

1R - 427-20

# APPROVALS

YEAR(S):

2013

**Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Wednesday, January 16, 2013 4:05 PM  
**To:** Hack Conder (hconder@riceswd.com)  
**Cc:** Leking, Geoffrey R, EMNRD; Laura Pena (lpena@riceswd.com); Katie Jones <kjones@riceswd.com> (kjones@riceswd.com); Scott Curtis (scurtis@riceswd.com)  
**Subject:** Remediation Plan (1R427-20) Termination - ROC EME H-35 EOL Site

**RE: Termination Request  
for the Rice Operating Company's  
EME H-35 EOL Site  
Unit Letter H, Section 35, T20S, R36E, NMPM, Lea County, New Mexico  
Remediation Plan (1R427-20) 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 January 11, 2013 (received January 15, 2013) (including the investigation report of January 31, 2003). The report is 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 (1R427-20) 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 8746

**January 11, 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

**JAN 15 2013**

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

RE: Termination Request  
EME H-35 EOL (1R427-20): UL/H Sec. 35, T20S, R36E  
(formerly EME A-35 EOL)  
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**

This site was previously referred to as EME A-35 EOL. The name is being changed to EME H-35 EOL to reflect the geographical location of the site. In 2003, ROC initiated work on the former H-35 EOL junction box. The site is located in UL/H, Sec. 35, T20S, R36E. NM OSE records indicate that groundwater would likely be encountered at a depth of approximately 122 +/- feet. The site was delineated using a backhoe to collect soil samples at regular intervals, creating a 15x12x8 ft deep excavation. Each sample was field titrated for chlorides and field screened using a PID for hydrocarbons. The excavated soil was blended on site and representative composite samples of the excavation bottom, the excavation walls, and the remediated backfill were sent to a commercial laboratory for analysis of chloride and TPH, resulting in a sidewall chloride concentration of 549 mg/kg and concentrations of gasoline range organics (GRO) and diesel range organics (DRO) below detectable limits. The bottom composite resulted in chloride concentrations of 496 mg/kg, a GRO concentration below detectable limits, and a DRO concentration of 29.4 mg/kg. The remediated backfill resulted in a chloride concentration of 372 mg/kg, a GRO concentration of 16.6 mg/kg, and a DRO concentration of 706 mg/kg. BTEX was also analyzed, resulting in concentrations below

detectable limits in all samples. From 8-7 ft BGS, a 1 ft thick clay liner was installed. The remediated backfill was returned to the excavation to ground surface and contoured to the surrounding area. The site was not seeded as it is located within an active production battery.

The junction box site location map, final report, photodocumentation, laboratory results 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.

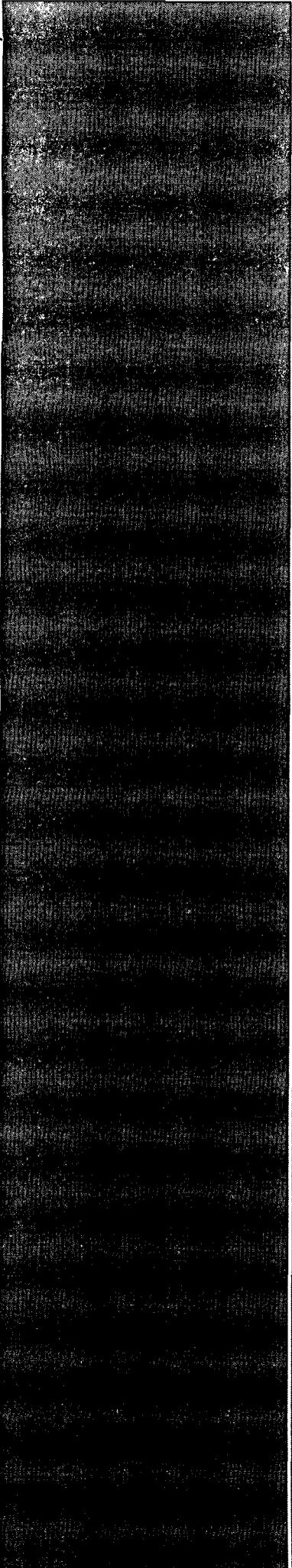
Please contact me at (575)393-9174 if you have any questions or wish to discuss this site. Thank you for your time and consideration.

Sincerely,  
RICE Operating Company

A handwritten signature in black ink, appearing to read "H. Conder", with a long horizontal flourish extending to the right.

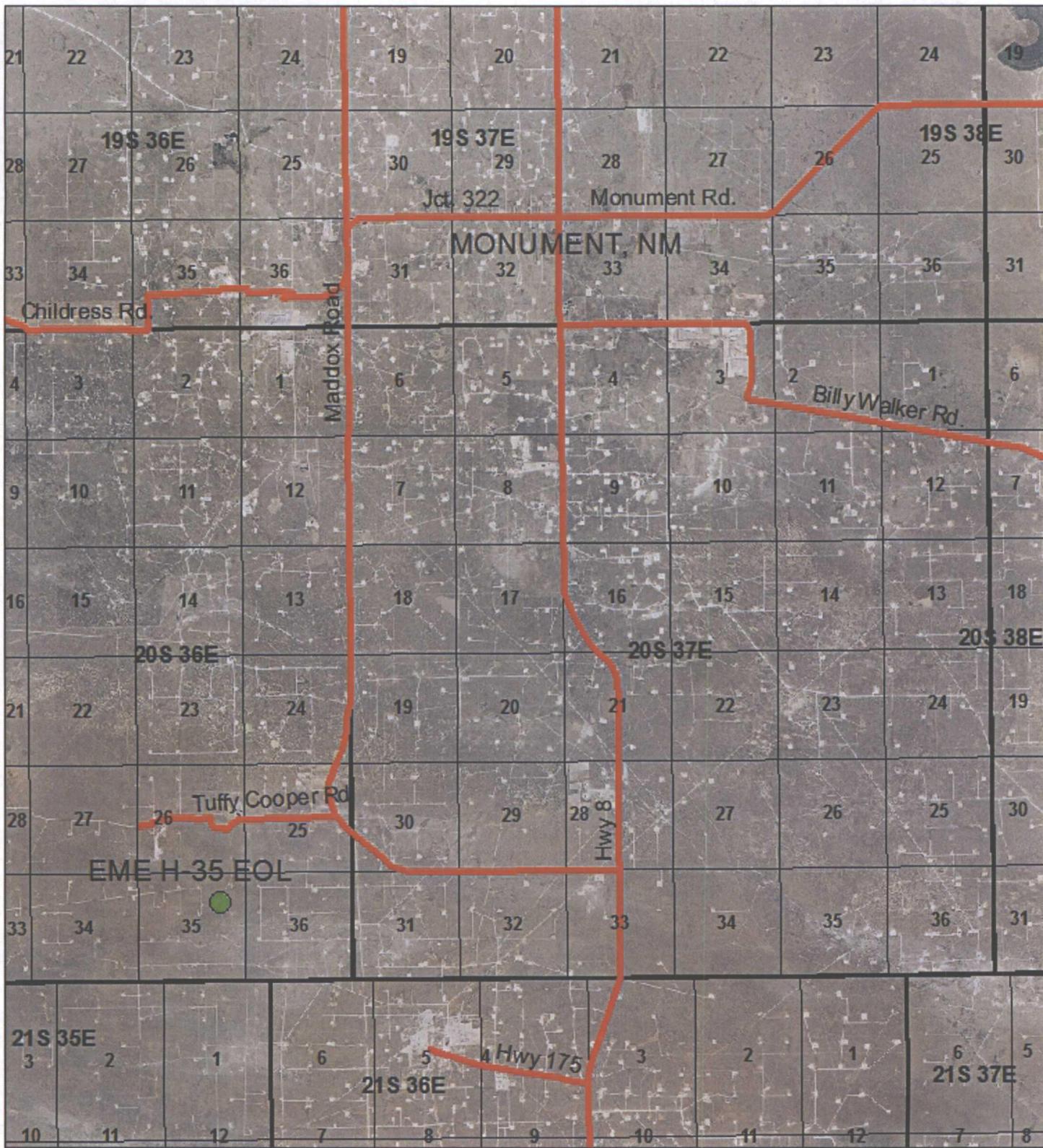
Hack Conder  
Environmental Manager

enclosures



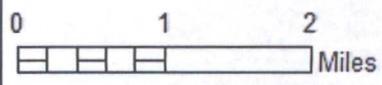
## Site Location Map

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

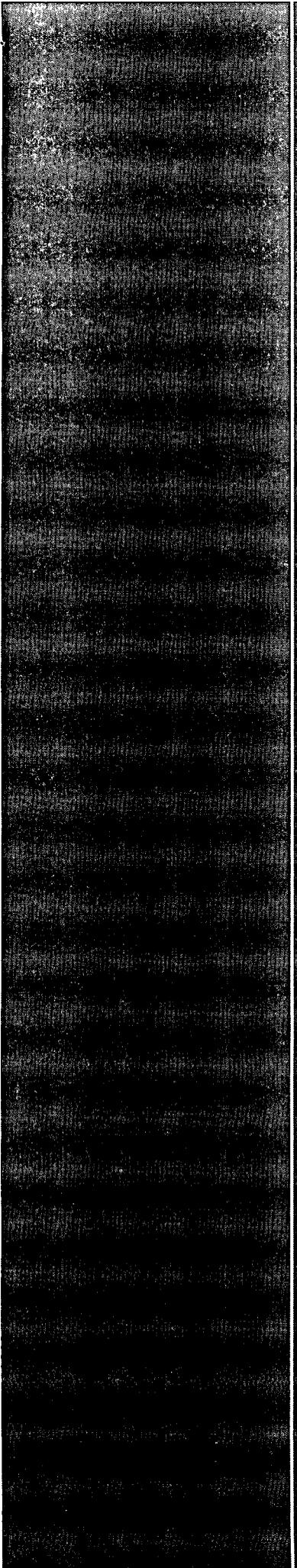


**EME  
H-35 EOL**

UL H SECTION 35  
T-20-S R-36-E  
LEA COUNTY, NM



Drawing date: 12/7/12  
Drafted by: Tony Grieco



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# 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		
							Length	Width	Depth
EME	A-35 EOL	A	35	20 S	36 E	Lea			

LAND TYPE: BLM \_\_\_\_\_ STATE \_\_\_\_\_ FEE LANDOWNER \_\_\_\_\_ Tuffy Cooper \_\_\_\_\_ OTHER \_\_\_\_\_

Depth to Groundwater 122 feet NMOCD SITE ASSESSMENT RANKING SCORE: 0

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

Soil Excavated 1400 cubic yards Excavation Length 15 Width 12 Depth 8 feet

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

**FINAL ANALYTICAL RESULTS:** Sample Date 1/13/2003 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
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10.0	29.4	496
SIDEWALLS	<0.025	<0.025	<0.025	<0.025	<10.0	<10.0	549
REMEDIATED	<0.025	<0.025	<0.025	<0.025	16.6	706	372

**General Description of Remedial Action:** This junction box was located inside an active production battery and surrounded by aged hardpan. Chlorides field-tested around 400 ppm down to 12' bgs while TPH drastically declined from 4' to 8' bgs. ROC originally planned to excavate a 10' radius surrounding the box, but due to space constraints in the battery, a 15' x 12' area was excavated to 8' bgs (where TPH impact ceased). A compacted clay barrier was installed at 8' bgs to hinder vertical migration of impact and the soil was blended and backfilled into the excavation. Since the facility is still active, the principle objective of the upgrade was to remove the source of impact. Since groundwater is 122' bgs, ROC does not consider the chloride left in place threatening to the groundwater or public health.

**CHLORIDE FIELD TESTS**

LOCATION	DEPTH	ppm
Vertical	4'	440
	12'	440
5'W	8'	587
6'N	8'	221
10' E	8'	606
6' S	8'	549

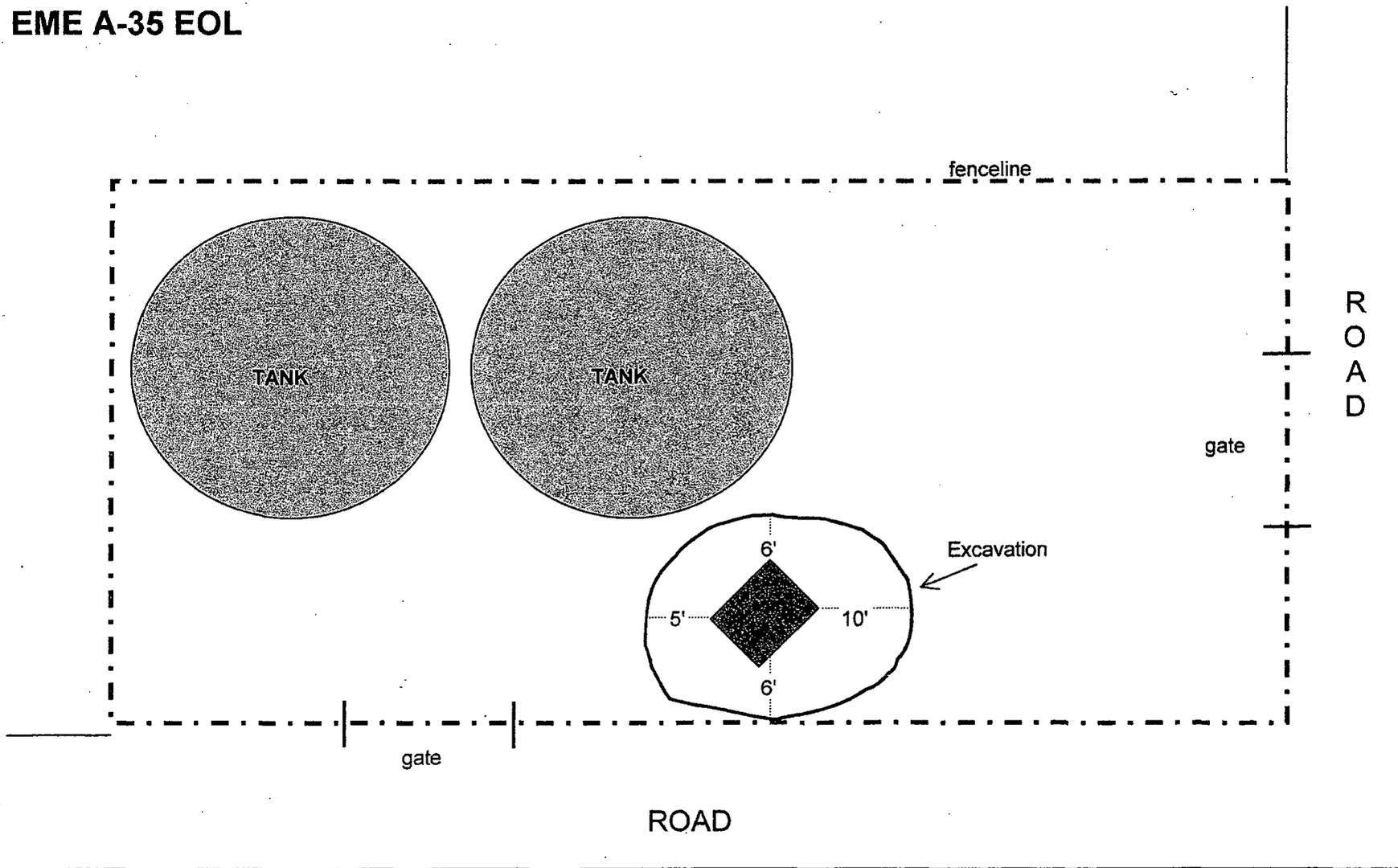
cc: lab results; diagram; photos

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

DATE 1/31/2003 PRINTED NAME Kristin Farris

SIGNATURE Kristin Farris TITLE Project Scientist

EME A-35 EOL



new  
jct-box

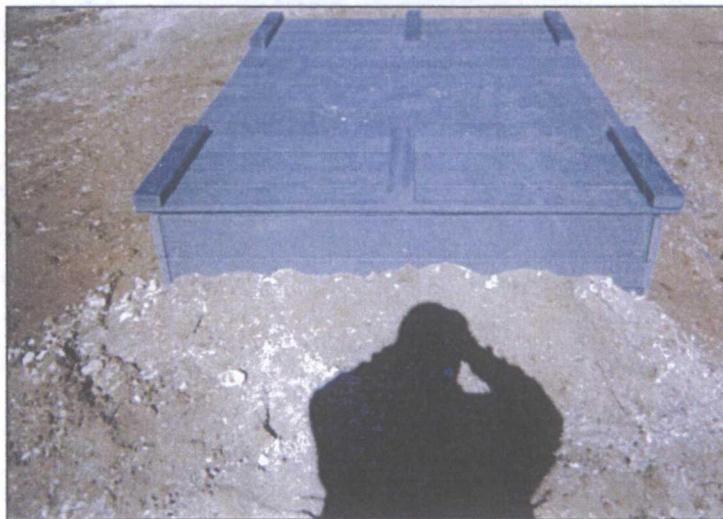
**EME A-35 EOL box upgrade**



**Backfilled**



**Box Construction**



**Complete Box**

A-35  
EOL

# ANALYTICAL REPORT

## Prepared for:

DEREK ROBINSON  
B & H ENVIRONMENTAL  
2858 STEVEN ROAD  
ODESSA, TX 79764

Project: Rice Operating

PO#:

Order#: G0305449

Report Date: 01/16/2003

### Certificates

US EPA Laboratory Code TX00158

# ENVIRONMENTAL LAB OF TEXAS

## SAMPLE WORK LIST

B & H ENVIRONMENTAL  
2858 STEVEN ROAD  
ODESSA, TX 79764  
915-368-4031

Order#: G0305449  
Project: None Given  
Project Name: Rice Operating  
Location: Penrock Fopeano EOL

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>
0305449-01	Bottom Comp. @ 8'	SOIL	1/13/03 13:30	1/14/03 8:05	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 3.5 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					
0305449-02	Wall Composite @ 6'	SOIL	1/13/03 13:35	1/14/03 8:05	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 3.5 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					
0305449-03	Remediated Composite	SOIL	1/13/03 15:30	1/14/03 8:05	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 3.5 C		
	8015M					
	8021B/5030 BTEX					
	Chloride					

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

DEREK ROBINSON  
 B & H ENVIRONMENTAL  
 2858 STEVEN ROAD  
 ODESSA, TX 79764

Order#: G0305449  
 Project: None Given  
 Project Name: Rice Operating  
 Location: Penrock Fopeano EOL

Lab ID: 0305449-01  
 Sample ID: Bottom Comp. @ 8'

### 8015M

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
Blank	Prepared	Analyzed	Amount	Factor	CK	8015M
		1/14/03	1	1		

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	29.4	10.0
TOTAL, C6-C35	29.4	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	71%	70	130
1-Chlorooctadecane	70%	70	130

### 8021B/5030 BTEX

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
Blank	Prepared	Analyzed	Amount	Factor	CK	8021B
0004365-02		1/14/03	1	25		
		23:02				

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	82%	80	120
Bromofluorobenzene	86%	80	120

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

DEREK ROBINSON  
 B & H ENVIRONMENTAL  
 2858 STEVEN ROAD  
 ODESSA, TX 79764

Order#: G0305449  
 Project: None Given  
 Project Name: Rice Operating  
 Location: Penrock Fopeano EOL

Lab ID: 0305449-02  
 Sample ID: Wall Composite @ 6'

### 8015M

Method	Date	Date	Sample	Dilution	Analyst	Method
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
		1/14/03	1	1	CK	8015M

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

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	77%	70	130
1-Chlorooctadecane	70%	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>		
0004365-02		1/15/03 15:56	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	91%	80	120
Bromofluorobenzene	96%	80	120

# ENVIRONMENTAL LAB OF TEXAS

## ANALYTICAL REPORT

DEREK ROBINSON  
 B & H ENVIRONMENTAL  
 2358 STEVEN ROAD  
 ODESSA, TX 79764

Order#: G0305449  
 Project: None Given  
 Project Name: Rice Operating  
 Location: Penrock Foepano EOL

Lab ID: 0305449-03  
 Sample ID: Remediated Composite

### 8015M

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
Blank	Prepared	Analyzed	Amount	Factor		
		1/14/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	16.6	10.0
DRO, >C12-C35	706	10.0
TOTAL, C6-C35	723	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	88%	70	130
1-Chlorooctadecane	84%	70	130

### 8021B/5030 BTEX

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
Blank	Prepared	Analyzed	Amount	Factor		
0004365-02		1/15/03	1	25	CK	8021B
		16:17				

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	94%	80	120

Approval: Sara McMurrey 01-17-03  
 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

## ANALYTICAL REPORT

DEREK ROBINSON  
 B & H ENVIRONMENTAL  
 2858 STEVEN ROAD  
 ODESSA, TX 79764

Order#: G0305449  
 Project: None Given  
 Project Name: Rice Operating  
 Location: Penrock Fopeano EOL

Lab ID: 0305449-01  
 Sample ID: Bottom Comp. @ 8'

**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	496	mg/kg	1	20	9253	1/14/03	SB

Lab ID: 0305449-02  
 Sample ID: Wall Composite @ 6'

**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	549	mg/kg	1	20	9253	1/14/03	SB

Lab ID: 0305449-03  
 Sample ID: Remediated Composite

**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	372	mg/kg	1	20	9253	1/14/03	SB

Approval: Jeanne McMurrey 01-17-03  
 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#: G0305449

<i>BLANK</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004352-02			<10.0		
<i>MS</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0305449-02	0	952	807	84.8%	
<i>MSD</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0305449-02	0	952	846	88.9%	4.7%
<i>SRM</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0004352-05		1000	775	77.5%	

# ENVIRONMENTAL LAB OF TEXAS

## QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0305449

<b>BLANK</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
		0004365-02			<0.025		
		0004365-02			<0.025		
		0004365-02			<0.025		
		0004365-02			<0.025		
		0004365-02			<0.025		
<b>MS</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
		0305449-02	0	0.1	0.104	104.%	
		0305449-02	0	0.1	0.106	106.%	
		0305449-02	0	0.1	0.108	108.%	
		0305449-02	0	0.2	0.228	114.%	
		0305449-02	0	0.1	0.110	110.%	
<b>MSD</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
		0305449-02	0	0.1	0.098	98.%	5.9%
		0305449-02	0	0.1	0.101	101.%	4.8%
		0305449-02	0	0.1	0.103	103.%	4.7%
		0305449-02	0	0.2	0.216	108.%	5.4%
		0305449-02	0	0.1	0.104	104.%	5.6%
<b>SRM</b>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
		0004365-05		0.1	0.104	104.%	
		0004365-05		0.1	0.107	107.%	
		0004365-05		0.1	0.108	108.%	
		0004365-05		0.2	0.225	112.5%	
		0004365-05		0.1	0.108	108.%	

# ENVIRONMENTAL LAB OF TEXAS

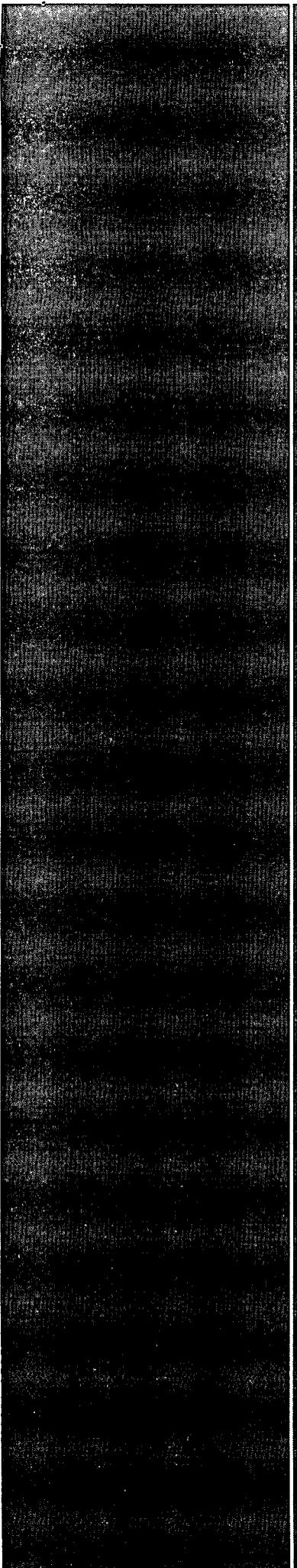
## QUALITY CONTROL REPORT

### Test Parameters

Order#: G0305449

<i>BLANK</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004333-01			<20.0		
<i>MS</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305446-01	0	1131	1010	89.3%	
<i>MSD</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0305446-01	1010	1131	1010	89.3%	0%
<i>SRM</i>	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg		0004333-04		5000	4960	99.2%	





# Current Photodocumentation

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

EME H-35 EOL (1R427-20)  
Unit Letter H, Section 35, T20S, R36E



Facing South

1/8/2013



Facing West

1/8/2013