AP - 47

ANNUAL MONITORING REPORT

YEAR(S): 2007

Highlander Environmental Corp.

Midland, Texas

CERTIFIED MAIL
RETURN RECEIPT NO. 7002 3150 0005 0508 7720

March 17, 2008

Mr. Wayne Price
New Mexico Energy, Minerals, & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

Re: 2007 Annual Groundwater Summary Report & Project Status Report, Rice Operating Company, Blinebry Drinkard (BD) SWD System Junction Box F-17, Unit F, Section 17, T-21-S, R-37-E, Lea County, New Mexico, NMOCD CASE #1R0426-14 (AP-47)

Dear Mr. Price:

Highlander Environmental Corp. (Highlander) takes this opportunity to submit the 2007 Annual Groundwater Summary Report for the Rice Operating Company (ROC), Blinebry Drinkard (BD) SWD System junction box F-17.

Background

As part of the ROC Junction Box Upgrade Workplan, starting on September 17, 2002, the junction box was removed and the Site was delineated vertically and horizontally with a backhoe. The Site was excavated to the approximate dimensions of 20 feet x 20 feet x 12 feet. Chloride impact was consistent vertically. No TPH impact was indicated.

During the excavation, an older junction box was discovered approximately 10 feet south of the existing location. On November 18, 2002, a soil boring was placed near this old box location and advanced to a depth of 75 feet. Chloride concentrations declined with depth, however, chloride impact to groundwater was observed.

Also on November 18, 2002, a 2 inch diameter monitor well was installed to a total depth of 85 feet. On December 13, 2002, ROC notified the NMOCD of groundwater impact, and on November 7, 2003 ROC submitted a Junction Box Disclosure Form to the NMOCD. Groundwater has been sampled and analyzed on a quarterly basis since June 2003. The

quarterly sampling has confirmed that there is no hydrocarbon impact to groundwater at this Site. The excavation was backfilled and the junction moved 45 feet south of the original site. The Site location is shown on Figure 1.

On March 17, 2005 an Investigation and Characterization Plan (ICP) was submitted to the NMOCD. On May 5, 2005, Daniel Sanchez with the NMOCD requested a Rule 19, Stage I Abatement Plan for this site. On July 12, 2005 a Stage I Abatement Plan was submitted to the NMOCD. The Stage I Abatement Plan approval was received, dated February 23, 2006.

Stage 1 Abatement Plan Implementation

As part of the Stage 1 Abatement Plan two additional monitor wells were proposed for the site. These two monitor wells (MW-2 and MW-3) were installed on March 22-23, 2006. The well locations are shown on Figure 3. MW-2 was placed down-gradient of MW-1 and MW-3 was placed up-gradient. The wells were developed and sampled on March 27, 2006.

Also as part of the Stage I Abatement Plan, a water well database search was performed to encompass a ½ mile radius around the site. ROC performed an internet search of the New Mexico Office of the State Engineer (OSE) and the United States Geologic Survey (USGS) databases for water wells within a ½ mile radius of the subject site.

RULE 19 RELEASE REQUEST and SOIL WORK PLAN

In a report to the NMOCD, dated August 10, 2006, ROC requested a release from additional Stage 1 and Stage 2 requirements and proposed to continue monitoring of the site. Additionally, ROC proposed to complete assessment and remediation of chloride impacted soils for closure under NMOCD approval. The horizontal extent of chloride impact to soils would be evaluated with a backhoe. Once evaluated, the soils will be excavated down below the root zone (minimum of 3.0' below ground surface) and an evapotranspiration barrier (non-compacted clay cap) will be placed into the excavation. The excavated soils will be evaluated for placement back into the excavation to ensure that it will sustain vegetative cover. Once completed, a closure report will be prepared and submitted for the soils portion of this investigation.

The New Mexico Oil Conservation Division Responded to the above-mentioned report on September 27, 2006, in an email memorandum. In that memorandum, the NMOCD stated that they required some additional data in order to continue evaluation of the request for Release from Rule 19. Specifically, the NMOCD requested an area map showing surrounding water wells, monitoring wells and any other sites that may have an impact on this site, and that ROC demonstrate that the groundwater gradient is accurate. A response letter with the requested data was submitted on December 27, 2006.

In a meeting between the NMOCD, Rice Operating and Highlander on July 18, 2007 and January 23, 2008, it was agreed the source of the chlorides appeared to be from an upgradient source based on groundwater gradient and chloride concentration maps. As such, it was agreed that Rice will reissue the original closure report with the request of no additional groundwater monitoring.

Monitor Well Sampling

The site monitor wells were sampled on February 6, April 16, July 23, and October 4, 2007. Prior to sampling, the wells were gauged for static water levels. The monitor well caps were opened and water level measurements were taken from the top of the casing. The measurements were taken to the nearest 0.01 feet.

The wells were then purged using a portable submersible pump. Approximately three casing volumes of water were purged from each well prior to sampling. The pump and associated tubing were decontaminated with a laboratory grade detergent and rinsed with deionized water. Cumulative water level measurements and purge volumes for the monitor wells are included in the Tables Section of this report.

The wells were also inspected for the presence of phase-separated hydrocarbons (PSH). Groundwater samples were collected as soon as possible after the groundwater returned to its static level. Groundwater samples were collected using clean disposable polyethylene bailers and disposable line. The samples were transferred into labeled and preserved containers provided by the laboratory. The samples were delivered under proper chain-of-custody control to Environmental Labs of Texas, Inc., Odessa, Texas and Cardinal Labs of Hobbs, New Mexico. The groundwater samples were analyzed for major anions, by methods 310.1, 9253 and 375.4, cations by method 6010B, Total Dissolved Solids (TDS) by method 160.1 and Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) by method EPA 8021B. Copies of the laboratory reports are enclosed in Appendix A.

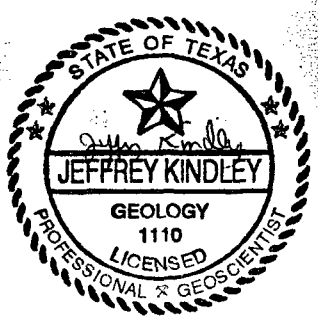
Monitor Well Sample Results

Monitor Well MW-2, down-gradient, has shown consistently low chloride concentrations ranging from 56 mg/L to 66.8 mg/L. The up-gradient well, MW-3 shows a fluctuation in the chloride concentration ranging from 830 mg/L to 1,490 mg/L and appears to indicate an up-gradient source of groundwater impact. In reviewing the historical data for MW-1 for the first 18 months of sampling, the chloride concentrations fluctuated between 177 mg/L and 886 mg/L. Then in January 2005, the chloride concentration jumped to 2,970 mg/L and has since ranged from 1,890 mg/L to 2,510 mg/L. Chloride concentrations decreased dramatically in MW-1 for the 3rd and 4th quarter sampling event (637 and 720 mg/L), respectively. Considering the concentration found in the upgradient monitor well, it appears that the impact to MW-1 may be affected by an up-gradient source of contamination.

In 2007, there were no BTEX constituents detected at or above reporting limits for any of the monitor wells. Cumulative analytical data is summarized in the Table Section of this report.

Conclusions

1. In 2007, there were no BTEX constituents detected at or above reporting limits for any of the monitor wells, and no BTEX has ever been detected in MW-1, nearest the junction box.
2. Chloride and total dissolved solid (TDS) concentrations from monitor wells MW-1 and upgradient MW-3 exceeded the New Mexico Water Quality Control Commission (WQCC) standards of 250 mg/L for chloride and 1000 mg/L for TDS in all sampling events.
3. Monitor Well MW-2, down-gradient, has shown consistently low chloride concentrations ranging from 56 mg/L to 66.8 mg/L. The up-gradient well, MW-3 has shown a fluctuation in chloride concentration ranging from 830 mg/L to 1,490 mg/L and appears to indicate an up-gradient source of groundwater impact. The historical data for MW-1, for the first 18 months of sampling, showed the chloride concentrations fluctuated between 177 mg/L and 886 mg/L. Then in January 2005, the chloride concentration jumped to 2,970 mg/L and has since ranged from 1,890 mg/L to 2,510 mg/L. Chloride concentrations decreased dramatically in MW-1 for the 3rd and 4th quarter sampling event (637 and 720 mg/L). Considering the concentration found in the upgradient monitor well, it appears that the impact to MW-1 may be at least somewhat affected by an up-gradient source of contamination.
4. Since it appears there is an upgradient source for the chloride concentrations, Rice will reissue the original closure report with the request of no additional groundwater monitoring.



Respectfully Submitted,
HIGHLANDER ENVIRONMENTAL CORP.

Jeffrey Kindley, P.G.
Senior Environmental Geologist

cc: ROC, Edward Hansen – NMOCD
Enclosures: Figures, Tables, Laboratory Analysis

FIGURES

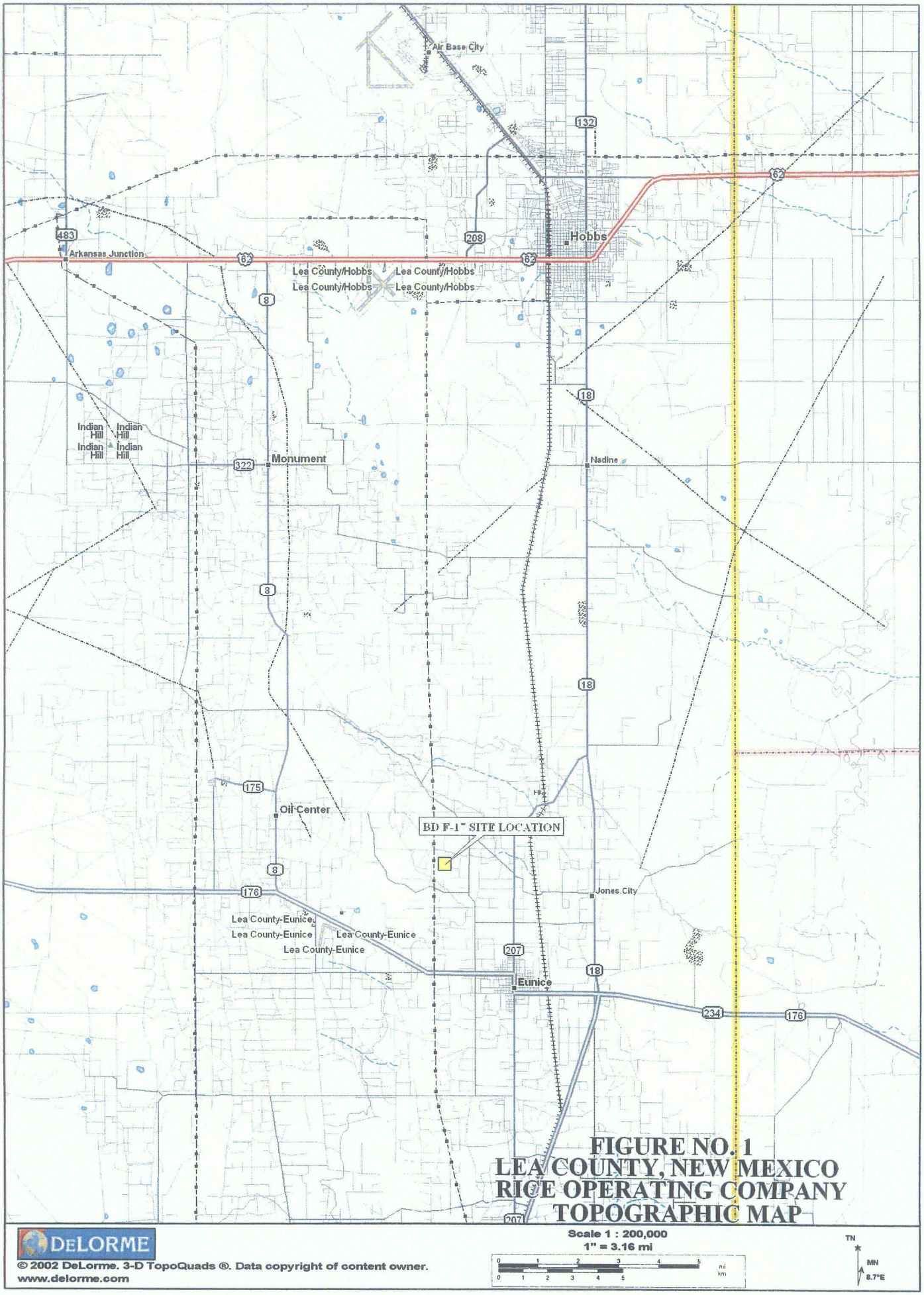


FIGURE NO. 1
LEA COUNTY, NEW MEXICO
RICE OPERATING COMPANY
TOPOGRAPHIC MAP

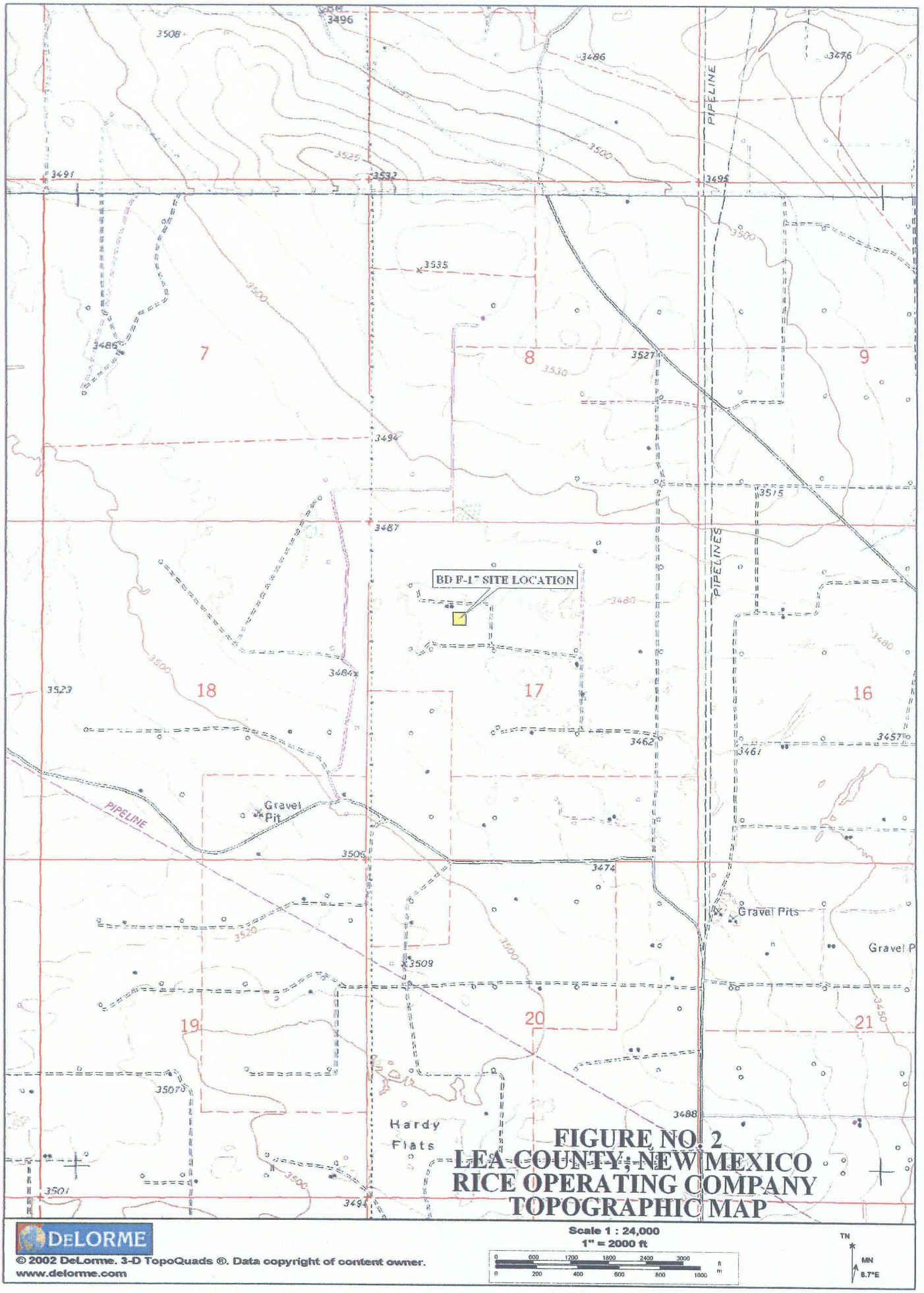


FIGURE NO. 2
LEA COUNTY, NEW MEXICO
RICE OPERATING COMPANY
TOPOGRAPHIC MAP

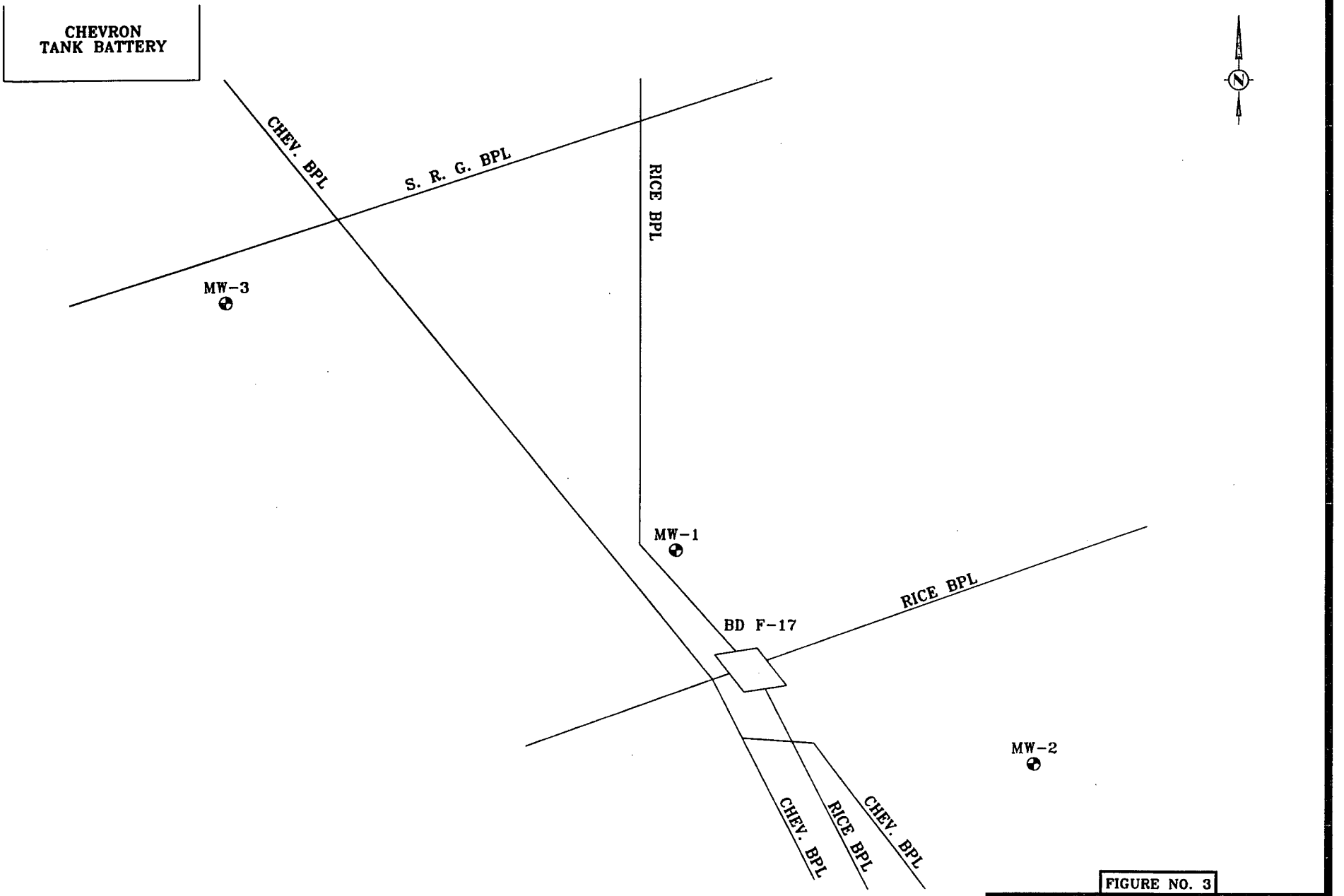
DeLORME

www.delorme.com

Scale 1 : 24,000
1" = 2000 ft

0 600 1200 1800 2400 3000 ft
0 200 400 600 800 1000 m

TN
MN
8.7°E



MONITOR WELL LOCATIONS

NOT TO SCALE

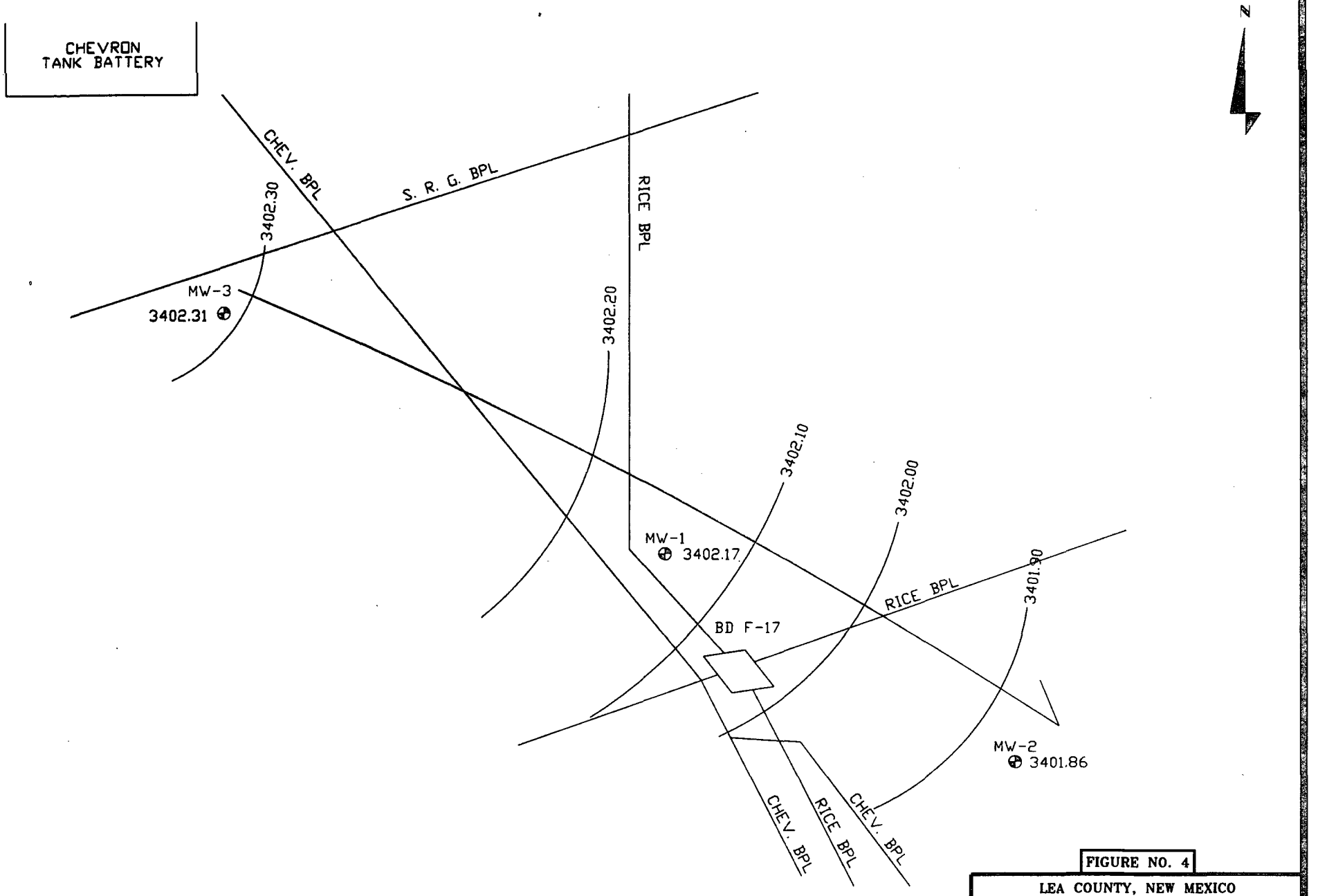
FIGURE NO. 3

LEA COUNTY, NEW MEXICO

RICE OPERATING COMPANY
BD F-17 JUNCTION
SITE MAP

DATE: 5/9/06
DWN. BY: JJ
FILE: C:\RICE\2305 SITE MAP

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS



C.I. = 0.10'
⊕ MONITOR WELL LOCATIONS

NOT TO SCALE

DWN. BY: RC
FILE: C:\RICE\2305 SITE MAP

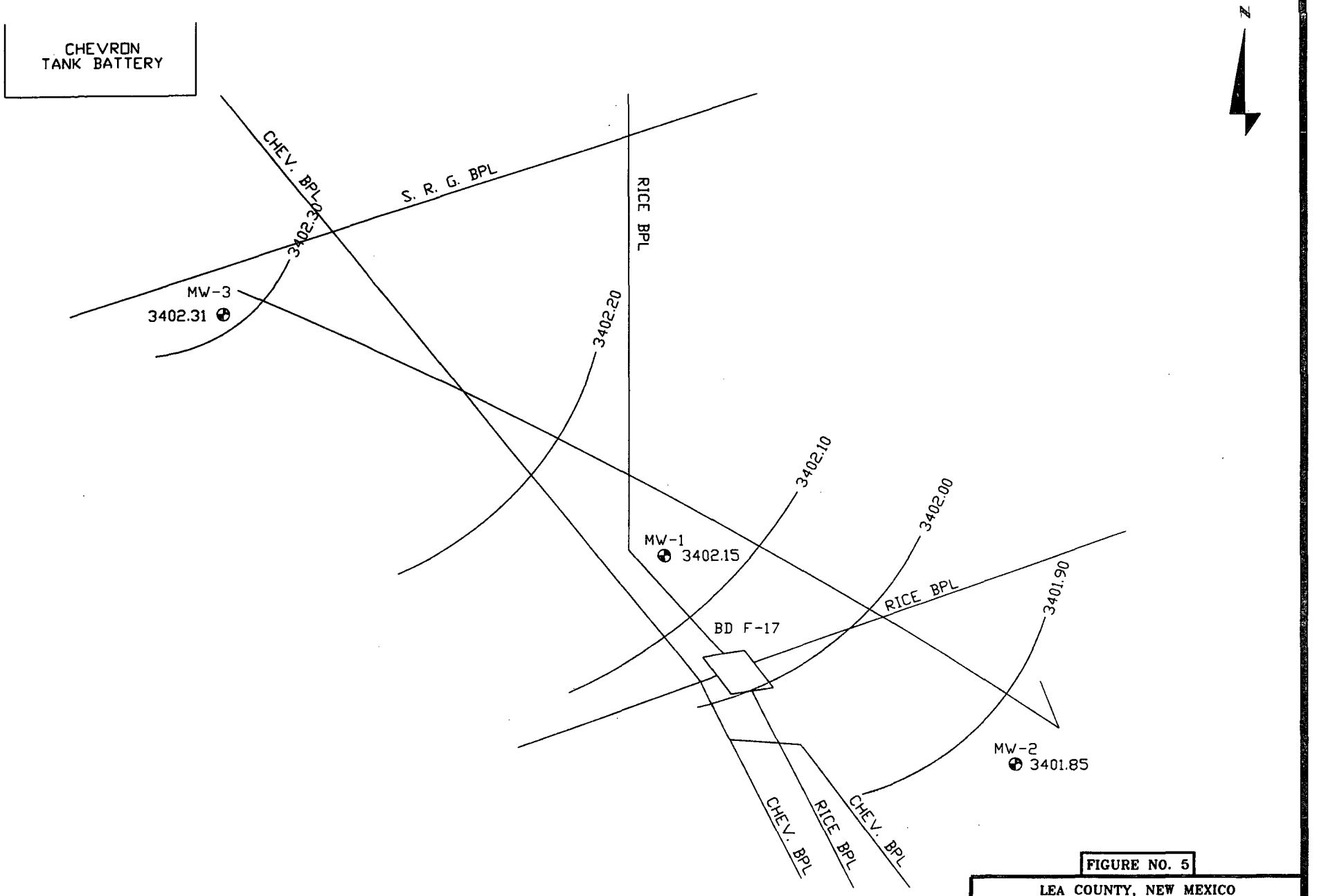
FIGURE NO. 4

LEA COUNTY, NEW MEXICO

RICE OPERATING COMPANY

BD F-17 JUNCTION
GROUNDWATER GRADIENT MAP
GAUGED ON 2-6-07

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS



C.I. = 0.10'
MONITOR WELL LOCATIONS

NOT TO SCALE

DWN. BY: RC
FILE: C:\RICE\2305 SITE MAP

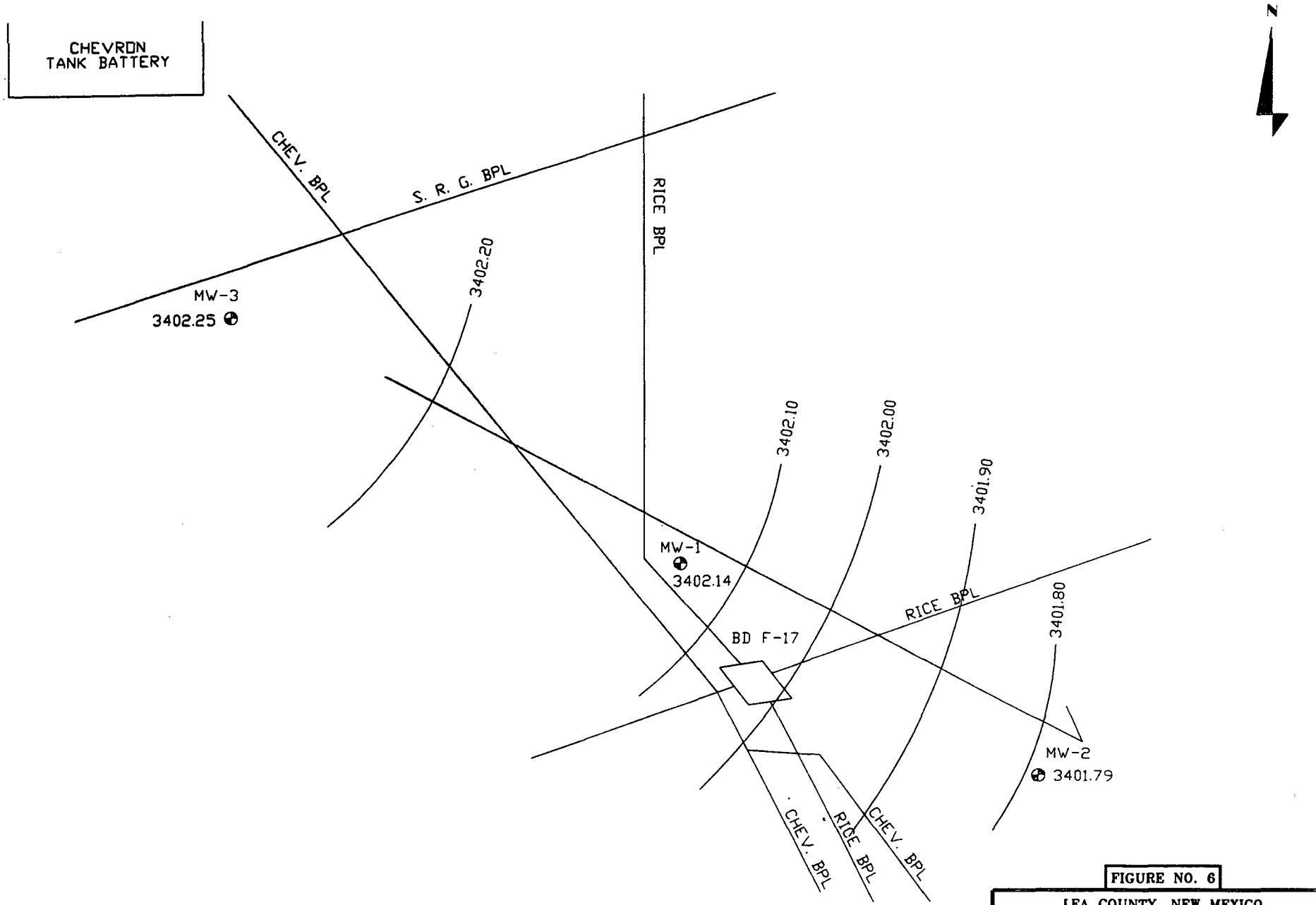
FIGURE NO. 5

LEA COUNTY, NEW MEXICO

RICE OPERATING COMPANY

BD F-17 JUNCTION
GROUNDWATER GRADIENT MAP
GAUGED ON 4-16-07

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS



C.I. = 0.10'
MONITOR WELL LOCATIONS

NOT TO SCALE

DWN. BY: RC
FILE: C:\RICE\2305 SITE MAP

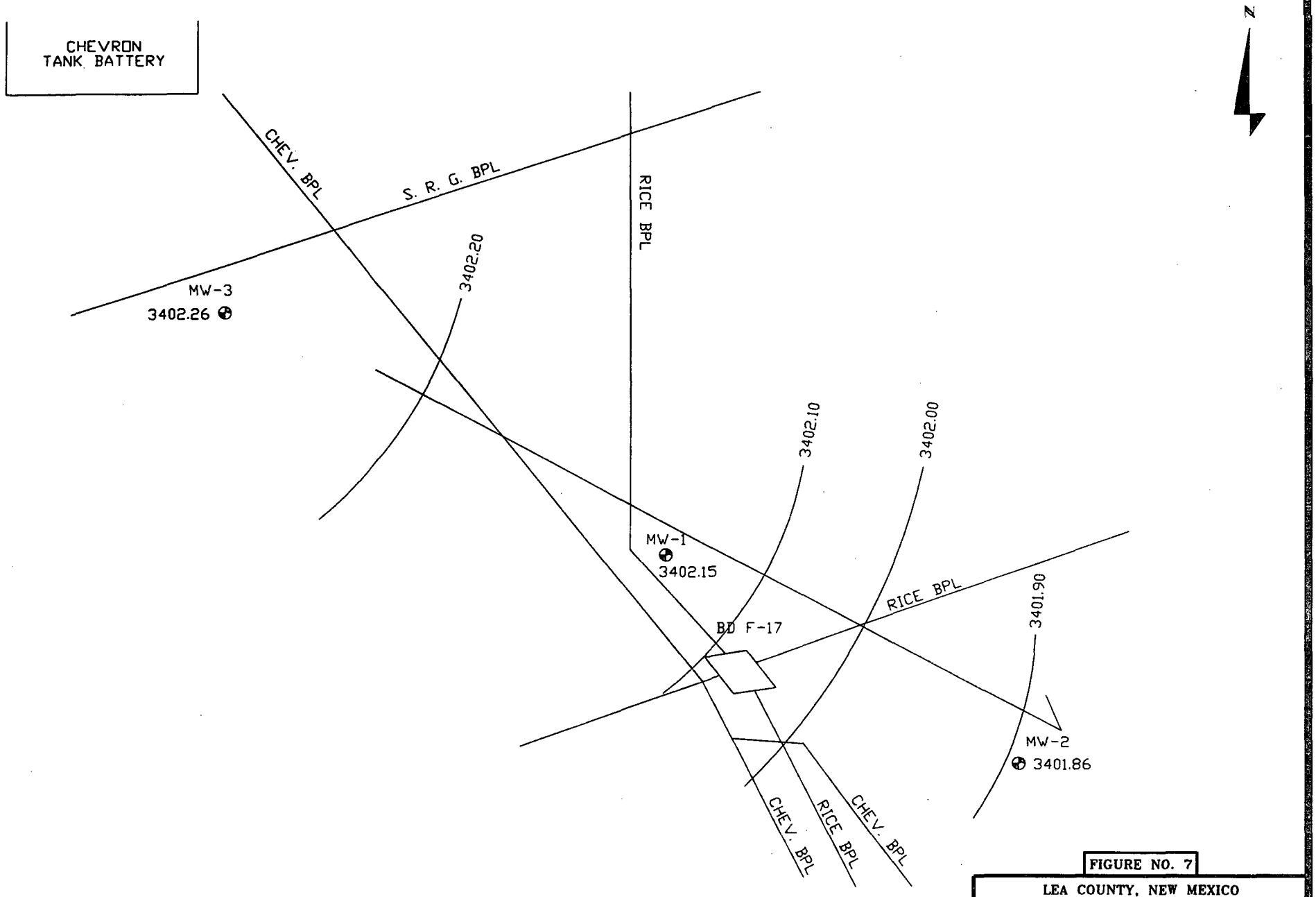
FIGURE NO. 6

LEA COUNTY, NEW MEXICO

RICE OPERATING COMPANY

BD F-17 JUNCTION
GROUNDWATER GRADIENT MAP
GAUGED ON 7-23-07

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS



C.I. = 0.10'
MONITOR WELL LOCATIONS

NOT TO SCALE

DWN. BY: RC
FILE: C:\RICE\2305 SITE MAP

FIGURE NO. 7

LEA COUNTY, NEW MEXICO

RICE OPERATING COMPANY

BD F-17 JUNCTION
GROUNDWATER GRADIENT MAP
GAUGED ON 10-4-07

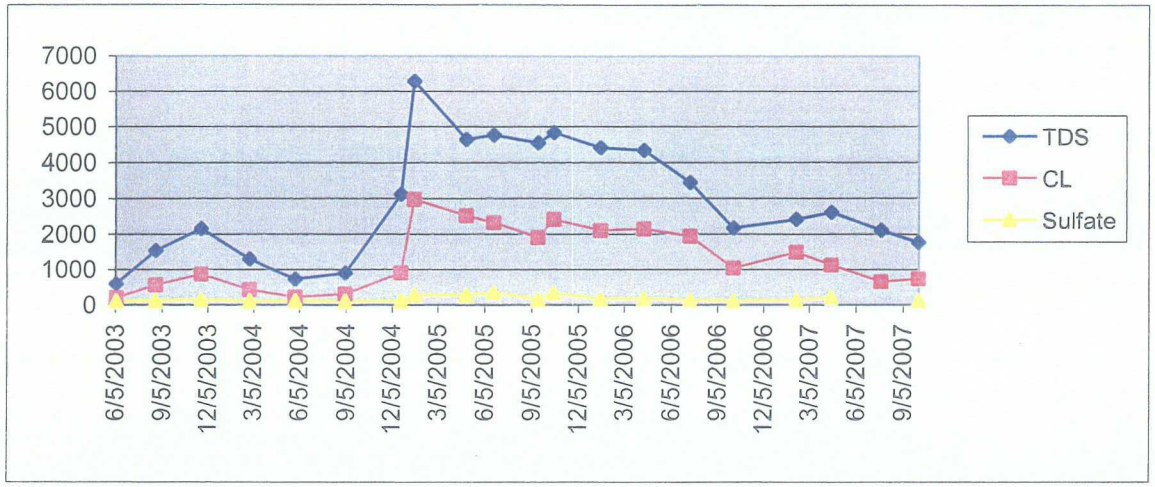
HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

TABLES

Rice Engineering Operating
F-17
Lea County, New Mexico

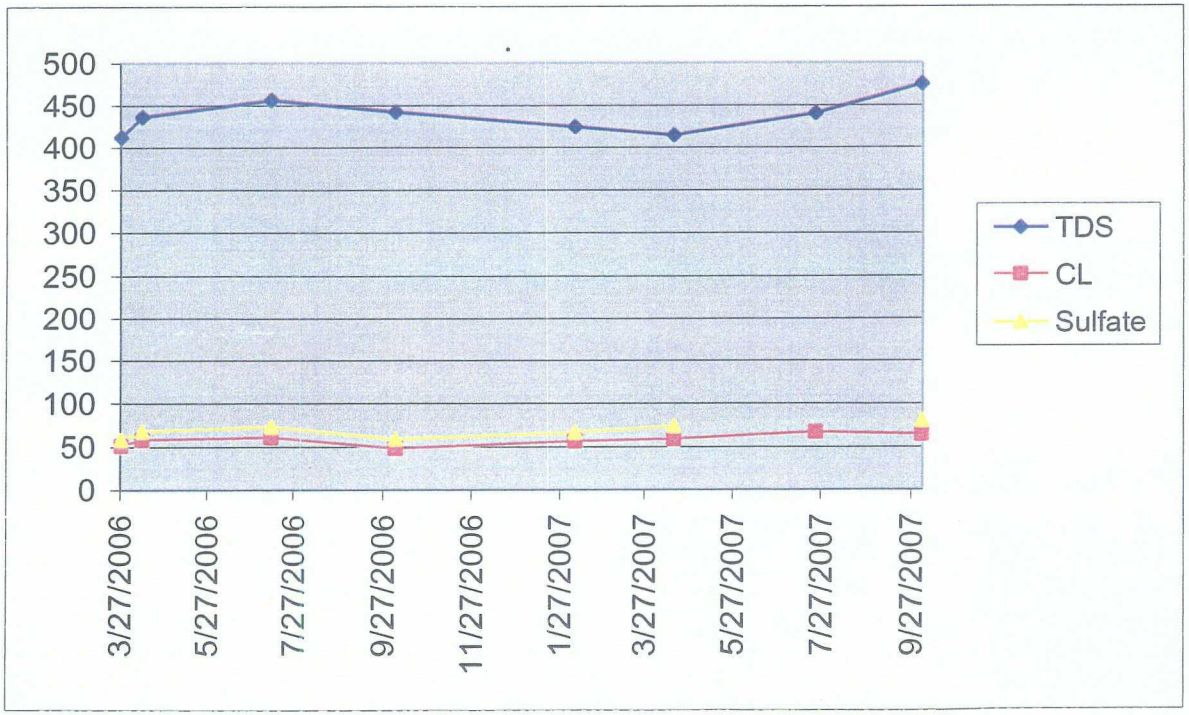
MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
1	75.67	85.20	1.5240	4.5	06/05/03	177	589	<0.001	<0.001	<0.001	<0.001	97.6	
1	75.73	85.12	1.50	4.5	08/22/03	549	1540	<0.001	<0.001	<0.001	<0.001	112	
1	75.75	84.85	1.456	4.3	11/20/03	851	2160	<0.001	<0.001	<0.001	<0.001	132	
1	75.73	84.48	1.40	4.2	02/25/04	415	1300	<0.001	<0.001	<0.001	<0.001	96.8	
1	71.75	85.12	2.13	6.4	05/27/04	195	726	<0.001	<0.001	<0.001	<0.001	97.8	
1	75.48	84.60	1.46	4.4	09/02/04	284	896	<0.001	<0.001	<0.001	<0.001	90.6	Lt brown
1	75.10	84.00	1.42	4.5	12/21/04	886	3120	<0.001	<0.001	<0.001	<0.001	96.2	
1	75.18	84.07	1.42	4.26	01/16/05	2970	6280	<0.001	<0.001	<0.001	<0.001	257	Re-sample
1	75.21	84.20	1.44	5.0	04/28/05	2510	4640	<0.001	<0.001	<0.001	<0.001	259	
1	75.20	84.15	1.43	10.0	06/21/05	2310	4770	<0.001	<0.001	<0.001	<0.001	339	
1	75.21	84.20	1.40	12.0	09/16/05	1890	4540	<0.001	<0.001	<0.001	<0.001	147	
1	75.20	84.20	1.40	5.0	10/17/05	2400	4830	<0.001	<0.001	<0.001	<0.001	319	
1	85.15	84.20	1.40	8.0	01/16/06	2090	4410	<0.001	<0.001	<0.001	<0.001	154	Silt to clear
1	75.20	84.20	1.40	8.0	04/11/06	2130	4340	<0.001	<0.001	<0.001	<0.001	167	Silt to clear
1	75.22	84.20	1.40	10.0	07/11/06	1930	3440	<0.001	<0.001	<0.001	<0.001	126	Clear
1	75.22	84.20	1.40	10.0	10/05/06	1020	2170	<0.001	<0.001	<0.001	<0.001	98.1	Clear
1	75.22	87.35	1.90	8.0	02/06/07	1480	2410	<0.001	<0.001	<0.001	<0.001	120	Clear
1	75.24	87.35	1.90	8.0	04/16/07	1110	2610	<0.001	<0.001	<0.001	<0.001	202	Clear
1	75.25	87.35	1.90	8.0	07/23/07	637	2110	<0.001	<0.001	<0.001	<0.002		Clear
1	75.24	87.35	1.90	8.0	10/04/07	720	1765	<0.001	<0.001	<0.001	<0.003	107	Clear

Rice Engineering Operating
F-17
Lea County, New Mexico
MW-1



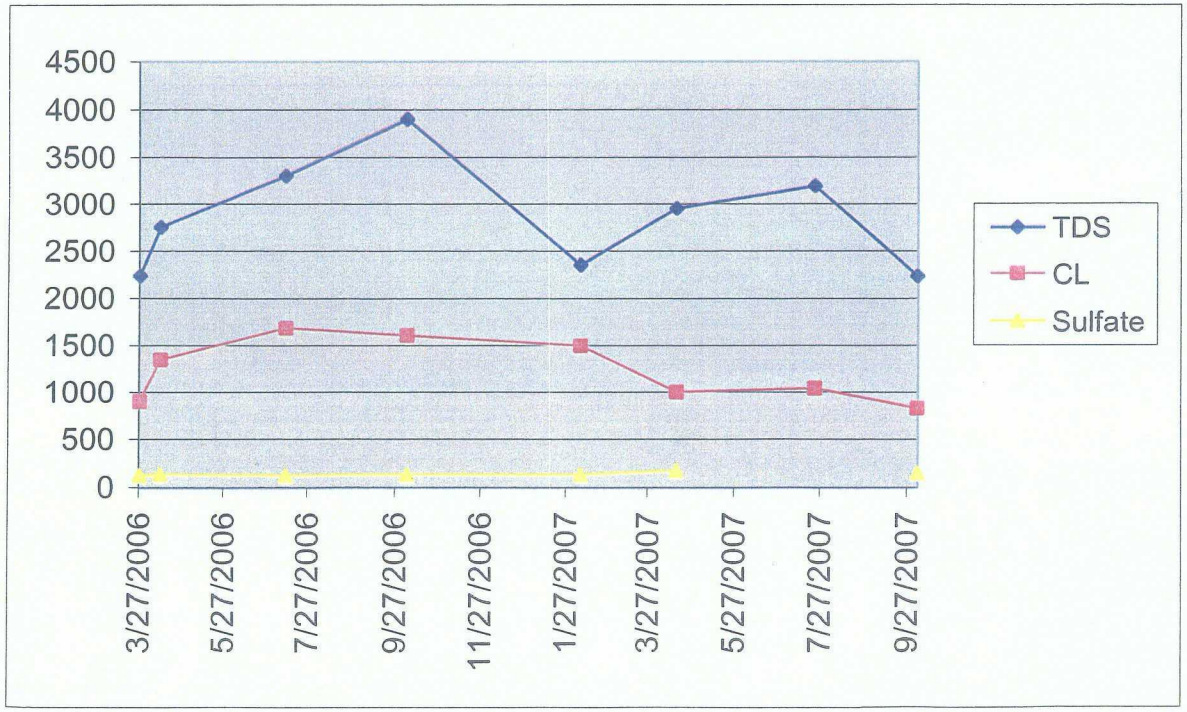
Rice Engineering Operating
F-17
Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
2	75.55	90.00	2.30	10.0	03/27/06	50.8	412	<0.001	<0.001	<0.001	<0.001	58.4	
2	75.90	90.00	2.30	10.0	04/11/06	57.9	436	<0.001	<0.001	<0.001	<0.001	68.2	
2	75.60	90.00	2.30	10.0	07/11/06	60.5	456	<0.001	<0.001	<0.001	<0.001	73.3	
2	75.62	90.00	2.30	10.0	10/05/06	47.6	442	<0.001	<0.001	<0.001	<0.001	59.2	Clear no odor
2	75.61	89.44	2.20	10.0	02/06/07	56	424	<0.001	<0.001	<0.001	<0.001	66.5	Clear no odor
2	75.62	89.44	2.20	8.0	04/16/07	58.5	414	<0.001	<0.001	<0.001	<0.001	74.2	Clear no odor
2	75.68	89.44	2.20	8.0	07/23/07	66.8	440	<0.001	<0.001	<0.001	<0.002		Sandy
2	75.61	89.44	2.20	8.0	10/04/07	64	475	<0.001	<0.001	<0.001	<0.003	80.5	Clear no odor



Rice Engineering Operating
F-17
Lea County, New Mexico

MW	Depth to Water	Total Depth	Well Volume	Volume Purged	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate	Comments
3	73.91	88.00	2.30	10.0	03/27/06	901	2240	<0.001	<0.001	<0.001	<0.001	126	
3	73.93	88.00	2.30	10.0	04/11/06	1340	2750	<0.001	<0.001	<0.001	<0.001	138	
3	73.91	88.00	2.30	10.0	07/11/06	1680	3300	<0.001	<0.001	<0.001	<0.001	125	
3	73.95	88.00	2.20	10.0	10/05/06	1600	3900	<0.001	<0.001	<0.001	<0.001	134	Clear
3	73.92	87.84	2.20	10.0	02/06/07	1490	2350	<0.001	<0.001	<0.001	<0.001	132	Clear
3	73.92	87.84	2.20	10.0	04/16/07	999	2950	<0.001	<0.001	<0.001	<0.001	177	Clear
3	73.98	87.84	2.20	8.0	07/23/07	1040	3190	<0.001	<0.001	<0.001	<0.002		Clear
3	73.97	87.84	2.20	8.0	10/04/07	830	2235	<0.001	<0.001	<0.001	<0.003	150	Clear



APPENDIX A

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: BD Junction F-17

Project Number: None Given

Location: T17S R37E Sec17 F ~ Lea County New Mexico

Lab Order Number: 7B09004

Report Date: 02/19/07

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: BD Junction F-17
Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well #1	7B09004-01	Water	02/06/07 10:20	02-08-2007 16:50
Monitor Well #2	7B09004-02	Water	02/06/07 09:25	02-08-2007 16:50
Monitor Well #3	7B09004-03	Water	02/06/07 11:10	02-08-2007 16:50

Rice Operating Co.	Project: BD Junction F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (7B09004-01) Water									
Benzene	ND	0.00100	mg/L	1	EB71210	02/12/07	02/13/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*84.8 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.0 %*	*80-120*		"	"	"	"	
Monitor Well #2 (7B09004-02) Water									
Benzene	ND	0.00100	mg/L	1	EB71210	02/12/07	02/13/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*83.6 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.8 %*	*80-120*		"	"	"	"	
Monitor Well #3 (7B09004-03) Water									
Benzene	ND	0.00100	mg/L	1	EB71210	02/12/07	02/13/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*82.8 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*80.6 %*	*80-120*		"	"	"	"	

Rice Operating Co.	Project: BD Junction F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (7B09004-01) Water									
Total Alkalinity	**212**	2.00	mg/L	1	EB71213	02/10/07	02/10/07	EPA 310.1M	
Chloride	**1480**	25.0	"	50	EB71202	02/12/07	02/13/07	EPA 300.0	
Total Dissolved Solids	**2410**	10.0	"	1	EB71003	02/09/07	02/10/07	EPA 160.1	
Sulfate	**120**	25.0	"	50	EB71202	02/12/07	02/13/07	EPA 300.0	
Monitor Well #2 (7B09004-02) Water									
Total Alkalinity	**182**	2.00	mg/L	1	EB71213	02/10/07	02/10/07	EPA 310.1M	
Chloride	**56.0**	5.00	"	10	EB71202	02/12/07	02/13/07	EPA 300.0	
Total Dissolved Solids	**424**	10.0	"	1	EB71003	02/09/07	02/10/07	EPA 160.1	
Sulfate	**66.5**	5.00	"	10	EB71202	02/12/07	02/13/07	EPA 300.0	
Monitor Well #3 (7B09004-03) Water									
Total Alkalinity	**280**	2.00	mg/L	1	EB71213	02/10/07	02/10/07	EPA 310.1M	
Chloride	**1490**	25.0	"	50	EB71202	02/12/07	02/13/07	EPA 300.0	
Total Dissolved Solids	**2350**	10.0	"	1	EB71003	02/09/07	02/10/07	EPA 160.1	
Sulfate	**132**	25.0	"	50	EB71202	02/12/07	02/13/07	EPA 300.0	

Rice Operating Co.	Project: BD Junction F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1 (7B09004-01) Water									
Calcium	**234**	4.05	mg/L	50	EB70903	02/09/07	02/09/07	EPA 6010B	
Magnesium	**118**	1.80	"	"	"	"	"	"	
Potassium	**10.1**	0.600	"	10	"	"	"	"	
Sodium	**586**	2.15	"	50	"	"	"	"	
Monitor Well #2 (7B09004-02) Water									
Calcium	**41.8**	0.810	mg/L	10	EB70903	02/09/07	02/09/07	EPA 6010B	
Magnesium	**19.4**	0.360	"	"	"	"	"	"	
Potassium	**3.55**	0.600	"	"	"	"	"	"	
Sodium	**55.1**	2.15	"	50	"	"	"	"	
Monitor Well #3 (7B09004-03) Water									
Calcium	**353**	4.05	mg/L	50	EB70903	02/09/07	02/09/07	EPA 6010B	
Magnesium	**148**	1.80	"	"	"	"	"	"	
Potassium	**14.3**	0.600	"	10	"	"	"	"	
Sodium	**378**	2.15	"	50	"	"	"	"	

Rice Operating Co.	Project: BD Junction F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB71210 - EPA 5030C (GC)										
Blank (EB71210-BLK1)				Prepared: 02/12/07 Analyzed: 02/13/07						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*42.1*		*ug/l*	*50.0*		*84.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.1*		"	*50.0*		*88.2*	*80-120*			
LCS (EB71210-BS1)				Prepared: 02/12/07 Analyzed: 02/13/07						
Benzene	0.0473	0.00100	mg/L	0.0500		94.6	80-120			
Toluene	0.0462	0.00100	"	0.0500		92.4	80-120			
Ethylbenzene	0.0424	0.00100	"	0.0500		84.8	80-120			
Xylene (p/m)	0.0971	0.00100	"	0.100		97.1	80-120			
Xylene (o)	0.0411	0.00100	"	0.0500		82.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*42.9*		*ug/l*	*50.0*		*85.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.4*		"	*50.0*		*90.8*	*80-120*			
Calibration Check (EB71210-CCV1)				Prepared: 02/12/07 Analyzed: 02/14/07						
Benzene	54.3		ug/l	50.0		109	80-120			
Toluene	51.1		"	50.0		102	80-120			
Ethylbenzene	48.1		"	50.0		96.2	80-120			
Xylene (p/m)	93.3		"	100		93.3	80-120			
Xylene (o)	40.3		"	50.0		80.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	*50.2*		"	*50.0*		*100*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*44.3*		"	*50.0*		*88.6*	*80-120*			
Matrix Spike (EB71210-MS1)	**Source: 7B09003-01**			Prepared: 02/12/07 Analyzed: 02/14/07						
Benzene	0.0448	0.00100	mg/L	0.0500	ND	89.6	80-120			
Toluene	0.0427	0.00100	"	0.0500	ND	85.4	80-120			
Ethylbenzene	0.0409	0.00100	"	0.0500	ND	81.8	80-120			
Xylene (p/m)	0.0831	0.00100	"	0.100	ND	83.1	80-120			
Xylene (o)	0.0406	0.00100	"	0.0500	ND	81.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*42.5*		*ug/l*	*50.0*		*85.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*41.2*		"	*50.0*		*82.4*	*80-120*			

Rice Operating Co.	Project: BD Junction F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB71210 - EPA 5030C (GC)										
Matrix Spike Dup (EB71210-MSD1)	**Source: 7B09003-01**			Prepared: 02/12/07 Analyzed: 02/14/07						
Benzene	0.0439	0.00100	mg/L	0.0500	ND	87.8	80-120	2.03	20	
Toluene	0.0420	0.00100	"	0.0500	ND	84.0	80-120	1.65	20	
Ethylbenzene	0.0417	0.00100	"	0.0500	ND	83.4	80-120	1.94	20	
Xylene (p/m)	0.0817	0.00100	"	0.100	ND	81.7	80-120	1.70	20	
Xylene (o)	0.0400	0.00100	"	0.0500	ND	80.0	80-120	1.49	20	
Surrogate: a,a,a-Trifluorotoluene	*41.0*		*ug/l*	*50.0*		*82.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*40.3*		*"*	*50.0*		*80.6*	*80-120*			

Rice Operating Co.	Project: BD Junction F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB71003 - Filtration Preparation										
Blank (EB71003-BLK1)				Prepared: 02/09/07 Analyzed: 02/10/07						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (EB71003-DUP1)	Source: 7B09002-01			Prepared: 02/09/07 Analyzed: 02/10/07						
Total Dissolved Solids	852	10.0	mg/L		908			6.36	20	
Duplicate (EB71003-DUP2)	Source: 7B09006-02			Prepared: 02/09/07 Analyzed: 02/10/07						
Total Dissolved Solids	1550	10.0	mg/L		1420			8.75	20	
Batch EB71202 - General Preparation (WetChem)										
Blank (EB71202-BLK2)				Prepared: 02/12/07 Analyzed: 02/13/07						
Chloride	ND	0.500	mg/L							
Sulfate	ND	0.500	"							
LCS (EB71202-BS1)				Prepared: 02/12/07 Analyzed: 02/13/07						
Chloride	10.5	0.500	mg/L	10.0		105	80-120			
Sulfate	11.1	0.500	"	10.0		111	80-120			
Calibration Check (EB71202-CCV1)				Prepared: 02/12/07 Analyzed: 02/13/07						
Sulfate	10.1		mg/L	10.0		101	80-120			
Chloride	10.3		"	10.0		103	80-120			
Duplicate (EB71202-DUP1)	Source: 7B09002-01RE1			Prepared: 02/12/07 Analyzed: 02/13/07						
Sulfate	20.3	10.0	mg/L		21.0			3.39	20	
Chloride	33.3	10.0	"		36.8			9.99	20	
Duplicate (EB71202-DUP2)	Source: 7B09006-02			Prepared: 02/12/07 Analyzed: 02/13/07						
Chloride	566	12.5	mg/L		576			1.75	20	
Sulfate	265	12.5	"		268			1.13	20	

Rice Operating Co.	Project: BD Junction F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB71202 - General Preparation (WetChem)										
Matrix Spike (EB71202-MS1)	**Source: 7B09002-01RE1**			Prepared: 02/12/07 Analyzed: 02/13/07						
Sulfate	256	10.0	mg/L	200	21.0	118	80-120			
Chloride	255	10.0	"	200	36.8	109	80-120			
Matrix Spike (EB71202-MS2)	**Source: 7B09006-02**			Prepared: 02/12/07 Analyzed: 02/13/07						
Sulfate	533	12.5	mg/L	250	268	106	80-120			
Chloride	845	12.5	"	250	576	108	80-120			
Batch EB71213 - General Preparation (WetChem)										
Blank (EB71213-BLK1)				Prepared & Analyzed: 02/10/07						
Total Alkalinity	ND	2.00	mg/L							
LCS (EB71213-BS1)				Prepared & Analyzed: 02/10/07						
Bicarbonate Alkalinity	194	2.00	mg/L	200		97.0	85-115			
Duplicate (EB71213-DUP1)	**Source: 7B09002-01**			Prepared & Analyzed: 02/10/07						
Total Alkalinity	226	2.00	mg/L		228			0.881	20	
Reference (EB71213-SRM1)				Prepared & Analyzed: 02/10/07						
Total Alkalinity	250		mg/L	250		100	90-110			

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Rice Operating Co.	Project: BD Junction F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB70903 - 6010B/No Digestion										
Blank (EB70903-BLK1)				Prepared & Analyzed: 02/09/07						
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (EB70903-CCV1)				Prepared & Analyzed: 02/09/07						
Calcium	2.10		mg/L	2.00		105	85-115			
Magnesium	2.17		"	2.00		108	85-115			
Potassium	1.73		"	2.00		86.5	85-115			
Sodium	1.78		"	2.00		89.0	85-115			
Duplicate (EB70903-DUP1)	**Source: 7B09002-01**			Prepared & Analyzed: 02/09/07						
Calcium	139	4.05	mg/L		137			1.45	20	
Magnesium	25.4	0.360	"		26.3			3.48	20	
Potassium	2.51	0.600	"		2.58			2.75	20	
Sodium	108	2.15	"		110			1.83	20	

Rice Operating Co.	Project: BD Junction F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Brent Barron Date: 2/19/2007

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kristin Farris Pope kpope@riceswd.com

Company Name: RICE Operating Company

Company Address: 122 W. Taylor Street

City/State/Zip: Hobbs, New Mexico 88240

Telephone No: (505) 393-9174 Fax No: (505) 397-1471

Sampler Signature: Rozanne Johnson (505)631-9310 e-mail: rozanne@valornet.com

Project Name: BD Junction F-17

Project #:

Project Loc: T21S R37E Sec17 F ~ Lea County New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only) ORDER #: 7B09004

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (2) 40 ml glass vials	H_2SO_4	NaOH	$Na_2S_2O_3$	None (1) 1 Liter HDPE	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles (BTEX-N 8260)	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Dissolved Solids	RUSH TAT [Pre-Schedule] 24, 48, 72hrs	Standard TAT
-01	Monitor Well #1			2/6/2007	10:20		3	X		2				1		GW			X	X					X			X		X
-02	Monitor Well #2			2/6/2007	9:25		3	X		2				1		GW			X	X					X			X		X
-03	Monitor Well #3			2/6/2007	11:10		3	X		2				1		GW			X	X					X			X		X

Special Instructions:
Please email to : kpope@riceswd.com mfranks@riceswd.com rozanne@valornet.com

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	2-8-07	4:50			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Carin Lees	Date 2/8/07	Time 4:50

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: 2.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: RIVE OP.

Date/ Time: 2/8/07 4:50

Lab ID # : 7B69004

Initials: CH

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	2.5 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Kristin Farris-Pope

Rice Operating Co.

122 W. Taylor

Hobbs, NM 88240

Project: BD Jct. F-17

Project Number: None Given

Location: T21S R37E Sec17 F ~ Lea County New Mexico

Lab Order Number: 7D18020

Report Date: 05/04/07

Rice Operating Co.	Project: BD Jct. F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Monitor Well # 1	7D18020-01	Water	04/16/07 10:10	04-18-2007 14:55
Monitor Well # 2	7D18020-02	Water	04/16/07 09:15	04-18-2007 14:55
Monitor Well # 3	7D18020-03	Water	04/16/07 11:20	04-18-2007 14:55

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Rice Operating Co.	Project: BD Jct. F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well # 1 (7D18020-01) Water									
Benzene	ND	0.00100	mg/L	1	ED72007	04/20/07	04/24/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*117 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*112 %*	*80-120*		"	"	"	"	
Monitor Well # 2 (7D18020-02) Water									
Benzene	ND	0.00100	mg/L	1	ED72007	04/20/07	04/24/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*116 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*109 %*	*80-120*		"	"	"	"	
Monitor Well # 3 (7D18020-03) Water									
Benzene	ND	0.00100	mg/L	1	ED72007	04/20/07	04/24/07	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*121 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*112 %*	*80-120*		"	"	"	"	

Rice Operating Co.	Project: BD Jct. F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well # 1 (7D18020-01) Water									
Total Alkalinity	**216**	2.00	mg/L	1	ED71913	04/19/07	04/19/07	EPA 310.1M	
Chloride	**1110**	25.0	"	50	ED72411	04/24/07	04/27/07	EPA 300.0	
Total Dissolved Solids	**2610**	10.0	"	1	ED72104	04/21/07	04/23/07	EPA 160.1	
Sulfate	**202**	25.0	"	50	ED72411	04/24/07	04/27/07	EPA 300.0	
Monitor Well # 2 (7D18020-02) Water									
Total Alkalinity	**194**	2.00	mg/L	1	ED71913	04/19/07	04/19/07	EPA 310.1M	
Chloride	**58.5**	5.00	"	10	ED72411	04/24/07	04/27/07	EPA 300.0	
Total Dissolved Solids	**414**	10.0	"	1	ED72104	04/21/07	04/23/07	EPA 160.1	
Sulfate	**74.2**	5.00	"	10	ED72411	04/24/07	04/27/07	EPA 300.0	
Monitor Well # 3 (7D18020-03) Water									
Total Alkalinity	**248**	2.00	mg/L	1	ED71913	04/19/07	04/19/07	EPA 310.1M	
Chloride	**999**	12.5	"	25	ED72411	04/24/07	04/27/07	EPA 300.0	
Total Dissolved Solids	**2950**	10.0	"	1	ED72104	04/21/07	04/23/07	EPA 160.1	
Sulfate	**177**	12.5	"	25	ED72411	04/24/07	04/27/07	EPA 300.0	

Rice Operating Co.	Project: BD Jct. F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well # 1 (7D18020-01) Water									
Calcium	**229**	4.05	mg/L	50	ED72703	04/27/07	04/27/07	EPA 6010B	
Magnesium	**122**	1.80	"	"	"	"	"	"	
Potassium	**8.29**	0.600	"	10	"	"	"	"	
Sodium	**343**	4.30	"	100	"	"	"	"	
Monitor Well # 2 (7D18020-02) Water									
Calcium	**42.6**	0.810	mg/L	10	ED72703	04/27/07	04/27/07	EPA 6010B	
Magnesium	**20.6**	0.360	"	"	"	"	"	"	
Potassium	**4.03**	0.600	"	"	"	"	"	"	
Sodium	**63.7**	0.430	"	"	"	"	"	"	
Monitor Well # 3 (7D18020-03) Water									
Calcium	**310**	4.05	mg/L	50	ED72703	04/27/07	04/27/07	EPA 6010B	
Magnesium	**136**	1.80	"	"	"	"	"	"	
Potassium	**9.94**	0.600	"	10	"	"	"	"	
Sodium	**271**	4.30	"	100	"	"	"	"	

Rice Operating Co.	Project: BD Jct. F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED72007 - EPA 5030C (GC)										
Blank (ED72007-BLK1)				Prepared: 04/20/07 Analyzed: 04/24/07						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*57.6*		*ug/l*	*50.0*		*115*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*57.5*		"	*50.0*		*115*	*80-120*			
LCS (ED72007-BS1)				Prepared: 04/20/07 Analyzed: 04/24/07						
Benzene	0.0528	0.00100	mg/L	0.0500		106	80-120			
Toluene	0.0551	0.00100	"	0.0500		110	80-120			
Ethylbenzene	0.0567	0.00100	"	0.0500		113	80-120			
Xylene (p/m)	0.107	0.00100	"	0.100		107	80-120			
Xylene (o)	0.0574	0.00100	"	0.0500		115	80-120			
Surrogate: a,a,a-Trifluorotoluene	*56.7*		*ug/l*	*50.0*		*113*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*55.1*		"	*50.0*		*110*	*80-120*			
Calibration Check (ED72007-CCV1)				Prepared: 04/20/07 Analyzed: 04/24/07						
Benzene	54.8		ug/l	50.0		110	80-120			
Toluene	55.1		"	50.0		110	80-120			
Ethylbenzene	56.5		"	50.0		113	80-120			
Xylene (p/m)	106		"	100		106	80-120			
Xylene (o)	57.1		"	50.0		114	80-120			
Surrogate: a,a,a-Trifluorotoluene	*56.9*		"	*50.0*		*114*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*53.1*		"	*50.0*		*106*	*80-120*			
Matrix Spike (ED72007-MS1)	**Source: 7D18018-03**			Prepared: 04/20/07 Analyzed: 04/24/07						
Benzene	0.0552	0.00100	mg/L	0.0500	ND	110	80-120			
Toluene	0.0573	0.00100	"	0.0500	ND	115	80-120			
Ethylbenzene	0.0565	0.00100	"	0.0500	ND	113	80-120			
Xylene (p/m)	0.109	0.00100	"	0.100	ND	109	80-120			
Xylene (o)	0.0598	0.00100	"	0.0500	ND	120	80-120			
Surrogate: a,a,a-Trifluorotoluene	*58.3*		*ug/l*	*50.0*		*117*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*57.6*		"	*50.0*		*115*	*80-120*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED72007 - EPA 5030C (GC)										
Matrix Spike Dup (ED72007-MSD1)	**Source: 7D18018-03**			Prepared: 04/20/07 Analyzed: 04/24/07						
Benzene	0.0549	0.00100	mg/L	0.0500	ND	110	80-120	0.00	20	
Toluene	0.0575	0.00100	"	0.0500	ND	115	80-120	0.00	20	
Ethylbenzene	0.0593	0.00100	"	0.0500	ND	119	80-120	5.17	20	
Xylene (p/m)	0.111	0.00100	"	0.100	ND	111	80-120	1.82	20	
Xylene (o)	0.0611	0.00100	"	0.0500	ND	122	80-120	1.65	20	QM-07
Surrogate: a,a,a-Trifluorotoluene	*60.0*		*ug/l*	*50.0*		*120*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*58.8*		"	*50.0*		*118*	*80-120*			

Rice Operating Co.	Project: BD Jct. F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED71913 - General Preparation (WetChem)										
Blank (ED71913-BLK1)				Prepared & Analyzed: 04/19/07						
Total Alkalinity	ND	2.00	mg/L							
LCS (ED71913-BS1)				Prepared & Analyzed: 04/19/07						
Bicarbonate Alkalinity	176	2.00	mg/L	200		88.0	85-115			
Duplicate (ED71913-DUP1)		Source: 7D18017-01		Prepared & Analyzed: 04/19/07						
Total Alkalinity	226	2.00	mg/L		232			2.62	20	
Reference (ED71913-SRM1)				Prepared & Analyzed: 04/19/07						
Total Alkalinity	246		mg/L	250		98.4	90-110			
Batch ED72104 - Filtration Preparation										
Blank (ED72104-BLK1)				Prepared: 04/21/07 Analyzed: 04/23/07						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (ED72104-DUP1)		Source: 7D18020-03		Prepared: 04/21/07 Analyzed: 04/23/07						
Total Dissolved Solids	2450	10.0	mg/L		2950			18.5	20	
Batch ED72411 - General Preparation (WetChem)										
Blank (ED72411-BLK1)				Prepared & Analyzed: 04/24/07						
Chloride	ND	0.500	mg/L							
Sulfate	ND	0.500	"							
Blank (ED72411-BLK2)				Prepared: 04/24/07 Analyzed: 04/27/07						
Chloride	ND	0.500	mg/L							
Sulfate	ND	0.500	"							

Rice Operating Co.	Project: BD Jct. F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED72411 - General Preparation (WetChem)										
LCS (ED72411-BS1)				Prepared: 04/24/07 Analyzed: 04/27/07						
Sulfate	9.66	0.500	mg/L	10.0		96.6	80-120			
Chloride	9.02	0.500	"	10.0		90.2	80-120			
Calibration Check (ED72411-CCV1)				Prepared: 04/24/07 Analyzed: 04/27/07						
Sulfate	11.0		mg/L	10.0		110	80-120			
Chloride	8.05		"	10.0		80.5	80-120			
Duplicate (ED72411-DUP1)		**Source: 7D23008-01**		Prepared: 04/24/07 Analyzed: 04/27/07						
Sulfate	74.3	5.00	mg/L		74.0			0.405	20	
Chloride	187	5.00	"		187			0.00	20	
Duplicate (ED72411-DUP2)		**Source: 7D18018-06**		Prepared: 04/24/07 Analyzed: 04/27/07						
Chloride	361	12.5	mg/L		367			1.65	20	
Sulfate	492	12.5	"		490			0.407	20	
Matrix Spike (ED72411-MS1)		**Source: 7D23008-01**		Prepared & Analyzed: 04/24/07						
Chloride	291	5.00	mg/L	100	187	104	80-120			
Sulfate	166	5.00	"	100	74.0	92.0	80-120			
Matrix Spike (ED72411-MS2)		**Source: 7D18018-06**		Prepared: 04/24/07 Analyzed: 04/27/07						
Chloride	631	12.5	mg/L	250	367	106	80-120			
Sulfate	774	12.5	"	250	490	114	80-120			

Rice Operating Co.	Project: BD Jct. F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Total Metals by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED72703 - 6010B/No Digestion										
Blank (ED72703-BLK1)				Prepared & Analyzed: 04/27/07						
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	"							
Potassium	ND	0.0600	"							
Sodium	ND	0.0430	"							
Calibration Check (ED72703-CCV1)				Prepared & Analyzed: 04/27/07						
Calcium	1.90		mg/L	2.00		95.0	85-115			
Magnesium	2.07		"	2.00		104	85-115			
Potassium	1.98		"	2.00		99.0	85-115			
Sodium	2.29		"	2.00		114	85-115			
Duplicate (ED72703-DUP1)	**Source: 7D18014-01**			Prepared & Analyzed: 04/27/07						
Calcium	140	4.05	mg/L		133			5.13	20	
Magnesium	76.4	1.80	"		76.8			0.522	20	
Potassium	15.7	0.600	"		15.6			0.639	20	
Sodium	350	4.30	"		358			2.26	20	

Rice Operating Co.	Project: BD Jct. F-17	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	
Hobbs NM, 88240	Project Manager: Kristin Farris-Pope	

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Celey D. Keene Date: 05/04/07

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kristin Farris Pope kpope@riceswd.com

Company Name: RICE Operating Company

Company Address: 122 W. Taylor Street

City/State/Zip: Hobbs, New Mexico 88240

Telephone No: (505) 393-9174 Fax No: (505) 397-1471

Sampler Signature: Rozanne Johnson (505)631-9310 e-mail: rozanne@valornet.com

Project Name: BD Junction F-17

Project #:

Project Loc: T21S R37E Sec17 F ~ Lea County New Mexico

PO #:

Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)

ORDER #: 7D18020

281053

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (2) 40 ml glass vials	H_2SO_4	NaOH	$Na_2S_2O_3$	None (1) 1 Liter HDPE	Other (Specify)	Matrix: Dw=Drinking Water SL=Sludge; GW = Groundwater S=Soil/Solid; NP=Non-Potable Specify Other	Analyze For: TCLP: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles (BTEX-N 8260)	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Dissolved Solids	RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Monitor Well #1			4/16/2007	10:10		3	X		2				1		GW			X	X					X			X		X
02	Monitor Well #2			4/16/2007	9:15		3	X		2				1		GW			X	X					X			X		X
03	Monitor Well #3			4/16/2007	11:20		3	X		2				1		GW			X	X					X			X		X

Special Instructions:

Please email to : kpope@riceswd.com matt@riceswd.com rozanne@valornet.com
jpurvis@riceswd.com

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	4-18-07	12:10	Mary Morton	4-18-07	12:11
Relinquished by: Mary Morton	4-18-07	1:55	Received by:	Date	Time
Relinquished by	Date	Time	Received by ELOT: Andrea Fa	4-18-07	1:55

Laboratory Comments:

Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
Labels on container(s) Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered Y N
by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star
1 Pkg
Temperature Upon Receipt: ~1.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Rice

Date/ Time: 4-18-07 2:55

Lab ID #: 7D18028

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	-1.0 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	(Yes)	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 286626

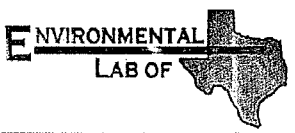
for

Rice Operating Co.

Project Manager: Kristin Pope

BD Junction F-17

13-AUG-07



12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

NELAC certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

13-AUG-07

Project Manager: **Kristin Pope**
Rice Operating Co.
122 West Taylor
Hobbs, NM 88240

Reference: XENCO Report No: **286626**
BD Junction F-17
Project Address: T21S R37E Sec17 F ~ Lea County New Mexico

Kristin Pope:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 286626. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 286626 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 286626

Rice Operating Co., Hobbs, NM

Project Name: BD Junction F-17

Project Id:
Contact: Kristin Pope
Project Location: T21S R37E Sec17 F ~ Lea County New M

Date Received in Lab: Jul-26-07 02:15 pm
Report Date: 13-AUG-07
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	286626-001		286626-002		286626-003		
	Field Id:	Monitor Well # 1		Monitor Well # 2		Monitor Well # 3		
	Depth:							
	Matrix:	WATER		WATER		WATER		
	Sampled:	Jul-23-07 14:15		Jul-23-07 13:20		Jul-23-07 15:05		
Alkalinity by EPA 310.1	*Extracted:*							
	Analyzed:	Jul-27-07 14:45		Jul-27-07 14:45		Jul-27-07 14:45		
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	
Alkalinity, Total (as CaCO3)		944	4.00	800	4.00	2500	4.00	
BTEX by EPA 8021B	*Extracted:*	Jul-27-07 13:38		Jul-27-07 13:38		Jul-27-07 13:38		
	Analyzed:	Jul-30-07 18:25		Jul-30-07 18:46		Jul-30-07 19:06		
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	
Benzene		ND	0.0010	ND	0.0010	ND	0.0010	
Toluene		ND	0.0010	ND	0.0010	ND	0.0010	
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	
m,p-Xylene		ND	0.0020	ND	0.0020	ND	0.0020	
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	
Total Xylenes		ND		ND		ND		
Total BTEX		ND		ND		ND		
Inorganic Anions by EPA 300	*Extracted:*							
	Analyzed:	Jul-27-07 14:53		Jul-27-07 14:53		Jul-27-07 14:53		
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	
Chloride		637	12.5	66.8	5.00	1040	25.0	
Metals per ICP by SW846 6010B	*Extracted:*	Jul-31-07 09:16		Jul-31-07 09:16		Jul-31-07 09:16		
	Analyzed:	Jul-31-07 14:50		Jul-31-07 14:57		Jul-31-07 14:55		
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	
Calcium		193	1.00	51.3	1.00	358	1.00	
Magnesium		95.3	0.100	22.8	0.100	160	0.100	
Potassium		6.85	2.00	3.60	2.00	10.9	2.00	
Sodium		252	5.00	57.8	5.00	241	5.00	
Residue, Filterable (TDS) by EPA 160.1	*Extracted:*							
	Analyzed:	Jul-26-07 16:30		Jul-26-07 16:30		Jul-26-07 16:30		
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	
Total dissolved solids		2110	5.00	440	5.00	3190	5.00	

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

Form 2 - Surrogate Recoveries

Project Name: BD Junction F-17

Work Order #: 286626 **Project ID:**

Lab Batch #: 701442 **Sample:** 286626-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0457	0.0500	91	80-120	

Lab Batch #: 701442 **Sample:** 286626-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0466	0.0500	93	80-120	

Lab Batch #: 701442 **Sample:** 286626-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0541	0.0500	108	80-120	

Lab Batch #: 701442 **Sample:** 286638-004 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0524	0.0500	105	80-120	

Lab Batch #: 701442 **Sample:** 286638-004 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0532	0.0500	106	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: BD Junction F-17

Work Order #: 286626 **Project ID:**

Lab Batch #: 701442 **Sample:** 497682-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0410	0.0500	82	80-120	

Lab Batch #: 701442 **Sample:** 497682-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0451	0.0500	90	80-120	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: BD Junction F-17

Work Order #: 286626 **Project ID:**

Lab Batch #: 701211 **Sample:** 701211-1-BKS **Matrix:** Water
Date Analyzed: 07/27/2007 **Date Prepared:** 07/27/2007 **Analyst:** WRU
Reporting Units: mg/L **Batch #:** 1

Alkalinity by EPA 310.1 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Alkalinity, Total (as CaCO3)	ND	400	340	85	80-120	

Lab Batch #: 701442 **Sample:** 497682-1-BKS **Matrix:** Water
Date Analyzed: 07/30/2007 **Date Prepared:** 07/27/2007 **Analyst:** CELKEE
Reporting Units: mg/L **Batch #:** 1

BTEX by EPA 8021B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Benzene	ND	0.0500	0.0457	91	70-125	
Toluene	ND	0.0500	0.0468	94	70-125	
Ethylbenzene	ND	0.0500	0.0501	100	71-129	
m,p-Xylene	ND	0.1000	0.0898	90	70-131	
o-Xylene	ND	0.0500	0.0475	95	71-133	

Lab Batch #: 701264 **Sample:** 701264-1-BKS **Matrix:** Water
Date Analyzed: 07/27/2007 **Date Prepared:** 07/27/2007 **Analyst:** IRO
Reporting Units: mg/L **Batch #:** 1

Inorganic Anions by EPA 300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
	BLANK /BLANK SPIKE RECOVERY STUDY					
Chloride	ND	10.0	9.94	99	90-110	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: BD Junction F-17

Work Order #: 286626 **Project ID:**

Analyst: DAT **Date Prepared:** 07/31/2007 **Date Analyzed:** 07/31/2007

Lab Batch ID: 701350 **Sample:** 497762-1-BKS **Batch #:** 1 **Matrix:** Water

Units: mg/L

Metals per ICP by SW846 6010B Analytes	BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Calcium	ND	1.00	1.02	102	1.0	1.05	105	3	75-125	25	
Magnesium	ND	1.00	1.13	113	1.0	1.12	112	1	75-125	25	
Potassium	ND	10.0	9.95	100	10.0	9.89	99	1	75-125	25	
Sodium	ND	11.0	10.8	98	11.0	10.7	97	1	75-125	25	

Relative Percent Difference RPD = 200*|(D-F)/(D+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: BD Junction F-17

Work Order #: 286626
Lab Batch #: 701264
Project ID:
Date Analyzed: 07/27/2007
Date Prepared: 07/27/2007
Analyst: IRO
QC- Sample ID: 286626-003 S
Batch #: 1
Matrix: Water
Reporting Units: mg/L

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	1040	500	1630	118	90-110	X

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

Form 3 - MS / MSD Recoveries

Project Name: BD Junction F-17

Work Order # : 286626 **Project ID:**

Lab Batch ID: 701442 **QC- Sample ID:** 286638-004 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/31/2007 **Date Prepared:** 07/27/2007 **Analyst:** CELKEE

Reporting Units: mg/L

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0309	0.0500	0.0808	100	0.0500	0.0774	93	7	70-125	25	
Toluene	0.0010	0.0500	0.0603	119	0.0500	0.0581	114	4	70-125	25	
Ethylbenzene	ND	0.0500	0.0633	127	0.0500	0.0613	123	3	71-129	25	
m,p-Xylene	0.0042	0.1000	0.1137	110	0.1000	0.1103	106	4	70-131	25	
o-Xylene	ND	0.0500	0.0609	122	0.0500	0.0591	118	3	71-133	25	

Lab Batch ID: 701350 **QC- Sample ID:** 286807-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 07/31/2007 **Date Prepared:** 07/31/2007 **Analyst:** DAT

Reporting Units: mg/L

Metals per ICP by SW846 6010B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Calcium	300	2.00	307	350	2.00	303	150	80	75-125	20	XF
Magnesium	9.93	2.00	12.1	109	2.00	12.0	104	5	75-125	20	
Potassium	15.1	20.0	39.1	120	20.0	38.9	119	1	75-125	20	
Sodium	4.39	22.0	28.3	109	22.0	27.5	105	4	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(D-G)/(D+G)

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Sample Duplicate Recovery

Project Name: BD Junction F-17

Work Order #: 286626

Lab Batch #: 701211 — Project ID:
Date Analyzed: 07/27/2007 — Date Prepared: 07/27/2007 — Analyst: WRU
QC- Sample ID: 286139-012 D — Batch #: 1 — Matrix: Water
Reporting Units: mg/L

Alkalinity by EPA 310.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Alkalinity, Total (as CaCO3)	2200	2200	0	20	

Lab Batch #: 701264
Date Analyzed: 07/27/2007 — Date Prepared: 07/27/2007 — Analyst: IRO
QC- Sample ID: 286626-003 D — Batch #: 1 — Matrix: Water
Reporting Units: mg/L

Inorganic Anions by EPA 300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	1040	1060	2	20	

Lab Batch #: 701255
Date Analyzed: 07/26/2007 — Date Prepared: 07/26/2007 — Analyst: IRO
QC- Sample ID: 286139-012 D — Batch #: 1 — Matrix: Water
Reporting Units: mg/L

Residue, Filterable (TDS) by EPA 160.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	5020	5370	7	30	

Lab Batch #: 701255
Date Analyzed: 07/26/2007 — Date Prepared: 07/26/2007 — Analyst: IRO
QC- Sample ID: 286633-006 D — Batch #: 1 — Matrix: Water
Reporting Units: mg/L

Residue, Filterable (TDS) by EPA 160.1	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	2980	3090	4	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765
Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Kristin Farris Pope kpope@riceswd.com
Company Name: RICE Operating Company
Company Address: 122 W. Taylor Street
City/State/Zip: Hobbs, New Mexico 88240
Telephone No: (505) 393-9174 Fax No: (505) 397-1471
Sampler Signature: Rozanne Johnson (505)631-9310 e-mail: rozanne@valornet.com

Project Name: BD Junction F-17
Project #:
Project Loc: T21S R37E Sec17 F ~ Lea County New Mexico
PO #:
Report Format: [X] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: 286626

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl (2) 40 ml glass vials	H_2SO_4	NaOH	$Na_2S_2O_3$	None (1) 1 Liter HDPE	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge; GW=Groundwater S=Soil/Solid; NP=Non-Potable Specify Other	Analyze For: TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles (BTEX-N 8260)	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Dissolved Solids		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	Monitor Well #1			7/23/2007	14:15		3	X		2				1		GW			X	X					X			X			X
02	Monitor Well #2			7/23/2007	13:20		3	X		2				1		GW			X	X					X			X			X
03	Monitor Well #3			7/23/2007	15:05		3	X		2				1		GW			X	X					X			X			X

Special Instructions:
Please email to : kpope@riceswd.com rozanne@valornet.com

Relinquished by:	Date	Time	Received by:	Date	Time
Rozanne Johnson	7-26-07	11:35	Raelyn Gardner	7-26-07	11:36
Relinquished by: Raelyn Gardner	7-26	2:15	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	7/26/07	2:15

Laboratory Comments:
Sample Containers Intact? N
VOCs Free of Headspace? N
Labels on container(s) N
Custody seals on container(s) N
Custody seals on cooler(s) N
Sample Hand Delivered N
by Sampler/Client Rep. ? N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 1.5 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Rice

Date/ Time: 7.26.07 7:15

Lab ID #: 286626

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	1.5 °C	
#2	Shipping container in good condition?	(Yes)	No		
#3	Custody Seals intact on shipping container/ cooler?	(Yes)	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	(Yes)	No	Not Present	
#5	Chain of Custody present?	(Yes)	No		
#6	Sample instructions complete of Chain of Custody?	(Yes)	No		
#7	Chain of Custody signed when relinquished/ received?	(Yes)	No		
#8	Chain of Custody agrees with sample label(s)?	(Yes)	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	(Yes)	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	(Yes)	No		
#11	Containers supplied by ELOT?	(Yes)	No		
#12	Samples in proper container/ bottle?	(Yes)	No	See Below	
#13	Samples properly preserved?	(Yes)	No	See Below	
#14	Sample bottles intact?	(Yes)	No		
#15	Preservations documented on Chain of Custody?	(Yes)	No		
#16	Containers documented on Chain of Custody?	(Yes)	No		
#17	Sufficient sample amount for indicated test(s)?	(Yes)	No	See Below	
#18	All samples received within sufficient hold time?	(Yes)	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	(Yes)	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 W. TAYLOR STREET
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 10/05/07
Reporting Date: 10/12/07
Project Number: NOT GIVEN
Project Name: BD JUNCTION F-17
Project Location: T21S R37E SEC17 F~LEA COUNTY, NM

Sampling Date: 10/04/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: HM/KS

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (u S/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:		10/12/07	10/11/07	10/11/07	10/12/07	10/10/07	10/10/07
H13452-1	MONITOR WELL #1	259	164	79.9	6.10	2,740	184
H13452-2	MONITOR WELL #2	64	47.9	21.8	4.89	683	180
H13452-3	MONITOR WELL #3	225	246	107	10.4	3,200	232
Quality Control		NR	50.6	51.6	1.87	9,760	NR
True Value QC		NR	50.0	50.0	2.00	10,000	NR
% Recovery		NR	101	103	93.6	97.6	NR
Relative Percent Difference		NR	< 0.1	1.6	5.7	0.1	NR
METHODS:			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

LAB NUMBER	SAMPLE ID	Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		10/11/07	10/11/07	10/10/07	10/10/07	10/10/07	10/11/07
H13452-1	MONITOR WELL #1	720	107	0	224	7.28	1,765
H13452-2	MONITOR WELL #2	64	80.5	0	220	7.54	475
H13452-3	MONITOR WELL #3	830	150	0	283	7.19	2,235
Quality Control		500	54.0	NR	1000	7.00	NR
True Value QC		500	50.0	NR	1000	7.00	NR
% Recovery		100	108	NR	100	100	NR
Relative Percent Difference		< 0.1	16.8	NR	< 0.1	0.1	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Kristin Farris-Pope
Chemist

10/12/07
Date

CARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: KRISTIN FARRIS-POPE
122 WEST TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 10/05/07
Reporting Date: 10/10/07
Project Number: NOT GIVEN
Project Name: BD JUNCTION F-17
Project Location: T21S R37E SEC17 F - LEA COUNTY, NM

Sampling Date: 10/04/07
Sample Type: WATER
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: CK

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		10/06/07	10/06/07	10/06/07	10/06/07
H13452-1	MONITOR WELL #1	<0.001	<0.001	<0.001	<0.003
H13452-2	MONITOR WELL #2	<0.001	<0.001	<0.001	<0.003
H13452-3	MONITOR WELL #3	<0.001	<0.001	<0.001	<0.003
Quality Control		0.114	0.106	0.106	0.108
True Value QC		0.100	0.100	0.100	0.300
% Recovery		114	106.0	106.0	108.0
Relative Percent Difference		9.3	11.6	12.1	12.7

METHOD: EPA SW-846 8021B

Chemist

10/12/07
Date

H13452b Rice

101 East Marland - Hobbs, New Mexico 88240
Tel (505) 393-2326
Fax (505) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Company Name: RICE Operating Company	BILL TO Company: RICE Operating Company — PO#
Project Manager: Kristin Farris-Pope, Project Scientist	Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240
Address: (Street, City, Zip) 122 W Taylor Street ~ Hobbs, New Mexico 88240	Phone#: (505) 393-9174 — Fax#: (505)397-1471
Phone #: (505) 393-9174 — Fax #: (505) 397-1471	
Project #: — Project Name: BD Junction F-17	
Project Location: T21S R37E Sec17 F ~ Lea County New Mexico	Sampler Signature: Rozanne Johnson (505)631-9310 rozanne@valornet.com

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL (2-40ml VOA)	HNO_3	$NaHSO_4$	H_2SO_4	ICE (1-1Liter HDPE)	NONE	SAMPLING: DATE (2007)	TIME
H13452-1	Monitor Well #1	G	3	X				2				1		10-4	9:15
-2	Monitor Well #2	G	3	X				2				1		10-4	8:20
-3	Monitor Well #3	G	3	X				2				1		10-4	10:35

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB #	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005/TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Moisture Content	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	Total Dissolved Solids	Chlorides	Turn Around Time ~ 24 Hours
H13452-1		X															X	X	X		
-2		X															X	X	X		
-3		X															X	X	X		

Relinquished by: Rozanne Johnson	Date: 10507	Time: 2:28pm	Received by: Sue Burnes — Date: 10/5/07 — Time: 2:28pm
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff) — Date: — Time:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:

Sample Condition: Cool: Yes / No; Intact: Yes / No

CHECKED BY: (Initials) SB

Phone Results		Yes		No
Fax Results		Yes		No — Additional Fax Number:

REMARKS:

Email Results to: kpope@riceswd.com, lweinheimer@riceswd.com, rozanne@valornet.com