1R-427-340

REPORTS

DATE:

-23-11

1R427-340

EME Jct. L-21

.

2010

APR -1 2011 Oil Conservation Division 1220 S. St. Francis Division 222, 27. 375.

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CLOSURE

RICE OPERATING COMPANY JUNCTION BOX FINAL REPORT

				BOX LO	CATION					
SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIF	RANGE	COUNTY	BOX DI	MENSIONS	- FEET	
Eunice Monument	.tct 1-21	1	1	21	195	37E	37E Lea	Length	Width	Depth
Eumont (EME)		-					E			
LAND TYPE: BLM STATE FEE LANDOWNEROTHER										
Depth to Grou	ndwater	47	feet	N	MOCD SITE	ASSESSMENT	RANKING S		20	
Date Started	4/22/	2010	Date Co	mpleted	5/27/201		Witness	no		
Soil Excavated	333.3	cubic yar	ds Ex	cavation Le	ength	30 Width	25	Depth	12feet	
Soil Disposed	108	cubic yar	ds Of	fsite Facility	/Sundai	nce Services	Location	Eunic	æ, NM	

FINAL ANALYTICAL RESULTS: samp

Sample Date 4/22/2010, 6/11/2010

Sample Depth 18 ft., 45 ft.

Procure 5-point composite sample of bottom and 4-point composite sample of sidewalls. TPH and Chloride laboratory test results completed by using an approved lab and testing procedures pursuant to NMOCD guidelines.

Sample Location	PID (field) ppm	GRO mg/kg	DRO mg/kg	Chlorides mg/kg
4-WALL COMP.	3.5	<10.0	72.6	800
BOTTOM COMP.	2.9	<10.0	<10.0	576
BACKFILL COMP.	2.3	<10.0	16.6	400
SB # 1 @ 18 ft.	0.6	<10.0	<10.0	496
SB # 1 @ 45 ft.	0.0	<10.0	<10.0	224

CHLOR	IDE FIELD TES	STS
LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	572
bottom comp.	12'	469
backfill comp.	n/a	360
	15'	526
	18'	635
	21'	492
	24'	426
SB # 1 at 10'	27'	422
south of the	30'	530
(source)	33'	346
	36'	302
	39'	305
	42'	309
	45'	321

General Description of Remedial Action: <u>This junction and line were eliminated</u> during the pipeline/upgrade program. After the former junction box was removed, an investigation was conducted using a backhoe to collect samples at regular intervals creating a 30X25X12-ft. deep excavation. Chloride field test performed on each sample yielded relatively low concentrations that did not relent with depth. Organic vapors were measured using a PID, which yielded low concentrations. The excavated soil was blended on site and representative samples were collected from the blended backfill, the bottom of the excavation,

and excavation Walls. The representative samples were sent to a commercial laboratory for

analysis of chloride and TPH. At 12 ft. below ground surface (BGS) a 20 ml plastic liner was installed with six inch pad of clean imported blow sand below and above liner. The blended backfill was returned to the excavation to 1 ft. BGS. The remaining blended backfill was hauled to a NMOCD approved facility. The remaining excavation was backfilled with clean imported soil to ground surface and contoured to the surrounding area. To further investigate depth of chloride presence, a soil bore was initiated on 6/11/2010, at 10 ft. south of former junction box. The boring was advanced to 45 ft. BGS with soil samples collected every 3 ft.

between 15 ft, and 45 ft. The 18 ft. and 45 ft. samples were taken to a commercial laboratory which confirmed chloride concentration that did relent with depth and low concentrations of TPH. The entire bore hole was plugged with bentonite to ground surface. On 6/01/2010, the site was seeded and reseeded on 11/30/2010 with a blend of native vegetation and is expected to return to a productive capacity at a

normal rate

enclosures: photos, boring log, lab results, PID (field) screenings, cross-section, chloride curve

I HE	REBY CERTIFY THA	T THE INFOR	RMATION ABOVE IS TRUE AND COMPLE	TE TO THE	BEST OF MY
			KNOWLEDGE AND BELIEF.		
	Dahad Casas		Salat Same	001104104	
SHE SUPERVISOR	Roben Egans	_SIGNATURE_	Tune of an	COMPANY_	RICE OPERATING COMPANY
REPORT			100		
ASSEMBLED BY	Larry Bruce Baker Jr.	_ INITIAL_	260		
PROJECT LEADER	Larry Bruce Baker Jr.	SIGNATURE	Lamy Bruce Bacher hr.	DATE_	3-23-11
				-	

EME JCT. L-21 Unit L, Section 21, T19S, R37E









Log	ger:	Jor	dan Woo	dfin	Former jct. box		E OPEN	RATING	E COMP
Dril	ultant:	Harr	ison & Co	noredo		4	21		The state
Drilling	Mothod	Juncu	Air Dotor	pgrade	SB-1				
Start	Date:		6/11/2010)	0 5 10 20		51	NGE 19	55
End					Feet	Pro	viect Name		Well ID:
Comm	ents: A	ll sar	nples f	rom cu	ttings. Located 10 ft south of	-1	EME ict. I	-21	SB-1
	th	ne for	mer ju	ction be	ox site.	Lo	cation: L	JL/L sec.	21 T19S R37E
			Drafte	ed by: La	ara Weinheimer	Lat	: 32°38'40.4	75"N	County: Lea
	TD :	= 45	ft		DGW = 47 ft	Lo	ng: 103°15'4	9.343"	State: NM
Depth (feet)	chlorid field tes	de sts	LAB	PID	Description		Lithology	Wel	Construction
15 ft	526			0.9					
					12 - 30 ft				
					CAND				
					SAND				
18 ft	635		CI-	0.6	tan to red				
			GRO	0.0					
			<10						
			DRO						
			<10						
21ft	492			0.4					
		-							
24 ft	426			0.6					
27 ft	122			0.2	(C(O) P Y)				
2/ 11	422			0.2				Service of	
					49957				
									bentonite
20.4	520			0.2					
30π	530			0.3		-			seal
					30 - 36 ft				
					SAND AND CALICHE RUBBLE				
33 ft	346			0.2	CARD AND CALIONE NUBBLE				
					tan to red				
36 ft	302			0.1					
	1								
	1	14.5				1			

Depth (feet)	chloride field tests	LAB	PID	Description	Lithology	Well Construction
39 ft	305		0			
				36 - 45 ft		
42 ft	309		0	SAND tan to red		
A5 (321	CI-				
	021	GRO <10 DRO				



PY



ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: HACK CONDER 112 W. TAYLOR HOBBS, NM 88240

Receiving Date: 06/11/10 Reporting Date: 06/14/10 Project Number: NOT GIVEN Project Name: EME JCT L-21 Project Location: EME JCT L-21 Sampling Date: 06/11/10 Sample Type: SOIL Sample Condition: COOL & INTACT Sample Received By: JH Analyzed By: AB

GRO DRO

 (C_6-C_{10}) (>C₁₀-C₂₈) CI* (mg/kg) (mg/kg) (mg/kg)

LAB NUMBER SAMPLE ID

ANALYSIS DATE	06/12/10	06/12/10	06/11/10
H20100-1 SB #1 @ 18'	<10.0	<10.0	496
H20100-2 SB #1 @ 45'	<10.0	<10.0	224
· · · · · · · · · · · · · · · · · · ·			
			17.
)
Quality Control	461	423	500
True Value QC	500	500	500
% Recovery	92.2	84.6	100
Relative Percent Difference	1.7	0.4	3.9

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METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI⁻: Std. Methods 4500-CI⁻B *Analyses performed on 1:4 w:v aqueous extracts.

Reported on wet weight.

Chemist

ollistin

H20100 TCL RICE

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OP.AT

RICE OPERATING COMPANY

122 West Tayor Hobbs, NM 88240 PHONE: (575) 393-9174 FAX: (575) 397-1471 PID METER CALIBRATION & FIELD REPORT FORM

Check Model Number:



 Model: PGM 7300
 Serial No: 590-000183

 Model: PGM 7300
 Serial No: 590-000508

 Model: PGM 7300
 Serial No: 590-000504

Model: PGM 7600 Model: PGM 7600 Model: PGM 7600 Serial No: 110-023920 Serial No: 110-013744 Serial No: 110-013676

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: 927041	EXPIRATION DATE: 11-14-12	
FILL DATE: (1-17-09	METER READING ACCURACY: LOO	

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
EME	2-21	L	21	195	37E

SAMPLE ID	PID	SAMPLE ID	PID
5B#1			
15'	0.9		
18'	0.6		
21'	0.4	(A) (A)	N//
24	0.6		11
27'	0.2		
30 '	0.3		
33'	0.7		
36'	0.1		
39'	Ø		
42'	0		
451	0		

I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATUE: Joudan Woodf

DATE: 10-11-10



ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: BRUCE BAKER 112 W. TAYLOR HOBBS, NM 88240

Receiving Date: 05/18/10 Reporting Date: 05/20/10 Project Number: NOT GIVEN Project Name: EME JCT. L-21 (19/37) Project Location: EME JCT. L-21 (19/37) Sampling Date: 05/17/10 Sample Type: SOIL Sample Condition: COOL & INTACT Sample Received By: JH Analyzed By: AB/HM

GRO DRO

 (C_6-C_{10}) (> $C_{10}-C_{28}$) CI* (mg/kg) (mg/kg) (mg/kg)

LAB NUMBER SAMPLE ID

ANALYSIS DATE	05/19/10	05/19/10	05/18/10
H19915-1 5PT. BOTTOM COMP @ 12'	<10.0	<10.0	576
H19915-2 4-WALL COMP.	<10.0	72.6	800
H19915-3 BLENDED BACKFILL	<10.0	16.6	400
Quality Control	499	489	500
True Value QC	500	500	500
% Recovery	99.8	97.8	100
Relative Percent Difference	0.3	1.1	< 0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CIB *Analyses performed on 1:4 w:v aqueous extracts. Reported on wet weight.

5/20/10

Date

H19915 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 thinty (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.

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 8824

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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101 East Marland, Hobbs, NM 88240 2111 Beechwood	, Abilene, TX 79603	
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 F	AX (325)673-7020	
Company Name: Niee Operative Company	8111 70	ANALYSIS REDUEST
Project Manager: Druck Baker	P.O. #:	
Address: 122 W. Tay lor	Company:	
City: $Fd' bb S$ State: M^{AA} Zip: $\mathscr{ES}2\#\sigma$	Attn:	
Phone #: 575-393-9174 Fax #: 575-397-1471	Address:	
Project #: Project Owner:	City:	
Project Name:	State: Zip:	

Project Manager: Dict C.	e Baker					P,C), #:				_		-		-							
Address: 122 W. Ta	4 10r					Ö	mpan	×			<u> </u>							 				
CITY: 1-40 665	State: Add	Zip:	88	240		Att	:"							(Ī	V						
Phone #: 575-393-	9174 Fax #: 575	-377	2	1217		Adu	dress					<u> </u>	$\overline{)}$	Ĉ	jt	2						
Project#:	Project Owner:					Cit						<u></u>)]			 				
Project Name:						Sta	te:		Zip:									 				
Project Location: EME	TCT. L-21 (19	1/37	5			Phe	# euc				I			A				 ·				
Sampler Name: Rober '	r Egans		+			Fay	<pre>(#)</pre>							NS				 				
FOR LAB USE ONLY				MA.	TRIX		PRES	ERV	SAN	PLING				61				 				_
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PLEASE NOTE: LJability and Demages. Cardinal's # PLEASE NOTE: LJability and Demages. Cardinal's # analyses. Al caims including tituae for negligence at service. In no event shall Cardinal be floble for incide	ability and cilent's exclusive remody far en ut any other cause whatbsever failed be di ntal or consequential damages, including	y claim aris o emed walv vithout Bruit	ing whele sing whele red unles	her base in made j siness in	d In contr Milling I	act or lori and recet	t, shell be vad by C use, or l	i limited lu ardinal w	o the amou Ithin 30 day offis incurre	nt paid by the cl a stiter completi d by client. Its s	ient for the on of the applic ubsidiarter	able										
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Robert	Time:									REMA	esult: .RKS:	2 - X 0		Se lo	8441 F 84 / 7	-ax#: + S	70.					
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RICE OPERATING COMPANY

122 West Tayor Hobbs, NM 88240 PHONE: (575) 393-9174 FAX: (575) 397-1471 PID METER CALIBRATION & FIELD REPORT FORM

Check Model Number:

Model: PGM 7300Serial No: 5Model: PGM 7300Serial No: 5Model: PGM 7300Serial No: 5

Serial No: 590-000183 Serial No: 590-000508 Serial No: 590-000504

Model: PGM 7600 Model: PGM 7600 Model: PGM 7600 Serial No: 110-023920 Serial No: 110-013744 Serial No: 110-013676

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOTNO: 928547	EXPIRATION DATE: 2-4-2013
FILL DATE:	METER READING ACCURACY: 99.8 PPM

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
EME	1-21	1	21	T195	R37E

SAMPLE ID	PID	SAMPLE ID	PID
20' South 2	720.1	SPT Bottom	29
4	169.3	4 Wall comp.	3.5
6	66.6	Blended Back Fill	2.3
8	50.9	·	
10	99.1		
12	87.2	2 A MAN	1/
201 East 2	0.4		/
4	0.4		
6	0.5		
S	0.6		
10	0.5		
19	05		

I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATUE: Gerando Martinez

DATE: 5-17-10



CHLORIDE CONCENTRATION CURVE

RICE Operating Company

••••

EME Jct. L-21 Unit 'L', Sec. 21, T19S, R37E

Soil bore 10 ft. south of former junction box (source)

[CI] ppm	526	635	492	426	422	530	346	302	305	309	321
Depth bgs (ft)	15	18	21	24	27	30	33	36	39	42	45



Groundwater = 47 ft.