**Pace Analytical Services, Inc.**  
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St. Rose, LA 70087  
Phone: 504.469.0333  
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LELAP # 02006

Client ID: MW-382406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468456

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	6.43		mg/L	0.500	29-Aug-06	29-Aug-06 15:14	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	1990		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting Limit is corrected for sample size, dilution and moisture content if applicable.  
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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-482506

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468457

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Reporting		Prep.	Analysis	Reg. Limit
						Units	Limit			
Nitrogen, Nitrate	EPA 353.2	76202	5	6.13		mg/L	0.500	29-Aug-06	29-Aug-06 15:32	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	17500		mg/L	10.0	30-Aug-06	30-Aug-06 16:30	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
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U.S. Dept. of Agriculture Foreign Soil Permit - S-47270

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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

**Pace Analytical\***

New Orleans Laboratory

Client ID: MW-582406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468458

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Reporting		Prep.	Analysis	Reg. Limit
						Units	Limit			
Nitrogen, Nitrate	EPA 353.2	76202	5	5.09		mg/L	0.500	29-Aug-06	29-Aug-06 15:17	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	1280		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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  
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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-682406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468459

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Reporting		Prep.	Analysis	Reg. Limit
						Units	Limit			
Nitrogen, Nitrate	EPA 353.2	76202	5	5.96		mg/L	0.500	29-Aug-06	29-Aug-06 15:18	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	1880		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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.  
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(1b) Flash point less than 140 degrees F is hazardous for ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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LELAP # 02006

**Pace Analytical\***

New Orleans Laboratory

Client ID: MW-782406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468460

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	2.97		mg/L	0.500	29-Aug-06	29-Aug-06 15:20	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	952.		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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Arkansas Dept. of Environmental Quality - 88-0681

Louisiana Dept. of Health and Hospitals / Drinking Water - LA060023

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Phone: 504.469.0333

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LELAP # 02006

**Pace Analytical\***

New Orleans Laboratory

Client ID: MW-882406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468461

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	5.51		mg/L	0.500	29-Aug-06	29-Aug-06 15:21	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	926.		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

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LELAP # 02006

**Pace Analytical\***

New Orleans Laboratory

Client ID: MW-982506

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468462

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	3.75		mg/L	0.500	29-Aug-06	29-Aug-06 15:33	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	24100		mg/L	10.0	30-Aug-06	30-Aug-06 16:30	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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.

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LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: MW-1082507

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468463

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	3.24		mg/L	0.500	29-Aug-06	29-Aug-06 15:34	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	7520		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
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1000 Riverbend Blvd. Suite F  
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Phone: 504.469.0333  
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LELAP # 02006

Client ID: MW-1282406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468464

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	3.06		mg/L	0.500	29-Aug-06	29-Aug-06 15:22	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	6190		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
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LELAP # 02006

**Pace Analytical\***

New Orleans Laboratory

Client ID: MW-1382406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468465

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	3.58		mg/L	0.500	29-Aug-06	29-Aug-06 15:23	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	2590		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
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1000 Riverbend Blvd. Suite F  
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Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Client ID: MW-1482406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468466

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	3.74		mg/L	0.500	29-Aug-06	29-Aug-06 15:24	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	11300		mg/L	10.0	30-Aug-06	30-Aug-06 16:30	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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.  
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Phone: 504.469.0333  
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LELAP # 02006

Client ID: MW-1682406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468467

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	3.17		mg/L	0.500	29-Aug-06	29-Aug-06 15:25	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	1460		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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.  
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Phone: 504.469.0333  
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LELAP # 02006

Client ID: MW-1782406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468468

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	3.06		mg/L	0.500	29-Aug-06	29-Aug-06 15:26	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	1700		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
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Phone: 504.469.0333  
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LELAP # 02006

Client ID: MW-1982406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468469

Project No.: 2062234

Description: None

Matrix: Water

% Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	3.01		mg/L	0.500	29-Aug-06	29-Aug-06 15:27	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	10900		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

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

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1000 Riverbend Blvd. Suite F  
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Phone: 504.469.0333  
Fax: 504.469.0555  
LELAP # 02006

Client ID: MW-2082406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468470

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Reporting		Prep.	Analysis	Reg. Limit
						Units	Limit			
Nitrogen, Nitrate	EPA 353.2	76202	5	3.39		mg/L	0.500	29-Aug-06	29-Aug-06 15:30	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	3590		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
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1000 Riverbend Blvd. Suite F  
St. Rose, LA 70087

Phone: 504.469.0333

Fax: 504.469.0555

LELAP # 02006

**Pace Analytical\***  
New Orleans Laboratory

Client ID: WMW82506

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468471

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Reporting		Prep.	Analysis	Reg. Limit
						Units	Limit			
Nitrogen, Nitrate	EPA 353.2	76202	5	2.78		mg/L	0.500	29-Aug-06	29-Aug-06 15:35	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	4840		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 89-0681  
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

9/14/2006 14:24:19

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: SW82506

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468472

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	5.99		mg/L	0.500	29-Aug-06	29-Aug-06 15:36	TAE (1)
Total Dissolved Solids	SM 2540C	76230	1	7600		mg/L	10.0	28-Aug-06	28-Aug-06 15:50	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.

DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.

Reporting 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 ignitability.

Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

New Orleans Laboratory Certifications  
Louisiana Dept. of Environmental Quality (LELAP) - 02006  
Arkansas Dept. of Environmental Quality - 89-0681  
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

9/14/2006 14:24:19



# 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: RW-182506

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468473

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76161	5	4.41	N	mg/L	0.500	29-Aug-06	29-Aug-06 15:05	TAE (1)
Total Dissolved Solids	SM 2540C	76230	1	5610		mg/L	10.0	28-Aug-06	28-Aug-06 15:50	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

**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

9/14/2006 14:24:19

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: DUP182406

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468474

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/24/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Nitrogen, Nitrate	EPA 353.2	76202	5	2.94		mg/L	0.500	29-Aug-06	29-Aug-06 15:31	TAE (1)
Total Dissolved Solids	SM 2540C	76201	1	1700		mg/L	10.0	28-Aug-06	28-Aug-06 14:45	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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 ignitability.  
Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

New Orleans Laboratory Certifications  
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9/14/2006 14:24:19

# 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

**Pace Analytical\***  
New Orleans Laboratory

Client ID: DUP282506

Client: CRA

Project: CEMC GL. ERWIN/039124

Site: None

Lab ID: 20468476

Project No.: 2062234

Description: None

Matrix: Water

%Moisture: n/a

Collected: 08/25/06

Received: 08/26/06

ParameterName	Method	Batch	DF	Result	Qu	Reporting		Prep.	Analysis	Reg. Limit
						Units	Limit			
Nitrogen, Nitrate	EPA 353.2	76161	5	4.60	N	mg/L	0.500	29-Aug-06	29-Aug-06 15:06	TAE (1)
Total Dissolved Solids	SM 2540C	76230	1	5570		mg/L	10.0	28-Aug-06	28-Aug-06 15:50	TAE (1)

2 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.  
DF denotes Dilution Factor of final sample. PF denotes sample Prep Factor which accounts for a non-routine sample size.  
Reporting 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.  
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Analysis performed in (1) New Orleans, (2) Baton Rouge, (3) Bossier City, (4) Houston, or (0) subcontract or field.

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9/14/2006 14:24:19

# 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

**Pace Analytical\***

New Orleans Laboratory

Project No.: 2062234

Parameter	Batch	Blank	ARL	Units	LCS	LCS	LCS	LCS	MS	MS	MS	(1)MS	DUP	QC Limits	RPD	Qu
					Spike	%Rec	%Rec	RPD	Spike	%Rec	%Rec	RPD	RPD	LCS	MS/MSD	Max
Calcium, Diss	76457	ND	0.500	mg/L	10	99			10	84	68 *	2		73 - 115	75 - 125	20
Magnesium, D	76457	ND	0.500	mg/L	10	99			10	79	84	2		73 - 116	75 - 125	20
Potassium, Dis	76457	ND	0.500	mg/L	10	100			10	93	92	1		73 - 114	75 - 125	20
Sodium, Disso	76457	ND	0.500	mg/L	10	100			10	70 *	46 *	2		64 - 122	75 - 125	20 Q3
Calcium, Diss	76458	ND	0.500	mg/L	10	96			10	78	86	4		73 - 115	75 - 125	20
Magnesium, D	76458	ND	0.500	mg/L	10	96			10	82	90	7		73 - 116	75 - 125	20
Potassium, Dis	76458	ND	0.500	mg/L	10	97			10	73 *	75	1		73 - 114	75 - 125	20 Q1
Sodium, Disso	76458	ND	0.500	mg/L	10	98			10	83	89	6		64 - 122	75 - 125	20

9/14/2006 14:24:19

ARL denotes Adjusted Reporting Limit, corrected for sample size, dilution and moisture content as applicable.

\* denotes recovery outside of QC limits.

(1) MS RPD is calculated via SW-846 rules; on the basis of spiked sample concentrations rather than spike recoveries.

**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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# 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

**Pace Analytical\***  
New Orleans Laboratory

## Wet Chemistry Quality Control Results

Project No.: 2062234

Parameter	Batch	Blank	ARL	Units	LCS Spike	LCS %Rec	LCSD %Rec	LCS RPD	MS Spike	MS %Rec	MS MSD %Rec	(1)MS RPD	DUP RPD	QC Limits LCS	MS/MSD	RPD Max	Qu
Nitrogen, Nitr	76202	ND	0.100	mg/L	0.5	98			1	60 *	63 *	1		90 - 110	80 - 120	20	
Nitrogen, Nitr	76161	ND	0.100	mg/L										-	-		
Nitrogen, Nitr	76161			mg/L	0.5	95			1	91	90	1		90 - 110	80 - 120	20	
Total Dissolve	76230	ND	10.0	mg/L	100	116						4		80 - 120	-	20	
Total Dissolve	76201	ND	10.0	mg/L	100	94								80 - 120	-		
Total Dissolve	76201	ND	10.0	mg/L	100	88						5		80 - 120	-	20	

9/14/2006 14:24:19

ARL denotes Adjusted Reporting Limit, corrected for sample size, dilution and moisture content as applicable.

\* denotes recovery outside of QC limits.

(1) MS RPD is calculated via SW-846 rules: on the basis of spiked sample concentrations rather than spike recoveries.

**New Orleans Laboratory Certifications**  
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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

## 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

**Pace Analytical\***  
New Orleans Laboratory

Project No.: **2062234**

### ALL Qualifiers

Qualifier	Qualifier Description
N	See narrative for a detailed explanation.

### QC Qualifiers

Qualifier	Qualifier Description
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.

9/14/2006 14:24:20

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  
U.S. Dept. of Agriculture Foreign Soil Permit - S-47270











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

## Analytical Report Number: 875594

Client: PACE ANALYTICAL SERVICES, INC.

Lab Contact: Brian Basten

Project Name: CHEVRON / CRA

Project Number: 2062234

Lab Sample Number	Field ID	Matrix	Collection Date
875594-001	MW-182406	WATER	08/24/06 15:55
875594-002	MW-282406	WATER	08/24/06 16:00
875594-003	MW-382406	WATER	08/24/06 16:45
875594-004	MW-482506	WATER	08/25/06 11:10
875594-005	MW-582406	WATER	08/24/06 16:55
875594-006	MW-682406	WATER	08/24/06 14:35
875594-007	MW-782406	WATER	08/24/06 15:05
875594-008	MW-882406	WATER	08/24/06 14:30
875594-009	MW-982506	WATER	08/25/06 10:30
875594-010	MW-1082506	WATER	08/25/06 12:45
875594-011	MW-1282406	WATER	08/24/06 13:10
875594-012	MW-1382406	WATER	08/24/06 15:10
875594-013	MW-1482406	WATER	08/24/06 12:30
875594-014	MW-1682406	WATER	08/24/06 13:45
875594-015	MW-1782406	WATER	08/24/06 13:50
875594-016	MW-1982406	WATER	08/24/06 12:20
875594-017	MW-2082406	WATER	08/24/06 12:35
875594-018	WMW82506	WATER	08/25/06 10:15
875594-019	SW82506	WATER	08/25/06 11:15
875594-020	RW-182506	WATER	08/25/06 12:30
875594-021	DUP182406	WATER	08/24/06
875594-022	DUP282506	WATER	08/25/06

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.

Approval Signature

Date

9-18-06

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : MW-182406

Matrix Type : WATER

Collection Date : 08/24/06

Report Date : 09/18/06

Lab Sample Number : 875594-001

**INORGANICS**

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity		300	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Chloride		180	25	5	mg/L		08/31/06	EPA 300.0	EPA 300.0
Fluoride	<	2.5	2.5	5	mg/L	CN	08/31/06	EPA 300.0	EPA 300.0
Sulfate		81	20	5	mg/L		08/31/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : MW-282406

Matrix Type : WATER

Collection Date : 08/24/06

Report Date : 09/18/06

Lab Sample Number : 875594-002

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	250	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Chloride	290	25	5	mg/L		08/31/06	EPA 300.0	EPA 300.0
Fluoride	< 2.5	2.5	5	mg/L	C	08/31/06	EPA 300.0	EPA 300.0
Sulfate	140	20	5	mg/L		08/31/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

**Client :** PACE ANALYTICAL SERVICES, INC.

**Project Name :** CHEVRON / CRA

**Project Number :** 2062234

**Field ID :** MW-382406

**Matrix Type :** WATER

**Collection Date :** 08/24/06

**Report Date :** 09/18/06

**Lab Sample Number :** 875594-003

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	260	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Chloride	750	250	50	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	2.6	2.5	5	mg/L		08/31/06	EPA 300.0	EPA 300.0
Sulfate	190	20	5	mg/L		08/31/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : MW-482506

Matrix Type : WATER

Collection Date : 08/25/06

Report Date : 09/18/06

Lab Sample Number : 875594-004

**INORGANICS**

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity		140	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Chloride		12000	2500	500	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	<	5.0	5.0	10	mg/L	C	08/31/06	EPA 300.0	EPA 300.0
Sulfate		290	40	10	mg/L		08/31/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : MW-582406

Matrix Type : WATER

Collection Date : 08/24/06

Report Date : 09/18/06

Lab Sample Number : 875594-005

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	190	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Chloride	930	50	10	mg/L		08/31/06	EPA 300.0	EPA 300.0
Fluoride	< 5.0	5.0	10	mg/L	C	08/31/06	EPA 300.0	EPA 300.0
Sulfate	140	40	10	mg/L		08/31/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

**Client :** PACE ANALYTICAL SERVICES, INC.

**Project Name :** CHEVRON / CRA

**Project Number :** 2062234

**Field ID :** MW-682406

**Matrix Type :** WATER

**Collection Date :** 08/24/06

**Report Date :** 09/18/06

**Lab Sample Number :** 875594-006

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	260	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Chloride	590	50	10	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	3.0	2.5	5	mg/L		08/31/06	EPA 300.0	EPA 300.0
Sulfate	170	20	5	mg/L		08/31/06	EPA 300.0	EPA 300.0



**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : MW-782406

Matrix Type : WATER

Collection Date : 08/24/06

Report Date : 09/18/06

Lab Sample Number : 875594-007

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	260	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Chloride	230	25	5	mg/L		08/31/06	EPA 300.0	EPA 300.0
Fluoride	3.1	2.5	5	mg/L		08/31/06	EPA 300.0	EPA 300.0
Sulfate	110	20	5	mg/L		08/31/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : MW-882406

Matrix Type : WATER

Collection Date : 08/24/06

Report Date : 09/18/06

Lab Sample Number : 875594-008

**INORGANICS**

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity		280	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Chloride		710	50	10	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride		3.2	2.5	5	mg/L		08/31/06	EPA 300.0	EPA 300.0
Sulfate		170	20	5	mg/L		08/31/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : MW-982506

Matrix Type : WATER

Collection Date : 08/25/06

Report Date : 09/18/06

Lab Sample Number : 875594-009

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	260	10	1	mg/L	N	09/07/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Chloride	10000	2500	500	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	< 2.5	2.5	5	mg/L	C	08/31/06	EPA 300.0	EPA 300.0
Sulfate	360	80	20	mg/L		09/01/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : MW-1082506

Matrix Type : WATER

Collection Date : 08/25/06

Report Date : 09/18/06

Lab Sample Number : 875594-010

**INORGANICS**

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity		110	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Chloride		2200	500	100	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	<	2.5	2.5	5	mg/L	C	08/31/06	EPA 300.0	EPA 300.0
Sulfate		97	20	5	mg/L		08/31/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

**Client :** PACE ANALYTICAL SERVICES, INC.

**Project Name :** CHEVRON / CRA

**Project Number :** 2062234

**Field ID :** MW-1282406

**Matrix Type :** WATER

**Collection Date :** 08/24/06

**Report Date :** 09/18/06

**Lab Sample Number :** 875594-011

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	87	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/05/06	SM 2320B	SM 2320B
Chloride	1700	500	100	mg/L	N	09/01/06	EPA 300.0	EPA 300.0
Fluoride	0.93	0.50	1	mg/L	N	09/01/06	EPA 300.0	EPA 300.0
Sulfate	48	4.0	1	mg/L	N	09/01/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : MW-1382406

Matrix Type : WATER

Collection Date : 08/24/06

Report Date : 09/18/06

Lab Sample Number : 875594-012

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	150	10	1	mg/L	N	09/06/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Chloride	760	50	10	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	< 2.5	2.5	5	mg/L	C	09/01/06	EPA 300.0	EPA 300.0
Sulfate	120	20	5	mg/L		09/01/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : MW-1482406

Matrix Type : WATER

Collection Date : 08/24/06

Report Date : 09/18/06

Lab Sample Number : 875594-013

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	85	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Chloride	5600	500	100	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	< 5.0	5.0	10	mg/L	C	09/01/06	EPA 300.0	EPA 300.0
Sulfate	690	40	10	mg/L		09/01/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : MW-1682406

Matrix Type : WATER

Collection Date : 08/24/06

Report Date : 09/18/06

Lab Sample Number : 875594-014

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	490	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Chloride	500	25	5	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	< 2.5	2.5	5	mg/L	C	09/01/06	EPA 300.0	EPA 300.0
Sulfate	89	20	5	mg/L		09/01/06	EPA 300.0	EPA 300.0



**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : MW-1782406

Matrix Type : WATER

Collection Date : 08/24/06

Report Date : 09/18/06

Lab Sample Number : 875594-015

**INORGANICS**

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity		200	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Chloride		560	50	10	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	<	2.5	2.5	5	mg/L	C	09/01/06	EPA 300.0	EPA 300.0
Sulfate		100	20	5	mg/L		09/01/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

**Client :** PACE ANALYTICAL SERVICES, INC.

**Project Name :** CHEVRON / CRA

**Project Number :** 2062234

**Field ID :** MWV-1982406

**Matrix Type :** WATER

**Collection Date :** 08/24/06

**Report Date :** 09/18/06

**Lab Sample Number :** 875594-016

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	250	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Chloride	3900	500	100	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	< 5.0	5.0	10	mg/L	C	09/01/06	EPA 300.0	EPA 300.0
Sulfate	390	40	10	mg/L		09/01/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : MW-2082406

Matrix Type : WATER

Collection Date : 08/24/06

Report Date : 09/18/06

Lab Sample Number : 875594-017

**INORGANICS**

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity		1100	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Chloride		1100	500	100	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	<	2.5	2.5	5	mg/L	C	09/01/06	EPA 300.0	EPA 300.0
Sulfate		84	20	5	mg/L		09/01/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : WMW82506

Matrix Type : WATER

Collection Date : 08/25/06

Report Date : 09/18/06

Lab Sample Number : 875594-018

**INORGANICS**

Test		Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	<	10	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity		150	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Carbonate Alkalinity	<	10	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Chloride		1500	500	100	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	<	2.5	2.5	5	mg/L	C	09/01/06	EPA 300.0	EPA 300.0
Sulfate		97	20	5	mg/L		09/01/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : SW82506

Matrix Type : WATER

Collection Date : 08/25/06

Report Date : 09/18/06

Lab Sample Number : 875594-019

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	300	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Chloride	3100	500	100	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	< 5.0	5.0	10	mg/L	C	09/01/06	EPA 300.0	EPA 300.0
Sulfate	600	40	10	mg/L		09/01/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : RW-182506

Matrix Type : WATER

Collection Date : 08/25/06

Report Date : 09/18/06

Lab Sample Number : 875594-020

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	290	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Chloride	2300	500	100	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	< 5.0	5.0	10	mg/L	C	09/01/06	EPA 300.0	EPA 300.0
Sulfate	440	40	10	mg/L		09/01/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : DUP182406

Matrix Type : WATER

Collection Date : 08/24/06

Report Date : 09/18/06

Lab Sample Number : 875594-021

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	320	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/06/06	SM 2320B	SM 2320B
Chloride	530	50	10	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	< 2.5	2.5	5	mg/L	CN	09/01/06	EPA 300.0	EPA 300.0
Sulfate	100	20	5	mg/L		09/01/06	EPA 300.0	EPA 300.0

**Pace Analytical  
Services, Inc.**

**Analytical Report Number: 875594**

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

Client : PACE ANALYTICAL SERVICES, INC.

Project Name : CHEVRON / CRA

Project Number : 2062234

Field ID : DUP282506

Matrix Type : WATER

Collection Date : 08/25/06

Report Date : 09/18/06

Lab Sample Number : 875594-022

**INORGANICS**

Test	Result	EQL	Dilution	Units	Code	Anl Date	Prep Method	Anl Method
Hydroxide Alkalinity	< 10	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Bicarbonate Alkalinity	300	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Carbonate Alkalinity	< 10	10	1	mg/L		09/07/06	SM 2320B	SM 2320B
Chloride	2300	500	100	mg/L		09/01/06	EPA 300.0	EPA 300.0
Fluoride	< 5.0	5.0	10	mg/L	C	09/01/06	EPA 300.0	EPA 300.0
Sulfate	450	40	10	mg/L		09/01/06	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	Inorganic	Sample received unpreserved. Sample was either preserved at the time of receipt or at the time of sample preparation.
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.

**Pace Analytical  
Services, Inc.**

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

Lab Number	TestGroupID	Field ID	Comment
875594	W-F-W	All Samples	C - Elevated detection limit due to matrix effect. Samples 001,002,004,005,009,010,012-022 were diluted due to high chloride and sulfate amounts.
875594-012	W-ALK2-W	MW-1382406	N - Spiked sample recovery not within control limits.

	875594-001	875594-002	875594-003	875594-004	875594-005	875594-006	875594-007	875594-008	875594-009	875594-010	875594-011	875594-012	875594-013	875594-014	875594-015	875594-016	875594-017	875594-018	875594-019	875594-020	875594-021	875594-022
Test Group Name																						
ALKALINITY AS HYDROXIDE	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
CHLORIDE	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
SULFATE	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B

Code	Facility	Address	TX Certification
B	Green Bay Lab (Bellevue St)	1241 Bellevue Street, Suite 9 Green Bay, WI 54302	Not Certified

# **Pace Analytical Services, Inc.**

## **QC Summary**

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

Batch: 875594

Lab Section: WETCHEM

QC Batch Number: 13975

Prep Method: EPA 300.0

Analytical Method: EPA 300.0

QC Type Client Sample ID Lab Sample ID

MB	WCG1918-095MB	WCG1918-095MB
LCS	WCG1918-095MBLCS	WCG1918-095MBLCS
MS	875599-001MS	875599-001MS
MS	MW-182406 20468454MS	875594-001MS
MSD	875599-001MSD	875599-001MSD
MSD	MW-182406 20468454MS	875594-001MSD

Client Sample ID MB ID

MW-182406	MB
875594-002	MB
MW-482506	MB
875594-004	MB
MW-682406	MB
875594-006	MB
MW-882406	MB
875594-008	MB
MW-1082506	MB

Lab Sample ID MB ID

875594-001	MB
875594-003	MB
875594-005	MB
875594-007	MB
875594-009	MB

Test Name	Method Blank Result Conc	LCS Spiked Conc	LCS Recovery Conc	LCS Recovery %	LCS Spiked Conc	LCS/LCSD Control Limits			Parent Sample Number	Parent Result Conc	MS Spiked Conc	MS Recovery			MSD Spiked Conc	MSD Recovery			MS/MSD Control Limits		
						LCS RPD %	LCS UCL %	LCS LCL %				MS Conc	MS %	MS C		MSD Conc	MSD %	MSD C	LCL %	UCL %	RPD %
Chloride	< 0.82	20.00	18.7	93.4	---	---	90	110	20	875594-001	179.6	100.0	270.7	91.1	100.0	270.9	91.3	0.1	90	110	20
Fluoride	< 0.096	2.00	1.9	95.5	---	---	90	110	20	875594-001	2.05	10.0	10.7	86.5	10.0	11	89.5	2.8	90	110	20
Sulfate	< 0.77	16.00	15.2	95.3	---	---	90	110	20	875594-001	80.80	80.00	153.8	91.2	80.00	154	91.6	0.2	90	110	20
Chloride	< 0.82	20.00	18.7	93.4	---	---	90	110	20	875599-001	104.8	100.0	211.8	107.1	100.0	199.3	94.6	6.1	90	110	20
Fluoride	< 0.096	2.0	1.9	95.5	---	---	90	110	20	875599-001	0.26	2.0	2	86.5	2.0	2	88.0	1.5	90	110	20
Sulfate	< 0.77	16.0	15.2	95.3	---	---	90	110	20	875599-001	23.0	16.0	36.2	94.8	16.0	38.6	97.4	1.1	90	110	20

Conc = mg/L unless otherwise noted

C = QC Code, see Qualifier 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: 9/18/2006

QC Batch Number: 13975

**Pace Analytical  
Services, Inc.**

**QC Summary**

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

Batch: 875594

Lab Section: WETCHEM

QC Batch Number: 13994

Prep Method: EPA 300.0

Analytical Method: EPA 300.0

QC Type Client Sample ID Lab Sample ID

MB	WCG1918-096MB	WCG1918-096MB
LCS	WCG1918-096MBLCS	WCG1918-096MBLCS
MS	DUP182406 20468474MS	875594-021MS
MS	MW-1282406 20468464M	875594-011MS
MSD	DUP182406 20468474MS	875594-021MSD
MSD	MW-1282406 20468464M	875594-011MSD

**Client Sample ID**

**Lab Sample ID**

**MB ID**

MW-1282406	875594-011	MB
MW-1482406	875594-013	MB
MW-1782406	875594-015	MB
MW-2082406	875594-017	MB
SW82506	875594-019	MB
DUP182406	875594-021	MB

Test Name	Method Blank Result Conc	LCS Spiked Conc	LCS Recovery		LCS Spiked Conc	LCS Recovery		LCS/LCSD Control Limits		Parent Sample Number	Parent Result Conc	MS Spiked Conc	MS Recovery		MSD Spiked Conc	MSD Recovery		MS/MSD RPD		MS/MSD Control Limits	
			Conc	%		Conc	%	LCL	UCL				Conc	%		Conc	%	RPD	C	LCL	UCL
Chloride	< 0.82	20.000	19.4	97.1	---	---	---	90	110	875594-011	1686.0	2000.0	3503	90.8	2000.0	3435	87.4	2.0	N	90	110
Fluoride	< 0.096	2.0	2	98.5	---	---	---	90	110	875594-011	0.93	2.0	2.5	79.0	2.0	2.6	81.0	1.6	N	90	110
Sulfate	< 0.77	16.0	15.8	98.8	---	---	---	90	110	875594-011	48.0	16.0	64	100.1	16.0	65.8	111.4	2.8	N	90	110
Chloride	< 0.82	20.00	19.4	97.1	---	---	---	90	110	875594-021	532.9	200.0	732	99.6	200.0	753.2	110.2	2.9	N	90	110
Fluoride	< 0.096	2.00	2	98.5	---	---	---	90	110	875594-021	2.00	10.0	10.7	87.0	10.0	10.6	86.0	0.9	N	90	110
Sulfate	< 0.77	16.00	15.8	98.8	---	---	---	90	110	875594-021	101.1	80.00	175.4	92.8	80.00	175.4	92.9	0.0	N	90	110

Conc = mg/L unless otherwise noted

C = QC Code, see Qualifier 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: 9/18/2006

QC Batch Number: 13994

# **Pace Analytical Services, Inc.**

## **QC Summary**

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

Batch: 875594

Lab Section: WETCHEM

QC Batch Number: 14056

Prep Method: SM 2320B

Analytical Method: SM 2320B

QC Type Client Sample ID Lab Sample ID

MB	WCG1919-024MB	WCG1919-024MB
LCS	WCG1919-024MBLCS	WCG1919-024MBLCS
MS	MW-182406 20468454MS	875594-001MS
MSD	MW-182406 20468454MS	875594-001MSD

Client Sample ID	Lab Sample ID	MB ID
MW-182406	875594-002	MB
MW-482506	875594-004	MB
MW-682406	875594-006	MB
MW-882406	875594-008	MB

Test Name	Method Blank Result Conc	LCS Spiked Conc	LCS Recovery Conc	LCS Spiked Conc	LCS/LCSD			LCS/LCSD Control Limits			Parent Sample Number	Parent Result Conc	MS			MS Recovery			MSD			MSD Recovery			MS/MSD Control Limits				
					LCS Recovery Conc	LCS Spiked Conc	LCS/LCSD RPD %	LCS/LCSD LCL %	LCS/LCSD UCL %	LCS/LCSD RPD %			MS Conc	MS Spiked Conc	MS Recovery Conc	MS Spiked Conc	MSD Conc	MSD Spiked Conc	MSD Recovery Conc	MSD Spiked Conc	MS/MSD LCL %	MS/MSD UCL %	MS/MSD RPD %						
Alkalinity as CaCO3	< 2.5	0								875594-001	< 3.7																		
Bicarbonate Alkalinity	< 2.5	12.60	13.1	103.8						80	120	20	875594-001	303.0	100.0	403.3	100.3	100.0	401.1	98.1						80	120	20	
Carbonate Alkalinity	< 2.5	0										< 3.7																	

Conc = mg/L unless otherwise noted

C = QC Code, see Qualifier Sheet

Parent Result is reported down to MDL in order to allow Validation of this worksheet

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Report Date: 9/18/2006

QC Batch Number: 14056

# **Pace Analytical Services, Inc.**

## **QC Summary**

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

Batch: 875594

Lab Section: WETCHEM

QC Batch Number: 14084

Prep Method: SM 2320B

Analytical Method: SM 2320B

QC Type Client Sample ID Lab Sample ID

MB	WCG1919-025MB	WCG1919-025MB
LCS	WCG1919-025MBLCS	WCG1919-025MBLCS
MS	MW-1382406 20468465M	875594-012MS
MSD	MW-1382406 20468465M	875594-012MSD

Lab Sample ID MB ID

875594-013	MB
875594-015	MB
875594-017	MB

Client Sample ID

MW-1482406
MW-1782406
MW-2082406

Lab Sample ID MB ID

875594-012	MB
875594-014	MB
875594-016	MB
875594-021	MB

Client Sample ID

MW-1382406
MW-1682406
MW-1982406
DUP182406

Test Name	Method Blank Result Conc	LCS Spiked Conc	LCS Recovery		LCS Spiked Conc	LCSD Recovery		LCSD Spiked Conc	LCSD Control Limits		Parent Sample Number	Parent Result Conc	MS Spiked Conc	MS Recovery		MSD Spiked Conc	MSD Recovery		MS/MSD RPD		MS/MSD Control Limits	
			Conc	%		Conc	%		LCL	UCL				Conc	%		Conc	%	LCL	UCL		
Alkalinity as CaCO3	< 3.7	0	12.60	103.8	---	---	---	---	---	---	875594-012	< 3.7	100.0	259.4	111.2	100.0	272.5	124.3	N	4.9	---	---
Bicarbonate Alkalinity	< 3.7	0	12.60	103.8	---	---	---	---	80	120	875594-012	148.2	---	---	---	---	---	---	80	120	---	---
Carbonate Alkalinity	< 3.7	0	12.60	103.8	---	---	---	---	---	---	875594-012	< 3.7	---	---	---	---	---	---	---	---	---	---

Conc = mg/L unless otherwise noted

C = QC Code, see Qualifier 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: 9/18/2006

QC Batch Number: 14084

# **Pace Analytical Services, Inc.**

## **QC Summary**

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

Batch: 875594

Lab Section: WETCHEM

QC Batch Number: 14110

Prep Method: SM 2320B

Analytical Method: SM 2320B

QC Type Client Sample ID Lab Sample ID

MB	WCG1919-026MB	WCG1919-026MB
LCS	WCG1919-026MBLCS	WCG1919-026MBLCS
MS	MW-982506 20468462MS	875594-009MS
MSD	MW-982506 20468462MS	875594-009MSD

Client Sample ID	Lab Sample ID	MB ID
MW-1082506	875594-010	MB
SW82506	875594-019	MB
DUP282506	875594-022	MB

Test Name	Method Blank Result Conc	LCS Spiked Conc	LCS Recovery Conc	LCS Recovery %	LCS Spiked Conc	LCS Recovery Conc	LCS Recovery %	LCS RPD	LCS/LCSD Control Limits			Parent Sample Number	Parent Result Conc	MS Spiked Conc	MS Recovery Conc	MS Recovery %	MSD Spiked Conc	MSD Recovery Conc	MS/MSD			MS/MSD Control Limits		
									LCL %	UCL %	RPD %								MSD Conc	MSD %	MSD RPD %	LCL %	UCL %	RPD %
Alkalinity as CaCO3	< 3.7	---	---	13.1	103.8	---	---	---	---	---	875594-009	< 3.7	---	---	---	---	---	---	---	---	---	---	---	
Bicarbonate Alkalinity	< 3.7	12.60	---	---	---	---	---	---	80	120	20	875594-009	259.4	100.0	335.7	76.3	100.0	327	67.6	2.6	80	120	20	
Carbonate Alkalinity	< 3.7	---	---	---	---	---	---	---	---	---	875594-009	< 3.7	---	---	---	---	---	---	---	---	---	---	---	

Conc = mg/L unless otherwise noted

C = QC Code, see Qualifier Sheet

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Report Date: 9/18/2006

QC Batch Number: 14110



Client Name: Pace - NOProject # 875594Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other \_\_\_\_\_Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ noPacking Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ None ☐ Other \_\_\_\_\_Thermometer Used JBType of Ice: ☒ Wet ☐ Blue ☐ None☒ Samples on ice, cooling process has begun

Cooler Temperature \_\_\_\_\_

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 8/30/06 - JS  
8/30/06

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7. <u>Due 9/8/06</u>
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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: 8-30-06

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)





# CHAIN-OF-CUSTODY / Analytical Request Document

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

## Section A Required Client Information:

Company: CPA  
Address: 2135 S. Loop 250 West  
Email To: jancolas@cpa.com  
Phone: (432) 466-0086 Fax: (432) 466-0081  
Requested Due Date/TAT: \_\_\_\_\_

## Section B Required Project Information:

Report To: James Oancas  
Copy To: \_\_\_\_\_  
Purchase Order No.: \_\_\_\_\_  
Project Name: CENC GL ERWIN  
Project Number: 039124

## Section C Invoice Information:

Attention: \_\_\_\_\_  
Company Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Pace Quote Reference: \_\_\_\_\_  
Pace Project Manager: CLAVENSEN  
Pace Profile #: \_\_\_\_\_

**REGULATORY AGENCY**  
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER  
☐ UST ☐ RCRA  
**SITE LOCATION**  
☐ GA ☐ IL ☐ IN ☐ MI ☐ MN ☐ NC  
☐ OH ☐ SC ☐ WI ☒ OTHER N/A

## Section D Required Client Information

### SAMPLE ID

One Character per box.  
(A-Z, 0-9 / -)

Samples IDs MUST BE UNIQUE

ITEM #	1	2	3	4	5	6	7	8	9	10	11	12
MATRIX	DRINKING WATER	DRINKING WATER	WASTE WATER	WASTE WATER	WASTE WATER	WASTE WATER	WASTE WATER	WASTE WATER	WASTE WATER	WASTE WATER	WASTE WATER	TEMP
CODE	DW	DW	WW	WW	WW	WW	WW	WW	WW	WW	WW	
SL												
WP												
AR												
OT												
TS												

COLLECTED	COMPOSITE START		COMPOSITE END/GRAB		SAMPLE TYPE	MATRIX CODE	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						
	DATE	TIME	DATE	TIME					Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HOI	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Other
1	8/24	1510	8/24	1510	G	WT G		3	X	X	X	X	X	X	X
2	8/24	1320	8/24	1320				3	X	X	X	X	X	X	X
3	8/24	1345	8/24	1345				3	X	X	X	X	X	X	X
4	8/24	1350	8/24	1350				3	X	X	X	X	X	X	X
5	8/24	1220	8/24	1220				3	X	X	X	X	X	X	X
6	8/24	1235	8/24	1235				3	X	X	X	X	X	X	X
7	8/25	1015	8/25	1015				3	X	X	X	X	X	X	X
8	8/25	1115	8/25	1115				3	X	X	X	X	X	X	X
9	8/25	1230	8/25	1230				3	X	X	X	X	X	X	X
10	8/24	—	8/24	—				3	X	X	X	X	X	X	X
11	8/25	—	8/25	—				3	X	X	X	X	X	X	X
12								1	X	X	X	X	X	X	X

Filtered (Y/N)	Requested Analysis:	Residual Chlorine (Y/N)	Pace Project Number	Lab ID
			875594	
			20468465	
			466	
			467	
			468	
			469	
			470	
			471	
			472	
			473	
			474	
			476	

Additional Comments:

RELINQUISHED BY / AFFILIATION DATE TIME

ACCEPTED BY / AFFILIATION DATE TIME

SAMPLE CONDITION

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

SAMPLER NAME AND SIGNATURE	DATE	TIME
James Kennedy	8/25	1600
James Kennedy	8/26	1630
James Kennedy	8/26	1700
James Kennedy	8/30	1200

PRINT Name of SAMPLER:  
SIGNATURE of SAMPLER:

APPENDIX C

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



METER INSTALLATION AND  
INSPECTION FORM

STATE ENGINEER OFFICE  
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  
Well File Nbr: CP 00886

NAME: Chevron USA  
ADDRESS: 11111 S. Wilcrest  
CITY/STATE/ZIP: Houston TX 77099

1. WATER METER INFORMATION:

Well File Nbr: CP 00886

Serial Number: 0607-96290-1-89

Meter Make: Vane Model # 793A

Number of Dials: 7 (1 needle / 6 roll type)  
Number of dials that move on the  
left side of dial on meter.

Multiplier: (0) (00) (000)  
Circle number of zeros that don't  
move on right side of dial on meter.

Unit of Measure: (GALLONS) (CUBIC FEET) (BARRELS) (ACRE-FEET) ( )  
Circle appropriate unit of measure. Specify Other

Initial Reading: 999986 Initial Reading Date: 9-26-06

2. COMMENTS:

On September 29, 2006 a meter reading was collected  
meter reading: 999991

Inspector: James Dencas (CRA) agent for Chevron USA  
Date: 9/29/06

wellcon5

3. Description of well:

Located in the SW 1/4 SE 1/4 of Sec. 35 Twp. 24S Rge. 37E N.M.P.M., or Tract No. \_\_\_\_\_  
of Map No. \_\_\_\_\_ of the CAPITAN District; total depth, 73 feet; is well cased \_\_\_\_\_;  
outside diameter of top casing (or hole, if uncased), 6 inches; if artesian, is well equipped with gate  
valve \_\_\_\_\_; date drilled July 10 19 98; Name of driller Scarborough Drilling.

4. Record of Pumping Test, if made (to be supplied by person or firm making test); Name and address of  
person making test, Conestoga-Rovers & Associates, 2135 S. Loop West Midland TX  
date of test February 23 19 2006; depth to water before test, 61.28 feet, 2.5 land surface,  
(above, below)  
and pumping level during test, 70.35 feet; length of test, 1.0 hours; average discharge, 0.75 G.P.M.;  
specific capacity of well, 0.1 gals./min. per foot of drawdown.

5. Permanent Pump Equipment:

(a) Description of pump: Make Grundfos; Type Redi-Flo 3;  
size of discharge 1 1/4 inches; if turbine type, give size of column, \_\_\_\_\_ inches; diameter of  
bowls \_\_\_\_\_ inches; number of bowls \_\_\_\_\_; length of suction pipe \_\_\_\_\_ feet; total length of  
column, bowls and suction pipe \_\_\_\_\_ feet; if centrifugal type, give size of pump 30.4 inches;  
if other type, describe \_\_\_\_\_;  
rated capacity of pump (if known), 5 G.P.M., at \_\_\_\_\_ rev. per min., from a depth of 80 feet.

(b) Description of power plant: Make \_\_\_\_\_; Type \_\_\_\_\_;  
rated horsepower (if available) \_\_\_\_\_; type of drive connection to pump \_\_\_\_\_  
(direct, gearhead, or belt)

(c) Actual discharge of pump, 0.75 G.P.M., at \_\_\_\_\_ rev. per min., from a depth of 70 feet;  
Date of test September 19 2006.

6. If reservoir is used, give approximate size: length \_\_\_\_\_ feet; width \_\_\_\_\_; depth \_\_\_\_\_.

7. If above well replaced an old well to be plugged or abandoned, fill out the following: the well abandoned  
is located in the \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 of Sec. \_\_\_\_\_, Twp. \_\_\_\_\_, Rge. \_\_\_\_\_.

Describe plugging method N/A  
Name of plugging contractor N/A

8. Well Record filed with State Engineer's Office Yes.  
(Yes or No)

I, James Oenelas (CRA) affirm that the foregoing statements are true to the best of my knowledge  
and belief and that I am the agent for Chevron USA owner and holder of said water right.  
(sole, partial, agent for, etc.,)

Chevron USA, Permittee  
By: James Oenelas (CRA) agent for Chevron USA

STATEMENT OF STATE ENGINEER'S REPRESENTATIVE

I hereby certify that I have inspected the above well and find it constructed in accordance with the conditions  
of the permit. Note any exceptions \_\_\_\_\_

Well was producing \_\_\_\_\_ gpm against a \_\_\_\_\_ head of \_\_\_\_\_ feet at \_\_\_\_\_ rpm.  
(measured) (estimated)

Old well has been \_\_\_\_\_  
(plugged) (abandoned) (etc.,)

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:

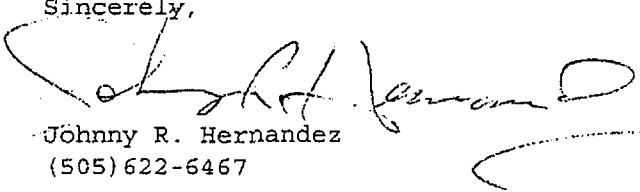
Enclosed is your copy of the above numbered permit which has been approved subject to the conditions set forth on the approval page thereof.

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

nonappcw

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.

Trn Desc: CP 886

File Number: CP 00886  
Trn Number: 172265



12/10/54

11-9-99

CP-886

- Mailing address P. O. Box 730

City and State Hobbs, NM 88240-0730

- (artesian or shallow water aquifer)

(name of underground basin)

3. The well is to be located in the SW 1/4 SE 1/4 1/4, 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.

- Outside Diameter of casing 6

(consumptive use, diversion)

for Environmental Remediation purposes.

6. Acreage to be irrigated or place of use \_\_\_\_\_ acres.

**Subdivision**

Section

**Township**

Range

**Acres**

Owner

Pursuant to New Mexico Oil Conservation Division

7. Additional statements or explanations

(NMOCDD), 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,

Texaco Exploration and Production, Inc., Permittee.

By:

26th



**VICKIE A. INMAN**  
Notary Public, State of Texas  
My Comm. Expires 4-14-2002

October 1 1880

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. ~~XX~~ 2004

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

By: Art Mason

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.

Street or Post Office Address PO Box 3109  
City and State Midland, TX 79702

Well was drilled under Permit No. \_\_\_\_\_ and is located in the:

G. L. Erwin Federal NCT-2 Tank Battery, 4.5 mi NE of Jal

a.  $\frac{1}{4}$   $\frac{1}{4}$   $\frac{1}{4}$   $\frac{1}{4}$  of Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ N.M.P.M.

b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_

c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in Lea County.

d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor Scarborough Drilling, Inc. License No. WD 1188

Address 122 N. 24th, Lamesa, TX 79331

Drilling Began 7-10-98 Completed 7-13-98 Type tools air rotary Size of hole 8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 73 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 58.46 ft.

#### Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			

#### Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	<del>Type of Screen</del> .020 screen	Perforations	
			Top	Bottom			From	To
4	sch 40 pvc		+ 2.5	53		.020 screen	53	73

#### Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
73	51	8	8-16 silica sand		poured
51	46	8	bentonite chips		poured; hydrated in place
46	0	8	cement		poured

#### Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_

Address \_\_\_\_\_

Plugging Method \_\_\_\_\_

Date Well Plugged \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			



