

1R - 427-29

REPORTS

DATE:

11-21-2003

EME P-34

1R0427-29

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	P-34	P	34	19S	36E	Lea	Moved 73 ft southwest		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER James A. Foster, Jr. OTHER _____

Depth to Groundwater 47 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 9/10/2003 Date Completed 10/3/2003 OCD Witness No

Soil Excavated 200 cubic yards Excavation Length 25 Width 16 Depth 12 feet

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

FINAL ANALYTICAL RESULTS: Sample Date 9/22/2003 Sample Depth 12 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	PID ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
SIDEWALLS	13.1	<10.0	<10.0	528
BOTTOM	26.7	xxx	xxx	800
BACKFILL	18.1	<10.0	<10.0	384

CHLORIDE FIELD TESTS

LOCATION	DEPTH (ft)	ppm
vertical @ source	6	907
	8	917
	10	690
	12	1165
	14	603
5 ft North	6	1753
	7	1109
	9	890
	10	735
	12	555
bottom comp.	12	682
4-wall comp.	n/a	784
backfill	n/a	694

General Description of Remedial Action: This junction box site was delineated with a backhoe while chloride tests and PID readings were conducted at regular intervals. TPH impact was minimal and lab results confirmed concentrations well below NMOCD guidelines. Chloride concentrations exhibited a conclusive decline with depth, however, lateral trends of chloride declination were not determined within the 25 x 16 x 12-ft-deep excavation. The excavation was backfilled with the blended excavated material up to 6 ft bgs. To inhibit further downward migration of chloride impact, a 1.5 ft compacted clay barrier was installed at 6 ft bgs and extended over shelves made to surround the original excavation (see diagram). The remaining blended material was then backfilled on top of the clay up to the surface. The disturbed surface was re-seeded with native vegetation on 10/15/2003 and will be monitored for growth.

enclosures: lab results, chloride graphs, photos, clay density test,

PID readings, cross-section of excavation

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

DATE 11/21/2003 PRINTED NAME Kristin Farris

SIGNATURE Kristin Farris TITLE Project Scientist

EME jct. P-34



Undisturbed Junction Box Prior to NORM Removal



Excavation Sept. 2003



Compacting and Testing Clay Liner at 6 ft BGS 10/2/2003



Backfilled Site with ID Plate Marking Clay Below



Construction of New Junction Box With New Plumbing

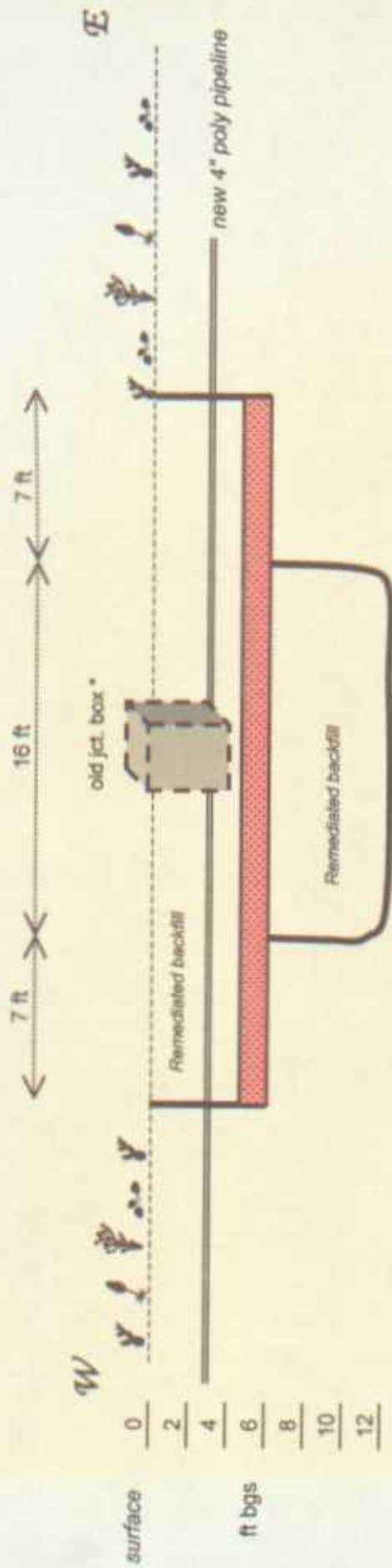


Completed Box 73 ft SW 8/29/2003



Seeding Disturbed Area 10/15/2003

EME jct. P-34 Impact Excavation Cross-Section



* New junction box has been built 73 ft Southwest from old junction.

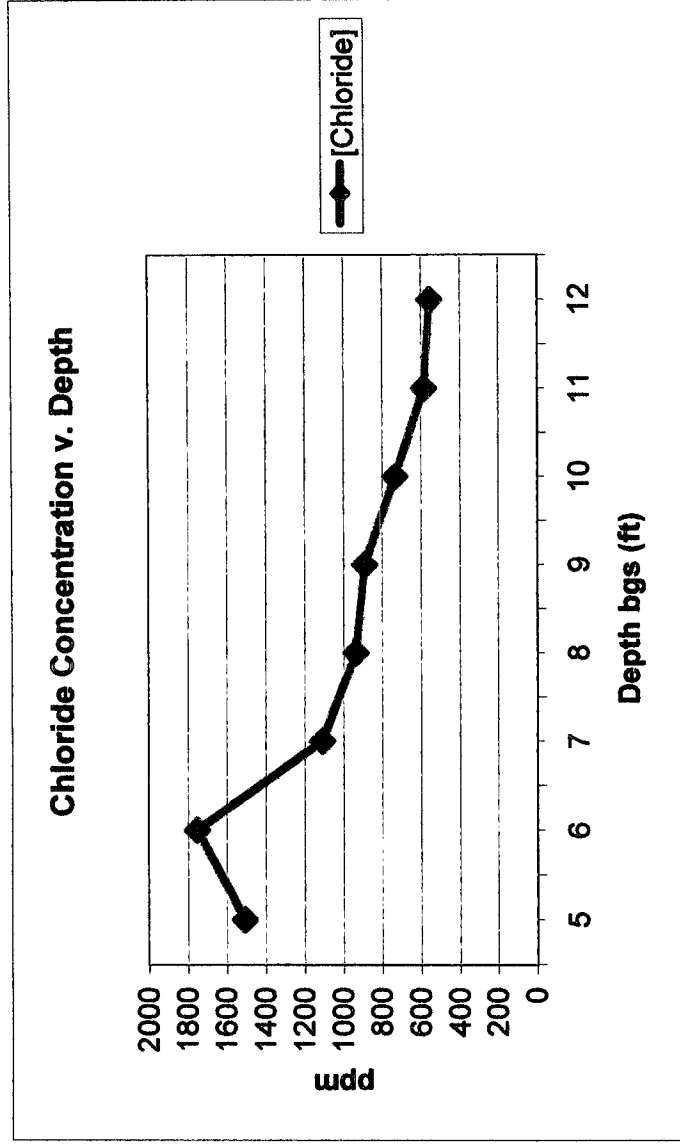
EME jct. P-34

T19S, R36E

5 ft North from Junction

Depth bgs (ft)	[Cl ⁻] ppm
5	1508
6	1753
7	1109
8	937
9	890
10	735
11	585
12	555

Groundwater = 47 ft

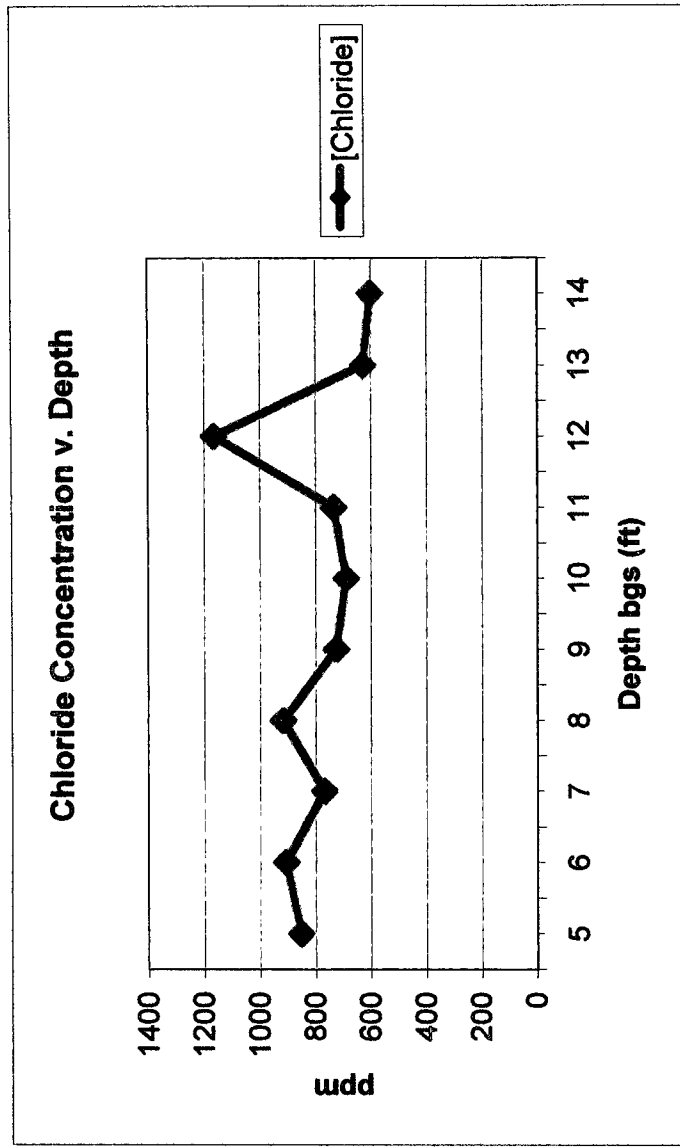


EME jet. P-34

T19S, R36E

Depth bgs (ft)	[Cl ⁻] ppm
5	852
6	907
7	769
8	917
9	726
10	690
11	735
12	1165
13	628
14	603

Groundwater = 47 ft





LABORATORY TEST REPORT
PETTIGREW and ASSOCIATES, P.A.
1110 N. GRIMES
HOBBS, NM 88240
(505) 393-9827



DEBRA P. HICKS, P.E./L.S.I.
WILLIAM M. HICKS, III, P.E./P.S.

To: Rice Operating Corporation
Attn: Carolyn Haynes
122 W. Taylor
Hobbs, NM 88240

Material: Red Clay

Test Method: ASTM: D 2922

Project: ~~EL-ME~~ ^{EME} Junction P-34

Date of Test: October 2, 2003

Depth: Finished Subgrade

Test No.	Location	Dry Density % Maximum	% Moisture	Depth
SG-1	Pit - 10' W. & 5' N. of the SE Corner	97.5	18.5	

Control Density: 104.2
ASTM: D 698

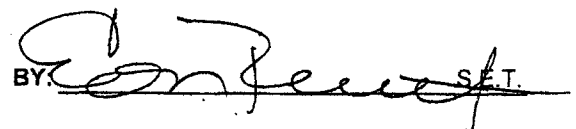
Optimum Moisture: 23.1%

Required Compaction: 95%

Lab No.: 03 6187-6188

Copies To: Rice Operating

PETTIGREW and ASSOCIATES

BY:  S.E.T.



ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR RICE OPERATING CO.

ATTN: KRISTIN FARRIS

122 W. TAYLOR

HOBBS, NM 88240

FAX TO: (505) 397-1471

Receiving Date: 11/19/03

Reporting Date: 11/19/03

Project Number: NOT GIVEN

Project Name: EME P-34

Project Location: LEA COUNTY

Analysis Date: 11/19/03

Sampling Date: 09/16/03

Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: BC

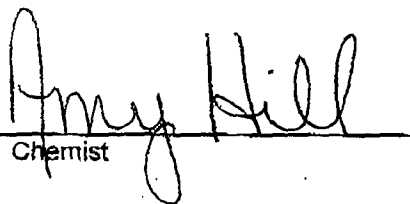
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Cl ⁻ (mg/Kg)
H8187-1	BOTTOM 12' COMP.	800
Quality Control		1000
True Value QC		1000
% Recovery		100
Relative Percent Difference		2.0

METHOD: Standard Methods

4500-Cl⁻B

Note: Analysis performed on a 1:4 w:v aqueous extract.


Chemist

11/19/03
Date

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H8187



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ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: KRISTIN FARRIS
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (505) 397-1471

Receiving Date: 09/26/03
Reporting Date: 09/27/03
Project Number: NOT GIVEN
Project Name: EME P-34
Project Location: LEA CO., NM

Sampling Date: 09/22/03
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC/AH

LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	CI* (mg/Kg)
ANALYSIS DATE		09/26/03	09/26/03	09/26/03
H8039-1	BOTTOM 6' COMPOSITE	<10.0	<10.0	1070
H8039-2	4 WALL COMPOSITE	<10.0	<10.0	528
H8039-3	STOCKPILE 5 POINT	<10.0	<10.0	384
Quality Control		765	803	980
True Value QC		800	800	1000
% Recovery		95.7	100	98.0
Relative Percent Difference		7.4	2.3	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CI'B

*Analyses performed on 1:4 w:v aqueous extracts.

Burgess A. Cook
Chemist

9/27/03
Date

H8039.XLS

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Page of

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

ETGI

25' x 16' x 12' deep

Junction Box Liner report Bottom / 4 wall / stockpile composite
SITE EXCAVATION INFORMATION

EMB P-34

DATE DEPTH CL PID TPH SOIL COMPOSITION

Lab C.	9-16-03	Bottom 12'	682	26.7	15
Lab C.		4 Wall	592	30.0	32
Lab C.		Stockpile	772	29.5	23
		N. Wall 7'	426	26.5	34
		S. Wall 18'	777	28.7	18
		W. Wall 8'	527	21.5	14
		E. Wall 8'	628	23.4	30

Gary Starr

ET62

Junction Box Final report 30x05'x6' deep

SITE EXCAVATION INFORMATION

EME P.34

DATE DEPTH CL LAB PID TPH SOIL COMPOSITION

146 C
146 C
146 C

9-22-03	Bottom 6'	989	1070	15.5	48	
	4 Well	784	528	13.1	49	
	5 Well	694	584	18.1	62	
	N. Well 7'	232		14.2	54	
	S. Well 18'	667		18.2	20	
	W. Well 15'	494		15.2	24	
	E. Well 15'	800		17.1	73	

Long Paul