

1R - 427-275

REPORTS

DATE:

1-23-09

EME Conoco State KN 12 EOL

1R427-275

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)	Conoco State KN-12 EOL	P	12	19S	36E	Lea	same location		

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

Depth to Groundwater 70 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20

Date Started 8/14/2006 Date Completed 11/5/2008 OCD Witness no

Soil Excavated 7 cubic yards Excavation Length 5 Width 3 Depth 13 feet

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

FINAL ANALYTICAL RESULTS: Sample Date 7/8/2008, 11/5/2008 Sample Depth 35 ft, 14 ft

TPH and Chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

CHLORIDE FIELD TESTS

Sample Location	PID (field) ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
5 ft WEST 14 ft GRAB	10.7	<10.0	<10.0	240
SOIL BORING #2 @ 5 FT	0.0			736
SOIL BORING #2 @ 35 FT				48

LOCATION	DEPTH	mg/kg
5 ft west	14'	459
background	6"	264
SOIL BORING #2 at 16 ft north of the junction (source) 6/30/2008	5'	804
	10'	666
	15'	211
	20'	146
	25'	121
	30'	89
	35'	114

General Description of Remedial Action: This junction was addressed 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 5x3x13-ft-deep excavation. Chloride field tests performed on each sample yielded generally low concentrations. Organic vapors were measured using a PID, which yielded low concentrations. The excavated soil was returned to the excavation and contoured to the surrounding area. A new, water-tight junction box was built in place of the former. To further investigate depth of chloride presence, two soil borings were initiated on 6/30/2008. Soil boring #1 (SB #1) failed and SB #2, located 16 ft north of the former junction, was advanced to a depth of 35 ft below ground surface (BGS). Soil samples were collected every 5 ft and field tested for chlorides. The 5 ft and 35 ft samples were analyzed by a commercial laboratory for chloride, which confirmed low concentrations. The entire borehole was plugged with bentonite to the ground surface. A delineation trench was excavated at 5 ft west of the former junction to a depth of 14 ft BGS. Field chloride and organic vapor tests yielded low concentrations, similar to that of the background sample. Laboratory analysis of the 14 ft sample confirmed low concentrations of chloride and TPH. The excavated soil was returned to the excavation to ground surface and contoured to the surrounding area. On 11/5/2008, 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, PID field screenings, boring log, chloride curve

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

SITE SUPERVISOR Darnell Mitchell SIGNATURE Darnell Mitchell COMPANY RICE OPERATING COMPANY
 REPORT ASSEMBLED BY Katie Jones INITIAL KJ
 PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE Larry Bruce Baker Jr. DATE 1-23-09

EME Conoco State KN-12 EOL

Unit P, Section 12, T19S, R36E



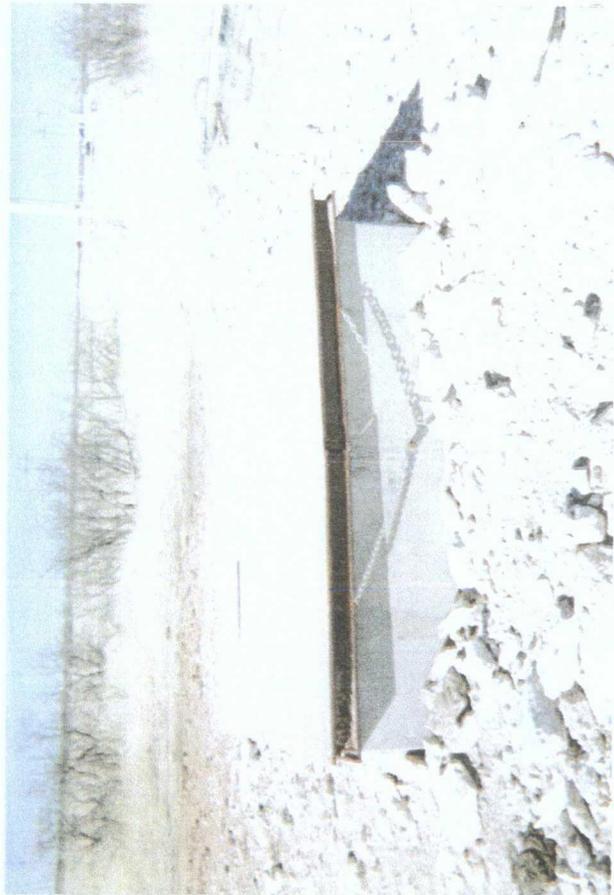
undisturbed junction box

prior to August 2006



collecting a soil sample

8/28/2006



new, water-tight junction box

2/16/2008



soil boring 16 ft north of the former junction

6/30/2008



COPY

ANALYTICAL RESULTS FOR
 RICE OPERATING COMPANY
 ATTN: ERIC GARRISON
 122 W. TAYLOR
 HOBBS, NM 88240

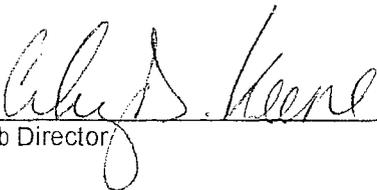
Receiving Date: 11/05/08
 Reporting Date: 11/07/08
 Project Number: NOT GIVEN
 Project Name: EME CONOCO ST KN 12
 Project Location: EME CONOCO ST KN 12

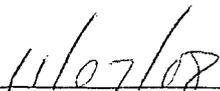
Sampling Date: 11/05/08
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: ML
 Analyzed By: AB/TR

LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/kg)	DRO (>C ₁₀ -C ₂₈) (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE		11/06/08	11/06/08	11/06/08
H16274-1	5' WEST OF SOURCE 14'	<10.0	<10.0	240
	BTTM G			
Quality Control		560	477	500
True Value QC		500	500	500
% Recovery		112	95.4	100
Relative Percent Difference		3.6	0.3	< 0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-ClB

*Analysis performed on a 1:4 w:v aqueous extract.


 Lab Director


 Date

H16274 TCL RICE

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. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



CARDINAL LABORATORIES
 101 East Marland, Hobbs, NM 88240
 (575) 393-2326 Fax (575) 393-2476

BILL TO		ANALYSIS REQUEST	
Company Name: <u>Rice Operations</u> Project Manager: <u>Eric Carlson</u> Address: <u>122 W Taylor</u> City: <u>Hobbs</u> State: <u>NM</u> Zip: <u>88240</u> Phone #: <u>393-9174</u> Fax #: <u>(575) 357-1471</u> Project #: _____ Project Owner: _____ Project Name: <u>EME CONCRETE AN 12</u> Project Location: <u>EME CONCRETE AN 12</u> Sampler Name: <u>ERIC CARLSON</u>		P.O. #: _____ Company: _____ Attn: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____	
Lab I.D. _____ Sample I.D. _____ H162741 5' WEST OF BRIDGE IN BOTTOM G		H162741 x 8015M TRH x CL	
Matrix: _____ Groundwater: _____ Wastewater: _____ Soil: _____ Oil: _____ Sludge: _____ Other: _____ # Containers: _____ (G) PAB OR (COMP): _____		Preserve: _____ Ice/Cool: _____ Acid/Bas: _____ Other: _____ Date: <u>11-5-08</u> Time: <u>10:15</u>	
Date: <u>11-5-08</u> Time: <u>4:30</u> Date: _____ Time: _____ Received By: <u>[Signature]</u> Received By: _____		Phone Result: <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: Fax Result: <input type="checkbox"/> No <input type="checkbox"/> Add'l Fax #: REMARKS: _____	
Delivered By: <u>[Signature]</u> Sampler: <u>MPS - Bus - Other:</u>		Checked By: <u>[Signature]</u> Temp: _____ Sample Condition: _____ Cook Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

COPY

DISCLAIMER: Liability and Damages: Cardinal's liability and clients' exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the service. 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 in interest, but only to the extent of the actual damages sustained by the client. Cardinal's performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise, shall be deemed to be a complete and exclusive remedy for the client. 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.

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

RECEIVED

JUL 11 2008
RICE OPERATING
HOBBS, NM

COPY

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: HACK CONDER
122 WEST TAYLOR
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 07/08/08
Reporting Date: 07/08/08
Project Number: NOT GIVEN
Project Name: EME CONOCO ST. KN-12 EOL
Project Location: EME CONOCO ST. KN-12 EOL

Analysis Date: 07/08/08
Sampling Date: 06/30/08
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AB
Analyzed By: KS

LAB NUMBER	SAMPLE ID	Cl ⁻ (mg/kg)
H15119-1	SB #2 @ 5'	736
H15119-2	SB #2 @ 35'	48
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods 4500-Cl⁻B

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

Kristin Dupre
Chemist

07/10/08
Date

H15119 RICE

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. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

COPY

Logger:	Lara Weinheimer & Noel Carmona	Client:	RICE Operating Company	Well ID: SB - 2
Driller:	Harrison & Cooper Drilling	Project Name:	EME Conoco St. KN-12 EOL	
Drilling Method:	Air rotary	Location:	EMED SWD System	
Start Date:	6-30-08		unit 'P' Sec.12 T19S, R36E	
End Date:	6-30-08		Lea County, NM	
Comments: Located 16 ft north of the former jct. box site TD = 35 ft GW = 70 ft				

Depth (feet)	chloride field tests	PID	Description	Lithology	Soil Bore Construction
			0 - 5 ft VERY FINE TO FINE SAND light brown, some rock, dry, oily		
5	804	0			
Lab	736				
10	666	0			
			5 - 20 ft VERY FINE TO FINE SAND tan, dry		
15	211	0			
20	146	0			
			20 - 25 ft VERY FINE TO FINE SAND light brown, primarily sandstone, dry		
25	121	0			
30	89				
			25 - 35 ft VERY FINE TO FINE SAND light reddish-brown, sandstone, dry		
35	114				
Lab	48				

CHLORIDE CONCENTRATION CURVE

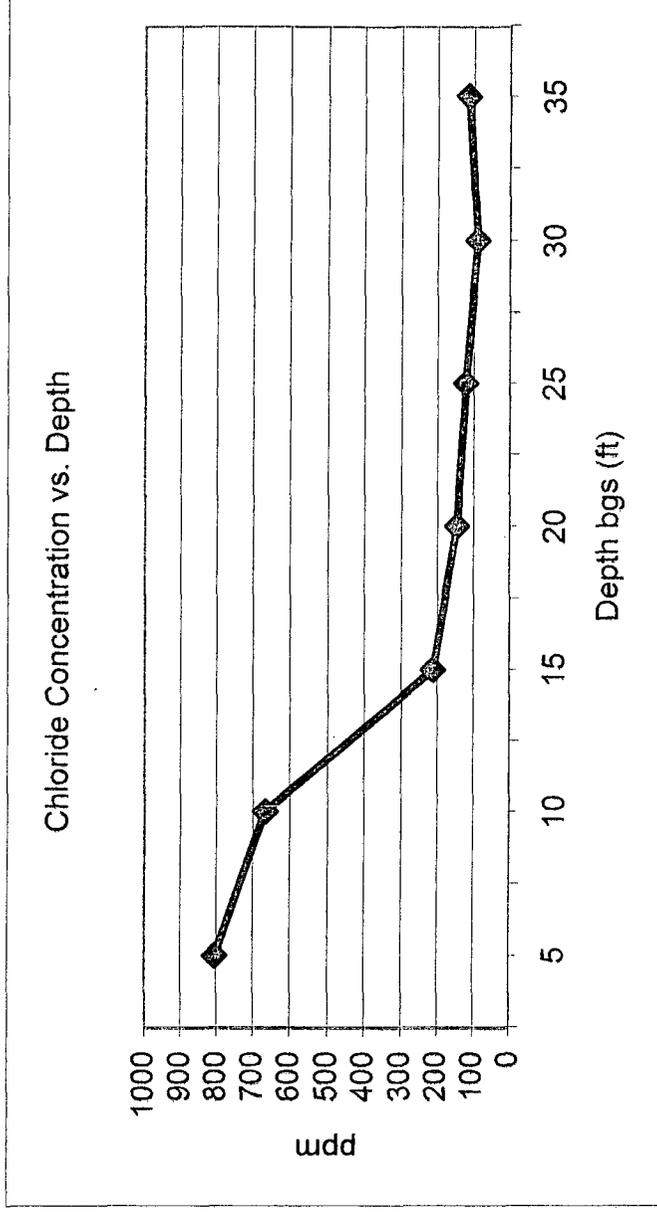
RICE Operating Company

EME Conoco State KN-12 EOL

Unit 'P', Sec. 12, T19S, R36E

SOIL BORING samples at 16 ft north of the junction (source)

Depth bgs (ft)	[Cl] ppm
5	804
10	666
15	211
20	146
25	121
30	89
35	114



Groundwater = 70 ft