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# ANNUAL GW REPORT

DATE: 2007

PECEIVED 2007

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

January 24, 2008

Wayne Price Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

RE:

2007 Annual Ground Water Monitoring Report F-29-1A Vent, Sec 29, T18S, R38E, Unit "F"

NMOCD Case #: None

Dear Mr. Wayne Price:

R.T. Hicks Consultants, Ltd is pleased to submit the 2007 Annual Ground Water Monitoring Report for the F-29-1A Vent site located in the Hobbs Salt Water Disposal System (SWD). This report consists of the following sections:

- 1. A table summarizing all laboratory results, depth to ground water and other pertinent data associated with ground water sampling at the site, including this past year.
- 2. Graphs showing chemical concentration over time for chloride, TDS, and
- 3. Laboratory data sheets associated with the routine sampling for 2007.
- 4. Site Survey

A Corrective Action Plan was submitted to NMOCD on November 14, 2005. On February 15, 2006, NMOCD approved the Closure Report on the condition the monitoring wells remain active. A Closure Report will be submitted in the spring of 2008.

Thank you for your consideration of this annual summary information. The attached CD contains an electronic copy of this report. If you have any questions, please contact us at 505-266-5004, or Kristin Farris Pope at ROC, 505-393-9174.

Sincerely,

R.T. Hicks Consultants, Ltd.

Randall T. Hicks

Principal

Copy: Hobbs NMOCD office; Rice Operating Company

	Comments	clear; no odor	gray; no odor			clear; no odor	clear; no odor		Clear no odor	Clear/	clear no odor	Clear No Odor	Clear No odor
	Total Xylenes (mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.003
	EthylBenzene (mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
e Ie	Toluene (mg/L)	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Table 1: chemistry over time	Benzene (mg/L)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
: chemisı	TDS (mg/L)	465	930	1260	1080	986	1000	966	998	826	850	1160	1047
Table 1	Sulfate (mg/L)	*No Results	154	84.5	75.7	63.2	58.1	62.9	86.1	104	95.7	102	130
	Chloride (mg/L)	100	613	332	322	300	270	298	285	325	279	263	292
	DTW (ft)	60.74	60.10	60.13	60.22	60.45	60.54	60.61	60.79	60.75	60.83	61.10	61.09
<del>+-</del>	Date	12/2/2004	3/22/2005	5/19/2005	8/9/2005	11/1/2005	1/31/2006	5/2/2006	11/3/2006	1/31/2007	4/26/2007	8/1/2007	10/19/2007
F-29-1A Vent	Well Name	MW-1 (Deep)	MW-1 (Deep)	MW-1 (Deep)	MW-1 (Deep)	MW-1 (Deep)	MW-1 (Deep)	MW-1 (Deep)	MW-1 (Deep)	MW-1 (Deep)	MW-1 (Deep)	MW-1 (Deep)	MW-1 (Deep)

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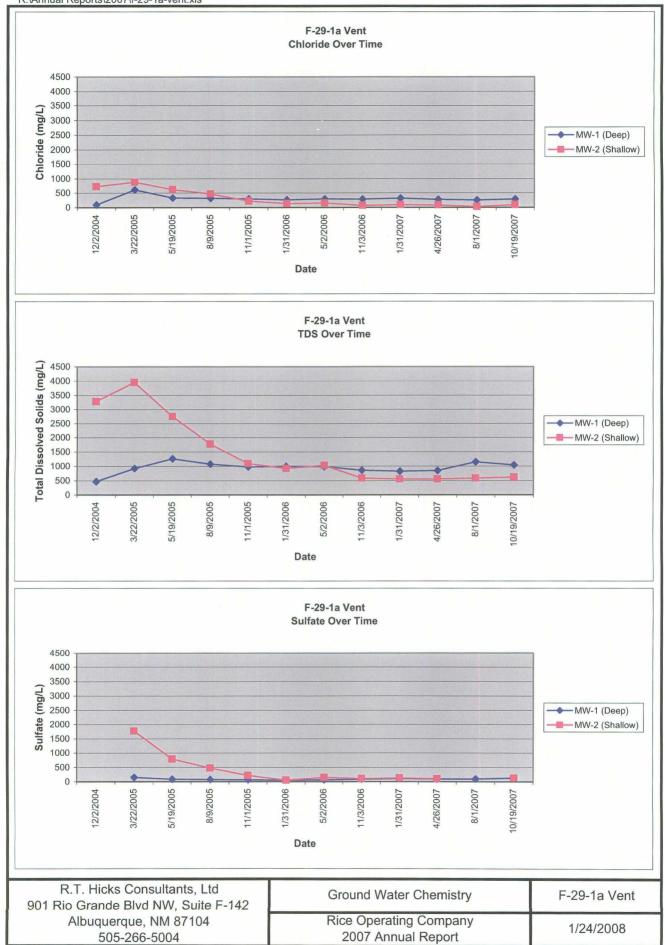
over time	
Table 1: chemistry	•

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F-29-1A Vent	ı,			Table .	I: chemis	Table 1: chemistry over time	ne			
Well Name	Date	DTW (ft)	Chloride (mg/L)	Sulfate (mg/L)	TDS (mg/L)	Benzene (mg/L)	Toluene (mg/L)	EthylBenzene (mg/L) Total Xylenes (mg/L)	Total Xylenes (mg/L)	Comments
MW-2 (Shallow)	12/2/2004	60.64	725	*No Results	3280	<0.001	<0.001	<0.001	<0.001	gray; no odor
MW-2 (Shallow)	3/22/2005	80.08	879	1780	3960	<0.001	<0.001	<0.001	<0.001	gray; no odor
MW-2 (Shallow)	5/19/2005	60.04	626	788	2750	<0.001	<0.001	<0.001	<0.001	
MW-2 (Shallow)	8/9/2005	60.14	470	475	1780	<0.001	<0.001	<0.001	<0.001	
MW-2 (Shallow)	11/1/2005	60.34	226	218	1100	<0.001	<0.001	<0.001	<0.001	Clear, no odor
MW-2 (Shallow)	1/31/2006	60.42	144	58.1	924	<0.001	<0.001	<0.001	<0.001	
MW-2 (Shallow)	9/2/2006	60.50	160	153	1040	<0.001	<0.001	<0.001	<0.001	
MW-2 (Shallow)	11/3/2006	69.09	79.6	111	592	<0.001	<0.001	<0.001	<0.001	Clear no odor
MW-2 (Shallow)	1/31/2007	60.63	98.2	125	556	<0.001	<0.001	<0.001	<0.001	Clear/
MW-2 (Shallow)	4/26/2007	60.63	89.4	107	556	<0.001	<0.001	<0.001	<0.001	clear no odor
MW-2 (Shallow)	8/1/2007	86.09	27.2	XXX	592	<0.001	<0.001	<0.001	<0.002	Clear No Odor
MW-2 (Shallow)	10/19/2007	86.09	100	125	624	<0.001	<0.001	<0.001	<0.003	Clear No odor

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# Analytical Report

### **Prepared for:**

Kristin Farris-Pope Rice Operating Co. 122 W. Taylor Hobbs, NM 88240

Project: Hobbs Jct. F-29-1A
Project Number: None Given

Location: T18S R38E Sec29F Lea Co., NM

Lab Order Number: 7B01021

Report Date: 02/13/07

Project: Hobbs Jct. F-29-1A

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- Deep	7B01021-01	Water	01/31/07 10:20	02-01-2007 15:42
Monitor Well #2- Shallow	7B01021-02	Water	01/31/07 09:45	02-01-2007 15:42

Project: Hobbs Jct. F-29-1A

Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

# Organics by GC Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1- Deep (7B01021-01) W:	ater								
Benzene	ND	0.00100	mg/L	1	EB70703	02/07/07	02/09/07	EPA 8021B	
Toluene	ND	0.00100	*	"	**	*	п	n	
Ethylbenzene	ND	0.00100	,,	n	**	n	p	"	
Xylene (p/m)	ND	0.00100	"	•	**	"	"	"	
Xylene (o)	ND	0.00100	"	n	"	"	,,	**	
Surrogate: a,a,a-Trifluorotoluene		86.2 %	80-12	0	"	,,	,,	"	
Surrogate: 4-Bromofluorobenzene		91.4 %	80-12	0	"	"	"	n	
Monitor Well #2- Shallow (7B01021-02)	Water								
Benzene	ND	0.00100	mg/L	1	EB70703	02/07/07	02/09/07	EPA 8021B	
Toluene	ND	0.00100		"	,,			"	
Ethylbenzene	ND	0.00100	,,		19	"	#	"	
Xylene (p/m)	ND	0.00100			n	**	**		
Xylene (o)	ND	0.00100	n	"	*	*	19	n	
Surrogate: a,a,a-Trifluorotoluene		86.0 %	80-12	0	,,	"	"	"	
Surrogate: 4-Bromofluorobenzene		90.0 %	80-12	0	"	"	"	"	

Project: Hobbs Jct. F-29-1A

Fax: (505) 397-1471

122 W. Taylor Hobbs NM, 88240

Project Number: None Given
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- Deep (7B01021-01) Wa	ter								
Total Alkalinity	164	2.00	mg/L	1	EB70209	02/02/07	02/02/07	EPA 310.1M	
Chloride	325	5.00	"	10	EB70208	02/02/07	02/03/07	EPA 300.0	
Total Dissolved Solids	826	10.0	**	1	EB70302	02/02/07	02/03/07	EPA 160.1	
Sulfate	104	5.00	"	10	EB70208	02/02/07	02/03/07	EPA 300.0	
Monitor Well #2- Shallow (7B01021-02)	Water								
Total Alkalinity	228	2.00	mg/L	1	EB70209	02/02/07	02/02/07	EPA 310.1M	
Chloride	98.2	5.00	,,	10	EB70208	02/02/07	02/03/07	EPA 300.0	
Total Dissolved Solids	556	10.0		1	EB70302	02/02/07	02/03/07	EPA 160,1	
Sulfate	125	5.00		10	EB70208	02/02/07	02/03/07	EPA 300.0	

Rice Operating Co. Project: Hobbs Jct. F-29-1A

122 W. TaylorProject Number:None GivenHobbs NM, 88240Project Manager:Kristin Farris-Pope

Fax: (505) 397-1471

# Total Metals by EPA / Standard Methods

#### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well #1- Deep (7B0102	1-01) Water								
Calcium	138	4.05	mg/L	50	EB70612	02/06/07	02/06/07	EPA 6010B	
Magnesium	26.9	0.360	*	10	**		**	и	
Potassium	3.85	0.600	"	*	"	"	*	ii.	
Sodium	84.3	2.15	n	50	**	•	**	n	
Monitor Well #2- Shallow (7B01	021-02) Water								
Calcium	27.5	0.810	mg/L	10	EB70612	02/06/07	02/06/07	EPA 6010B	
Magnesium	15.0	0.360	"	"	**	"	"	**	
Potassium	2.68	0.600			*		P	n	
Sodium	124	2,15	**	50		**		**	

Project: Hobbs Jct. F-29-1A

122 W. Taylor

Project Number: None Given

Fax: (505) 397-1471

Hobbs NM, 88240

Project Manager: Kristin Farris-Pope

# **Organics by GC - Quality Control Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike	Source Result	%REC	%REC	RPD	RPD Limit	Notes
Analyte	Kesuit	Limit	Units	Level	Result	70KEC	Limits	KPD	Limit	Notes
Batch EB70703 - EPA 5030C (GC)										
Blank (EB70703-BLK1)				Prepared: 0	02/07/07 Aı	nalyzed: 02	/10/07			
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	н							
Surrogate: a,a,a-Trifluorotoluene	41.0		ug/I	50.0		82.0	80-120			
Surrogate: 4-Bromofluorobenzene	43.5		n	50.0		87.0	80-120			
LCS (EB70703-BS1)				Prepared: 0	12/07/07 A1	nalyzed: 02	/09/07			
Benzene	0.0524	0.00100	mg/L	0.0500		105	80-120			
Toluene	0.0527	0.00100	н	0.0500		105	80-120			
Ethylbenzene	0.0524	0.00100	**	0.0500		105	80-120			
Xylene (p/m)	0.111	0.00100	,,	0.100		111	80-120			
Xylene (o)	0.0478	0.00100	"	0.0500		95.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	47.2		ug/l	50.0		94.4	80-120			
Surrogate: 4-Bromofluorobenzene	53.0		"	50.0		106	80-120			
Calibration Check (EB70703-CCV1)				Prepared: 0	2/07/07 Ai	nalyzed: 02	/10/07			
Benzene	55.4		ug/l	50.0		113	80-120			
Toluene	53.4		n	50.0		107	80-120			
Ethylbenzene	53.1			50.0		106	80-120			
Xylene (p/m)	110		**	100		110	80-120			
Xylene (o)	46.7			50.0		93.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	46.8		"	50.0		93.6	80-120			
Surrogate: 4-Bromofluorobenzene	55.8		"	50.0		112	80-120			
Matrix Spike (EB70703-MS1)	Sou	ırce: 7B01020-	01	Prepared: 0	2/07/07 At	nalyzed: 02	/09/07			
Benzene	0.0598	0.00100	mg/L	0.0500	ND	120	80-120			
Toluene	0.0587	0.00100		0.0500	ND	117	80-120			
Ethylbenzene	0.0579	0.00100		0.0500	ND	116	80-120			
Xylene (p/m)	0.125	0.00100	*	0.100	ND	125	80-120			М
Xylene (o)	0.0550	0.00100	ь	0.0500	NĐ	011	80-120			
Surrogate: a,a,a-Trifluorotoluene	51.3		ng/l	50.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	58.7		"	50.0		117	80-120			

Project: Hobbs Jct. F-29-1A

Fax: (505) 397-1471

122 W. Taylor Hobbs NM, 88240 Project Number: None Given
Project Manager: Kristin Farris-Pope

# Organics by GC - Quality Control Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch EB70703 - EPA 5030C (GC
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Matrix Spike Dup (EB70703-MSD1)	Sou	rce: 7B01020-	01	Prepared: 0	2/07/07 A	nalyzed: 0	2/10/07			
Benzene	0.0598	0.00100	mg/L	0.0500	ND	120	80-120	0.00	20	
Tolucne	0.0593	0.00100		0.0500	ND	119	80-120	1.69	20	
Ethylbenzene	0.0599	0.00100		0.0500	ND	120	80-120	3.39	20	
Xylene (p/m)	0.128	0.00100		0.100	ND	128	80-120	2.37	20	M1
Xylene (o)	0.0562	0.00100		0.0500	ND	112	80-120	1.80	20	
Surrogate: a,a,a-Trifluorotoluene	52.6		ug/l	50.0		105	80-120			
Surrogate: 4-Bromofluorobenzene	60.3		"	50.0		121	80-120			S-04

Project: Hobbs Jct. F-29-1A

Fax: (505) 397-1471

122 W. Taylor Hobbs NM, 88240 Project Number: None Given
Project Manager: Kristin Farris-Pope

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EB70208 - General Preparation (V	WetChem)			,						
Blank (EB70208-BLK1)				Prepared: (	02/02/07	Analyzed: 02	2/03/07			
Sulfate	0.459	0.500	mg/L							E
Chloride	ND	0.500	"							
LCS (EB70208-BS1)				Prepared: 0	02/02/07	Analyzed: 02	2/03/07			
Chloride	10.7	0.500	mg/L	10.0		107	80-120			
Sulfate	11.6	0,500	"	10.0		116	80-120	•		
Calibration Check (EB70208-CCV1)				Prepared: 0	02/02/07	Analyzed: 02	1/03/07			
Chloride	10.5		mg/L	10.0		105	80-120			
Sulfate	11.8			10.0		118	80-120			
Duplicate (EB70208-DUP1)	Sour	rce: 7B01017-	01	Prepared: 0	)2/02/07	Analyzed: 02	!/03/07		_	
Sulfate	93.0	5.00	mg/L		96.4			3.59	20	
Chloride	127	5.00			132			3.86	20	
Duplicate (EB70208-DUP2)	Sour	rce: 7B01020-	02	Prepared: (	02/02/07	Analyzed: 02	2/03/07			
Chloride	2220	50.0	mg/L		2240	-		0.897	20	
Sulfate	2410	50.0	"		2400			0.416	20	
Matrix Spike (EB70208-MS1)	Sour	rce: 7B01017-	01	Prepared: 0	02/02/07	Analyzed: 02	1/03/07			
Sulfate	204	5.00	mg/L	100	96.4	108	80-120			
Chloride	240	5.00	"	100	132	108	80-120			
Matrix Spike (EB70208-MS2)	Sour	rce: 7B01020-	02	Prepared: 0	Prepared: 02/02/07 Analyzed: 02/03/07					
Sulfate	3500	50.0	mg/L	1000	2400	110	80-120			
Chloride	3330	50.0	"	1000	2240	109	80-120			

Project: Hobbs Jct. F-29-1A

Fax: (505) 397-1471

122 W. Taylor Hobbs NM, 88240 Project Number: None Given
Project Manager: Kristin Farris-Pope

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EB70209 - General Preparation (Wet	Chem)									
Blank (EB70209-BLK1)				Prepared &	k Analyzed:	02/02/07				
Total Alkalinity	ND	2.00	mg/L							
Duplicate (EB70209-DUP1)	Sou	rce: 7B01016-	01	Prepared &	analyzed:	02/02/07				
Total Alkalinity	310	2.00	mg/L		314			1.28	20	
Reference (EB70209-SRM1)				Prepared &	Analyzed:	02/02/07				
Total Alkalinity	246		mg/L	250		98.4	90-110			
Batch EB70302 - Filtration Preparation				A						
Blank (EB70302-BLK1)				Prepared: (	02/02/07 A	nalyzed: 02	2/03/07			
Fotal Dissolved Solids	ND	10.0	mg/L							
Duplicate (EB70302-DUP1)	Sou	rce: 7B01016-	01	Prepared: (	02/02/07 A	nalyzed: 02	2/03/07			
Total Dissolved Solids	1920	10.0	mg/L		1840			4.26	20	
Duplicate (EB70302-DUP2)	Sou	rce: 7B01020-	01	Prepared: 0	02/02/07 A	nalyzed: 02	2/03/07			
Total Dissolved Solids	6280	10.0	mg/L		5700			9.68	20	

Project: Hobbs Jct. F-29-1A

122 W. Taylor

Project Number: None Given

Fax: (505) 397-1471

Hobbs NM, 88240

Project Manager: Kristin Farris-Pope

# Total Metals by EPA / Standard Methods - Quality Control

#### **Environmental Lab of Texas**

ı		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EB70612 - 6010B/No Digestion										
Blank (EB70612-BLK1)				Prepared &	Analyzed:	02/06/07				
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	u							
Potassium	ND	0.0600	•							
Sodium	ND	0.0430	**							
Calibration Check (EB70612-CCV1)				Prepared &	: Analyzed:	02/06/07				
Calcium	1.79		mg/L	2.00		89.5	85-115			
Magnesium	1.98			2.00		99.0	85-115			
Potassium	1.80		,,	2.00		90.0	85-115			
Sodium	1.74		,,	2.00		87.0	85-115			
Duplicate (EB70612-DUP1)	Sou	rce: 7B01016-	01	Prepared &	: Analyzed:	02/06/07				
Calcium	172	4.05	mg/L		176			2.30	20	
Magnesium	111	1,80	**		109			1.82	20	
Potassium	17.0	0.600	**		16.8			1.18	20	
Sodium	306	4.30	**		305			0.327	20	

Rice Operating Co.

Project: Hobbs Jct. F-29-1A

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.
MI	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
В	Analyte is found in the associated blank as well as in the sample (CLP B-flag).
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

	Bush	Enallor L		
Report Approved By:			Date:	2/13/2007

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

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Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

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A Xenco Laboratories Company

# Environmental Lab of Texas

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CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

TO THE STATE OF

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Page 1

12600 West I-20 East Odessa, Texas 79765

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

TAT bisbns3 × NPDES Project Loc: T18S R38E Sec29 F ~ Lea County New Mexico RUSH TAT (Pre-Schedule) 24, 48, 72 hrs Total Dissolved Solids  $\times$ × M.A.O.M. TRRP Project Name: Hobbs Junction F-29-1A SCI Sample Containers Intact? Custody seals on container(s) Sample Hand Delivered by Sample(Client Rep. ? by Courier? UPS BTEX 8021B/5030  $\times$ VOCs Free of Headspace? Laboratory Comments: Labels on container(s) XStandard Metals: As Ag Ba Cd Cr Pb Hg Se TCLP TOTAL SAR / ESP / CEC Anions (Cl. SO4, Alkalinity) # Od Project#: Cations (Ca. Mg, Na, K) Report Format: 8001 XT 9001 XT :Hd1 10:21 Time Fime 89198 WS108 1.814 H61 Specify Other 8 80 2-1-07 Other (Specify) rozanne@valornet.com Mone (1) 1 Liter HDPE Ozszen rozanne@valornet.com HOGN (505) 397-147 ⁵OS<sup>z</sup>H N HCl (2) 40 ml glass vials アンないか HMO × ന cotal #, of Containers ~ ield Fillered Fax No: e-mail: 10:20 mfranks@riceswd.com 9:45 Time Sampled kpope@riceswd.com 1/31/2007 1/31/2007 Date Sampled Ending Depth Hobbs, New Mexico 88240 12:00 Time RICE Operating Company шe Rozanne Johnson (505)631-9310 Beginning Depth Please email to: kpope@riceswd.com 122 W. Taylor Street Kristin Farris Pope 2-1-07 Date (505) 393-9174 FIELD CODE 180102 Monitor Well #2-Shallow Monitor Well #1-Deep Sampler Signature: Company Address: Project Manager: Company Name Telephone No: City/State/Zip: Special Instructions: \* (lab use only ORDER 200 P (Vino seu dsi) # 8A.

FedEx Lone Star

ပ္ <u>⊘</u>

emperature Upon Receipt:

Тіте

542 1542

- Kara moon

Received by ELOT

15:12 E E

20-1-2

Date

# Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: (ICO)(2.				
Date/ Time: 2-1-07 15: 1/2				
Lab ID#: 180 b2/				
Initials:				
Sample Receipt	Checklist		Cli	ent Initials
#1 Temperature of container/ cooler?	Yes	No	4.0 °C	entimuais
2 Shipping container in good condition?	Yes	No		
Custody Seals intact on shipping container/ cooler?	Ves	No	Not Present	
44 Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5 Chain of Custody present?	Yes	No	HOLLISON	
#5 Chain of Custody present? #6 Sample instructions complete of Chain of Custody?	Yes	No		
77 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	
#8 Chain of Custody agrees with sample label(s)? #9 Container label(s) legible and intact?	Yes	No	Not Applicable	
#10 Sample matrix/ properties agree with Chain of Custody?	Yes	No	Trocy applicable	
	Yes	No		
#11 Containers supplied by ELOT? #12 Samples in proper container/ bottle?	Ves	No	See Below	
#13 Samples properly preserved?	Yes	No	See Below	
	Yes	No	000 201011	
#14 Sample bottles intact? #15 Preservations documented on Chain of Custody? #16 Containers 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? #19 Subcontract of sample(s)?	Yes	No	See Below	
#19 Subcontract of sample(s)?	Yes	No	(Not Applicable)	
#20 VOC samples have zero headspace?	Yes)	No	Not Applicable	
	1 (3)		1.000.000.000.000.000.000.000.000.000.0	
Variance Docum	mentation			
Contact: Contacted by:		_	Date/ Time:	
Contact: Contacted by:				
Regarding:				<del></del>
Corrective Action Taken:				
		·	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	
Check all that Apply: See attached e-mail/ fax				
Client understands and woul	ld like to pro	ceed with	analysis	
Cooling process had begun	•		•	



# Analytical Report

# **Prepared for:**

Kristin Farris-Pope Rice Operating Co. 122 W. Taylor Hobbs, NM 88240

Project: Hobbs Jct. F-29-1A Project Number: None Given

Location: T18S R38E Sec29 F ~ Lea County New Mexico

Lab Order Number: 7D26011

Report Date: 05/07/07

Project: Hobbs Jct. F-29-1A

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- Deep	7D26011-01	Water	04/26/07 11:00	04-26-2007 16:25
Monitor Well # 2- Shallow	7D26011-02	Water	04/26/07 10:05	04-26-2007 16:25

Project: Hobbs Jct. F-29-1A

Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

# Organics by GC Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	127. 4	Datab	D	A l	Makad	NI ·
Monitor Well # 1- Deep (7D26011-01) W		LIIII	Omis	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.00100	mg/L	1	ED73007	04/30/07	05/01/07	EPA 8021B	
Toluene	ND	0.00100	**			"	n	11	
Ethylbenzene	ND	0.00100	*		**	**	*	и	
Xylene (p/m)	ND	0.00100		**	•	"	*		
Xylene (o)	ND	0.00100	"	"	н	"	"	n	
Surrogate: a,a,a-Trifluorotoluene		108 %	80-1	20	"	n	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	80-1	20	,,	"	"	"	
Monitor Well # 2- Shallow (7D26011-02)	Water								
Benzene	ND	0.00100	mg/L	1	ED73007	04/30/07	05/01/07	EPA 8021B	
Toluene	ND	0.00100	"		**	n	**		
Ethylbenzene	ND	0.00100	**		,,	"	"	**	
Xylene (p/m)	ND	0.00100	**		n	"	19	*	
Xylene (o)	ND	0.00100	**		17		••	*	
Surrogate: a,a,a-Trifluorotoluene		108 %	- 80-1	20	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.6 %	80-1	20	"	"	"	"	

Project: Hobbs Jct. F-29-1A

Project Number: None Given
Project Manager: Kristin Farris-Pope

Fax: (505) 397-1471

# $General\ Chemistry\ Parameters\ by\ EPA\ /\ Standard\ Methods$

#### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well # 1- Deep (7D26011-01) V	Vater								
Total Alkalinity	160	2.00	mg/L	ī	ED73002	04/30/07	04/30/07	EPA 310.1M	
Chloride	279	5.00	,	10	EE70307	05/03/07	05/03/07	EPA 300.0	
Total Dissolved Solids	850	10.0		1	EE70209	04/27/07	05/02/07	EPA 160.1	
Sulfate	95.7	5.00	н	10	EE70307	05/03/07	05/03/07	EPA 300.0	
Monitor Well # 2- Shallow (7D26011-02	2) Water								
Total Alkalinity	232	2.00	mg/L	1	ED73002	04/30/07	04/30/07	EPA 310.1M	
Chloride	89.4	5.00	"	10	EE70307	05/03/07	05/03/07	EPA 300.0	
Total Dissolved Solids	556	10.0		1	EE70209	04/27/07	05/02/07	EPA 160.1	
Sulfate	107	5.00	,,	10	EE70307	05/03/07	05/03/07	EPA 300.0	

Project: Hobbs Jct. F-29-1A

Project Number: None Given Project Manager: Kristin Farris-Pope Fax: (505) 397-1471

# **Total Metals by EPA / Standard Methods**

#### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Monitor Well # 1- Deep (7D2601)	I-01) Water								
Calcium	181	4.05	mg/L	50	ED72704	04/27/07	04/27/07	EPA 6010B	
Magnesium	25.5	0.360		10	"	Ď	11	n	
Potassium	4.45	0.600	.,	"	**	"	,,	n	
Sodium	86.4	2.15	"	50	*	.,	"	н	
Monitor Well # 2- Shallow (7D26	011-02) Water								
Calcium	67.6	4.05	mg/L	50	ED72704	04/27/07	04/27/07	EPA 6010B	
Magnesium	14.9	0.360	"	10		w	"	n	
Potassium	2.03	0.600	**			"	"	н	
Sodium	117	2.15		50	n			•	

Project: Hobbs Jct. F-29-1A

Fax: (505) 397-1471

122 W. Taylor Hobbs NM, 88240 Project Number: None Given

Project Manager: Kristin Farris-Pope

Organics by GC - Quality Control Environmental Lab of Texas

Analyta	D to	Reporting	I lade	Spike	Source	0/ D.C.C	%REC	RPD	RPD Limit	N-+
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	KPD	Limit	Notes
Batch ED73007 - EPA 5030C (GC)										
Blank (ED73007-BLK1)				Prepared &	Analyzed:	04/30/07				
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	**							
Xylene (0)	ND	0.00100	**							
Surrogate: a,a,a-Trifluorotoluene	51.7		ug/l	50.0		103	80-120			
Surrogate: 4-Bromofluorobenzene	52.3		"	50.0		105	80-120			
LCS (ED73007-BS1)				Prepared &	Analyzed:	04/30/07				
Benzene	0.0564	0.00100	mg/L	0.0500		113	80-120			
Toluene	0.0571	0.00100	**	0.0500		114	80-120			
Ethylbenzene	0.0575	0.00100	"	0.0500		115	80-120			
Xylene (p/m)	0.106	0.00100	**	0.100		106	80-120			
Xylene (o)	0.0575	0.00100	,,	0.0500		115	80-120			
Surrogate: a.a.a-Trifluorotoluene	55.4		ug/l	50.0		111	80-120			
Surrogate: 4-Bromofluorohenzene	54.8		"	50.0		110	80-120			
Calibration Check (ED73007-CCV1)				Prepared: 0	4/30/07 Ai	nalyzed: 05	/01/07			
Benzene	0.0547		mg/L	0.0500		109	80-120			
Toluene	0.0555		**	0.0500		111	80-120			
Ethylbenzene	0.0550		**	0.0500		110	80-120			
Xylene (p/m)	0.102		*	0.100		102	80-120			
Xylene (0)	0.0566			0.0500		113	80-120			
Surrogate: a,a.a-Trifluorotoluene	53.8		ug/I	50.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	53.8		"	50.0		108	80-120			
Matrix Spike (ED73007-MS1)	Sou	ırce: 7D26012-	01	Prepared: 0	04/30/07 Ai	nalyzed: 05	/01/07			
Benzene	0,0565	0.00100	mg/L	0.0500	ND	113	80-120			
Toluene	0.0568	0.00100	*	0.0500	ND	134	80-120			
Ethylbenzene	0.0549	0.00100	**	0.0500	ND	110	80-120			
Xylene (p/m)	0.105	0.00100	,,	0.100	ND	105	80-120			
Xylene (o)	0.0577	0.00100		0.0500	ND	115	80-120			
Surrogate: a,a,a-Trifluorotoluene	54.0		ug-7	50.0		108	80-120		<del></del>	
Surrogate: 4-Bromofluorobenzene	53.6		,,	50.0		107	80-120			

Project: Hobbs Jct. F-29-1A

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 ED73007 - EPA 5030C (GC)										
Matrix Spike Dup (ED73007-MSD1)	Sour	rce: 7D26012-	01	Prepared: 0	4/30/07 A	nalyzed: 05	701/07			
Benzene	0.0542	0.00100	mg/L	0.0500	ND	108	80-120	4.52	20	
Toluene	0.0551	0.00100	**	0.0500	ND	110	80-120	3,57	20	
Ethylbenzene	0.0561	0.00100	**	0.0500	ND	112	80-120	1.80	20	
Xylene (p/m)	0.102	0.00100	"	0.100	ND	102	80-120	2.90	20	
Xylene (o)	0.0557	0.00100	**	0.0500	ND	111	80-120	3,54	20	
Surrogate: a,a,a-Trifluorotoluene	52.7		ug/l	50.0		105	80-120			
Surrogate: 4-Bromofluorobenzene	52.8		"	50.0		106	80-120			

Fax: (505) 397-1471

Project: Hobbs Jct. F-29-1A

122 W. Taylor

Project Number: None Given

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Hobbs NM, 88240

Project Manager: Kristin Farris-Pope

# General Chemistry Parameters by EPA / Standard Methods - Quality Control Environmental Lab of Texas

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch ED73002 - General Preparati	on (WetChem)									
Blank (ED73002-BLK1)				Prepared &	Analyzed:	04/30/07				
Total Alkalinity	ND	2.00	mg/L							
LCS (ED73002-BS1)				Prepared &	z Analyzed:	04/30/07				
Total Alkalinity	0.00	2.00	mg/L			·	85-115		-	
Bicarbonate Alkalinity	180	2.00	•	200		90.0	85-115			
Duplicate (ED73002-DUP1)	Sou	rce: 7D26006-	01	Prepared &	Analyzed:	04/30/07				
Total Alkalinity	214	2.00	mg/L		218			1,85	20	
Bicarbonate Alkalinity	0.00	2.00	n		0.00				20	
Reference (ED73002-SRM1)				Prepared &	. Analyzed:	04/30/07				
Total Alkalinity	256		mg/L	250		102	90-110			
Batch EE70209 - General Preparati	on (WetChem)									
				Prepared: (	04/27/07 A	nalyzed: 05	/02/07			
Blank (EE70209-BLK1)										
Blank (EE70209-BLK1) Total Dissolved Solids	ND	10.0	mg/L							
Total Dissolved Solids		10.0 rce: 7D26007-	-	Prepared: (	04/27/07 A	nalyzed: 05	5/02/07			
Total Dissolved Solids  Duplicate (EE70209-DUP1)			-	Prepared: (	04/27/07 A 1470	nalyzed: 05	/02/07	2.02	20	
Total Dissolved Solids  Duplicate (EE70209-DUP1)  Total Dissolved Solids	Sour	rce: 7D26007-	01 mg/L					2.02	20	
Total Dissolved Solids  Duplicate (EE70209-DUP1)  Total Dissolved Solids  Duplicate (EE70209-DUP2)	Sour	rce: 7D26007- 10.0	01 mg/L		1470			2.02	20	
	Sour 1500  Sour 712	rce: 7D26007- 10.0 rce: 7D26009-	01 mg/L 01		1470 04/27/07 A					
Total Dissolved Solids  Duplicate (EE70209-DUP1)  Total Dissolved Solids  Duplicate (EE70209-DUP2)  Total Dissolved Solids	Sour 1500  Sour 712	rce: 7D26007- 10.0 rce: 7D26009-	01 mg/L 01	Prepared: (	1470 04/27/07 A	nalyzed: 05				
Total Dissolved Solids  Duplicate (EE70209-DUP1)  Total Dissolved Solids  Duplicate (EE70209-DUP2)  Total Dissolved Solids  Batch EE70307 - General Preparati	Sour 1500  Sour 712	rce: 7D26007- 10.0 rce: 7D26009-	01 mg/L 01	Prepared: (	1470 04/27/07 A 684	nalyzed: 05				

Project: Hobbs Jct. F-29-1A

122 W. Taylor

Project Number: None Given

Fax: (505) 397-1471

Hobbs NM, 88240

Project Manager: Kristin Farris-Pope

### General Chemistry Parameters by EPA / Standard Methods - Quality Control **Environmental Lab of Texas**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EE70307 - General Preparation (V	VetChem)							.,,		
LCS (EE70307-BS1)				Prepared &	Analyzed:	05/03/07				
Chloride	9.62	0.500	mg/L	10.0		96.2	80-120			
Sulfate	10.0	0.500	н	10.0		100	80-120			
Calibration Check (EE70307-CCV1)				Prepared &	Analyzed:	05/03/07				
Sulfate	11.6		mg/L	10.0		116	80-120			
Chloride	8.93		"	10.0		89.3	80-120			
Duplicate (EE70307-DUP1)	Sourc	<b>Source: 7D26006-01</b> Prepared & Analyzed: 05/03/07								
Sulfate	342	12.5	mg/L		339			0.881	20	
Chloride	941	50.0	*		917			2.58	20	
Duplicate (EE70307-DUP2)	Sourc	e: 7D26010-	-01	Prepared &	z Analyzed:	05/03/07				
Sulfate	74.1	5.00	mg/L		75.5			1.87	20	
Chloride	93.1	5.00	n		94.3			1.28	20	
Matrix Spike (EE70307-MS1)	Sourc	e: 7D26006-	-01	Prepared &	Analyzed:	05/03/07				
Sulfate	728	12.5	mg/L	250	339	156	80-120			M
Matrix Spike (EE70307-MS2)	Source	e: 7D26010-	-01	Prepared & Analyzed: 05/03/07						
Chloride	278	5.00	mg/L	100	94.3	184	80-120			М
Sulfate	204	5.00	n	100	75.5	128	80-120			М
Matrix Spike (EE70307-MS3)	Sourc	e: 7D26006-	-01	Prepared &	Analyzed:	05/03/07				
Chloride	1800	50.0	mg/L	1000	917	88.3	80-120			

Project: Hobbs Jct. F-29-1A

Fax: (505) 397-1471

122 W. Taylor Hobbs NM, 88240 Project Number: None Given

Project Manager: Kristin Farris-Pope

# Total Metals by EPA / Standard Methods - Quality Control **Environmental Lab of Texas**

		Reporting		Spike	Source		%REC		RPD	į
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch ED72704 - 6010B/No Digestion		_								
Blank (ED72704-BLK1)				Prepared &	Analyzed:	04/27/07				
Calcium	ND	0.0810	mg/L							
Magnesium	ND	0.0360	•							
Potassium	ND	0.0600	н							
Sodium	ND	0.0430	**							
Calibration Check (ED72704-CCV1)				Prepared &	Analyzed:	04/27/07				
Calcium	2.13		mg/L	2.00		106	85-115			
Magnesium	2.15		**	2.00		108	85-115			
Potassium	2.14		17	2.00		107	85-115			
Sodium	1.98		"	2.00		99.0	85-115			
Duplicate (ED72704-DUP1)	Sour	rce: 7D23010-	01	Prepared &	: Analyzed:	04/27/07				
Calcium	44.1	0.810	mg/L		42.4			3.93	20	
Magnesium	43.0	0.360	••		42.4			1.41	20	
Potassium	22.7	0.600	**		22.1			2.68	20	
Sodium	41.9	0.430	**		40.8			2.66	20	

Rice Operating Co.

Project: Hobbs Jct. F-29-1A

Project Number: None Given

Hobbs NM, 88240

Project Manager: Kristin Farris-Pope

#### **Notes and Definitions**

The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS). MI DET Analyte DETECTED Analyte NOT DETECTED at or above the reporting limit ND NR Sample results reported on a dry weight basis dry RPD Relative Percent Difference Laboratory Control Spike LCS MS Matrix Spike Dup Duplicate

Report Approved By: Date: 5/7/2007

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

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Environmental Lab of Texas

A Xenco Laboratories Company

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

# Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

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

TAT brebnet2  $\times$ × zzzzzz NPDES Project Loc: T18S R38E Sec29 F ~ Lea County New Mexico RUSH TAT (Pre-Schedule) 14, 48, 72 http://doi.org/10.1016/10.1 Ç FedEx 0 Total Dissolved Solids Sample Containers Infact?
VOCs Free of Headspace? ☐ TRRP Project Name: Hobbs Junction F-29-1A 2 108 Custody seals on cooler(s) 🐇 Labels on container(s) Custody seals on container(s) Temperature Upon Receipt: × Sample Hand Delivered by Sampler/Clent Rep? by Couner? UPS B1EX 8021B/2030 .aboratory Comments: PRIMAGEMER Roport Format: X Standard Metala: As Ag Ba Cd Cr Pb Hg Se 5 OTAL S SAR / ESP / CEC Anions (Ol. SO4, Alkalinity) Project #: # Od Calions (Ca. Mg, Na. K) 9001 XT 3001 XT (4) C/ 4:15 Ime 89108 M2108 1.814 SS 30 ロルカ C 26-67 Other (Specify) rozanne@valornet.com 390H YOU ! (!) MON O<sub>2</sub>S<sub>2</sub>BN rozanne@valomet.com HOWN (505) 397-1471 'OS<sup>®</sup>H HCi (2) 40 ml glass vials N FONH 90( × (4) ന stanialnoO to .\* iato! редадің рірі e-mail: Fax No: ર્જ ~ S baldma2 amiT 0 matt@riceswd.com kpope@riceswd.com Received by ELOT. 4/26/2007 4/26/2007 Received by: belgme2 eleQ ングで Ending Depth Hobbs, New Mexico 88240 **近**多 RICE Operating Company me Rozanne Johnson (505)631-9310, gediuuing Depth purvis@riceswd.com kpope@riceswd.com Kristin Farris Pope 122 W. Taylor Street 1000h 1/54/07 (505) 393-9174 FIELD CODE Monitor Well #2-Shallow Please email to Monitor Well #1-Deep 103201 Company Address: Sampler Signature Project Manager: Company Name Telephone No. City/State/Zip Special Instructions Rozanne John (lab use only ORDER #: Ş \_\_ O (Vino seu dai) # 8AJ

# Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

	0.				
ient:	Rice				
ate/ Time:	4-76-07 4:25				
ab ID#:	7026011				
nitials:	al				
	Sample Receip	t Chacklist			
	Sample Receip	CONCENNAL		Client Ir	nitials
1 Tempera	ature of container/ cooler?	Yes	No	1.0 °C	
	g container in good condition?	Yes I	No		
	/ 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 Sample 7 Chain of C	f Custody present?	Yes	No		
6 Sample	instructions complete of Chain of Custody?	Yes	No		
7 Chain o	of Custody signed when relinquished/ received?	Yes	No		
8 Chain o	of Custody agrees with sample label(s)?	ĊŶē₃ T	No	ID written on Cont./ Lid	
9 Contain	ner label(s) legible and intact?	769	No	Not Applicable	
	e matrix/ properties agree with Chain of Custody?	₹£3	No		
	ners supplied by ELOT?	Yes	No		
······································	es in proper container/ bottle?	<u> </u>	No	See Below	
CONTRACTOR OF SECURITY AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS	es properly preserved?	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	No	See Below	
in Mr. fi-M-M-Macanaccaeccaeccaeccaecceccineaccaec	e bottles intact?		No		
	ryations documented on Chain of Custody?	र्शिं व	No		
v en une jage consider elektrika kelebrakele between en in van be	ners documented on Chain of Custody?	(Yes)	No		
	ent sample amount for indicated test(s)?	<u>  \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	No	See Below	
~~~~~~~	nples received within sufficient hold time?	(Ze3	No	See Below	
~~~	intract of sample(s)?	Yes	No	ENGLApplicables	
********************	samples have zero headspace?	7/65	No No	Not Applicable	
rau voos	emples have zero neauspace:	11(1,03)	1 110	1 Not Approache	
	Variance Doc	umentation			
Contact:	Contacted by:			Date/ Time:	
Regarding:					
2					
Corrective A	Action Taken:				
					·····
					***************************************
		anna ann an Airm an Air			
Check all th	nat Apply: See attached e-mail/ fax				

# **Analytical Report 287160**

for

Rice Operating Co.

Project Manager: Kristin Pope

**Hobbs Junction F-29-1A** 

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: 287160

Hobbs Junction F-29-1A

Project Address:T18S R38E Sec29 F E ~ 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 Number287160. 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 N287160 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.

**Brent Barron** 

Odessa Laboratory Director

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# Certificate of Analysis Summary 287160 Rice Operating Co., Hobbs, NM



Project Name: Hobbs Junction F-29-1A

Project Id:

Date Received in Lab Aug-02-07 12:50 pm

Contact: Kristin Pope

**Project Location:** T18S R38E Sec29 F E ~ Lea County New

Project Manager:

Report Date:

Brent Barron, II

13-AUG-07

	Lab Id:	287160-0	001	287160-0	102	
Analusia Dannastad	Field Id:	Monitor Well #		Monitor Well # 2		
Analysis Requested	Depth:	Monto Well H	1-Беер	monnor wen #	2-Shanow	
	Matrix:	WATE	D	WATE	D	
	Sampled:	Aug-01-07	10:25	Aug-01-07	09:10	
Alkalinity by EPA 310.1	Extracted:					
	Analyzed:	Aug-07-07		Aug-07-07		
	Units/RL:	mg/L	RL	mg/L	RL	
Alkalinity, Total (as CaCO3)		188	4.00	240	4.00	
BTEX by EPA 8021B	Extracted:	Aug-02-07		Aug-02-07	į	
•	Analyzed:	Aug-05-07		Aug-05-07	19:44	
	Units/RL:	mg/L	RL	mg/L	RL	
Benzene		ND	0.0010	ND	0.0010	
Toluene		ND	0.0010	ND	0.0010	
Ethylbenzene		ND	0.0010	ND	0.0010	
m,p-Xylene		ND	0.0020	ND	0.0020	
o-Xylene		ND	0.0010	ND	0.0010	
Total Xylenes		ND		ND		
Total BTEX		ND		ND		
Inorganic Anions by EPA 300	Extracted:					
Inorganic Amons by El A 500	Analyzed:	Aug-07-07	11:48	Aug-07-07	11:48	
	Units/RL:	mg/L	RL	mg/L	RL	
Chloride	1	263	10.0	27.2	5.00	
Sulfate		102	10.0	26.2	5.00	
Metals per ICP by SW846 6010B	Extracted:					
Micras per let by 5 W640 0010B	Analyzed:	Aug-03-07	14:39	Aug-03-07	14:39	
	Units/RL:	mg/L	RL	mg/L	RL	
Calcium	i	197	0.100	76.8	0.100	
Magnesium		18.5	0.010	12.4	0.010	
Potassium	)	3.52	0.500	2.23	0.500	
Sodium		69.1	0.500	111	0.500	
Residue, Filterable (TDS) by EPA	Extracted:					
160.1	Analyzed:	Aug-06-07	16:20	Aug-06-07	16:20	
	Units/RL:	mg/L	RL	mg/L	RL	
Total dissolved solids		1160	5.00	592	5.00	
	-				50	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our hability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Odessa Laboratory Director

# XENCO Laboratories

# **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.

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# Form 2 - Surrogate Recoveries



Project Name: Hobbs Junction F-29-1A

Work Order #: 287160

Project ID:

Lab Batch #: 701934

Sample: 287160-001 / SMP

Batch:

Matrix: Water

Units: mg/L	St	SURROGATE RECOVERY STUDY						
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags			
Analytes			[D]					
4-Bromofluorobenzene	0.0436	0.0500	87	80-120				

Lab Batch #: 701934

**Sample:** 287160-002 / SMP

Batch:

Matrix: Water

Units: mg/L SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits % R	Flags
•					
4-Bromofluorobenzene	0.0403	0.0500	81	80-120	

Lab Batch #: 701934

**Sample:** 287160-002 S / MS

Batch:

Matrix: Water

Units: mg/L	SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery % R	Control Limits %R	Flags	
Analytes			[D]			
4-Bromofluorobenzene	0.0495	0.0500	99	80-120		

Lab Batch #: 701934

**Sample:** 287160-002 SD / MSD

Batch:

Matrix: Water

Units: mg/L	Units: mg/L SURROGATE RECOVERY STUDY					
BTEX by EPA 8021B	Amount Found [A]	True Amount {B}	Recovery %R	Control Limits %R	Flags	
Analytes		, ,	[D]			
4-Bromofluorobenzene	0.0457	0.0500	91	80-120		

Lab Batch #: 701934

**Sample:** 497877-1-BKS / BKS

Batch:

Matrix: Water

Units: mg/L SURROGATE RE				ECOVERY STUDY			
BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits % R	Flags		
Analytes		-	[D]				
4-Bromofluorobenzene	0.0497	0.0500	99	80-120			

Surrogate Recovery [D] = 100 \* A / B

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

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> Poor recoveries due to dilution



# Form 2 - Surrogate Recoveries



**Project Name: Hobbs Junction F-29-1A** 

Work Order #: 287160

Project ID:

Lab Batch #: 701934

Sample: 497877-1-BLK / BLK

Batch:

Matrix: Water

Units: mg/L	RROGATE R	RECOVERY STUDY			
BTEX by EPA 8021B  Analytes	Amount Found [A]	True Amount [B]	Recovery %R {D}	Control Limits % R	Flags
Analytes					
4-Bromofluorobenzene	0.0467	0.0500	93	80-120	

<sup>\*\*</sup> Surrogates outside limits; data and surrogates confirmed by reanalysis

<sup>\*\*\*</sup> 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: Hobbs Junction F-29-1A** 

Work Order #: 287160

Project ID:

Lab Batch #: 701789

Sample: 701789-1-BKS

Matrix: Water

**Date Analyzed:** 08/07/2007

**Date Prepared:** 08/07/2007

Reporting Units: mg/L

Batch #:

Analyst: WRU

BLANK /BLANK SPIKE RECOVERY STUDY

Alkalinity by EPA 310.1	Blank Result [A]	Spike Added [B]	Blank Spike Result	Blank Spike % R	Control Limits %R	Flags
Analytes	[, -,	(2)	[C]	[D]	,,,,,	
Alkalinity, Total (as CaCO3)	ND	200	194	97	80-120	

Lab Batch #: 701934

Sample: 497877-1-BKS

Matrix: Water

**Date Analyzed:** 08/05/2007

**Date Prepared:** 08/04/2007

Analyst: CELKEE

Reporting Units: mg/I

BLANK /BLANK SPIKE RECOVERY STUDY

Reporting Omes. mg/L	Batch #:	BLANK /I	BLANK SP	IKE REC	JOVERY	STUDY
BTEX by EPA 8021B  Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike % R [D]	Control Limits % R	Flags
Benzene	ND	0.0500	0.0512	102	70-125	
Toluene	ND	0.0500	0.0531	106	70-125	
Ethylbenzene	ND	0.0500	0.0573	115	71-129	
m,p-Xylene	ND	0.1000	0.1029	103	70-131	
o-Xylene	ND	0.0500	0.0554	111	71-133	

Lab Batch #: 701864

Sample: 701864-1-BKS

Matrix: Water

**Date Analyzed:** 08/07/2007

**Date Prepared:** 08/07/2007

Analyst: IRO

Reporting Units: mg/L	Batch #:	BLANK /	BLANK SP	IKE REC	COVERY	STUDY
Inorganic Anions by EPA 300	Blank Result [A]	Spike Added [B]	Blank Spike Result	Blank Spike %R	Control Limits %R	Flags
Analytes	[A]	[D]	[C]	/6 K  D]	/8 K	
Chloride	ND	10.0	9.03	90	90-110	
Sulfate	ND	10.0	9.63	96	90-110	

Lab Batch #: 701571

**Sample:** 701571-1-BKS

Matrix: Water

**Date Analyzed:** 08/03/2007

**Date Prepared:** 08/03/2007

Analyst: LATCOR

Reporting Units: mg/L	Batch #: 1	BLANK /	BLANK SP	IKE REC	COVERY	STUDY
Metals per ICP by SW846 6010B	Blank Result	Spike Added	Blank Spike Result	Blank Spike %R	Control Limits % R	Flags
Analytes	[A]	[B]	[C]	[D]	/0 K	
Calcium	ND	2.00	1.83	92	75-125	
Magnesium	ND	2.00	2.08	104	75-125	
Potassium	ND	2.00	2.28	114	75-125	
Sodium	ND	2.00	1.94	97	75-125	

Blank Spike Recovery [D] = 100\*[C]/[B]

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



# Form 3 - MS Recoveries

**Project Name: Hobbs Junction F-29-1A** 



Work Order #: 287160

Lab Batch #: 701864

Project ID: 08/07/2007

1

Analyst: IRO

**Date Analyzed:** 08/07/2007 QC-Sample ID: 287159-003 S

**Inorganic Anions by EPA 300** 

**Analytes** 

Batch #:

Date Prepared:

Matrix: Water

Reporting Units: mg/L

Chloride

MATI	RIX / MA	TRIX SPIKE	RECO	VERY STU	JDY
Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
 549	250	862	126	90-110	v

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

- Triple

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St. 25%

Project Name: Hobbs Junction F-29-1A



Work Order # 287160

701934 Lab Batch ID:

Date Analyzed: 08/05/2007

Matrix: Water Batch #:

Project ID:

QC-Sample ID: 287160-002 S 08/04/2007 Date Prepared:

CELKEE Analyst:

Reporting Units: mg/L		W,	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY	/ MATF	IX SPIK	E DUPLICA	FE REC	VERY S	TUDY		
BTEX by EPA 8021B	Parent Sample	Spike	Spiked Sample Spiked Result Sample		Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	Result [A]	Added [B]	[C]	%R [D]		Result [F]	%R [G]	%	%R	%RPD	
Benzene	QN	0.0500	0.0510	102	0.0500	0.0510	102	0	70-125	25	
Toluene	QN	0.0500	0.0528	106	0.0500	0.0528	901	0	70-125	25	
Ethylbenzene	ΩN	0.0500	0.0573	115	0.0500	0.0562	112	3	71-129	25	
m,p-Xylene	ND	0.1000	0.1023	102	0.1000	0.0994	66	3	70-131	25	
o-Xylene	QN	0.0500	0.0554	Ξ	0.0500	0.0536	107	4	71-133	25	

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: Hobbs Junction F-29-1A

Work Order #: 287160

**Lab Batch #:** 701789 **Date Analyzed:** 08/07/2007

Project ID:

**Date Prepared:** 08/07/2007

1

Analyst: WRU

**QC-Sample ID:** 287122-001 D

Batch #:

Matrix: Water

Reporting Units: mg/L	SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
Alkalinity by EPA 310.1  Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Alkalinity, Total (as CaCO3)	216	216	0	20	

Lab Batch #: 701571

**Date Analyzed:** 08/03/2007

**Date Prepared:** 08/03/2007

Analyst: LATCOR

QC- Sample ID: 287179-001 D

Batch #: 1

Matrix: Water

Reporting Units: mg/L	SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
Metals per ICP by SW846 6010B  Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Calcium	301	285	5	25	
Magnesium	120	134	11	25	
Potassium	20.1	15.8	24	25	
Sodium	284	265	7	25	

Lab Batch #: 701790

**Date Analyzed:** 08/06/2007

**Date Prepared:** 08/06/2007

Analyst: IRO

**QC-Sample ID:** 287122-001 D

Batch #:

Matrix: Water

Reporting Units: mg/L SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Sample Control Residue, Filterable (TDS) by EPA 160.1 RPD Duplicate Limits Result Flag %RPD Result [A] [B] Analyte 754 784 30 Total dissolved solids

Lab Batch #: 701790

Date Analyzed: 08/06/2007

**Date Prepared:** 08/06/2007

Analyst: IRO

QC-Sample ID: 287348-002 D

Batch #:

Matrix: Water

Reporting Units: mg/L	SAMPLE /	SAMPLE	DUPLIC	ATE REC	OVERY
Residue, Filterable (TDS) by EPA 160.1  Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Total dissolved solids	6250	6290	1	30	

# **Environmental Lab of Texas**

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	Ľ.	W)	Company Address:			Sampler Signature:		-	ンなこのと	뿐	Monitor Well #1-Deep	Monitor Well #2-Shallow					1			ns: Please email to :	11			
	Project Manager:	Company Name	ddr	<u>:</u>	<u> </u>	nat		Ć			#	#								, io	VI		4	
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# Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Dilent: File			
Date/ Time: 8 - 2 • 07 17 : 50			
Lab 1D#: 287160			
initials:			
Sample Receipt (	Checklist		Client Initials
#1 Temperature of container/ cooler?	(Fes)	No	1.5 °C
#2 Shipping container in good condition?	Yes	No	1, )
#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	Not Flesent
76 Sample instructions complete of Chain of Custody?	Yes	No	
#7 Chain of Custody signed when relinquished/ received?	Yes	No	
#8 Chain of Custody signed when reiniquished/ received? #8 Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid
#9 Container label(s) legible and intact?	ves)	No	
#10 Sample matrix/ properties agree with Chain of Custody?	Yes	No	Not Applicable
	Yes	No	
#11 Containers supplied by ELOT?	Yes	No	0 0
#12 Samples in proper container/ bottle?		No	See Below
#13 Samples properly preserved?	YES		See Below
#14 Sample bottles intact?	YES	No 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 Docum	nentation		
Contacted by:	<del></del>		Date/ Time:
Regarding:	······································		
Corrective Action Taken:			
Check all that Apply:  See attached e-mail/ fax  Client understands and woul  Cooling process had begun seems.			



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: 10/22/07 Reporting Date: 10/26/07

Project Number: NOT GIVEN

Project Name: HOBBS JUNCTION F-29-1A

Project Location: T18S-R38E-SEC29 F~LEA COUNTY, NM

Sampling Date: 10/19/07 Sample Type: WATER

Sample Condition: COOL & INTACT

Sample Received By: SB Analyzed By: HM/KS

		Na	Ca	Mg	K	Conductivity	T-Alkalinity
LAB NUMBER	SAMPLE ID	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(uS/cm)	(mgCaCO <sub>3</sub> /L)
ANALYSIS DA	E:	10/26/07	10/25/07	10/25/07	10/25/07	10/24/07	10/24/07
H13553-1	M.W. #1~DEEP	84	174	22.6	2.65	1,472	168
H13553-2	M.W. #2~SHALLOW	105	71.9	17.7	1.11	955	212
<b>Quality Control</b>		NR	49.2	51.6	2.73	1,386	NR
True Value QC		NR	50.0	50.0	3.00	1,404	NR
% Recovery		NR	98.4	103	91.0	98.7	NR
Relative Percen	nt Difference	NR	< 0.1	< 0.1	6.7	1.3	NR
METHODS:		SM3	3500-Ca-D	3500-Mg E	8049	120.1	310.1

METHODS:	SM3500-Ca-D 3500-Mg E	8049	120.1	310.1
<u> </u>				

		G	304	CO3	rico <sub>3</sub>	рп	102
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(s.u.)	(mg/L)
ANALYSIS [	DATE:	10/25/07	10/26/07	10/24/07	10/24/07	10/24/07	10/24/07
H13553-1	M.W. #1~DEEP	292	130	0	205	7.37	1,047
H13553-2	M.W. #2~SHALLOW	100	125	0	259	7.55	624
Quality Cont	rol	500	23.5	NR	1000	6.97	NR
True Value C	QC .	500	25.0	NR	1000	7.00	NR
% Recovery		100	93.9	NR	100	99.6	NR
Relative Perd	cent Difference	2.0	12.5	NR	1.2	0.1	NR

METHODS:	SM4500-CI-B	375.4	310.1	310.1	150.1	160.1

Buster Deploto

HCO.



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: (575) 397-1471

Receiving Date: 10/22/07

Reporting Date: 10/24/07

Project Number: NOT GIVEN

Project Name: HOBBS JUNCTION F-29-1A

Project Location: T18S R38E SEC29 F - LEA COUNTY, NM

Sampling Date: 10/19/07

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	10/23/07	10/23/07	10/23/07	10/23/07

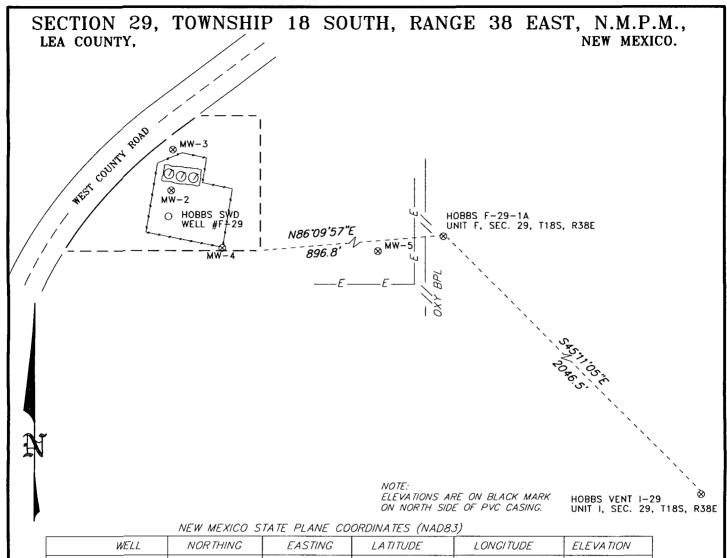
ANALYSIS D	ATE	10/23/07	10/23/07	10/23/07	10/23/07
H13553-1	MONITOR WELL #1 - DEEP	<0.001	<0.001	<0.001	<0.003
H13553-2	MONITOR WELL #2 - SHALLOW	<0.001	<0.001	<0.001	<0.003
					<del> </del>
Quality Contr	rol	0.106	0.101	0.102	0.310
True Value Q	OC	0.100	0.100	0.100	0.300
% Recovery		106	101	102	103
Relative Perc	cent Difference	1.8	1.0	1.9	1.0

METHOD: EPA SW-846 8021B

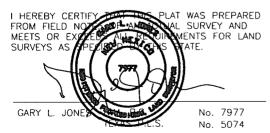
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10/26/07 Date Page 1 of 1

101 East Mariand - Hobbs, New Mexico 88240 Tel (505) 393-2226	Cardinal Labor	nal	   	   p		to	rie	6	atories. Inc.	ا ا		11	동	A A	유	UST	CHAIN-OF-CUSTODY AND	AN	AN	LYS	ANALYSIS REQUEST		ES		
Fax (505) 393-2476								6		<u>:</u>				⇉	\B Orc	LAB Order ID #	44:					-			
Company Name: RICE Operating Company	Company	<u>u u </u>	BILLTO Company: RICE Operating	Company: Operating		Company	}	<u>a</u>	#Ö_						₹	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	SIS	REG	ANALYSIS REQUEST		Ì			Ì	
Project Manager:				Address:				Street, City, Zip)	ity, Zip)		Τ	-	•		<u>.</u>	Se or	Specif	/ Meth	(Circle or Specify Method No.)	~ ·	•			•	
in Fa	pe, Project Scientist	7	122 W Taylor Street ~	ylor Stre		Hobbs, New Mexico 88240	v Mexico	88240							-										
Address: (Street, City, Zip)	lity, Zip)			Phone#:	#			LL.	Fax#:																
122 W Taylor Street ~	122 W Taylor Street ~ Hobbs, New Mexico 88240	<u> </u>	(505) 393-9174	93-91	74	!			(505)397-1471	97-14	7.1			7.00										_	
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T18S-R38E-Sec29 F	529 F ∼ Lea County - New Mexico	Mexico.		1		1	1072		rozanne@valorpet com				2 Ex		a- 1			9				_	(8)		1.2
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WELL	NORTHING	EASTING	LATITUDE	LONGITUDE	ELE VATION
WLLL	TVORTITIVO	LASTING	LATITODE	LONGITODE	ELEVATION
MW-2	627819.025	898021.191	N 32°43'14.0"	W 10310'24.9"	3645.71′
MW−3	627908.779	898025.082	N 32°43'14.9"	W 103'10'24.8"	3645.76
MW-4	627693.822	898134.408	N 32°43'12.7"	W 10370'23.6"	3645.76'
мW-5	627687.313	898477.159	N 32*43'12.7"	W 103°10'19.5"	3646.74' PVC 3644.37'-GRND
HOBBS F-29-1A MARK ON NORTH SIDE OF NORTH 2" PVC	627753.789	899029.184	N 32*43'13.2"	W 103'10'13.1"	3648.89' 3645.5'-GRND
HOBBS F-29-1A MARK ON NORTH SIDE OF SOUTH 2" PVC	627753.579	899029.160	N 32°43'13.2"	W 103'10'13.1"	3648.76' 3645.5'-GRND
HOBBS VENT 1-29 MARK ON NORTH SIDE OF 2" PVC	626311.386	900480.915	N 32'42'58.8"	W 103'09'56.3"	3650.65′ 3647.6′–GRND



BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: RICE Drawn By: K. GOAD

Date: 02-11-2005 Disk: KJG CD#4 - RICEB.DWG Survey Date: VARIES Sheet 1 of 1 Sheets

200 0 200 400 FEET

# RICE OPERATING COMPANY

REF: MONITOR WELLS

MONITOR WELLS LOCATED IN

SECTION 29, TOWNSHIP 18 SOUTH, RANGE 38 EAST,

N.M.P.M., LEA COUNTY, NEW MEXICO.