

AP - 50

ANNUAL MONITORING REPORT

YEAR(S):
2002

RICE Operating Company

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

CERTIFIED MAIL

RETURN RECEIPT NO. 7002 2410 0000 4940 0995

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

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.

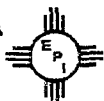
RICE OPERATING COMAPANY

Kristin Farris

Kristin Farris
Project Scientist

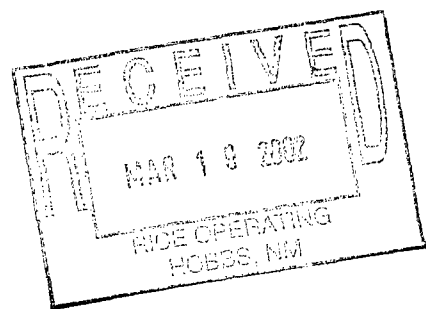
Enclosures: Summary table & graph for each site
 Analytical results

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



March 10, 2002

Mr. Donnie Anderson
Rice Operating Company
122 West Taylor
Hobbs, New Mexico 88240



Subject: Zachary Hinton #5 and A-20 Monitor Well Sampling

Dear Mr. Anderson,

Included below is the development and sampling information collected by Environmental Plus, Inc. (EPI) on 3-5-02 for the Zachary Hinton and A-20 monitor wells.

RICE OPERATING
ZACHARY HINTON AND A-20 MONITOR WELLS

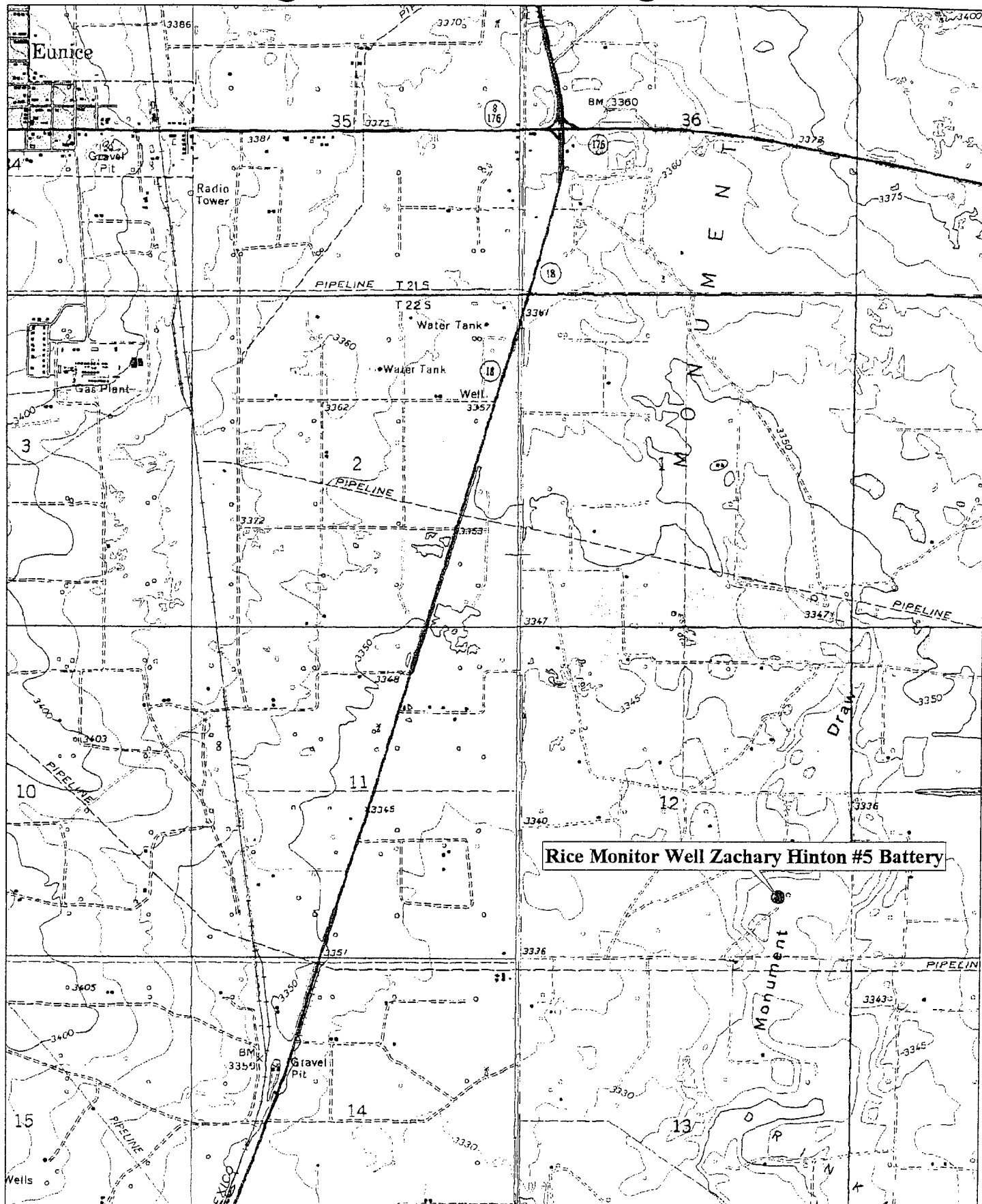
MONITOR WELL ID	DATE	WELL CASING INSIDE DIAMETER INCHES	WATER LEVEL FROM TOP OF CASING FEET	TOTAL DEPTH FROM TOP OF CASING FEET	BORE WATER VOLUME GALLONS	PURGE VOLUME GALLONS	PURGE WATER OBSERVATIONS
ZACHARY HINTON	3/5/2002	2	56.1	67.0	1.8	5.3	NO OIL SHEEN ON PURGE WATER
A-20	3/5/2002	2	24.7	38.4	2.2	6.7	OIL SHEEN ON PURGE WATER

If you have any questions or require more information please call Mr. Ben Miller or myself at the office or at 505.390.0288 or 505.390.7864, respectively.

Sincerely,

Pat McCasland
EPI Technical Services Manager

cc: Ben Miller, EPI Vice President and General Manager
Sherry Miller, EPI President
file





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:

Receiving Date: 03/05/02
Reporting Date: 03/08/02
Project Owner: RICE
Project Name: ZACHARY HINTON #5
Project Location: NOT GIVEN

Sampling Date: 03/05/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: HM

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (mS/cm)	T-Alkalinity (mgCaCO ₃ /L)
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ANALYSIS DATE:	03/08/02	03/08/02	03/08/02	03/08/02	03/08/02	03/08/02	03/08/02
H6562-1 WROZH53502MW	521	162	75	20.4	4098		191
Quality Control	NR	55	49	5.27	1489		NR
True Value QC	NR	50	50	5.00	1413		NR
% Recovery	NR	110	97.2	105	105		NR
Relative Percent Difference	NR	0	6.0	0	0.3		NR

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
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	Cl ⁻ (mg/L)	SO ₄ (mg/L)	CO ₃ (mg/L)	HCO ₃ (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:	03/08/02	03/08/02	03/08/02	03/08/02	03/08/02	03/06/02
H6562-1 WROZH53502MW	1000	263	0	233	7.782	2403
Quality Control	1040	52.66	NR	975	7.11	NR
True Value QC	1000	50.00	NR	1000	7.00	NR
% Recovery	104	105	NR	97.5	102	NR
Relative Percent Difference	2.0	0.6	NR	2.7	0.4	5.1

METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
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Amy Hill
Chemist

3-8-02
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 successors 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.

H6562



ARDINAL LABORATORIES

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

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

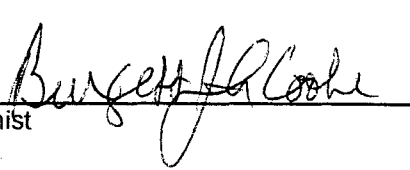
ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: DONNIE ANDERSON
122 W. TAYLOR
HOBBS, NM 88240
FAX TO:

Receiving Date: 03/05/02
Reporting Date: 03/06/02
Project Owner: RICE OPERATING
Project Name: ZACHARY HINTON #5
Project Location: NOT GIVEN

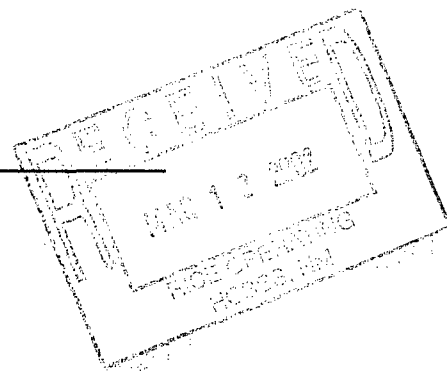
Sampling Date: 03/05/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		03/05/02	03/05/02	03/05/02	03/05/02
H6562-1	WROZH53502MW	<0.002	<0.002	<0.002	<0.006
Quality Control		0.098	0.096	0.092	0.260
True Value QC		0.100	0.100	0.100	0.300
% Recovery		97.6	96.0	91.7	86.7
Relative Percent Difference		2.5	4.1	9.1	15.2

METHOD: EPA SW-846 8260


Chemist

3/6/02
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 successors 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.

H6562B.XLS

101 East Marland, Hobbs, NM 88240
505-393-2326 Fax 505-393-2476

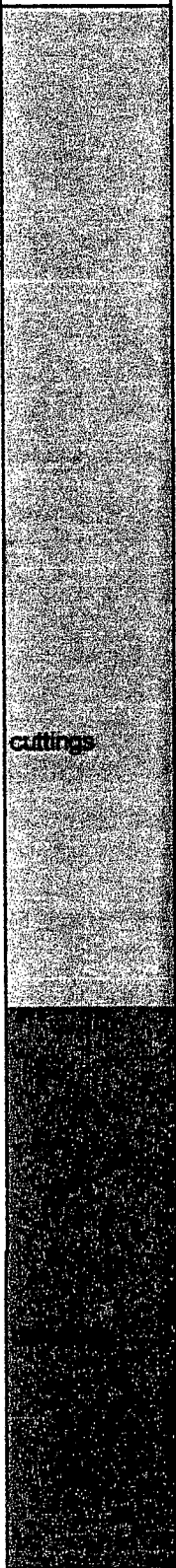
2111 Beechwood, Abilene, TX 79603
915-673-7001 Fax 915-673-7020

[illegible]

Sampler Relinquished: 	Received By: Date: 3-5-02 Time: 12:30		Checked By:
	Relinquished by: Date: 3-5-02 Time: 12:50		
Delivered by Sampler	Sample Cool & Intact Yes ☒ No ☐		Delivered by Sampler

DRILLING LOG		Site Name/Location			Logged by: DEA	
RICE Operating Company 122 West Taylor Hobbs, New Mexico 88240 Phone: (505) 393-9174 Fax: (505) 397-1471		Zacary Hinton EOL 12-T22S-R37E Blinebry-Drinkard SWD System Lea County, NM			Well No: MW1 Date Drilled: 2/28/02 Driller: Eades Well Depth: 83' Boring Depth: 83' Well Material: PVC Casing Length: 63' Boring Diameter: 4.5" Casing Size: 2" Screen Length: 15' Drilling Method: Air Rotary Slot Size: N/A	
				Construction: Sand and bentonite above screen.		

TEST

DEPTH	SUBSURFACE LITHOLOGY	SAMPLE TYPE	(ppm)	REMARKS	Boring
0	Ground surface		CI		
1	Red Sand	Grab	700	Field Test	
2					
3	Sand and caliche streaks				
4					
5		Grab	1500	Field Test	
6					
7					
8					
9					
10		Grab	2000	Field Test	
11					
12					
13	Sandy brown clay				
14					
15		Grab	2450	Field Test	
16					
17					
18					
19	Tan sand				
20		Grab	3000	Field Test	
21					
22					
23					
24	Red Sand				
25		Grab	1750	Field Test	
26					
27					
28					
29					
30	Tan sand	Grab	3270	Field Test	
31					
32					
33					
34					
35		Grab	8160	Field Test	
36					
37					
38					
39					
40		Grab	5300	Field Test	
41					
42					
43					
44					
45		Grab	5000	Field Test	
46					
47					
48					
49					
50		Grab	6410	Field Test	

51				
52				
53				
54				
55		Grab	500	Field Test
56	Gray sand			
57				
58				
59				
60	Red sandy clay	Grab	89	Lab Test
61				
62	Tan sandy clay			
63				

Water sample taken 3/5/02 results: Chlorides 1000 ppm, TDS 2403 ppm.

ANALYTICAL REPORT

Prepared for:

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

Project: Zachary Hinton jct.

PO#: 505

Order#: G0204937

Report Date: 11/13/2002

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#: G0204937
Project: None Given
Project Name: Zachary Hinton 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>
0204937-01	MW 1	WATER	11/6/02 10:15	11/6/02 19:30	See COC	See COC
<u>Lab Testing:</u>		Rejected: No	Temp: 4 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#: G0204937
Project: None Given
Project Name: Zachary Hinton jct.
Location: BD

Lab ID: 0204937-01
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>		
0003670-02		11/7/02	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	89%	80	120
Bromofluorobenzene	90%	80	120

Approval:

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

Date

DL = Diluted out 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#: G0204937
Project: None Given
Project Name: Zachary Hinton jct.
Location: BD

Lab ID: 0204937-01
Sample ID: MW 1

Anions

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Bicarbonate Alkalinity	180	mg/L	1	2.00	310.1	11/7/02	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	11/7/02	SB
Chloride	408	mg/L	1	5.00	9253	11/12/02	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.10	310.1	11/7/02	SB
SULFATE, 375.4	240	mg/L	5	2.5	375.4	11/12/02	SB

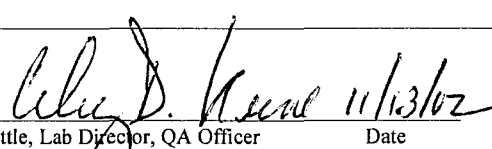
Cations

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Calcium	84.2	mg/L	100	1.0	6010B	11/11/02	SM
Magnesium	4.61	mg/L	10	0.010	6010B	11/11/02	SM
Potassium	9.58	mg/L	10	0.50	6010B	11/11/02	SM
Sodium	181	mg/L	100	1.0	6010B	11/11/02	SM

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Total Dissolved Solids (TDS)	1290	mg/L	1	5.0	160.1	11/7/02	TAL

Approval:


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

Date

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#: G0204937

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Benzene-mg/L		0003670-02			<0.001	
Ethylbenzene-mg/L		0003670-02			<0.001	
Toluene-mg/L		0003670-02			<0.001	
p/m-Xylene-mg/L		0003670-02			<0.001	
o-Xylene-mg/L		0003670-02			<0.001	
CONTROL						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Benzene-mg/L		0003670-03		0.1	0.096	96.%
Ethylbenzene-mg/L		0003670-03		0.1	0.099	99.%
Toluene-mg/L		0003670-03		0.1	0.098	98.%
p/m-Xylene-mg/L		0003670-03		0.2	0.209	104.5%
o-Xylene-mg/L		0003670-03		0.1	0.101	101.%
CONTROL DUP						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Benzene-mg/L		0003670-04		0.1	0.098	98.%
Ethylbenzene-mg/L		0003670-04		0.1	0.101	101.%
Toluene-mg/L		0003670-04		0.1	0.100	100.%
p/m-Xylene-mg/L		0003670-04		0.2	0.213	106.5%
o-Xylene-mg/L		0003670-04		0.1	0.102	102.%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Benzene-mg/L		0003670-05		0.1	0.100	100.%
Ethylbenzene-mg/L		0003670-05		0.1	0.102	102.%
Toluene-mg/L		0003670-05		0.1	0.102	102.%
p/m-Xylene-mg/L		0003670-05		0.2	0.216	108.%
o-Xylene-mg/L		0003670-05		0.1	0.103	103.%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0204937

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0003690-01			<2.00	
Carbonate Alkalinity-mg/L		0003691-01			<0.10	
Chloride-mg/L		0003720-01			<5.00	
Hydroxide Alkalinity-mg/L		0003692-01			<0.10	
SULFATE, 375.4-mg/L		0003722-01			<0.50	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0204935-01	422		423	0.2%
Carbonate Alkalinity-mg/L		0204935-01	0		<0.10	0.0%
Hydroxide Alkalinity-mg/L		0204935-01	0		<0.10	0.0%
SULFATE, 375.4-mg/L		0204935-01	116		120	3.4%
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Chloride-mg/L		0204935-01	833	500	1330	99.4%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Chloride-mg/L		0204935-01	833	500	1320	97.4%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0003690-04		0.05	0.0496	99.2%
Carbonate Alkalinity-mg/L		0003691-04		0.05	0.0496	99.2%
Chloride-mg/L		0003720-04		5000	4960	99.2%
Hydroxide Alkalinity-mg/L		0003692-04		0.05	0.0496	99.2%
SULFATE, 375.4-mg/L		0003722-04		50	49.0	98.0%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0204937

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0003711-02			<0.010	
Magnesium-mg/L		0003711-02			<0.001	
Potassium-mg/L		0003711-02			<0.050	
Sodium-mg/L		0003711-02			<0.010	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0204950-02	314		312	0.6%
Magnesium-mg/L		0204950-02	12.8		12.5	2.4%
Potassium-mg/L		0204950-02	17.2		16.8	2.4%
Sodium-mg/L		0204950-02	468		472	0.9%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0003711-05		2	2.01	100.5%
Magnesium-mg/L		0003711-05		2	1.90	95.5%
Potassium-mg/L		0003711-05		2	1.79	89.5%
Sodium-mg/L		0003711-05		2	1.79	89.5%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0204937

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0003668-01			<5.0		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0204936-01	17400		17200		1.2%

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: Zachary Hinton 0000 jct.

Project Manager: Kristen Farris

Company Name RICE Operating

Company Address: 123 W. Taylor

City/State/Zip: Hs Hs N/M 88240

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

Sampler Signature: Kevin Lewis

Fax No: (505) 397-1471

Telephone No. (505) 393-9174

Sampler Signature: Kristin Davis

[illegible]

ANALYTICAL REPORT

Prepared for:

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

Project: B.D. Zach Hinton

PO#:

Order#: G0204219

Report Date: 08/21/2002

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#: G0204219
Project:
Project Name: B.D. Zach Hinton
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>
0204219-01	MW-1	WATER	8/13/02 10:50	8/14/02 20:00	40 ml glass	Ice, HCl
<u>Lab Testing:</u>		Rejected: No	Temp:	4.0 C		
8021B/5030 BTEX						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204219
Project:
Project Name: B.D. Zach Hinton
Location: None Given

Lab ID: 0204219-01
Sample ID: MW-1

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0002915-02		8/16/02 15:34	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

Approval:

Cele D. Keene 8/22/02
Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

Date

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0204219

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Benzene-mg/L		0002915-02			<0.001	
Ethylbenzene-mg/L		0002915-02			<0.001	
Toluene-mg/L		0002915-02			<0.001	
p/m-Xylene-mg/L		0002915-02			<0.001	
o-Xylene-mg/L		0002915-02			<0.001	
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Benzene-mg/L		0204268-01	0	0.1	0.095	95.%
Ethylbenzene-mg/L		0204268-01	0	0.1	0.097	97.%
Toluene-mg/L		0204268-01	0	0.1	0.099	99.%
p/m-Xylene-mg/L		0204268-01	0	0.2	0.201	100.5%
o-Xylene-mg/L		0204268-01	0	0.1	0.094	94.%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Benzene-mg/L		0204268-01	0	0.1	0.099	99.% 4.1%
Ethylbenzene-mg/L		0204268-01	0	0.1	0.101	101.% 4.%
Toluene-mg/L		0204268-01	0	0.1	0.103	103.% 4.%
p/m-Xylene-mg/L		0204268-01	0	0.2	0.210	105.% 4.4%
o-Xylene-mg/L		0204268-01	0	0.1	0.100	100.% 6.2%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Benzene-mg/L		0002915-05		0.1	0.104	104.%
Ethylbenzene-mg/L		0002915-05		0.1	0.107	107.%
Toluene-mg/L		0002915-05		0.1	0.106	106.%
p/m-Xylene-mg/L		0002915-05		0.2	0.222	111.%
o-Xylene-mg/L		0002915-05		0.1	0.106	106.%

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

Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Kristin Farris

Project Name: B.D. Zach Hinton

Company Name Rice Operating Co.

Project #:

Company Address: _____

Project Loc:

City/State/Zip:

PO#

Telephone No:

Fax No:

Sampler Signature:

[illegible]

ENVIRONMENTAL LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

REMIT TO:
12600 West I-20 East
Odessa, Texas 79765
(915) 563-1800
Fax (915) 563-1713

Invoice

BILL TO
RICE OPERATING CO. KRISTIN FARRIS 122 WEST TAYLOR HOBBS, NM 88240

DATE	INVOICE NO.
8/25/2002	14779

TERMS	P.O. NO.	PROJECT
Net 15		BD ZACH HINTON

ITEM	DESCRIPTION	QTY	RATE	AMOUNT
BTEX	ELT#0204219-01 BENZENE, TOLUENE, ETHYLBENZENE, XYLENE	1	65.00	65.00
505-9447 Kristin Farris 830-02 RECEIVED AUG 28 2002 RICE OPERATING HOBBS, NM				
We appreciate your business.			Total	\$65.00

DRILLING LOG		Site Name/Location		Logged by: DEA	
RICE Operating Company 122 West Taylor Hobbs, New Mexico 88240 Phone: (505) 393-9174 Fax (505) 397-1471		Zacary Hinton EOL 12-T22S-R37E Blinebry-Drinkard SWD System Lea County, NM		Well No: MW1	Date Drilled: 2/28/02
		Well Depth: 63'	Boring Depth: 63'	Driller: Eades	Construction:
		Casing Length: 63'	Boring Diameter: 4.5"	Well Material: PVC	Sand and bentonite above screen.
		Screen Length: 15'	Drilling Method: Air Rotary	Casing Size: 2"	Slot Size: N/A

TEST					
DEPTH	SUBSURFACE LITHOLOGY	SAMPLE TYPE	(ppm)	REMARKS	Boring
0	Ground surface		CI		
1	Red Sand	Grab	700	Field Test	
2					
3	Sand and caliche streaks				
4					
5		Grab	1500	Field Test	
6					
7					
8					
9					
10		Grab	2000	Field Test	
11					
12					
13	Sandy brown clay				
14					
15		Grab	2450	Field Test	
16					
17					
18					
19	Tan sand				
20		Grab	3000	Field Test	
21					
22					
23					
24	Red Sand				
25		Grab	1750	Field Test	
26					
27					
28					
29					
30	Tan sand	Grab	3270	Field Test	
31					
32					
33					
34					
35		Grab	8160	Field Test	
36					
37					
38					
39					
40		Grab	5300	Field Test	
41					
42					
43					
44					
45		Grab	5000	Field Test	
46					
47					
48					
49					
50		Grab	6410	Field Test	

51				
52				
53				
54				
55		Grab	500	Field Test
56	Gray sand			
57				
58				
59				
60	Red sandy clay	Grab	89	Lab Test
61				
62	Tan sandy clay			
63				

Water sample taken 3/5/02 results: Chlorides 1000 ppm, TDS 2403 ppm.

BD Jct. O-12 (Zachary Hinton)
O, 12, 22S, 37E

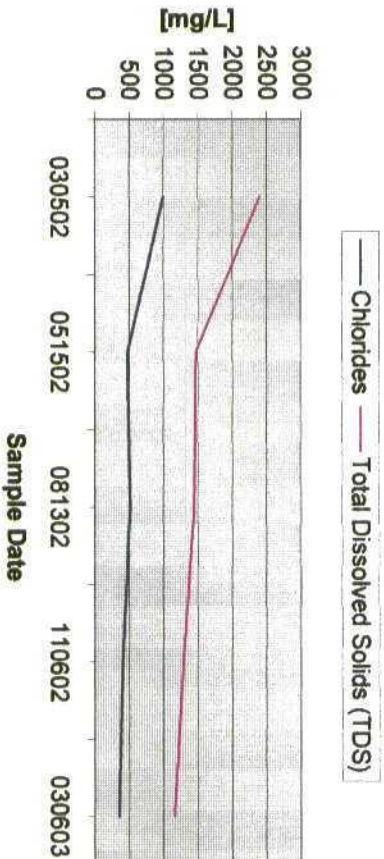
Rice Operating Co. Monitor Well Data Sheet

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	56.10	67.00	1,800	5.30	030502	1236	1000	2403	<0.002	<0.002	<0.002	<0.006
1	55.98	66.08	1,620	4.00	051502	1000	478	1470	<0.001	<0.001	<0.001	<0.001
1	56.10	66.7	1,700	5.00	081302	1050	514	1450	<0.001	<0.001	<0.001	<0.001
1	56.14	66.65	1,682	5.25	110602	1015	408	1290	<0.001	<0.001	<0.001	<0.001
1	56.07	66.54	1,670	5.00	030603	1345	354	1160	<0.001	<0.001	<0.001	<0.001

sandy
red & silty

BD Zachary Hinton Jct. Monitor Well



ANALYTICAL REPORT

Prepared for:

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

Project: BD O-12
PO#:
Order#: G0305908
Report Date: 03/14/2003

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#: G0305908
Project:
Project Name: BD O-12
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>
0305908-01	MW 1	WATER	3/6/03 13:45	3/6/03 18:50	See COC	See COC
<u>Lab Testing:</u>		Rejected: No	Temp: 4 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#: G0305908
Project:
Project Name: BD O-12
Location: None Given

Lab ID: 0305908-01
Sample ID: MW 1

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
Blank	Prepared	Analyzed	Amount	Factor		
0004923-02		3/12/03 21:35	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	<0.001	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	92%	80	120
Bromofluorobenzene	103%	80	120

Approval: Raland K. Tuttle 3-18-03
Raland K. Tuttle, Lab Director, QA Officer Date
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#: G0305908
Project:
Project Name: BD O-12
Location: None Given

Lab ID: 0305908-01
Sample ID: MW 1

Cations

Parameter	Result	Units	Dilution Factor	RL	Method	Date Prepared	Date Analyzed	Analyst
Calcium	92.2	mg/L	10	0.10	6010B	03/14/2003	3/14/03	SM
Magnesium	46.8	mg/L	10	0.010	6010B	03/14/2003	3/14/03	SM
Potassium	9.73	mg/L	10	0.50	6010B	03/14/2003	3/14/03	SM
Sodium	235	mg/L	100	1.0	6010B	03/14/2003	3/14/03	SM

Approval: *Raland K. Tuttle* 3-18-03
Raland K. Tuttle, Lab Director, QA Officer
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#: G0305908
Project:
Project Name: BD O-12
Location: None Given

Lab ID: 0305908-01
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	182	mg/L	1	2.00	310.1	3/7/03	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	3/7/03	SB
Chloride	354	mg/L	1	5.00	9253	3/7/03	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.10	310.1	3/7/03	SB
SULFATE, 375.4	377	mg/L	10	5.0	375.4	3/13/03	SB

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)	1160	mg/L	1	5.0	160.1	3/11/03	TAL

Approval:

Raland K. Tuttle 3-18-03
Raland K. Tuttle, Lab Director, QA Officer
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

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0305908

BLANK							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0004923-02			<0.001		
Toluene-mg/L		0004923-02			<0.001		
Ethylbenzene-mg/L		0004923-02			<0.001		
p/m-Xylene-mg/L		0004923-02			<0.001		
o-Xylene-mg/L		0004923-02			<0.001		
CONTROL							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0004923-03		0.1	0.089	89.9%	
Toluene-mg/L		0004923-03		0.1	0.092	92.9%	
Ethylbenzene-mg/L		0004923-03		0.1	0.094	94.9%	
p/m-Xylene-mg/L		0004923-03		0.2	0.197	98.5%	
o-Xylene-mg/L		0004923-03		0.1	0.098	98.9%	
CONTROL DUP							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0004923-04		0.1	0.089	89.9%	0.0%
Toluene-mg/L		0004923-04		0.1	0.089	89.9%	3.3%
Ethylbenzene-mg/L		0004923-04		0.1	0.094	94.9%	0.0%
p/m-Xylene-mg/L		0004923-04		0.2	0.194	97.9%	1.5%
o-Xylene-mg/L		0004923-04		0.1	0.099	99.9%	1.0%
SRM							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0004923-05		0.1	0.085	85.9%	
Toluene-mg/L		0004923-05		0.1	0.086	86.9%	
Ethylbenzene-mg/L		0004923-05		0.1	0.088	88.9%	
p/m-Xylene-mg/L		0004923-05		0.2	0.182	91.9%	
o-Xylene-mg/L		0004923-05		0.1	0.093	93.9%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0305908

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Bicarbonate Alkalinity-mg/L		0004888-01			<2.00	
Carbonate Alkalinity-mg/L		0004892-01			<0.10	
Chloride-mg/L		0004891-01			<5.00	
Hydroxide Alkalinity-mg/L		0004890-01			<0.10	
SULFATE, 375.4-mg/L		0004928-01			<0.50	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Bicarbonate Alkalinity-mg/L		0305907-01	206		207	0.5%
Carbonate Alkalinity-mg/L		0305907-01	0		<0.10	0.0%
Hydroxide Alkalinity-mg/L		0305907-01	0		<0.10	0.0%
SULFATE, 375.4-mg/L		0305907-01	1020		988	3.2%
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Chloride-mg/L		0305907-01	2600	1000	3580	98.0%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Chloride-mg/L		0305907-01	2600	1000	3600	100.0% 0.6%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery RPD
Bicarbonate Alkalinity-mg/L		0004888-04		0.05	0.0496	99.2%
Carbonate Alkalinity-mg/L		0004892-04		0.05	0.0496	99.2%
Chloride-mg/L		0004891-04		5000	4963	99.3%
Hydroxide Alkalinity-mg/L		0004890-04		0.05	0.0496	99.2%
SULFATE, 375.4-mg/L		0004928-04		50	49.0	98.0%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0305908

BLANK							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0004936-02			<0.010		
Magnesium-mg/L		0004936-02			<0.001		
Potassium-mg/L		0004936-02			<0.050		
Sodium-mg/L		0004936-02			<0.010		
DUPLICATE							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0305907-01	360		364		1.1%
Magnesium-mg/L		0305907-01	160		164		2.5%
Potassium-mg/L		0305907-01	24.4		24.8		1.6%
Sodium-mg/L		0305907-01	1230		1170		5.0%
SRM							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0004936-05		2	2.11	105.5%	
Magnesium-mg/L		0004936-05		2	2.08	104.0%	
Potassium-mg/L		0004936-05		2	1.84	92.0%	
Sodium-mg/L		0004936-05		2	1.93	96.5%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0305908

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0004906-01			<5.0		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0305907-01	5340		5370		0.6%

12600 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:

172 W. Taylor

City/State/Zip:

Hobbs, NM 88240

Telephone No. (

(505) 393-9174

Sampler Signature:

Joe Frost

Fax No:

(505) 397-1471

[illegible]

ANALYTICAL REPORT

Prepared for:

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

Project: Zachary Hinton jct.

PO#: 505

Order#: G0204937

Report Date: 11/13/2002

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#: G0204937
Project: None Given
Project Name: Zachary Hinton 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>
0204937-01	MW 1	WATER	11/6/02 10:15	11/6/02 19:30	See COC	See COC
<u>Lab Testing:</u>		Rejected: No	Temp: 4 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#: G0204937
Project: None Given
Project Name: Zachary Hinton jct.
Location: BD

Lab ID: 0204937-01

Sample ID: MW 1

8021B/5030 BTEX

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
0003670-02		11/7/02	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	89%	80	120
Bromofluorobenzene	90%	80	120

Approval:

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#: G0204937
Project: None Given
Project Name: Zachary Hinton jct.
Location: BD

Lab ID: 0204937-01
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	180	mg/L	1	2.00	310.1	11/7/02	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	11/7/02	SB
Chloride	408	mg/L	1	5.00	9253	11/12/02	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.10	310.1	11/7/02	SB
SULFATE, 375.4	240	mg/L	5	2.5	375.4	11/12/02	SB

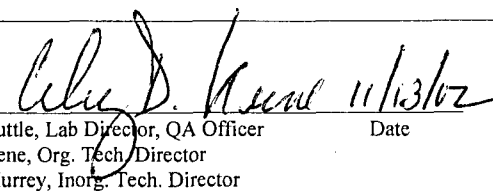
Cations

<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>
Calcium	84.2	mg/L	100	1.0	6010B	11/11/02	SM
Magnesium	4.61	mg/L	10	0.010	6010B	11/11/02	SM
Potassium	9.58	mg/L	10	0.50	6010B	11/11/02	SM
Sodium	181	mg/L	100	1.0	6010B	11/11/02	SM

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)	1290	mg/L	1	5.0	160.1	11/7/02	TAL

Approval:


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

Date

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#: G0204937

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003670-02			<0.001		
Ethylbenzene-mg/L		0003670-02			<0.001		
Toluene-mg/L		0003670-02			<0.001		
p/m-Xylene-mg/L		0003670-02			<0.001		
o-Xylene-mg/L		0003670-02			<0.001		
CONTROL	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003670-03		0.1	0.096	96.%	
Ethylbenzene-mg/L		0003670-03		0.1	0.099	99.%	
Toluene-mg/L		0003670-03		0.1	0.098	98.%	
p/m-Xylene-mg/L		0003670-03		0.2	0.209	104.5%	
o-Xylene-mg/L		0003670-03		0.1	0.101	101.%	
CONTROL DUP	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003670-04		0.1	0.098	98.%	2.1%
Ethylbenzene-mg/L		0003670-04		0.1	0.101	101.%	2.%
Toluene-mg/L		0003670-04		0.1	0.100	100.%	2.%
p/m-Xylene-mg/L		0003670-04		0.2	0.213	106.5%	1.9%
o-Xylene-mg/L		0003670-04		0.1	0.102	102.%	1.%
SRM	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003670-05		0.1	0.100	100.%	
Ethylbenzene-mg/L		0003670-05		0.1	0.102	102.%	
Toluene-mg/L		0003670-05		0.1	0.102	102.%	
p/m-Xylene-mg/L		0003670-05		0.2	0.216	108.%	
o-Xylene-mg/L		0003670-05		0.1	0.103	103.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0204937

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0003690-01			<2.00		
Carbonate Alkalinity-mg/L		0003691-01			<0.10		
Chloride-mg/L		0003720-01			<5.00		
Hydroxide Alkalinity-mg/L		0003692-01			<0.10		
SULFATE, 375.4-mg/L		0003722-01			<0.50		
DUPLICATE		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0204935-01	422		423		0.2%
Carbonate Alkalinity-mg/L		0204935-01	0		<0.10		0.0%
Hydroxide Alkalinity-mg/L		0204935-01	0		<0.10		0.0%
SULFATE, 375.4-mg/L		0204935-01	116		120		3.4%
MS		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Chloride-mg/L		0204935-01	833	500	1330	99.4%	
MSD		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Chloride-mg/L		0204935-01	833	500	1320	97.4%	0.8%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Bicarbonate Alkalinity-mg/L		0003690-04		0.05	0.0496	99.2%	
Carbonate Alkalinity-mg/L		0003691-04		0.05	0.0496	99.2%	
Chloride-mg/L		0003720-04		5000	4960	99.2%	
Hydroxide Alkalinity-mg/L		0003692-04		0.05	0.0496	99.2%	
SULFATE, 375.4-mg/L		0003722-04		50	49.0	98.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0204937

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0003711-02			<0.010		
Magnesium-mg/L		0003711-02			<0.001		
Potassium-mg/L		0003711-02			<0.050		
Sodium-mg/L		0003711-02			<0.010		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0204950-02	314		312		0.6%
Magnesium-mg/L		0204950-02	12.8		12.5		2.4%
Potassium-mg/L		0204950-02	17.2		16.8		2.4%
Sodium-mg/L		0204950-02	468		472		0.9%
SRM	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0003711-05		2	2.01	100.5%	
Magnesium-mg/L		0003711-05		2	1.90	95.5%	
Potassium-mg/L		0003711-05		2	1.79	89.5%	
Sodium-mg/L		0003711-05		2	1.79	89.5%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0204937

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0003668-01			<5.0		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0204936-01	17400		17200		1.2%

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: Zachary Hinton jct.

Project Manager:

Kristin Farris

Company Name

RICE Operating

Company Address:

122 W. Taylor

City/State/Zip:

H0665, NM 88240

Telephone No. (

(505) 393-9174

Fax No:

(505) 397-1471

Sampler Signature:

Christian Jorgensen

[illegible]

ANALYTICAL REPORT

Prepared for:

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

Project: B.D. Zach Hinton

PO#:

Order#: G0204219

Report Date: 08/21/2002

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#: G0204219
Project:
Project Name: B.D. Zach Hinton
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>
0204219-01	MW-1	WATER	8/13/02 10:50	8/14/02 20:00	40 ml glass	Ice, HCl
<u>Lab Testing:</u>		Rejected: No	Temp:	4.0 C		
8021B/5030 BTEX						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204219
Project:
Project Name: B.D. Zach Hinton
Location: None Given

Lab ID: 0204219-01
Sample ID: MW-1

8021B/5030 BTEX

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0002915-02		8/16/02 15:34	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

Approval:

Cele D. Keene 8/22/02
Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

Date

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0204219

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Benzene-mg/L		0002915-02			<0.001	
Ethylbenzene-mg/L		0002915-02			<0.001	
Toluene-mg/L		0002915-02			<0.001	
p/m-Xylene-mg/L		0002915-02			<0.001	
o-Xylene-mg/L		0002915-02			<0.001	
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Benzene-mg/L		0204268-01	0	0.1	0.095	95.%
Ethylbenzene-mg/L		0204268-01	0	0.1	0.097	97.%
Toluene-mg/L		0204268-01	0	0.1	0.099	99.%
p/m-Xylene-mg/L		0204268-01	0	0.2	0.201	100.5%
o-Xylene-mg/L		0204268-01	0	0.1	0.094	94.%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Benzene-mg/L		0204268-01	0	0.1	0.099	99.%
Ethylbenzene-mg/L		0204268-01	0	0.1	0.101	101.%
Toluene-mg/L		0204268-01	0	0.1	0.103	103.%
p/m-Xylene-mg/L		0204268-01	0	0.2	0.210	105.%
o-Xylene-mg/L		0204268-01	0	0.1	0.100	100.%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Benzene-mg/L		0002915-05		0.1	0.104	104.%
Ethylbenzene-mg/L		0002915-05		0.1	0.107	107.%
Toluene-mg/L		0002915-05		0.1	0.106	106.%
p/m-Xylene-mg/L		0002915-05		0.2	0.222	111.%
o-Xylene-mg/L		0002915-05		0.1	0.106	106.%

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Kristin Farris

Kristin Farris

Company Name

Rice Operating Co

Company Address:

City/State/Zip:

Telephone No:

Fax No:

Sampler Signature:[illegible]

LAB OF I, LTD.

"Don't Treat Your Soil Like Dirt!"

12600 West I-20 East
Odessa, Texas 79765
(915) 563-1800
Fax (915) 563-1713

Invoice

BILL TO
RICE OPERATING CO. KRISTIN FARRIS 122 WEST TAYLOR HOBBS, NM 88240

DATE	INVOICE NO.
8/25/2002	14779

TERMS	P.O. NO.	PROJECT
Net 15		BD ZACH HINTON

ITEM	DESCRIPTION	QTY	RATE	AMOUNT
BTEX	ELT#0204219-01 BENZENE, TOLUENE, ETHYLBENZENE, XYLENE	1	65.00	65.00
505-9447 Kristin Farris 8-30-02 RECEIVED AUG 29 2002 RICE OPERATING HOBBS, NM				
We appreciate your business.			Total	\$65.00

ANALYTICAL REPORT

Prepared for:

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

BD
Zach
Hinton

Project: MW 1
PO#: 505
Order#: G0204251
Report Date: 08/22/2002

Ions

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#: G0204251
Project:
Project Name: MW 1
Location: BD Zachary Hinton

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>
0204251-01	MW 1	WATER	8/13/02 10:50	8/16/02 19:36	L HDPE	Ice
<u>Lab Testing:</u>		Rejected: No	Temp:	0 C		
Anions						
Cations						
Total Dissolved Solids (TDS)						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204251
Project:
Project Name: MW 1
Location: BD Zachary Hinton

Lab ID: 0204251-01
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	130	mg/L	100	1.0	6010B	08/21/2002	8/22/02	SM
Magnesium	54.4	mg/L	10	0.010	6010B	08/21/2002	8/22/02	SM
Potassium	23.4	mg/L	10	0.50	6010B	08/21/2002	8/22/02	SM
Sodium	457	mg/L	100	1.0	6010B	08/21/2002	8/22/02	SM

Approval:

Raland K. Tuttle, Lab Director, QA Officer

Celey D. Keene, Org. Tech. Director

Jeanne McMurrey, Inorg. Tech. Director

Sandra Biezugbe, Lab Tech.

Sara Molina, Lab Tech.

Date

N/A = Not Applicable RL = Reporting Limit

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

ANALYTICAL REPORT

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

Order#: G0204251
Project:
Project Name: MW 1
Location: BD Zachary Hinton

Lab ID: 0204251-01
Sample ID: MW 1

Anions

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Bicarbonate Alkalinity	188	mg/L	1	2.00	310.1	8/17/02	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	8/17/02	SB
Chloride	514	mg/L	1	5.00	9253	8/17/02	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.10	310.1	8/17/02	SB
SULFATE, 375.4	256	mg/L	1	0.5	375.4	8/21/02	SB

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Total Dissolved Solids (TDS)	1450	mg/L	1	5.0	160.1	8/19/02	SB

Approval:

Raland K. Tuttle 8-23-02
Raland K. Tuttle, Lab Director, QA Officer
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

QUALITY CONTROL REPORT

Anions

Order#: G0204251

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Bicarbonate Alkalinity-mg/L		0002886-01			<2.0	
Carbonate Alkalinity-mg/L		0002888-01			<0.10	
Chloride-mg/L		0002896-01			<5.0	
Hydroxide Alkalinity-mg/L		0002890-01			<0.10	
SULFATE, 375.4-mg/L		0002932-01			<0.5.0	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Bicarbonate Alkalinity-mg/L		0204251-01	188		189	0.5%
Carbonate Alkalinity-mg/L		0204251-01	0		<0.10	0.0%
Hydroxide Alkalinity-mg/L		0204251-01	0		<0.10	0.0%
SULFATE, 375.4-mg/L		0204251-01	256		255	0.4%
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Chloride-mg/L		0204220-01	70.9	250	319	99.2%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Chloride-mg/L		0204220-01	70.9	250	319	99.2%
0.0%						
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Bicarbonate Alkalinity-mg/L		0002886-04		0.050	0.0496	99.2%
Carbonate Alkalinity-mg/L		0002888-04		0.050	0.0496	99.2%
Chloride-mg/L		0002896-04		5,000	4,960	99.2%
Hydroxide Alkalinity-mg/L		0002890-04		0.050	0.0496	99.2%
SULFATE, 375.4-mg/L		0002932-04		50.0	49.5	99.0%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0204251

BLANK							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0002943-02			<0.01		
Magnesium-mg/L		0002943-02			<0.001		
Potassium-mg/L		0002943-02			<0.05		
Sodium-mg/L		0002943-02			<0.01		
DUPLICATE							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0204220-04	100		99.5		0.5%
Magnesium-mg/L		0204220-04	13.7		13.5		1.5%
Potassium-mg/L		0204220-04	5.48		5.4		1.5%
Sodium-mg/L		0204220-04	78.8		78.7		0.1%
SRM							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0002943-05		2	2.02	101.%	
Magnesium-mg/L		0002943-05		2	1.91	95.5%	
Potassium-mg/L		0002943-05		2	1.94	97.%	
Sodium-mg/L		0002943-05		2	2	100.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0204251

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0002885-01			<5.00		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0204251-01	1450		1510		4.1%

12500 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: MW1

Project #:

Project Loc: BD Zachary Hinton

PO #: 505

Fax No: _____

Sampler Signature: John D. Jones

[illegible]

ANALYTICAL REPORT

Prepared for:

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

Project: O-12
Order#: G0203377
Report Date: 05/21/2002

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#: G0203377
Project:
Project Name: O-12
Location: BD SWD

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.

<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>
0203377-01	MW 1	WATER	5/15/02 10:00	5/16/02 19:45	See COC	See COC
<u>Lab Testing:</u>		Rejected: No	Temp: See COC			
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#: G0203377
Project:
Project Name: O-12
Location: BD SWD

Lab ID: 0203377-01
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>		
0001761-02		5/20/02 15:38	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

Approval:

Raland K. Tuttle 5-21-02
Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

Date

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0203377
Project:
Project Name: O-12
Location: BD SWD

Lab ID: 0203377-01
Sample ID: MW 1

Anions

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Bicarbonate Alkalinity	186	mg/L	1	2.00	310.1	5/17/02	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	5/17/02	SB
Chloride	478	mg/L	1	5.00	9253	5/17/02	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.10	310.1	5/17/02	SB
SULFATE, 375.4	261	mg/L	1	0.50	375.4	5/17/02	SB

Cations

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Calcium	108	mg/L	50	0.500	6010B	5/17/02	SM
Magnesium	53	mg/L	10	0.010	6010B	5/17/02	SM
Potassium	12.1	mg/L	10	0.500	6010B	5/17/02	SM
Sodium	275	mg/L	250	2.50	6010B	5/17/02	SM

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Total Dissolved Solids (TDS)	1470	mg/L	1	5.0	160.1	5/17/02	CK

Approval: Raland K Tuttle 5-22-02
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#: G0203377

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Benzene-mg/L		0001761-02			<0.001	
Ethylbenzene-mg/L		0001761-02			<0.001	
Toluene-mg/L		0001761-02			<0.001	
p/m-Xylene-mg/L		0001761-02			<0.001	
o-Xylene-mg/L		0001761-02			<0.001	
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Benzene-mg/L		0203378-01	0	0.1	0.104	104.%
Ethylbenzene-mg/L		0203378-01	0	0.1	0.104	104.%
Toluene-mg/L		0203378-01	0	0.1	0.105	105.%
p/m-Xylene-mg/L		0203378-01	0	0.2	0.210	105.%
o-Xylene-mg/L		0203378-01	0	0.1	0.104	104.%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Benzene-mg/L		0203378-01	0	0.1	0.101	101.%
Ethylbenzene-mg/L		0203378-01	0	0.1	0.101	101.%
Toluene-mg/L		0203378-01	0	0.1	0.103	103.%
p/m-Xylene-mg/L		0203378-01	0	0.2	0.205	102.5%
o-Xylene-mg/L		0203378-01	0	0.1	0.101	101.%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Benzene-mg/L		0001761-05		0.1	0.102	102.%
Ethylbenzene-mg/L		0001761-05		0.1	0.102	102.%
Toluene-mg/L		0001761-05		0.1	0.104	104.%
p/m-Xylene-mg/L		0001761-05		0.2	0.208	104.%
o-Xylene-mg/L		0001761-05		0.1	0.102	102.%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0203377

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Bicarbonate Alkalinity-mg/L		0001754-01			<2.00	
Carbonate Alkalinity-mg/L		0001755-01			<0.10	
Chloride-mg/L		0001753-01			<5.00	
Hydroxide Alkalinity-mg/L		0001756-01			<0.10	
SULFATE, 375.4-mg/L		0001741-01			<0.50	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Bicarbonate Alkalinity-mg/L		0203375-01	503		505	0.4%
Carbonate Alkalinity-mg/L		0203375-01	0		<0.10	0.0%
Hydroxide Alkalinity-mg/L		0203375-01	0		<0.10	0.0%
SULFATE, 375.4-mg/L		0203355-01	610		610	0.0%
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Chloride-mg/L		0203375-01	3720	5000	8600	97.6%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Chloride-mg/L		0203375-01	3720	5000	8680	99.2%
0.9%						
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
						RPD
Bicarbonate Alkalinity-mg/L		0001754-04		0.05	0.0496	99.2%
Carbonate Alkalinity-mg/L		0001755-04		0.05	0.0496	99.2%
Chloride-mg/L		0001753-04		5000	5050	101.0%
Hydroxide Alkalinity-mg/L		0001756-04		0.05	0.0496	99.2%
SULFATE, 375.4-mg/L		0001741-04		50	49.9	99.8%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0203377

BLANK							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0001757-02			<0.01		
Magnesium-mg/L		0001757-02			<0.001		
Potassium-mg/L		0001757-02			<0.05		
Sodium-mg/L		0001757-02			<0.01		
DUPLICATE							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0203375-01	240		258		7.2%
Magnesium-mg/L		0203375-01	93.4		96.4		3.2%
Potassium-mg/L		0203375-01	13.4		13.5		0.7%
Sodium-mg/L		0203375-01	2120		1970		7.3%
SRM							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Calcium-mg/L		0001757-05		2	2.06	103.5%	
Magnesium-mg/L		0001757-05		2	2.11	105.5%	
Potassium-mg/L		0001757-05		2	2.07	103.5%	
Sodium-mg/L		0001757-05		2	2.1	105.5%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0203377

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0001764-01			<5.00		

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Fax No (505) 397-1471

PO #: 715

Aug 07 01 10:22a

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[illegible]



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:

Receiving Date: 03/05/02
Reporting Date: 03/08/02
Project Owner: RICE
Project Name: ZACHARY HINTON #5
Project Location: NOT GIVEN

Sampling Date: 03/05/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: HM

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (mS/cm)	T-Alkalinity (mgCaCO ₃ /L)
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ANALYSIS DATE:	03/08/02	03/08/02	03/08/02	03/08/02	03/08/02	03/08/02	03/08/02
H6562-1	WROZH53502MW	521	162	75	20.4	4098	191
Quality Control		NR	55	49	5.27	1489	NR
True Value QC		NR	50	50	5.00	1413	NR
% Recovery		NR	110	97.2	105	105	NR
Relative Percent Difference		NR	0	6.0	0	0.3	NR

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
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	Cl ⁻ (mg/L)	SO ₄ (mg/L)	CO ₃ (mg/L)	HCO ₃ (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:	03/08/02	03/08/02	03/08/02	03/08/02	03/08/02	03/06/02
H6562-1 WROZH53502MW	1000	263	0	233	7.782	2403
Quality Control	1040	52.66	NR	975	7.11	NR
True Value QC	1000	50.00	NR	1000	7.00	NR
% Recovery	104	105	NR	97.5	102	NR
Relative Percent Difference	2.0	0.6	NR	2.7	0.4	5.1

METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
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Amy Hill
Chemist

3-8-02
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 successors 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.

H6562



ARDINAL LABORATORIES

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:

Receiving Date: 03/05/02
Reporting Date: 03/06/02
Project Owner: RICE OPERATING
Project Name: ZACHARY HINTON #5
Project Location: NOT GIVEN

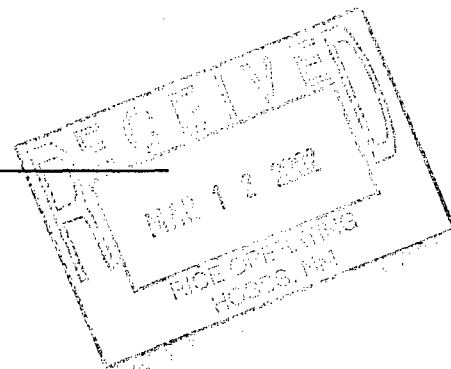
Sampling Date: 03/05/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		03/05/02	03/05/02	03/05/02	03/05/02
H6562-1	WROZH53502MW	<0.002	<0.002	<0.002	<0.006
Quality Control		0.098	0.096	0.092	0.260
True Value QC		0.100	0.100	0.100	0.300
% Recovery		97.6	96.0	91.7	86.7
Relative Percent Difference		2.5	4.1	9.1	15.2

METHOD: EPA SW-846 8260

Burgess J. Cooke
Chemist

3/6/02
Date



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H6562B.XLS

Sampler Relinquished: <i>Bradley Blum</i>	Received By:	Date 3-5-02 Time 12:50	Fax Results To Pat McCasland 505-394-2601 REMARKS:
Relinquished by:	Received By: (lab staff)	Date 3-5-02 Time 12:50	
Delivered by Sampler	Sample Cool & Intact Yes ☒ No ☐	Checked By:	

**RICE OPERATING COMPANY
JUNCTION BOX DISCLOSURE FORM**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
BD	Zachary Hinton EOL	O	12	22S	37E	Lea	Length	Width	Depth
							Box Has Not Been Built Yet		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Tom Kennan OTHER _____

Depth to Groundwater 56 feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 2/6/2001 Date Completed not complete OCD Witness No

Soil Excavated 0 cubic yards Excavation Length 0 Width 0 Depth 0 feet

Soil Disposed 0 cubic yards Offsite Facility n/a Location n/a

FINAL ANALYTICAL RESULTS: Sample Date n/a Sample Depth n/a

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
Vadose Zone Samples Will Be Included With Final Closure Report							

General Description of Remedial Action: Site was delineated vertically and laterally with a backhoe. Chloride impact was consistent vertically, while TPH was minimal at the location. The site was bored on 2/28/02 and chloride was found to impact groundwater. A cased monitor well was installed and the groundwater has been sampled and analyzed quarterly (see annual groundwater report for results). ROC has contracted a hydrologic consultant to assist ROC in developing a remediation plan for the vadose zone at groundwater-impacted sites with the ultimate objective being final closure.

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
Vertical	5	2500
	7	1400
	9	1800
	11	5200
	13	5000
	15	5400
Soil Bore	35	8160
	45	5000
	50	6410
	55	500

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

DATE 1/21/2003 PRINTED NAME Kristin Farris

SIGNATURE *Kristin Farris* TITLE Project Scientist