

1R - 427 - 31

REPORTS

DATE:

10-9-2003

EME Penroc W.E.B. EOL

1R0427-31

FINAL REPORT

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
EME	W.E.B. EOL	C	13	21 S	35 E	Lea	Length	Width	Depth
							8	5	5.5

LAND TYPE: BLM _____ STATE X FEE LANDOWNER _____ OTHER _____

Depth to Groundwater >200 feet NMOCD SITE ASSESSMENT RANKING SCORE: 0

Date Started 5/30/2003 Date Completed 9/18/2003 OCD Witness No

Soil Excavated 29 cubic yards Excavation Length 10 Width 10 Depth 8 feet

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

FINAL ANALYTICAL RESULTS: Sample Date 5/30/2003 Sample Depth 8 ft bgs

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	Chloride mg/kg
SIDEWALLS	<0.025	<0.025	<0.025	0.026	<10.0	<10.0	496
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	2800
REMEDIATED	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	496
BORE @ 30 ft	xxx	xxx	xxx	xxx	xxx	xxx	195

General Description of Remedial Action: The junction box site was delineated

vertically and laterally producing a 10 x 10 x 8 ft bgs excavation. TPH was non-detect

and chloride concentrations exhibited a vertical and lateral decline. However, the bottom composite yielded 2800 ppm. The excavated soil was blended on-site (496 ppm) and then

backfilled into the hole. A watertight junction box was built over the location. Due to the

elevated chloride concentration in the bottom composite, a soil bore was made adjacent

to the junction. Returns were continuously tested for chloride during the boring until 30 ft bgs

when a conclusive declination trend was observed (see graph). The impact remaining in place

does not present a threat to human health, livestock, or groundwater at 200 feet below surface.

The surface is expected to re-vegetate at a normal rate.

cc: chloride graph, diagram, lab results, photos

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
Vertical	4	1300
	8	950
bottom comp.	8	2200
4 wall comp.	n/a	400
remed. comp.	n/a	450
Soil Bore	30	314

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

DATE 10/9/2003 PRINTED NAME Kristin Farris

SIGNATURE Kristin Farris TITLE Project Scientist

EME W.E.B. EOL



↑ Excavation ↓

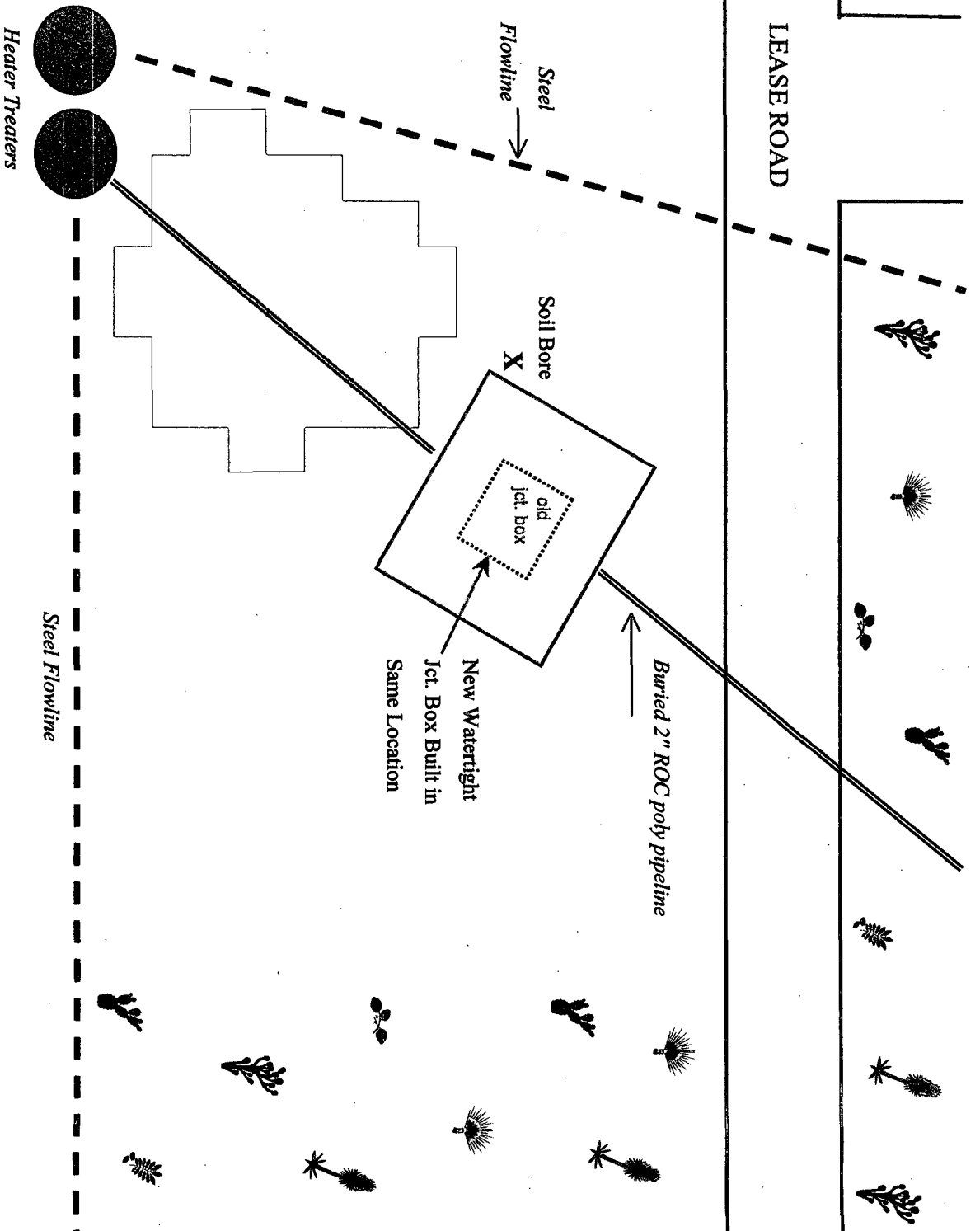
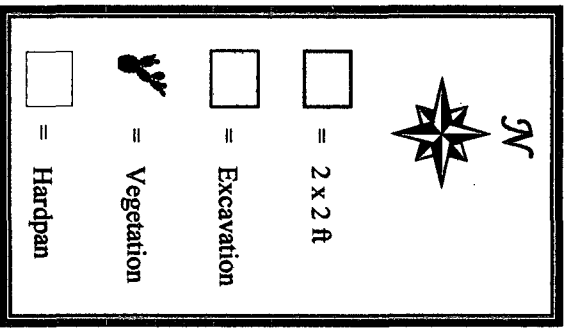


Backfilled With New Junction Box

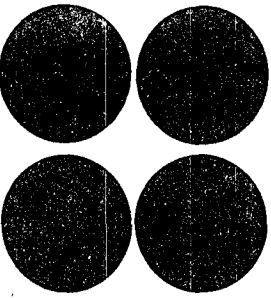
EME W.E.B. EOL

10 x 10 x 8 ft deep Excavation

LEASE ROAD



Tank Battery



CHLORIDE CONCENTRATION CURVE

RICE Operating Company

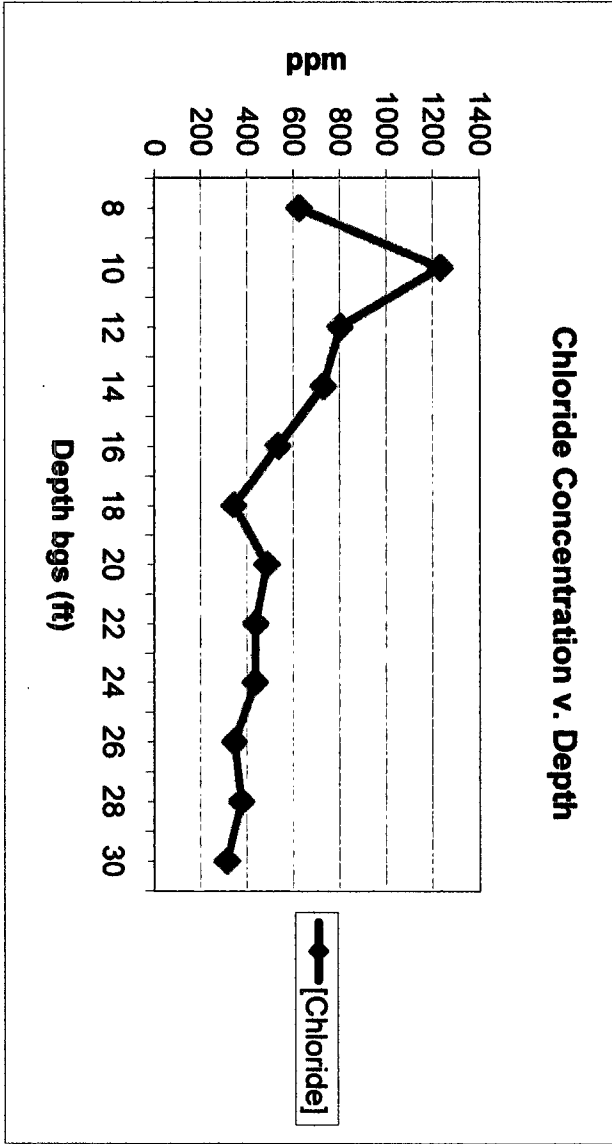
EME W.E.B. FOL

Unit 'C', Sec. 13, T21S, R35E

Soil Bore Next To Junction

Depth bgs (ft)	[Cl ⁻] ppm
8	627
10	1234
12	803
14	729
16	534
18	345
20	486
22	438
24	435
26	347
28	376
30	314

Groundwater = >200 ft



ANALYTICAL REPORT

Prepared for:

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

Project: Penroe WEB EOL

PO#:

Order#: G0306609

Report Date: 06/06/2003

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#: G0306609
Project:
Project Name: Penroe WEB EOL
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>
0306609-01	Bottom Comp @ 8'	SOIL	5/30/03 14:00	5/30/03 16:35	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 1.0 C		
0306609-02	Wall Comp	SOIL	5/30/03 14:00	5/30/03 16:35	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 1.0 C		
0306609-03	Pile Comp	SOIL	5/30/03 14:00	5/30/03 16:35	4 oz glass	Ice
	<u>Lab Testing:</u> 8015M 8021B/5030 BTEX Chloride	Rejected: No		Temp: 1.0 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306609
Project:
Project Name: Penroe WEB EOL
Location: EME

Lab ID: 0306609-01
Sample ID: Bottom Comp @ 8'

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		6/2/03	1	1	WL	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	100%	70	130
1-Chlorooctadecane	110%	70	130

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>		
0005728-02		6/2/03 12:45	1	25	JMM	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	90%	80	120
Bromofluorobenzene	105%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306609
Project:
Project Name: Penroe WEB EOL
Location: EME

Lab ID: 0306609-02
Sample ID: Wall Comp

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		6/2/03	1	1	WL	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	103%	70	130
1-Chlorooctadecane	111%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0005728-02		6/2/03 13:07	1	25	JMM	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	<0.025	0.025
p/m-Xylene	0.026	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	93%	80	120
Bromofluorobenzene	110%	80	120

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306609
Project:
Project Name: Penroe WEB EOL
Location: EME

Lab ID: 0306609-03
Sample ID: Pile Comp

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
Blank	Prepared	Analyzed	Amount	Factor		
		6/2/03	1	1	WL	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	104%	70	130
1-Chlorooctadecane	110%	70	130

8021B/5030 BTEX

Method	Date	Date	Sample	Dilution	Analyst	Method
Blank	Prepared	Analyzed	Amount	Factor		
0005728-02		6/2/03 13:29	1	25	JMM	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	<0.025	0.025
Ethylbenzene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	82%	80	120
Bromofluorobenzene	99%	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

6-06-03

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306609
Project:
Project Name: Penroe WEB EOL
Location: EME

Lab ID: 0306609-01
Sample ID: Bottom Comp @ 8'

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>
Chloride	2800	mg/kg	1	20	9253	6/3/03	SB

Lab ID: 0306609-02
Sample ID: Wall Comp

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>
Chloride	496	mg/kg	1	20	9253	6/3/03	SB

Lab ID: 0306609-03
Sample ID: Pile Comp

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>
Chloride	496	mg/kg	1	20	9253	6/3/03	SB

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.

6-06-03
Date

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0306609

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005708-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306609-01	0	952	1180	123.9%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306609-01	0	952	1170	122.9%	0.9%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005708-05		1000	1068	106.8%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0306609

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005728-02			<0.025		
Toluene-mg/kg		0005728-02			<0.025		
Ethylbenzene-mg/kg		0005728-02			<0.025		
p/m-Xylene-mg/kg		0005728-02			<0.025		
o-Xylene-mg/kg		0005728-02			<0.025		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005728-03		0.1	0.104	104.%	
Toluene-mg/kg		0005728-03		0.1	0.101	101.%	
Ethylbenzene-mg/kg		0005728-03		0.1	0.105	105.%	
p/m-Xylene-mg/kg		0005728-03		0.2	0.219	109.5%	
o-Xylene-mg/kg		0005728-03		0.1	0.109	109.%	
CONTROL DUP	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005728-04		0.1	0.095	95.%	9.%
Toluene-mg/kg		0005728-04		0.1	0.092	92.%	9.3%
Ethylbenzene-mg/kg		0005728-04		0.1	0.094	94.%	11.1%
p/m-Xylene-mg/kg		0005728-04		0.2	0.196	98.%	11.1%
o-Xylene-mg/kg		0005728-04		0.1	0.096	96.%	12.7%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005728-05		0.1	0.104	104.%	
Toluene-mg/kg		0005728-05		0.1	0.101	101.%	
Ethylbenzene-mg/kg		0005728-05		0.1	0.100	100.%	
p/m-Xylene-mg/kg		0005728-05		0.2	0.207	103.5%	
o-Xylene-mg/kg		0005728-05		0.1	0.100	100.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0306609

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005710-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306609-01	2800	500	3320	104.0%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306609-01	2800	500	3330	106.0%	0.3%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005710-04		5000	4960	99.2%	

**12600 West I-20 East
Odessa, Texas 79763**

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

Kristin Ferris

Project Name:

~~XXXXXXXXXXXX~~ Perro WEB EOL

Company Name

Rice Operations

Project #:

Company Address:

122 W Taylor

Project Loc:

~~SECRET~~ EME

City/State/Zip:

Holbs, NM 88240

我口口

Telephone No:

Fax No:

Sampler Signature: _____

Fax No:

[illegible]

Special Instructions

15 Fax to Ric

Relinquished by:

Date 5-30-03

Time 4:30 p

Received by:

Received by: *Jim Anderson*

Relinquished by:

Date _____

Time

Received by Editor.

Sample Containers Intact?

Temperature Upon Receipt:

Laboratory Comments:

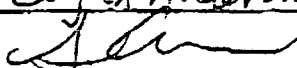
Laboratory Comments:
Samples of +02 were trans-
posed +
1.0 °C
Changed
Per Logan
6-1-03 15.2

100

45

TO: Environmental Labs of Texas
RE: EME Penae WGB EOL Results.
6-6-03

I mislabeled the jars sent to you.
The jar with white caliche is the
"Bottom comp @ 8'", and the jar with
the red sand is the "Wall Comp". Could
you please send the results again
with the correction. Thanks You.

Logan Anderson


RE Environmental

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Client: RICE OPERATING

Date/Time: 6/6/03 1530 hrs.

Order #: 0306609

Initials: KA

Sample Receipt Checklist

Temperature of container/cooler?	☒ Yes	☐ No	1.0	C
Shipping container/cooler in good condition?	☒ Yes	☐ No		
Custody Seals intact on shipping container/cooler?	☒ Yes	☐ No	Not present	
Custody Seals intact on sample bottles?	☒ Yes	☐ No	Not present	
Chain of custody present?	☒ Yes	☐ No		
Sample Instructions complete on Chain of Custody?	☐ Yes	☒ No	Sample field codes transposed	
Chain of Custody signed when relinquished and received?	☒ Yes	☐ No		
Chain of custody agrees with sample label(s)	☐ Yes	☒ No		
Container labels legible and intact?	☒ Yes	☐ No		
Sample Matrix and properties same as on chain of custody?	☐ Yes	☒ No		
Samples in proper container/bottle?	☒ Yes	☐ No		
Samples properly preserved?	☒ Yes	☐ No		
Sample bottles intact?	☒ Yes	☐ No		
Preservations documented on Chain of Custody?	☒ Yes	☐ No		
Containers documented on Chain of Custody?	☒ Yes	☐ No		
Sufficient sample amount for indicated test?	☒ Yes	☐ No		
All samples received within sufficient hold time?	☒ Yes	☐ No		
VOC samples have zero headspace?	☒ Yes	☐ No	Not Applicable	

Other observations:

Logan
Contact Person: - Anderson Variance Documentation: 6/6/03 1530 Contacted by: Roland Tuttle
Regarding: Logan Called Roland & Advised the Labels on Samples 01 & 02 were transposed & Needed to be changed.

Corrective Action Taken:

Labels were placed on proper samples and
Data was corrected inhouse; A New Report
was generated & faxed. KA 6/6/03 1550

ANALYTICAL REPORT

Prepared for:

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

Project: EME Pen Roc Web EOL

PO#:

Order#: G0307650

Report Date: 10/08/2003

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#: G0307650
Project: Bore Samples
Project Name: EME Pen Roc Web EOL
Location: Non eglven

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>
0307650-01	8' W. Source @30'	SOIL	9/18/03 8:30	10/6/03 8:00	Plastic Bag	ice
<u>Lab Testing:</u>		Rejected: No	Temp: 4.0 C			
Chloride						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0307650
Project: Bore Samples
Project Name: EME Pen Roc Web EOL
Location: Non cGiven

Lab ID: 0307650-01
Sample ID: 8' W. Source @30'

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>
Chloride	195	mg/kg	1	20	9253	10/7/03	SB

Approval:

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

10/9/03
Date

RL = Reporting Limit N/A = Not Applicable

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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

Test Parameters

Order#: G0307650

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0007064-01			<20		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307648-01	1030	500	1540	102.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0307648-01	1030	500	1560	106.%	1.3%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0007064-04		5000	4960	99.2%	

12500 West I-20 East

Project Name: EMT Pen Rec Web EOL

Project #: BORE Samples

Project Loc:

PO #

Fax No: 505-397-1471

Oct 09 03 02:02p