1R - 255

AGWMR

06/26/2008



MEULIVED

2008 JUN 27 PM 3 01

Matthew P. Hudson Remediation Project Manager Upstream Business Unit Chevron Environmental Management Company 1400 Smith St Room 40038 Houston, TX 77002 Tel 713 372 1046 mhudson@chevron.com

June 26, 2008

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

Subject: 2007 Annual Groundwater Monitoring Reports

Dear Glenn:

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

1R-254: G.L. Erwin "A and B" Federal NCT-2 Tank Battery, Lea County, NM

• 1R-255: J.R. Philips Tank Battery No. 2, Lea County, NM

- 1R-258: Former New Mexico State "F" Tank Battery, Lea County, NM
- 1R-289: Cooper-Jal Unit South Injection Station, Lea County, NM

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

Sincerely,

Matthew P. Hudson

Enclosures

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



2007 ANNUAL GROUNDWATER MONITORING REPORT

J.R. PHILLPS TANK BATTERY NO. 2 OGRID NO. 4323/CASE NO. 1R255 SE/4, NW/4, SECTION 6, T-20-S, R-37-E LATITUDE: N 32° 36′ 22.3″ LONGITUDE: W 103° 17′ 41.5″ LEA COUNTY, NEW MEXICO

Prepared For:

Mr. Matt Hudson CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY Upstream Business Unit 1400 Smith Street, Room 40038 Houston, Texas 77002

> Prepared by: Conestoga-Rovers & Associates

2135 S Loop 250 West Midland, Texas 79703

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

web: www.CRAworld.com

JUNE 12, 2008 REF. NO. 039126 (3)

TABLE OF CONTENTS

1.0	INTRO	DDUCTION1
2.0	REGU	LATORY FRAMEWORK
3.0	GROU 3.1 3.2	NDWATER SAMPLING AND ANALYSIS
4.0	PLAN.	NED ACTIVITIES5
5.0	SUMM	1ARY6
		LIST OF FIGURES
FIGU	RE 1	SITE LOCATION MAP
FIGU	RE 2	SITE DETAILS MAP
FIGU	RE 3	GROUNDWATER GRADIENT MAP – MAY 2007
FIGU	RE 4	CHLORIDE ISOCONCENTRATION MAP – MAY 2007
FIGU	RE 5	SULFATE ISOCONCENTRATION MAP – MAY 2007
FIGU	RE 6	TOTAL DISSOLVED SOLIDS ISOCONCENTRATION MAP – MAY 2007
		<u>LIST OF TABLES</u>
TABL	E I	GROUNDWATER GAUGING SUMMARY
TABL	E II	GROUNDWATER ANALYTICAL SUMMARY
		LIST OF APPENDICES
APPE	ndix a	NMOCD CORRESPONDENCE
APPE	ndix b	CERTIFIED LABORATORY REPORT AND CHAIN-OF-CUSTODIES

1.0 INTRODUCTION

This Annual Groundwater Monitoring Report presents groundwater monitoring data collected at the J.R. Phillips Tank Battery No. 2 (hereafter referred to as the "Site") by Conestoga-Rovers & Associates (CRA) on behalf of Chevron Environmental Management Company (CEMC). Annual groundwater monitoring activities were performed on May 30 and 31, 2007.

The Site is located approximately three miles southwest of Monument, New Mexico and situated in Unit Letter F in the southeast quarter (SE/4) of the northwest quarter (NW/4) of Section 6, Township 20 South, Range 37 East, Lea County, New Mexico. The Site is a former emergency pit used for temporary containment of produced fluids associated with the tank battery. Land use in the vicinity of the Site is undeveloped rangeland vegetated with indigenous grass, livestock ranching and oil and gas production. A Site Location Map is presented as FIGURE 1.

Site assessment activities were initiated in 1999 when Environmental Plus, Inc. (EPI) of Eunice, New Mexico performed a subsurface assessment of the emergency produced water overflow pit located east of the tank battery and a small burn pit located south-southeast of the emergency pit. The investigation revealed the presence of hydrocarbon affected soil. Approximately 33,500 cubic yards of hydrocarbon-affected material were excavated at the Site between December 1999 and October 2000. The soil was transported to the Texaco Exploration and Production, Inc. (Texaco) centralized treatment facility located northwest of Jal, New Mexico. The emergency pit was excavated to approximately 25 to 30 feet below ground surface (bgs) and the burn pit was excavated to approximately 12 to 15 bgs. The remedial excavations were subsequently backfilled and closed during December 2000 and January 2001. Site assessment and remediation activities were presented in the *Comprehensive Report and Proposed Investigation Plan* (Larson & Associates, Inc. [LA], November 28, 2000).

In March 2000, EPI installed two monitor wells (MW-1 and MW-2) to evaluate background chloride concentrations in groundwater at the Site. In April 2001, LA supervised the installation of six monitor (MW-3 through MW-8) to assess groundwater quality upgradient, downgradient and crossgradient of the Site. Details of that investigation were submitted to the New Mexico Oil Conservation Division (NMOCD) in a *Groundwater Assessment Report* (LA, May 24, 2001). In that report, semi-annual groundwater monitoring was proposed for two years, with groundwater samples to be analyzed for major cations, anions and total dissolved solids (TDS).

The proposed activities were approved by the NMOCD in a letter dated December 27, 2001, with the condition that groundwater also be analyzed for benzene, toluene, ethylbenzene and xylene (BTEX). The NMOCD agreed to allow Texaco to monitor groundwater at the Site due to a regional groundwater impact from chloride that has affected groundwater at the Site, as well as upgradient, crossgradient and downgradient of the Site. An *Annual Groundwater Monitoring Report* (LA, May 10, 2004) presented the results of activities performed in 2003, which fulfilled the two-year monitoring schedule approved by the NMOCD. CEMC proposed a modification to the groundwater monitoring schedule from semi-annual to annual, analyzing groundwater samples only

for major cations, anions and TDS. The groundwater monitoring modifications were approved by the NMOCD in a letter dated October 1, 2004. NMOCD correspondence and approval letters are included in APPENDIX A. Annual groundwater monitoring results for activities performed in May 2004 and May 2005 were presented in the *Annual Groundwater Monitoring Report* (LA, August 15, 2005). CRA has performed groundwater monitoring and reporting activities since 2006.

2.0 REGULATORY FRAMEWORK

The NMOCD guidelines require groundwater to be analyzed for potential contaminants as defined by the New Mexico Water Quality Control Commission (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 annually with a network of eight monitor wells and one water well (FIGURE 2). CRA performed groundwater sampling activities on May 30 and 31, 2007.

Prior to purging the 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 6010B, 310.2, 2320B, 300.0 and 2540C. The fluids recovered and generated during the sampling event were containerized in sealed, 55-gallon drums located onsite and subsequently managed at an NMOCD-permitted and Chevron-approved salt water disposal (SWD) facility operated by Nabors Well Services LTD. (Nabors).

3.1 POTENTIOMETRIC SURFACE AND GRADIENT

Groundwater elevation data are presented in TABLE I. A groundwater gradient map for May 2007 is presented as FIGURE 3. Depth to groundwater ranged from 29.47 feet to 35.50 feet below top of casing on May 30, 2007. Groundwater flow at the Site is to the southeast at a gradient of approximately 0.009 feet/foot.

3.2 ANALYTICAL RESULTS

Analytical results are summarized in TABLE II. Isopleths of the chloride, sulfate and TDS concentrations for the May 2007 groundwater monitoring event are presented as FIGURES 4, 5 and 6, respectively.

The analytical results generally fall within historical ranges. During the May 2007 sampling event, all nine wells sampled exceeded the NMWQCC groundwater standards for chloride and TDS. In addition, eight monitor wells (MW-1 through MW-8) exceeded the NMWQCC groundwater standard for sulfate. Fluoride and nitrate concentrations were below laboratory detection limits during the 2007 sampling event. Copies of the certified analytical reports and chain-of-custody documentation are attached in APPENDIX B.

4.0 PLANNED ACTIVITIES

Annual groundwater monitoring will continue at the Site in 2008, with submission of an annual report to the NMOCD, detailing the results of activities.

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 annually with a network of eight monitor wells and one water well;
- Depth to groundwater ranged from 29.47 feet to 35.50 feet below top of casing on May 30, 2007. Groundwater flow at the Site is to the southeast at a gradient of approximately 0.009 feet/foot;
- The analytical results generally fall within historical ranges. During the May 2007 sampling event, all nine wells sampled exceeded the NMWQCC groundwater standards for chloride and TDS. In addition, eight monitor wells (MW-1 through MW-8) exceeded the NMWQCC groundwater standard for sulfate. Fluoride and nitrate concentrations were below laboratory detection limits during the 2007 sampling event;
- The 2008 groundwater monitoring event is scheduled for May 2008.

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

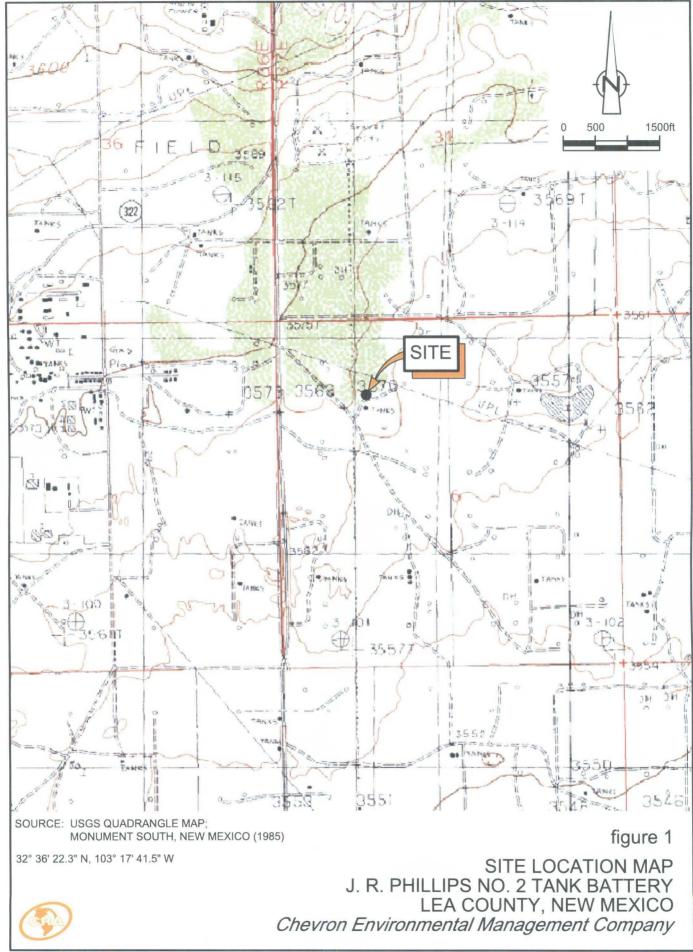
Todd Wells

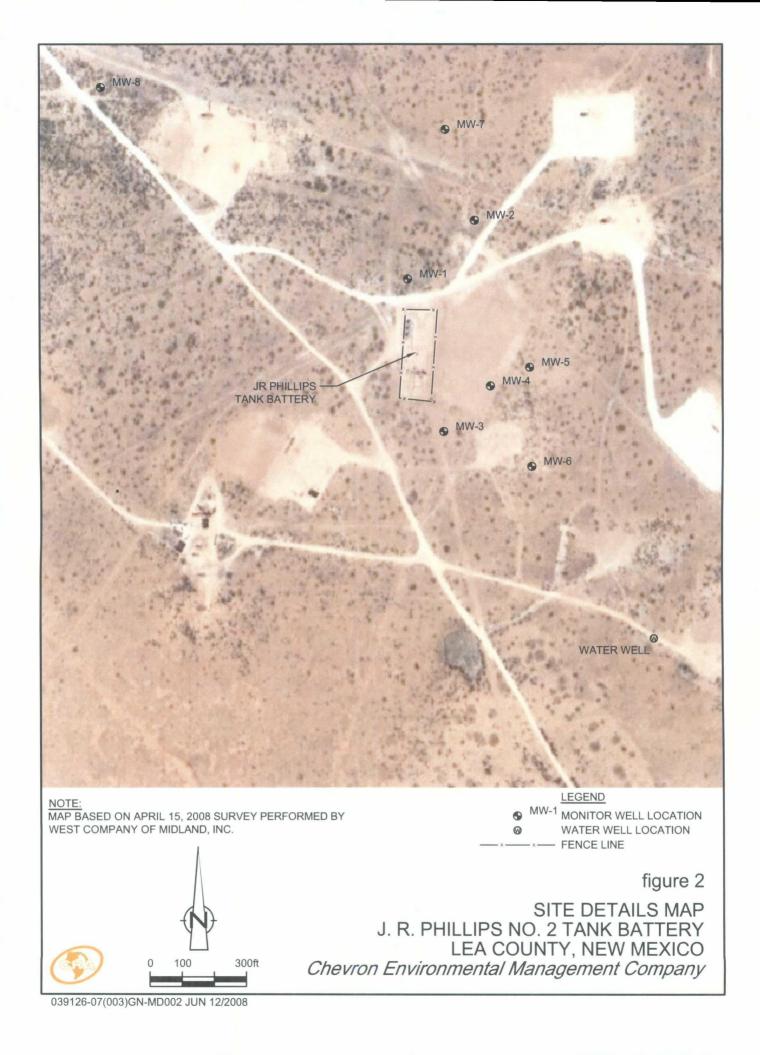
Project Manager

Told Wells

Thomas C. Larson

Operations Manager





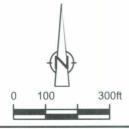


NOTES:

- 1. MAP BASED ON APRIL 15, 2008 SURVEY PERFORMED BY WEST COMPANY OF MIDLAND, INC.
- 2. GROUNDWATER ELEVATIONS COLLECTED ON MAY 30, 2007.







GROUNDWATER GRADIENT MAP - MAY 2007
J. R. PHILLIPS NO. 2 TANK BATTERY
LEA COUNTY, NEW MEXICO
Chevron Environmental Management Company

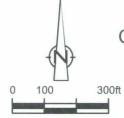


NOTES:

1. MAP BASED ON APRIL 15, 2008 SURVEY PERFORMED BY WEST COMPANY OF MIDLAND, INC.

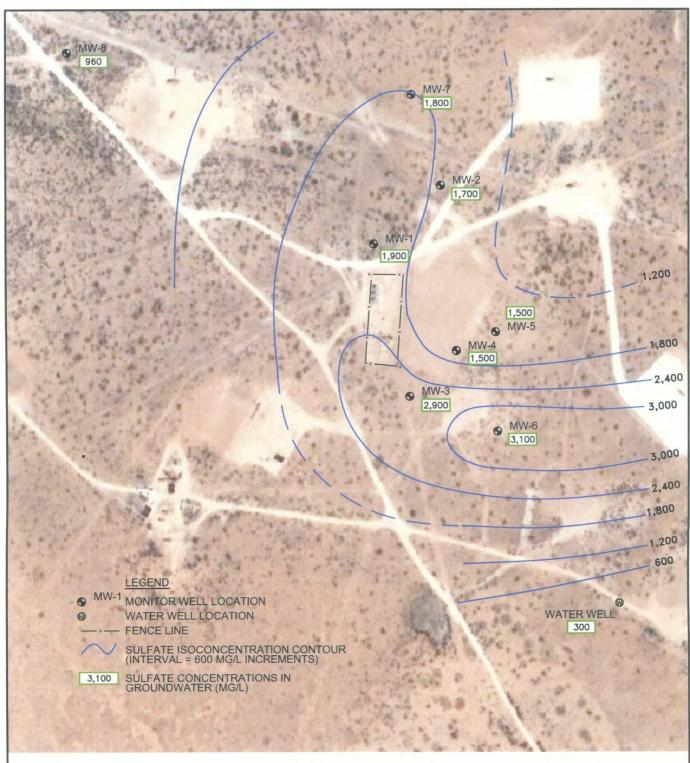
2. GROUNDWATER SAMPLES COLLECTED ON MAY 31, 2007.





CHLORIDE ISOCONCENTRATION MAP - MAY 2007
J. R. PHILLIPS NO. 2 TANK BATTERY
LEA COUNTY, NEW MEXICO

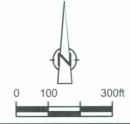
Chevron Environmental Management Company



NOTES:

- 1. MAP BASED ON APRIL 15, 2008 SURVEY PERFORMED BY WEST COMPANY OF MIDLAND, INC.
- 2. GROUNDWATER SAMPLES COLLECTED ON MAY 31, 2007.





SULFATE ISOCONCENTRATION MAP - MAY 2007 J. R. PHILLIPS NO. 2 TANK BATTERY LEA COUNTY, NEW MEXICO Chevron Environmental Management Company

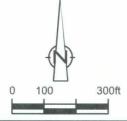


NOTES

1. MAP BASED ON APRIL 15, 2008 SURVEY PERFORMED BY WEST COMPANY OF MIDLAND, INC.

2. GROUNDWATER SAMPLES COLLECTED ON MAY 31, 2007.





TDS ISOCONCENTRATION MAP - MAY 2007 J. R. PHILLIPS NO. 2 TANK BATTERY LEA COUNTY, NEW MEXICO Chevron Environmental Management Company

TABLE I GROUNDWATER GAUGING SUMMARY CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY J.R. PHILLIPS TANK BATTERY NO.2 LEA COUNTY, NEW MEXICO

Well ID		Depth to	Casing	Groundwater		Well Screen
тос	Collection	Groundwater	Diameter	Elevation	Well Depth	Interval
Elevation	Date	(ft TOC)	(in)	(ft)	(ft TOC)	(ft bgs)
MW-1	5/2/01	39.33	2	3532.28	45.10	27-42
3571.61	05/21/02	40.37		3531.24		
	11/12/02	40.92		3530.69		
	05/15/03	41.11		3530.50		
	09/03/03	41.54		3530.07		
	11/20/03	41.65		3529.96		
	05/03/04	41.40		3530.21		
	05/10/05	38.86		3532.75		
	05/15/06	34.70		3536.91		
	05/30/07	34.12		3537.49		
MW-2	5/2/01	39.15	2	3531.97	45.12	27-42
3571.12	05/21/02	40.14		3530.98		
	11/12/02	40.69		3530.43		
	05/15/03	40.89		3530.23		
	09/03/03	41.33		3529.79		
	11/20/03	41.42		3529.70		
	05/03/04	41.11		3530.01		
	05/10/05	35.78		3535.34		
	05/15/06	34.63		3536.49		
	05/30/07	33.96		3537.16		
MW-3	5/2/01	39.30	2	3531.40	. 56.50	34-54
3570.70	05/21/02	40.57		3530.13	. 50.50	
3370.70	11/12/02	41.09		3529.61		
	05/15/03	41.26		3529.44		
	09/03/03	41.61		3529.09		
	11/20/03	41.73		3528.97		
	05/03/04	41.60		3529.10		
	05/05/04	36.89		3533.81		
	05/15/06	35.70		3535.00		
	05/30/07	35.70		3535.59		
MW-4	5/2/01	40.24	2	3530.83	57.12	34-54
3571.07	05/21/02	41.09		3529.98	37.12	34-34
3371.07	11/12/02	41.59		3529.48		
	05/15/03	41.77		3529.30		
	09/03/03	42.19		3528.88		
	11/20/03	42.17		3528.80		
	05/03/04	42.03		3529.04		
	05/10/05	37.15		3533.92		
1	05/15/06	36.15		3534.92		
	05/30/07	35.5		3535.57		
MW-5	5/2/01	38.37	2	3530.94	57.75	34-54
3569.31	05/21/02	39.53		3529.78		
	11/12/02	40.02		3529.29		
	05/15/03	40.21		3529.10		
	09/03/03	42.21		3527.10		
H	11/20/03	40.71		3528.60		
1	05/03/04	40.39		3528.92		
	05/10/05	35.48		3533.83		
[05/15/06	34.65		3533.65		
	05/30/07	33.94		3535.37		***
	03/30/0/	33.74		3333.37		1

TABLE I

GROUNDWATER GAUGING SUMMARY CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY J.R. PHILLIPS TANK BATTERY NO.2 LEA COUNTY, NEW MEXICO

TOC Elevation Collection Date Groundwater (ft TOC) Diameter (in) Elevation (ft) Well Depth (ft TOC) Interval (ft bgs) MW-6 3569.53 5/2/01 05/21/02 40.22 40.22 3530.13 3529.31 57.30 3528.81 34-54 3528.81 05/15/03 40.88 09/03/03 3528.65 11/20/03 41.92 41.12 3528.65 05/05/04 41.12 05/10/05 36.56 3532.81 05/15/06 35.65 3532.81 05/10/05 36.56 3532.81 05/10/05 36.56 3532.81 05/13/07 34.93 3534.60 05/33/07 34.93 3531.61 3572.46 05/21/02 40.85 3530.81 0	Well ID		Depth to	Casing	Groundwater	··-	Well Screen
MW-6	TOC	Collection	Groundwater	Diameter	Elevation	Well Depth	
3569.53	Elevation	Date	(ft TOC)	(in)	(ft)	(ft TOC)	(ft bgs)
11/12/02 40.72 3528.81	MW-6	5/2/01	39.40	2	3530.13	57.30	34-54
05/15/03	3569.53	05/21/02	40.22		3529.31		
05/15/03			40.72		3528.81		
09/03/03			40.88		3528.65		
11/20/03			41.92		3527.61		
05/03/04					3528.20		
05/10/05			41.12		3528.41		
MW-7			1				
MW-7 5/2/01 39.76 2 3532.70 57.85 36-56 3572.46 05/21/02 40.85 3531.61 11/12/02 41.47 3530.99 05/15/03 41.65 3530.81 09/03/03 42.13 3530.33 11/20/03 42.25 3530.54 05/03/04 41.92 3530.54 05/10/05 36.43 3537.38 05/15/06 35.08 3537.38 05/30/07 34.37 3538.09 MW-8 5/2/01 40.35 2 3537.31 65.20 47-62 3577.66 05/21/02 49.27 3534.51 09/03/03 43.52			1				
MW-7 5/2/01 39.76 2 3532.70 57.85 36-56 3572.46 05/21/02 40.85 3531.61 11/12/02 41.47 3530.99 05/15/03 41.65 3530.81 09/03/03 42.13 3530.33 11/20/03 42.25 3530.54 05/03/04 41.92 3530.54 05/10/05 36.43 3536.03 05/15/06 35.08 3537.38 05/30/07 34.37 3528.39 MW-8 5/2/01 40.35 2 3537.31 65.20 47-62 3577.66 05/21/02 49.27 3528.39 11/20/03 43.30							
3572.46	MW-7			2		57.85	36-56
11/12/02 41.47 3530.99			1 1		3531.61		
05/15/03 41.65 3530.81 09/03/03 42.13 3530.33 11/20/03 42.25 3530.21 05/03/04 41.92 3530.54 05/10/05 36.43 3536.03 05/15/06 35.08 3537.38 05/30/07 34.37 3538.09 MW-8 5/2/01 40.35 2 3537.31 65.20 47-62 3577.66 05/21/02 49.27 3528.39 11/12/02 43.15 3534.51 05/15/03 43.30 3534.36 11/20/03 43.87 3534.36 05/30/04 44.07 3535.59 05/10/05 33.45 354.21			1				
09/03/03 42.13 3530.33 11/20/03 42.25 3530.21 05/03/04 41.92 3530.54 05/15/06 36.43 3536.03 05/15/06 35.08 3537.38 05/30/07 34.37 3538.09 MW-8 5/2/01 40.35 2 3537.31 65.20 47-62 3577.66 05/21/02 49.27 3528.39 11/12/02 43.15 3534.51 05/15/03 43.30 3534.36 09/03/03 43.52 3534.14 11/20/03 43.87 3533.59 05/10/05 32.30 3545.36 05/10/05 33.45 3544.21							
11/20/03 42.25 3530.21 05/03/04 41.92 3530.54 05/10/05 36.43 3536.03 05/15/06 35.08 3537.38 05/30/07 34.37 3538.09 MW-8 5/2/01 40.35 2 3537.31 65.20 47-62 3577.66 05/21/02 49.27 3528.39 11/12/02 43.15 3534.51 05/15/03 43.30 3534.36 11/20/03 43.87 3533.79 11/20/03 43.87 3533.59 05/03/04 44.07 3533.59 05/15/06 33.45 3544.21 05/30/07 33.17 3528.61 69.35							
05/03/04							
05/10/05 36.43 3536.03 05/15/06 35.08 3537.38 05/30/07 34.37 3538.09 MW-8 5/2/01 40.35 2 3537.31 65.20 47-62 3577.66 05/21/02 49.27 3528.39 11/12/02 43.15 3534.51 05/15/03 43.30 3534.36 09/03/03 43.52 3534.14 11/20/03 43.87 3533.79 05/03/04 44.07 3533.59 05/10/05 32.30 3545.36 05/10/05 33.45 3544.21 05/30/07 33.17 3524.49 3562.54 05/21/02 34.60 3527.94							
05/15/06 35.08 3537.38 05/30/07 34.37 3538.09 MW-8 5/2/01 40.35 2 3537.31 65.20 47-62 3577.66 05/21/02 49.27 3528.39 11/12/02 43.15 3534.51 05/15/03 43.30 3534.36 09/03/03 43.52 3534.14 11/20/03 43.87 3533.79 05/03/04 44.07 3533.59 05/10/05 32.30 3545.36 05/10/05 33.45 3544.21 05/30/07 33.17 3528.61 69.35 Unknown 3562.54 05/21/02 34.60 3527.94 11/2/02 35.03 3527.03<							
MW-8 5/2/01 40.35 2 3538.09 3577.66 05/21/02 49.27 3528.39 11/12/02 43.15 3534.51 05/15/03 43.30 3534.36 09/03/03 43.52 3533.79 11/20/03 43.87 3533.59 05/03/04 44.07 3533.59 05/10/05 32.30 3545.36 05/15/06 33.45 3544.21 05/30/07 33.17 3524.49 WW-1 5/2/01 33.93 5 3528.61 69.35 Unknown 3562.54 05/21/02 34.60 3527.94 11/2/02 35.03							
MW-8 5/2/01 40.35 2 3537.31 65.20 47-62 3577.66 05/21/02 49.27 3528.39 11/12/02 43.15 3534.51 05/15/03 43.30 3534.36 09/03/03 43.52 3534.14 11/20/03 43.87 3533.79 05/03/04 44.07 3533.59 05/10/05 32.30 3545.36 05/15/06 33.45 3544.21 05/30/07 33.17 3544.49 WW-1 5/2/01 33.93 5 3528.61 69.35 Unknown 3562.54 05/21/02 34.60 3527.94 11/12/02 35.03 3527.91 09/03/03 35.56							
3577.66 05/21/02 49.27 3528.39 11/12/02 43.15 3534.51 05/15/03 43.30 3534.36 09/03/03 43.52 3534.14 11/20/03 43.87 3533.79 05/03/04 44.07 3533.59 05/10/05 32.30 3545.36 05/15/06 33.45 3544.21 05/30/07 33.17 3544.49 WW-1 5/2/01 33.93 5 3528.61 69.35 Unknown 3562.54 05/21/02 34.60 3527.94 11/12/02 35.03 3527.03 09/03/03 35.51 3526.98 11/20/03 35.49 3527.05 <td>MW-8</td> <td></td> <td></td> <td></td> <td>-</td> <td>65.20</td> <td>47-62</td>	MW-8				-	65.20	47-62
11/12/02							
05/15/03 43.30 3534.36 09/03/03 43.52 3534.14 11/20/03 43.87 3533.79 05/03/04 44.07 3533.59 05/10/05 32.30 3545.36 05/15/06 33.45 3544.21 05/30/07 33.17 3544.49 WW-1 5/2/01 33.93 5 3528.61 69.35 Unknown 3562.54 05/21/02 34.60 3527.94 11/12/02 35.03 3527.91 09/03/03 35.51 3527.03 11/20/03 35.49 3526.98 05/03/04 35.49 3531.96 05/15/06 30.05 3532.49		1					
09/03/03 43.52 3534.14 11/20/03 43.87 3533.79 05/03/04 44.07 3533.59 05/10/05 32.30 3545.36 05/15/06 33.45 3544.21 05/30/07 33.17 3544.49 WW-1 5/2/01 33.93 5 3528.61 69.35 Unknown 3562.54 05/21/02 34.60 3527.94 11/12/02 35.03 3527.51 09/03/03 35.51 3527.03 11/20/03 35.56 3526.98 05/03/04 35.49 3531.96 05/15/06 30.05 3532.49	•						
11/20/03			1				
05/03/04 44.07 3533.59 05/10/05 32.30 3545.36 05/15/06 33.45 3544.21 05/30/07 33.17 3544.49 WW-1 5/2/01 33.93 5 3528.61 69.35 Unknown 3562.54 05/21/02 34.60 3527.94 11/12/02 35.03 3527.51 09/03/03 35.51 3527.03 11/20/03 35.56 3526.98 05/03/04 35.49 3527.05 05/10/05 30.58 3531.96 05/15/06 30.05 3532.49			'				
05/10/05 32.30 3545.36 05/15/06 33.45 3544.21 05/30/07 33.17 3544.49 WW-1 5/2/01 33.93 5 3528.61 69.35 Unknown 3562.54 05/21/02 34.60 3527.94 11/12/02 35.03 3527.51 09/03/03 35.51 3527.03 11/20/03 35.56 3526.98 05/03/04 35.49 3527.05 05/10/05 30.58 3531.96 05/15/06 30.05 3532.49							
05/15/06 33.45 3544.21 05/30/07 33.17 3544.49 WW-1 5/2/01 33.93 5 3528.61 69.35 Unknown 3562.54 05/21/02 34.60 3527.94 11/12/02 35.03 3527.51 09/03/03 35.51 3527.03 11/20/03 35.56 3526.98 05/03/04 35.49 3527.05 05/10/05 30.58 3531.96 05/15/06 30.05 3532.49							
05/30/07 33.17 3544.49 WW-1 5/2/01 33.93 5 3528.61 69.35 Unknown 3562.54 05/21/02 34.60 3527.94 11/12/02 35.03 3527.51 09/03/03 35.51 3527.03 11/20/03 35.56 3526.98 05/03/04 35.49 3527.05 05/10/05 30.58 3531.96 05/15/06 30.05 3532.49							
WW-1 5/2/01 33.93 5 3528.61 69.35 Unknown 3562.54 05/21/02 34.60 3527.94 11/12/02 35.03 3527.51 09/03/03 35.51 3527.03 11/20/03 35.56 3526.98 05/03/04 35.49 3527.05 05/10/05 30.58 3531.96 05/15/06 30.05 3532.49							
3562.54 05/21/02 34.60 3527.94 11/12/02 35.03 3527.51 09/03/03 35.51 3527.03 11/20/03 35.56 3526.98 05/03/04 35.49 3527.05 05/10/05 30.58 3531.96 05/15/06 30.05 3532.49	WW-1	· · · · · · · · · · · · · · · · · · ·		5	 	69.35	Unknown
11/12/02 35.03 3527.51 09/03/03 35.51 3527.03 11/20/03 35.56 3526.98 05/03/04 35.49 3527.05 05/10/05 30.58 3531.96 05/15/06 30.05 3532.49				*			
09/03/03 35.51 3527.03 11/20/03 35.56 3526.98 05/03/04 35.49 3527.05 05/10/05 30.58 3531.96 05/15/06 30.05 3532.49		1			1		
11/20/03 35.56 3526.98 05/03/04 35.49 3527.05 05/10/05 30.58 3531.96 05/15/06 30.05 3532.49		1			1		
05/03/04 35.49 3527.05 05/10/05 30.58 3531.96 05/15/06 30.05 3532.49							
05/10/05 30.58 3531.96 05/15/06 30.05 3532.49					1		
05/15/06 30.05 3532.49							
1 00/00/07 27.47 00/00/07		05/30/07	29.47		3533.07		

Notes:

- 1. TOC Top of Casing.
- 2. bgs below ground surface.

TABLE II GROUNDWATER ANALYTICAL SUMMARY CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY J.R. PHILLIPS TANK BATTERY NO.2 LEA COUNTY, NEW MEXICO

									MW-3											MW-2	101										MW-1	***	*	Sample ID
5/31/07	5/16/06	5/10/05	5/4/04	11/21/03	9/9/03	5/15/03	11/13/02	5/23/02	5/3/01	5/31/07	5/16/06	5/10/05	5/4/04	11/21/03	9/9/03	5/15/03	11/12/02	5/22/02	5/3/01	4/10/01	5/31/07	5/16/06	5/10/05	5/4/04	11/21/03	9/9/03	5/15/03	11/12/02	5/23/02	5/3/01	4/10/01		7.60	Sample Date
<10	<10	<1.00	<1.00	<1.00	1	<1.00	< 0.10	<1.00	<2.00	<10	<10	<1.00	<1.00	<1.00	1	<1.00	<0.10	<1.00	<2.00	0.00	<10	<10	<1.00	<1.00	<1.00	1	<1.00	<0.10	<1.00	<2.00	0.00		,	Carbonate Alkalinity
520	550	472	478	464	1	462	456	512	458	1370	890	502	530	510	-	498	482	530	516	566	378	410	412	438	460	1	430	456	494	500	556			Bicarbonate Alkalinity
520	550	472	478	464	1	462	456	512	458	1370	890	502	530	510	-	498	482	530	516	566	378	410	412	438	460	1	430	456	494	500	556		New	*Total Alkalinity
7,700	8,600	11;900	11,400	10,500	10,300	10,700;	11,400	10,800	.11,078	6,700	6,300	8,080	, 6,040	5,790	6,470	5,850	6,740	7,320	7,799	8,704	7,000	6,700	7,000	5,280	4,910	5,320	5,150	6,030	6,060	6,913	7,300	250	New Mexico Water Quality Control Commission Groundwater Standard	Chloride
<50	0.76	<2.00	<8.00	1	1	1	;	1	ı	<50	2.1	5.57	<4.00	1	ŀ	1	ı	ì	1	1	<50	1.3	<2.00	<4.00	1	1	1	1	1	1	,	× 1.60	Quality Control C	Fluoride
<0.100	<0.40	<2.00	<8.00	1	1	1	1	1	1	<0.100	<0.40	<2.00	<4.00	{	}	1	1	1	1	ł	<0.100	<0.40	<2.00	<4.00	1	1	;	1	1	1	1	10	ommission Gro	Nitrate - N
2,900	3,100	4,190	4,750	4,480		4,220	3,670	3,920	3,525	1,700	1,600	2,090	1,950	2,100		1,990	1,780	2,150	2,670	2,611	1,900	1,700	2,360	1,620	1,730	1	1,710	1,400	1,850	2,020	2,061	600	undwater Standa	Sulfate
591	642.000 D2	965	808	972	1	921	863	999	984	417	375.000 D2	385	326	378		312	352	471	412.4	569	461	403.000 D2	453	272	· 302	-	312	235	361	323.4	445		urd	Calcium
213	243.000 D2	356	291	333	1	315	371	350	431.9	183	168.000 D2	171	136	158	1	150	187	204	221.7	296	200	182.000 D2	211	115	121	1	121	143	154	172.5	175			Magnesium
<50	24.100 D2	86.70	54.10	47.50	1	34.10	59.30	56.50	38.89	<50	9.330 D2	52.90	43.80	52.1	1	31.30	48.70	42.20	30.31	31.00	<50	38.400 D2	94.50	49.10	54.6		42.80	67.40	66.40	52.11	44.00	, ,	*,	Potassium
4,760	6,040.000 D 1	7,320	5,290	7,540	1	5,870	5,680	6,210	6,114	4,000	4,330.000 D1	4,310	3,300	3,770	-	4,670	3,640	4,200	4,424	5,871	4,150	4,080.000 D1	3,780	3,030	3,360	-	3,970	3,060	3,750	3,756	5,058			Sodium
14,100	23,200	26,750	22,500	23,100	the softs (finds only a chamber of a constant of the soft of the s	24,200	23,600	24,200	24,135	14,900	14,200	17,050	12,520	14,080	The state of the s	14,000	14,300	15,700	16,857	19,312	15,600	16,600	16,250	11,260	11,540		5,990	12,800	13,300	14,501	15,816	1,000		TDS

TABLE II GROUNDWATER ANALYTICAL SUMMARY CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY J.R. PHILLIPS TANK BATTERY NO.2 LEA COUNTY, NEW MEXICO

					-				MW-6										MW-5						-				MW-4			Sample ID
5/31/07	5/16/06	5/10/05	5/4/04	11/20/03	9/9/03	5/15/03	11/13/02	5/23/02	5/3/01	5/31/07	5/16/06	5/10/05	5/4/04	11/21/03	9/9/03	5/15/03	11/13/02	5/23/02	5/3/01	5/31/07	5/16/06	5/10/05	5/4/04	11/21/03	9/9/03	5/15/03	11/13/02	5/22/02	5/3/01			Sample Date
<10	<10	<1.00	<1.00	<1.00	1	<1.00	< 0.10	<1.00	<2.00	<10	<10	<1.00	<1.00	<1.00	1	<1.00	<0.10	<1.00	<2.00	<10	<10	<1.00	<1.00	<1.00	1	<1.00	<0.10	<1.00	<2.00			Carbonate Alkalinity
776	750	476	466	480	1	470	416	474	460	426	530	536	534	522	i :	562	640	496	416	624	750	708	900	770	1	1050	1020	814	618			Bicarbonate Alkalinity
776	750	476	466	480	1	470	416	474	460	426	530	536	534	522		562	640	496	416	624	750	708	900	770	-	1050	1020	814	618	1 s.	New	Total Alkalinity
7,800	8,700	11,000	11,400	10,000	10,300	10,700	10,800	11,000	11,876	6,400	5,800	23,300.	6,630	7,010	7,090	6,800	7,270	6,970	8,685	5,500	. 6,400	7,750	8,740	7,500	7,800	7,140	7,890	8,170	9,572	250	Mexico Water (Chloride
<50	1.0	3.48	<8.00	l	1	1	1	1	1	<50	1.4	<2.00	<4.00	1	1	i	1	1	1	<50	0.81	273	<6.00	-	1		1	1		1.60	Quality Control C	Fluoride
<0.100	<0.40	<2.00	<8.00	ţ	1	ł	1	1	1	<0.100	<0.40	<2.00	<4.00	ı	1		ł	1	1	<0.100	<0.40	<2.00	<6.00	1		1	-	-	1	10	ommission Gro	Nitrate - N
3,100	3,200	4,050	4,310	4,410		4,310	3,660	4,300.	4,380	1,500	1,600	2,380	2,310	3,170		2,320	1,790	2,510	3,045	1,500	1,900	2,010	3,170	2,720	A vertical distance of the second of the sec	1,210	1,020	1,940	2,755	600	New Mexico Water Quality Control Commission Groundwater Standard	Sulfate
600	620.000 D2	801	869	904	1	1,000	936	1,130	1,004	372	335.000 D2	362	365	434	1	383	266	394	430.9	272	253.000 D2	330	240	334	-	185	47.1	389	467.7		ırd	Calcium
226	268.000 D2	331	350	399	1	388	486	483	429.9	154	143.000 D2	151	152	178		167	172	200	237.1	126	146.000 D2	186	191	198	1	179	202	220	299.8		***	Magnesium
> 50	24.200 D2	52.20	49.00	42.50	1	34.10	57.60	53.00	52.27	<50	23.900 D2	68.30	47.80	54.90	1	30.90	43.80	44.00	44.36	<50	<5.000 D2	50.40	25.80	39.70		14.80	21.60	45.30	49.25		,	Potassium
5,200	5,980.000 D1	6,090	5,590	5,610		5,760	5,470	6,060	6,281	3,910	4,110.000 D1	4,400	3,850	4,300		5,300	3,880	4,680	4,651	3,550	4,120.000 D1	4,400	3,660	4,760		5,250	3,980	5,100	5,435			Sodium
18,700	18,900	24,200	23,850	23,500		23,800	23,400	25,500	25,288	14,400	14,100	17,400	16,800	16,850	.	16,000	14,900	16,900	18,846	13,700	11,100	26,700	15,800	17,350	and the second s	15,200	14,800	18,200	20,118	1,000		TDS

TABLE II GROUNDWATER ANALYTICAL SUMMARY CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY J.R. PHILLIPS TANK BATTERY NO.2 LEA COUNTY, NEW MEXICO

									WW-1					-		-			MW-8				.					-:-	MW-7			Sample ID
5/31/07	5/16/06	5/10/05	5/4/04	11/21/03	9/9/03	5/15/03	11/12/02	5/3/01	-	5/31/07	5/16/06	5/10/05	5/4/04	11/20/03	9/9/03	5/15/03	11/12/02	5/23/02	5/2/01	5/31/07	5/16/06	5/10/05	5/4/04	11/20/03	9/9/03	5/15/03	11/12/02	5/22/02	5/2/01			Sample Date
<10	<10	<1.00	<1.00	<1.00	1	<1.00	<0.10	<2.00	-	<10	<10	<1.00	<1.00	<1.00	l	<1.00	<0.10	<1.00	<2.00	<10	<10	<1.00	<1.00	<1.00	1	<1.00	<0.10	<1.00	<2.00			Carbonate Alkalinity
<10	67	<4.00	<4.00	<4.00	ì	<4.00	<2.0	<2.00		378	480	446	380	438	ŧ	468	444	430	426	397	480	450	418	434	1	438	412	440	436			Bicarbonate Alkalinity
<10	67	<4.00	<4.00	<4.00	ì	<4.00	<2.0	<2.00	-	378	480	446	380	438	1	468	444	430	426	397	480	450	418	434	-	438	412	440	436		New	Total Alkalinity
2,400	1,300	121	12,500	10,000	<5.00	11,800	<5.0	12,053	13,152		2,600	2,590	7,960	8,190	7,270	7,300	7,270	6,680	7,445	6,800	6,500	8,210	6,610	6,360	6,910	7,180	7,530	7,420	8,154	250	New Mexico Water Quality Control Commission Groundwater Standard	Chloride
<25	<0.50	<1.00	<8.00	{	1	1	1	1	ł	<50	3.1	4.12	<6.00	1	1	1	1	1	!	<50	1.1	2.14	<4.00	I	I	}	I	I	1	* 1.60	uality Control C	Fluoride
<0.100	1.9	<1.00	<8.00	1	1	1	1	ł	ı	<0.100	<0.40	<1.00	<6.00	1	1	ı	1	1	1	<0.100	<0.40	<2.00	<4.00	1	1	*	1	ł	ł	10	ommission Grou	Nitrate - N
300	110	63.40	1,880	2,180	Control of the Contro	1,780	998	•629	And the second s	960	960	936	1,370	2,570		1,690	1,220	1,260	1,213	1,800	1,700	1,810	1,930	2,110		2,350	1,800	2,280	2,430	600	ındwater Standaı	Sulfate
645	155.000 D2	39.8	1,540	1,650	1	1,490	1,120	1,419	ł	394	327.000 D2	228	912	881	1	777	591	701	766.7	496	530.000 D2	506	527	532	1	583	512	630	599.5		ď	Calcium
167	34.500 D2	12.2	450	461	;	403	361	387.3	1	133	117.000 D2	84.40	321	280	1	265	254	237	295.7	187	200.000 D2	188	188	204	1	220	244	264	289.8			Magnesium
\$0	<5.000 D2	3.05	47.00	52.7	1	28.90	38.30	38.95	1	<50	21.000 D2	46.30	60.10	64.5	;	55.10	88.00	75.90	52.68	<50	15.600 D2	62.80	47.10	52.70	1	33.30	55.00	48.50	34.57			Potassium
1,830	186.000 D1	10.20	3,470	3,630	i	3,360	2,260	1,486	1	1,830	1,680.000 D1	1,740	2,970	3,560	1	4,580	3,150	3,420	2,999	3,730	4,020.000 D1	3,860	3,460	3,770	1	4,970	3,950	4,390	4,578	5.	. ***	Sodium
5,340	4,180	336	23,400	18,900		21,400	15,800	22,571	man man per man	8,080	6,620	5,635	12,750	14,040		15,700	14,000	13,300	16,325	14,900	18,100	14,600	16,600	14,500	-	16,800	15,700	16,900	18,578	1,000		TDS

Works.

- 1. Shaded cells indicate New Mexico Water Quality Control Commission (NMWQCC) exceedance.
- Results shown in mg/L.
- 3. Analytical data prior to 2006 was provided to CRA by Larson & Associates.
- 4. D1 The analysis was performed at a dilution due to the high analyte concentration.
- 5. D2 The analysis was performed at a dilution due to the presence of matrix interferences.

APPENDIX A

NMOCD CORRESPONDENCE



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jenniser A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

December 27, 2001

<u>CERTIFIED MAIL</u> RETURN RECEIPT NO. 7000-1670-0012-5357-8116

Mr. Rodney Bailey
Texaco Exploration & Production, Inc.
500 N. Loraine
Midland, Texas
79701

RE: CASE #1R0255

J.R. PHILLIPS #2 TANK BATTERY SITE

MONUMENT, NEW MEXICO

Dear Mr. Bailey:

The New Mexico Oil Conservation Division (OCD) has reviewed Texaco Exploration & Production, Inc.'s (Texaco) May 24, 2001 "GROUNDWATER ASSESSMENT REPORT, TEXACO EXPLORATION AND PRODUCTION INC., J.R. PHILLIPS TANK BATTERY #2, SE/4, NW/4, SECTION 6, TOWNSHIP 20 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO, MAY 24, 2001" which was submitted on behalf of Texaco by their consultant Larson & Associates, Inc. This document contains the results of Texaco's investigation of the extent of ground water contamination related to a former emergency pit at the J.R. Phillips #2 Tank Battery south of Monument, New Mexico. The document also contains a proposal for further ground water monitoring at the site.

The above referenced monitoring proposal is approved with the following conditions:

- 1. Ground water from the monitoring wells shall also be analyzed for concentrations of benzene, toluene, ethylbenzene and xylene (BTEX).
- 2. Texaco shall notify the OCD at least 48 hours in advance of scheduled activities such that the OCD has the opportunity to witness the events and split samples.

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

If you have any questions, please contact me at (505) 476-3491.

Sincerely,

William C. Olson

Hydrologist

Environmental Bureau

Chris Williams, OCD Hobbs District Office xc:

Mark Larson, Larson & Associates, Inc.



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

October 1, 2004

Mr. Rodney Bailey ChevronTexaco 15 Smith Road

Midland, Texas

79705

RE:

CASE #1R0255

J.R. PHILLIPS #2 TANK BATTERY SITE

MONUMENT, NEW MEXICO

Dear Mr. Bailey:

The New Mexico Oil Conservation Division (OCD) has reviewed ChevronTexaco's May 10, 2004 "ANNUAL GROUNDWATER MONITORING REPORT, CHEVRONTEXACO EXPLORATION AND PRODUCTION COMPANY, J.R.PHILLIPS TANK BATTERY NO. 2, NW/4 SE/4, SECTION 30, TOWNSHIP 18 SOUTH, RANGE 38 EAST, LEA COUNTY, NEW MEXICO" which was submitted on behalf of ChevronTexaco by their consultant Larson & Associates, Inc. This document contains the results of ChevronTexaco's 2003 remediation and monitoring of contaminated ground water at the J.R. Phillips #2 Tank Battery south of Monument, New Mexico. The document also proposes to change the sampling schedule of ground water monitoring wells from semi-annual to annual sampling.

The above-referenced monitoring proposal is approved. Please be advised that OCD approval does not limit ChevronTexaco to the proposed work plan should the plan fail to adequately remediate or monitor contamination related to ChevronTexaco's activities, or if contamination exists which is outside the scope of the work plan. In addition, OCD approval does not relieve ChevronTexaco of responsibility for compliance with any other federal, state or local laws and regulations. If you have any questions, please contact me at (505) 476-3491.

Sincerely,

William C. Olson

Hydrologist

Environmental Bureau

xc:

Chris Williams, OCD Hobbs District Office

Cindy K. Crain, Larson & Associates, Inc.

APPENDIX B

CERTIFIED LABORATORY REPORTS AND CHAIN-OF-CUSTODIES



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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

June 18, 2007

Luke Markham CRA 2135 S. Loop 250 West Midland, TX 79701

RE: Project: 2070014

RE: Project ID: JR PHILLIPS/039126

Circly Clovesa

Dear Luke Markham:

Enclosed are the analytical results for sample(s) received by the laboratory on June 01, 2007. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Cindy Olavesen



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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006



Report of Laboratory Analysis
Project Number: 2070014





Sample Cross Reference Report

Pace Analytical Services, Inc.

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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client: CRA MIDLAND

Project: JR PHILLIPS/039126

Project No.: <u>2070014</u>

Sample ID	Lab ID	Matrix	Collecti Date/Ti		Receive Date/Tin	
MW1 53107	20524683	Water	05/31/2007	13:10	06/01/2007	09:50
MW2 53107	20524684	Water	05/31/2007	13:15	06/01/2007	09:50
MW3 53107	20524685	Water	05/31/2007	13:00	06/01/2007	09:50
MW4 53107	20524686	Water	05/31/2007	12:30	06/01/2007	09:50
MW5 53107	20524687	Water	05/31/2007	12:35	06/01/2007	09:50
MW6 53107	20524688	Water	05/31/2007	12:05	06/01/2007	09:50
MW7 53107	20524689	Water	05/31/2007	13:35	06/01/2007	09:50
MW8 53107	20524690	Water	05/31/2007	14:05	06/01/2007	09:50
WWI 53107	20524691	Water	05/31/2007	11:40	06/01/2007	09:50
DUP 53107	20524692	Water	05/31/2007		06/01/2007	09:50





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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Project:

2070014

Sample Receipt Condition:

All samples were received in accordance with EPA protocol.

Holding Times:

All holding times were met.

Blanks:

All blank results were below reporting limits.

Laboratory Control Samples:

All LCS recoveries were within QC limits.

Matrix Spikes and Duplicates:

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





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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Project: <u>2070014</u>

 Analytical Method	Batch	Sample used for QC
EPA 6010	86770	Client sample MW-8 53007 from project 2069969
SM 2540C	86681	Project sample MW1 53107
SM 2320B	86785	Batch sample from another client



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: MW1 53107

Project: JR PHILLIPS/039126

Lab ID: 20524683

Description: None

Client: CRA MIDLAND

Site: None

Project No.: <u>2070014</u>

Matrix: Water

% Moisture: n/a

Collected: <u>05/31/07</u>

Received: <u>06/01/07</u>

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		leg. imit
Calcium, Dissolved	EPA 6010	86770	10	461000	D2	ug/L	50000	05-Jun-07	11-Jun-07 15:31	KJR	
Magnesium, Dissolved	EPA 6010	86770	10	200000	D2	ug/L	50000	05-Jun-07	11-Jun-07 15:31	KJR	
Potassium, Dissolved	EPA 6010	86770	10	ND	D2	ug/L	50000	05-Jun-07	11-Jun-07 15:31	KJR	
Sodium, Dissolved	EPA 6010	86770	10	4150000	D 1	ug/L	50000	05-Jun-07	11-Jun-07 15:31	KJR	

⁴ parameter(s) reported

DF denotes Dilution Factor of final sample.

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

Qu lists qualifiers. Specific qualifiers are defined at the end of the report. For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

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



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: MW2 53107

Project: JR PHILLIPS/039126

Lab ID: 20524684

Description: None

Client: CRA MIDLAND

Site: None

Project No.: 2070014

Matrix: Water

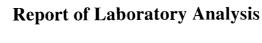
% Moisture: n/a

Collected: <u>05/31/07</u>

Received: 06/01/07

							Reporting				Reg.
ParameterName	Method	Batch	DF	Result	Qu	Units	Limit	Prep.	Analysis		Limit
Calcium, Dissolved	EPA 6010	86770	10	417000	D2	ug/L	50000	05-Jun-07	11-Jun-07 15:35	KJR	
Magnesium, Dissolved	EPA 6010	86770	10	183000	D2	ug/L	50000	05-Jun-07	11-Jun-07 15:35	KJR	
Potassium, Dissolved	EPA 6010	86770	10	ND	D2	ug/L	50000	05-Jun-07	11-Jun-07 15:35	KJR	
Sodium, Dissolved	EPA 6010	86770	10	4000000	DI	ug/L	50000	05-Jun-07	11-Jun-07 15:35	KJR	

4 parameter(s) reported



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: MW3 53107

Project: JR PHILLIPS/039126

Hew Orleans Laboratory

Lab ID: 20524685

Description: None

^yace Analytical

Client: CRA MIDLAND

Site: None

Project No.: <u>2070014</u>

Matrix: Water

% Moisture: n/a

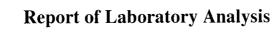
Collected: <u>05/31/07</u>

Received: 06/01/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Re _i Lin
Calcium, Dissolved	EPA 6010	86770	10	591000	D2	ug/L	50000	05-Jun-07	11-Jun-07 15:40	KJR
Magnesium, Dissolved	EPA 6010	86770	10	213000	D2	ug/L	50000	05-Jun-07	11-Jun-07 15:40	KJR
Potassium, Dissolved	EPA 6010	86770	10	ND	D2	ug/L	50000	05-Jun-07	11-Jun-07 15:40	KJR
Sodium, Dissolved	EPA 6010	86770	10	4760000	D1	ug/L	50000	05-Jun-07	11-Jun-07 15:40	KJR

⁴ parameter(s) reported

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



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: MW4 53107

Project: JR PHILLIPS/039126

Hew Orleans Laboratory

Lab ID: 20524686

Description: None

ace Analytical

Client: CRA MIDLAND

Site: None

Project No.: 2070014

Matrix: Water

% Moisture: n/a

Collected: <u>05/31/07</u>

Received: 06/01/07

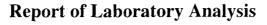
ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reş Lim
Calcium, Dissolved	EPA 6010	86770	10	272000	D2	ug/L	50000	05-Jun-07	11-Jun-07 15:44	KJR
Magnesium, Dissolved	EPA 6010	86770	10	126000	D2	ug/L	50000	05-Jun-07	11-Jun-07 15:44	KJR
Potassium, Dissolved	EPA 6010	86770	10	ND	D2	ug/L	50000	05-Jun-07	11-Jun-07 15:44	KJR
Sodium, Dissolved	EPA 6010	86770	10	3550000	DI	ug/L	50000	05-Jun-07	11-Jun-07 15:44	KJR

⁴ parameter(s) reported

DF denotes Dilution Factor of final sample. Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable, Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable. (1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.

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





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: MW5 53107

Project: JR PHILLIPS/039126

Lab ID: 20524687

Description: None

Client: CRA MIDLAND

Site: None

Project No.: 2070014

Matrix: Water

% Moisture: n/a

Collected: 05/31/07

Received: 06/01/07

ParameterName	Method	Batch	DF	Result	Ou	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	86770	10	372000	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:22	KJR	
Magnesium, Dissolved	EPA 6010	86770	10	154000	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:22	KJR	
Potassium, Dissolved	EPA 6010	86770	10	ND	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:22	KJR	
Sodium, Dissolved	EPA 6010	86770	10	3910000	D1 .	ug/L	50000	05-Jun-07	12-Jun-07 12:22	KJR	

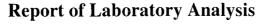
4 parameter(s) reported

6/18/2007 11:43:11

Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable. Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable. (1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.

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



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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Hew Orleans Laboratory

Client ID: MW6 53107

Project: JR PHILLIPS/039126

Lab ID: <u>20524688</u>

Description: None

Client: CRA MIDLAND

Site: None

Project No.: 2070014

Matrix: Water

% Moisture: n/a

Collected: <u>05/31/07</u>

Received: <u>06/01/07</u>

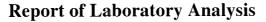
ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	86770	10	600000	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:26	KJR	
Magnesium, Dissolved	EPA 6010	86770	10	226000	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:26	KJR	
Potassium, Dissolved	EPA 6010	86770	10	ND	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:26	KJR	
Sodium, Dissolved	EPA 6010	86770	10	5200000	Dl	ug/L	50000	05-Jun-07	12-Jun-07 12:26	KJR	

4 parameter(s) reported

Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable. Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable. (1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.

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



Pace Analytical* New Orleans Laboratory

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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client ID: <u>MW7 53107</u>

Project: JR PHILLIPS/039126

Lab ID: 20524689

Description: None

Client: CRA MIDLAND

Site: None

Project No.: <u>2070014</u>

Matrix: Water

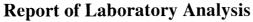
% Moisture: n/a

Collected: <u>05/31/07</u>

Received: <u>06/01/07</u>

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	86770	10	496000	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:30	KJR	
Magnesium, Dissolved	EPA 6010	86770	10	187000	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:30	KJR	
Potassium, Dissolved	EPA 6010	86770	10	ND	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:30	KJR	
Sodium, Dissolved	EPA 6010	86770	10	3730000	DI	ug/L	50000	05-Jun-07	12-Jun-07 12:30	KJR	

⁴ parameter(s) reported



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: MW8 53107

Project: JR PHILLIPS/039126

New Orleans Laboratory

Lab ID: 20524690

Description: None

Face Analytical*

Client: CRA MIDLAND

Site: None

Project No.: 2070014

Matrix: Water

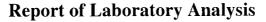
% Moisture: n/a

Collected: 05/31/07

Received: 06/01/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	86770	10	394000	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:35	KJR	
Magnesium, Dissolved	EPA 6010	86770	10	133000	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:35	KJR	
Potassium, Dissolved	EPA 6010	86770	10	ND	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:35	KJR	
Sodium, Dissolved	EPA 6010	86770	10	1830000	DI	ug/L	50000	05-Jun-07	12-Jun-07 12:35	KJR	

⁴ parameter(s) reported



face Analytical* **Hew Orleans Laboratory**

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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client ID: <u>WW1 53107</u>

Client: CRA MIDLAND

Project: JR PHILLIPS/039126

Site: None

Lab ID: 20524691

Project No.: <u>2070014</u>

Description: None

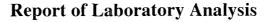
Matrix: Water

% Moisture: n/a

Collected: <u>05/31/07</u>

Received: <u>06/01/07</u>

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis	Reș Lin
Calcium, Dissolved	EPA 6010	86770	10	645000	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:41	KJR
Magnesium, Dissolved	EPA 6010	86770	10	167000	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:41	KJR
Potassium, Dissolved	EPA 6010	86770	10	ND	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:41	KJR
Sodium, Dissolved	EPA 6010	86770	10	1830000	D1	ug/L	50000	05-Jun-07	12-Jun-07 12:41	KJR



face Analytical New Orleans Laboratory

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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client ID: DUP 53107

Project: JR PHILLIPS/039126

Lab ID: <u>20524692</u>

Description: None

Client: CRA MIDLAND

Site: None

Project No.: 2070014

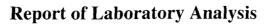
Matrix: Water

% Moisture: n/a

Collected: 05/31/07

Received: 06/01/07

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Calcium, Dissolved	EPA 6010	86770	10	393000	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:45	KJR	
Magnesium, Dissolved	EPA 6010	86770	10	131000	D2	ug/L	50000	05-Jun-07	12-Jun-07 12:45	KJR	
Potassium, Dissolved	EPA 6010	86770	10	ND	D2	ug/L	50000	05-Jun - 07	12-Jun-07 12:45	KJR	
Sodium, Dissolved	EPA 6010	86770	10	1740000	Dl	ug/L	50000	05-Jun-07	12-Jun-07 12:45	KJR	



Face Analytical Hew Orleans Laboratory Pace Analytical Services, Inc. 1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client ID: MW1 53107

Project: JR PHILLIPS/039126

Lab ID: 20524683

Description: None

Client: CRA MIDLAND

Site: None

Project No.: 2070014

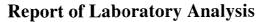
Matrix: Water

% Moisture: n/a

Collected: <u>05/31/07</u>

Received: 06/01/07

							Reporting				Reg.
ParameterName	Method	Batch	DF	Result	Qu	Units	Limit	Prep.	Analysis	_	Limit
Alkalinity, Carbonate (CaCC) SM 2320B	86785	1	ND		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity, Total	SM 2320B	86785	1	378.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity,Bicarbonate (CaC	SM 2320B	86785	1	378.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Nitrogen, Nitrate	SM 4500-NO3	86787	1	ND		mg/L	0.100	05-Jun-07	05-Jun-07 12:19		
Total Dissolved Solids	SM 2540C	86681	1	15600		mg/L	4.00	01-Jun-07	01-Jun-07 15:15	TAE	



ace Analytical Hew Orleans Laboratory

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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client ID: MW2 53107

Project: JR PHILLIPS/039126

Lab ID: 20524684

Description: None

Client: CRA MIDLAND

Site: None

Project No.: 2070014

Matrix: Water

% Moisture: n/a

Collected: <u>05/31/07</u>

Received: <u>06/01/07</u>

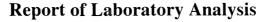
							Reporting				Reg.
ParameterName	Method	Batch	DF	Result	Qu	Units;	Limit	Prep.	Analysis		Limit
Alkalinity, Carbonate (CaCO	SM 2320B	86785	ı	ND		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity, Total	SM 2320B	86785	1	1370		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity,Bicarbonate (CaC	SM 2320B	86785	1	1370		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Nitrogen, Nitrate	SM 4500-NO3	86787	l	ND		mg/L	0.100	05-Jun-07	05-Jun-07 12:22		
Total Dissolved Solids	SM 2540C	86681	1	14900		mg/L	4.00	01-Jun-07	01-Jun-07 15:15	TAE	

DF denotes Dilution Factor of final sample.

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

Qu lists qualifiers. Specific qualifiers are defined at the end of the report. For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

⁽¹a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity. (1b) Flash point less than 140 degrees F is hazardous for ignitibility.



ace Analytical Hew Orleans Laboratory

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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client ID: MW3 53107

Project: JR PHILLIPS/039126

Lab ID: 20524685

Description: None

Client: CRA MIDLAND

Site: None

Project No.: 2070014

Matrix: Water

% Moisture: n/a

Collected: <u>05/31/07</u>

Received: 06/01/07

							Reporting				Reg.
ParameterName	Method	Batch	DF	Result	Qu	Units	Limit	Prep.	Analysis		Limit
Alkalinity, Carbonate (CaCO	SM 2320B	86785	1	ND		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity, Total	SM 2320B	86785	i	520.		mg/L	0.01	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity,Bicarbonate (CaC	SM 2320B	86785	1	520.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Nitrogen, Nitrate	SM 4500-NO3	86787	1	ND		mg/L	0.100	05-Jun-07	05-Jun-07 12:23		
Total Dissolved Solids	SM 2540C	86681	1	14100		mg/L	4.00	01-Jun-07	01-Jun-07 15:15	TAE	

⁵ parameter(s) reported



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: MW4 53107

Project: JR PHILLIPS/039126

Lab ID: 20524686

Description: None

Client: CRA MIDLAND

Site: None

Project No.: <u>2070014</u>

Matrix: Water

% Moisture: n/a

Collected: 05/31/07

Received: 06/01/07

							Reporting				Reg.
ParameterName	Method	Batch	DF	Result	Qu	Units	Limit	Prep.	Analysis		Limit
Alkalinity, Carbonate (CaCO	SM 2320B	86785	1	ND		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity, Total	SM 2320B	86785	1	624.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity,Bicarbonate (CaC	SM 2320B	86785	1	624.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Nitrogen, Nitrate	SM 4500-NO3	86787	1	ND		mg/L	0.100	05-Jun-07	05-Jun-07 12:24		
Total Dissolved Solids	SM 2540C	86681	1	13700		mg/L	4.00	01-Jun-07	01-Jun-07 15:15	TAE	

⁵ parameter(s) reported



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: <u>MW5 53107</u>

Project: JR PHILLIPS/039126

Lab ID: 20524687

Description: None

Client: CRA MIDLAND

Site: None

Project No.: 2070014

Matrix: Water

% Moisture: n/a

Collected: <u>05/31/07</u>

Received: <u>06/01/07</u>

							Reporting				Reg.
ParameterName	Method	Batch	DF	Result	Qu	Units	Limit	Prep.	Analysis		Limit
Alkalinity, Carbonate (CaCO	SM 2320B	86785	i	ND		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity, Total	SM 2320B	86785	1	426.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity, Bicarbonate (CaC	SM 2320B	86785	1	426.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Nitrogen, Nitrate	SM 4500-NO3	86787	1	ND		mg/L	0.100	05-Jun-07	05-Jun-07 12:25		
Total Dissolved Solids	SM 2540C	86681	1	14400		mg/L	4.00	01-Jun-07	01-Jun-07 15:15	TAE	

⁵ parameter(s) reported

PF other than I denotes sample Prep Factor which accounts for a non-routine sample size.

DF denotes Dilution Factor of final sample.

Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable. Qu lists qualifiers. Specific qualifiers are defined at the end of the report.

For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable. (1a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity.

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



Face Analytical* Hew Orleans Laboratory Pace Analytical Services, Inc. 1000 Riverbend Blvd. Suite F St. Rose , LA 70087

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client ID: MW6 53107

Project: JR PHILLIPS/039126

Lab ID: 20524688

Description: None

Client: CRA MIDLAND

Site: None

Project No.: 2070014

Matrix: Water

% Moisture: n/a

Collected: <u>05/31/07</u>

Received: 06/01/07

							Reporting				Reg.
ParameterName	Method	Batch	DF	Result	Qu	Units	Limit	Prep.	Analysis		Limit
Alkalinity, Carbonate (CaCC	SM 2320B	86785	1	ND		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity, Total	SM 2320B	86785	1	776.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity,Bicarbonate (CaC	SM 2320B	86785	1	776.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Nitrogen, Nitrate	SM 4500-NO3	86787	l	ND		mg/L	0.100	05-Jun-07	05-Jun-07 12:26		
Total Dissolved Solids	SM 2540C	86681	1	18700		mg/L	4.00	01-Jun-07	01-Jun-07 15:15	TAE	

⁵ parameter(s) reported

DF denotes Dilution Factor of final sample.

Reporting/Detection Limit is corrected for sample size, dilution and moisture content if applicable. Qu lists qualifiers. Specific qualifiers are defined at the end of the report. For moisture results, wet denotes result is not corrected for moisture and n/a denotes not applicable.

⁽¹a) pH less than 2.0 or greater than 12.5 is hazardous for corrosivity. (1b) Flash point less than 140 degrees F is hazardous for ignitibility.



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: MW7_53107

Project: JR PHILLIPS/039126

Lab ID: 20524689

Description: None

Client: CRA MIDLAND

Site: None

Project No.: <u>2070014</u>

Matrix: Water

% Moisture: n/a

Collected: <u>05/31/07</u>

Received: 06/01/07

							Reporting				Reg.
ParameterName	Method	Batch	DF	Result	Qu	Units	Limit	Prep.	Analysis		Limit
Alkalinity, Carbonate (CaCO	SM 2320B	86785	1	ND		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity, Total	SM 2320B	86785	1	397.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity,Bicarbonate (CaC	SM 2320B	86785	ı	397.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Nitrogen, Nitrate	SM 4500-NO3	86787	1	ND		mg/L	0.100	05-Jun-07	05-Jun-07 12:27		
Total Dissolved Solids	SM 2540C	86681	1	14900		mg/L	4.00	01-Jun-07	01-Jun-07 15:15	TAE	

⁵ parameter(s) reported



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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

[®]ace Analytical* New Orleans Laboratory

Client ID: MW8 53107

Project: JR PHILLIPS/039126

Lab ID: 20524690

Description: None

Client: CRA MIDLAND

Site: None

Project No.: 2070014

Matrix: Water

% Moisture: n/a

Collected: 05/31/07

Received: 06/01/07

							Reporting				Reg.
ParameterName	Method	Batch	DF	Result	Qu	Units	Limit	Prep.	Analysis		Limit
Alkalinity, Carbonate (CaCO	SM 2320B	86785	1	ND		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity, Total	SM 2320B	86785	1	378.	•	mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity,Bicarbonate (CaC	SM 2320B	86785	1	378.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Nitrogen, Nitrate	SM 4500-NO3	86787	1	ND		mg/L	0.100	05-Jun-07	05-Jun-07 12:28		
Total Dissolved Solids	SM 2540C	86681	1	8080		mg/L	4.00	01-Jun-07	01-Jun-07 15:15	TAE	

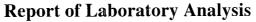
5 parameter(s) reported

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.

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

6/18/2007 11:43:15



New Orleans Laboratory

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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client ID: WW1 53107

Project: JR PHILLIPS/039126

Lab ID: 20524691

Description: None

Face Analytical*

Client: CRA MIDLAND

Site: None

Project No.: 2070014

Matrix: Water

% Moisture: n/a

Collected: <u>05/31/07</u>

Received: <u>06/01/07</u>

ParameterName	Method	Batch	DF	Result	Qu	Units	Reporting Limit	Prep.	Analysis		Reg. Limit
Alkalinity, Carbonate (CaCO	SM 2320B	86785	1	ND		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity, Total	SM 2320B	86785	1	ND		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity,Bicarbonate (CaC	SM 2320B	86785	1	ND		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Nitrogen, Nitrate	SM 4500-NO3	86787	1	ND		mg/L	0.100	05-Jun-07	05-Jun-07 12:29		
Total Dissolved Solids	SM 2540C	86681	1	5340		mg/L	4.00	01-Jun-07	01-Jun-07 15:15	TAE	



Face Analytical* New Orleans Laboratory

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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Client ID: DUP 53107

Project: JR PHILLIPS/039126

Lab ID: 20524692

Description: None

Client: CRA MIDLAND

Site: None

Project No.: 2070014

Matrix: Water

% Moisture: n/a

Collected: 05/31/07

Received: 06/01/07

							Reporting				Reg.
ParameterName	Method	Batch	DF	Result	Qu	Units	Limit	Prep.	Analysis		Limit
Alkalinity, Carbonate (CaCC) SM 2320B	86785	ı	ND		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity, Total	SM 2320B	86785	1	388.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Alkalinity, Bicarbonate (CaC	SM 2320B	86785	1	388.		mg/L	10.0	05-Jun-07	05-Jun-07 13:50	SMS2	
Nitrogen, Nitrate	SM 4500-NO3	86787	1	ND		mg/L	0.100	05-Jun-07	05-Jun-07 12:30		
Total Dissolved Solids	SM 2540C	86681	1	7420		mg/L	4.00	01-Jun-07	01-Jun-07 15:15	TAE	



Report of Quality Control

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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Project: 2070014

Parameter	Batch	Blank	ARL	Units	LCS Spike	LCS Found S		MS Spike	Sample Found	MS Found	MSD Found		MSD %Rec		_	QC Limits LCS MS/MSD	Max RPD	Qu
Calcium, Diss	86770	ND (000	ug/L	10000	9270	93	10000	54100.00	61160	54350	71 *	3 *	12		73 - 115 75 - 125	20	Q3
Magnesium, D	86770	ND (000	ug/L	10000	9269	93	10000	19150.00	26520	23880	74 *	47 *	10		73 - 116 75 - 125	20	Q1
Potassium, Dis	86770	ND (000	ug/L	10000	8999	90	10000	4009.00	12500	11270	85	73 *	10		73 - 114 75 - 125	20	
Sodium, Disso	86770	ND	000	ug/L	10000	9188	92	10000 5	59340.00	66270	60870	69 *	15 *	8		64 - 122 75 - 125	20	Q3



Report of Quality Control

Pace Analytical Services, Inc. 1000 Riverbend Blvd. Suite F

St. Rose , LA 70087

Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Project: 2070014

Parameter	Batch	Blank	ARL	Units	LCS Spike	LCS LCS Found %Rec	MS Sample Spike Found	MS Found	MSD MS MSD MSD Found %Rec %Rec RPD		•	Max RPD	Qu
Total Dissolve	86681	ND	4.00	mg/L	100	106 106	15560.00			3	80 - 120 -	20	
Alkalinity, Tot	86785			mg/L	50	47.76 96	0.00			0	90 - 110 -	20	



Report Qualifiers

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

> Phone: 504.469.0333 Fax: 504.469.0555 LELAP # 02006

Project: 2070014

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

DIMI DIMI DINC Pace Project Number ☐ DRINKING WATER 200224683 1042643 0 SAMPLE CONDITION of YN QN YN □ Other The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately. (NIX) entroldo N/s Page: M. 2. GROUND WATER 0560 **S** ACCEPTED BY / AFFILIATION: DATE TIME Z メギ SC **イイ アメソス イメイメ メッ**マ XXXXXXX □ RCRA 2 70014 Pace 6-1-02 メメメメ XXXX □GA HO | Filtered (Y □ NPDES Nethanol □ UST Preservatives 1520¢ Unpreserved 1 [230 AU 2 x 見るちを見 જ CONTAINERS 4 1335242 130027 2 5/31 1305 2512 5/31/1235/24/2 SAMPLE TEMP 130分 1315 27 りなずしでて 5/3/10t 1600 1405 27 RELINQUISHED BY / AFFILIATION DATE TIME MHO COMPOSITE ENMISRAB Company Name CAA TIME Pace Quote Reference: Pace Project Manager: Sko Address Same !! Invoice Information: 3 3(5/31 3 8 <u>S</u> Section C Pace Profile #: DATE 3 Attention: 1 $\overline{\mathcal{L}}$ 8 S COMPOSITE START TIME CHON Merkham DATE 039126 SAMPLE TYPE GMOD=0 BARD=6 O Ø Ø P ଠ 0 Q ţ. Ø Ð 0 Section B Required Project Information: 3 3 7 MATRIX CODE 100 J Purchase Order No.: Project Name: Project Number: Report To: Valid Matrix Codes
MATRIX
ORINKING WATER
VAFIER
PRODUCT
SOIL/SOLID
OIL
OIL
OIL
OIL
OIL
SOLICE
SOIL/SOLID
SOLICE
SOIL/SOLID
SOLICE
SOLIC Copy To: 32-686-086 432-680-480 Section D Required Client Information Requested Due Date/TAT: Stenderd 4 One Character per box. (A-Z, 0-9 / .-)
Samples IDs MUST BE UNIQUE 9 Q 2 0 O 0 ٥ SAMPLEID Addition 250 W. 50464 Pace Analytical 3 8 m 10 1 Section A
Required Client Information: 5 Additional Comments: MINION L. T. Email To: のなり C **る** Qa かる R W Q 3 <u>\$</u> 3 3 3 Company # M3TI

SEE REVERSE SIDE FOR INSTRUCTIONS

SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

saidmes

Received

O^o ni qməT

DATE Signed (MIM / DD / YY)

Sealed Cooler



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

Analytical Report Number: 884569

Client: PACE ANALYTICAL SERVICES, INC.

Lab Contact: Eric Wied

Project Name: CRA
Project Number: 2070014

Lab Sample Number	Field ID	Matrix	Collection Date
884569-001	MW1 53107 20524683	WATER	05/31/07 13:10
884569-002	MW2 53107 20524684	WATER	05/31/07 13:15
884569-003	MW3 53107 20524685	WATER	05/31/07 13:00
884569-004	MW4 53107 20524686	WATER	05/31/07 12:30
884569-005	MW5 53107 20524687	WATER	05/31/07 12:35 ·
884569-006	MW6 53107 20524688	WATER	05/31/07 12:05
884569-007	MW7 53107 20524689	WATER	05/31/07 13:35
884569-008	MW8 53107 20524690	WATER	05/31/07 14:05
884569-009	WW1 53107 20524691	WATER	05/31/07 11:40
884569-010	DUP 53107 20524692	WATER	05/31/07

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

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

REPORT OF LABORATORY ANALYSIS

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



Approval Signature

06.15.07

Date

Page 1 of 17

Project Name: CRA

Project Number: 2070014

Analytical Report Number: 884569

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

Matrix Type: WATER

Collection Date: 05/31/07

Report Date: 06/15/07

Field ID: MW1 53107 20524683

Client: PACE ANALYTICAL SERVICES, INC.

NORGANICS									
Test		Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Metho	d Ani Method
Chloride		7000	2500	500	mg/L		06/12/07 12:12 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Anl By: GLL
Fluoride	<	50	50	100	mg/L	С	06/12/07 12:48 PM	EPA 300.0	EPA 300.0
•						Prep	Date/Time:		Ani By:
Sulfate		1900	400	100	mg/L		06/12/07 12:48 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Ani By: GLL

Analytical Report Number: 884569

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

Client: PACE ANALYTICAL SERVICES, INC.

Project Name: CRA
Project Number: 2070014

Field ID: MW2 53107 20524684

Matrix Type: WATER Collection Date: 05/31/07

Report Date: 06/15/07

NORGANICS									
Test		Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Metho	d Anl Method
Chloride		6700	2500	500	mg/L		06/12/07 01:00 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Anl By: GLL
luoride	<	50	50	100	mg/L	С	06/12/07 01:12 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Anl By:
Sulfate		1700	400	100	mg/L		06/12/07 01:12 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Anl By: GLL

Analytical Report Number: 884569

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

Client: PACE ANALYTICAL SERVICES, INC.

Project Name: CRA
Project Number: 2070014

Field ID: MW3 53107 20524685

Matrix Type: WATER
Collection Date: 05/31/07

Report Date: 06/15/07

NORGANICS									
Test		Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Metho	d Anl Method
Chloride		7700	2500	500	mg/L		06/12/07 01:25 PN	/ EPA 300.0	EPA 300.0
						Prep	Date/Time:		Ani By: GLL
Fluoride	<	50	50	100	mg/L	С	06/12/07 01:37 PN	/ EPA 300.0	EPA 300.0
						Prep	Date/Time:		Anl By:
Sulfate		2900	400	100	mg/L		06/12/07 01:37 PM	/ EPA 300.0	EPA 300.0
						Prep	Date/Time:		Anl By: GLL

Analytical Report Number: 884569

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

Client: PACE ANALYTICAL SERVICES, INC.

Project Name: CRA

Project Number: 2070014

Field ID: MW4 53107 20524686

Matrix Type: WATER

Collection Date: 05/31/07

Report Date: 06/15/07

NORGANICS									
Test		Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Metho	d Anl Method
Chloride		5500	500	100	mg/L		06/12/07 02:01 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Anl By: GLL
Fluoride	<	50	50	100	mg/L	С	06/12/07 02:01 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Anl By:
Sulfate		1500	400	100	mg/L		06/12/07 02:01 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Ani By: GLL

Analytical Report Number: 884569

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

Client: PACE ANALYTICAL SERVICES, INC.

Project Name: CRA
Project Number: 2070014

Field ID: MW5 53107 20524687

Matrix Type: WATER Collection Date: 05/31/07

Report Date: 06/15/07

NORGANICS									
Test		Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Metho	d Anl Method
Chloride		6400	2500	500	mg/L		06/12/07 02:13 PM	EPA 300.0	EPA 300.0
						Prep l	Date/Time:		Anl By: GLL
Fluoride	<	50	50	100	mg/L	С	06/12/07 02:25 PM	EPA 300.0	EPA 300.0
						Prep i	Date/Time:		Anl By:
Sulfate		1500	400	100	mg/L		06/12/07 02:25 PM	EPA 300.0	EPA 300.0
						Prep l	Date/Time:		Anl By: GLL

Analytical Report Number: 884569

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

Client: PACE ANALYTICAL SERVICES, INC.

Project Name: CRA
Project Number: 2070014

Field ID: MW6 53107 20524688

Matrix Type : WATER

Collection Date: 05/31/07 Report Date: 06/15/07

INORGANICS									
Test		Result	EQL	Dilution	Units	Code	Ani Date/Time	Prep Metho	d Anl Method
Chloride		7800	2500	500	mg/L		06/12/07 02:38 PM	EPA 300.0	EPA 300.0
						Prep l	Date/Time:		Anl By: GLL
Fluoride	<	50	50	100	mg/L	С	06/12/07 03:14 PM	EPA 300.0	EPA 300.0
						Prep I	Date/Time:		Ani By:
Sulfate		3100	400	100	mg/L	·	06/12/07 03:14 PM	EPA 300.0	EPA 300.0
						Prep I	Date/Time:		Anl By: GLL

Analytical Report Number: 884569

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

Client: PACE ANALYTICAL SERVICES, INC.

Project Name: CRA
Project Number: 2070014

Field ID: MW7 53107 20524689

Matrix Type: WATER

Collection Date: 05/31/07 Report Date: 06/15/07

NORGANICS									
Test	į	Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Metho	d Anl Method
Chloride		6800	500	100	mg/L		06/12/07 03:39 PM	EPA 300.0	EPA 300.0
						Prep I	Date/Time:		Anl By: GLL
Fluoride	<	50	50	100	mg/L	С	06/12/07 03:39 PM	EPA 300.0	EPA 300.0
						Prep I	Date/Time:		Ani By:
Sulfate		1800	400	100	mg/L		06/12/07 03:39 PM	EPA 300.0	EPA 300.0
						Prep l	Date/Time:		Anl By: GLL

Analytical Report Number: 884569

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

Client: PACE ANALYTICAL SERVICES, INC.

Project Name: CRA
Project Number: 2070014

Field ID: MW8 53107 20524690

Matrix Type: WATER Collection Date: 05/31/07

Report Date: 06/15/07

NORGANICS									
NORGANICS Test		Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Metho	d Anl Method
Chloride		3200	500	100	mg/L	····	06/12/07 03:51 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Anl By: GLL
Fluoride	<	50	50	100	mg/L	С	06/12/07 03:51 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Anl By:
Sulfate		960	400	100	mg/L		06/12/07 03:51 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Anl By: GLL

Analytical Report Number: 884569

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

Client: PACE ANALYTICAL SERVICES, INC.

Project Name: CRA
Project Number: 2070014

Field ID: WW1 53107 20524691

Matrix Type: WATER Collection Date: 05/31/07

Report Date: 06/15/07

NORGANICS									
Test Test		Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Metho	d Anl Method
Chloride		2400	250	50	mg/L	<u> </u>	06/12/07 04:03 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Ani By: GLL
Fluoride	<	25	25	50	mg/L	С	06/12/07 04:03 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Anl By:
Bulfate		300	200	50	mg/L		06/12/07 04:03 PM	EPA 300.0	EPA 300.0
i						Prep	Date/Time:		Anl By: GLL

Analytical Report Number: 884569

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

Client: PACE ANALYTICAL SERVICES, INC.

Project Name: CRA
Project Number: 2070014

Field ID: DUP 53107 20524692

Matrix Type: WATER Collection Date: 05/31/07

Report Date: 06/15/07 Lab Sample Number: 884569-010

INORGANICS									
Test		Result	EQL	Dilution	Units	Code	Anl Date/Time	Prep Metho	d Anl Method
Chloride		3200	500	100	mg/L	N	06/12/07 04:15 PM	EPA 300.0	EPA 300.0
1						Prep	Date/Time:		Anl By: GLL
Fluoride	<	50	50	100	mg/L	C	06/12/07 04:15 PM	EPA 300.0	EPA 300.0
•						Prep	Date/Time:		Anl By:
Sulfate		940	400	100	mg/L		06/12/07 04:15 PM	EPA 300.0	EPA 300.0
						Prep	Date/Time:		Anl By: GLL

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

Lab Number	TestGroupID	Field ID	Comment
884569	W-F-W	All Samples	C - Elevated detection limit due to high chloride content. For samples 001-010

Qualifier Codes

preparation.

	ntice To	Evaluation
		Explanation Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally,
1110	_	method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
lno	rganic	The analyte has been detected between the method detection limit and the reporting limit.
		Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
All		Elevated detection limit.
All		Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
lno	Ü	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
Org	дапіс	Analyte concentration exceeds calibration range.
lno	organic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
Org	ganic	Surrogate results outside control criteria.
All		The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
All		Preservation, extraction or analysis performed past holding time.
IF Ino	organic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
All	I	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
Or <u>i</u> All	ganic	Detection limit may be elevated due to the presence of an unrequested analyte.
All	l	Elevated detection limit due to low sample volume.
Or	ganic	Sample pH was greater than 2
All	١.	Spiked sample recovery not within control limits.
Or:	ganic	Sample received overweight.
Or	rganic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
All	l	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
Or	rganic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
J All	1	The analyte was not detected at or above the reporting limit.
All	ŀ	Sample received with headspace.
/ All	1	A second aliquot of sample was analyzed from a container with headspace.
All	I	See Sample Narrative.
Or	rganics	This compound was separated in the check standard but it did not meet the resolution criteria as set forth in SW846.
All	l	Laboratory Control Spike recovery not within control limits.
All	1	Precision not within control limits.
Ind	organic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
All	li .	The analyte was not detected at or above the reporting limit.
Ind	organic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
Ind	organic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
Ind	organic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
ine	organic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
inc inc	organic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
ine	organic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
' in	organic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
	organic	Sample was received unpreserved. Sample was preserved either at the time of receipt or at the time of sample preparation.
) In	organic	Sample was received with insufficient preservation. Acid was added either at the time of receipt or at the time of sample preparation.

P	a	CE	<i>,</i>	۱n	al	y	tic	ca	j
S	e	rv	ic	es	,	lr	ıc		

Analysis Summary by Laboratory

1241 Bellevue Street Green Bay, WI 54302

Test Group Name	884569-001	884569-002	884569-003	884569-004	884569-005	884569-006	884569-007	884569-008	884569-009	884569-010
CHLORIDE	В	В	В	В	В	В	В	В	В	В
FLUORIDE	В	В	В	В	В	В	В	В	В	В
SULFATE	В	В	В	.В	В	В	В	В	В	В

1	ļ	
	Code	TX Certification
	В	Not Certified
		,

QC Summary

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

Batch:	88	884569						1				ğ	QC Type	Client	Client Sample ID		Lab	Lab Sample ID	Q			
Lab Section:	Š	WETCHEM	∑									MB	m	WCG2	WCG2192-089MB	m	MC	WCG2192-089MB	 9MB			
OC Batch Number: 21645	ber: 21	645										ט	CS	WCG2	WCG2192-089MBLCS	STCS	WC	WCG2192-089MBLCS	9MBLCS			
Drop Mothod:		ביסיס אמם	c									MS	W	DUP 5	DUP 53107 20524692MS	4692MS		884569-010MS	S			
רובף ואופוווסמ.		7 200°.	.									MS	m	884568	884568-001MS		884	884568-001MS	S			
Analytical Method:		EPA 300.0	0						•			W	MSD	DUP 5	DUP 53107 20524692MSD	4692MS		884569-010MSD	SD			
												W	MSD	884568	884568-001MSD		884	884568-001MSD	SD			
Client Sample ID		Lab Sample ID	nple (D	MB ID	_			ਹ	Client Sample ID	mple I	۵		Lab Sample ID	ple ID	MB ID							
MW1 53107 20524683		884569-001	10	MB				Ź	MW2 53107 20524684	7 20524	684	w	884569-002	2	MB							
MW3 53107 20524685		884569-003	03	MB				ĕ	MW4 53107 20524686	7 20524	989	w	884569-004	**	MB							
MW5 53107 20524687		884569-005	.05	MB				ž	MW6 53107 20524688	7 20524	688	ω	884569-006	ςΩ.	MB							
MW7 53107 20524689 WW1 53107 20524691		884569-007 884569-009	07 09	M MB				ชี ดี	MW8 53107 20524690 DUP 53107 20524692	7 20524 205246	690 892	ω ω	884569-008 884569-010	m 0	MB MB							
	Method							/SOT		LCS/LCSD Control Limits	alts								MS/	් දි	MS/MSD Control Limits	o
:	Blank	SSI			CSD		í		٠		5	Parent	Parent	N Z	9			c	MSD	Č	3	0
lest Name	Conc	Spiked	LCS Recovery Conc %	scovery C	Spiked	Conc	Recove %	ያ ያ	ر با %	۲ ۲ ۲	አ ያ %	samble Number	Conc	Spirked Conc :	Conc % C	C Conc		Conc % C	χ % Ο] %		х 5 8
Chloride	2	20.0	19.9	99.4		 		1	8	110	8	884568-001	62.0	20.0	83.5 107.8	20.0	84.4	112.2 N	1.0	06 	110	8
Fluoride	< 0.5	2.0	2	101.0	1	1	1	1	8	5	8	884568-001	1.2	2.0	3.2 99.0	2.0	3.2	100.5	0.9	8	110	8
Sulfate	4	16.00	16.2	101.4	: 1		1	1	8	55	8	884568-001	116.7	160.0	271.7 96.9	160.0	0 274.2	98.4	6.0	80	110	8
Chloride	2	20.000	19.9	99.4		: :	!	 	8	110	8	884569-010	3224.0	2000.0	5474 112.5	N 2000.0	.0 5518	114.7 N	0.8	8	110	20
Fluoride	< 0.5	2.000	2	101.0	.	!	· I	 	8	110	82	884569-010 <	5.9	200.0	214 107.0	200.0	0 211	105.5	1.4	8	110	20
Sulfate	4	16.000	16.2	101.4	. 1		. I		8	110	20	884569-010	938.00	1600.0	2550 100.8	1600.0	.0 2527	99.3	6.0	8	110	20

Conc ≈ mg/L unless otherwise noted

C = QC Code, see Qualifer Sheet

The %R and RPD results are calculated from raw data values with more significant figures than are reported on this form. Parent Result is reported down to MDL in order to allow Validation of this worksheet

Report Date: 6/15/2007

		dalbonn waaanbe		001/01
Pace Analytical Client Name	: Pace -	<u>1</u> A	Project#_	884567
Courier: Fed Ex UPS USPS Clie	nt Commercial	Pace Other	(apita	
Tracking #:				Overbale Programme (1975) Name 2003 (1975)
Custody Seal on Cooler/Box Present: yes		, -	no	
Packing Material: Bubble Wrap Bubble	Bags None	Other		
Thermometer Used 55	Type of Ice: Wet	Blue None [cooling process has begun
Cooler Temperature	Biological Tissue	is Frozen: Yes No	contents:	tials of person examining
Temp should be above freezing to 6°C		Comments:	ς	46-6-07
Chain of Custody Present:	□yes □No □N/A	1.		
Chain of Custody Filled Out:	∑Yes □No □N/A	2.		
Chain of Custody Relinquished:	ZYes □No □N/A	3.		···
Sampler Name & Signature on COC:	ZÎYes □No □N/A	4.	V ************************************	
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.		
Short Hold Time Analysis (<72hr):	□Yes ₽Ño □N/A	6.		
Rush Turn Around Time Requested:	□Yes ☑No □N/A	7. Cel 15		
Sufficient Volume:	√GYes □No □N/A	8.		
Correct Containers Used:	√☐Yes ☐No ☐N/A	9.		
-Pace Containers Used:	√Yes □No □N/A			
Containers Intact:	☐Yes ☐No ☐N/A	10.		
Filtered volume received for Dissolved tests	□Yes □No ☑N/A	11		
Sample Labels match COC:	ZYeş □No □N/A	12.		
-Includes date/time/ID/Analysis Matrix:	$\underline{\omega}$			
All containers needing preservation have been checked.	□Yes □No □N/A	13.		
All containers needing preservation are found to be in	□Yes □No □N/A			
compliance with EPA recommendation.	,	Initial when	Lot # of added	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	□Yes □No	completed	preservative	
Samples checked for dechlorination:	□Yes □No ÆN/A	14.		
Headspace in VOA Vials (>6mm):	□Yes □No ☑N/A	15.	· · · · · · · · · · · · · · · · · · ·	
Trip Blank Present:	□Yes - □No □N/A	16.		
Trip Blank Custody Seals Present	□Yes □No □N/A			
Pace Trip Blank Lot # (if purchased):				
Client Notification/ Resolution:			Field Data Requi	red? Y / N
Person Contacted:	Date/	Time:		
Comments/ Resolution:				
			·	
			·	

Sample Condition Upon Receipt

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

Project Manager Review:

Date:

Face Analytical ®

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

LOW FARED Pace Project Number ntact N/B N/A N/A ☐ DRINKING WATER Q 0524683 1042643 Samples \mathcal{O} SAMPLE CONDITION ð N/자 Other_ N₩ □ eo) ud TOTHER N/X CX/N Page: ⅀ O^o ni qməl C GROUND WATER ACCEPTED BY / AFFILIATION DATE TIME 02/01 M \square Z SC ☐ RCRA 20 70014 9 DATE Signed (MM/DD/YY) ~₹ メメ НО□ Filtered (YN) × ¥ **6**∀ × □ NPDES Methanol □ UST Na₂S₂O₃ Preservatives HOsV HCI EONH [₹]OS^ζH Unpreserved ٤ Mark Your OPENICA CP CONTAINERS 7 6 9 d CP 3 3 31 1735 36 2 #0E 25 SHED BY AFFILIATION DATE TIME S SAMPLE TEMP 40 1250 Ab 3 1205 25 1300/27 4 (336) 35 さんろ OHII COMPOSITE ENDIGRAD 30 Company Name: TIME 53104 Pace Quote Reference: Pace Project Manager: Address: Same Section C Invoice Information: ~~ SIGNATURE of SAMPLER: <u>~</u> m Pace Profile #: (~ 3 5 3 3 DATE 3 Attention: 5 10 10 5 COMPOSITE START TIME I COMO Mark ham DATE SAMPLE TYPE G=GRAB C=COMP O O 9 1 J O 9 Q, 2012 O S Section B Required Project Information: 1-3 7 MATRIX CODE 5 62/2 Purchase Order No. Project Name: Project Number: TARE STANDED Valid Matrix Codes
MATRIX
ORANGER
ORANGER
VARATER
VARATER
VARATER
SOIUSOLID
SOIUSOLID
OIL
OIL
OTHER
AIR
TISSUE Report To: Copy To: Fax 432 - 680-0180 Section D Required Client Information Requested Due Date/TAT: Stendard 17 4 rt 4 14 1 4 -(A-Z, 0-9 / .-) Samples IDs MUST BE UNIQUE 0 0 0 0 0 SAMPLE 1D \bigcirc 0 20703 Address 1000 250 W One Character per box. \mathcal{O} m 3 3 3 Section A Required Client Information: Phone 32-686-0086 10 10 15 15 V Additional Comments: C Oc. N 4 Midland ; M V Q, S W W <u>3</u> ≰ 3 <u>≥</u> <u>₹</u> ≥ $\overline{\mathbf{x}}$ Company 3 ITEM #

SEE REVERSE SIDE FOR INSTRUCTIONS