1R - 427-214

REPORTS

DATE:

2006

EME Amerada Mattern

1R-427-214

RECEIVED

APR - 4 2007

Environmental Bureau
Oil Conservation Division

CLOSURE

RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT

BOX LOCATION

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

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

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

Date Started 6/14/2005 Date Completed 12/28/2005 NMOCD Witness no

Soil Excavated 506 cubic yards Excavation Length 35 Width 30 Depth 13 feet

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

FINAL ANALYTICAL RESULTS:

Sample Date 12/7/2005 **Sample Depth** 13 ft

5-point composite sample of bottom and 4-point composite sample of excavation sidewalls. TPH and chloride laboratory test results completed by using an approved laboratory and testing procedures pursuant to NMOCD guidelines.

Sample Location	PID ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
4-WALL COMP.	0.9	<10.0	20.7	107
BOTTOM COMP.	3.0	<10.0	18.1	19.6
BACKFILL COMP.	8.5	<10.0	19.7	140

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
4-wall comp.	n/a	330
bottom comp.	12	233
backfill comp.	n/a	245

General Description of Remedial Action:

This junction was eliminated and the pipelines were capped. The box lumber was removed and the site was delineated using a backhoe while chloride field tests and PID screenings were performed at regular intervals on the soil samples creating a 35 x 30 x 13-ft-deep excavation. Chloride field tests exhibited relatively low concentrations that generally declined with depth and breadth. Composite samples were collected from the final excavation for confirmation of the field tests. The excavated soil was blended on site and then backfilled into the excavation. Additional fill was needed so clean topsoil was imported to level the excavation to the surrounding terrain. The disturbed area was seeded with a blend of native vegetation and is expected to return to productive capacity at a normal rate. Remaining hydrocarbon will naturally attenuate. These activities are not a threat to groundwater, human health, or the environment.

enclosures: chloride graph, photos, lab results, PID field screenings

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

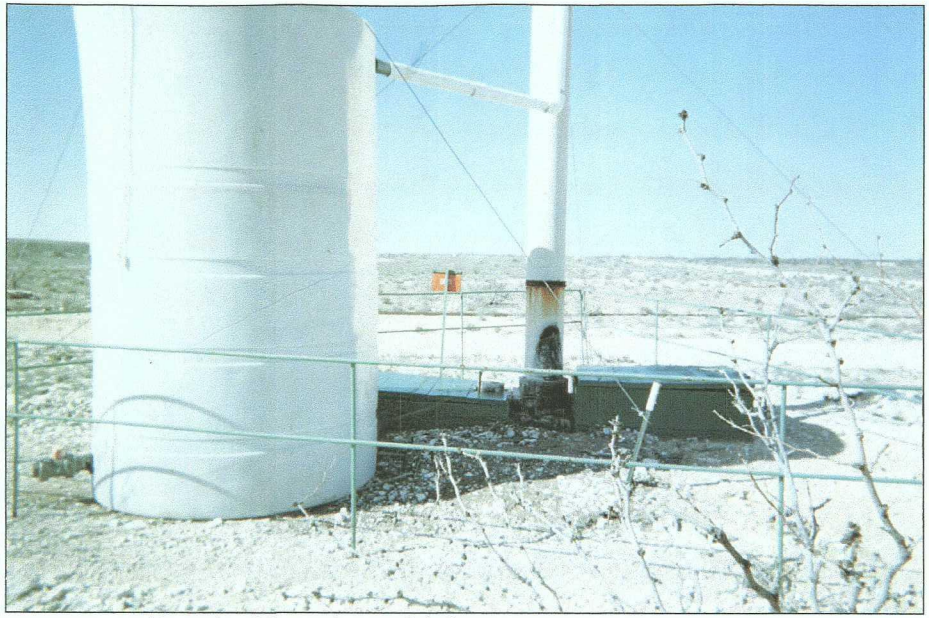
SITE SUPERVISOR Jorge Hernandez SIGNATURE not available COMPANY RICE Operating Company

REPORT ASSEMBLED BY Kristin Farris Pope SIGNATURE Kristin Pope

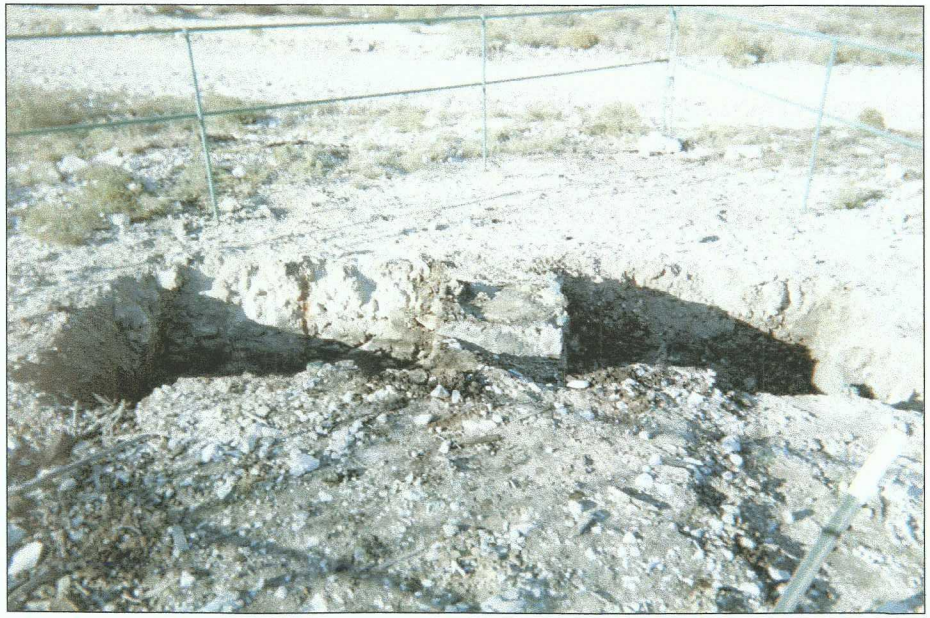
DATE 5/11/2006 TITLE Project Scientist

EME Amerada Mattern boot

Unit 'K', Section 20, T19S, R37E



undisturbed junction with boot 3/18/2004



box removed

back hoe delineation 6/14/2005

track hoe delineation 12/7/2005

spreading imported topsoil on backfilled site 2/8/2006

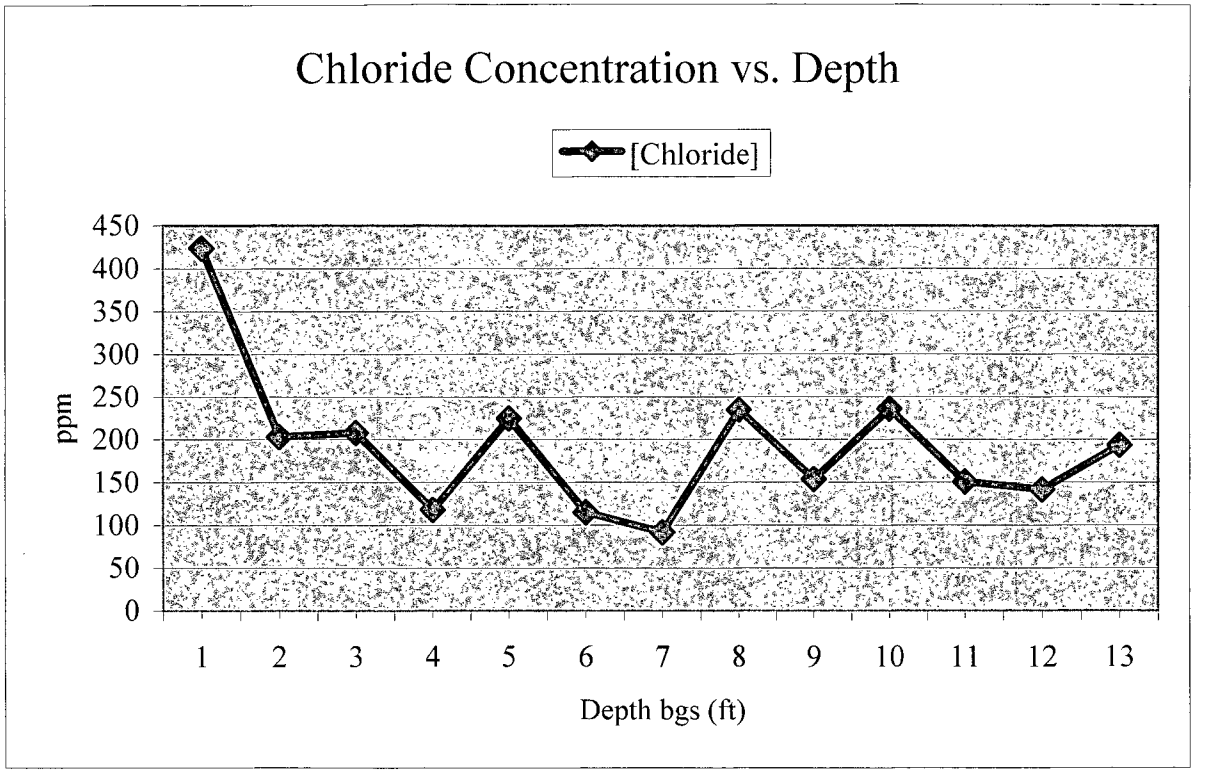
seeding surface 3/7/2006

EME Amerada Mattern boot

Unit 'K', Sec. 20, T19S, R37E

15 ft EAST of junction

Depth bgs (ft)	[Cl⁻] ppm
1	424
2	203
3	208
4	118
5	225
6	115
7	91.7
8	235
9	154
10	236
11	151
12	142
13	194



Groundwater = 40 ft

30 x 35 x 13 ft

122 WEST TAYLOR
HOBBS, NEW MEXICO 88240
PHONE: (505) 393-9174 FAX: (505) 397-1471

VOC FIELD TEST REPORT FORM

MINI RAE PLUS CLASSIC PHOTOIONIZATION GAS DETECTOR

MODEL NO: PGM 761S
SERIAL NO: ~~10442~~ 7-19-05
CALIBRATION GAS
GAS COMPOSITION: ISOBUTYLENE 100 PPM
AIR BALANCE
LOT NO: 05-2859
FILL DATE: 7-19-05
EXP. DATE: 1-19-07
ACCURACY: ± 2-7o
METER READING
ACCURACY: 91.6

SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE
EME	Emerald Mattern Boot	K	20	19S	37W

BETEX Study

SAMPLE	PID RESULT	SAMPLE	PID RESULT
N. Wall 1	5.4		
S. Wall 2	3.7		
E. Wall 3	2.6		
W. Wall 4	5.3		
Bottom Comp @ 13'	3.0		
Backfill Comp	8.5		
4 Wall Comp	0.9		

COPY

I certify that I have calibrated the above instrument in accordance to the manufacture operation manual.

Signature

12-7-05
Date

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

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

Project: EME Amerada Mattern Boot
Project Number: None Given
Location: None Given

Lab Order Number: 5L08001

Report Date: 12/09/05

Rice Operating Co.	Project: EME Amerada Mattern Boot	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Roy Rascon	12/09/05 17:01

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
4 Wall Comp.	5L08001-01	Soil	12/07/05 09:05	12/08/05 08:00
Bottom Comp.	5L08001-02	Soil	12/07/05 09:00	12/08/05 08:00
Backfill	5L08001-03	Soil	12/07/05 09:10	12/08/05 08:00

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Rice Operating Co.	Project: EME Amerada Mattern Boot	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Roy Rascon	12/09/05 17:01

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4 Wall Comp. (5L08001-01) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EL50804	12/08/05	12/09/05	EPA 8015M	
Diesel Range Organics >C12-C35	**20.7**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**20.7**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*90.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*96.2 %*	*70-130*		"	"	"	"	
Bottom Comp. (5L08001-02) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EL50804	12/08/05	12/08/05	EPA 8015M	
Diesel Range Organics >C12-C35	**18.1**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**18.1**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*86.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*90.0 %*	*70-130*		"	"	"	"	
Backfill (5L08001-03) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EL50804	12/08/05	12/08/05	EPA 8015M	
Diesel Range Organics >C12-C35	**19.7**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**19.7**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*87.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*88.4 %*	*70-130*		"	"	"	"	

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Rice Operating Co.	Project: EME Amerada Mattern Boot	Fax: (505) 397-1471
122 W. Taylor	Project Number: None Given	**Reported:**
Hobbs NM, 88240	Project Manager: Roy Rascon	12/13/05 11:20

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
4 Wall Comp. (5L08001-01) Soil									
Chloride	**107**	5.00	mg/kg	10	EL50919	12/09/05	12/09/05	EPA 300.0	
% Moisture	**11.4**	0.1	%	1	EL50903	12/08/05	12/09/05	% calculation	
Bottom Comp. (5L08001-02) Soil									
Chloride	**19.6**	5.00	mg/kg	10	EL50919	12/09/05	12/09/05	EPA 300.0	
% Moisture	**9.7**	0.1	%	1	EL50903	12/08/05	12/09/05	% calculation	
Backfill (5L08001-03) Soil									
Chloride	**140**	10.0	mg/kg	20	EL50919	12/09/05	12/09/05	EPA 300.0	
% Moisture	**11.5**	0.1	%	1	EL50903	12/08/05	12/09/05	% calculation	

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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
Batch EL50804 - Solvent Extraction (GC)										
Blank (EL50804-BLK1)				Prepared & Analyzed: 12/08/05						
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	*49.5*		*mg/kg*	*50.0*		*99.0*	*70-130*			
Surrogate: 1-Chlorooctadecane	*48.7*		"	*50.0*		*97.4*	*70-130*			
LCS (EL50804-BS1)				Prepared & Analyzed: 12/08/05						
Gasoline Range Organics C6-C12	401	10.0	mg/kg wet	500		80.2	75-125			
Diesel Range Organics >C12-C35	498	10.0	"	500		99.6	75-125			
Total Hydrocarbon C6-C35	899	10.0	"	1000		89.9	75-125			
Surrogate: 1-Chlorooctane	*53.3*		*mg/kg*	*50.0*		*107*	*70-130*			
Surrogate: 1-Chlorooctadecane	*50.3*		"	*50.0*		*101*	*70-130*			
Calibration Check (EL50804-CCV1)				Prepared & Analyzed: 12/08/05						
Gasoline Range Organics C6-C12	431		mg/kg	500		86.2	80-120			
Diesel Range Organics >C12-C35	545		"	500		109	80-120			
Total Hydrocarbon C6-C35	976		"	1000		97.6	80-120			
Surrogate: 1-Chlorooctane	*57.8*		"	*50.0*		*116*	*70-130*			
Surrogate: 1-Chlorooctadecane	*54.9*		"	*50.0*		*110*	*70-130*			
Matrix Spike (EL50804-MS1)	**Source: 5L08001-01**			Prepared & Analyzed: 12/08/05						
Gasoline Range Organics C6-C12	429	10.0	mg/kg dry	564	ND	76.1	75-125			
Diesel Range Organics >C12-C35	560	10.0	"	564	20.7	95.6	75-125			
Total Hydrocarbon C6-C35	989	10.0	"	1130	20.7	85.7	75-125			
Surrogate: 1-Chlorooctane	*45.8*		*mg/kg*	*50.0*		*91.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*48.7*		"	*50.0*		*97.4*	*70-130*			
Matrix Spike Dup (EL50804-MSD1)	**Source: 5L08001-01**			Prepared & Analyzed: 12/08/05						
Gasoline Range Organics C6-C12	431	10.0	mg/kg dry	564	ND	76.4	75-125	0.465	20	
Diesel Range Organics >C12-C35	557	10.0	"	564	20.7	95.1	75-125	0.537	20	
Total Hydrocarbon C6-C35	988	10.0	"	1130	20.7	85.6	75-125	0.101	20	
Surrogate: 1-Chlorooctane	*45.3*		*mg/kg*	*50.0*		*90.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*48.8*		"	*50.0*		*97.6*	*70-130*			

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
Batch EL50903 - General Preparation (Prep)										
Blank (EL50903-BLK1)				Prepared: 12/08/05 Analyzed: 12/09/05						
% Solids	100		%							
Duplicate (EL50903-DUP1)		**Source: 5L08001-01**		Prepared: 12/08/05 Analyzed: 12/09/05						
% Solids	87.6		%		88.6			1.14	20	
Batch EL50919 - Water Extraction										
Blank (EL50919-BLK1)				Prepared & Analyzed: 12/09/05						
Chloride	ND	0.500	mg/kg							
LCS (EL50919-BS1)				Prepared & Analyzed: 12/09/05						
Chloride	9.17		mg/L	10.0		91.7	80-120			
Calibration Check (EL50919-CCV1)				Prepared & Analyzed: 12/09/05						
Chloride	8.57		mg/L	10.0		85.7	80-120			
Duplicate (EL50919-DUP1)		**Source: 5L08001-01**		Prepared & Analyzed: 12/09/05						
Chloride	102	5.00	mg/kg		106			3.85	20	

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: 12-13-05

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.

Environmental Lab of Texas, Inc.

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 Ruscon
Company Name: Rice Operating Co.
Company Address: 122 W Taylor
City/State/Zip: Hobbs N.M. 88240
Telephone No:
Fax No:
Sampler Signature: [signature]

Project Name: EME Amerada Hatfield Boot
Project #:
Project Loc:
PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TDS (CL) SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RUSH TAT (Pre-Schedule)
5L03301 -01	4 Wall Comp	12/7/05	9:05	1	✓									✓		✓			✓					
-02	Bottom Comp	12/7/05	9:00	1	✓									✓		✓			✓					
-03	Backfill	12/7/05	9:10	1	✓									✓		✓			✓					

TCLP:
TOTAL:

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/7/05	05:00P	[signature]	12/7	[illegible]
[signature]	12/8	7:15	Received by ELOT: Carrie Kelly Drop Box	12/8/05	5:00

Sample Containers Intact? (Y) N
Temperature Upon Receipt:
Laboratory Comments: [illegible] 2.0

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

Client: Pine Ox,

Date/Time: 12/8/05 8.00

Order #: 5L0800

Initials: CR

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	2.0 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	
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:

_____

_____

_____

Variance Documentation:

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

Regarding:

_____

_____

_____

Corrective Action Taken:

_____

_____

_____

_____

_____

_____

_____