

1R - 427-278

REPORTS

DATE:

1-27-09

EME L-32 Vent

1R427-278

RECEIVED

MAR 25 2009

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		
Eunice Monument Eumont (EME)	L-32 vent	L	32	20S	37E	Lea	Length	Width	Depth
							eliminated		

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

Depth to Groundwater 124 feet NMOCD SITE ASSESSMENT RANKING SCORE: 0

Date Started 7/6/2007 Date Completed 7/17/2007 OCD Witness no

Soil Excavated 89 cubic yards Excavation Length 20 Width 10 Depth 12 feet

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

FINAL ANALYTICAL RESULTS: Sample Date 7/11/2008 Sample Depth 12 ft

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	Chloride mg/kg
4-WALL COMP.	<0.004	0.007	0.023	0.183	<10.0	702	448
BOTTOM COMP.	<0.010	0.255	0.218	1.861	136	1440	384
BACKFILL COMP.	<0.004	0.045	0.045	0.481	73.8	1620	448

CHLORIDE FIELD TESTS

General Description of Remedial Action: This junction was eliminated during the pipeline replacement/upgrade program. After the former junction box was removed, an investigation was conducted using a backhoe to collect soil samples at regular intervals producing a 20x10x12-ft-deep excavation. Chloride field tests were performed on each sample, which yielded generally low concentrations. Organic vapors were measured using a PID, which yielded some elevated concentrations. Representative composite samples were sent to a commercial laboratory for analysis of chloride, TPH, and BTEX; which confirmed concentrations were within NMOCD guidelines. The excavated soil was blended on-site and returned to the excavation to ground surface and contoured to the surrounding area. On 7/17/2007, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate.

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	475
bottom comp.	12'	355
blended backfill	n/a	446
background	6"	116
vertical delineation trench at 10 ft south of the junction (source)	1'	282
	2'	647
	3'	894
	4'	752
	5'	806
	6'	712
	7'	729
	8'	622
	9'	500
	10'	413
	11'	391
	12'	358

enclosures: photos, lab results, BTEX study, chloride curve

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

SITE SUPERVISOR Noel Camona SIGNATURE [Signature] COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Katie Jones INITIAL KJ

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE [Signature] DATE 1-21-09

EME L-32 vent

Unit L, Section 32, T20S, R37E



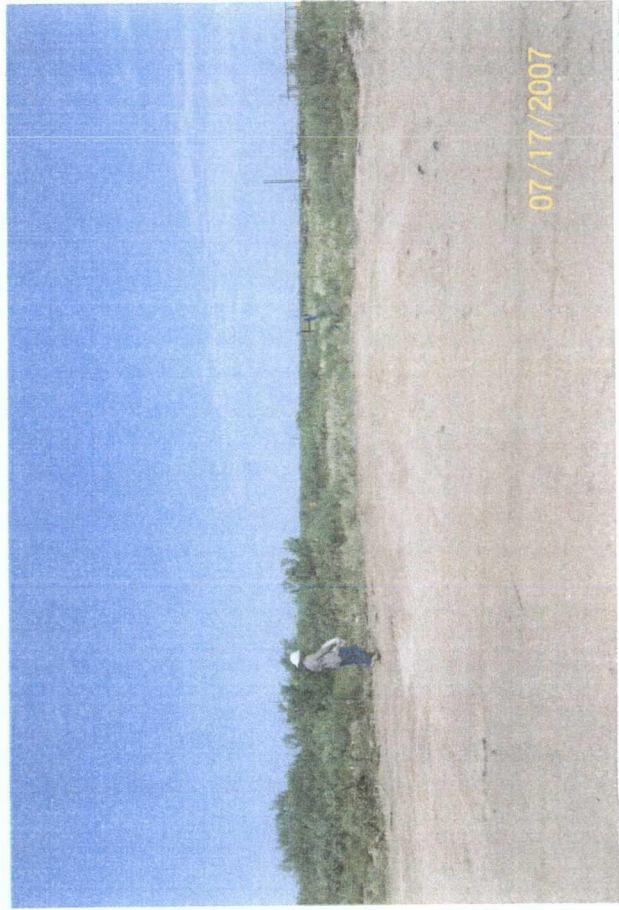
site prior to excavation

6/6/2007



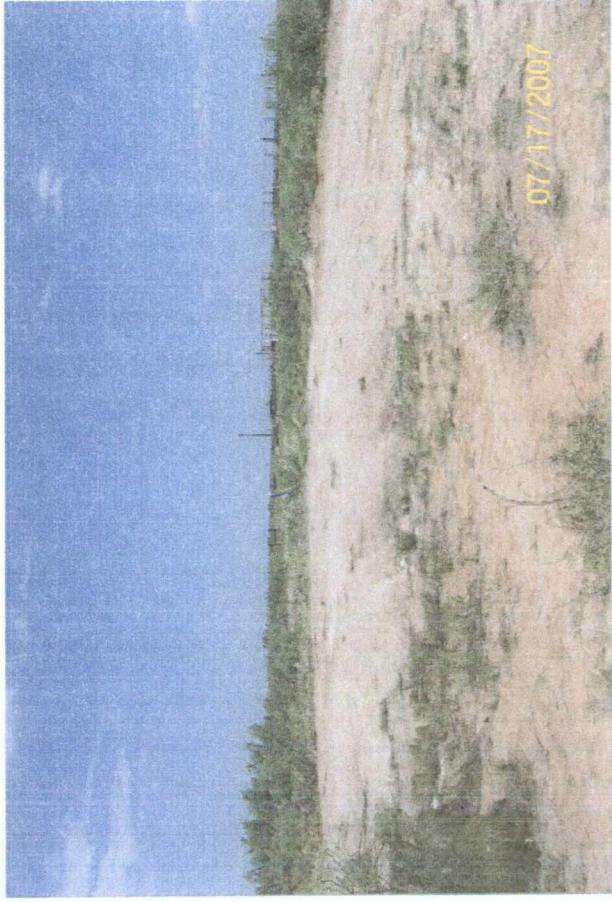
backfilling excavation

7/16/2007



seeding backfilled site

7/17/2007



site complete

7/17/2007

COPY

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

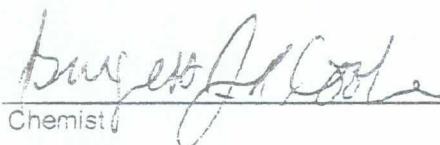
Receiving Date: 07/11/07
 Reporting Date: 07/12/07
 Project Number: NOT GIVEN
 Project Name: EME VENT L-32
 Project Location: NOT GIVEN

Sampling Date: 07/11/07
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: BC
 Analyzed By: BC/HM

LAB NO.	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	CI* (mg/Kg)
ANALYSIS DATE		07/12/07	07/12/07	07/12/07
H12884-1	5 PT. BTM. COMP @ 12' FIELD	136	1440	384
H12884-2	4 WALL COMP. 20'x10' FIELD	<10.0	702	448
H12884-3	BLENDED BACKFILL	73.8	1620	448
Quality Control		732	743	500
True Value QC		800	800	500
% Recovery		91.5	92.8	100
Relative Percent Difference		<0.1	1.3	1.0

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

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


 Chemist

7/12/07
 Date

H12884A RICE

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusion are limited for any claim arising from, 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.



ARDINAL LABORATORIES

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

PHONE (505) 393-2328 • 101 E. MARLAND • HOBBS, NM 88240

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

COPY

Receiving Date: 07/11/07
Reporting Date: 07/13/07
Project Number: NOT GIVEN
Project Name: EME VENT L-32
Project Location: NOT GIVEN

Sampling Date: 07/11/07
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: AB

LAB NO	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		07/12/07	07/12/07	07/12/07	07/12/07
H12884-1	5 PT. BTM. COMP @ 12' FIELD	<0.010	0.255	0.218	1.661
H12884-2	4 WALL COMP. 20'x10' FIELD	<0.004	0.007	0.023	0.183
H12884-3	BLENDED BACKFILL	<0.004	0.045	0.045	0.481
H12884-4	COMP. OF BTM. #1-#5 <i>IN LAB</i>	0.046	0.476	0.328	2.18
H12884-5	COMP. OF NORTH, SOUTH, <i>IN</i> EAST, WEST WALL COMPS. <i>LAB</i>	<0.002	0.008	0.015	0.122
Quality Control		0.111	0.101	0.102	0.313
True Value QC		0.100	0.100	0.100	0.300
% Recovery		111	101	102	104
Relative Percent Difference		5.0	7.1	8.5	8.7

METHOD: EPA SW-846 8021 B

Burton Roche
Chemist

7/13/07
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. H12884-1-5 RICE Cardinal is not 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.



CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 101 Enat Marland, Hobbs, NM 88240
(325) 673-7001 Fax (325) 673-7020 (505) 393-2328 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 2

ANALYSIS REQUEST											
P.O. #:											
Company:											
Attn:											
Address:											
City:											
State:											
Zip:											
Phone #:											
Fax #:											
Project Name: <u>Rock Creek</u>											
Project #:											
Project Owner:											
Project Location:											
Sampler Name: <u>Alfred Capone</u>											
FOR LAB USE ONLY											
Lab I.D.	Sample I.D.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.	DATE	TIME
1-12345-1	2pt. Bitten Camp @ 12:00 field	1								7-11-07	10:00 AM
2-12345-2	4 wall Camp @ 12:00 field	1								7-11-07	1:00 PM
3-12345-3	Beached Backfill	1								7-11-07	1:25 PM
4-12345-4	Bitten #1	1								7-11-07	10:00 AM
5-12345-5	Bitten #2	1								7-11-07	1:00 PM
6-12345-6	Bitten #3	1								7-11-07	1:00 PM
7-12345-7	Bitten #4	1								7-11-07	1:00 PM
8-12345-8	Bitten #5	1								7-11-07	1:00 PM
9-12345-9	South wall Camp	1								7-11-07	1:00 PM
10-12345-10	South wall Camp	1								7-11-07	1:00 PM

PLEASE NOTE: Cardinal Laboratories is not responsible for any claim arising from the use of this form. The amount paid by the client for this service is non-refundable. All claims for damages or any other claims arising from the use of this form shall be the responsibility of the client. In no event shall Cardinal Laboratories be liable for any damages, including without limitation, business interruption, loss of profits, or loss of data, or any other damages, arising from the use of this form. The use of this form is subject to the terms and conditions of the Cardinal Laboratories Chain of Custody and Analysis Request form.

Sampler: Alfred Capone Received By: Lab Staff

Rollinquinahed BY: Alfred Capone Received By: Lab Staff

Delivered By: (Circle One) UPS

Sampler - UPS - Bus - Other:

Phone Results: ☐ Yes ☐ No

Fax Results: ☐ Yes ☐ No

REMARKS: EMAIL JEFFREY @ NCA.COM

AT RICE SWD.COM

NA

NOTE: PH 8815

C-1

BTEX

NOTE: Copy to file

5 EN 1-1-13

RUN BTEX

ONLY

NOTE: PH 8815

2141 Beechwood, Abilene, TX 79503 101 East Marland, Hobbs, NM 88240
(325) 673-7001 Fax (325) 673-7020 (505) 393-2326 Fax (505) 393-2476

BILL TO										ANALYSIS REQUEST									
Company Name: Rice Operating Co.										CO NOTE: Composite NORTH Wall, South Wall EAST Wall, and West Wall In LAB RICE BTEX only									
Project Manager: Hack Elder																			
Address: 122 W. Taylor																			
City: Hobbs, NM																			
State: NM Zip: 88240																			
Phone #: 505/393-9174 Fax #: 505/393-1471										DATE TIME 7-11-07 1:00pm									
Attn: Taylor																			
Address:																			
City:																			
State: Zip:																			
Project #: Project Owner:										PRESERV. ACID/BASE ICE / COOL OTHER:									
Project Name: RICE Vent L-32																			
Project Location:																			
Sampler Name: Robert Carmona																			
FOR LAB USE ONLY																			
Lab I.D. Sample I.D.										MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:									
EAST wall Comp																			
West wall Comp																			
Lab I.D. Sample I.D.										DATE TIME									
Lab I.D. Sample I.D.										DATE TIME									
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Lab I.D. Sample I.D.										DATE TIME									

† Cardinal cannot accept verbal changes. Please fax wilkton changes to (325) 673-7020.

2008 BTEX Study

Revised Junction Box Upgrade Plan (2003)

System: EME
Site: L-32 vent

Date: 7/11/2007
Sampler: Noel Carmona
Laboratory: Cardinal Laboratories

Location	Component	PID reading (ppm)	FIELD COMPOSITE (mg/kg)			
			Benzene	Toluene	Ethyl Benzene	Total Xylenes
bottom composite at 12 ft BGS	1	1229.0	<0.010	0.255	0.218	1.661
	2	32.1				
	3	883.0				
	4	970.0				
	5	996.0				
			LAB COMPOSITE (mg/kg)			
			0.046	0.476	0.328	2.18

Field PID tests <100 ppm are considered final for BTEX. If PID is >100 ppm, the components of the BTEX composite sample will be collected individually and will be composited under laboratory conditions to prevent excessive volatilization. A 15-box, 30-sample study will be made to compare field-compositing with lab-compositing BTEX samples. Composite components are collected in a skewed 'W' pattern.

Revised Junction Box Upgrade Work Plan (July 16, 2003)

2008 BTEX Study

Revised Junction Box Upgrade Plan (2003)

System: EME
Site: L-32 vent

Date: 7/11/2007
Sampler: Noel Carmona

Laboratory: Cardinal Laboratories

Location	Component	PID reading (ppm)	FIELD COMPOSITE (mg/kg)			
			Benzene	Toluene	Ethyl Benzene	Total Xylenes
4-wall composite from 20x10x12 ft	NORTH wall	10.7	<0.004	0.007	0.023	0.183
	SOUTH wall	98.6				
	EAST wall	415.0				
	WEST wall	61.5				
			LAB COMPOSITE (mg/kg)			
			<0.002	0.008	0.015	0.122

Field PID tests <100 ppm are considered final for BTEX. If PID is >100 ppm, the components of the BTEX composite sample will be collected individually and will be composited under laboratory conditions to prevent excessive volatilization. A 15-box, 30-sample study will be made to compare field-compositing with lab-compositing BTEX samples. Composite components are collected in a skewed 'W' pattern.

Revised Junction Box Upgrade Work Plan (July 16, 2003)

CHLORIDE CONCENTRATION CURVE

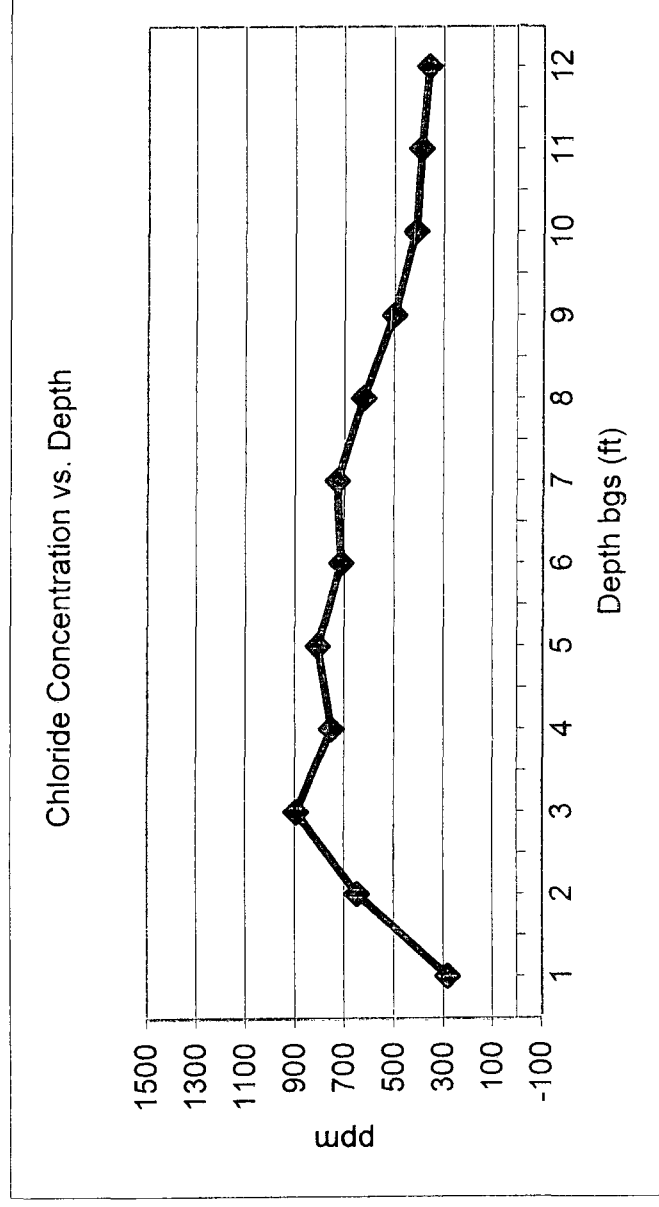
RICE Operating Company

EME L-32 vent

Unit 'L', Sec. 32, T20S, R37E

Backhoe samples at 10 ft south of the junction (source)

Depth bgs (ft)	[Cl ⁻] ppm
1	282
2	647
3	894
4	752
5	806
6	712
7	729
8	622
9	500
10	413
11	391
12	358



Groundwater = 124 ft