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REPORTS

DATE:

7/25/2006

IR 289

MidContinent SBU
Chevron North America
Exploration and Production Company
P. O. Box 36366
Houston, TX 77236

July 25, 2006

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

Subject: 2005 Annual Groundwater Monitoring Report
Cooper-Jal Unit South Injection Station, Lea County, New Mexico
Prepared for Chevron Environmental Management Company
OGRID No. 4323

Dear Mr. Price:

Enclosed is the subject report for ground water monitoring work completed at the Cooper-Jal Unit during 2005. The report provides information and details on the ground water monitoring activities completed by Larson & Associates (Larson) and Conestoga-Rovers & Associates (CRA). Larson completed the monitoring work for the first semi-annual event in 2005. Around September of 2005, this project was transferred to CRA, and they completed the monitoring work for the second semi-annual event of 2005.

All future monitoring and reporting work will be completed by the new contractor and Chevron's agent for this site:

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

If you have any questions concerning this report or the on-going work, please call me at (281) 561-3653. Or you can contact Luke Markham with CRA at (432) 686-0086.

Sincerely,

Scott Toner
Remediation Project Manager

Enclosure

Cc: Ms. Patricia Caperton, NMOCD (with electronic copy of report)
Mr. Luke Markham, CRA (without copy of report)
Mr. Tom Larson, CRA (without copy of report)

IR2289

2005 ANNUAL GROUNDWATER MONITORING REPORT

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

IR 289

2005 ANNUAL GROUNDWATER MONITORING REPORT

COOPER-JAL UNIT SOUTH INJECTION STATION
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LATITUDE: N 32° 12′ 7.3″ LONGITUDE: W 103° 12′ 59.9″
LEA COUNTY, NEW MEXICO

Prepared For:

Mr. Scott Toner
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
Abandonment Business Unit
11111 S. Wilcrest Drive
Houston, Texas 77099

Prepared by:
Conestoga-Rovers & Associates

2135 South Loop 250 West
Midland, Texas 79703

Office: (432) 686-0086
Fax: (432) 686-0186

web: www.CRAworld.com

APRIL 20, 2006
REF. NO. 039123

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1.0 INTRODUCTION

This Annual Groundwater Monitoring Report presents groundwater data collected during the 2005 reporting period on behalf of Chevron Environmental Management Company (CEMC) at the Cooper-Jal Unit South Injection Station (hereafter referred to as the "Site"). Groundwater sampling events were performed on May 17, 2005 and on November 16-17, 2005 by Larson & Associates, Inc, (LA) and by Conestoga-Rovers & Associates (CRA), respectively.

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

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

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

2.0 REGULATORY FRAMEWORK

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

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

3.0 GROUNDWATER SAMPLING AND ANALYSIS

Groundwater at the Site is monitored with a network of 19 monitor wells according to the *Work Plan for Plume Delineation and Modification to Proposed Groundwater Monitoring Schedule* (LA, November 18, 1998). Wells MW-8, MW-9, MW-9A, MW-10 and MW-11 are sampled semi-annually. The remaining 14 wells are sampled annually during the second semi-annual sampling event. A Site Details Map is presented as FIGURE 2.

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

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 purged of a minimum of three casing volumes of groundwater. Geochemical field parameters including pH, temperature and conductivity were collected during the purging/sampling process. All non-disposable groundwater sampling equipment was decontaminated with a soap (Liquinox®) and potable water wash, a potable water rinse and a final deionized water rinse to minimize potential cross-contamination between each monitor well. Subsequent to the purging process, groundwater samples were collected using clean, disposable PVC bailers. Laboratory-supplied sample containers were then filled directly from the disposable PVC bailers.

Groundwater samples were placed on ice in insulated coolers and chilled to a temperature of approximately 4°C (40°F). The coolers were sealed for shipment and proper chain-of-custody documentation accompanied the samples to the laboratory (Pace Analytical Services, Inc. located in St. Rose, Louisiana) for analysis of major cations, anions and TDS by Environmental Protection Agency (EPA) Methods 6010, 310.1, 325.2, 375.4, 352.1, 9214 and 160.1. The fluids recovered and generated during the sampling event were containerized in a dedicated poly tank located onsite and subsequently managed at an NMOCD-permitted salt water disposal (SWD) facility by Nabors Well Services LTD. (Nabors).

3.1 POTENTIOMETRIC SURFACE AND GRADIENT

Groundwater elevation data is presented in TABLE I. Groundwater gradient maps for May 2005 and November 2005 are presented on FIGURES 3 and 4, respectively. Depth to groundwater ranged from 131.56 feet to 144.36 feet below top of casing on May 17, 2005 and from 130.70 feet to 144.60 feet below top of casing on November 15, 2005. Groundwater flow at the Site is to the southeast at a gradient 0.003 feet/foot.

3.2 ANALYTICAL RESULTS

Analytical results are summarized in TABLE II. An isopleth of the chloride concentration for the May 2005 groundwater monitoring event is shown on FIGURE 5. Chloride isopleths for the shallow and deep wells for the November 2005 are shown on FIGURES 6 and 7, respectively.

The analytical results generally fall within historical ranges. During the May 2005 sampling event, one monitor well (MW-9A) exceeded the NMWQCC groundwater standards for chloride and TDS. In addition, five monitor wells (MW-8, MW-9, MW-10 and MW-11) exceeded the NMWQCC groundwater standard for fluoride. In November 2005, 10 wells (MW-1, MW-2, MW-4, MW-4A, MW-5, MW-7, MW-9A, MW-13, RW-1 and RW-2) exceeded the NMWQCC groundwater standards for chloride and TDS. In addition, one well (MW-1) exceeded the NMWQCC groundwater standard for fluoride. Nitrate and sulfate concentrations were below NMWQCC groundwater standards during the 2005 sampling events. Copies of the certified analytical reports and chain-of-custody documentation are attached in APPENDIX A.

4.0 PLANNED ACTIVITIES

The first semi-annual 2006 groundwater monitoring event is scheduled for May 2006. In addition, aquifer testing activities are planned in 2006. On October 1, 1999, Texaco Exploration and Production, Inc. filed applications with the New Mexico Office of the State Engineer (NMOSE) to Divert Underground Waters for proposed recovery wells RW-1 (CP-884) and RW-2 (CP-885). LA reported that the NMOSE denied the appropriation permits on concerns that NMOSE's internal 40-year aquifer drawdown projections exceeded NMOSE criteria. CEMC will resubmit the permit applications after review and modifications are made, as appropriate, to the proposed groundwater treatment system's projected groundwater extraction rates and the projected time frame required to achieve the NMWQCC cleanup standards.

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 with a network of 19 monitor wells. Wells MW-8, MW-9, MW-9A, MW-10 and MW-11 are sampled semi-annually. The remaining 14 wells are sampled annually during the second semi-annual sampling event;
- Depth to groundwater ranged from 131.56 feet to 144.36 feet below top of casing on May 17, 2005 and from 130.70 feet to 144.60 feet below top of casing on November 15, 2005. Groundwater flow at the Site is to the southeast at a gradient 0.003 feet/foot;
- The analytical results generally fall within historical ranges. During the May 2005 sampling event, one monitor well (MW-9A) exceeded the NMWQCC groundwater standards for chloride and TDS. In addition, five monitor wells (MW-8, MW-9, MW-10 and MW-11) exceeded the NMWQCC groundwater standard for fluoride. In November 2005, 10 wells (MW-1, MW-2, MW-4, MW-4A, MW-5, MW-7, MW-9A, MW-13, RW-1 and RW-2) exceeded the NMWQCC groundwater standards for chloride and TDS. In addition, one well (MW-1) exceeded the NMWQCC groundwater standard for fluoride;
- The first semi-annual 2006 groundwater monitoring event is scheduled for May 2006. In addition, aquifer testing activities are planned in 2006.

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

Luke D. Markham
Project Manager

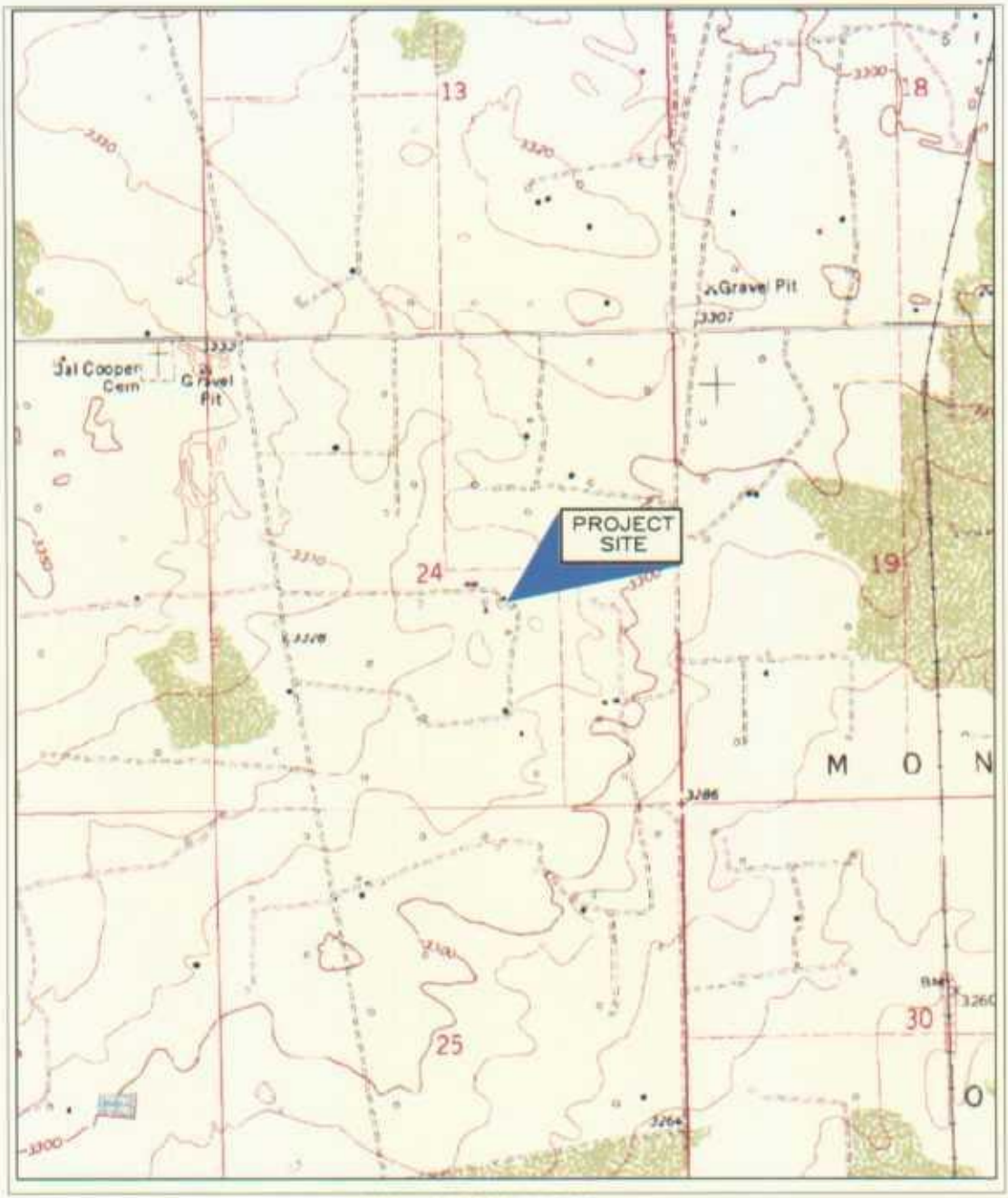
James R. Buice
Senior Project Manager

FIGURES

JAL NW QUADRANGLE
NEW MEXICO

LAT= 32° 12' 07.3" N
LONG= 103° 12' 59.9" W

PHOTOREVISED 1977



USGS MAP SERIES 1:24,000

0 1 2 4
(Miles)

0 4000 8000 12000 16000
(Feet)

CONTOUR INTERVAL 10 FEET

NORTH

039123 SLR 051505

SITE LOCATION MAP	JOB No. 039123
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY COOPER–JAL UNIT SOUTH INJECTION STATION LEA COUNTY, NEW MEXICO	FIGURE 1

Approximate Scale In Feet
1"=400'
0 200 400

MW-13

MW-12

COOPER-JAL SOUTH
WATER STATION
TANK BATTERY

Fence

Cattle Guard

MW-6

MW-3

WELL NO. 148

MW-2A

MW-2

MW-1

MW-5

MW-5A

RW-1

MW-4A

MW-4

WELL NO. 245

MW-10

RW-2

MW-7

WELL NO. 411

WELL NO. 421

MW-8

MW-9A

MW-9

MW-11

LEGEND

- Monitor Well Location (Deep)
- Monitor Well Location (Shallow)
- Cooper-Jal Oil Well Location
- Recovery Well Location (Fully Penetrating)
- Monitor Well Location (Fully Penetrating)

Basemap adapted from Larson & Associates, Inc. (August 18, 2005).

031923 SLR 021406

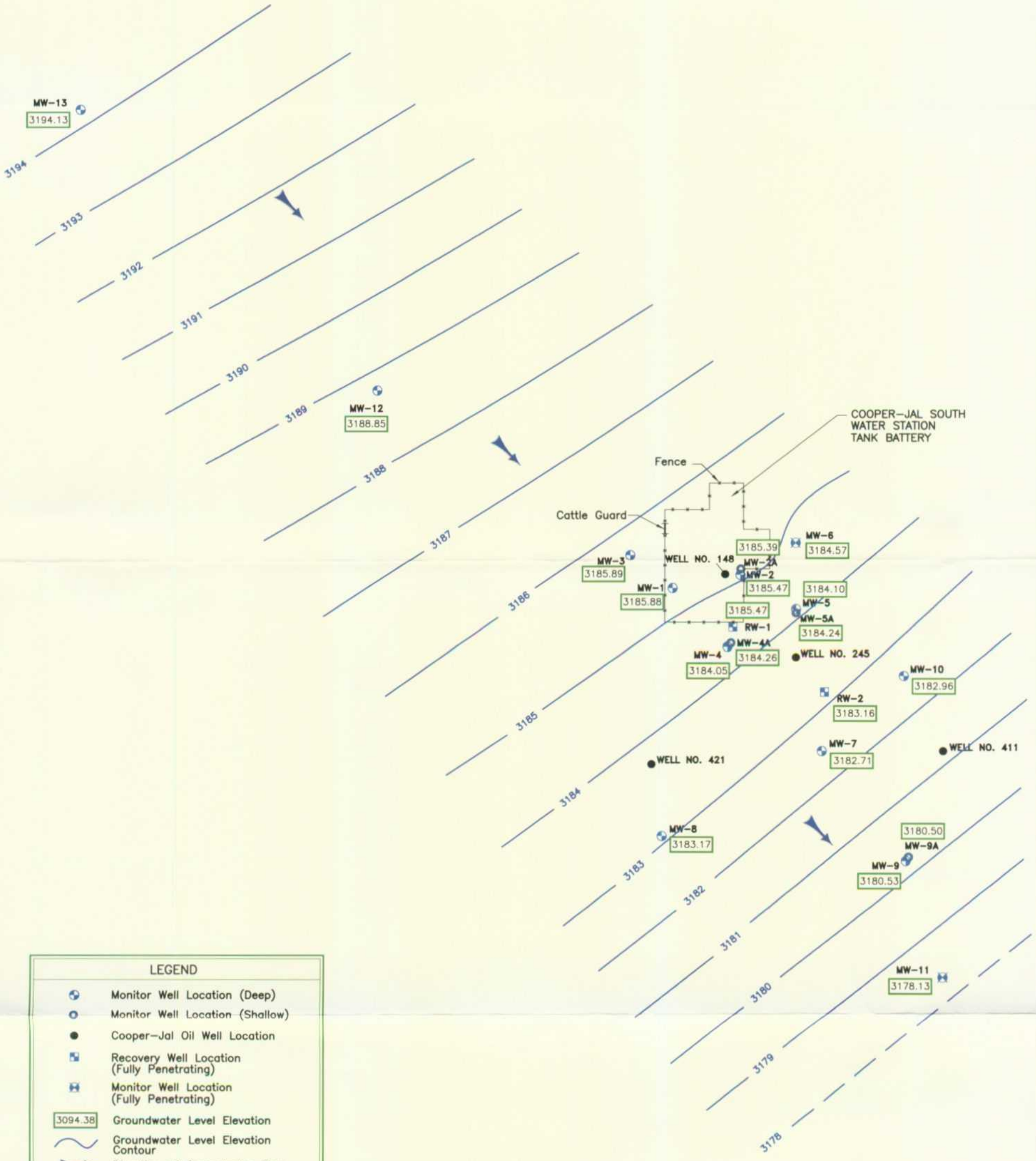
SITE DETAILS MAP

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

JOB No.
039123

FIGURE
2

Approximate Scale In Feet
1"=400'
0 200 400



LEGEND

- Monitor Well Location (Deep)
- Monitor Well Location (Shallow)
- Cooper-Jal Oil Well Location
- Recovery Well Location (Fully Penetrating)
- Monitor Well Location (Fully Penetrating)
- 3094.38 Groundwater Level Elevation
- Groundwater Level Elevation Contour
- Direction of Groundwater Flow

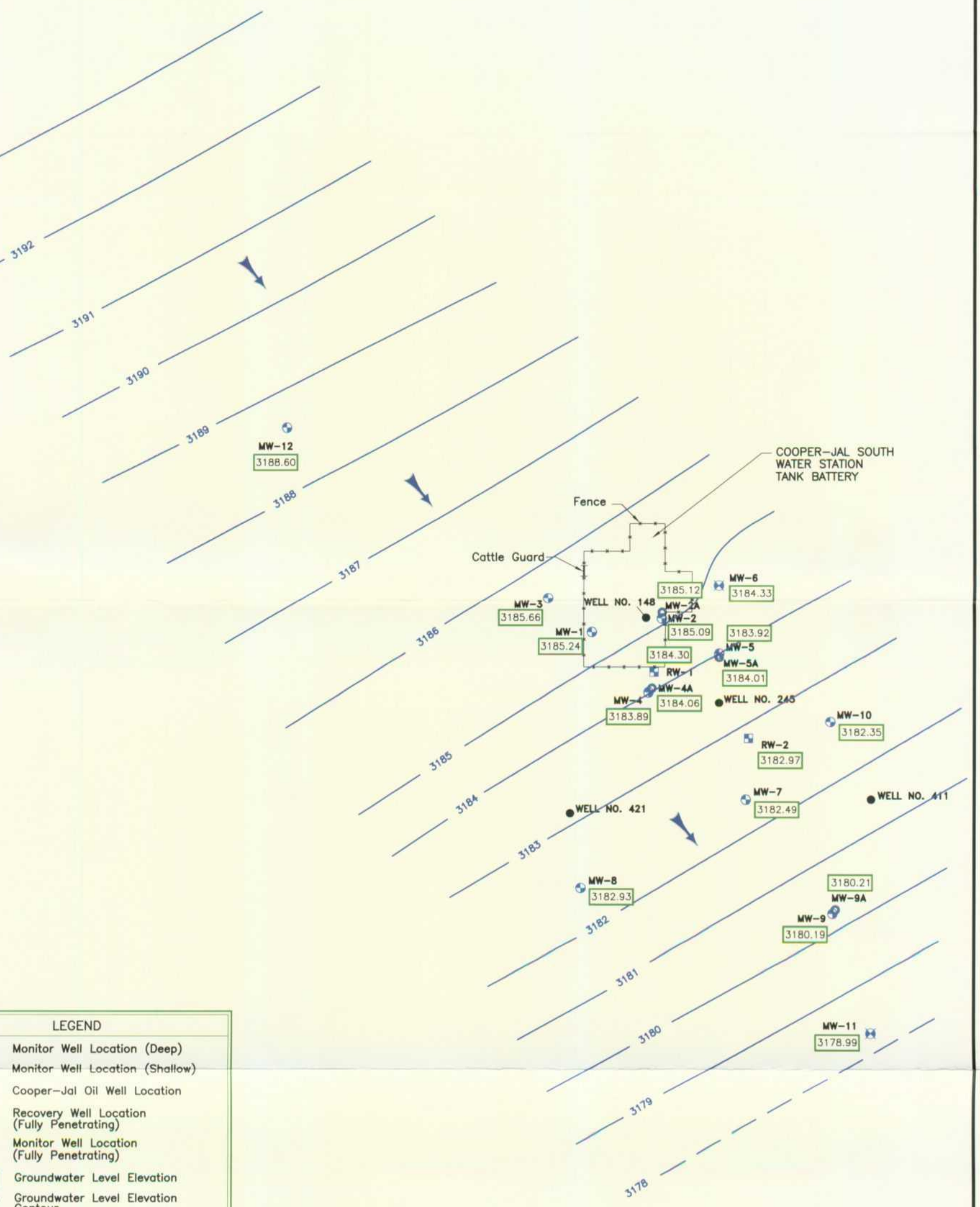
1. Groundwater level elevations were measured by Larson & Associates on May 17, 2005.
2. Contours are feet above MSL.
3. Basemap adapted from Larson & Associates, Inc. (August 18, 2005).

031923 SLR 021406

GROUNDWATER GRADIENT MAP – MAY 2005
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT SOUTH INJECTION STATION
LEA COUNTY, NEW MEXICO

JOB No. 039123
FIGURE 3

Approximate Scale In Feet
1"=400'
0 200 400



LEGEND	
⊕	Monitor Well Location (Deep)
⊙	Monitor Well Location (Shallow)
●	Cooper-Jal Oil Well Location
▪	Recovery Well Location (Fully Penetrating)
⊞	Monitor Well Location (Fully Penetrating)
3094.38	Groundwater Level Elevation
~	Groundwater Level Elevation Contour
→	Direction of Groundwater Flow

1. Groundwater level elevations were measured by Conestoga-Rovers & Associates on November 15, 2005.
2. Contours are feet above MSL.
3. Basemap adapted from Larson & Associates, Inc. (August 18, 2005).

031923 SLR 021406

GROUNDWATER GRADIENT MAP - NOVEMBER 2005
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
COOPER-JAL UNIT SOUTH INJECTION STATION
LEA COUNTY, NEW MEXICO

JOB No. 039123
FIGURE 4

Approximate Scale In Feet
1"=400'
0 200 400

MW-13

MW-12

COOPER-JAL SOUTH
WATER STATION
TANK BATTERY

Fence

Cattle Guard

MW-6

MW-3

WELL NO. 148

MW-2A

MW-2

MW-1

MW-5

MW-5A

RW-1

MW-4A

MW-4

WELL NO. 245

MW-10
233

RW-2

MW-7

WELL NO. 411

WELL NO. 421

MW-8
41

MW-9A
*354

MW-9
44.2

MW-11
43.1

250

LEGEND	
	Monitor Well Location (Deep)
	Monitor Well Location (Shallow)
	Cooper-Jal Oil Well Location
	Recovery Well Location (Fully Penetrating)
	Monitor Well Location (Fully Penetrating)
354	Chloride Concentration (mg/L)

Basemap adapted from Larson & Associates, Inc. (August 18, 2005).

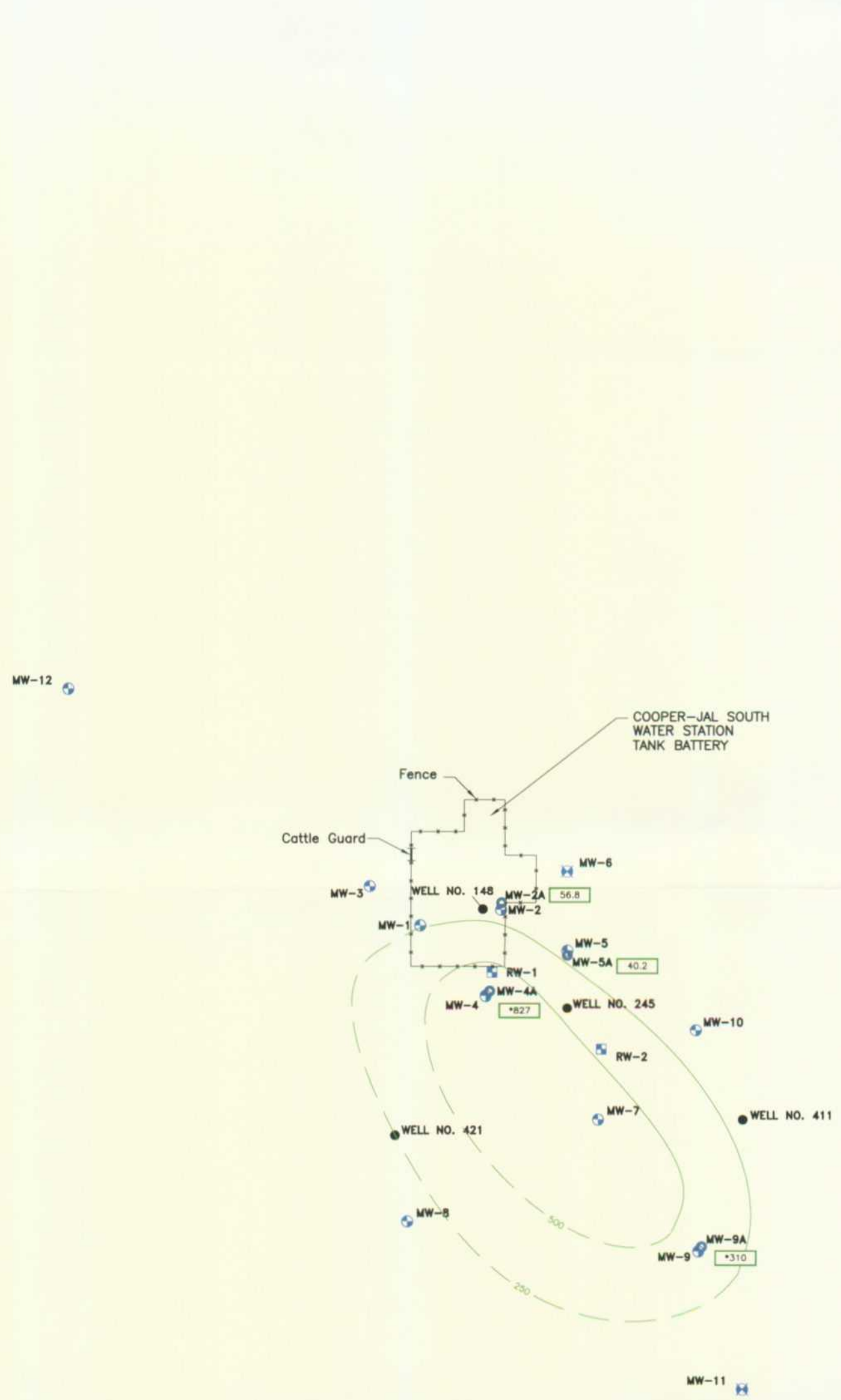
031923 SLR 021406

CHLORIDE ISOCONCENTRATION MAP - MAY 2005

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

JOB No.
039123

FIGURE
5



LEGEND

- Monitor Well Location (Deep)
- Monitor Well Location (Shallow)
- Cooper-Jal Oil Well Location
- Recovery Well Location (Fully Penetrating)
- Monitor Well Location (Fully Penetrating)
- 310 Chloride Concentration (mg/L)

* - The analysis was performed at a dilution due to the high analyte concentration.

Basemap adapted from Larson & Associates, Inc. (August 18, 2005).

031923 SLR 021406

SHALLOW GROUNDWATER CHLORIDE ISOCONCENTRATION MAP - NOVEMBER 2005

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

JOB No. 039123

FIGURE 6

Approximate Scale In Feet
1"=400'
0 200 400

MW-13
*722

250
500

MW-12
109

COOPER-JAL SOUTH
WATER STATION
TANK BATTERY

Fence

Cattle Guard

101
MW-6

MW-3
96.3

WELL NO. 148

MW-2A
MW-2
*4720

MW-1
*1210

MW-5
*2140
MW-5A

*895
RW-1

MW-4A

MW-4
*9440

WELL NO. 245

MW-10
*205

5000

RW-2
*1770

1000

500

MW-7
*456

WELL NO. 421

WELL NO. 411

MW-8
113

250

MW-9A
MW-9
83.5

MW-11
58.1

LEGEND

- Monitor Well Location (Deep)
- Monitor Well Location (Shallow)
- Cooper-Jal Oil Well Location
- Recovery Well Location (Fully Penetrating)
- Monitor Well Location (Fully Penetrating)
- 310 Chloride Concentration (mg/L)

Contours do not honor RW-1 chloride concentration.

* - The analysis was performed at a dilution due to the high analyte concentration.

Basemap adapted from Larson & Associates, Inc. (August 18, 2005).

031923 SLR 021406

DEEP GROUNDWATER CHLORIDE ISOCONCENTRATION MAP - NOVEMBER 2005

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

JOB No.
039123

FIGURE
7

TABLES

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

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

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

Well ID *TOC Elevation*	Collection Date	Depth to Groundwater (ft TOC)	Casing Diameter (in)	Groundwater Elevation (ft)	Well Depth (ft TOC)	Well Screen Interval (ft bgs)
MW-3	05/18/98	132.65	2	3185.56	171.93	161-171
3318.21	05/25/99	132.52	---	3185.69	---	---
	02/08/01	132.40	---	3185.81	---	---
	05/10/02	132.40	---	3185.81	---	---
	10/22/02	132.49	---	3185.72	---	---
	05/20/03	132.75	---	3185.46	---	---
	11/24/03	132.29	---	3185.92	---	---
	05/11/04	132.38	---	3185.83	---	---
	11/15/04	132.46	---	3185.75	---	---
	05/17/05	132.32	---	3185.89	---	---
	11/15/05	132.55	---	3185.66	---	---
MW-4	05/18/98	136.01	2	3183.73	171.41	161-171
3319.74	05/25/99	135.57	---	3184.17	---	---
	02/08/01	135.87	---	3183.87	---	---
	05/10/02	135.67	---	3184.07	---	---
	10/22/02	135.90	---	3183.84	---	---
	05/20/03	136.00	---	3183.74	---	---
	11/24/03	135.70	---	3184.04	---	---
	05/11/04	135.34	---	3184.40	---	---
	11/15/04	135.76	---	3183.98	---	---
	05/17/05	135.69	---	3184.05	---	---
	11/15/05	135.85	---	3183.89	---	---
MW-4A	05/18/98	135.68	2	3183.90	146.00	128-143
3319.58	05/21/99	135.65	---	3183.93	---	---
	05/25/99	135.90	---	3183.68	---	---
	02/08/01	135.34	---	3184.24	---	---
	05/10/02	135.30	---	3184.28	---	---
	10/22/02	135.51	---	3184.07	---	---
	05/20/03	135.55	---	3184.03	---	---
	11/24/03	135.31	---	3184.27	---	---
	05/11/04	135.72	---	3183.86	---	---
	11/15/04	135.38	---	3184.20	---	---
	05/17/05	135.32	---	3184.26	---	---
	11/15/05	135.52	---	3184.06	---	---

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

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

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

Well ID *TOC Elevation*	Collection Date	Depth to Groundwater (ft TOC)	Casing Diameter (in)	Groundwater Elevation (ft)	Well Depth (ft TOC)	Well Screen Interval (ft bgs)
MW-7	05/18/98	136.19	2	3182.20	166.15	151-166
3318.39	05/25/99	135.98	---	3182.41	---	---
	02/08/01	135.87	---	3182.52	---	---
	05/10/02	135.67	---	3182.72	---	---
	10/22/02	135.89	---	3182.50	---	---
	05/20/03	136.12	---	3182.27	---	---
	11/24/03	135.71	---	3182.68	---	---
	05/11/04	135.74	---	3182.65	---	---
	11/15/04	135.78	---	3182.61	---	---
	05/17/05	135.68	---	3182.71	---	---
	11/15/05	135.90	---	3182.49	---	---
MW-8	05/18/98	134.36	2	3182.78	171.92	155-170
3317.14	05/25/99	134.21	---	3182.93	---	---
	02/08/01	134.08	---	3183.06	---	---
	05/10/02	133.95	---	3183.19	---	---
	10/22/02	134.18	---	3182.96	---	---
	05/20/03	134.38	---	3182.76	---	---
	11/24/03	133.99	---	3183.15	---	---
	05/11/04	134.02	---	3183.12	---	---
	11/15/04	134.11	---	3183.03	---	---
	05/17/05	133.97	---	3183.17	---	---
	11/15/05	134.21	---	3182.93	---	---
MW-9	05/18/98	132.89	2	3179.90	161.40	149-164
3312.79	05/25/99	132.68	---	3180.11	---	---
	02/08/01	132.52	---	3180.27	---	---
	05/10/02	137.20	---	3175.59	---	---
	10/22/02	132.56	---	3180.23	---	---
	05/20/03	132.75	---	3180.04	---	---
	11/24/03	132.35	---	3180.44	---	---
	05/11/04	132.39	---	3180.40	---	---
	11/15/04	132.43	---	3180.36	---	---
	05/17/05	132.26	---	3180.53	---	---
	11/15/05	132.60	---	3180.19	---	---

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

Well ID *TOC Elevation*	Collection Date	Depth to Groundwater (ft TOC)	Casing Diameter (in)	Groundwater Elevation (ft)	Well Depth (ft TOC)	Well Screen Interval (ft bgs)
MW-9A	05/18/98	132.65	2	3179.91	144.15	127-142
3312.56	05/25/99	132.43	---	3180.13	---	---
	02/08/01	132.37	---	3180.19	---	---
	05/10/02	137.20	---	3175.36	---	---
	10/22/02	132.35	---	3180.21	---	---
	05/20/03	132.55	---	3180.01	---	---
	11/24/03	132.10	---	3180.46	---	---
	05/11/04	132.14	---	3180.42	---	---
	11/15/04	132.19	---	3180.37	---	---
	05/17/05	132.06	---	3180.50	---	---
	11/15/05	132.35	---	3180.21	---	---
MW-10	05/18/98	137.18	2	3182.12	164.15	151-166
3319.30	05/25/99	137.04	---	3182.26	---	---
	02/08/01	136.88	---	3182.42	---	---
	05/10/02	136.80	---	3182.50	---	---
	10/22/02	136.91	---	3182.39	---	---
	05/20/03	137.13	---	3182.17	---	---
	11/24/03	136.71	---	3182.59	---	---
	05/11/04	136.77	---	3182.53	---	---
	11/15/04	136.82	---	3182.48	---	---
	05/17/05	136.34	---	3182.96	---	---
	11/15/05	136.95	---	3182.35	---	---
MW-11	03/23/99	131.12	4	3178.57	165.71	125-165
3309.69	05/25/99	130.91	---	3178.78	---	---
	02/08/01	130.11	---	3179.58	---	---
	05/10/02	135.60	---	3174.09	---	---
	10/22/02	130.76	---	3178.93	---	---
	05/20/03	131.03	---	3178.66	---	---
	11/24/03	130.57	---	3179.12	---	---
	05/11/04	130.61	---	3179.08	---	---
	11/15/04	130.65	---	3179.04	---	---
	05/17/05	131.56	---	3178.13	---	---
	11/15/05	130.70	---	3178.99	---	---

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

Well ID *TOC Elevation*	Collection Date	Depth to Groundwater (ft TOC)	Casing Diameter (in)	Groundwater Elevation (ft)	Well Depth (ft TOC)	Well Screen Interval (ft bgs)
MW-12	05/10/02	139.57	2	3188.86	165.50	156.68-171.65
3328.43	10/22/02	139.73	---	3188.70	---	---
	05/20/03	139.72	---	3188.71	---	---
	11/24/03	139.69	---	3188.74	---	---
	05/11/04	139.64	---	3188.79	---	---
	11/15/04	139.68	---	3188.75	---	---
	05/17/05	139.58	---	3188.85	---	---
	11/15/05	139.83	---	3188.60	---	---
MW-13	05/10/02	144.45	2	3194.04	167.40	156.68-171.65
3338.49	10/22/02	144.49	---	3194.00	---	---
	05/20/03	144.9	---	3193.59	---	---
	11/24/03	144.37	---	3194.12	---	---
	05/11/04	144.47	---	3194.02	---	---
	11/15/04	144.56	---	3193.93	---	---
	05/17/05	144.36	---	3194.13	---	---
	11/15/05	144.60	---	3193.89	---	---
RW-1	05/21/99	134.32	5	3184.18	171.25	130.41-174.37
3318.50	05/25/99	134.24	---	3184.26	---	---
	02/08/01	134.15	---	3184.35	---	---
	05/10/02	134.00	---	3184.50	---	---
	10/22/02	134.17	---	3184.33	---	---
	05/20/03	134.40	---	3184.10	---	---
	11/24/03	134.02	---	3184.48	---	---
	05/11/04	134.01	---	3184.49	---	---
	11/15/04	134.06	---	3184.44	---	---
	05/17/05	133.97	---	3184.53	---	---
	11/15/05	134.20	---	3184.30	---	---

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

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

Notes:

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

TABLE II

GROUNDWATER ANALYTICAL SUMMARY

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

COOPER-JAL UNIT SOUTH INJECTION STATION

LEA COUNTY, NEW MEXICO

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

TABLE II

GROUNDWATER ANALYTICAL SUMMARY

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

COOPER-JAL UNIT SOUTH INJECTION STATION

LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Carbonate Alkalinity	Bicarbonate Alkalinity	Total Alkalinity	Chloride	Fluoride	Nitrate - N	Sulfate	Calcium	Magnesium	Potassium	Sodium	TDS
New Mexico Water Quality Control Commission Groundwater Standard					250	1.60	10	600					1,000
MW-3	2/27/98	--	--	190	452	--	--	406	200.0	50.0	11.00	237.0	1,500
	2/14/01	<1.0	158	158	34	1.60	2.40	100	54.5	19.0	7.61	48.6	440
	5/17/02	<1.0	158	158	30.6	1.56	2.35	102	55.6	18.4	5.04	50.0	433
	10/23/02	--	--	--	35.4	--	--	104	--	--	--	--	419
	5/22/03	<1.0	156	156	30.6	1.17	2.25	96.3	53.2	17.8	5.39	54.6	435
	11/25/03	<1.0	160	160	31.4	1.35	2.30	103	46.5	18.0	5.19	51.7	440
	5/12/04	<1.00	164	164	32.3	1.20	2.38	101	52.2	16.8	4.77	47.5	448
	11/16/04	<1.00	166	166	35.1	1.53	2.77	95.4	56.3	23.6	12.70	58.9	424
	11/17/05	<10.0	171	171	96.3	0.97	2.2	108 D1	89.200	22.100	8.870	93.400	840 N
MW-4	2/27/98	--	--	230	12,000	--	--	1,300	1,700.0	880.0	48.00	5,300.0	22,000
	4/9/98	--	--	240	13,000	--	--	1,500	1,740.0	840.0	42.00	5,400.0	23,000
	2/14/01	<1.0	232	232	15,000	1.80	6.80	1,500	--	--	--	--	29,000
	5/17/02	<1.0	232	232	11,300	2.01	6.09	1,380	1,610.0	814.0	60.90	4,310.0	22,600
	10/23/02	--	--	--	11,300	--	--	1,320	--	--	--	--	23,200
	5/22/03	<1.0	220	220	11,300	<10.00	12.30	1,370	1,450.0	659.0	47.30	4,140.0	62,500
	11/26/03	<1.0	218	218	12,100	<8.00	12.30	1,400	1830.0	889.0	62.00	4,620.0	54,450
	5/11/04	<1.00	214	214	14,200	<8.00	8.97	1,560	1800.0	829.0	60.70	4,850.0	65,450
	11/17/04	<1.00	222	222	13,600	<20.00	31.50	1,410	2020.0	972.0	73.60	5,900.0	25,200
	11/17/05	<10.0	181	181	9,440 D1	0.82	0.20	45.8 D1	849.000	387.000	28.100	3,880.000	24,300 N
MW-4A	2/27/98	--	--	180	1,600	--	--	410	470.0	130.0	11.00	620.0	3,300
	2/14/01	<1.0	154	154	1,600	1.40	2.80	210	--	--	--	--	4,000
	5/15/02	<1.0	156	156	377	<1.00	2.23	121	200.0	49.5	10.30	125.0	1,610
	10/23/02	--	--	--	478	--	--	114	--	--	--	--	1,430
	5/22/03	<1.0	154	154	844	<1.00	2.43	160	279.0	58.9	10.10	248.0	2,200
	11/26/03	<1.0	158	158	1,060	<4.00	5.82	182	337.0	79.3	15.20	329.0	2,585
	5/11/04	<1.00	156	156	984	<2.00	3.30	179	297.0	66.5	11.50	279.0	2,300
	11/17/04	<1.00	164	164	1,110	<2.00	4.62	186	369.0	75.4	14.90	413.0	2,235
	11/16/05	<10.0	181	181	827 D1	<0.5	2.2	160 D1	335.000	64.400	9.230	382.000	2,340 N

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

Sample ID	Sample Date	Carbonate Alkalinity	Bicarbonate Alkalinity	Total Alkalinity	Chloride	Fluoride	Nitrate - N	Sulfate	Calcium	Magnesium	Potassium	Sodium	TDS
New Mexico Water Quality Control Commission Groundwater Standard					250	1.60	10	600					1,000
MW-5	2/26/98	--	--	180	6,600	--	--	910	1,400.0	470.0	31.00	2,400.0	12,000
	2/14/01	<1.0	166	166	7,700	1.80	4.10	910	--	--	--	--	18,000
	5/17/02	<1.0	156	156	4,040	1.53	4.56	586	757.0	319.0	60.90	1,260.0	8,340
	10/23/02	--	--	--	3,900	--	--	94.8	--	--	--	--	422
	5/22/03	<1.0	158	158	3,170	<4.00	6.52	550	644.0	215.0	49.90	1,240.0	7,860
	11/25/03	<1.0	168	168	5,120	<4.00	6.77	739	978.0	365.0	54.90	1,680.0	11,940
	5/11/04	<1.00	160	160	6,760	<3.00	4.65	1,030	1,180.0	417.0	40.30	2,120.0	20,380
	11/17/04	<1.00	172	172	6,750	<10	16.60	786	1,210.0	486.0	40.60	2,300.0	11,980
	11/17/05	<10.0	161	161	2,140 D1	0.79	0.16	334 D1	339.000	126.000	10.800	791.000	7,120 N
MW-5A	2/26/98	--	--	170	190	--	--	180	107.0	23.0	3.50	117.0	740
	2/15/01	<1.0	164	164	140	1.20	2.10	130	90.2	27.9	8.70	74.6	670
	5/15/02	<1.0	182	182	53.5	<1.00	2.23	84.4	63.2	16.1	4.69	43.6	475
	10/23/02	--	--	--	50	--	--	616	--	--	--	--	8,670
	5/22/03	<1.0	158	158	32.5	<1.00	2.10	69.9	55.5	13.8	3.41	41.5	416
	11/25/03	<1.0	332	332	34.1	1.05	2.20	75.5	60.9	14.6	4.08	45.0	422
	5/11/04	<1.00	164	164	38.8	<1.00	2.25	75.8	60.9	15.0	3.40	43.2	484
	11/17/04	<1.00	152	152	39.6	1.37	2.66	74.3	58.1	13.6	3.83	48.5	430
	11/16/05	<10.0	191	191	40.2	0.82	2.1	75.2 D1	176.000	17.800	4.220	45.300	570 N
MW-6	2/26/98	--	--	200	260	--	--	400	180.0	44.0	6.20	205.0	1,200
	2/14/01	<1.0	158	158	59	1.70	2.20	99	67.5	22.1	7.67	52.3	470
	5/17/02	<1.0	162	162	37.8	1.62	2.14	99.3	63.1	19.6	5.12	48.6	427
	10/23/02	--	--	--	46.1	--	--	109	--	--	--	--	331
	5/22/03	<1.0	162	162	40.3	1.24	2.13	94.4	61.7	17.4	4.23	51.9	464
	11/25/03	<1.0	154	154	53.6	1.40	2.18	98	53.6	18.7	4.97	51.7	482
	5/11/04	<1.00	156	156	54.4	1.23	2.19	97	59.0	18.1	4.22	47.8	506
	11/16/04	<1.00	162	162	57.9	1.64	2.68	99.8	66.6	19.6	5.16	57.0	464
	11/17/05	<10.0	201	201	101	0.97	0.35	97.8 D1	103.000	20.200	4.100	59.100	730 N

TABLE II

GROUNDWATER ANALYTICAL SUMMARY

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

COOPER-JAL UNIT SOUTH INJECTION STATION

LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Carbonate Alkalinity	Bicarbonate Alkalinity	Total Alkalinity	Chloride	Fluoride	Nitrate - N	Sulfate	Calcium	Magnesium	Potassium	Sodium	TDS
New Mexico Water Quality Control Commission Groundwater Standard					250	1.60	10	600					1,000
MW-7	5/14/98	--	--	230	430	--	--	340	214.0	66.0	13.00	165.0	1,200
	2/14/01	<1.0	150	150	510	1.70	2.40	150	--	--	--	--	1,500
	5/16/02	<1.0	150	150	75.7	1.59	2.27	97.4	68.6	23.2	6.63	54.3	501
	10/22/02	--	--	--	88.6	--	--	109	--	--	--	--	490
	5/22/03	<1.0	140	140	173	1.17	2.14	88.9	85.5	28.2	6.18	64.6	631
	11/26/03	<1.0	136	136	189	1.29	2.23	93.5	95.7	31.0	7.91	63.6	704
	5/13/04	<1.00	130	130	267	1.11	2.18	94.7	107.0	34.7	6.59	62.9	914
	11/16/04	<1.00	130	130	367	1.49	2.72	97.3	142.0	49.3	8.61	87.9	870
	11/17/05	<10.0	121	121	456 D1	0.53	0.28	106 D1	412.000	64.700	12.100	100.000	1,440 N
MW-8	5/13/98	--	--	200	270	--	--	390	190.0	60.0	12.00	170.0	1,200
	2/14/01	<1.0	156	156	49	1.80	2.50	100	59.9	21.5	7.84	52.9	400
	5/16/02	<1.0	158	158	32.9	1.57	2.33	101	56.6	19.2	5.20	49.5	432
	10/22/02	--	--	--	40.8	--	--	104	--	--	--	--	392
	5/22/03	8	160	168	33.2	1.40	2.32	98.3	53.9	18.3	9.31	46.4	410
	11/26/03	<1.0	142	142	31.7	1.59	2.38	95.6	55.3	18.2	5.31	50.2	443
	5/12/04	<1.00	154	154	36.3	1.39	2.38	101	53.0	17.3	4.56	48.1	435
	11/16/04	<1.00	170	170	39.8	1.94	2.94	103	57.8	18.6	5.63	56.4	435
	5/17/05	4	152	156	41	1.64	2.94	105	61.0	18.6	5.78	47.3	434
	11/17/05	<10.0	171	171	113	1.1	<0.05	115 D1	83.400	21.700	5.740	102.000	750 N
MW-9	5/14/98	--	--	190	350	--	--	470	207.0	61.0	12.00	200.0	1,300
	2/15/01	<1.0	156	156	35	2.60	2.40	110	60.4	19.8	7.47	47.0	430
	5/16/02	<1.0	160	160	31.7	2.22	2.28	99.4	60.8	17.6	5.32	50.1	440
	10/23/02	--	--	--	39	--	--	102	--	--	--	--	436
	5/22/03	<1.0	160	160	31	1.75	2.19	93.3	52.2	15.8	4.75	50.2	455
	11/26/03	<1.0	150	150	31.8	1.99	2.34	99.8	57.7	16.6	4.69	46.3	452
	5/12/04	<1.00	164	164	33.6	1.79	2.29	99.2	54.8	16.0	4.27	43.5	467
	11/16/04	8	154	162	367	1.49	2.72	97.3	63.2	17.8	5.59	55.5	433
	5/17/05	4	154	154	44.2	2.43	3.05	117	58.8	16.7	5.94	44.1	434
	11/17/05	<10.0	161	161	83.5	1.3	0.14	111 D1	149.000	26.200	7.430	80.400	790 N

TABLE II

GROUNDWATER ANALYTICAL SUMMARY

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY

COOPER-JAL UNIT SOUTH INJECTION STATION

LEA COUNTY, NEW MEXICO

Sample ID	Sample Date	Carbonate Alkalinity	Bicarbonate Alkalinity	Total Alkalinity	Chloride	Fluoride	Nitrate - N	Sulfate	Calcium	Magnesium	Potassium	Sodium	TDS
New Mexico Water Quality Control Commission Groundwater Standard					250	1.60	10	600					1,000
MW-9A	5/14/98	--	--	280	600	--	--	770	338.0	96.0	12.00	334.0	2,200
	2/15/01	<1.0	142	142	85	1.40	2.20	71	71.6	19.2	6.94	46.0	400
	5/15/02	<1.0	136	136	148	<1.00	2.18	65.3	62.9	16.1	4.62	46.8	445
	10/23/02	--	--	--	168	--	--	75.5	--	--	--	--	651
	5/22/03	<1.0	126	126	207	<1.00	2.09	62.1	102.0	25.2	4.80	55.7	672
	11/26/03	<1.0	118	118	216	1.14	2.26	62.7	107.0	25.1	5.31	53.2	648
	5/12/04	<1.00	122	122	242	<1.00	2.10	64.7	105.0	26.2	5.11	26.2	950
	11/16/04	<1.00	114	114	296	1.24	2.74	67.5	130.0	33.1	6.24	70.3	826
	5/17/05	<1.00	112	112	354	1.04	2.85	77.1	131.0	31.7	6.39	60.5	828
	11/17/05	<10.0	121	121	310 D1	0.82	0.31	74.7 D1	337.000	41.400	8.080	74.500	1,520 N
MW-10	5/14/98	--	--	240	360	--	--	450	211.0	62.0	11.00	190.0	1,400
	2/15/01	<1.0	140	140	190	2.00	2.30	97	108.0	32.3	8.20	61.0	660
	5/17/02	<1.0	152	152	204	1.93	2.19	99.1	109.0	31.7	7.60	62.4	713
	10/22/02	--	--	--	213	--	--	108	--	--	--	--	758
	5/22/03	<1.0	152	152	213	1.45	2.17	96.6	109.0	29.9	8.65	74.2	764
	11/26/03	<1.0	152	152	220	1.54	2.26	103	120.0	35.7	6.96	64.0	752
	5/13/04	<1.00	158	158	232	1.39	2.23	102	114.0	31.6	5.95	57.2	802
	11/17/04	<1.00	170	170	245	1.73	2.78	104	121.0	35.7	7.07	70.3	764
	5/17/05	<1.00	150	150	233	1.77	2.80	106	113.0	32.3	6.83	60.2	776
	11/17/05	<10.0	151	151	205 D1	1.2	0.26	111 D1	482.000	47.400	13.100	82.400	970 N
MW-11	1/22/99	30	<1.0	30	46	2.30	4.20	94	33.0	7.0	9.10	58.0	370
	2/15/01	<1.0	156	156	37	2.40	2.40	120	64.0	19.1	7.83	50.1	360
	5/16/02	<1.0	160	160	31.9	2.13	2.33	98.8	63.5	17.2	4.83	47.0	444
	10/23/02	--	--	--	37.2	--	--	102	--	--	--	--	447
	5/22/03	12	154	166	32.3	1.74	2.28	96.7	62.3	0.0	4.63	47.6	437
	11/26/03	<1.0	160	160	32.4	1.83	2.23	96.4	59.2	16.6	4.67	48.6	448
	5/12/04	<1.00	164	164	34.6	1.71	2.38	97.7	54.8	15.7	4.28	46.2	457
	11/16/04	<1.00	160	160	39	2.17	2.81	100	65.2	16.8	5.14	54.3	454
	5/17/05	4	158	162	43.1	1.87	2.82	94.6	68.4	16.9	6.45	44.0	429
	11/17/05	<10.0	161	161	58.1	1.5	2.1	91.3 D1	75.000	17.700	4.550	64.700	700 N

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

Sample ID	Sample Date	Carbonate Alkalinity	Bicarbonate Alkalinity	Total Alkalinity	Chloride	Fluoride	Nitrate - N	Sulfate	Calcium	Magnesium	Potassium	Sodium	TDS
New Mexico Water Quality Control Commission Groundwater Standard					250	1.60	10	600					1,000
MW-12	5/15/02	<1.0	160	160	58.3	1.09	2.44	91.3	53.5	15.9	5.52	50.3	462
	10/23/02	--	--	--	65	--	--	102	--	--	--	--	477
	5/22/03	<1.0	148	148	91.1	1.04	2.30	87.7	74.2	21.0	4.89	57.6	516
	11/25/03	<1.0	142	142	93.1	1.18	2.36	90.9	74.7	20.9	5.41	52.5	548
	5/12/04	<1.00	458	458	72.9	1.04	2.35	86.7	58.1	19.0	5.92	51.8	489
	11/15/04	<1.00	184	184	79.8	1.39	2.83	88.8	59.7	21.5	16.50	77.4	512
	11/17/05	<10.0	151	151	109	0.93	0.12	94.6 D1	193.000	26.600	13.400	87.500	700 N
MW-13	5/13/02	<1.0	100	100	517	<1.00	1.61	437	116.0	76.0	19.40	269.0	1,596
	10/23/02	--	--	--	549	--	--	370	--	--	--	--	1,740
	5/22/03	<1.0	186	186	944	<2.00	2.33	361	289.0	101.0	15.30	458.0	3,060
	11/25/03	<1.0	226	226	1,460	<2.00	2.22	372	369.0	117.0	20.00	478.0	3,445
	5/12/04	<1.00	234	234	1,550	<4.00	4.58	369	384.0	114.0	18.60	485.0	4,240
	11/15/04	<1.00	226	226	1,870	<2.00	4.92	384	510.0	164.0	16.50	627.0	3,600
	11/17/05	<10.0	201	201	722 D1	1.0	2.5	206 D1	786.000	91.600	19.700	276.000	2,350 N
RW-1	5/27/99	0	224	224	8,700	2.70	7.00	840	679.0	521.0	34.00	3290	14,000
	5/22/03	<1.0	190	190	2,410	2.46	4.23	345	162.0	145.0	25.40	1,180.0	5,260
	11/26/03	<1.0	184	184	1,990	<4.00	20.00	324	199.0	147.0	38.60	1,080.0	5,050
	5/11/04	<1.00	148	148	491	1.32	2.65	109	66.3	23.4	11.20	252.0	1,224
	11/17/04	<1.00	160	160	633	1.65	3.23	121	89.7	43.5	18.00	382.0	1,314
	11/17/05	<10.0	221	221	895 D1	1.0	1.4	166 D1	122.000	70.900	8.400	493.000	2,380 N
RW-2	5/22/03	324	<4.00	780	1,580	<2.00	2.43	23.9	1,060.0	<0.500	20.20	258.0	4,310
	11/26/03	64	<4.00	704	1,480	<5.00	5.81	38.3	988.0	<0.500	23.80	240.0	3,535
	5/13/04	36.0	<4.00	578	1,770	<3.00	3.19	67	898.0	<0.500	21.60	260.0	4,175
	11/17/04	104.0	<4.00	692	2,280	<10.0	<10.0	116	1180.0	<0.500	18.50	415.0	3,915
	11/17/05	281	<10.0	422	1,770 D1	0.89	0.60	175 D1	861.000	16.600	13.100	361.000	7,350 N

Notes:

1. Shaded cells indicate New Mexico Water Quality Control Commission (NMWQCC) exceedance.
2. Results shown in mg/L.
3. N - See narrative in laboratory report for a detailed explanation.
4. D1 - The analysis was performed at a dilution due to the high analyte concentration.

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
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Analytical and Quality Control Report

Cindy Crain
Larson and Associates, Inc.
P. O. Box 50685
Midland, Tx 79710

Report Date: May 31, 2005

Work Order: 5051915

Project Name: Cooper-Jal
Project Number: 0-0113

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
63118	MW-10	water	2005-05-17	13:33	2005-05-19
63119	MW-9A	water	2005-05-17	14:20	2005-05-19
63120	MW-9	water	2005-05-17	14:42	2005-05-19
63121	MW-11	water	2005-05-17	15:10	2005-05-19
63122	MW-8	water	2005-05-17	15:48	2005-05-19
63123	Dup-1	water	2005-05-17	00:00	2005-05-19

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 63118 - MW-10

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18336	Date Analyzed:	2005-05-23	Analyzed By:	RS
Prep Batch:	16141	Sample Preparation:	2005-05-23	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		**150**	mg/L as CaCo3	1	4.00
Total Alkalinity		**150**	mg/L as CaCo3	1	4.00

Sample: 63118 - MW-10

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18435	Date Analyzed:	2005-05-24	Analyzed By:	TP
Prep Batch:	16052	Sample Preparation:	2005-05-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		**113**	mg/L	10	0.500
Dissolved Potassium		**6.83**	mg/L	1	0.500
Dissolved Magnesium		**32.3**	mg/L	1	0.500
Dissolved Sodium		**60.2**	mg/L	1	0.500

Sample: 63118 - MW-10

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18267	Date Analyzed:	2005-05-19	Analyzed By:	WB
Prep Batch:	16082	Sample Preparation:	2005-05-19	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		**233**	mg/L	5	0.500
Fluoride		**1.77**	mg/L	5	0.200
Sulfate		**106**	mg/L	5	0.500

Sample: 63118 - MW-10

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18267	Date Analyzed:	2005-05-19	Analyzed By:	WB
Prep Batch:	16082	Sample Preparation:	2005-05-19	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		**2.80**	mg/L	5	0.200

Sample: 63118 - MW-10

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18329	Date Analyzed:	2005-05-23	Analyzed By:	WB
Prep Batch:	16136	Sample Preparation:	2005-05-20	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		776.0	mg/L	2	10.00

Sample: 63119 - MW-9A

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18336	Date Analyzed:	2005-05-23	Analyzed By:	RS
Prep Batch:	16141	Sample Preparation:	2005-05-23	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		112	mg/L as CaCo3	1	4.00
Total Alkalinity		112	mg/L as CaCo3	1	4.00

Sample: 63119 - MW-9A

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18435	Date Analyzed:	2005-05-24	Analyzed By:	TP
Prep Batch:	16052	Sample Preparation:	2005-05-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		131	mg/L	10	0.500
Dissolved Potassium		6.39	mg/L	1	0.500
Dissolved Magnesium		31.7	mg/L	1	0.500
Dissolved Sodium		60.5	mg/L	1	0.500

Sample: 63119 - MW-9A

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18267	Date Analyzed:	2005-05-19	Analyzed By:	WB
Prep Batch:	16082	Sample Preparation:	2005-05-19	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		354	mg/L	10	0.500
Fluoride		1.04	mg/L	5	0.200
Sulfate		77.1	mg/L	5	0.500

Sample: 63119 - MW-9A

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18267	Date Analyzed:	2005-05-19	Analyzed By:	WB
Prep Batch:	16082	Sample Preparation:	2005-05-19	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		2.85	mg/L	5	0.200

Sample: 63119 - MW-9A

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18330	Date Analyzed:	2005-05-23	Analyzed By:	WB
Prep Batch:	16137	Sample Preparation:	2005-05-20	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		828.0	mg/L	2	10.00

Sample: 63120 - MW-9

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18336	Date Analyzed:	2005-05-23	Analyzed By:	RS
Prep Batch:	16141	Sample Preparation:	2005-05-23	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		4.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		150	mg/L as CaCo3	1	4.00
Total Alkalinity		154	mg/L as CaCo3	1	4.00

Sample: 63120 - MW-9

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18435	Date Analyzed:	2005-05-24	Analyzed By:	TP
Prep Batch:	16052	Sample Preparation:	2005-05-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		58.8	mg/L	1	0.500
Dissolved Potassium		5.94	mg/L	1	0.500
Dissolved Magnesium		16.7	mg/L	1	0.500
Dissolved Sodium		44.1	mg/L	1	0.500

Sample: 63120 - MW-9

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18267	Date Analyzed:	2005-05-19	Analyzed By:	WB
Prep Batch:	16082	Sample Preparation:	2005-05-19	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		44.2	mg/L	5	0.500
Fluoride		2.43	mg/L	5	0.200
Sulfate		117	mg/L	5	0.500

Sample: 63120 - MW-9

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18267	Date Analyzed:	2005-05-19	Analyzed By:	WB
Prep Batch:	16082	Sample Preparation:	2005-05-19	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		3.05	mg/L	5	0.200

Sample: 63120 - MW-9

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18330	Date Analyzed:	2005-05-23	Analyzed By:	WB
Prep Batch:	16137	Sample Preparation:	2005-05-20	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		434.0	mg/L	1	10.00

Sample: 63121 - MW-11

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18337	Date Analyzed:	2005-05-24	Analyzed By:	RS
Prep Batch:	16142	Sample Preparation:	2005-05-24	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		4.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		158	mg/L as CaCo3	1	4.00
Total Alkalinity		162	mg/L as CaCo3	1	4.00

Sample: 63121 - MW-11

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18435	Date Analyzed:	2005-05-24	Analyzed By:	TP
Prep Batch:	16052	Sample Preparation:	2005-05-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		68.4	mg/L	1	0.500
Dissolved Potassium		6.45	mg/L	1	0.500
Dissolved Magnesium		16.9	mg/L	1	0.500
Dissolved Sodium		44.0	mg/L	1	0.500

Sample: 63121 - MW-11

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18267	Date Analyzed:	2005-05-19	Analyzed By:	WB
Prep Batch:	16082	Sample Preparation:	2005-05-19	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		43.1	mg/L	5	0.500
Fluoride		1.87	mg/L	5	0.200
Sulfate		94.6	mg/L	5	0.500

Sample: 63121 - MW-11

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18267	Date Analyzed:	2005-05-19	Analyzed By:	WB
Prep Batch:	16082	Sample Preparation:	2005-05-19	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		2.82	mg/L	5	0.200

Sample: 63121 - MW-11

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18330	Date Analyzed:	2005-05-23	Analyzed By:	WB
Prep Batch:	16137	Sample Preparation:	2005-05-20	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		429.0	mg/L	1	10.00

Sample: 63122 - MW-8

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18337	Date Analyzed:	2005-05-24	Analyzed By:	RS
Prep Batch:	16142	Sample Preparation:	2005-05-24	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00

continued ...

sample 63122 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Carbonate Alkalinity		4.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		152	mg/L as CaCo3	1	4.00
Total Alkalinity		156	mg/L as CaCo3	1	4.00

Sample: 63122 - MW-8

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18438	Date Analyzed:	2005-05-24	Analyzed By:	TP
Prep Batch:	16052	Sample Preparation:	2005-05-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		61.0	mg/L	1	0.500
Dissolved Potassium		5.78	mg/L	1	0.500
Dissolved Magnesium		18.6	mg/L	1	0.500
Dissolved Sodium		47.3	mg/L	1	0.500

Sample: 63122 - MW-8

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18267	Date Analyzed:	2005-05-19	Analyzed By:	WB
Prep Batch:	16082	Sample Preparation:	2005-05-19	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		41.0	mg/L	5	0.500
Fluoride		1.64	mg/L	5	0.200
Sulfate		105	mg/L	5	0.500

Sample: 63122 - MW-8

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18267	Date Analyzed:	2005-05-19	Analyzed By:	WB
Prep Batch:	16082	Sample Preparation:	2005-05-19	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		2.94	mg/L	5	0.200

Sample: 63122 - MW-8

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18330	Date Analyzed:	2005-05-23	Analyzed By:	WB
Prep Batch:	16137	Sample Preparation:	2005-05-20	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		434.0	mg/L	1	10.00

Sample: 63123 - Dup-1

Analysis:	Alkalinity	Analytical Method:	SM 2320B	Prep Method:	N/A
QC Batch:	18337	Date Analyzed:	2005-05-24	Analyzed By:	RS
Prep Batch:	16142	Sample Preparation:	2005-05-24	Prepared By:	RS

Parameter	Flag	RL Result	Units	Dilution	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1	1.00
Bicarbonate Alkalinity		150	mg/L as CaCo3	1	4.00
Total Alkalinity		150	mg/L as CaCo3	1	4.00

Sample: 63123 - Dup-1

Analysis:	Cations	Analytical Method:	S 6010B	Prep Method:	S 3005A
QC Batch:	18438	Date Analyzed:	2005-05-24	Analyzed By:	TP
Prep Batch:	16052	Sample Preparation:	2005-05-20	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
Dissolved Calcium		125	mg/L	10	0.500
Dissolved Potassium		8.31	mg/L	1	0.500
Dissolved Magnesium		34.2	mg/L	1	0.500
Dissolved Sodium		62.5	mg/L	1	0.500

Sample: 63123 - Dup-1

Analysis:	Ion Chromatography	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18267	Date Analyzed:	2005-05-19	Analyzed By:	WB
Prep Batch:	16082	Sample Preparation:	2005-05-19	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Chloride		238	mg/L	5	0.500
Fluoride		1.69	mg/L	5	0.200
Sulfate		108	mg/L	5	0.500

Sample: 63123 - Dup-1

Analysis:	NO3 (IC)	Analytical Method:	E 300.0	Prep Method:	N/A
QC Batch:	18267	Date Analyzed:	2005-05-19	Analyzed By:	WB
Prep Batch:	16082	Sample Preparation:	2005-05-19	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Nitrate-N		2.83	mg/L	5	0.200

Sample: 63123 - Dup-1

Analysis:	TDS	Analytical Method:	SM 2540C	Prep Method:	N/A
QC Batch:	18329	Date Analyzed:	2005-05-23	Analyzed By:	WB
Prep Batch:	16136	Sample Preparation:	2005-05-20	Prepared By:	WB

Parameter	Flag	RL Result	Units	Dilution	RL
Total Dissolved Solids		720.0	mg/L	2	10.00

Method Blank (1) QC Batch: 18267

Parameter	Flag	MDL Result	Units	RL
Nitrate-N		<0.00400	mg/L	0.2

Method Blank (1) QC Batch: 18267

Parameter	Flag	MDL Result	Units	RL
Chloride		<0.0504	mg/L	0.5
Fluoride		<0.0473	mg/L	0.2
Sulfate		<0.450	mg/L	0.5

Method Blank (1) QC Batch: 18329

Parameter	Flag	MDL Result	Units	RL
Total Dissolved Solids		<5.000	mg/L	10

Method Blank (1) QC Batch: 18330

Parameter	Flag	MDL Result	Units	RL
Total Dissolved Solids		<5.000	mg/L	10

Method Blank (1) QC Batch: 18336

Parameter	Flag	MDL Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 18337

Parameter	Flag	MDL Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.00	mg/L as CaCo3	4
Total Alkalinity		<4.00	mg/L as CaCo3	4

Method Blank (1) QC Batch: 18435

Parameter	Flag	MDL Result	Units	RL
Dissolved Calcium		<0.102	mg/L	0.5
Dissolved Potassium		<0.0454	mg/L	0.5
Dissolved Magnesium		<0.110	mg/L	0.5
Dissolved Sodium		<0.0114	mg/L	0.5

Method Blank (1) QC Batch: 18438

Parameter	Flag	MDL Result	Units	RL
Dissolved Calcium		<0.102	mg/L	0.5
Dissolved Potassium		<0.0454	mg/L	0.5
Dissolved Magnesium		<0.110	mg/L	0.5
Dissolved Sodium		<0.0114	mg/L	0.5

Duplicate (1) QC Batch: 18329

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	778.0	720.0	mg/L	2	8	14.9

Duplicate (1) QC Batch: 18330

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids	2495	2470	mg/L	1	1	14.9

Duplicate (1) QC Batch: 18336

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Carbonate Alkalinity	4.00	4.00	mg/L as CaCo3	1	0	20
Bicarbonate Alkalinity	148	150	mg/L as CaCo3	1	1	20
Total Alkalinity	152	154	mg/L as CaCo3	1	1	4.6

Duplicate (1) QC Batch: 18337

Param	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity	<1.00	<1.00	mg/L as CaCo3	1	0	20
Carbonate Alkalinity	12.0	12.0	mg/L as CaCo3	1	0	20
Bicarbonate Alkalinity	330	324	mg/L as CaCo3	1	2	20
Total Alkalinity	342	336	mg/L as CaCo3	1	2	4.6

Laboratory Control Spike (LCS-1) QC Batch: 18267

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	2.52	2.53	mg/L	1	2.50	<0.00400	101	0	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 18267

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	12.4	12.3	mg/L	1	12.5	<0.0504	99	1	90 - 110	20
Fluoride	2.46	2.47	mg/L	1	2.50	<0.0473	98	0	90 - 110	20
Sulfate	12.6	12.6	mg/L	1	12.5	<0.450	101	0	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 18435

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	49.6	50.7	mg/L	1	50.0	<0.102	99	2	85 - 115	20
Dissolved Potassium	50.6	50.9	mg/L	1	50.0	<0.0454	101	1	85 - 115	20
Dissolved Magnesium	47.0	48.0	mg/L	1	50.0	<0.110	94	2	85 - 115	20

continued ...

control spikes continued ...

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Sodium	47.9	49.3	mg/L	1	50.0	<0.0114	96	3	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1) QC Batch: 18438

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	49.6	50.7	mg/L	1	50.0	<0.102	99	2	85 - 115	20
Dissolved Potassium	50.6	50.9	mg/L	1	50.0	<0.0454	101	1	85 - 115	20
Dissolved Magnesium	47.0	48.0	mg/L	1	50.0	<0.110	94	2	85 - 115	20
Dissolved Sodium	47.9	49.3	mg/L	1	50.0	<0.0114	96	3	85 - 115	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 18267 Spiked Sample: 63123

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Nitrate-N	28.7	28.9	mg/L	10	2.50	2.83	103	1	78.8 - 116	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 18267 Spiked Sample: 63123

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Chloride	345	344	mg/L	10	12.5	238	86	0	70.7 - 124	20
Fluoride	27.1	25.0	mg/L	10	2.50	1.69	102	8	70.9 - 126	20
Sulfate	233	233	mg/L	10	12.5	108	100	0	82.5 - 123	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 18435 Spiked Sample:

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	[1,2]	581	563	mg/L	10	50.0	533	10	3	75 - 125	20
Dissolved Potassium	[3,4]	270	255	mg/L	10	50.0	198	14	6	75 - 125	20
Dissolved Magnesium	[5,6]	1830	1850	mg/L	100	50.0	1860	1	1	75 - 125	20
Dissolved Sodium	[7,8]	5410	5560	mg/L	100	50.0	6010	-12	3	75 - 125	20

[1]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[2]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[3]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[4]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[5]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[6]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[7]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.
[8]Matrix spike recoveries out of control limits due to matrix spike being diluted out. Use LCS/LCSD to demonstrate analysis is under control.

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) QC Batch: 18438 Spiked Sample: 63122

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Dissolved Calcium	110	112	mg/L	1	50.0	61	98	2	75 - 125	20
Dissolved Potassium	61.0	62.2	mg/L	1	50.0	5.78	110	2	75 - 125	20
Dissolved Magnesium	72.7	73.4	mg/L	1	50.0	18.6	108	1	75 - 125	20
Dissolved Sodium	96.3	97.8	mg/L	1	50.0	47.3	98	2	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Standard (ICV-1) QC Batch: 18267

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.53	101	90 - 110	2005-05-19

Standard (ICV-1) QC Batch: 18267

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.6	101	90 - 110	2005-05-19
Fluoride		mg/L	2.50	2.57	103	90 - 110	2005-05-19
Sulfate		mg/L	12.5	12.7	102	90 - 110	2005-05-19

Standard (CCV-1) QC Batch: 18267

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		mg/L	2.50	2.53	101	90 - 110	2005-05-19

Standard (CCV-1) QC Batch: 18267

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.5	100	90 - 110	2005-05-19
Fluoride		mg/L	2.50	2.56	102	90 - 110	2005-05-19
Sulfate		mg/L	12.5	12.6	101	90 - 110	2005-05-19

Standard (ICV-1) QC Batch: 18329

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1003	100	90 - 110	2005-05-23

Standard (CCV-1) QC Batch: 18329

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1013	101	90 - 110	2005-05-23

Standard (ICV-1) QC Batch: 18330

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1013	101	90 - 110	2005-05-23

Standard (CCV-1) QC Batch: 18330

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1005	100	90 - 110	2005-05-23

Standard (ICV-1) QC Batch: 18336

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	240	96	90 - 110	2005-05-23

Standard (CCV-1) QC Batch: 18336

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 200	2005-05-23
Carbonate Alkalinity		mg/L as CaCo3	0.00	<1.00		0 - 200	2005-05-23
Bicarbonate Alkalinity		mg/L as CaCo3	0.00	<4.00		0 - 200	2005-05-23
Total Alkalinity		mg/L as CaCo3	250	242	97	90 - 110	2005-05-23

Standard (ICV-1) QC Batch: 18337

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	242	97	90 - 110	2005-05-24

Standard (CCV-1) QC Batch: 18337

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	238	95	90 - 110	2005-05-24

Standard (ICV-1) QC Batch: 18435

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	51.5	103	90 - 110	2005-05-24
Dissolved Potassium		mg/L	50.0	51.5	103	90 - 110	2005-05-24
Dissolved Magnesium		mg/L	50.0	50.0	100	90 - 110	2005-05-24
Dissolved Sodium		mg/L	50.0	50.8	102	90 - 110	2005-05-24

Standard (CCV-1) QC Batch: 18435

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	54.9	110	90 - 110	2005-05-24
Dissolved Potassium		mg/L	50.0	51.9	104	90 - 110	2005-05-24
Dissolved Magnesium		mg/L	50.0	52.0	104	90 - 110	2005-05-24
Dissolved Sodium		mg/L	50.0	50.0	100	90 - 110	2005-05-24

Standard (ICV-1) QC Batch: 18438

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	51.5	103	90 - 110	2005-05-24
Dissolved Potassium		mg/L	50.0	51.5	103	90 - 110	2005-05-24
Dissolved Magnesium		mg/L	50.0	50.0	100	90 - 110	2005-05-24
Dissolved Sodium		mg/L	50.0	50.8	102	90 - 110	2005-05-24

Standard (CCV-1) QC Batch: 18438

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	55.0	110	90 - 110	2005-05-24
Dissolved Potassium		mg/L	50.0	50.8	102	90 - 110	2005-05-24
Dissolved Magnesium		mg/L	50.0	52.0	104	90 - 110	2005-05-24
Dissolved Sodium		mg/L	50.0	47.0	94	90 - 110	2005-05-24

5051915

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc. Environmental Consultants
Fax: 432-687-0456
432-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME:	SITE MANAGER:
ChevTex	Cindy Crain
PROJECT NO.:	PROJECT NAME:
0-0113	Cooper Jal
PAGE 1 OF 1	LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	PARAMETERS/METHOD NUMBER: CATIONS	ANIONS	TDS	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
5/17/05	1333	✓			MW10 63118	1	1	1	1		
	1420				MW9A 119						
	1442				MW9 20						
	1510				MW11 21						
	1548				MW8 22						
5/17/05					DUP1 23						

SAMPLED BY: (Signature)	DATE: 5/17/05 TIME: 1600
RELINQUISHED BY: (Signature)	DATE: 5/18/05 TIME: 1115
RECEIVED BY: (Signature)	DATE: 5/18/05 TIME: 1115
RELINQUISHED BY: (Signature)	DATE: 5/18/05 TIME: 1130
RECEIVED BY: (Signature)	DATE: 5/18/05 TIME: 10:56

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

COMMENTS:

TURNAROUND TIME NEEDED

RECEIVING LABORATORY:
ADDRESS:
CITY: STATE: ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: TIME:

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

SAMPLE CONDITION WHEN RECEIVED:

LA CONTACT PERSON:

SAMPLE TYPE:

QS/1344578 7 samples #5

Report Date: May 31, 2005
0-0113

Work Order: 5051915
Cooper-Jal

Page Number: 16 of 16

63118 505915

CHAIN—OF—CUSTODY RECORD

Larson & Associates, Inc.
Environmental Consultants
Fax: 432-687-0456
432-687-0901
507 N. Marienfeld, Ste. 202 • Midland, TX 79701

CLIENT NAME: ChevTex
SITE MANAGER: Cindy Crain
PROJECT NO.: 0-0113
PROJECT NAME: Cooper Jal
PAGE 1 OF 1
LAB. PO #

DATE	TIME	WATER	SOIL	OTHER	SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS	CATIONS	ANIONS	TDS	LAB. I.D. NUMBER (LAB USE ONLY)	REMARKS (I.E., FILTERED, UNFILTERED, PRESERVED, UNPRESERVED, GRAB COMPOSITE)
5/17/05	1333	✓			MW10	63118	1	1	1	1		
|	1420	|			MW9A	119	|	|	|	|		
|	1442	|			MW9	20	|	|	|	|		
|	1510	|			MW11	21	|	|	|	|		
|	1548	|			MW8	22	|	|	|	|		
5/17/05		|			Dup1	23	|	|	|	|		

SAMPLED BY: (Signature) [signature] DATE: 5/17/05 TIME: 1600

RELINQUISHED BY: (Signature) [signature] DATE: 5/18/05 TIME: 1115

RECEIVED BY: (Signature) Helen Shelton DATE: 5/18/05 TIME: 1115

RELINQUISHED BY: (Signature) Helen Shelton DATE: 5/18/05 TIME: 1130

RECEIVED BY: (Signature) [signature] DATE: 5-19-05 TIME: 10:56

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER: Lone Star

COMMENTS:

TURNAROUND TIME NEEDED

WHITE – RECEIVING LAB
YELLOW – RECEIVING LAB (TO BE RETURNED TO LA AFTER RECEIPT)
PINK – PROJECT MANAGER
GOLD – QA/QC COORDINATOR

RECEIVING LABORATORY: Trace Analysis
ADDRESS:
CITY: Lubbock STATE: ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: TIME:

SAMPLE CONDITION WHEN RECEIVED:

LA CONTACT PERSON:

SAMPLE TYPE:

QS P1394578 7 samples HS

5/3 [illegible]

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New Orleans Laboratory

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LELAP # 02006

December 12, 2005

Luke Markham
CRA
2135 S. Loop 250 West
Midland, TX 79703

RE: Project: 2055621
RE: Project ID: COOPER-JAL/039123

Dear Luke Markham:

Enclosed are the analytical results for sample(s) received by the laboratory on November 22, 2005. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Cindy Olavesen

Cindy Olavesen

ACCREDITED IN ACCORDANCE WITH nelac

REPORT OF LABORATORY ANALYSIS

Pace Analytical 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

Report of Laboratory Analysis

Project Number: 2055621

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New Orleans Laboratory

Sample Cross Reference Report

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

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client: CRA

Project: COOPER-JAL/039123

Project No.: 2055621

Sample ID	Lab ID	Matrix	Collection Date/Time		Received Date/Time	
MW-11	20414660	Water	11/17/2005	16:54	11/22/2005	09:10
MW-13	20414661	Water	11/17/2005	15:10	11/22/2005	09:10
MW-1	20414662	Water	11/16/2005	17:00	11/22/2005	09:10
MW-2A	20414663	Water	11/16/2005	14:30	11/22/2005	09:10
MW-4A	20414664	Water	11/16/2005	15:35	11/22/2005	09:10
MW-5A	20414665	Water	11/16/2005	15:30	11/22/2005	09:10
MW-2	20414666	Water	11/16/2005	16:30	11/22/2005	09:10
MW-3	20414668	Water	11/17/2005	15:50	11/22/2005	09:10
RW-1	20414670	Water	11/17/2005	17:22	11/22/2005	09:10
DUP-1	20414671	Water	11/17/2005		11/22/2005	09:10
MW-4	20414740	Water	11/17/2005	11:34	11/22/2005	09:10
MW-5	20414741	Water	11/17/2005	11:07	11/22/2005	09:10
MW-7	20414742	Water	11/17/2005	12:02	11/22/2005	09:10
RW-2	20414743	Water	11/17/2005	12:38	11/22/2005	09:10
MW-6	20414744	Water	11/17/2005	10:35	11/22/2005	09:10
MW-10	20414745	Water	11/17/2005	13:10	11/22/2005	09:10
MW-9	20414746	Water	11/17/2005	13:39	11/22/2005	09:10
MW-8	20414747	Water	11/17/2005	14:30	11/22/2005	09:10
MW-9A	20414748	Water	11/17/2005	14:00	11/22/2005	09:10
MW-12	20414749	Water	11/17/2005	16:17	11/22/2005	09:10

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Phone: 504.469.0333
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LELAP # 02006

Client ID: MW-11 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414660 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66679	1	75000		ug/L	500.	22-Nov-05	22-Nov-05 22:33	KJR (1)	
Magnesium	EPA 6010	66679	1	17700		ug/L	500.	22-Nov-05	22-Nov-05 22:33	KJR (1)	
Potassium	EPA 6010	66679	1	4550		ug/L	500.	22-Nov-05	22-Nov-05 22:33	KJR (1)	
Sodium	EPA 6010	66679	1	64700		ug/L	500.	22-Nov-05	22-Nov-05 22:33	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.
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.

12/12/2005 12:16:54

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LELAP # 02006

Client ID: MW-13 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414661 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66679	1	786000		ug/L	500.	22-Nov-05	22-Nov-05 22:38	KJR (1)	
Magnesium	EPA 6010	66679	1	91600		ug/L	500.	22-Nov-05	22-Nov-05 22:38	KJR (1)	
Potassium	EPA 6010	66679	1	19700		ug/L	500.	22-Nov-05	22-Nov-05 22:38	KJR (1)	
Sodium	EPA 6010	66679	1	276000		ug/L	500.	22-Nov-05	22-Nov-05 22:38	KJR (1)	

4 parameter(s) reported

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LELAP # 02006

Client ID: MW-1 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414662 **Project No.:** 2055621

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

Collected: 11/16/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66679	1	85400		ug/L	500.	22-Nov-05	22-Nov-05	22:06 KJR (1)	
Magnesium	EPA 6010	66679	1	92600		ug/L	500.	22-Nov-05	22-Nov-05	22:06 KJR (1)	
Potassium	EPA 6010	66679	1	23000		ug/L	500.	22-Nov-05	22-Nov-05	22:06 KJR (1)	
Sodium	EPA 6010	66679	1	847000		ug/L	500.	22-Nov-05	22-Nov-05	22:06 KJR (1)	

4 parameter(s) reported

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Client ID: MW-2A
Client: CRA
Project: COOPER-JAL/039123
Site: None
Lab ID: 20414663
Project No.: 2055621
Description: None
Matrix: Water
%Moisture: n/a
Collected: 11/16/05
Received: 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66679	1	157000		ug/L	500.	22-Nov-05	22-Nov-05 22:11	KJR (1)	
Magnesium	EPA 6010	66679	1	18000		ug/L	500.	22-Nov-05	22-Nov-05 22:11	KJR (1)	
Potassium	EPA 6010	66679	1	4200		ug/L	500.	22-Nov-05	22-Nov-05 22:11	KJR (1)	
Sodium	EPA 6010	66679	1	49800		ug/L	500.	22-Nov-05	22-Nov-05 22:11	KJR (1)	

4 parameter(s) reported

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Client ID: MW-4A
Client: CRA
Project: COOPER-JAL/039123
Site: None
Lab ID: 20414664
Project No.: 2055621
Description: None
Matrix: Water
%Moisture: n/a
Collected: 11/16/05
Received: 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66679	1	335000		ug/L	500.	22-Nov-05	22-Nov-05 22:16	KJR (1)	
Magnesium	EPA 6010	66679	1	64400		ug/L	500.	22-Nov-05	22-Nov-05 22:16	KJR (1)	
Potassium	EPA 6010	66679	1	9230		ug/L	500.	22-Nov-05	22-Nov-05 22:16	KJR (1)	
Sodium	EPA 6010	66679	1	382000		ug/L	500.	22-Nov-05	22-Nov-05 22:16	KJR (1)	

4 parameter(s) reported

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LELAP # 02006

Client ID: MW-5A
Client: CRA
Project: COOPER-JAL/039123
Site: None
Lab ID: 20414665
Project No.: 2055621
Description: None
Matrix: Water
%Moisture: n/a
Collected: 11/16/05
Received: 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66679	1	176000		ug/L	500.	22-Nov-05	22-Nov-05	22:23 KJR (1)	
Magnesium	EPA 6010	66679	1	17800		ug/L	500.	22-Nov-05	22-Nov-05	22:23 KJR (1)	
Potassium	EPA 6010	66679	1	4220		ug/L	500.	22-Nov-05	22-Nov-05	22:23 KJR (1)	
Sodium	EPA 6010	66679	1	45300		ug/L	500.	22-Nov-05	22-Nov-05	22:23 KJR (1)	

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Client ID: MW-2
Client: CRA
Project: COOPER-JAL/039123
Site: None
Lab ID: 20414666
Project No.: 2055621
Description: None
Matrix: Water
%Moisture: n/a
Collected: 11/16/05
Received: 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66679	1	594000		ug/L	500.	22-Nov-05	22-Nov-05	22:28 KJR (1)	
Magnesium	EPA 6010	66679	1	209000		ug/L	500.	22-Nov-05	22-Nov-05	22:28 KJR (1)	
Potassium	EPA 6010	66679	1	20800		ug/L	500.	22-Nov-05	22-Nov-05	22:28 KJR (1)	
Sodium	EPA 6010	66679	10	3290000		ug/L	5000	22-Nov-05	29-Nov-05	16:18 KJR (1)	

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LELAP # 02006

Client ID: MW-3 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414668 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66679	1	89200		ug/L	500.	22-Nov-05	22-Nov-05	22:43 KJR (1)	
Magnesium	EPA 6010	66679	1	22100		ug/L	500.	22-Nov-05	22-Nov-05	22:43 KJR (1)	
Potassium	EPA 6010	66679	1	8870		ug/L	500.	22-Nov-05	22-Nov-05	22:43 KJR (1)	
Sodium	EPA 6010	66679	1	93400		ug/L	500.	22-Nov-05	22-Nov-05	22:43 KJR (1)	

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Client ID: RW-1
Project: COOPER-JAL/039123
Lab ID: 20414670
Description: None

Client: CRA
Site: None
Project No.: 2055621
Matrix: Water **%Moisture:** n/a
Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66679	1	122000		ug/L	500.	22-Nov-05	22-Nov-05	22:58 KJR (1)	
Magnesium	EPA 6010	66679	1	70900		ug/L	500.	22-Nov-05	22-Nov-05	22:58 KJR (1)	
Potassium	EPA 6010	66679	1	8400		ug/L	500.	22-Nov-05	22-Nov-05	22:58 KJR (1)	
Sodium	EPA 6010	66679	1	493000		ug/L	500.	22-Nov-05	22-Nov-05	22:58 KJR (1)	

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LELAP # 02006

Pace Analytical® New Orleans Laboratory

Client ID: DUP-1 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414671 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66679	1	92000		ug/L	500.	22-Nov-05	22-Nov-05	23:03 KJR (1)	
Magnesium	EPA 6010	66679	1	50200		ug/L	500.	22-Nov-05	22-Nov-05	23:03 KJR (1)	
Potassium	EPA 6010	66679	1	9240		ug/L	500.	22-Nov-05	22-Nov-05	23:03 KJR (1)	
Sodium	EPA 6010	66679	1	377000		ug/L	500.	22-Nov-05	22-Nov-05	23:03 KJR (1)	

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Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: MW-4 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414740 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66845	1	849000		ug/L	500.	29-Nov-05	06-Dec-05	01:25 KJR (1)	
Magnesium	EPA 6010	66845	1	387000		ug/L	500.	29-Nov-05	06-Dec-05	01:25 KJR (1)	
Potassium	EPA 6010	66845	1	28100		ug/L	500.	29-Nov-05	06-Dec-05	01:25 KJR (1)	
Sodium	EPA 6010	66845	5	3880000		ug/L	2500	29-Nov-05	06-Dec-05	08:05 KJR (1)	

4 parameter(s) reported

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For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
(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.

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LELAP # 02006

Client ID: MW-5
Project: COOPER-JAL/039123
Lab ID: 20414741
Description: None

Client: CRA
Site: None
Project No.: 2055621
Matrix: Water **%Moisture:** n/a
Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66845	1	339000		ug/L	500.	29-Nov-05	06-Dec-05 01:45	KJR (1)	
Magnesium	EPA 6010	66845	1	126000		ug/L	500.	29-Nov-05	06-Dec-05 01:45	KJR (1)	
Potassium	EPA 6010	66845	1	10800		ug/L	500.	29-Nov-05	06-Dec-05 01:45	KJR (1)	
Sodium	EPA 6010	66845	1	791000		ug/L	500.	29-Nov-05	06-Dec-05 08:10	KJR (1)	

4 parameter(s) reported

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Client ID: MW-7 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414742 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66845	1	412000		ug/L	500.	29-Nov-05	06-Dec-05 01:50	KJR (1)	
Magnesium	EPA 6010	66845	1	64700		ug/L	500.	29-Nov-05	06-Dec-05 01:50	KJR (1)	
Potassium	EPA 6010	66845	1	12100		ug/L	500.	29-Nov-05	06-Dec-05 01:50	KJR (1)	
Sodium	EPA 6010	66845	1	100000		ug/L	500.	29-Nov-05	06-Dec-05 07:09	KJR (1)	

4 parameter(s) reported

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Client ID: RW-2 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414743 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66845	1	861000		ug/L	500.	29-Nov-05	06-Dec-05 01:57	KJR (1)	
Magnesium	EPA 6010	66845	1	16600		ug/L	500.	29-Nov-05	06-Dec-05 01:57	KJR (1)	
Potassium	EPA 6010	66845	1	13100		ug/L	500.	29-Nov-05	06-Dec-05 01:57	KJR (1)	
Sodium	EPA 6010	66845	1	361000		ug/L	500.	29-Nov-05	06-Dec-05 07:14	KJR (1)	

4 parameter(s) reported

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Client ID: MW-6 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414744 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66845	1	103000		ug/L	500.	29-Nov-05	06-Dec-05 02:02	KJR (1)	
Magnesium	EPA 6010	66845	1	20200		ug/L	500.	29-Nov-05	06-Dec-05 02:02	KJR (1)	
Potassium	EPA 6010	66845	1	4100		ug/L	500.	29-Nov-05	06-Dec-05 02:02	KJR (1)	
Sodium	EPA 6010	66845	1	59100		ug/L	500.	29-Nov-05	06-Dec-05 07:21	KJR (1)	

4 parameter(s) reported

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Client ID: MW-10 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414745 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66845	1	482000		ug/L	500.	29-Nov-05	06-Dec-05 02:07	KJR (1)	
Magnesium	EPA 6010	66845	1	47400		ug/L	500.	29-Nov-05	06-Dec-05 02:07	KJR (1)	
Potassium	EPA 6010	66845	1	13100		ug/L	500.	29-Nov-05	06-Dec-05 02:07	KJR (1)	
Sodium	EPA 6010	66845	1	82400		ug/L	500.	29-Nov-05	06-Dec-05 07:26	KJR (1)	

4 parameter(s) reported

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Client ID: MW-9 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414746 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66845	1	149000		ug/L	500.	29-Nov-05	06-Dec-05 02:22	KJR (1)	
Magnesium	EPA 6010	66845	1	26200		ug/L	500.	29-Nov-05	06-Dec-05 02:22	KJR (1)	
Potassium	EPA 6010	66845	1	7430		ug/L	500.	29-Nov-05	06-Dec-05 02:22	KJR (1)	
Sodium	EPA 6010	66845	1	80400		ug/L	500.	29-Nov-05	06-Dec-05 07:31	KJR (1)	

4 parameter(s) reported

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Client ID: MW-8 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414747 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66845	1	83400		ug/L	500.	29-Nov-05	06-Dec-05 02:27	KJR (1)	
Magnesium	EPA 6010	66845	1	21700		ug/L	500.	29-Nov-05	06-Dec-05 02:27	KJR (1)	
Potassium	EPA 6010	66845	1	5740		ug/L	500.	29-Nov-05	06-Dec-05 02:27	KJR (1)	
Sodium	EPA 6010	66845	1	102000		ug/L	500.	29-Nov-05	06-Dec-05 07:36	KJR (1)	

4 parameter(s) reported

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Client ID: MW-9A
Client: CRA
Project: COOPER-JAL/039123
Site: None
Lab ID: 20414748
Project No.: 2055621
Description: None
Matrix: Water
%Moisture: n/a
Collected: 11/17/05
Received: 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66845	1	337000		ug/L	500.	29-Nov-05	06-Dec-05 02:32	KJR (1)	
Magnesium	EPA 6010	66845	1	41400		ug/L	500.	29-Nov-05	06-Dec-05 02:32	KJR (1)	
Potassium	EPA 6010	66845	1	8080		ug/L	500.	29-Nov-05	06-Dec-05 02:32	KJR (1)	
Sodium	EPA 6010	66845	1	74500		ug/L	500.	29-Nov-05	06-Dec-05 07:41	KJR (1)	

4 parameter(s) reported

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Client ID: MW-12 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414749 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium	EPA 6010	66845	1	193000		ug/L	500.	29-Nov-05	06-Dec-05 02:37	KJR (1)	
Magnesium	EPA 6010	66845	1	26600		ug/L	500.	29-Nov-05	06-Dec-05 02:37	KJR (1)	
Potassium	EPA 6010	66845	1	13400		ug/L	500.	29-Nov-05	06-Dec-05 02:37	KJR (1)	
Sodium	EPA 6010	66845	1	87500		ug/L	500.	29-Nov-05	06-Dec-05 07:46	KJR (1)	

4 parameter(s) reported

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Client ID: MW-11 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414660 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	161.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	161.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Chloride	EPA 325.2	66785	1	58.1		mg/L	1.00	28-Nov-05	28-Nov-05	13:11 MHM (1)	
Sulfate	EPA 375.4	66786	5	91.3	D1	mg/L	5.00	28-Nov-05	28-Nov-05	13:20 MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	700.	N	mg/L	10.0	30-Nov-05	30-Nov-05	11:30 LJL (1)	

6 parameter(s) reported

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Client ID: MW-13 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414661 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05 13:30 LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	201.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30 LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	201.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30 LJL (1)	
Chloride	EPA 325.2	66785	10	722.	D1	mg/L	10.0	28-Nov-05	28-Nov-05 13:11 MHM (1)	
Sulfate	EPA 375.4	66786	10	206.	D1	mg/L	10.0	28-Nov-05	28-Nov-05 13:17 MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	2350	N	mg/L	10.0	30-Nov-05	30-Nov-05 11:30 LJL (1)	

6 parameter(s) reported

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Louisiana Dept. of Environmental Quality (LELAP) - 02006
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

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New Orleans Laboratory

Report of Laboratory Analysis

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

Phone: 504.469.0333
Fax: 504.469.0555
LELAP # 02006

Client ID: MW-1 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414662 **Project No.:** 2055621

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

Collected: 11/16/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	262.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	262.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Chloride	EPA 325.2	66785	20	1210	D1	mg/L	20.0	28-Nov-05	28-Nov-05	12:56 MHM (1)	
Sulfate	EPA 375.4	66786	20	215.	D1	mg/L	20.0	28-Nov-05	28-Nov-05	12:49 MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	2640	N	mg/L	10.0	30-Nov-05	30-Nov-05	11:30 LJL (1)	

6 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.

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Client ID: MW-2A
Client: CRA
Project: COOPER-JAL/039123
Site: None
Lab ID: 20414663
Project No.: 2055621
Description: None
Matrix: Water
%Moisture: n/a
Collected: 11/16/05
Received: 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	151.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	151.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Chloride	EPA 325.2	66785	1	56.8		mg/L	1.00	28-Nov-05	28-Nov-05	12:56 MHM (1)	
Sulfate	EPA 375.4	66786	5	75.1	D1	mg/L	5.00	28-Nov-05	28-Nov-05	13:20 MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	630.	N	mg/L	10.0	30-Nov-05	30-Nov-05	11:30 LJL (1)	

6 parameter(s) reported

ND denotes Not Detected at or above the adjusted reporting limit.
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Client ID: MW-4A
Client: CRA
Project: COOPER-JAL/039123
Site: None
Lab ID: 20414664
Project No.: 2055621
Description: None
Matrix: Water
%Moisture: n/a
Collected: 11/16/05
Received: 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	181.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	181.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Chloride	EPA 325.2	66785	10	827.	D1	mg/L	10.0	28-Nov-05	28-Nov-05 12:56	MHM (1)	
Sulfate	EPA 375.4	66786	10	160.	D1	mg/L	10.0	28-Nov-05	28-Nov-05 12:49	MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	2340	N	mg/L	10.0	30-Nov-05	30-Nov-05 11:30	LJL (1)	

6 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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Client ID: MW-5A
Client: CRA
Project: COOPER-JAL/039123
Site: None
Lab ID: 20414665
Project No.: 2055621
Description: None
Matrix: Water
%Moisture: n/a
Collected: 11/16/05
Received: 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	191.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	191.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Chloride	EPA 325.2	66785	1	40.2		mg/L	1.00	28-Nov-05	28-Nov-05 12:56	MHM (1)	
Sulfate	EPA 375.4	66786	5	75.2	D1	mg/L	5.00	28-Nov-05	28-Nov-05 13:20	MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	570.	N	mg/L	10.0	30-Nov-05	30-Nov-05 11:30	LJL (1)	

6 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.
For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.
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Client ID: MW-2 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414666 **Project No.:** 2055621

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

Collected: 11/16/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	171.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	171.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Chloride	EPA 325.2	66785	200	4720	D1	mg/L	200.	28-Nov-05	28-Nov-05 13:27	MHM (1)	
Sulfate	EPA 375.4	66786	20	645.	D1	mg/L	20.0	28-Nov-05	28-Nov-05 12:49	MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	10000	N	mg/L	10.0	30-Nov-05	30-Nov-05 11:30	LJL (1)	

6 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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LELAP # 02006

Client ID: MW-3 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414668 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	171.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	171.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Chloride	EPA 325.2	66785	1	96.3		mg/L	1.00	28-Nov-05	28-Nov-05 13:11	MHM (1)	
Sulfate	EPA 375.4	66786	5	108.	D1	mg/L	5.00	28-Nov-05	28-Nov-05 13:20	MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	840.	N	mg/L	10.0	30-Nov-05	30-Nov-05 11:30	LJL (1)	

6 parameter(s) reported

12/12/2005 12:16:56

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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.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
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LELAP # 02006

Client ID: RW-1 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414670 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	221.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	221.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Chloride	EPA 325.2	66785	10	895.	D1	mg/L	10.0	28-Nov-05	28-Nov-05	13:11 MHM (1)	
Sulfate	EPA 375.4	66786	10	166.	D1	mg/L	10.0	28-Nov-05	28-Nov-05	13:04 MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	2380	N	mg/L	10.0	30-Nov-05	30-Nov-05	11:30 LJL (1)	

6 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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Phone: 504.469.0333
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LELAP # 02006

Client ID: DUP-1 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414671 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	181.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	181.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Chloride	EPA 325.2	66785	10	762.	D1	mg/L	10.0	28-Nov-05	28-Nov-05	13:11 MHM (1)	
Sulfate	EPA 375.4	66786	10	153.	D1	mg/L	10.0	28-Nov-05	28-Nov-05	13:04 MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	2150	N	mg/L	10.0	30-Nov-05	30-Nov-05	11:30 LJL (1)	

6 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.

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Client ID: MW-4 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414740 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	181.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	181.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Chloride	EPA 325.2	66785	200	9440	D1	mg/L	200.	28-Nov-05	28-Nov-05 14:28	MHM (1)	
Sulfate	EPA 375.4	66786	5	45.8	D1	mg/L	5.00	28-Nov-05	28-Nov-05 13:20	MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	24300	N	mg/L	10.0	30-Nov-05	30-Nov-05 11:30	LJL (1)	

6 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.

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Phone: 504.469.0333
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LELAP # 02006

Client ID: MW-5 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414741 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	161.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	161.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Chloride	EPA 325.2	66785	20	2140	D1	mg/L	20.0	28-Nov-05	28-Nov-05	13:11 MHM (1)	
Sulfate	EPA 375.4	66786	20	334.	D1	mg/L	20.0	28-Nov-05	28-Nov-05	13:04 MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	7120	N	mg/L	10.0	30-Nov-05	30-Nov-05	11:30 LJL (1)	

6 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.

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Report of Laboratory Analysis

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Phone: 504.469.0333
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LELAP # 02006

Client ID: MW-7
Client: CRA
Project: COOPER-JAL/039123
Site: None
Lab ID: 20414742
Project No.: 2055621
Description: None
Matrix: Water
%Moisture: n/a
Collected: 11/17/05
Received: 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	121.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	121.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Chloride	EPA 325.2	66785	10	456.	D1	mg/L	10.0	28-Nov-05	28-Nov-05	13:11 MHM (1)	
Sulfate	EPA 375.4	66786	10	106.	D1	mg/L	10.0	28-Nov-05	28-Nov-05	13:04 MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	1440	N	mg/L	10.0	30-Nov-05	30-Nov-05	11:30 LJL (1)	

6 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.

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Client ID: RW-2 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414743 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	281.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	422.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Chloride	EPA 325.2	66785	20	1770	D1	mg/L	20.0	28-Nov-05	28-Nov-05	13:11 MHM (1)	
Sulfate	EPA 375.4	66786	20	175.	D1	mg/L	20.0	28-Nov-05	28-Nov-05	13:04 MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	7350	N	mg/L	10.0	30-Nov-05	30-Nov-05	11:30 LJL (1)	

6 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.
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Client ID: MW-6 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414744 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	201.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	201.		mg/L	10.0	29-Nov-05	29-Nov-05	13:30 LJL (1)	
Chloride	EPA 325.2	66785	1	101.		mg/L	1.00	28-Nov-05	28-Nov-05	13:11 MHM (1)	
Sulfate	EPA 375.4	66786	5	97.8	D1	mg/L	5.00	28-Nov-05	28-Nov-05	13:20 MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	730.	N	mg/L	10.0	30-Nov-05	30-Nov-05	11:30 LJL (1)	

6 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.

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Client ID: MW-10 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414745 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	151.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	151.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Chloride	EPA 325.2	66785	10	205.	D1	mg/L	10.0	28-Nov-05	28-Nov-05 13:38	MHM (1)	
Sulfate	EPA 375.4	66786	5	111.	D1	mg/L	5.00	28-Nov-05	28-Nov-05 13:32	MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	970.	N	mg/L	10.0	30-Nov-05	30-Nov-05 11:30	LJL (1)	

6 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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Client ID: MW-9 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414746 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	161.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	161.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Chloride	EPA 325.2	66785	1	83.5		mg/L	1.00	28-Nov-05	28-Nov-05 13:26	MHM (1)	
Sulfate	EPA 375.4	66786	5	111.	D1	mg/L	5.00	28-Nov-05	28-Nov-05 13:32	MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	790.	N	mg/L	10.0	30-Nov-05	30-Nov-05 11:30	LJL (1)	

6 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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Client ID: MW-8 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414747 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	171.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	171.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Chloride	EPA 325.2	66785	1	113.		mg/L	1.00	28-Nov-05	28-Nov-05 13:26	MHM (1)	
Sulfate	EPA 375.4	66786	5	115.	D1	mg/L	5.00	28-Nov-05	28-Nov-05 13:32	MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	750.	N	mg/L	10.0	30-Nov-05	30-Nov-05 11:30	LJL (1)	

6 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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Client ID: MW-9A
Client: CRA
Project: COOPER-JAL/039123
Site: None
Lab ID: 20414748
Project No.: 2055621
Description: None
Matrix: Water
%Moisture: n/a
Collected: 11/17/05
Received: 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	121.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	121.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Chloride	EPA 325.2	66785	10	310.	D1	mg/L	10.0	28-Nov-05	28-Nov-05 13:38	MHM (1)	
Sulfate	EPA 375.4	66786	5	74.7	D1	mg/L	5.00	28-Nov-05	28-Nov-05 13:32	MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	1520	N	mg/L	10.0	30-Nov-05	30-Nov-05 11:30	LJL (1)	

6 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.
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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Client ID: MW-12 **Client:** CRA

Project: COOPER-JAL/039123 **Site:** None

Lab ID: 20414749 **Project No.:** 2055621

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

Collected: 11/17/05 **Received:** 11/22/05

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO)	EPA 310.1	66858	1	ND		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity, Total	EPA 310.1	66858	1	151.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Alkalinity,Bicarbonate (CaC	EPA 310.1	66858	1	151.		mg/L	10.0	29-Nov-05	29-Nov-05 13:30	LJL (1)	
Chloride	EPA 325.2	66785	1	109.		mg/L	1.00	28-Nov-05	28-Nov-05 13:26	MHM (1)	
Sulfate	EPA 375.4	66786	5	94.6	D1	mg/L	5.00	28-Nov-05	28-Nov-05 13:32	MHM (1)	
Total Dissolved Solids	EPA 160.1	66762	1	700.	N	mg/L	10.0	30-Nov-05	30-Nov-05 11:30	LJL (1)	

6 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.
(1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.
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Report of Quality Control

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Project No.: 2055621

Parameter	Batch	Blank	ARL	Units	LCS Spike	LCS %Rec	LCSD %Rec	LCS RPD	MS Spike	MS %Rec	MSD %Rec	(1)MS DUP RPD	RPD	QC Limits LCS	QC Limits MS/MSD	RPD Max	Qu
Calcium	66679	ND	500.	ug/L	2000	107								86 - 122	-		
Magnesium	66679	ND	500.	ug/L	2000	104								88 - 118	-		
Potassium	66679	ND	500.	ug/L	2000	101								86 - 117	-		
Sodium	66679	ND	500.	ug/L	2000	108								69 - 130	-		
Calcium	66845			ug/L	2000	101								86 - 122	-		
Magnesium	66845			ug/L	2000	105								88 - 118	-		
Potassium	66845			ug/L	2000	104								86 - 117	-		
Sodium	66845			ug/L	2000	96								69 - 130	-		

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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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Wet Chemistry Quality Control Results

Project No.: 2055621

Parameter	Batch	Blank	ARL	Units	LCS Spike	LCS %Rec	LCSD %Rec	LCS RPD	MS Spike	MS %Rec	MSD %Rec	(1)MS RPD	DUP RPD	QC Limits LCS	QC Limits MS/MSD	RPD Max	Qu
Alkalinity, Tot	66858			mg/L	50	95							4	80 - 120	-	20	
Chloride	66785	ND	1.00	mg/L	93	94			100	0 *	0 *	0		90 - 120	75 - 125	20	
Sulfate	66786	ND	1.00	mg/L	13	96			25	41 *	33 *	1		90 - 110	75 - 125	20	
Total Dissolve	66762	ND	10.0	mg/L	100	92							3	80 - 120	-	20	

12/12/2005 12:16:57

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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Project No.: 2055621

ALL Qualifiers

Qualifier	Qualifier Description
N	See narrative for a detailed explanation.

Analyte Qualifiers

Qualifier	Qualifier Description
J	This estimated value for the analyte is below the adjusted reporting limit but above the instrument reporting limit.

General Qualifiers

Qualifier	Qualifier Description
D1	The analysis was performed at a dilution due to the high analyte concentration.

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ANALYSIS LABORATORIES, INC.

2932 LIME STREET • P. O. BOX 8666 • METAIRIE, LOUISIANA 70011

TELEPHONE (504) 889-0710 • FAX (504) 889-2613

LELAP CERTIFICATE #02079

December 2, 2005

05A-366201

Ms. Karen Brown
PACE ANALYTICAL SERVICES, INC.
1000 Riverbend Blvd., Suite F
St. Rose, LA 70087

EPN #: 2055621

WATER TESTING

Ten water samples submitted on November 23, 2005, were analyzed to determine the nitrate as requested.

The results were:

PACE Sample ID	PACE Client ID	Sampled Date/Time	Nitrate, mg/l N	Detection Limit, mg/l N	Analyzed Date/Time/Analyst
20414740	MW-4	11-17-05/1134	0.20	0.05	11-28-05/1024/SG
20414741	MW-5	11-17-05/1107	0.16	0.05	11-28-05/1026/SG
20414742	MW-7	11-17-05/1202	0.28	0.05	11-28-05/1028/SG
20414743	RW-2	11-17-05/1238	0.60	0.05	11-28-05/1030/SG
20414744	MW-6	11-17-05/1035	0.35	0.05	11-28-05/1034/SG
20414745	MW-10	11-17-05/1310	0.26	0.05	11-28-05/1036/SG
20414746	MW-9	11-17-05/1339	0.14	0.05	11-28-05/1038/SG
20414747	MW-8	11-17-05/1430	<0.05	0.05	11-28-05/1040/SG
20414748	MW-98	11-17-05/1400	0.31	0.05	11-28-05/1042/SG
20414749	MW-12	11-17-05/1617	0.12	0.05	11-28-05/1044/SG

Reference: Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983.

Method: 352.1

ANALYSIS LABORATORIES, INC.

Thomas C Blythe

CHEMIST

ANALYSIS LABORATORIES, INC.

2932 LIME STREET • P. O. BOX 8666 • METAIRIE, LOUISIANA 70011

TELEPHONE (504) 889-0710 • FAX (504) 889-2613

PACE
Subcontract
Analytical

05A-366201

Results Analyte Parameter/Protocol: Nitrate / EPA 352.1
Measurement Units: mg/L N

Sample I. D.:	20414740	20414741	20414742	20414743	20414744
Analytical Result:	0.20	0.16	0.28	0.60	0.35
Detection Limit:	0.05	0.05	0.05	0.05	0.05
Dilution Factor:	1	1	1	1	1
Date Analyzed:	11-28-05, 1024, SG	11-28-05, 1026, SG	11-28-05, 1028, SG	11-28-05, 1030, SG	11-28-05, 1034, SG

Quality Control

Lab Blank Result: <0.05

Duplicate Control

Duplicate Result:
Original Result:
Rel. % Difference:

Matrix Spike Analysis

Spiking Concen.:
Background Result:
Matrix Spk. Result:
MS Recov., Percent:
MS Dup. Result:
MSD Recov., Percent:
MS/MSD Rel. % Diff.:

QC Check

"True Value":	0.30
Measured Value:	0.30
Recovery, %:	100.0

ANALYSIS LABORATORIES, INC.

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PACE
Subcontract
Analytical

05A-366201

Results

Analyte Parameter/Protocol: Nitrate / EPA 352.1
Measurement Units: mg/L N

Sample I. D.:	20414745	20414746	20414747	20414748	20414749
Analytical Result:	0.26	0.14	<0.05	0.31	0.12
Detection Limit:	0.05	0.05	0.05	0.05	0.05
Dilution Factor:	1	1	1	1	1
Date Analyzed:	11-28-05, 1036, SG	11-28-05, 1038, SG	11-28-05, 1040, SG	11-28-05, 1042, SG	11-28-05, 1044, SG

Quality Control

Lab Blank Result: <0.05

Duplicate Control

Duplicate Result: 0.26
Original Result: 0.26
Rel. % Difference: 0.0

Matrix Spike Analysis

Spiking Concen.:
Background Result:
Matrix Spk. Result:
MS Recov., Percent:
MS Dup. Result:
MSD Recov., Percent:
MS/MSD Rel. % Diff.:

QC Check

"True Value": 0.30
Measured Value: 0.30
Recovery, %: 100.0

ANALYSIS LABORATORIES, INC.

2932 LIME STREET • P. O. BOX 8666 • METAIRIE, LOUISIANA 70011

TELEPHONE (504) 889-0710 • FAX (504) 889-2613

LELAP CERTIFICATE #02079

December 2, 2005 05A-366202

Ms. Karen Brown
PACE ANALYTICAL SERVICES, INC.
1000 Riverbend Blvd., Suite F
St. Rose, LA 70087

EPN #: 2055621

WATER TESTING

Ten water samples were submitted on November 23, 2005, in order to determine the fluoride contents. The results were as follows:

PACE Sample ID	PACE Client ID	Sampled Date/Time	mg/L Fluoride	Detection Limit, mg/l F	Analyzed Date/Time/Analyst
20414740	MW-4	11-17-05/1134	0.82	0.5	11-30-05/1500/CC
20414741	MW-5	11-17-05/1107	0.79	0.5	11-30-05/1510/CC
20414742	MW-7	11-17-05/1202	0.53	0.5	11-30-05/1520/CC
20414743	RW-2	11-17-05/1238	0.89	0.5	11-30-05/1530/CC
20414744	MW-6	11-17-05/1035	0.97	0.5	11-30-05/1540/CC
20414745	MW-10	11-17-05/1310	1.2	0.5	11-30-05/1550/CC
20414746	MW-9	11-17-05/1339	1.3	0.5	11-30-05/1600/CC
20414747	MW-8	11-17-05/1430	1.1	0.5	11-30-05/1610/CC
20414748	MW-98	11-17-05/1400	0.82	0.5	11-30-05/1620/CC
20414749	MW-12	11-17-05/1617	0.93	0.5	11-30-05/1630/CC

Reference: Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA, SW-846, 3rd Edition, September, 1986 with updates.

Method: 9214

ANALYSIS LABORATORIES, INC.

Thomas C Blythe

CHEMIST

ANALYSIS LABORATORIES, INC.

2932 LIME STREET • P. O. BOX 8666 • METAIRIE, LOUISIANA 70011

TELEPHONE (504) 889-0710 • FAX (504) 889-2613

PACE
Subcontract
Analytical

05A-366202

Results

Analyte Parameter/Protocol: Fluoride / EPA 9214
Measurement Units: mg/L F^-

Sample I. D.:	20414740	20414741	20414742	20414743	20414744
Analytical Result:	0.82	0.79	0.53	0.89	0.97
Detection Limit:	0.5	0.5	0.5	0.5	0.5
Dilution Factor:	1	1	1	1	1
Date Analyzed:	11-30-05, 1500, CC	11-30-05, 1510, CC	11-30-05, 1520, CC	11-30-05, 1530, CC	11-30-05, 1540, CC

Quality Control

Lab Blank Result: <0.5

Duplicate Control

Duplicate Result:
Original Result:
Rel. % Difference:

Matrix Spike Analysis

Spiking Concen.:
Background Result:
Matrix Spk. Result:
MS Recov., Percent:
MS Dup. Result:
MSD Recov., Percent:
MS/MSD Rel. % Diff.:

QC Check

"True Value": 5.0
Measured Value: 5.0
Recovery, %: 100.0

ANALYSIS LABORATORIES, INC.

2932 LIME STREET • P. O. BOX 8666 • METAIRIE, LOUISIANA 70011

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PACE
Subcontract
Analytical

05A-366202

Results

Analyte Parameter/Protocol: Fluoride / EPA 9214
Measurement Units: mg/L F^-

Sample I. D.:	20414745	20414746	20414747	20414748	20414749
Analytical Result:	1.2	1.3	1.1	0.82	0.93
Detection Limit:	0.5	0.5	0.5	0.5	0.5
Dilution Factor:	1	1	1	1	1
Date Analyzed:	11-30-05, 1550, CC	11-30-05, 1600, CC	11-30-05, 1610, CC	11-30-05, 1620, CC	11-30-05, 1630, CC

Quality Control

Lab Blank Result: <0.5

Duplicate Control

Duplicate Result:	1.1
Original Result:	1.1
Rel. % Difference:	0.0

Matrix Spike Analysis

Spiking Concen.:	
Background Result:	
Matrix Spk. Result:	
MS Recov., Percent:	
MS Dup. Result:	
MSD Recov., Percent:	
MS/MSD Rel. % Diff.:	

QC Check

"True Value":	5.0
Measured Value:	5.0
Recovery, %	100.0

Pace Analytical™
www.pacelabs.com

SUBCONTRACTING CHAIN-OF-CUSTODY

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

Due Date: 12-6-05 Freight Carrier: Pace Custody Seals: Intact / Broken / Missing

Subcontractor: Analytes Airbill #: _____ Samples: Intact / Broken / Missing

Contact: Cindy Dawson EPN #: 2055621 Cooler Temperature (°C): _____

PACE SAMPLE ID	CLIENT SAMPLE ID	SAMPLE DATE/TIME	MATRIX	SAMPLE #	ANALYTE/ METHOD	SAMPLE COMMENTS
20414740	MW-4	11-17-05 1134	WT	1		FL/NO3
741	MW-5	1107				
742	MW-7	1202				
743	RW-2	1238				
744	MW-6	1035				
745	MW-10	1310				
746	MW-9	1339				
747	MW-8	1430				
748	MW-98	1400				
749	MW-12	1617				

Relinquished by:	Date/Time	Received by:	Project Comments/Remarks:
Relinquished by:	Date/Time	Received by:	Run out of hold added to previous proj.
Relinquished by:	Date/Time	Received for subcontractor by:	

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

ANALYSIS LABORATORIES, INC.

2932 LIME STREET • P. O. BOX 8666 • METAIRIE, LOUISIANA 70011

TELEPHONE (504) 889-0710 • FAX (504) 889-2613

LELAP CERTIFICATE #02079

December 1, 2005

05A-365301

Ms. Karen Brown
PACE ANALYTICAL SERVICES, INC.
1000 Riverbend Blvd., Suite F
St. Rose, LA 70087

EPN #: 2055621

WATER TESTING

Ten water samples submitted on November 22, 2005, were analyzed to determine the nitrate as requested.

The results were:

PACE Sample ID	PACE Client ID	Sampled Date/Time	Nitrate, mg/l N	Detection Limit, mg/l N	Analyzed Date/Time/Analyst
20414660	MW-11	11-17-05/1654	2.1	0.5	11-28-05/1300/CC
20414661	MW-13	11-17-05/1510	2.5	0.5	11-28-05/1305/CC
20414662	MW-1	11-17-05/1700	2.4	0.5	11-28-05/1310/CC
20414663	MW-2A	11-17-05/1430	2.3	0.5	11-28-05/1315/CC
20414664	MW-4A	11-17-05/1535	2.2	0.5	11-28-05/1320/CC
20414665	MW-5A	11-17-05/1530	2.1	0.5	11-28-05/1325/CC
20414666	MW-2	11-17-05/1630	2.6	0.5	11-28-05/1330/CC
20414668	MW-3	11-17-05/1550	2.2	0.5	11-28-05/1335/CC
20414670	RW-1	11-17-05/1722	1.4	0.5	11-28-05/1340/CC
20414671	DUP-1	11-17-05/----	1.4	0.5	11-28-05/1345/CC

Reference: Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983.

Method: 352.1

ANALYSIS LABORATORIES, INC.

Thomas C Blythe

CHEMIST

ANALYSIS LABORATORIES, INC.

2932 LIME STREET • P. O. BOX 8666 • METAIRIE, LOUISIANA 70011

TELEPHONE (504) 889-0710 • FAX (504) 889-2613

PACE
Subcontract
Analytical

05A-365301

Results

Analyte Parameter/Protocol: Nitrate / EPA 352.1
Measurement Units: mg/L N

Sample I. D.:	20414660	20414661	20414662	20414663	20414664
Analytical Result:	2.1	2.5	2.4	2.3	2.2
Detection Limit:	0.5	0.5	0.5	0.5	0.5
Dilution Factor:	1	1	1	1	1
Date Analyzed:	11-28-05, 1300, CC	11-28-05, 1305, CC	11-28-05, 1310, CC	11-28-05, 1315, CC	11-28-05, 1320, CC

Quality Control

Lab Blank Result: <0.5

Duplicate Control

Duplicate Result:
Original Result:
Rel. % Difference:

Matrix Spike Analysis

Spiking Concen.:
Background Result:
Matrix Spk. Result:
MS Recov., Percent:
MS Dup. Result:
MSD Recov., Percent:
MS/MSD Rel. % Diff.:

QC Check

"True Value":	8.0
Measured Value:	7.6
Recovery, %:	95.0

ANALYSIS LABORATORIES, INC.

2932 LIME STREET • P. O. BOX 8666 • METAIRIE, LOUISIANA 70011

TELEPHONE (504) 889-0710 • FAX (504) 889-2613

PACE
Subcontract
Analytical

05A-365301

Results

Analyte Parameter/Protocol: Nitrate / EPA 352.1
Measurement Units: mg/L N

Sample I. D.:	20414665	20414666	20414668	20414670	20414671
Analytical Result:	2.1	2.6	2.2	1.4	1.4
Detection Limit:	0.5	0.5	0.5	0.5	0.5
Dilution Factor:	1	1	1	1	1
Date Analyzed:	11-28-05, 1325, CC	11-28-05, 1330, CC	11-28-05, 1335, CC	11-28-05, 1340, CC	11-28-05, 1345, CC

Quality Control

Lab Blank Result: <0.5

Duplicate Control

Duplicate Result:	2.2
Original Result:	2.2
Rel. % Difference:	0.0

Matrix Spike Analysis

Spiking Concen.:	8.0
Background Result:	2.1
Matrix Spk. Result:	9.2
MS Recov., Percent:	88.8
MS Dup. Result:	
MSD Recov., Percent:	
MS/MSD Rel. % Diff.:	

QC Check

"True Value":	8.0
Measured Value:	7.6
Recovery, %:	95.0

ANALYSIS LABORATORIES, INC.

2932 LIME STREET • P. O. BOX 8666 • METAIRIE, LOUISIANA 70011

TELEPHONE (504) 889-0710 • FAX (504) 889-2613

LELAP CERTIFICATE #02079

December 1, 2005 05A-365302

Ms. Karen Brown
PACE ANALYTICAL SERVICES, INC.
1000 Riverbend Blvd., Suite F
St. Rose, LA 70087

EPN #: 2055621

WATER TESTING

Ten water samples were submitted on November 22, 2005, in order to determine the fluoride contents. The results were as follows:

PACE Sample ID	PACE Client ID	Sampled Date/Time	mg/L Fluoride	Detection Limit, mg/l F	Analyzed Date/Time/Analyst
20414660	MW-11	11-17-05/1654	1.5	0.5	11-25-05/0950/CC
20414661	MW-13	11-17-05/1510	1.0	0.5	11-25-05/1000/CC
20414662	MW-1	11-17-05/1700	3.0	0.5	11-25-05/1010/CC
20414663	MW-2A	11-17-05/1430	0.60	0.5	11-25-05/1020/CC
20414664	MW-4A	11-17-05/1535	<0.5	0.5	11-25-05/1030/CC
20414665	MW-5A	11-17-05/1530	0.82	0.5	11-25-05/1040/CC
20414666	MW-2	11-17-05/1630	0.72	0.5	11-25-05/1050/CC
20414668	MW-3	11-17-05/1550	0.97	0.5	11-25-05/1100/CC
20414670	RW-1	11-17-05/1722	1.0	0.5	11-25-05/1120/CC
20414671	DUP-1	11-17-05/----	1.1	0.5	11-25-05/1130/CC

Reference: Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, USEPA, SW-846, 3rd Edition, September, 1986 with updates.

Method: 9214

ANALYSIS LABORATORIES, INC.

Thomas C. Blythe

CHEMIST

ANALYSIS LABORATORIES, INC.

2932 LIME STREET • P. O. BOX 8666 • METAIRIE, LOUISIANA 70011

TELEPHONE (504) 889-0710 • FAX (504) 889-2613

PACE
Subcontract
Analytical

05A-365302

Results Analyte Parameter/Protocol: Fluoride / EPA 9214
Measurement Units: mg/L F^-

Sample I. D.:	20414660	20414661	20414662	20414663	20414664
Analytical Result:	1.5	1.0	3.0	0.60	<0.5
Detection Limit:	0.5	0.5	0.5	0.5	0.5
Dilution Factor:	1	1	1	1	1
Date Analyzed:	11-25-05, 0950, CC	11-25-05, 1000, CC	11-25-05, 1010, CC	11-25-05, 1020, CC	11-25-05, 1030, CC

Quality Control

Lab Blank Result: <0.5

Duplicate Control

Duplicate Result:
Original Result:
Rel. % Difference:

Matrix Spike Analysis

Spiking Concen.:
Background Result:
Matrix Spk. Result:
MS Recov., Percent:
MS Dup. Result:
MSD Recov., Percent:
MS/MSD Rel. % Diff.:

QC Check
"True Value": 1.0
Measured Value: 1.0
Recovery, %: 100.0

ANALYSIS LABORATORIES, INC.

2932 LIME STREET • P. O. BOX 8666 • METAIRIE, LOUISIANA 70011

TELEPHONE (504) 889-0710 • FAX (504) 889-2613

PACE
Subcontract
Analytical

05A-365302

Results Analyte Parameter/Protocol: Fluoride / EPA 9214
Measurement Units: mg/L F^-

Sample I. D.:	20414665	20414666	20414668	20414670	20414671
Analytical Result:	0.82	0.72	0.97	1.0	1.1
Detection Limit:	0.5	0.5	0.5	0.5	0.5
Dilution Factor:	1	1	1	1	1
Date Analyzed:	11-25-05, 1040, CC	11-25-05, 1050, CC	11-25-05, 1100, CC	11-25-05, 1120, CC	11-25-05, 1130, CC

Quality Control

Lab Blank Result: <0.5

Duplicate Control

Duplicate Result:	0.97
Original Result:	0.97
Rel. % Difference:	0.0

Matrix Spike Analysis

Spiking Concen.:	
Background Result:	
Matrix Spk. Result:	
MS Recov., Percent:	
MS Dup. Result:	
MSD Recov., Percent:	
MS/MSD Rel. % Diff.:	

QC Check

"True Value":	1.0
Measured Value:	1.0
Recovery, %	100.0

Pace Analytical™
www.pacelabs.com

SUBCONTRACTING CHAIN-OF-CUSTODY

Pace Analytical Services, Inc
1000 Riverbend Blvd., Suite
St. Rose, LA 7008
Phone: 504.469.033
Fax: 504.469.055

Due Date: 12-6-05 **Freight Carrier:** Pace **Custody Seals:** Intact / Broken / Missing

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

Contact: Kindy Olivera **EPN #:** 205562 / **Cooler Temperature (°C):** _____

PACE SAMPLE ID	CLIENT SAMPLE ID	SAMPLE DATE/TIME	MATRIX	SAMPLE #	ANALYTE/ METHOD	SAMPLE COMMENTS
2041 4660	MW-11	11-12-05 1654	WT	1		72 / NO3
661	MW-13	11-17-05 1510				
662	MW-1	11-16-05 1700				
663	MW-2A	11-16-05 1430				
664	MW-4A	11-16-05 1535				
665	MW-5A	11-16-05 1540				
666	MW-2	11-16-05 1630				
668	MW-3	11-17-05 1550				
670	RW-1	11-17-05 1722				
671	Dup-1	11-17-05 —				

Relinquished by:	**Date/Time** 11-22-05 / 1336	**Received by:** A. Albert	**Project Comments/Remarks:** Run NO3 out of hold
Relinquished by:	**Date/Time**	**Received by:**	
Relinquished by:	**Date/Time**	**Received for subcontractor by:**	

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