

1R - 426-35

REPORTS

DATE:

4/01/2003

RICE Operating Company

122 West Taylor • Hobbs, New Mexico 88240
Phone: (505)393-9174 • Fax: (505) 397-1471

CERTIFIED MAIL

RETURN RECEIPT NO. 7000 1530 0005 9895 4992

April 1, 2003

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

RECEIVED

APR 07 2003

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

RE: 2002 MONITOR WELL REPORT/SAMPLING SUMMARY
BD SWD SYSTEM
LEA COUNTY, NEW MEXICO

Mr. Olson:

Rice Operating Company (ROC) takes this opportunity to submit the 2002 Monitor Well Report for the Blinebry-Drinkard (BD) Salt Water Disposal System. There are 4 sites in this system that have monitor wells that are sampled quarterly pursuant to NMOCD guidelines. Groundwater impact became apparent at these sites during the remediation process of the Junction Box Upgrade Plan.

Site Name	Unit Letter	Section	Township/Range
J-26 jct.	J	26	T21S, R37E
Zachary Hinton jct.	O	12	T22S, R37E
F-17 jct.	F	17	T21S, R37E
I-27 jct.	I	27	T22S, R37E

In 2002, the Zachary Hinton monitor well was sampled by Environmental Plus, Inc. of Eunice, and also by ROC. The 2002 sampling events for J-26, F-17, and I-27 were conducted by ROC. In 2003, ROC will continue to conduct the sampling of the monitor wells at these sites. As in 2002, either Environmental Lab of Texas of Odessa, Texas, or Cardinal Laboratories of Hobbs will conduct analytical tests of the water samples of 2003.

Trident Environmental of Midland, Texas and R. T. Hicks Consultants, Ltd. of Albuquerque have been contracted by ROC to prioritize the junction box disclosure sites and to generate work plans for remediation of the vadose zone. NMOCD can anticipate the submittal of work plans for several such sites in 2003. After NMOCD approval, AFE's will be submitted to System Partners for approval. Sites with confirmed groundwater impact will also be evaluated for the extent of groundwater impact.

ROC is the service provider (operator) for the BD Salt Water Disposal System and has not ownership of any portion of pipeline, well, or facility. The BD SWD System is owned by a consortium of oil producers, System Partners, who provide all operating capital on a percentage ownership/usage basis.

Thank you for your consideration concerning this annual summary of groundwater monitoring information. If you have any questions, do not hesitate to contact me.

RICE OPERATING COMAPANY

Kristin Farris

Kristin Farris
Project Scientist

Enclosures: Summary table & graph for each site
 Analytical results

Cc: LBG, CDH, file, Chris Williams
 NMOCD, District I Office
 1625 N. French Drive
 Hobbs, NM 88240

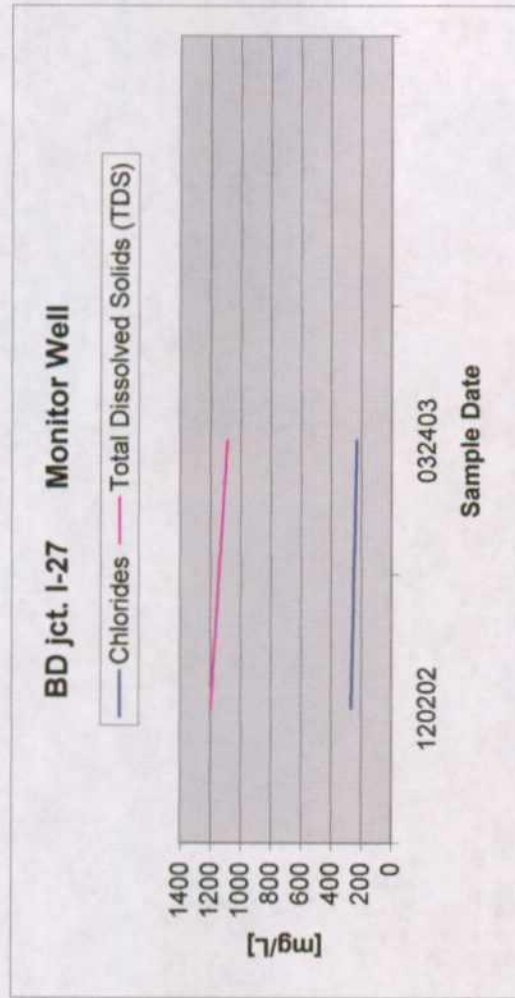
BD jct. I-27
I, 27, 21S, 37E

Rice Operating Co. Monitor Well Data Sheet

All parameter concentrations are in mg/L.

MW #	(ft)		(gal)		SAMPLE DATE	TIME	CL-	TDS	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES
	WATER LEVEL	TOTAL DEPTH	WELL VOLUME	VOLUME BAILED								
1	48.39	51.10	0.434	1.45	120202	1210	266	1200	<0.001	<0.001	<0.001	<0.001
1	46.92	51.01	0.659	1.90	032403	1200	230	1090	0.002	<0.001	<0.001	<0.001

silty, baller



ANALYTICAL REPORT

Prepared for:

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

Project: BD I-27

PO#:

Order#: G0306060

Report Date: 03/27/2003

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS**SAMPLE WORK LIST**

Rice Operating
122 W. Taylor
Hobbs, NM 88240
505-397-1471

Order#: G0306060
Project:
Project Name: BD I-27
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0306060-01	MW 1	WATER	3/24/03 12:00	3/24/03 19:30	See COC	See COC
<u>Lab Testing:</u>		Rejected: No	Temp: 1.5 C			
8021B/5030 BTEX						
Anions						
Cations						
Total Dissolved Solids (TDS)						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306060
Project:
Project Name: BD I-27
Location: None Given

Lab ID: 0306060-01
Sample ID: MW 1

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
Blank	Prepared	Analyzed	Amount	Factor		
0005057-02		3/27/03 11:10	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	0.002	0.001
Toluene	<0.001	0.001
Ethylbenzene	<0.001	0.001
p/m-Xylene	<0.001	0.001
o-Xylene	<0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	105%	80	120
Bromofluorobenzene	81%	80	120

Approval: Raland K. Tuttle 3-28-03
Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biczugbe, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306060
Project:
Project Name: BD I-27
Location: None Given

Lab ID: 0306060-01
Sample ID: MW 1

Cations

Parameter	Result	Units	Dilution Factor	RL	Method	Date Prepared	Date Analyzed	Analyst
Calcium	111	mg/L	10	0.10	6010B	03/25/2003	3/25/03	SM
Magnesium	61.3	mg/L	10	0.010	6010B	03/25/2003	3/25/03	SM
Potassium	5.49	mg/L	10	0.50	6010B	03/25/2003	3/25/03	SM
Sodium	189	mg/L	10	0.10	6010B	03/25/2003	3/25/03	SM

Approval:

Roland K. Tuttle 3-28-03
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

N/A = Not Applicable RL = Reporting Limit

Page 1 of 1

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306060
Project:
Project Name: BD 1-27
Location: None Given

Lab ID: 0306060-01
Sample ID: MW 1

Anions

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Bicarbonate Alkalinity	360	mg/L	1	2.00	310.1	3/25/03	CK
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	3/25/03	CK
Chloride	230	mg/L	1	5.00	9253	3/25/03	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.10	310.1	3/25/03	CK
SULFATE, 375.4	260	mg/L	5	2.5	375.4	3/26/03	CK

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Total Dissolved Solids (TDS)	1090	mg/L	1	5.0	160.1	3/26/03	TAL

Approval:

Raland K. Tuttle 3-28-03
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

RL = Reporting Limit N/A = Not Applicable

Page 1 of 1

ENVIRONMENTAL LAB OF TEXAS I, LTD.

12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

ENVIRONMENTAL LAB OF TEXAS**QUALITY CONTROL REPORT****8021B/5030 BTEX****Order#: G0306060**

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0005057-02			<0.001		
Toluene-mg/L		0005057-02			<0.001		
Ethylbenzene-mg/L		0005057-02			<0.001		
p/m-Xylene-mg/L		0005057-02			<0.001		
o-Xylene-mg/L		0005057-02			<0.001		
CONTROL		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0005057-03		0.1	0.085	85.%	
Toluene-mg/L		0005057-03		0.1	0.089	89.%	
Ethylbenzene-mg/L		0005057-03		0.1	0.090	90.%	
p/m-Xylene-mg/L		0005057-03		0.2	0.185	92.5%	
o-Xylene-mg/L		0005057-03		0.1	0.088	88.%	
CONTROL DUP		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0005057-04		0.1	0.090	90.%	5.7%
Toluene-mg/L		0005057-04		0.1	0.093	93.%	4.4%
Ethylbenzene-mg/L		0005057-04		0.1	0.097	97.%	7.5%
p/m-Xylene-mg/L		0005057-04		0.2	0.203	101.5%	9.3%
o-Xylene-mg/L		0005057-04		0.1	0.099	99.%	11.8%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Benzene-mg/L		0005057-05		0.1	0.103	103.%	
Toluene-mg/L		0005057-05		0.1	0.104	104.%	
Ethylbenzene-mg/L		0005057-05		0.1	0.105	105.%	
p/m-Xylene-mg/L		0005057-05		0.2	0.219	109.5%	
o-Xylene-mg/L		0005057-05		0.1	0.107	107.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0306060

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0005043-01			<2.00		
Carbonate Alkalinity-mg/L		0005043-01			<0.10		
Chloride-mg/L		0005042-01			<5.00		
Hydroxide Alkalinity-mg/L		0005043-01			<0.10		
SULFATE, 375.4-mg/L		0005072-01			<0.5		
DUPLICATE		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0306056-01	193		192		0.5%
Carbonate Alkalinity-mg/L		0306056-01	0		<0.10		0.0%
Hydroxide Alkalinity-mg/L		0306056-01	0		<0.10		0.0%
SULFATE, 375.4-mg/L		0306056-01	140		144		2.8%
MS		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Chloride-mg/L		0306056-01	230	500	718	97.6%	
MSD		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Chloride-mg/L		0306056-01	230	500	709	95.8%	1.3%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0005043-04		0.05	0.0524	104.8%	
Carbonate Alkalinity-mg/L		0005043-04		0.05	0.0524	104.8%	
Chloride-mg/L		0005042-04		5000	4960	99.2%	
Hydroxide Alkalinity-mg/L		0005043-04		0.05	0.0524	104.8%	
SULFATE, 375.4-mg/L		0005072-04		50	57.5	115.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0306060

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0005058-02			<0.010		
Magnesium-mg/L		0005058-02			<0.001		
Potassium-mg/L		0005058-02			<0.050		
Sodium-mg/L		0005058-02			<0.010		
DUPLICATE		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0306056-01	138		138		0.0%
Magnesium-mg/L		0306056-01	25.7		24.8		3.6%
Potassium-mg/L		0306056-01	5.86		5.90		0.7%
Sodium-mg/L		0306056-01	113		114		0.9%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0005058-05		2	2.30	115.0%	
Magnesium-mg/L		0005058-05		2	2.10	105.0%	
Potassium-mg/L		0005058-05		2	1.90	95.0%	
Sodium-mg/L		0005058-05		2	2.12	106.0%	

ENVIRONMENTAL LAB OF TEXAS**QUALITY CONTROL REPORT****Test Parameters**

Order#: G0306060

BLANK						
WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L	0005067-01			<5.0		
DUPLICATE						
WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L	0306059-01	1040		1030		1.0%

12606 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Kristin Farris

Company Name

RICE Operating

Company Address:

122 W. Taylor

City/State/Zip:

Habbs, NM 88240

Telephone No. (505) 393-9174

Fax No: (505) 397-1471

Sampler Signature:

Yr. Father

[illegible]

ANALYTICAL REPORT

Prepared for:

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

Project: I-27 Jct.
PO#: 505
Order#: G0205153
Report Date: 12/11/2002

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

Rice Operating
122 W. Taylor
Hobbs, NM 88240
505-397-1471

Order#: G0205153
Project: None Given
Project Name: I-27 Jct.
Location: BD

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0205153-01	MW 1	WATER	12/2/02 12:10	12/2/02 20:40	See COC	See COC
	<u>Lab Testing:</u>	Rejected: No		Temp: 3.5 C		
	Cations					
	Alkalinity, Bicarbonate					
	Alkalinity, Carbonate					
	Alkalinity, Hydroxide					
	Chloride					
	SULFATE, 375.4					
	Total Dissolved Solids (TDS)					
	0205153-02	MW 1	WATER	12/2/02 12:10	12/2/02 20:40	See COC
<u>Lab Testing:</u>	Rejected: No		Temp: 3.5 C			
8021B/5030 BTEX						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0205153
Project: None Given
Project Name: I-27 Jct.
Location: BD

Lab ID: 0205153-02
Sample ID: MW 1

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0004008-02		12/9/02 14:17	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	<0.001	0.001
Ethylbenzene	<0.001	0.001
Toluene	<0.001	0.001
p/m-Xylene	<0.001	0.001
o-Xylene	<0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	104%	80	120
Bromofluorobenzene	94%	80	120

Approval: *Raland K Tuttle* 12-11-02
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0205153
Project: None Given
Project Name: I-27 Jct.
Location: BD

Lab ID: 0205153-01

Sample ID: MW 1

Test Parameters

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date Analyzed</u>	<u>Analyst</u>
Alkalinity, Bicarbonate	360	mg/L as CaCO	1	2.00	310.1	12/10/02	SB
Alkalinity, Carbonate	<0.100	mg/L as CaCO	1	0.100	310.1	12/10/02	SB
Alkalinity, Hydroxide	<0.10	mg/L as CaCO	1	0.10	310.1	12/10/02	SB
Chloride	266	mg/L	1	5.00	9253	12/4/02	SB
SULFATE, 375.4	244	mg/L	5	2.5	375.4	12/10/02	SB
Total Dissolved Solids (TDS)	1200	mg/L	1	5.0	160.1	12/3/02	TAL

Approval: Raland K Tuttle 12-11-02
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0205153
Project: None Given
Project Name: I-27 Jct.
Location: BD

Lab ID: 0205153-01
Sample ID: MW 1

Cations

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Dilution</u> <u>Factor</u>	<u>RL</u>	<u>Method</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Analyst</u>
Calcium	103	mg/L	100	1.0	6010B	12/10/2002	12/10/02	SM
Magnesium	60.7	mg/L	10	0.010	6010B	12/10/2002	12/10/02	SM
Potassium	7.34	mg/L	10	0.50	6010B	12/10/2002	12/10/02	SM
Sodium	133	mg/L	100	1.0	6010B	12/10/2002	12/10/02	SM

Approval:

Raland K. Tuttle 12-11-02

Raland K. Tuttle, Lab Director, QA Officer

Date

Celey D. Keene, Org. Tech. Director

Jeanne McMurrey, Inorg. Tech. Director

Sandra Biezugbe, Lab Tech.

Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0205153

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Benzene-mg/L		0004008-02			<0.001	
Ethylbenzene-mg/L		0004008-02			<0.001	
Toluene-mg/L		0004008-02			<0.001	
p/m-Xylene-mg/L		0004008-02			<0.001	
o-Xylene-mg/L		0004008-02			<0.001	
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Benzene-mg/L		0205197-10	0	0.1	0.100	100.0%
Ethylbenzene-mg/L		0205197-10	0	0.1	0.102	102.0%
Toluene-mg/L		0205197-10	0	0.1	0.102	102.0%
p/m-Xylene-mg/L		0205197-10	0	0.2	0.215	107.5%
o-Xylene-mg/L		0205197-10	0	0.1	0.103	103.0%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Benzene-mg/L		0205197-10	0	0.1	0.100	100.0%
Ethylbenzene-mg/L		0205197-10	0	0.1	0.100	100.0%
Toluene-mg/L		0205197-10	0	0.1	0.101	101.0%
p/m-Xylene-mg/L		0205197-10	0	0.2	0.207	103.5%
o-Xylene-mg/L		0205197-10	0	0.1	0.101	101.0%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Benzene-mg/L		0004008-05		0.1	0.097	97.0%
Ethylbenzene-mg/L		0004008-05		0.1	0.100	100.0%
Toluene-mg/L		0004008-05		0.1	0.100	100.0%
p/m-Xylene-mg/L		0004008-05		0.2	0.214	107.0%
o-Xylene-mg/L		0004008-05		0.1	0.104	104.0%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0205153

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0004013-02			<0.010	
Magnesium-mg/L		0004013-02			<0.001	
Potassium-mg/L		0004013-02			<0.050	
Sodium-mg/L		0004013-02			<0.010	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0205154-01	76.7		77.7	1.3%
Magnesium-mg/L		0205154-01	32.9		32.8	0.3%
Potassium-mg/L		0205154-01	7.08		7.16	1.1%
Sodium-mg/L		0205154-01	158		158	0.0%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0004013-05		2	2.07	103.5%
Magnesium-mg/L		0004013-05		2	2.22	111.1%
Potassium-mg/L		0004013-05		2	1.79	89.5%
Sodium-mg/L		0004013-05		2	1.80	90.0%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0205153

BLANK						
WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Alkalinity, Bicarbonate-mg/L as CaCO	0004025-01			<2.00		
Alkalinity, Carbonate-mg/L as CaCO	0004026-01			<0.100		
Alkalinity, Hydroxide-mg/L as CaCO	0004027-01			<0.10		
Chloride-mg/L	0003965-01			<5.00		
SULFATE, 375.4-mg/L	0004028-01			<0.5		
Total Dissolved Solids (TDS)-mg/L	0003957-01			<5.0		
DUPLICATE						
WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Alkalinity, Bicarbonate-mg/L as CaCO	0205153-01	360		359		0.3%
Alkalinity, Carbonate-mg/L as CaCO	0205153-01	0		<0.100		0.0%
Alkalinity, Hydroxide-mg/L as CaCO	0205153-01	0		<0.10		0.0%
SULFATE, 375.4-mg/L	0205153-01	244		250		2.4%
Total Dissolved Solids (TDS)-mg/L	0205153-01	1200		1170		2.5%
MS						
WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L	0205115-01	461	500	948	97.4%	
MSD						
WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L	0205115-01	461	500	957	99.2%	0.9%
SRM						
WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Alkalinity, Bicarbonate-mg/L as CaCO	0004025-04		0.05	0.0496	99.2%	
Alkalinity, Carbonate-mg/L as CaCO	0004026-04		0.05	0.0496	99.2%	
Alkalinity, Hydroxide-mg/L as CaCO	0004027-04		0.05	0.0496	99.2%	
Chloride-mg/L	0003965-04		5000	4960	99.2%	
SULFATE, 375.4-mg/L	0004028-04		50	51.6	103.2%	

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: I-27 jct.

Project #:

Project Loc: **BD**

PO #: 505

Fax No: (505) 397-1471

Christo Jancic

[illegible]

**RICE OPERATING COMPANY
JUNCTION DISCLOSURE REPORT**

COPY ✓

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
BD	I-27	I	27	21S	37E	LEA	Length	Width	Depth

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER _____ CITY OF EUNICE _____ OTHER _____

Depth to Groundwater 45' feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 10/7/2002 Date Completed 10/15/2002 OCD Witness NO

Soil Excavated 2300 cubic yards Excavation Length 90 Width 60 Depth 15 feet

Soil Disposed 0 cubic yards Offsite Facility _____ Location _____

FINAL ANALYTICAL RESULTS: Sample Date 10/10/2002 Sample Depth 15'

Procure 5-point composite sample of bottom and 4-point composite sample of sidewalls.
TPH, BTEX and Chloride laboratory test results completed by using an approved lab and
testing procedures pursuant to NMOCD guidelines.

Sample Location	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg	GRO mg/kg	DRO mg/kg	Chlorides mg/kg
SIDEWALLS 15'	<0.025	<0.025	<0.025	<0.025	<10	<10	2500
BOTTOM 15'	<0.025	<0.025	<0.025	<0.025	<10	<10	1500
SIDEWALLS 10'	<0.025	<0.025	<0.025	<0.025	<10	<10	425
BOTTOM 11'	<0.025	<0.025	<0.025	<0.025	<10	<10	213
Remediated Soil	<0.025	<0.025	<0.025	<0.025	<10	22.9	417

General Description of Remedial Action: Vertical and lateral delineation found an area

Impacted with TPH and chlorides. TPH impacted soil was excavated to 15' bgs in an area 20' by 20' and land farmed on-site. Chlorides were removed to 11' bgs in an area 90' by 60'. Clean backfill was placed in the deep excavation from 15' bgs to 11' bgs. A 20 mil poly liner was installed at 11' bgs. This poly liner will inhibit the vertical transmissivity of the soil constituents and ensure no detrimental effects to the groundwater. The remediated soil was placed in the excavation in 3' lifts. A monitor well was installed 20' down gradient of the old junction box site to monitor groundwater constituents. An annual report with sampling results will be sent to the NMOCD. This site will be seeded in the spring of 2003. This site is no longer a junction and no box is required.

TPH/CHLORIDE FIELD TESTS

LOCATION	Depth	TPH	mg/kg
SIDEWALLS	15'	22	2350
BOTTOM	15'	91	1470
Remediated Soil	comp	82	400
Vertical Trench	3'	5920	N/A
	11'	22,480	N/A
	15'	904	N/A
	17'	68	2270
	23'	N/A	2670
	27'	N/A	3100
	30	N/A	5950

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY
KNOWLEDGE AND BELIEF.

DATE October 30, 2002 PRINTED NAME D. E. Anderson

SIGNATURE *D. E. Anderson* TITLE Project Leader - Environmental



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: DONNIE ANDERSON
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 11/11/02
Reporting Date: 11/14/02
Project Number: NOT GIVEN
Project Name: I-27
Project Location: NOT GIVEN

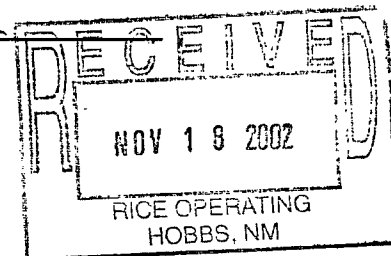
Sampling Date: 11/11/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		11/13/02	11/13/02	11/13/02	11/13/02
H7200-1	I-27	<0.002	<0.002	<0.002	<0.006
Quality Control		0.108	0.102	0.102	0.300
True Value QC		0.100	0.100	0.100	0.300
% Recovery		108	102	102	100
Relative Percent Difference		1.4	7.4	8.2	9.5

METHOD: EPA SW-846 8260

Bryant J. Carter
Chemist

11/14/02
Date



PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or third parties arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
BD	I-27	I	27	21S	37E	LEA	Length	Width	Depth

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER _____ CITY OF EUNICE _____ OTHER _____

Depth to Groundwater _____ 45' _____ feet NMOC SITE ASSESSMENT RANKING SCORE: _____ 20 _____

Date Started _____ 10/7/2002 _____ Date Completed _____ 10/15/2002 _____ OCD Witness _____ NO _____

Soil Excavated _____ 2300 _____ cubic yards Excavation Length _____ 90 _____ Width _____ 60 _____ Depth _____ 15 _____ feet

Soil Disposed _____ 0 _____ cubic yards Offsite Facility _____ Location _____

FINAL ANALYTICAL RESULTS: Sample Date _____ 10/10/2002 _____ Sample Depth _____ 15' _____

Procure 5-point composite sample of bottom and 4-point composite sample of sidewalls.
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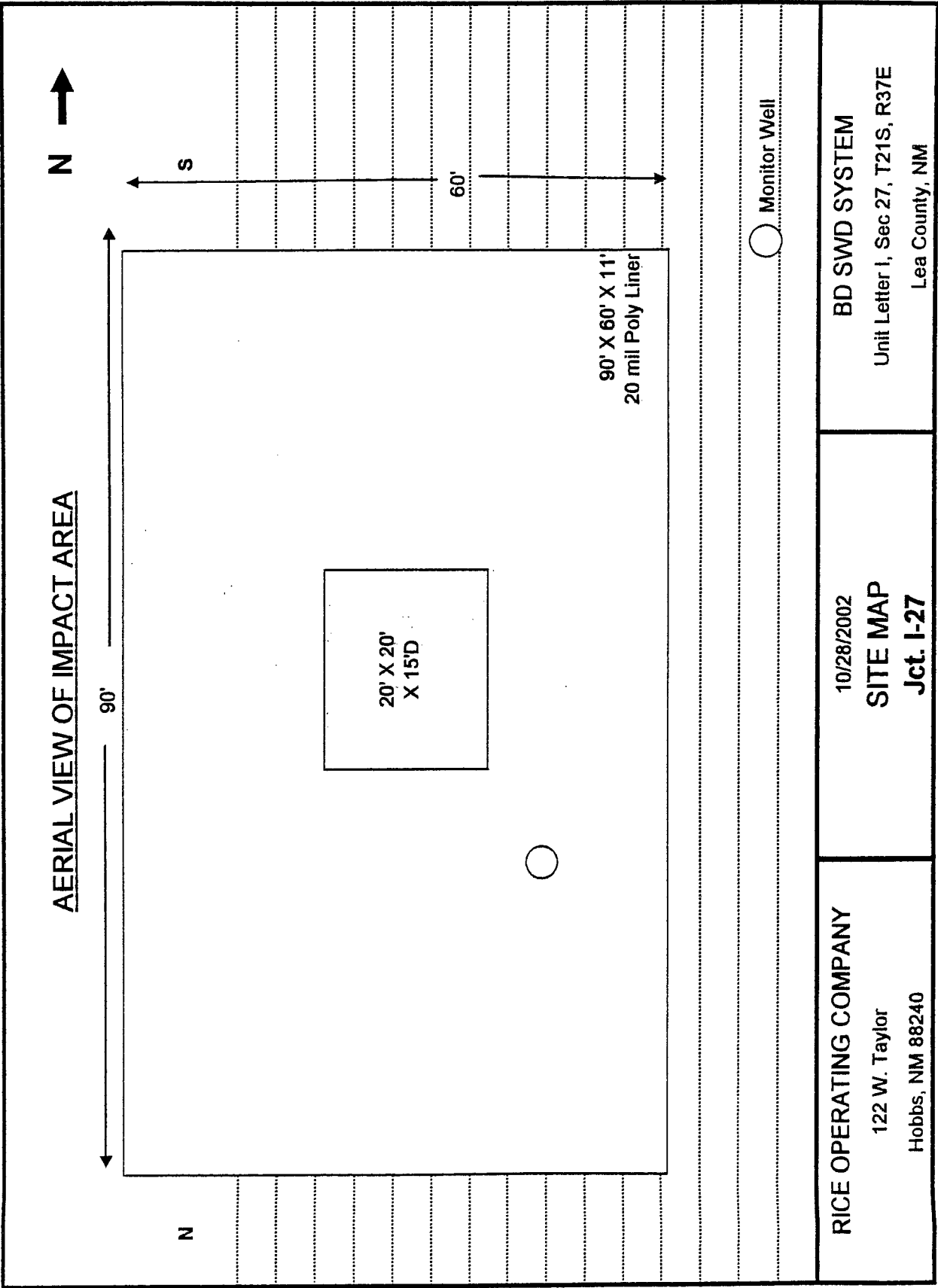
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	23'	N/A	2670
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	30	N/A	5950

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KNOWLEDGE AND BELIEF.

DATE _____ October 30, 2002 _____ PRINTED NAME _____ D. E. Anderson _____

SIGNATURE _____ TITLE _____ Project Leader - Environmental _____



RICE OPERATING COMPANY

122 W. Taylor
Hobbs, NM 88240

10/28/2002

SITE MAP

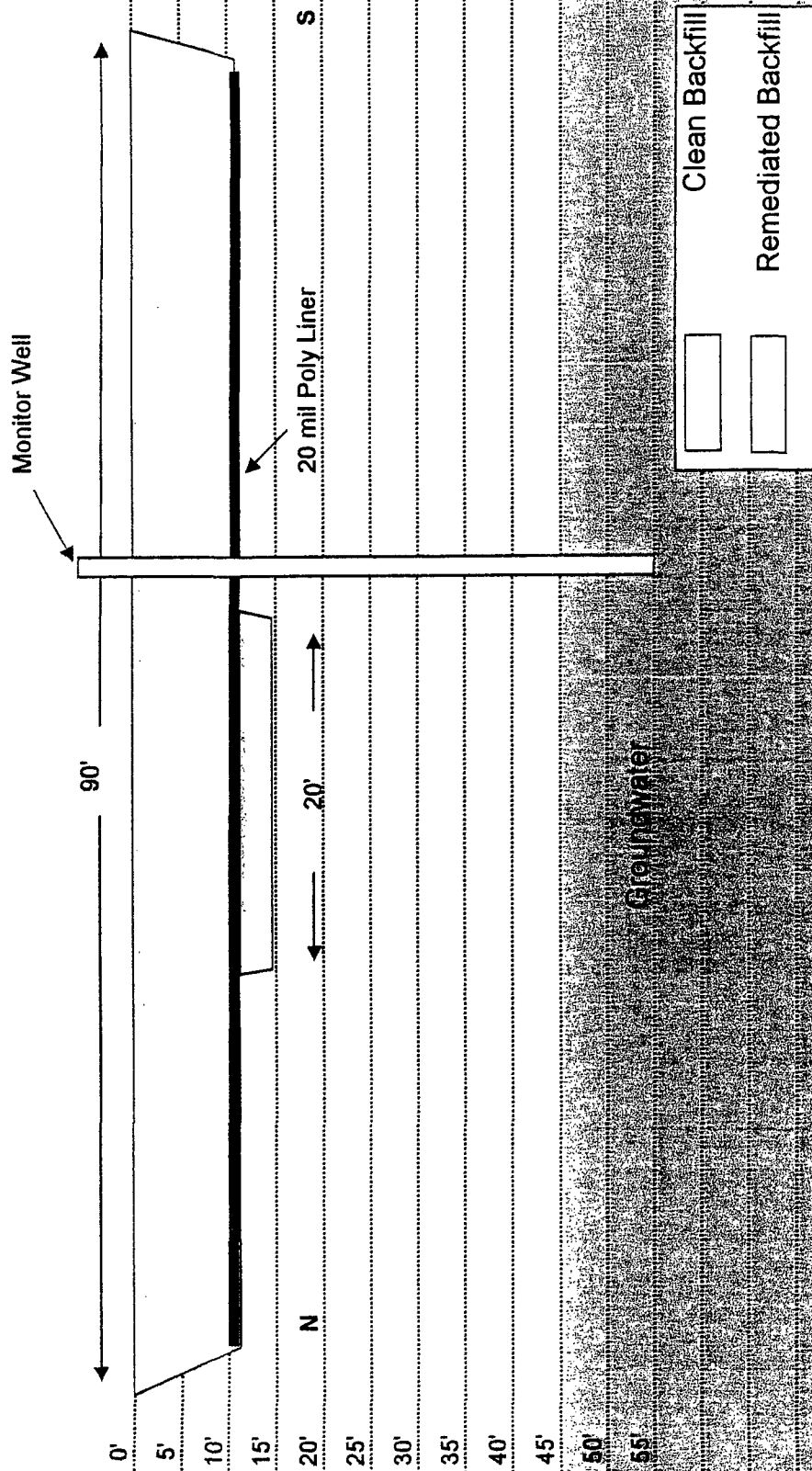
Jct. I-27

BD SWD SYSTEM

Unit Letter I, Sec 27, T21S, R37E

Lea County, NM

PROFILE VIEW OF IMPACT AREA



RICE OPERATING COMPANY

122 W. Taylor
Hobbs, NM 88240

10/28/2002

SITE MAP

Jct. I-27

BD SWD SYSTEM

Unit Letter I, Sec 27, T21S, R37E

Lea County, NM

