

1R - 427-116

**APPROVALS**

**YEAR(S):**

2013

**Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Thursday, May 16, 2013 9:42 AM  
**To:** Hack Conder (hconder@riceswd.com)  
**Cc:** Leking, Geoffrey R, EMNRD; Laura Pena (lpna@riceswd.com); Katie Jones <kjones@riceswd.com> (kjones@riceswd.com); Scott Curtis (scurtis@riceswd.com)  
**Subject:** Remediation Plan (1R427-116) Termination - ROC EME E-12 Site

**RE: Termination Request  
for the Rice Operating Company's  
EME E-12 Site  
Unit Letter E, Section 12, T20S, R36E, NMPM, Lea County, New Mexico  
Remediation Plan (1R427-116) Termination**

Dear Mr. Conder:

The New Mexico Oil Conservation Division (OCD) has received Rice Operating Company's report and request to close the above-referenced site, dated April 26, 2013 (received May 3, 2013). The reports are acceptable to the OCD.

The above-referenced report, submitted in accordance with 19.15.29 NMAC (Rule 29; formally, Rule 116), indicates that Rice Operating Company has met the requirements of 19.15.29 NMAC; therefore, the OCD approves the report and hereby notifies you that the remediation plan (1R427-116) is terminated in accordance with 19.15.29 NMAC.

Please be advised that OCD approval of this report does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

If you have any questions regarding this matter, please contact me at 505-476-3489.

Edward J. Hansen  
Hydrologist  
Environmental Bureau

# **RICE** *Operating Company*

122 West Taylor • Hobbs, New Mexico 88240

Phone: (575) 393-9174 • Fax: (575) 397-1471

CERTIFIED MAIL

RETURN RECEIPT NO. 7007 2560 0000 4569 9224

**April 26, 2013**

**RECEIVED**

Mr. Edward Hansen  
New Mexico Energy, Minerals, & Natural Resources  
Oil Conservation Division, Environmental Bureau  
1220 S. St. Francis Drive  
Santa Fe, New Mexico 87505

**MAY 3 2013**

Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

RE: Termination Request  
EME E-12 (1R427-116): UL/E Sec. 12, T20S, R36E  
RICE Operating Company – Eunice Monument Eumont SWD System

Mr. Hansen:

Rice Operating Company (ROC) is the service provider (agent) for the EME Saltwater Disposal (SWD) System and has no ownership of any portion of the pipeline, well, or facility. The System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

## **Background**

In 2001, ROC initiated work on the former E-12 junction box. The site is located in UL/E, Sec. 12, T20S, R36E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 28 +/- feet. To investigate the depth of chloride presence, a soil bore was installed on November 14, 2001 to a total depth of 25 ft below ground surface (bgs). Samples were collected every 5 ft and field titrated for chlorides, resulting in low concentrations. The 20 ft sample was sent to a commercial laboratory for analysis, resulting in a chloride concentration of 35 mg/kg, a DRO concentration of 17 mg/kg, and GRO and BTEX concentrations below detectable limits.

The site was then excavated to dimension of 25x15x8 ft deep. Representative composite samples of the excavation bottom and the excavation walls were sent to a commercial for analysis of chloride and TPH, resulting in a sidewall chloride concentration of 864 mg/kg and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits. The bottom composite resulted in a chloride concentration of 1,376 mg/kg and concentrations of GRO and DRO below detectable limits. Both samples were analyzed for BTEX, resulting in concentrations below detectable limits throughout. A compacted clay layer was installed and will provide a barrier that will inhibit the

downward migration of chlorides to groundwater. The excavation was backfilled with blended soil and a new, watertight junction was installed over the site. Seeding is not required.

This site is located within the regionally impacted groundwater plume in an area with groundwater chloride concentrations between 5,000 – 10,000 mg/l (see Site Location Map).

The junction box site location map, final report, laboratory analysis, and current photodocumentation are attached.

**Recommendations**

Site investigation demonstrates that residual chloride and hydrocarbons in the vadose zone will not with reasonable probability contaminate groundwater in excess of NMOCD standards. This site meets the requirements of the NMOCD-approved Revised Junction Box Upgrade Work Plan (July 16, 2003). As such, ROC request termination of the regulatory file, or similar closure status.

Please contact me at (575)393-9174 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,  
RICE Operating Company

A handwritten signature in black ink, appearing to read 'H. Conder', with a stylized, flowing script.

Hack Conder  
Environmental Manager

enclosures

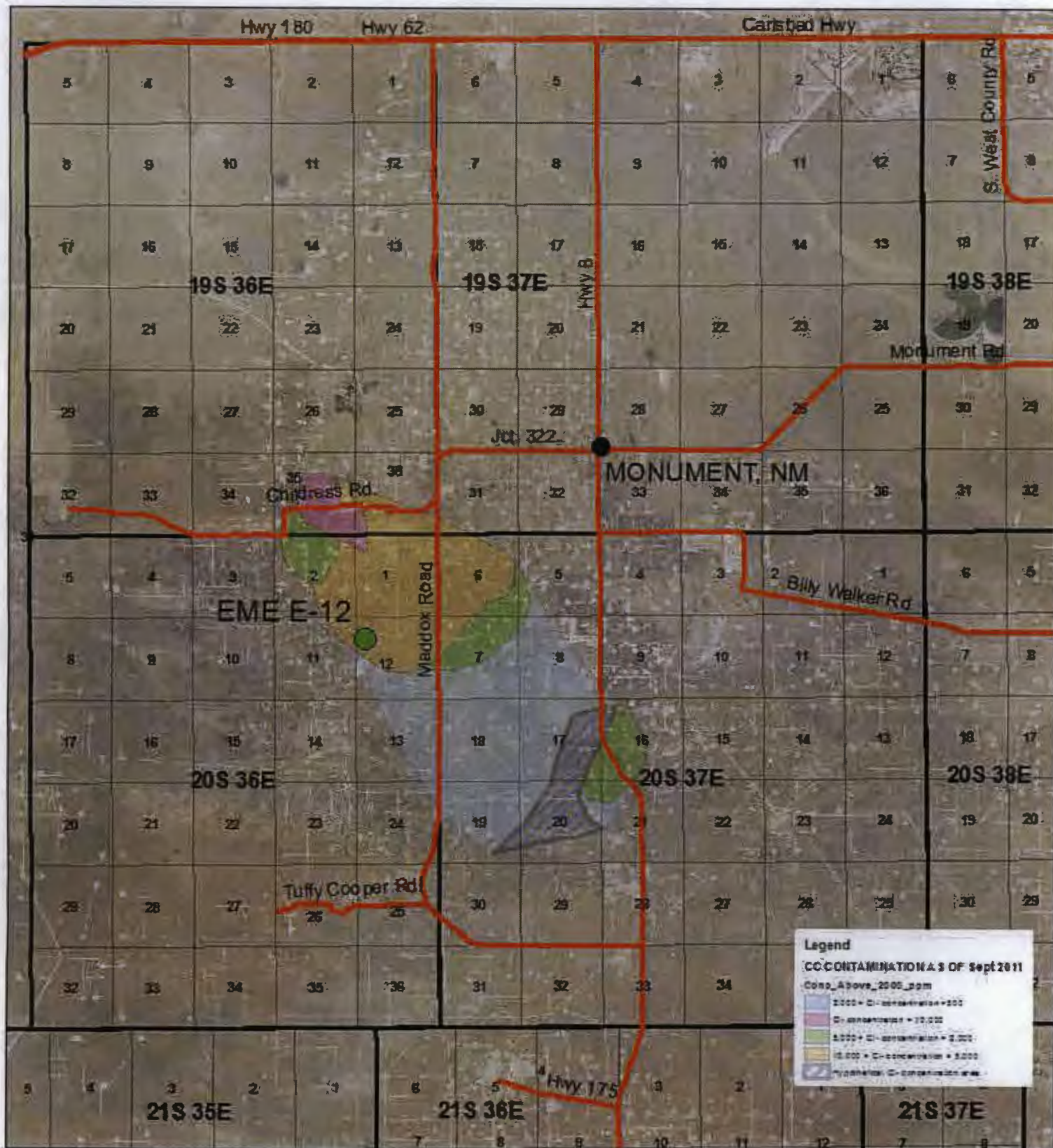
RECEIVED OGD  
2013 MAY -3 P 2:27



## Site Location Map

**RICE *Operating Company* (ROC)**  
112 West Taylor Hobbs, NM 88240  
Phone: (575) 393-9174 Fax: (575) 397-1471





## EME E-12 (1R427-116)

Unit Letter E, Section 1  
 T20S, R36E  
 Lea County, NM



0 1 2  
 Miles

Drawing date: 4/9/13  
 Drafted by: LS



## Area Map



**EME**  
**E-12**

UL/E SECTION 12  
T-20-S R-36-E  
LEA COUNTY, NM

NMOCD CASE #: 1R427-116



Drawing date: 4/25/13  
Drafted by: T. Grieco



# Junction Box Report

**RICE *Operating Company* (ROC)**  
112 West Taylor Hobbs, NM 88240  
Phone: (575) 393-9174 Fax: (575) 397-1471



**RICE OPERATING COMPANY  
JUNCTION BOX FINAL REPORT**

**BOX LOCATION**

| SWD SYSTEM | JUNCTION | UNIT | SECTION | TOWNSHIP | RANGE | COUNTY | BOX DIMENSIONS - FEET |             |            |
|------------|----------|------|---------|----------|-------|--------|-----------------------|-------------|------------|
| EME        | E-12     | E    | 12      | 20S      | 36E   | LEA    | Length<br>10          | Width<br>10 | Depth<br>6 |

LAND TYPE: BLM \_\_\_\_\_ STATE \_\_\_\_\_ FEE LANDOWNER \_\_\_\_\_ BYRD \_\_\_\_\_ OTHER \_\_\_\_\_

Depth to Groundwater \_\_\_\_\_ 28 \_\_\_\_\_ feet NMOCD SITE ASSESSMENT RANKING SCORE: \_\_\_\_\_ 20 \_\_\_\_\_

Date Started \_\_\_\_\_ 10/26/2001 \_\_\_\_\_ Date Completed \_\_\_\_\_ 11/27/2001 \_\_\_\_\_ OCD Witness \_\_\_\_\_ NO \_\_\_\_\_

Soil Excavated \_\_\_\_\_ 90 \_\_\_\_\_ cubic yards Excavation Length \_\_\_\_\_ 25 \_\_\_\_\_ Width \_\_\_\_\_ 15 \_\_\_\_\_ Depth \_\_\_\_\_ 8 \_\_\_\_\_ feet

Soil Disposed \_\_\_\_\_ 0 \_\_\_\_\_ cubic yards Offsite Facility \_\_\_\_\_ Location \_\_\_\_\_

**FINAL ANALYTICAL RESULTS:** Sample Date \_\_\_\_\_ 11/27/2001 \_\_\_\_\_ Sample Depth \_\_\_\_\_ 8' \_\_\_\_\_

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       | < 0.050       | < 0.050       | < 0.050             | <0.015              | <50       | <50       | 864             |
| BOTTOM          | < 0.050       | < 0.050       | < 0.050             | <0.015              | <50       | <50       | 1376            |
| Boring @ 20'    | <0.025        | 0.026         | <0.025              | <0.025              | <10       | 17        | 35              |

General Description of Remedial Action: \_\_\_\_\_ Dug to 11' and found chlorides exceeding

1000 ppm. A soil boring was completed 11/14/01 and the results demonstrated chlorides stopped before reaching groundwater. No indication of TPH was found during delineation. The junction box was excavated to 8' and a compacted clay barrier and water proof box was installed and backfilled. The clay liner will act as a barrier to reduce the hydraulic conductivity and vertical transmissivity of the impacted soil, inhibiting the migration of chlorides. Excavated soil was blended below NMOCD guidelines and used as backfill.

**CHLORIDE FIELD TESTS**

| LOCATION        | DEPTH | mg/kg |
|-----------------|-------|-------|
| SIDEWALLS       | 6'    | 220   |
| BOTTOM          | 8'    | 1350  |
| Vertical trench | 11'   | 1070  |
| Soil Boring     | 5'    | 50    |
|                 | 10'   | 50    |
|                 | 15'   | 50    |
|                 | 20'   | 50    |
|                 | 25'   | 50    |
|                 |       |       |
|                 |       |       |

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

DATE \_\_\_\_\_ December 6, 2001 \_\_\_\_\_ PRINTED NAME \_\_\_\_\_ D. E. Anderson \_\_\_\_\_

SIGNATURE \_\_\_\_\_ TITLE \_\_\_\_\_ Project Leader - Environmental \_\_\_\_\_

Atkins Engineering  
Associates, Inc.

2904 W. 2nd St., Roswell, NM 88202-3156

LOG OF BORING Rice E12

(Page 1 of 1)

Rice Operating Co.  
122 West Taylor  
Hobbs, New Mexico 88240

Contact: Donnie Anderson

Job#: RICEENV.JAL.01

Date : 11-14-01  
Drill Start :  
Drill End :  
Boring Location : Edge of pit

Site Location : Monument, NM  
Auger Type : Air drill  
Logged By : Mort Bates

| Depth<br>in<br>Feet | GRAPHIC | USCS | Samples <i>CIT-ppm</i> | DESCRIPTION                                      | Lab |  |
|---------------------|---------|------|------------------------|--|-----|--|
| 0                   |         |      |                        | Poorly graded sand, tan, loose, dry              |     |  |
|                     |         | SP   |                        |  |     |  |
|                     |         |      |                        | Poorly graded sand w/ caliche, tan, firm, dry    |     |  |
|                     |         | SP   |                        |  |     |  |
| 5                   |         |      | <i>SD</i>              |  |     |  |
|                     |         |      |                        | Poorly graded sand, tan, loose, dry              |     |  |
|                     |         | SP   |                        |  |     |  |
| 10                  |         |      | <i>SD</i>              |  |     |  |
|                     |         |      |                        | Poorly graded sand w/ broken sandstone, tan, dry |     |  |
|                     |         | SP   |                        |  |     |  |
| 15                  |         |      | <i>SD</i>              |  |     |  |
|                     |         |      |                        | Sandstone, tan, firm, dry                        |     |  |
| 20                  |         |      | <i>SD</i>              |  |     |  |
|                     |         | SS   |                        |  |     |  |
| 25                  |         |      | <i>SD</i>              |  |     |  |
|                     |         |      |                        | Total depth 25'                                  |     |  |
| 30                  |         |      |                        |  |     |  |

Well: E12

Drill cutting backfill

Bentonite Seal

*TPH  
29ppm*



PHONE (505) 383-2326 • 101 E. MARLAND • HOBBS, NM 88240

Sampling Date: NOT GIVEN  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: HM  
Analyzed By: BC/HM

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

Date \_\_\_\_\_

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.





PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

**ANALYTICAL RESULTS FOR  
RICE OPERATING CO.**

**ATTN: CHRIS RODRIGUEZ**

**122 W. TAYLOR**

**HOBBS, NM 88240**

**FAX TO: (505) 397-1471**

**Receiving Date: 11/27/01**

**Reporting Date: 11/28/01**

**Project Number: E-12**

**Project Name: E-12 BOX UPGRADE**

**Project Location: EME**

**Sampling Date: NOT GIVEN**

**Sample Type: SOIL**

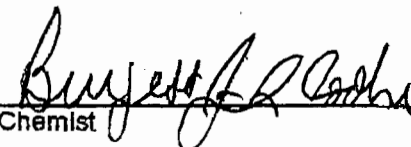
**Sample Condition: COOL & INTACT**

**Sample Received By: HM**

**Analyzed By: BC**

| LAB NO.                     | SAMPLE ID             | BENZENE<br>(mg/Kg) | TOLUENE<br>(mg/Kg) | ETHYL<br>BENZENE<br>(mg/Kg) | TOTAL<br>XYLENES<br>(mg/Kg) |
|-----------------------------|-----------------------|--------------------|--------------------|-----------------------------|-----------------------------|
| ANALYSIS DATE               |                       | 11/27/01           | 11/27/01           | 11/27/01                    | 11/27/01                    |
| H6298-1                     | E-12 WALL COMPOSITE   | <0.005             | <0.005             | <0.005                      | <0.015                      |
| H6298-2                     | E-12 BOTTOM COMPOSITE | <0.005             | <0.005             | <0.005                      | <0.015                      |
|                             |                       |                    |                    |                             |                             |
|                             |                       |                    |                    |                             |                             |
|                             |                       |                    |                    |                             |                             |
| Quality Control             |                       | 0.110              | 0.108              | 0.109                       | 0.319                       |
| True Value QC               |                       | 0.100              | 0.100              | 0.100                       | 0.300                       |
| % Recovery                  |                       | 110                | 108                | 109                         | 108                         |
| Relative Percent Difference |                       | 0.5                | 3.6                | 1.6                         | 1.9                         |

**METHOD: EPA SW-846 8260**

  
Chemist

11/28/01  
Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

H6298B.XLS



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

RICE OPERATING COMPANY  
ATTN: DONNIE ANDERSON  
122 W TAYLOR  
HOBBS, NM 88240  
FAX: 505-397-1471

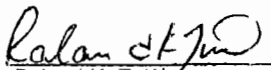
Sample Type: Soil  
Sample Condition: Intact/ Iced/ 4 deg C  
Project Name: EME Junction Box Upgrade  
Project #: E-12  
Project Location: Lea County, NM  
PO#: 716

Sampling Date: 11/14/01  
Receiving Date: 11/15/01  
Analysis Date: 11/16/01

| ELT#       | FIELD CODE | Chloride<br>mg/kg |
|------------|------------|-------------------|
| 0102026-01 | 20' Boring | 35                |

|                       |       |
|-----------------------|-------|
| QUALITY CONTROL       | 5050  |
| TRUE VALUE            | 5000  |
| % INSTRUMENT ACCURACY | 101   |
| SPIKED AMOUNT         | 625   |
| ORIGINAL SAMPLE       | 22    |
| SPIKE                 | 654   |
| SPIKE DUP             | 654   |
| % EXTRACTION ACCURACY | 101   |
| BLANK                 | <5.00 |
| RPD                   | 0.0   |

Methods: SW 846-9253

  
Roland K. Tuttle

11-19-01  
Date



# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.  
ATTN: KEN DUTTON  
2540 WEST MARLAND  
HOBBS, NM 88240  
FAX: 505-397-4701

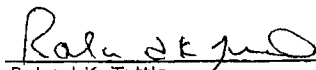
Sample Type: Soil  
Sample Condition: Intact/ Iced/ 4 deg C  
Project Name: EME Junction Box Upgrade  
Project #: E-12  
Project Location: Lea County, NM  
PO#: 716

Sampling Date: 11/14/01  
Receiving Date: 11/15/01  
Analysis Date: 11/16/01

| ELT#       | FIELD CODE | BENZENE<br>mg/kg | TOLUENE<br>mg/kg | ETHYLBENZENE<br>mg/kg | m,p-XYLENE<br>mg/kg | o-XYLENE<br>mg/kg |
|------------|------------|------------------|------------------|-----------------------|---------------------|-------------------|
| 0102026-01 | 20' Boring | <0.025           | 0.026            | <0.025                | <0.025              | <0.025            |

|                       |        |        |        |        |        |
|-----------------------|--------|--------|--------|--------|--------|
| QUALITY CONTROL       | 0.105  | 0.105  | 0.104  | 0.207  | 0.101  |
| TRUE VALUE            | 0.100  | 0.100  | 0.100  | 0.200  | 0.100  |
| % INSTRUMENT ACCURACY | 105    | 105    | 104    | 104    | 101    |
| SPIKED AMOUNT         | 0.100  | 0.100  | 0.100  | 0.200  | 0.100  |
| ORIGINAL SAMPLE       | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 |
| SPIKE                 | 0.102  | 0.101  | 0.106  | 0.215  | 0.104  |
| SPIKE DUP             | 0.103  | 0.102  | 0.106  | 0.216  | 0.104  |
| % EXTRACTION ACCURACY | 102    | 101    | 106    | 108    | 104    |
| BLANK                 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 |
| RPD                   | 0.98   | 0.98   | 0.00   | 0.00   | 0.00   |

METHODS: EPA SW 846-8021B ,5030

  
Ralanda K. Tuttle

11-19-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

RICE OPERATING COMPANY  
ATTN: DONNIE ANDERSON  
122 W TAYLOR  
HOBBS, NM 88240  
FAX: 505-397-1471

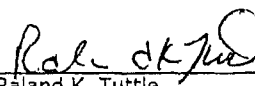
Sample Type: Soil  
Sample Condition: Intact/ Iced/ 4 deg C  
Project Name: EME Junction Box Upgrade  
Project #: E-12  
Project Location: Lea County, NM  
PO#: 716

Sampling Date: 11/14/01  
Receiving Date: 11/15/01  
Analysis Date: 11/16/01

| ELT#       | FIELD CODE | GRO<br>C6-C10<br>mg/kg | DRO<br>>C10-C28<br>mg/kg |
|------------|------------|------------------------|--------------------------|
| 0102026-01 | 20' Boring | <10                    | 17                       |

|                       |      |      |
|-----------------------|------|------|
| QUALITY CONTROL       | 458  | 519  |
| TRUE VALUE            | 500  | 500  |
| % INSTRUMENT ACCURACY | 92   | 104  |
| SPIKED AMOUNT         | 476  | 476  |
| ORIGINAL SAMPLE       | <10  | 47   |
| SPIKE                 | 494  | 564  |
| SPIKE DUP             | 486  | 550  |
| % EXTRACTION ACCURACY | 102  | 106  |
| BLANK                 | <10  | <10  |
| RPD                   | 1.63 | 2.51 |

Methods: SW 846-8015M

  
Ralend K. Tuttle

11-19-01  
Date

12600 West I-20 East  
Odessa, Texas 79763  
Phone: 915-563-1800  
Fax: 915-563-1713

# CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

**Project Name:** EME JUNCTION BOX UPGRADE

Project #: E-12

Project Loc: Lea County NM

PO #: 716

**Fax No: 505-397-1471**

Telephone No: 505-393-9174

**Sampler Signature:** *[Signature]*

[illegible]


**Special Instructions:**

**Fax results to D. Anderson**

|                                     |      |      |              |
|-------------------------------------|------|------|--------------|
| Relinquished by: <i>[Signature]</i> | Date | Time | Received by: |
|-------------------------------------|------|------|--------------|

| Date | Time |
|------|------|
|------|------|

100

|  |                  |              |                  |
|--|------------------|--------------|------------------|
| Relinquished by:  | Date<br>11/15/01 | Time<br>1500 | Received by: ELO |
|--|------------------|--------------|------------------|

|       |       |
|-------|-------|
| Date: | Time: |
|-------|-------|

100

|                     |         |       |      |
|---------------------|---------|-------|------|
| Carton, Dean Harper | 4/15/18 | 20:18 | Cell |
|---------------------|---------|-------|------|

|          |      |
|----------|------|
| 10/15/01 | 2018 |
|----------|------|

\_\_\_\_\_





# Current Photodocumentation

**RICE *Operating Company* (ROC)**  
112 West Taylor Hobbs, NM 88240  
Phone: (575) 393-9174 Fax: (575) 397-1471

# EME E-12 (1R427-116)

UL/E, Section 12, T20S, R36E



Facing north

3/20/2013



Facing west

3/20/2013