1R - 427-278

REPORTS

DATE:

1-27-09

43

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		
							Length	Width	Depth
Eunice Monument Eumont (EME)	L-32 vent	L	32	20S	37E	Lea	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	1.661	136	1440	384
BACKFILL COMP.	<0.004	0.045	0.045	0.481	73.8	1620	448

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 with in 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.

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

CHLORIDE FIELD TESTS

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

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

SITE SUPERVISOR Noel Carmona SIGNATURE _____ COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Katie Jones INITIAL KJ

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE Larry Bruce Baker Jr. 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

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

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)	Cl* (mg/Kg)
ANALYSIS DATE		07/12/07	07/12/07	07/12/07
H12884-1	5 PT. BTTM. 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; Cl: Std. Methods 4500-ClB
*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

7/12/07
Date

H12884A RICE

CARDINAL LABORATORIES

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ANALYTICAL RESULTS FOR
RICE OPERATING CO.
ATTN: HACK CONDER
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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. BTTM. 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 BTTM. #1-#5 IN LAB	0.046	0.476	0.328	2.18
H12884-5	COMP. OF NORTH, SOUTH, EAST, WEST WALL COMPS. IN LAB	<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

Chemist

7/13/07
Date

ARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 (325) 673-7001 Fax (325) 673-7020
101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Rice Operating Co.	BILL TO
Project Manager: Hack Conder	P.O. #:
Address: 122 W Taylor	Company:
City: Hobbs State: NM Zip: 88240	Attn:
Phone #: 505) 393-9174 Fax #: 505) 397-1471	Address:
Project #: Project Owner:	City:
Project Name: EME Vent L-32	State: Zip:
Project Location:	Phone #:
Sampler Name: Noel Corrasco	Fax #:

ANALYSIS REQUEST — COPY

Lab I.D. (FOR LAB USE ONLY)	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	TPH 8015	Cl-	BTEX						
H12894-1	5pt. Bttm Comp @12' field	C	1			✓					✓		7-11-07	10:00 a.m.	✓	✓	✓						
-2	4 wall Comp. 20x10' field	C	1			✓					✓		↓	1:00 p.m.	✓	✓	✓						
-3	Blended Backfill	C	1			✓					✓			1:25 p.m.	✓	✓	✓						
-4	Bttm. #1	G	1			✓					✓			10:00 AM	NOTE: Composite #1-5 in LAB Run BTEX only								
	Bttm. #2	G	1			✓					✓												
	Bttm. #3	G	1			✓					✓												
	Bttm. #4	G	1			✓					✓												
	Bttm. #5	G	1			✓					✓			↓									
-5	~~North wall Comp~~	C	1			✓					✓			1:00 p.m.	NOTE: PAGE 2								
	South wall Comp	C	1			✓					✓		↓	↓									

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 the client for the 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 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.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished: [signature]	Date: Time:	Received By:	Phone Result: ☐ Yes ☐ No Fax Result: ☐ Yes ☐ No REMARKS: Email JPurvis & nCarrasco @RICESWD.com or TM.
Relinquished By:	Date: 7/11/07 Time: 4:45 pm	Received By: (Lab Staff) [signature]	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Temp. °C: Cool Intact? ☒ Yes ☐ No	Checked By: (Initials)	

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

CARDINAL LABORATORIES, INC.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2111 Beechwood, Abilene, TX 79603 (325) 673-7001 Fax (325) 673-7020
101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

Company Name: Rice Operating Co.	BILL TO
Project Manager: Mack Ender	P.O. #:
Address: 122 W. Taylor	Company:
City: Hobbs State: NM Zip: 88240	Attn:
Phone #: 505) 393-9174 Fax #: 505) 397-1471	Address:
Project #: Project Owner:	City:
Project Name: Eme Unit L-32	State: Zip:
Project Location:	Phone #:
Sampler Name: Neal Cannon	Fax #:

ANALYSIS REQUEST

CO

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE / COOL	OTHER:	SAMPLING: DATE	TIME
	EAST wall Comp	C	1			✓					✓		7-11-07	1:00 p.m.
	West wall Comp	C	1			✓					✓		"	"

NOTE: Composite North wall, South wall, EAST wall, and West wall For L-32 Run BTEX only

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 the client for the 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 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, 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.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice and all costs of collection, including attorney's fees.

Sampler Relinquished:	Date:	Received By:	Phone Result: ☐ Yes ☐ No
	Time:		Fax Result: ☐ Yes ☐ No
Relinquished By:	Date: 7/11/07	Received By: (Lab Staff)	REMARKS: Email JPurvis @ NCannon @ RICESUD.com
	Time: 4:45		

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition: Temp. °C	Intact?	Checked By: (Initials)
Cool	☑ Yes ☐ No	

† Cardinal cannot accept verbal changes. Please fax written 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)

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