

1R - 427-26

REPORTS

DATE:

3-5-2003

1R0477-26

FINAL REPORT

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
EME	H-10-1	H	10	20S	36E	Lea	Length	Width	Depth
							No Box		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER George & Harry Klein OTHER _____

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

Date Started 1/29/2003 Date Completed 2/13/2003 OCD Witness No

Soil Excavated 600 cubic yards Excavation Length 30 Width 30 Depth 17 feet

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

FINAL ANALYTICAL RESULTS: Sample Date 2/12/2003 Sample Depth 17' 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	189	338
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10.0	49.2	145
BACKFILL	<0.025	<0.025	<0.025	<0.025	<10.0	113	<20

General Description of Remedial Action: During the jct. box upgrade, it was discovered that the junction was adjacent to an abandoned production facility that was never remediated. The area surrounding the box and that to the south is barren and overlain by hardpan. 15' in every direction was excavated to the depth of 17'bgs where TPH concentrations met OCD guidelines. Chloride impact was minimal. The 30' x 30' x 17' excavation was lined with 20 mil plastic that extended up the sides to about 5'bgs to encapsulate the impacted soil. However, on-site landfarming remediated the soil to OCD guidelines. With the liner already in place, the excavation was backfilled with the remediated soil. The site has been re-seeded with native vegetation and will be monitored for growth. Remaining TPH is expected to naturally attenuate. This site is no longer a junction so a box is not required.

cc: photos, lab results, diagrams

CHLORIDE FIELD TESTS

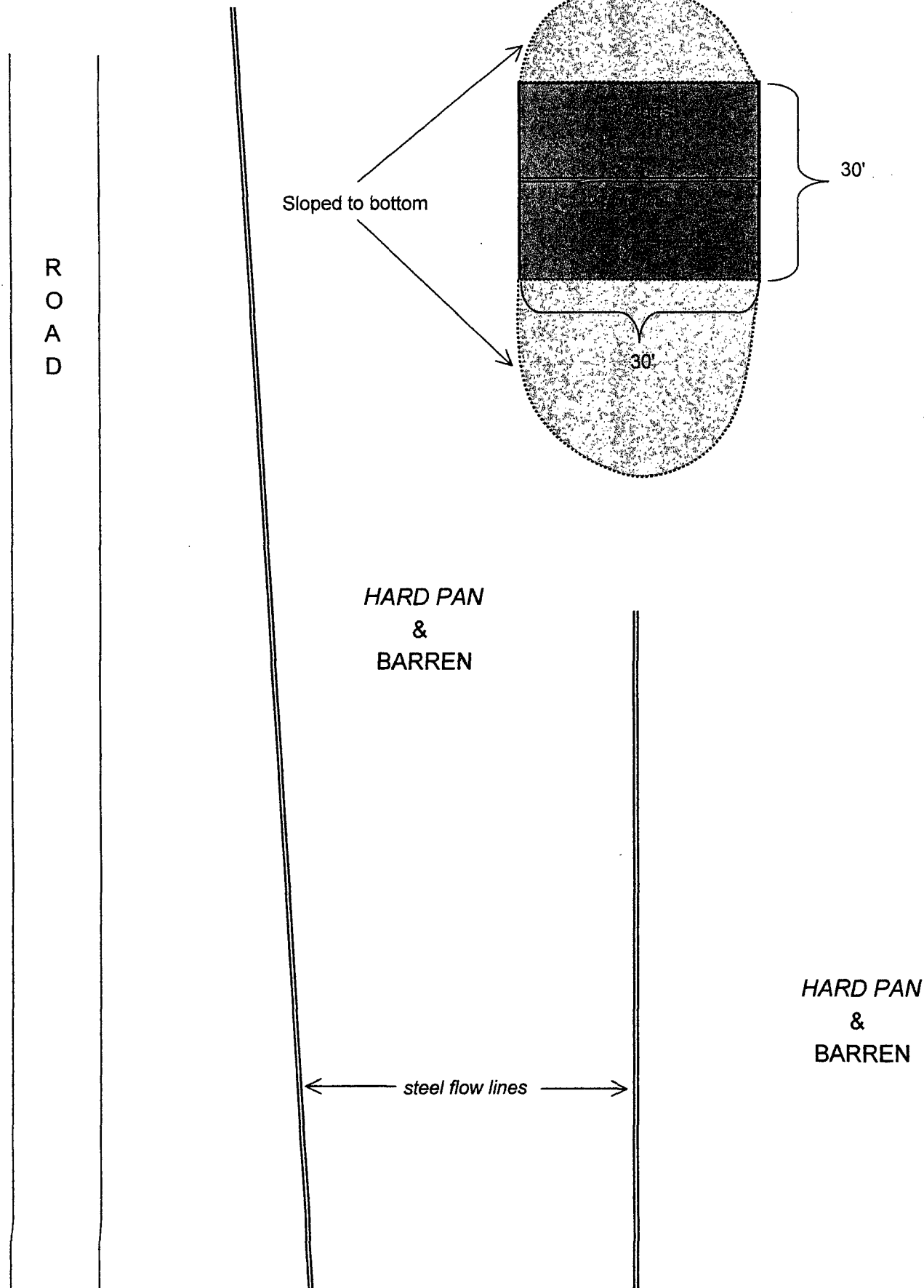
LOCATION	DEPTH (ft)	ppm
Vetical	Surface	149
	3	8300
	7	199
	11	284
Btm. Comp.	17	189

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

DATE 3/5/2003 PRINTED NAME Kristin Farris

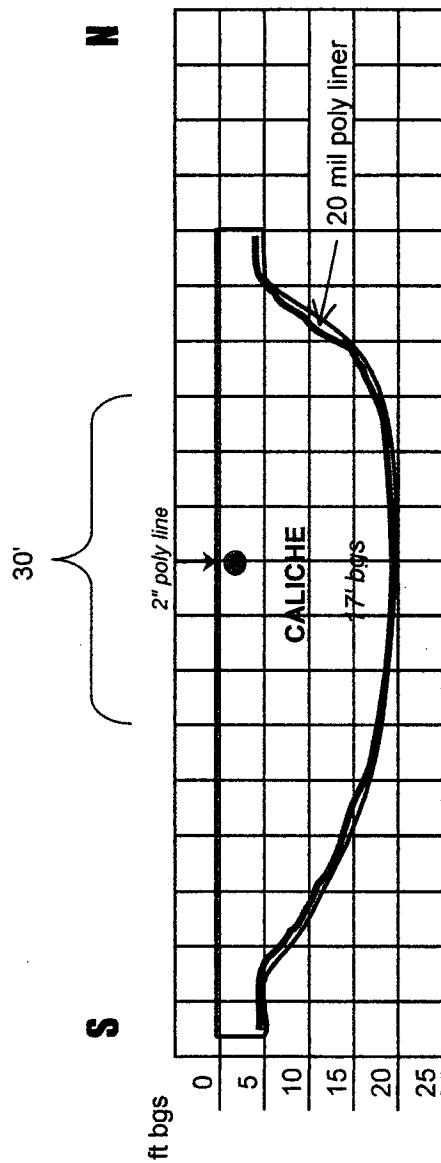
SIGNATURE Kristin Farris TITLE Projects Scientist

EME jct. H-10-1
30' x 30' x 17' Impact Excavation



EME jct. H-10-1
30' x 30' x 17' Impact Excavation

— = 5 FT



EME jct. H-10-1



Before Remediation



Impact Excavation

EME jct. H-10-1



Backfilling Poly Liner



Backfilled (looking north)

CHLORIDE CONCENTRATION CURVE

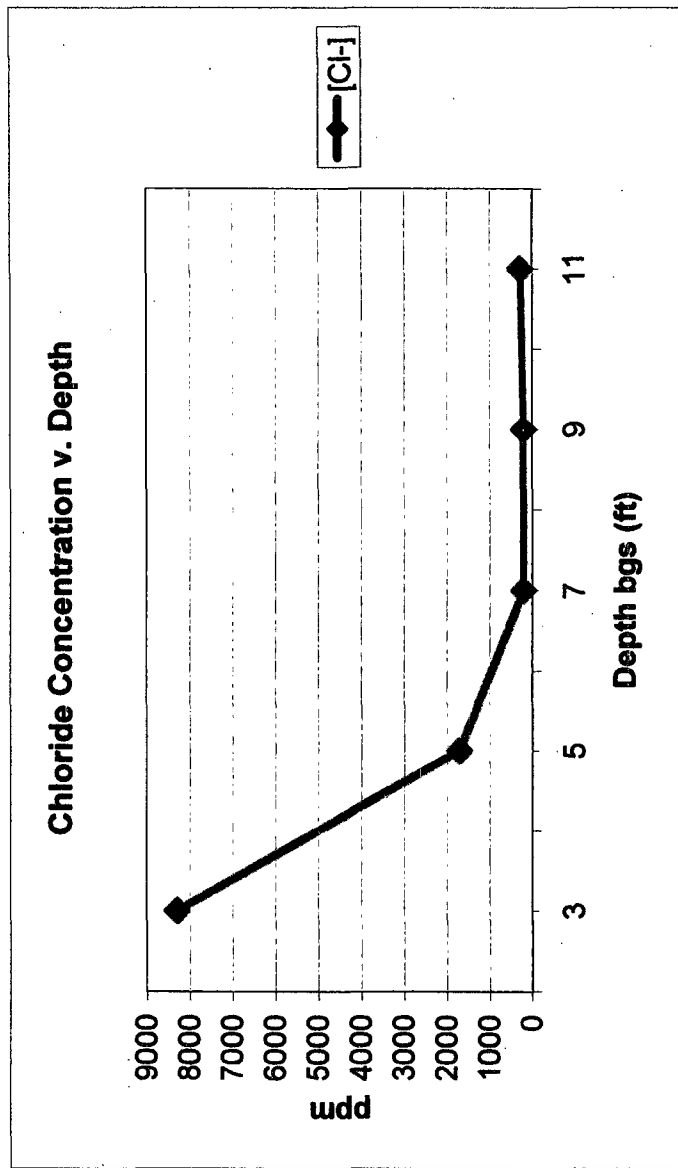
RICE Operating Company

EME jct. H-10-1

T20S, R36E

Depth bgs (ft)	[Cl-] ppm
3	8300
5	1716
7	199
9	201
11	284

Groundwater = 31 ft



ANALYTICAL REPORT

Prepared for:

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

Project: Jct. H-10-1 Btm. + Wall Comp.
PO#: 749
Order#: G0305702
Report Date: 02/14/2003

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#: G0305702
Project: None Given
Project Name: Jct. H-10-1
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>Date / Time</u>	<u>Container</u>	<u>Preservative</u>
			<u>Collected</u>	<u>Received</u>		
0305702-01	Btm. Comp. @ 17'	SOIL	2/12/03	2/12/03	4 oz Glass	Ice
				19:50		
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.0 C		
	8015M 8021B/5030 BTEX Chloride					
0305702-02	Wall Comp.	SOIL	2/12/03	2/12/03	4 oz Glass	Ice
				19:50		
	<u>Lab Testing:</u>	Rejected: No		Temp: 1.0 C		
	8015M 8021B/5030 BTEX Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

Order#: G0305702
Project: None Given
Project Name: Jct. H-10-1
Location: EME

Lab ID: 0305702-01
Sample ID: Btm. Comp. @ 17'

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		2/13/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	49.2	10.0
TOTAL, C6-C35	49.2	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	98%	70	130
1-Chlorooctadecane	100%	70	130

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
0004632-02		2/14/03 0:18	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	85%	80	120
Bromofluorobenzene	95%	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#: G0305702
Project: None Given
Project Name: Jct. H-10-1
Location: EME

Lab ID: 0305702-02
Sample ID: Wall Comp.

8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		2/13/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	189	10.0
TOTAL, C6-C35	189	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	94%	70	130
1-Chlorooctadecane	97%	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>		
0004632-02		2/14/03 0:39	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	87%	80	120
Bromofluorobenzene	92%	80	120

Approval: *Raland K. Tuttle* 2-14-03
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#: G0305702
Project: None Given
Project Name: Jct. H-10-1
Location: EME

Lab ID: 0305702-01
Sample ID: Btm. Comp. @ 17'

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	145	mg/kg	1	20.0	9253	2/14/03	CK

Lab ID: 0305702-02
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	338	mg/kg	1	20.0	9253	2/14/03	CK

Approval: Raland K. Tuttle 2-14-03
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#: G0305702

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004634-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0305702-01	49.2	952	849	84.0%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0305702-01	49.2	952	845	83.6%	0.5%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004634-05		1000	903	90.3%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0305702

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0004632-02			<0.025		
Toluene-mg/kg		0004632-02			<0.025		
Ethylbenzene-mg/kg		0004632-02			<0.025		
p/m-Xylene-mg/kg		0004632-02			<0.025		
o-Xylene-mg/kg		0004632-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0305706-04	0	2.5	2.14	85.6%	
Toluene-mg/kg		0305706-04	0.037	2.5	2.21	86.9%	
Ethylbenzene-mg/kg		0305706-04	0	2.5	2.25	90.%	
p/m-Xylene-mg/kg		0305706-04	0.058	5	4.90	96.8%	
o-Xylene-mg/kg		0305706-04	0	2.5	2.31	92.4%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0305706-04	0	2.5	2.21	88.4%	3.2%
Toluene-mg/kg		0305706-04	0.037	2.5	2.24	88.1%	1.3%
Ethylbenzene-mg/kg		0305706-04	0	2.5	2.26	90.4%	0.4%
p/m-Xylene-mg/kg		0305706-04	0.058	5	4.91	97.%	0.2%
o-Xylene-mg/kg		0305706-04	0	2.5	2.34	93.6%	1.3%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0004632-05		0.1	0.087	87.%	
Toluene-mg/kg		0004632-05		0.1	0.088	88.%	
Ethylbenzene-mg/kg		0004632-05		0.1	0.088	88.%	
p/m-Xylene-mg/kg		0004632-05		0.2	0.192	96.%	
o-Xylene-mg/kg		0004632-05		0.1	0.092	92.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0305702

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004640-01			<20.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305697-01	3540	5000	8510	99.4%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305697-01	3540	5000	8600	101.2%	1.1%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004640-04		5000	5230	104.6%	

12500 West I-20 East
Odessa, Texas 79763

pt. H-10-1

Project #:

Project Lac:

PO #: 749

[illegible]

Backfill

ANALYTICAL REPORT

Prepared for:

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

Project: Jct. H-10-1

PO#: 749

Order#: G0305841

Report Date: 03/05/2003

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#: G0305841
Project:
Project Name: Jct. H-10-1
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>
0305841-01	Backfill	SOIL	2/27/03	2/27/03 19:36	4 oz glass	Ice
	<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#: G0305841
Project:
Project Name: Jct. H-10-1
Location: EME

Lab ID: 0305841-01
Sample ID: Backfill

8015M

Method <u>Blank</u>	Date <u>Prepared</u>	Date <u>Analyzed</u>	Sample <u>Amount</u>	Dilution <u>Factor</u>	Analyst	Method
		2/28/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	113	10.0
TOTAL, C6-C35	113	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	99%	70	130
1-Chlorooctadecane	94%	70	130

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
0004839-02		3/4/03 12:20	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	90%	80	120
Bromofluorobenzene	98%	80	120

Approval:

Coley D. Keene 3/5/03
 Raland K. Tuttle, Lab Director, QA Officer
 Coley 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

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ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

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

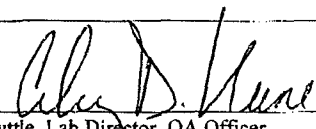
Order#: G0305841
Project:
Project Name: Jct. H-10-1
Location: EME

Lab ID: 0305841-01
Sample ID: Backfill

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	<20.0	mg/kg	1	20	9253	3/3/03	SB

Approval:


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

Date 3/5/03

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****8015M****Order#: G0305841**

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004808-02			<10.0		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0305835-01	0	952	875	91.9%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0305835-01	0	952	809	85.5%	7.8%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004808-05		1000	822	82.2%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX
Order#: G0305841

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0004839-02			<0.025		
Toluene-mg/kg		0004839-02			<0.025		
Ethylbenzene-mg/kg		0004839-02			<0.025		
p/m-Xylene-mg/kg		0004839-02			<0.025		
o-Xylene-mg/kg		0004839-02			<0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0305835-02	0	0.1	0.097	97.%	
Toluene-mg/kg		0305835-02	0	0.1	0.100	100.%	
Ethylbenzene-mg/kg		0305835-02	0	0.1	0.102	102.%	
p/m-Xylene-mg/kg		0305835-02	0	0.2	0.210	105.%	
o-Xylene-mg/kg		0305835-02	0	0.1	0.103	103.%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0305835-02	0	0.1	0.098	98.%	1.%
Toluene-mg/kg		0305835-02	0	0.1	0.100	100.%	0.%
Ethylbenzene-mg/kg		0305835-02	0	0.1	0.101	101.%	1.%
p/m-Xylene-mg/kg		0305835-02	0	0.2	0.208	104.%	1.%
o-Xylene-mg/kg		0305835-02	0	0.1	0.102	102.%	1.%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0004839-05		0.1	0.098	98.%	
Toluene-mg/kg		0004839-05		0.1	0.102	102.%	
Ethylbenzene-mg/kg		0004839-05		0.1	0.102	102.%	
p/m-Xylene-mg/kg		0004839-05		0.2	0.211	105.5%	
o-Xylene-mg/kg		0004839-05		0.1	0.105	105.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0305841

<i>BLANK</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004828-01			<20.0		
<i>MS</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305835-01	106	1000	1100	99.4%	
<i>MSD</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305835-01	106	1000	1100	99.4%	0.0%
<i>SRM</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004828-04		5000	4960	99.2%	

Environmental Lab of Texas, Inc.

12500 West 1-20 East
Odessa, Texas 79763

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

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Kristin Harris

Project Name: Jet. H-10-1

Company Name ALICE Operating

Project #

Company Address: 122 W. Taylor

Project Loc: EMF

City/State/Zip: Hobbs, NM 88240

PO #: 749

Telephone No. (505) 393-9174

Fax No: (505) 397-1471

Sampler Signature: Martin J. Davis

[illegible]