

1R - 427-25

REPORTS

DATE:

4-4-2003

1R0 427-25

FINAL REPORT

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
EME	C-12-1 North	C	12	20 S	36 E	Lea	No Box		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Charcie Byrd OTHER _____

Depth to Groundwater 31 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 3/3/2003 Date Completed 3/31/2003 OCD Witness No

Soil Excavated 46 cubic yards Excavation Length 13 Width 12 Depth 8 feet

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

FINAL ANALYTICAL RESULTS: Sample Date 3/4/2003 Sample Depth 8' 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	Chlorides mg/kg
SIDEWALLS	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	638
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	248
REMEDIATED	<0.025	<0.025	<0.025	<0.025	<10.0	312	496

General Description of Remedial Action: The site was delineation vertically where

TPH dissipated at 4' bgs and chloride impact declined substantially at 8' bgs. The excavation was extended laterally in all directions until chloride and TPH impact exhibited a decline from the source. A 1' clay barrier was installed at the bottom of the 13' x 12' x 8' excavation to hinder vertical migration of any remaining impact. The excavated soil was landfarmed on location, backfilled into the clay-lined hole, and then contoured to the surrounding area. A junction box is no longer required at this location. Remaining TPH is expected to naturally attenuate.

cc: lab results, photos

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
Vertical	2	1400
	4	1300
	6	800
	8	400
4' N	6	300
4' S	6	450
6' E	6	600
6' W	6	500
Bottom. Comp.	8	500

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

DATE 4/4/2003 PRINTED NAME Kristin Farris

SIGNATURE Kristin Farris TITLE Projects Scientist

EME C-12-1 North



Before Excavation



Excavation

EME C-12-1 North



Clay Barrier

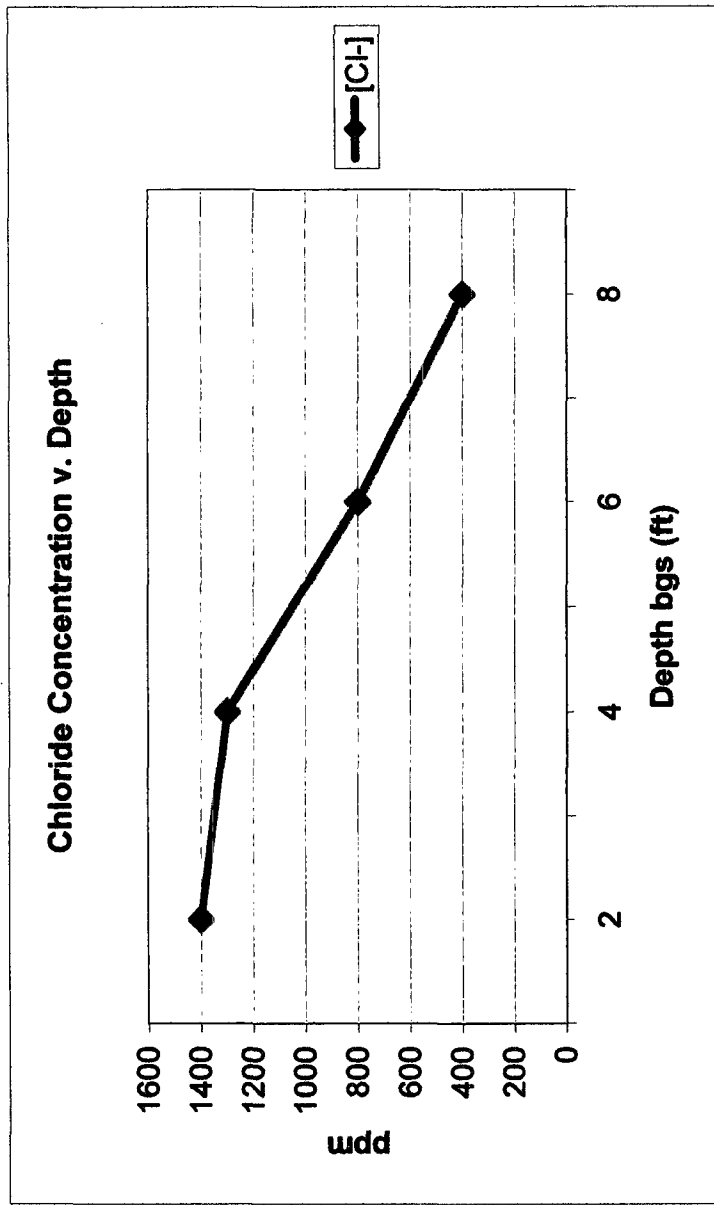


Backfilled

EME C-12-1 North Boot
T20S, R36S

Depth bgs (ft)	[Cl-] ppm
2	1400
4	1300
6	800
8	400

Groundwater = 31 ft



ANALYTICAL REPORT

Prepared for:

DONNIE ANDERSON
RICE OPERATING CORP.
122 WEST TAYLOR
HOBBS, NM 88240

Project: C-12-1 North

PO#:

Order#: G0305881

Report Date: 03/10/2003

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

RICE OPERATING CORP.
122 WEST TAYLOR
HOBBS, NM 88240

Order#: G0305881
Project:
Project Name: C-12-1 North
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>
0305881-01	5 pt. Bottom Comp. @ 8'	SOIL	3/4/03	3/5/03	4 oz glass	Ice
			10:30	9:08		
			Temp: 1.5 C			
			Rejected: No			
			<u>Lab Testing:</u>			
	8015M					
	8021B/5030 BTEX					
	Chloride					
0305881-02	4 pt. Wall Comp. @ 6'	SOIL	3/4/03	3/5/03	4 oz glass	Ice
			10:00	9:08		
			Temp: 1.5 C			
			Rejected: No			
			<u>Lab Testing:</u>			
	8015M					
	8021B/5030 BTEX					
	Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DONNIE ANDERSON
RICE OPERATING CORP.
122 WEST TAYLOR
HOBBS, NM 88240

Order#: G0305881
Project:
Project Name: C-12-1 North
Location: EME

Lab ID: 0305881-01
Sample ID: 5 pt. Bottom Comp. @ 8'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		3/7/03	1	1	CK	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	78%	70	130
1-Chlorooctadecane	70%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0004865-02		3/6/03 22:21	1	25	CK	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	102%	80	120
Bromofluorobenzene	120%	80	120

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

DONNIE ANDERSON
RICE OPERATING CORP.
122 WEST TAYLOR
HOBBS, NM 88240

Order#: G0305881
Project:
Project Name: C-12-1 North
Location: EME

Lab ID: 0305881-02
Sample ID: 4 pt. Wall Comp. @ 6'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		3/7/03	1	1	CK	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	90%	70	130
1-Chlorooctadecane	80%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0004865-02		3/6/03 22:41	1	25	CK	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	100%	80	120
Bromofluorobenzene	120%	80	120

Approval: *Raland K. Tuttle* 3-10-03
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

DONNIE ANDERSON
RICE OPERATING CORP.
122 WEST TAYLOR
HOBBS, NM 88240

Order#: G0305881
Project:
Project Name: C-12-1 North
Location: EME

Lab ID: 0305881-01
Sample ID: 5 pt. 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	248	mg/kg	1	20	9253	3/6/03	SB

Lab ID: 0305881-02
Sample ID: 4 pt. Wall Comp. @ 6'

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	638	mg/kg	1	20	9253	3/6/03	SB

Approval: Raland K. Tuttle 3-10-03
Raland K. Tuttle, Lab Director, QA Officer Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0305881

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004876-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0305881-02	0	952	766	80.5%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0305881-02	0	952	720	75.6%	6.2%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004876-05		1000	864	86.4%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0305881

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0004865-02			<0.025		
Toluene-mg/kg		0004865-02			<0.025		
Ethylbenzene-mg/kg		0004865-02			<0.025		
p/m-Xylene-mg/kg		0004865-02			<0.025		
o-Xylene-mg/kg		0004865-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0305891-01	0.032	2.5	2.17	85.5%	
Toluene-mg/kg		0305891-01	0.1	2.5	2.20	84.%	
Ethylbenzene-mg/kg		0305891-01	0.093	2.5	2.41	92.7%	
p/m-Xylene-mg/kg		0305891-01	0.292	5	5.05	95.2%	
o-Xylene-mg/kg		0305891-01	0.069	2.5	2.47	96.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0305891-01	0.032	2.5	2.23	87.9%	2.7%
Toluene-mg/kg		0305891-01	0.1	2.5	2.25	86.%	2.2%
Ethylbenzene-mg/kg		0305891-01	0.093	2.5	2.43	93.5%	0.8%
p/m-Xylene-mg/kg		0305891-01	0.292	5	5.07	95.6%	0.4%
o-Xylene-mg/kg		0305891-01	0.069	2.5	2.48	96.4%	0.4%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0004865-05		0.1	0.098	98.%	
Toluene-mg/kg		0004865-05		0.1	0.102	102.%	
Ethylbenzene-mg/kg		0004865-05		0.1	0.103	103.%	
p/m-Xylene-mg/kg		0004865-05		0.2	0.214	107.%	
o-Xylene-mg/kg		0004865-05		0.1	0.107	107.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0305881

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004859-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305877-01	0	275.75	248	89.9%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305877-01	248	275.75	257	93.2%	3.6%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004859-04		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

Logan Anderson

C-12-1 North

Rice Operating

End

Project Loc:

注○

Fax No:

[illegible]

ANALYTICAL REPORT

Prepared for:

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

Project: C-12 North Jct Box

PO#: 757

Order#: G0306120

Report Date: 04/04/2003

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#: G0306120
Project:
Project Name: C-12 North Jct Box
Location: EME 757

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>
0306120-01	Backfill Comp.	SOIL	3/28/03	3/28/03 19:55	4 oz glass	lcc
<u>Lab Testing:</u>		Rejected: No	Temp:	2 C		
8015M						
8021B/5030 BTEX						
Chloride						

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0306120
Project:
Project Name: C-12 North Jet Box
Location: EME 757

Lab ID: 0306120-01
Sample ID: Backfill Comp.

8015M

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
		4/1/03	1	1	WL	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	312	10.0
TOTAL, C6-C35	312	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	107%	70	130
1-Chlorooctadecane	109%	70	130

8021B/5030 BTEX

<u>Method</u> <u>Blank</u>	<u>Date</u> <u>Prepared</u>	<u>Date</u> <u>Analyzed</u>	<u>Sample</u> <u>Amount</u>	<u>Dilution</u> <u>Factor</u>	<u>Analyst</u>	<u>Method</u>
0005137-02		4/2/03 19:32	1	25	CK	8021B

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

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	86%	80	120
Bromofluorobenzene	111%	80	120

Approval: Raland K Tuttle 4-04-03
 Raland K. Tuttle, Lab Director, QA Officer Date
 Celey D. Keene, Org. Tech. Director
 Jeanne McMurrey, Inorg. Tech. Director
 Sandra Biezugbe, Lab Tech.
 Sara Molina, Lab Tech.

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#: G0306120
Project:
Project Name: C-12 North Jet Box
Location: EME 757

Lab ID: 0306120-01
Sample ID: Backfill Comp.

Test Parameters

<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>Analyzed</u>	<u>Analyst</u>
Chloride	496	mg/kg	1	20	9253	3/31/03	CK

Approval:

Raland K. Tuttle 4-04-03
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

8015M

Order#: G0306120

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005102-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306116-01	0	952	898	94.3%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0306116-01	0	952	923	97.7%	2.7%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005102-05		1000	907	90.7%	

ENVIRONMENTAL LAB OF TEXAS**QUALITY CONTROL REPORT****8021B/5030 BTEX****Order#: G0306120**

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005137-02			<0.025		
Toluene-mg/kg		0005137-02			<0.025		
Ethylbenzene-mg/kg		0005137-02			<0.025		
p/m-Xylene-mg/kg		0005137-02			<0.025		
o-Xylene-mg/kg		0005137-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306143-04	0	0.1	0.086	86.%	
Toluene-mg/kg		0306143-04	0	0.1	0.092	92.%	
Ethylbenzene-mg/kg		0306143-04	0	0.1	0.101	101.%	
p/m-Xylene-mg/kg		0306143-04	0	0.2	0.212	106.%	
o-Xylene-mg/kg		0306143-04	0	0.1	0.104	104.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306143-04	0	0.1	0.093	93.%	7.8%
Toluene-mg/kg		0306143-04	0	0.1	0.095	95.%	3.2%
Ethylbenzene-mg/kg		0306143-04	0	0.1	0.099	99.%	2.%
p/m-Xylene-mg/kg		0306143-04	0	0.2	0.206	103.%	2.9%
o-Xylene-mg/kg		0306143-04	0	0.1	0.098	98.%	5.9%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005137-05		0.1	0.094	94.%	
Toluene-mg/kg		0005137-05		0.1	0.097	97.%	
Ethylbenzene-mg/kg		0005137-05		0.1	0.099	99.%	
p/m-Xylene-mg/kg		0005137-05		0.2	0.205	102.5%	
o-Xylene-mg/kg		0005137-05		0.1	0.099	99.%	

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

Order#: G0306120

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005095-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306109-02	0	500	532	106.4%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0306109-02	0	500	517	103.4%	2.9%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0005095-04		5000	4960	99.2%	

12600 West 120 East
Odessa, Texas 79763

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CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Kristin Farris

Company Name: RICE Operating

Company Address: 122 W Taylor

City/State/Zip: Holbrook, NM 88840

Telephone No: (505) 393-9174

Fax No: (505) 397-1471

Sampler Signature: [Signature]

Project #:

Project Loc: EME 757

PO #: 757

Project Name: C-12-1 W-14 Set Box

Relinquished by:	Date	Time	Received by:	Date	Time	Analyze For	
						ICLP	TOTAL
Special Instructions: <u>For Healths</u> <u>John M. [Signature]</u> <u>3-28-03</u>	03/28/03	5:00	[Signature]	3-28-03	19:55	Preservative	
						Matrix	
						No. of Containers	
						Ice	
						HNO ₃	
						HCl	
						NaOH	
						H ₂ SO ₄	
						None	
						Other (Specify)	
Water							
Sludge							
Soil							
Other (specify):							
TDS @ SAR / EC							
TPH 418, 1							
TPH TX 1005/1006							
TPH 8015M GRO/DRO							
Metals: As Ag Ba Cd Cr Pb Hg Se							
Volatiles							
Semi-volatiles							
BTEX 80218/5030							
RUSH TAT (Pre-Schedule)							
Standard TAT							