

1R - 427 - 62

REPORTS

DATE:

3-5-2002

1R0427-62

**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	A-2	A	2	20S	36E	LEA	12	10	5

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

Depth to Groundwater 27 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 2/18/2002 Date Completed 2/22/2002 OCD Witness NO

Soil Excavated 260 cubic yards Excavation Length 30 Width 30 Depth 8' feet

Soil Disposed 236 cubic yards Offsite Facility South Monument/Sundance Location Monument/Eunice, NM

FINAL ANALYTICAL RESULTS: Sample Date 2/25/2002 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	<0.025	<0.025	<0.025	<0.025	<10	32.3	266
BOTTOM	<0.025	<0.025	<0.025	<0.025	<10	27.8	138

General Description of Remedial Action: Delineated vertical and lateral extent.

Vertical delineation found TPH clean at 8' bgs and chloride dropped from 400 ppm at 4' to 200 ppm at 14'. These results indicate impact probably did not reach groundwater.

A compacted clay barrier to vertical transmissivity and water tight junction box was installed and backfilled. Natural attenuation will remediate the remaining hydrocarbon.

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
SIDEWALLS	7'	300
BOTTOM	8'	200
Vertical Trench	4'	400
	6'	500
	8'	400
	10'	400
	12'	300
	14'	200

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

DATE March 5, 2002 PRINTED NAME D. E. Anderson

SIGNATURE *D. E. Anderson* TITLE Project Leader - Environmental

ANALYTICAL REPORT

Prepared for:

RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Project: Rice Operating *EME A-2 jet box*
Order#: G0202676
Report Date: 02/28/2002

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768
366-0804

Order#: G0202676
Project: A-2
Project Name: Rice Operating
Location: A-2

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.

<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>
0202676-01	4 pt Wall Comp. @7'	SOIL	2/19/02 3:00	2/26/02 9:50	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 3C		
	8015M TPH GRO/DRO					
	8021B/5030 BTEX					
	Chloride					
0202676-02	5 pt Bottom Comp @ 8'	SOIL	2/25/02 3:00	2/26/02 9:50	4 oz Glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 3C		
	8015M TPH GRO/DRO					
	8021B/5030 BTEX					
	Chloride					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Order#: G0202676
Project: A-2
Project Name: Rice Operating
Location: A-2

Lab ID: 0202676-01
Sample ID: 4 pt Wall Comp. @7'

8015M TPH GRO/DRO

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0000717-01		2/27/02 9:39	1	1	CK	8015m

Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10
DRO, >C12-C28	32.3	10

8021B/5030 BTEX

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0000707-02		2/27/02 10:35	5	25	CK	8021B

Parameter	Result ug/kg	RL
Benzene	< 25.0	25.0
Ethylbenzene	<25.0	25.0
Toluene	< 25.0	25.0
p/m-Xylene	< 25.0	25.0
o-Xylene	< 25.0	25.0

Lab ID: 0202676-02
Sample ID: 5 pt Bottom Comp @ 8'

8015M TPH GRO/DRO

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
<u>Blank</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Amount</u>	<u>Factor</u>		
0000717-01		2/27/02 10:12	1	1	CK	8015m

Parameter	Result mg/kg	RL
GRO, C6-C12	<10	10
DRO, >C12-C28	27.8	10

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Order#: G0202676
Project: A-2
Project Name: Rice Operating
Location: A-2

Lab ID: 0202676-02
Sample ID: 5 pt Bottom Comp @ 8'

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		
0000707-02		2/27/102 10:56	5	25	CK	8021B

Parameter	Result ug/kg	RL
Benzene	< 25.0	25.0
Ethylbenzene	<25.0	25.0
Toluene	< 25.0	25.0
p/m-Xylene	< 25.0	25.0
o-Xylene	< 25.0	25.0

Approval: *Raland K Tuttle* 3-01-02
Date

Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Irene Perry, QA Assistant
Sandra Biezugbe, Lab Tech.
Curt Cowdrey, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

RE ENVIRONMENTAL
P.O. BOX 13418
ODESSA, TX 79768

Order#: G0202676
Project: A-2
Project Name: Rice Operating
Location: A-2

Lab ID: 0202676-01
Sample ID: 4 pt Wall Comp. @7'

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	266	mg/kg	1	5	9253	2/27/02	SB

Lab ID: 0202676-02
Sample ID: 5 pt 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	138	mg/kg	1	5	9253	2/27/02	SB

Approval:

Raland K. Tuttle 3-01-02
Date

Raland K. Tuttle, Lab Director, QA Officer
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Irene Perry, QA Assistant
Sandra Biezugbe, Lab Tech.
Curt Cowdrey, Lab Tech.
Sara Molina, Lab Tech.

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M TPH GRO/DRO

Order#: G0202676

<i>BLANK</i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/L	0000717-01			<10		
DRO, >C12-C28-mg/L	0000717-01			<10		
<i>MS</i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202676-01	0	480	540	113.4%	
DRO, >C12-C28-mg/kg	0202676-01	32	480	480	93.4%	
<i>MSD</i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/kg	0202676-01	0	480	600	125.0%	9.7%
DRO, >C12-C28-mg/kg	0202676-01	32	480	510	100.8%	7.1%
<i>SRM</i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
GRO, C6-C12-mg/L	0000717-04		500	520	104.4%	0.0%
DRO, >C12-C28-mg/L	0000717-04		500	490	98.4%	0.0%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0202676

BLANK	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-ug/kg	0000707-02			<25		
Ethylbenzene-ug/kg	0000707-02			<25		
Toluene-ug/kg	0000707-02			<25		
p/m-Xylene-ug/kg	0000707-02			<25		
o-Xylene-ug/kg	0000707-02			<25		
MS	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-ug/kg	0202676-01	0	100	100	100.0%	
Ethylbenzene-ug/kg	0202676-01	0	100	110	110.0%	
Toluene-ug/kg	0202676-01	0	100	110	110.0%	
p/m-Xylene-ug/kg	0202676-01	0	200	230	115.0%	
o-Xylene-ug/kg	0202676-01	0	100	110	110.0%	
MSD	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-ug/kg	0202676-01	0	100	110	110.0%	9.5%
Ethylbenzene-ug/kg	0202676-01	0	100	110	110.0%	0.0%
Toluene-ug/kg	0202676-01	0	100	110	110.0%	0.0%
p/m-Xylene-ug/kg	0202676-01	0	200	230	116.0%	0.9%
o-Xylene-ug/kg	0202676-01	0	100	120	120.0%	8.7%
SRM	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-ug/kg	0000707-05		100	110	110.0%	0.0%
Ethylbenzene-ug/kg	0000707-05		100	120	117.0%	0.0%
Toluene-ug/kg	0000707-05		100	110	110.0%	0.0%
p/m-Xylene-ug/kg	0000707-05		200	230	117.0%	0.0%
o-Xylene-ug/kg	0000707-05		100	120	120.0%	0.0%

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0202676

<i>BLANK</i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0000714-01			<5.0		
<i>CONTROL</i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0000714-02		5000	5000	101.6%	
<i>MS</i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0202662-37	2600	1200	3900	101.6%	
<i>MSD</i>	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0202662-37	2600	1200	3900	103.2%	0.5%

SOUTH MONUMENT SURFACE WASTE FACILITY

TICKET NO # 5364

LEASE OPERATOR

Rice Operating Corporation

ORIGINATING LOCATION: ~~BRITTS~~ A-2

Sec 2 T 20S R 36E

TRANSPORTER NAME & ADDRESS

R.E. Environmental
P.O. Box 13418
Odessa T.X. 79768-3418

Attn: KENA KAY COOPER

DESCRIPTION OF WASTE

Non-Hazardous Hydrocarbons

10 YRD Loads

QUANTITY

80 Yd

8 Loads

FACILITY CONTACT

SIGNATURE OF CONTACT

DATE

CELL NUMBER MATERIAL WAS PLACED IN LANDFARM: B-1

NAME OF TRANSPORTER (DRIVER):

SIGNATURE OF DRIVER

DATE

DISPOSAL SITE

South Monument Surface Waste Facility
P. O. Box 418
Hobbs, NM 88241-0418
Sec 25 T20S R36E N/2NE/4

"As a condition of acceptance for disposal, I hereby certify that this waste is an exempt waste as defined by the Environmental Protection Agency (EPA). The waste are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recovery Act (RCRA) Subtitle C regulations; and not mixed with non-exempt waste."

FACILITY REPRESENTATIVE

DATE

7 Loads CLEAN SAND

12 YRD Loads

84 YARDS TOTAL

SOUTH MONUMENT SURFACE WASTE FACILITY

TICKET NO # 5365

LEASE OPERATOR

Rice Operating Corporation

ORIGINATING LOCATION: ~~DRIFT B~~ A-2

Sec 2 T 20s R 36E

TRANSPORTER NAME & ADDRESS

R.E. ENVIRONMENTAL
P.O. Box 13418
ODessa T.X. 79768-3418

Attn: KENA KAY COOPER

DESCRIPTION OF WASTE

Non-Hazardous Hydrocarbons

5 Loads

QUANTITY

~~12 yds~~ 10 yds

50 yards

FACILITY CONTACT:

Kenya Kay Cooper
SIGNATURE OF CONTACT

2/22/02
DATE

CELL NUMBER MATERIAL WAS PLACE IN LANDFARM: B-1

Chris Stoehner

NAME OF TRANSPORTER (DRIVER):

X Chris Stoehner
SIGNATURE OF DRIVER

2-22-02
DATE

Hauled 5 Ld to disposal.
DISPOSAL SITE

South Monument Surface Waste Facility
P. O. Box 418
Hobbs, NM 88241-0418
Sec 25 T20S R36E N/2NE/4

"As a condition of acceptance for disposal, I hereby certify that this waste is an exempt waste as defined by the Environmental Protection Agency (EPA). The waste are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recovery Act (RCRA) Subtitle C regulations; and not mixed with non-exempt waste."

Kenya Kay Cooper
FACILITY REPRESENTATIVE

2/22/02
DATE

1 Load SAND
12 yds

SOUTH MONUMENT SURFACE WASTE FACILITY

TICKET NO # 5366

LEASE OPERATOR

Rice Operating Corporation

ORIGINATING LOCATION: ~~BRIT 2~~

Sec 25 T 20S R 36E
System E-MF
SCT A-2

TRANSPORTER NAME & ADDRESS

R.E. Environmental
P.O. Box 13418
Odessa-T.X.

Attn: KENA KAY COOPER

DESCRIPTION OF WASTE

Non-Hazardous Hydrocarbons 12 YARD
LOADS

QUANTITY

6 Loads

72 YARDS

FACILITY CONTACT:

[Signature]
SIGNATURE OF CONTACT

2/26/02

DATE

CELL NUMBER MATERIAL WAS PLACE IN LANDFARM: B-1

[Signature]
NAME OF TRANSPORTER (DRIVER):

[Signature]
SIGNATURE OF DRIVER

2-26-02

DATE

DISPOSAL SITE

South Monument Surface Waste Facility
P. O. Box 418
Hobbs, NM 88241-0418
Sec 25 T20S R36E N/2NE/4

"As a condition of acceptance for disposal, I hereby certify that this waste is an exempt waste as defined by the Environmental Protection Agency (EPA). The waste are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recovery Act (RCRA) Subtitle C regulations; and not mixed with non-exempt waste."

[Signature]
FACILITY REPRESENTATIVE

2/26/02
DATE

5 Loads 60 YARDS
SAND 12 YARD Loads

SOUTH MONUMENT SURFACE WASTE FACILITY

TICKET NO # 5367

LEASE OPERATOR

Rice Operating Corporation

ORIGINATING LOCATION: ~~BRIDGE~~ A-2

Sec 2 T20S R 36E

TRANSPORTER NAME & ADDRESS

R.E. Environmental
P.O. Box 13418
Odessa, TX
Attn: KENA KAY COOPER

DESCRIPTION OF WASTE

Non-Hazardous Hydrocarbons

12 YARD
LOADS

QUANTITY

12 YARDS

FACILITY CONTACT:

[Signature]
SIGNATURE OF CONTACT

2/26/02
DATE

CELL NUMBER MATERIAL WAS PLACED IN LANDFARM: B-1

NAME OF TRANSPORTER (DRIVER):

[Signature]
SIGNATURE OF DRIVER

2-26-02
DATE

DISPOSAL SITE

South Monument Surface Waste Facility
P. O. Box 418
Hobbs, NM 88241-0418
Sec 25 T20S R36E N/2NE/4

"As a condition of acceptance for disposal, I hereby certify that this waste is an exempt waste as defined by the Environmental Protection Agency (EPA). The waste are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recovery Act (RCRA) Subtitle C regulations; and not mixed with non-exempt waste."

[Signature]
FACILITY REPRESENTATIVE

2/26/02
DATE

+ LOAD 12 YARDS
NO SAND

Sundance Services, Inc.

P.O. Box 1737 ★ Eunice, NM 88231
(505) 394-2511

N2 50513

LEASE OPERATOR/SHIPPER/COMPANY: Rice

LEASE NAME: EME

TRANSPORTER COMPANY: Dirt Works

TIME: _____ AM/PM

DATE: 2-01-02 VEHICLE NO.: #101

DRIVER NO.: 101

CHARGE TO: ~~Dirt Works~~ Rice

TYPE OF MATERIAL

Production Water

Drilling Fluids

Completion Fluids

Tank Bottoms

Contaminated soil

C-117 No.: _____

Other Material: 0/D

BS&W Content: _____

Description: _____

See 2 Tabs R36E
System EME SW P
JUL. A-2

VOLUME OF MATERIAL BBLs. 2 :

YARD 12 : _____

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001, et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: [Signature]
(SIGNATURE)

FACILITY REPRESENTATIVE: [Signature]
(SIGNATURE)

Sundance Services, Inc.

P.O. Box 1737 ★ Eunice, NM 88231
(505) 394-2511

NO 50556

LEASE OPERATOR/SHIPPER/COMPANY: Rece

LEASE NAME: EME

TRANSPORTER COMPANY: Outs works

TIME: AM/PM

DATE: 9-01-02 VEHICLE NO. # 101

DRIVER NO.:

CHARGE TO: Rece

TYPE OF MATERIAL

Production Water

Drilling Fluids

Completion Fluids

Tank Bottoms

Contaminated soil

C-117 No.:

Other Material:

BS&W Content: _____

Description: 6/10

See 2 T205 R36E
System EME SWD
707 A-2

VOLUME OF MATERIAL BBLs. _____ : YARD 12 : _____

AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. § 6901, et seq., THE NM HEALTH AND SAF. CODE § 361.001, et seq., AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED DRILLING FLUIDS, PRODUCED WATERS, AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO SUNDANCE SERVICES, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO SUNDANCE SERVICES, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: [Signature]
(SIGNATURE)

FACILITY REPRESENTATIVE: [Signature]
(SIGNATURE)

EME A-2 Jet. Box Upgrade



NORM Removal



Remediation



Completed Junction Box