

1R - 427 - 187

REPORTS

DATE:

10-11-05

Eme Amerada Mattern
Ea

1R0427-187

Final Report

**RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT**

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
EME	Amerada Mattern EOL	K	20	19S	37E	Lea	Length	Width	Depth
							eliminated—no box		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Jimmie T. Cooper et ux
Jimmie B Cooper OTHER _____

Depth to Groundwater 40 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 6/16/2005 Date Completed 7/8/2005 NMOCD Witness no

Soil Excavated 44 cubic yards Excavation Length 10 Width 10 Depth 12 feet

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

FINAL ANALYTICAL RESULTS: Sample Date 6/17/2005 Sample Depth 12 ft

5-point composite sample of bottom and 4-point composite sample of excavation 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	Ethylbenzene mg/kg	Total Xylenes mg/kg	GRO mg/kg	DRO mg/kg	Chloride mg/kg
4-WALL COMP.	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	24.3
BOTTOM COMP.	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	46.9
REMEDI. BACKFILL	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	48.8

CHLORIDE FIELD TESTS

General Description of Remedial Action: This End-Of-Line (EOL) junction box has been eliminated with the Pipeline Replacement Program. The box lumber was removed and the site was decontaminated for NORM. The location was then delineated using a backhoe while soil samples were collected every vertical foot and field-tested for chloride and volatile organic compounds (VOCs) using a PID. A 10 x 10 x 12-ft-deep excavation was produced and all chloride concentrations were less than 250 ppm. BTEX, GRO, and DRO concentrations on the final samples were non-detect by the laboratory. The excavated soil was blended on-site and then backfilled into the excavation and contoured to the surrounding surface. The disturbed surface was seeded with a blend of native vegetation on 9/30/2005 and is expected to return to productive capacity at a normal rate. A replacement junction box was not needed at this site because the pipeline junction has been eliminated.

LOCATION	DEPTH (ft)	ppm
vertical trench at junction box	3	228
	4	171
	5	140
	6	260
	7	195
	8	266
	9	152
	10	179
	11	159
	12	209
4-wall comp.	n/a	170
bottom comp.	12	204
backfill comp.	n/a	142

enclosures: photos, lab results

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

SITE SUPERVISOR Jorge Hernandez SIGNATURE not available COMPANY RICE Operating Company

REPORT ASSEMBLED BY Kristin Farris Pope SIGNATURE Kristin Farris Pope

DATE 10/11/2005 TITLE Project Scientist

EME Amerada Mattern EOL



undisturbed junction box

3/18/2004



inside of junction box

3/18/2004



box lumber removed

11/15/2004



beginning excavation & delineation

6/16/2005



delineation & excavation

6/16/2005



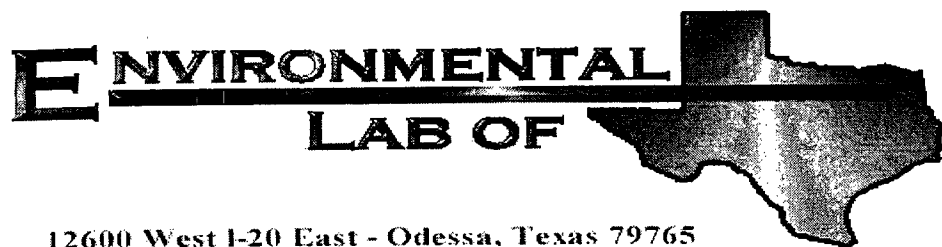
backfilling & compacting

7/8/2005



contouring surface of backfilled site

7/8/2005



12600 West I-20 East - Odessa, Texas 79765

COPY

Analytical Report

Prepared for:

Roy Rascon
Rice Operating Co.
122 W. Taylor
Hobbs, NM 88240

Project: EME Amerada Mattern EOL

Project Number: None Given

Location: None Given

Lab Order Number: 5F20003

Report Date: 06/22/05

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: EME Amerada Mattern EOL
Project Number: None Given
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:
06/22/05 15:04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
4-Wall Composite	5F20003-01	Soil	06/17/05 10:56	06/17/05 18:00
Remediate Backfill	5F20003-02	Soil	06/17/05 11:03	06/17/05 18:00
Bottom Composite @ 12 ft.	5F20003-03	Soil	06/17/05 10:19	06/17/05 18:00

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: EME Amerada Mattern EOL
Project Number: None Given
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:
06/22/05 15:04

Organics by GC Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4-Wall Composite (5F20003-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF52103	06/20/05	06/21/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		86.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF52007	06/20/05	06/21/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		78.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		87.6 %	70-130		"	"	"	"	
Remediate Backfill (5F20003-02) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF52103	06/20/05	06/21/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		86.3 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.5 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF52007	06/20/05	06/21/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		78.8 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		91.4 %	70-130		"	"	"	"	
Bottom Composite @ 12 ft. (5F20003-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EF52103	06/20/05	06/21/05	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		87.3 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.9 %	80-120		"	"	"	"	
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EF52007	06/20/05	06/21/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 2 of 9

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: EME Amerada Mattern EOL
Project Number: None Given
Project Manager: Roy Rascon

Fax: (505) 397-1471
Reported:
06/22/05 15:04

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Bottom Composite @ 12 ft. (5F20003-03) Soil									
Surrogate: 1-Chlorooctane		78.8 %	70-130		EF52007	06/20/05	06/21/05	EPA 8015M	
Surrogate: 1-Chlorooctadecane		92.4 %	70-130		"	"	"	"	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: EME Amerada Mattern EOL
Project Number: None Given
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:
06/22/05 15:04

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4-Wall Composite (5F20003-01) Soil									
Chloride	24.3	5.00	mg/kg	10	EF52210	06/21/05	06/21/05	EPA 300.0	
% Moisture	6.6	0.1	%	1	EF52105	06/20/05	06/21/05	% calculation	
Remediate Backfill (5F20003-02) Soil									
Chloride	48.8	5.00	mg/kg	10	EF52210	06/21/05	06/21/05	EPA 300.0	
% Moisture	8.7	0.1	%	1	EF52105	06/20/05	06/21/05	% calculation	
Bottom Composite @ 12 ft. (5F20003-03) Soil									
Chloride	46.9	5.00	mg/kg	10	EF52210	06/21/05	06/21/05	EPA 300.0	
% Moisture	8.7	0.1	%	1	EF52105	06/20/05	06/22/05	% calculation	

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: EME Amerada Mattern EOL
Project Number: None Given
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:
06/22/05 15:04

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EF52007 - Solvent Extraction (GC)

Blank (EF52007-BLK1)

Prepared & Analyzed: 06/20/05

Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	36.3		mg/kg	50.0		72.6	70-130			
Surrogate: 1-Chlorooctadecane	35.4		"	50.0		70.8	70-130			

LCS (EF52007-BS1)

Prepared & Analyzed: 06/20/05

Gasoline Range Organics C6-C12	426	10.0	mg/kg wet	500		85.2	75-125			
Diesel Range Organics >C12-C35	407	10.0	"	500		81.4	75-125			
Total Hydrocarbon C6-C35	833	10.0	"	1000		83.3	75-125			
Surrogate: 1-Chlorooctane	36.8		mg/kg	50.0		73.6	70-130			
Surrogate: 1-Chlorooctadecane	35.6		"	50.0		71.2	70-130			

Calibration Check (EF52007-CCV1)

Prepared: 06/20/05 Analyzed: 06/21/05

Gasoline Range Organics C6-C12	501		mg/kg	500		100	80-120			
Diesel Range Organics >C12-C35	468		"	500		93.6	80-120			
Total Hydrocarbon C6-C35	969		"	1000		96.9	80-120			
Surrogate: 1-Chlorooctane	52.7		"	50.0		105	70-130			
Surrogate: 1-Chlorooctadecane	53.4		"	50.0		107	70-130			

Matrix Spike (EF52007-MS1)

Source: 5F17028-01

Prepared & Analyzed: 06/20/05

Gasoline Range Organics C6-C12	509	10.0	mg/kg dry	515	ND	98.8	75-125			
Diesel Range Organics >C12-C35	493	10.0	"	515	ND	95.7	75-125			
Total Hydrocarbon C6-C35	1000	10.0	"	1030	ND	97.1	75-125			
Surrogate: 1-Chlorooctane	51.5		mg/kg	50.0		103	70-130			
Surrogate: 1-Chlorooctadecane	49.6		"	50.0		99.2	70-130			

Matrix Spike Dup (EF52007-MSD1)

Source: 5F17028-01

Prepared & Analyzed: 06/20/05

Gasoline Range Organics C6-C12	487	10.0	mg/kg dry	515	ND	94.6	75-125	4.42	20	
Diesel Range Organics >C12-C35	493	10.0	"	515	ND	95.7	75-125	0.00	20	
Total Hydrocarbon C6-C35	980	10.0	"	1030	ND	95.1	75-125	2.02	20	
Surrogate: 1-Chlorooctane	50.6		mg/kg	50.0		101	70-130			
Surrogate: 1-Chlorooctadecane	49.5		"	50.0		99.0	70-130			

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: EME Amerada Mattern EOL
Project Number: None Given
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:
06/22/05 15:04

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EF52103 - EPA 5030C (GC)

Blank (EF52103-BLK1)

Prepared & Analyzed: 06/20/05

Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	84.8		ug/kg	100		84.8	80-120			
Surrogate: 4-Bromofluorobenzene	98.1		"	100		98.1	80-120			

LCS (EF52103-BS1)

Prepared: 06/20/05 Analyzed: 06/21/05

Benzene	93.4		ug/kg	100		93.4	80-120			
Toluene	94.5		"	100		94.5	80-120			
Ethylbenzene	86.7		"	100		86.7	80-120			
Xylene (p/m)	194		"	200		97.0	80-120			
Xylene (o)	86.6		"	100		86.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	104		"	100		104	80-120			
Surrogate: 4-Bromofluorobenzene	117		"	100		117	80-120			

Calibration Check (EF52103-CCV1)

Prepared: 06/20/05 Analyzed: 06/21/05

Benzene	87.0		ug/kg	100		87.0	80-120			
Toluene	86.5		"	100		86.5	80-120			
Ethylbenzene	80.2		"	100		80.2	80-120			
Xylene (p/m)	172		"	200		86.0	80-120			
Xylene (o)	82.2		"	100		82.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	100		"	100		100	80-120			
Surrogate: 4-Bromofluorobenzene	101		"	100		101	80-120			

Matrix Spike (EF52103-MS1)

Source: 5F17011-06

Prepared: 06/20/05 Analyzed: 06/21/05

Benzene	2330		ug/kg	2500	ND	93.2	80-120			
Toluene	2350		"	2500	ND	94.0	80-120			
Ethylbenzene	2120		"	2500	ND	84.8	80-120			
Xylene (p/m)	4650		"	5000	42.3	92.2	80-120			
Xylene (o)	2070		"	2500	ND	82.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	101		"	100		101	80-120			
Surrogate: 4-Bromofluorobenzene	115		"	100		115	80-120			

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: EME Amerada Mattern EOL
Project Number: None Given
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:
06/22/05 15:04

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EF52103 - EPA 5030C (GC)

Matrix Spike Dup (EF52103-MSD1)

Source: 5F17011-06

Prepared: 06/20/05

Analyzed: 06/21/05

Benzene	2300		ug/kg	2500	ND	92.0	80-120	1.30	20	
Toluene	2390		"	2500	ND	95.6	80-120	1.69	20	
Ethylbenzene	2150		"	2500	ND	86.0	80-120	1.41	20	
Xylene (p/m)	4680		"	5000	42.3	92.8	80-120	0.649	20	
Xylene (o)	2180		"	2500	ND	87.2	80-120	5.18	20	
Surrogate: a,a,a-Trifluorotoluene	103		"	100		103	80-120			
Surrogate: 4-Bromofluorobenzene	120		"	100		120	80-120			

Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: EME Amerada Mattern EOL
Project Number: None Given
Project Manager: Roy Rascon

Fax: (505) 397-1471

Reported:
06/22/05 15:04

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EF52105 - General Preparation (Prep)

Blank (EF52105-BLK1)

Prepared: 06/20/05 Analyzed: 06/21/05

% Moisture	ND	0.1	%
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Duplicate (EF52105-DUP1)

Source: 5F17028-01

Prepared: 06/20/05 Analyzed: 06/21/05

% Solids	96.4		%	97.1	0.724	20
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Batch EF52210 - Water Extraction

Blank (EF52210-BLK1)

Prepared & Analyzed: 06/21/05

Chloride	ND	0.500	mg/kg
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LCS (EF52210-BS1)

Prepared & Analyzed: 06/21/05

Chloride	10.9		mg/L	10.0	109	80-120
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Calibration Check (EF52210-CCV1)

Prepared & Analyzed: 06/21/05

Chloride	11.3		mg/L	10.0	113	80-120
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Duplicate (EF52210-DUP1)

Source: 5F20004-10

Prepared & Analyzed: 06/21/05

Chloride	4470	100	mg/kg	4590	2.65	20
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Rice Operating Co.
122 W. Taylor
Hobbs NM, 88240

Project: EME Amerada Mattern EOL
Project Number: None Given
Project Manager: Roy Rascon

Fax: (505) 397-1471
Reported:
06/22/05 15:04

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By: Raland K. Tuttle Date: 6-22-05

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

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: Roy Rascon

Project Name: EPIC Imceads matter Feb

Company Name Rice Operating Company

Project #:

Company Address: 122 W Taylor

Project Loc:

City/State/Zip: Hobbs, NM 88240

PO #:

Telephone No: 505-393-9174

Fax No: 505-397-1471

Sampler Signature:

Case / Demand

[illegible]

Environmental Lab of Texas

Variance / Corrective Action Report – Sample Log-In

Client: Rice Operating Co.

Date/Time: 06-17-05 @ 1800

Order #: 5F20003

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	-1.5	C
Shipping container/cooler in good condition?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Custody Seals intact on shipping container/cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not present	
Custody Seals intact on sample bottles?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not present	
Chain of custody present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Chain of Custody signed when relinquished and received?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Chain of custody agrees with sample label(s)	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Container labels legible and intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Samples in proper container/bottle?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Samples properly preserved?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample bottles intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Preservations documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Containers documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sufficient sample amount for indicated test?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
All samples received within sufficient hold time?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
VOC samples have zero headspace?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not Applicable	

Other observations:

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____
Regarding: _____

Corrective Action Taken:
