

AP - 60

STAGE 1 & 2 REPORTS

DATE:

JAN. 21, 2003

1R0427-92

DISCLOSURE REPORT

**RICE OPERATING COMPANY
JUNCTION BOX DISCLOSURE FORM**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
EME	K-33-1	K	33	19S	37E	Lea	Length	Width	Depth
							Box Has Not Been Built Yet		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Sarah Phillips et. al OTHER _____

Depth to Groundwater 37 feet NMOC SITE ASSESSMENT RANKING SCORE: 20

Date Started 9/20/2001 Date Completed not complete OCD Witness No

Soil Excavated 270 cubic yards Excavation Length 28 Width 24 Depth 11 feet

Soil Disposed 108 cubic yards Offsite Facility Sundance Location Eunice, NM

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 NMOC 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 10/3/02 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	10	900
	12	950
	14	850
Soil Bore	5	600
	10	850
	15	800
	18	750
	20	700
	22	1000

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

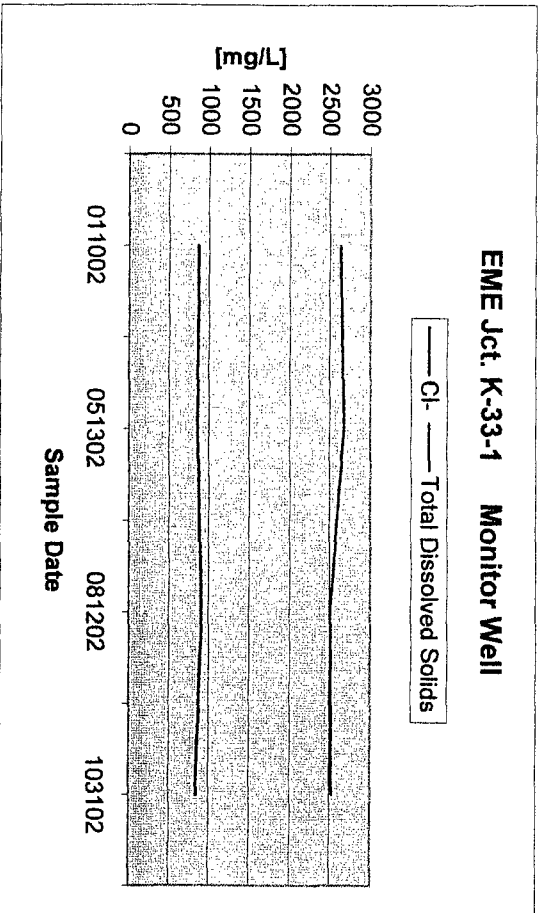
SIGNATURE Kristin Farris TITLE Project Scientist

EME Jct. K-33-1
K, 33-1, 10S, 37E

Rice Operating Co. Monitor Well Data Sheet

All parameter concentrations are in mg/L.

MW #	WATER LEVEL (ft)	TOTAL DEPTH	WELL VOLUME (gal)	VOLUME BAILED	SAMPLE DATE	TIME	CL	TDS	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES
1	36.90	41.00	0.700	2.00	011002	1140	872	2635	<0.002	<0.002	<0.002	<0.006
1	36.88	40.78	0.624	2.90	051302	1010	860	2680	<0.001	<0.001	<0.001	<0.001
1	37.20	40.79	0.574	1.75	081202	1200	913	2510	<0.001	<0.001	<0.001	<0.001
1	37.11	40.77	0.586	1.75	103102	1315	842	2530	<0.001	<0.001	<0.001	<0.001



EME Jct. K-33-1
K, 33-1, 10S, 37E

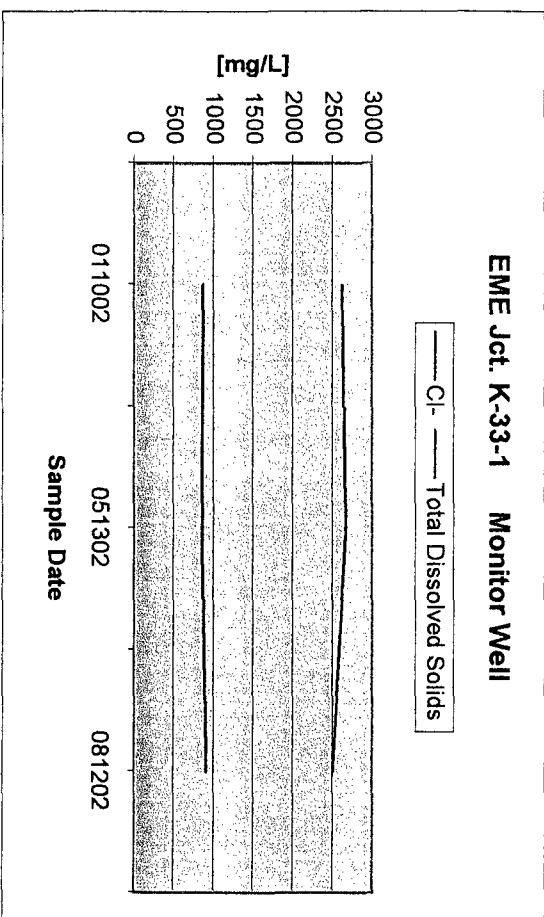
Rice Operating Co. Monitor Well Data Sheet

(ft)

(gal)

All parameter concentrations are in mg/L.

MMW #	WATER LEVEL	TOTAL DEPTH	WELL VOLUME	VOLUME BAILED	SAMPLE DATE	TIME	CL-	TDS	BENZENE	TOLUENE	ETHYL BENZENE	TOTAL XYLENES
1	36.90	41.00	0.700	2.00	011002	1140	872	2635	<0.002	<0.002	<0.002	<0.006
1	36.88	40.78	0.624	2.90	051302	1010	860	2680	<0.001	<0.001	<0.001	<0.001
1	37.2	40.79	0.574	7.75	081202	1200	913	2510	<0.001	<0.001	<0.001	<0.001



ANALYTICAL REPORT

Prepared for:

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

Project: jct. K-33-1
PO#: 510
Order#: G0204904
Report Date: 11/06/2002

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#: G0204904
Project: None Given
Project Name: jct. K-33-1
Location: EME

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>
0204904-01	MW 1	WATER	10/31/02 13:15	10/31/02 18:30	See COC	See COC
<u>Lab Testing:</u>		Rejected: No	Temp:	3.5 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#: G0204904
Project: None Given
Project Name: jct. K-33-1
Location: EME

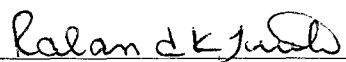
Lab ID: 0204904-01
Sample ID: MW 1

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
0003617-02		11/1/02	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	92%	80	120
Bromofluorobenzene	92%	80	120

Approval:  11-07-02
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.

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204904
Project: None Given
Project Name: jct. K-33-1
Location: EME

Lab ID: 0204904-01
Sample ID: MW 1

Anions

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Bicarbonate Alkalinity	307	mg/L	1	2.00	310.1	11/2/02	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	11/2/02	SB
Chloride	842	mg/L	1	5.00	9253	11/5/02	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.10	310.1	11/2/02	SB
SULFATE, 375.4	310	mg/L	5	2.5	375.4	11/6/02	SB

Cations

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Calcium	239	mg/L	100	1.0	6010B	11/6/02	SM
Magnesium	114	mg/L	100	0.10	6010B	11/6/02	SM
Potassium	14.9	mg/L	10	0.50	6010B	11/6/02	SM
Sodium	260	mg/L	100	1.0	6010B	11/6/02	SM

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Total Dissolved Solids (TDS)	2530	mg/L	1	5.0	160.1	11/4/02	TAL

Approval: Raland K. Tuttle 11-07-02
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#: G0204904

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003617-02			<0.001		
Ethylbenzene-mg/L		0003617-02			<0.001		
Toluene-mg/L		0003617-02			<0.001		
p/m-Xylene-mg/L		0003617-02			<0.001		
o-Xylene-mg/L		0003617-02			<0.001		
CONTROL	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003617-03		0.1	0.096	96.0%	
Ethylbenzene-mg/L		0003617-03		0.1	0.099	99.0%	
Toluene-mg/L		0003617-03		0.1	0.098	98.0%	
p/m-Xylene-mg/L		0003617-03		0.2	0.208	104.0%	
o-Xylene-mg/L		0003617-03		0.1	0.101	101.0%	
CONTROL DUP	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003617-04		0.1	0.100	100.0%	4.1%
Ethylbenzene-mg/L		0003617-04		0.1	0.103	103.0%	4.0%
Toluene-mg/L		0003617-04		0.1	0.102	102.0%	4.0%
p/m-Xylene-mg/L		0003617-04		0.2	0.218	109.0%	4.7%
o-Xylene-mg/L		0003617-04		0.1	0.106	106.0%	4.8%
SRM	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0003617-05		0.1	0.104	104.0%	
Ethylbenzene-mg/L		0003617-05		0.1	0.109	109.0%	
Toluene-mg/L		0003617-05		0.1	0.107	107.0%	
p/m-Xylene-mg/L		0003617-05		0.2	0.230	115.0%	
o-Xylene-mg/L		0003617-05		0.1	0.110	110.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0204904

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0003610-01			<2.00	
Carbonate Alkalinity-mg/L		0003611-01			<0.10	
Chloride-mg/L		0003640-01			<5.00	
Hydroxide Alkalinity-mg/L		0003612-01			<0.10	
SULFATE, 375.4-mg/L		0003652-01			<0.50	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0204904-01	307		308	0.3%
Carbonate Alkalinity-mg/L		0204904-01	0		<0.10	0.0%
Hydroxide Alkalinity-mg/L		0204904-01	0		<0.10	0.0%
SULFATE, 375.4-mg/L		0204904-01	310		314	1.3%
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Chloride-mg/L		0204904-01	842	500	1340	99.6%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Chloride-mg/L		0204904-01	842	500	1350	101.6%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0003610-04		0.05	0.0496	99.2%
Carbonate Alkalinity-mg/L		0003611-04		0.05	0.0496	99.2%
Chloride-mg/L		0003640-04		5000	4960	99.2%
Hydroxide Alkalinity-mg/L		0003612-04		0.05	0.0496	99.2%
SULFATE, 375.4-mg/L		0003652-04		50	49.3	98.6%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0204904

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0003651-02			<0.010	
Magnesium-mg/L		0003651-02			<0.001	
Potassium-mg/L		0003651-02			<0.050	
Sodium-mg/L		0003651-02			<0.010	
CONTROL						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0003651-03		2	1.99	99.5%
Magnesium-mg/L		0003651-03		2	2.17	108.5%
Potassium-mg/L		0003651-03		2	1.97	98.5%
Sodium-mg/L		0003651-03		2	1.92	96.6%
CONTROL DUP						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0003651-04		2	2.04	102.2%
Magnesium-mg/L		0003651-04		2	2.24	112.2%
Potassium-mg/L		0003651-04		2	1.93	96.5%
Sodium-mg/L		0003651-04		2	1.88	94.4%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0003651-05		2	2.04	102.2%
Magnesium-mg/L		0003651-05		2	2.24	112.2%
Potassium-mg/L		0003651-05		2	1.93	96.5%
Sodium-mg/L		0003651-05		2	1.88	94.4%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0204904

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0003650-01			<5.0		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0204904-01	2530		2540		0.4%

ANALYTICAL REPORT

Prepared for:

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

Project: K-33-1
PO#: 510
Order#: G0204197
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#: G0204197
Project:
Project Name: K-33-1
Location: EME 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, 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>
0204197-01	MW 1	WATER	8/12/02 12:00	8/12/02 20:05	See COC	See COC
	<u>Lab Testing:</u>	Rejected: No		Temp: 4.0 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#: G0204197
Project:
Project Name: K-33-1
Location: EME SWD

Lab ID: 0204197-01

Sample ID: MW 1

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0002915-02		8/21/02 12:39	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	110%	73	115
Bromofluorobenzene	99%	72	110

Approval:

Raland K. Tuttle
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

8-22-02

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#: G0204197
Project:
Project Name: K-33-1
Location: EME SWD

Lab ID: 0204197-01
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	279	mg/L	1	2.00	310.1	8/13/02	CK
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	8/13/02	CK
Chloride	913	mg/L	1	5.00	9253	8/13/02	CK
Hydroxide Alkalinity	< 0.10	mg/L	1	0.10	310.1	8/13/02	CK
SULFATE, 375.4	292	mg/L	5	2.5	375.4	8/14/02	MB

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	378	mg/L	100	1.0	6010B	8/14/02	SM
Magnesium	110	mg/L	100	0.10	6010B	8/14/02	SM
Potassium	15.0	mg/L	10	0.50	6010B	8/14/02	SM
Sodium	280	mg/L	100	1.0	6010B	8/14/02	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)	2510	mg/L	1	5.0	160.1	8/13/02	CK

Approval: Raland K. Tuttle 8-22-02
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#: G0204197

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	95.0%	
Ethylbenzene-mg/L		0204268-01	0	0.1	0.097	97.0%	
Toluene-mg/L		0204268-01	0	0.1	0.099	99.0%	
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	94.0%	
MSD	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L		0204268-01	0	0.1	0.099	99.0%	4.1%
Ethylbenzene-mg/L		0204268-01	0	0.1	0.101	101.0%	4.0%
Toluene-mg/L		0204268-01	0	0.1	0.103	103.0%	4.0%
p/m-Xylene-mg/L		0204268-01	0	0.2	0.210	105.0%	4.4%
o-Xylene-mg/L		0204268-01	0	0.1	0.100	100.0%	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	104.0%	
Ethylbenzene-mg/L		0002915-05		0.1	0.107	107.0%	
Toluene-mg/L		0002915-05		0.1	0.106	106.0%	
p/m-Xylene-mg/L		0002915-05		0.2	0.222	111.0%	
o-Xylene-mg/L		0002915-05		0.1	0.106	106.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0204197

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bicarbonate Alkalinity-mg/L		0002801-01			<2.00		
Carbonate Alkalinity-mg/L		0002801-01			<0.10		
Chloride-mg/L		0002793-01			<5.00		
Hydroxide Alkalinity-mg/L		0002801-01			< 0.10		
SULFATE, 375.4-mg/L		0002811-01			<0.5		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bicarbonate Alkalinity-mg/L		0204196-01	360		358		0.6%
Carbonate Alkalinity-mg/L		0204196-01	0		<0.10		0.0%
Hydroxide Alkalinity-mg/L		0204196-01	0		< 0.10		0.0%
SULFATE, 375.4-mg/L		0204195-01	141		143		1.4%
MS	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L		0204137-01	56.7	100	152	95.3%	
MSD	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L		0204137-01	56.7	100	156	99.3%	2.6%
SRM	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bicarbonate Alkalinity-mg/L		0002801-04		0.05	0.0575	115.0%	
Carbonate Alkalinity-mg/L		0002801-04		0.05	0.0575	115.0%	
Chloride-mg/L		0002793-04		5000	4870	97.4%	
Hydroxide Alkalinity-mg/L		0002801-04		0.05	0.0575	115.0%	
SULFATE, 375.4-mg/L		0002811-04		50	48.8	97.6%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0204197

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0002810-02			< 0.010	
Magnesium-mg/L		0002810-02			<0.001	
Potassium-mg/L		0002810-02			<0.05	
Sodium-mg/L		0002810-02			<0.01	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0204137-02	35.6		34.7	2.6%
Magnesium-mg/L		0204137-02	10.5		10.2	2.9%
Potassium-mg/L		0204137-02	3.02		3.1	2.6%
Sodium-mg/L		0204137-02	47.9		48.3	0.8%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0002810-05		2	2.06	103.9%
Magnesium-mg/L		0002810-05		2	2.18	109.9%
Potassium-mg/L		0002810-05		2	1.77	88.5%
Sodium-mg/L		0002810-05		2	1.79	89.5%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0204197

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0002822-01			<5.00		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0204197-01	2510		2640		5.0%

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: 122 W. Taylor

City/State/Zip: Hobbs, NM 88240

Telephone No: (505) 393-9074

Sampler Signature: James Harris

Project Name: K-33-1

Project #:-

Project Loc: EME SWD

PO #: 510

Fax No: (505) 397-1471

Sampler Signature: James Harris

[illegible]

Special Instructions:

Major Tons
Relinquished by:

K. Farris

Relinquished by:

Relinquished by:	Date	Time	Received by:
------------------	------	------	--------------

K. Farris	08/20/2017	1700	Requisition #	1101
Relinquished by:				

Relinquished by:		Date	Time	Received by:		Date	Time

Relinquished by:	Date	Time	Received by: ELOF	File #	Tr.
------------------	------	------	-------------------	--------	-----

Sample Containers: Induct?

Temperature Upon Receipt

Laboratory Comments:

ANALYTICAL REPORT

Prepared for:

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

Project: K-33-1
PO#: 510
Order#: G0204197
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#: G0204197
Project:
Project Name: K-33-1
Location: EME 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, 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>
0204197-01	MW 1	WATER	8/12/02 12:00	8/12/02 20:05	See COC	See COC
<u>Lab Testing:</u>		Rejected: No	Temp:	4.0 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#: G0204197
Project:
Project Name: K-33-1
Location: EME SWD

Lab ID: 0204197-01
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>		
0002915-02		8/21/02 12:39	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	110%	73	115
Bromofluorobenzene	99%	72	110

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

8-22-02

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0204197
Project:
Project Name: K-33-1
Location: EME SWD

Lab ID: 0204197-01
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	279	mg/L	1	2.00	310.1	8/13/02	CK
Carbonate Alkalinity	<0.10	mg/L	1	0.10	310.1	8/13/02	CK
Chloride	913	mg/L	1	5.00	9253	8/13/02	CK
Hydroxide Alkalinity	< 0.10	mg/L	1	0.10	310.1	8/13/02	CK
SULFATE, 375.4	292	mg/L	5	2.5	375.4	8/14/02	MB

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	378	mg/L	100	1.0	6010B	8/14/02	SM
Magnesium	110	mg/L	100	0.10	6010B	8/14/02	SM
Potassium	15.0	mg/L	10	0.50	6010B	8/14/02	SM
Sodium	280	mg/L	100	1.0	6010B	8/14/02	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)	2510	mg/L	1	5.0	160.1	8/13/02	CK

Approval: Raland K. Tuttle 8-22-02
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.

RL = Reporting Limit N/A = Not Applicable

Page 1 of 1

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0204197

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.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0204197

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0002801-01			<2.00	
Carbonate Alkalinity-mg/L		0002801-01			<0.10	
Chloride-mg/L		0002793-01			<5.00	
Hydroxide Alkalinity-mg/L		0002801-01			<0.10	
SULFATE, 375.4-mg/L		0002811-01			<0.5	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0204196-01	360		358	0.6%
Carbonate Alkalinity-mg/L		0204196-01	0		<0.10	0.0%
Hydroxide Alkalinity-mg/L		0204196-01	0		<0.10	0.0%
SULFATE, 375.4-mg/L		0204195-01	141		143	1.4%
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Chloride-mg/L		0204137-01	56.7	100	152	95.3%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Chloride-mg/L		0204137-01	56.7	100	156	99.3%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0002801-04		0.05	0.0575	115.0%
Carbonate Alkalinity-mg/L		0002801-04		0.05	0.0575	115.0%
Chloride-mg/L		0002793-04		5000	4870	97.4%
Hydroxide Alkalinity-mg/L		0002801-04		0.05	0.0575	115.0%
SULFATE, 375.4-mg/L		0002811-04		50	48.8	97.6%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Cations

Order#: G0204197

BLANK		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0002810-02			< 0.010		
Magnesium-mg/L		0002810-02			<0.001		
Potassium-mg/L		0002810-02			<0.05		
Sodium-mg/L		0002810-02			<0.01		
DUPLICATE		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0204137-02	35.6		34.7		2.6%
Magnesium-mg/L		0204137-02	10.5		10.2		2.9%
Potassium-mg/L		0204137-02	3.02		3.1		2.6%
Sodium-mg/L		0204137-02	47.9		48.3		0.8%
SRM		LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
	WATER						
Calcium-mg/L		0002810-05		2	2.06	103.%	
Magnesium-mg/L		0002810-05		2	2.18	109.%	
Potassium-mg/L		0002810-05		2	1.77	88.5%	
Sodium-mg/L		0002810-05		2	1.79	89.5%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0204197

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0002822-01			<5.00		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0204197-01	2510		2640		5.0%

ANALYTICAL REPORT

Prepared for:

DONNIE ANDERSON
RICE OPERATING COMPANY
122 W. TAYLOR
HOBBS, NM 88242

Project: K-33-1
Order#: G0203354
Report Date: 05/17/2002

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

RICE OPERATING COMPANY
122 W. TAYLOR
HOBBS, NM 88242
505-397-1471

Order#: G0203354
Project:
Project Name: K-33-1
Location: EME 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>
0203354-01	MW 1	WATER	5/13/02 10:10	5/15/02 10:00	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

DONNIE ANDERSON
RICE OPERATING COMPANY
122 W. TAYLOR
HOBBS, NM 88242

Order#: G0203354
Project:
Project Name: K-33-1
Location: EME SWD

Lab ID: 0203354-01

Sample ID: MW 1

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0001724-02		5/15/02 17:14	1	1	CK	8021B

Parameter	Result μg/L	RL
Benzene	<1.00	1.00
Ethylbenzene	<1.00	1.00
Toluene	<1.00	1.00
p/m-Xylene	<1.00	1.00
o-Xylene	<1.00	1.00

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

DONNIE ANDERSON
RICE OPERATING COMPANY
122 W. TAYLOR
HOBBS, NM 88242

Order#: G0203354
Project:
Project Name: K-33-1
Location: EME SWD

Lab ID: 0203354-01
Sample ID: MW 1

Anions

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Bicarbonate Alkalinity	292	mg/L	1	2.0	310.1	5/15/02	SB
Carbonate Alkalinity	<0.10	mg/L	1	0.1	310.1	5/15/02	SB
Chloride	860	mg/L	1	5.00	9253	5/16/02	SB
Hydroxide Alkalinity	<0.10	mg/L	1	0.1	310.1	5/15/02	SB
SULFATE, 375.4	346	mg/L	12.5	6.25	375.4	5/17/02	SB

Cations

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Calcium	266	mg/L	50	0.500	6010B	5/16/02	SM
Magnesium	106	mg/L	50	0.050	6010B	5/16/02	SM
Potassium	15.4	mg/L	10	0.500	6010B	5/16/02	SM
Sodium	303	mg/L	50	0.500	6010B	5/16/02	SM

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Total Dissolved Solids (TDS)	2680	mg/L	1	5.0	160.1	5/15/02	SB

Approval: Raland K. Tuttle 5-19-02
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#: G0203354

BLANK							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/L		0001724-02			<1.00		
Ethylbenzene-µg/L		0001724-02			<1.00		
Toluene-µg/L		0001724-02			<1.00		
p/m-Xylene-µg/L		0001724-02			<1.00		
o-Xylene-µg/L		0001724-02			<1.00		
CONTROL							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/L		0001724-03		100	115	115.0%	
Ethylbenzene-µg/L		0001724-03		100	114	114.0%	
Toluene-µg/L		0001724-03		100	112	112.0%	
p/m-Xylene-µg/L		0001724-03		200	225	112.5%	
o-Xylene-µg/L		0001724-03		100	113	113.0%	
CONTROL DUP							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/L		0001724-04		100	114	114.0%	0.9%
Ethylbenzene-µg/L		0001724-04		100	110	110.0%	3.6%
Toluene-µg/L		0001724-04		100	109	109.0%	2.7%
p/m-Xylene-µg/L		0001724-04		200	225	112.5%	0.0%
o-Xylene-µg/L		0001724-04		100	112	112.0%	0.9%
SRM							
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-µg/L		0001724-05		100	115	115.0%	
Ethylbenzene-µg/L		0001724-05		100	112	112.0%	
Toluene-µg/L		0001724-05		100	109	109.0%	
p/m-Xylene-µg/L		0001724-05		200	226	113.0%	
o-Xylene-µg/L		0001724-05		100	111	111.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Anions

Order#: G0203354

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0001737-01			<2.00	
Carbonate Alkalinity-mg/L		0001738-01			<0.10	
Chloride-mg/L		0001733-01			<5.00	
Hydroxide Alkalinity-mg/L		0001739-01			<0.10	
SULFATE, 375.4-mg/L		0001741-01			<0.50	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0203354-01	292		293	0.3%
Carbonate Alkalinity-mg/L		0203354-01	0		<0.10	0.9%
Hydroxide Alkalinity-mg/L		0203354-01	0		<0.10	0.9%
SULFATE, 375.4-mg/L		0203355-01	610		610	0.9%
MS						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Chloride-mg/L		0203354-01	860	500	1360	100.0%
MSD						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Chloride-mg/L		0203354-01	860	500	1360	100.0%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Bicarbonate Alkalinity-mg/L		0001737-04		0.05	0.0496	99.2%
Carbonate Alkalinity-mg/L		0001738-04		0.05	0.0496	99.2%
Chloride-mg/L		0001733-04		5000	5050	101.0%
Hydroxide Alkalinity-mg/L		0001739-04		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#: G0203354

BLANK						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0001725-02			<0.010	
Magnesium-mg/L		0001725-02			<0.001	
Potassium-mg/L		0001725-02			<0.050	
Sodium-mg/L		0001725-02			<0.010	
DUPLICATE						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0203354-01	266		264	0.8%
Magnesium-mg/L		0203354-01	106		106	0.0%
Potassium-mg/L		0203354-01	15.4		14.8	4.0%
Sodium-mg/L		0203354-01	303		308	1.6%
SRM						
	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery
Calcium-mg/L		0001725-05		2	1.99	99.5%
Magnesium-mg/L		0001725-05		2	2.06	103.0%
Potassium-mg/L		0001725-05		2	1.77	88.5%
Sodium-mg/L		0001725-05		2	1.91	95.5%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0203354

BLANK	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0001731-01			<5.00		
DUPLICATE	WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Total Dissolved Solids (TDS)-mg/L		0203354-01	2680		2760		2.9%

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: DONNIE ANDERSON

Company Name RICE OPERATING COMPANY

Company Address: 122 W. TAYLOR

City/State/Zip: HOBBS, NEW MEXICO, 88240

Telephone No: (505) 393-9174

Sampler Signature: Kazim Jarriz

Project Name: K-33-

Project #:

Project Loc: EME SWD

PO #: 716

Fax No: (505) 397-1471

Sampler Signature: Kazim Jarriz

LAB # (Lab Use Only)		FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative										Matrix				Analyze For:					
						Ice	HNO ₃	HCl	NaOH	H ₂ SO ₄	None	Other (Specify)	Water	Sedge	Soil	Other (Specify)	TDS / CL / SM / SO	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTX 80218/5030	
0203354-01		MW 1	5-13-02	10:15 am	1																				
0203354-02		MW 1	5-13-02	10:10 am	2																				

Special Instructions:

Major cations & anions / FAX Results to K. Farris

Relinquished by: Kristin Farris

Relinquished by: J.D. Hayner

Received by:

Received by ELDT: Paul D. Farris

Date / Time

5-14-02 4:30 PM

5-15-02 10:00 AM

Sample Containers: 12/27

Temperature Upon Receipt: -0.5°C - 40mL glass

Laboratory Comments: 18.5°C - L HDPE



ENVIRONMENTAL PLUS, INC.

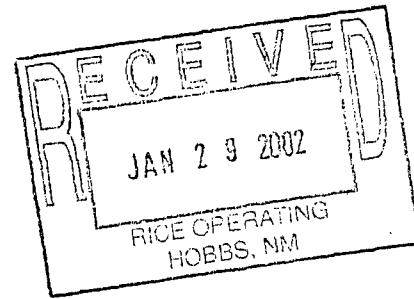
Micro-Blaze

Micro-Blaze One™

STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

January 25, 2002

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



Subject: Monument EME System Monitor Well Sampling

Dear Mr. Anderson,

Included below is the development and sampling information collected by Environmental Plus, Inc. (EPI) on 1-10-02 for the Monument EME System monitor wells.

RICE OPERATING MONUMENT EME SYSTEM 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
P6	1/10/2002	2	36.7	48.0	1.8	5.5
K33-I	1/10/2002	2	36.9	41.0	0.7	2.0
M16-I	1/10/2002	2	22.6	35.1	2.0	6.1
JUNCTION N-5	1/10/2002	2	35.5	41.3	0.9	2.8

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

ENVIRONMENTAL PLUS, INC.



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: 01/11/02
Reporting Date: 01/16/02
Project Owner: RICE OPERATING CO.
Project Name: K-33-1
Project Location: NOT GIVEN

Sampling Date: 01/10/02
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 (μ S/cm)	T-Alkalinity (mgCaCO ₃ /L)
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ANALYSIS DATE:	01/16/02	01/15/02	01/15/02	01/15/02	01/15/02	01/15/02
H6430-1 R011002K331MW	210	372	126	24.4	4003	349
Quality Control	NR	55.0	48.6	5.27	1489	NR
True Value QC	NR	50.0	50.0	5.00	1413	NR
% Recovery	NR	110	97.2	105	105	NR
Relative Percent Difference	NR	0	6.0	0	0.3	NR

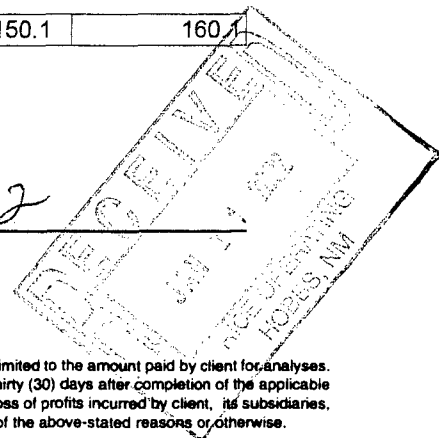
METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
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	Cl ⁻ (mg/L)	SO ₄ (mg/L)	CO ₃ (mg/L)	HCO ₃ (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:	01/15/02	01/15/02	01/15/02	01/15/02	01/15/02	01/15/02
H6430-1 R011002K331MW	872	344	0	426	7.17	2635
Quality Control	1040	52.66	NR	984	7.00	NR
True Value QC	1000	50.00	NR	1000	7.00	NR
% Recovery	104	105	NR	98.4	100	NR
Relative Percent Difference	1.0	0.6	NR	2.7	0.1	NR

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

1-16-02
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.

H6430A.XLS



ARDINAL LABORATORIES

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

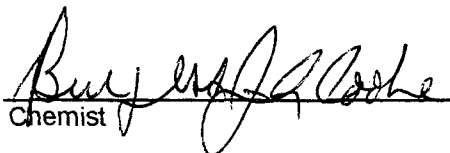
ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: DONNIE ANDERSON
122 W. TAYLOR
HOBBS, NM 88240
FAX TO:

Receiving Date: 01/11/02
Reporting Date: 01/12/02
Project Owner: RICE OPERATING CO.
Project Name: K-33-1
Project Location: NOT GIVEN

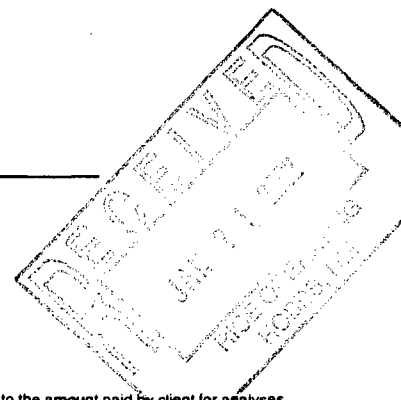
Sampling Date: 01/10/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		01/11/02	01/11/02	01/11/02	01/11/02
H6430-1	R011002K331MW	<0.002	<0.002	<0.002	<0.006
Quality Control		0.100	0.104	0.108	0.314
True Value QC		0.100	0.100	0.100	0.300
% Recovery		99.9	104	108	105
Relative Percent Difference		1.6	2.8	2.2	1.9

METHOD: EPA SW-846 8260


Chemist

1/12/02
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.

H6430B.XLS

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

[illegible]

Atkins Engineering
Associates, Inc.

2904 W. 2nd St., Roswell, NM 88202-3156

LOG OF BORING Rice EME, K33-1 TH

(Page 1 of 1)

Rice Operating Co.

122 W. Taylor

Hobbs, New Mexico 88240

Contact: Donnie Anderson

Job#: RICENGLAIR.01

Date : 10-03-01

Drill Start : 1530

Drill End : 1630

Boring Location : S. Monument 1mi & E ½ mi

Site Location

: South Monument

Auger Type

: Hollow Stem

Logged By

: Mort Bates

Depth in Feet	GRAPHIC	USCS	Samples per foot	DESCRIPTION	Lab
0				Sand, tan, loose, damp	
5		SP	600		
10			850	Caliche, white, firm, dry	
15			800	Caliche w/ sand, tan, loose, damp	
20		SP	750	Sand, tan, loose, damp	
		SP	700	Sand w/ sandstone, tan, loose, damp	
			680		
Total depth 22'					
25					

Bentonite