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REPORTS

DATE:



BD M-34 Vent 2009

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Environmental Eureau Oil Conservation Division)R426-25\$

DISCLOSURE

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APD - 6 2010

RICE OPERATING COMPANY JUNCTION BOX DISCLOSURE* REPORT

							Fre		K 11 103	
				BOX LOCA				Ironmental	Burn	
SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	Been Or	MENSIONS	FEETa	u
Blinebry-Drinkard	NI-34 Vent	M	34	21S	37E	Lea	Length 12'	9, MigHuOl	1 1)10est(5'	on
(BD)				1 . 1		1		eliminated		
LAND TYPE: E	3LM	STATE	FEE LA	NDOWNER:	Ma	rk Owen	OTHER_			
Depth to Grour	ndwater	75	feet	NMOCD	SITE ASS	ESSMENT	RANKING SC	CORE:	20	
Date Started	10/7/	2008	Date Co	mpleted	11/5/2009	OCD	Witness	no		
Soil Excavated	177.8	cubic yar	ids Exc	cavation Ler	igth 20	Width	20	Depth	12	fee
Soil Excavated Soil Disposed		cubic yar		cavation Ler fsite Facility					12 e, NM	fee

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	Chloride mg/kg
SB#1 @ 15'	2.5	<10.0	<10.0	1,040
SB#1 @ 39'	3.5	<10.0	<10.0	304
4-WALL COMP.	84.5	<10.0	839	1,650
BOTTOM COMP.	62.3	<10.0	921	2,100

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	1,315
bottom comp.	12'	1,584
	15'	870
	18'	758
	21'	705
	24'	651
Soil bore at	27'	662
former junction	30'	662
	33'	605
	36'	513
	39'	360

General Description of Remedial Action: This junction was addressed under the

pipeline replacement/upgrade program. After the former box was removed, an

investigation was conducted using a backhoe to collect soil samples at regular intervals producing a 20x20x12-ft deep hole. Each sample was field tested for chlorides and

organic vapors. Field chloride tests yielded elevated chloride concentrations that did

not relent with depth. Representative composite samples were sent to a commercial laboratory for analysis. Then clean imported caliche was hauled in to backfill excavation to 5' bgs. Then a one foot clay layer was installed and compaction test performed. The remaining excavation was backfilled with clean imported blow sand and contoured to the surrounding area. On 11/06/2009, a soil bore was advanced to 39 ft. BGS, while soil samples were collected every 3 ft. and tested for chloride concentrations and organics. At 15 ft. and 39 ft. BGS, the soil samples were sent to a commercial laboratory for analysis. The soil bore was plugged with bentonite to ground surface. Once soil bore was complete contaminated soil was hauled to an NMOCD approved facility. On 11/24/2009, site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate. NMOCD was notified on 3/22/2010 of potential groundwater impact.

Additional evaluation is High Priority

enclosure: photos, lab results, compaction results, PID (field) screenings, soil bore log, cross section, chloride graph

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

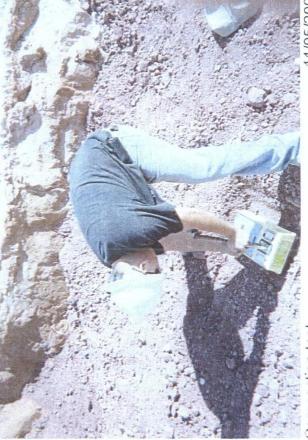
SITE SUPERVISOR	Eric Garrison	SIGNATURE	not avaliab l e		COMPANY	RICE OPERATING COMP	ANY		
REPORT ASSEMBLED BY	Lanny Shune Baker Jr.	INITAL_	LBB						
PROJECT LEADER	Larry Bruce Baker Jr. *This site is a "DISCLOSU	SIGNATURE RE.1 IL will be p	Javan laced on a phil	Annex prilized list	of similar si	Ites for fun	DATE_	<u>3-23-10</u>)

BD M-34 Vent



Former junction box

10/07/2008



Unit M, Section 34, T21S, R37E





11/05/2009

Compaction test

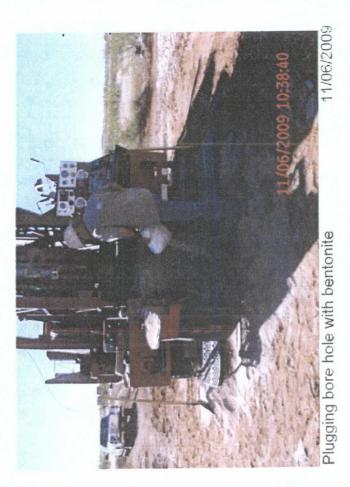
11/05/2009

BD M-34 Vent





Unit M, Section 34, T21S, R37E



Seeding site



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

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

Receiving Date: 11/02/09 Reporting Date:11/03/09 Project Number: NOT GIVEN Project Name: BD M-34 VENT Project Location: BD M-34 VENT Sampling Date: 11/02/09 Sample Type: SOIL Sample Condition: COOL & INTACT Sample Received By: ML Analyzed By: AB

DRO GRO

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

LAB NUMBER SAMPLE ID

ANALYSIS D	DATE	11/03/09	11/03/09	11/03/09
H18628-1	5PT BTTM COMP @ 12'	<10.0	921	2,100
H18628-2	4 WALL COMP @ 20'x20'	<10.0	839	1,650
Quality Cont	rol	538	599	500
True Value C	2C	500	500	500
% Recovery		108	120	100
Relative Per	cent Difference	1.3	9.9	< 0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CI'B *Analysis performed on a 1:4 w:v aqueous extract. Reported on wet weight.

DUV

H18628 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 apolicable 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 subsiciaries. 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.

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ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240 (575) 393-2326 Fax (575) 393-2476	Company Name: Rice OPEra Ting.		Address: 12.3. WILLON	U State: 1/1 Zip: X8240	2-3174 Fax#(575)3	Project Owner:	Project Name: 212 M - 34 U.C.M 1	P 💼 t Location: 人の m-34 U @n 1				TE: Lisbility and Damagos Cardinal's fishility and client's exclusive termsky for any claim arising whether based in contract fi clearns including thuse for negigence and any other cause wholscover shall be deemed waived unless made in willing an or event shall Candinal be liable for inclearation to consequential damages including whether fundation. Instances and whether study town are so as inclear on the related to the activation of consequential damages including whether so (whether study captor are so as inclear on the related to the activation of consider the activation to formate a fourther activation.	Date:	Delivered By: (Circle One) Temp. Sample Condition Cool Intacy Samples - Other	

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





RICE OPERATING COMPANY

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

Check Model Number:

- - -

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Model: PGM 7300SeModel: PGM 7300SeModel: PGM 7300Se

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

LOT NO : 924908	EXPIRATION DATE: 7/29/12
FILL DATE: 7/30/09	METER READING ACCURACY: 100 ppm

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
BD	M-34 Vent	М	34	218	37E

PID	SAMPLE ID	PID
62.3		
84.5		
		_
	62.3 84.5	62.3 84.5

I verify that I have calibrated the above instrument in accordance to the manufacture operation manual. * The person working this site is no longer employed by ROC but information was comprised from field notes.

Larry Buce Baher In. Signature:

DATE: 2-16-10



PHONIE (575) 393-2326 • 101 E. MARLAND • HOBB'S, NIM 88240

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

Receiving Date: 11/06/09 Reporting Date: 11/11/09 Project Owner: NOT GIVEN Project Name: BD M-34 VENT Project Location: BD M-34 VENT Sampling Date: 11/06/09 Sample Type: SOIL Sample Condition: COOL & INTACT Sample Received By: ML Analyzed By: AB/HM

GRO DRO

(C₆-C₁₀) (>C₁₀-C₂₈) CI* (mg/kg) (mg/kg) (mg/kg)

LAB NUMBER SAMPLE ID

ANALYSIS DATE	11/10/09	11/10/09	11/10/09
H18679-1 SB#1 @ 15'	<10.0	<10.0	1,040
H18679-2 SB#1 @ 39'	<10.0	<10.0	304
Quality Control	448	508	500
True Value QC	500	500	500
% Recovery	89.6	102	100
Relative Percent Difference	0.5	1.5	< 0.1

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

00 M Chemist

Date

H18679 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 subsidianes, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such clarm 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 execut in full with written approval of Cardinal Laboratories.

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CHAIN-OF-CUSTODY/AND/ANALYSIS REQUEST

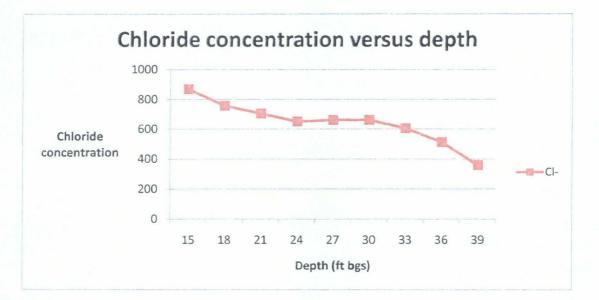
ARDINAL LABORATORIES 101 East Mariand, Hobbs, NM 88240 2111 Beechwood, Abilene, TX

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Phor	Phone #: 393-9174	174	Fax #: 397-1471	71					Address:	35:														
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	Method:	box upgrad		0 5 10 20 Feet		-	INGE 19	55
Start Dat	and the second design of the s	11/6/20		Feet				
End Date		11/6/20			Pn	oject Name:		Well ID:
Comm				ling from 15 - 21 ft. All other were		BD M-34 \	/ent	SB #1
from ai	r rotary cut			ed at the center of the frmr jct. box.				34 T21S R37E
	TD		ted by: l	ara Weinheimer		: 32°25'42.3		County: Lea
		: 39 ft		GW = 75 ft	ILO	ng: 103°9'16.	.348" VV	State: NM
Depth (feet)	chloride field test	ILAR	PID	Description		Lithology	Well	Construction
				12 - 15 ft				
				VERY FINE TO FINE SAND; CALICHE				
		CI-						
15	870	1040	2.5	light brown, dry, no odor		No.	Sec. and	
		G RO <10.0		15 - 18 ft		- Bush - N		
		DRO		VERY FINE TO FINE SAND; SANDSTONE		Same Street Street		
		<10.0		& CALICHE				
18	758		4.4	light brown, sl ightly moist, no odor			and the second	
						-	in the second	
21	705		3.5	18 - 27 ft	1			
	100		0.0	VERY FINE TO FINE SAND; CONSOL. ROCK				
				light brown, slightly moist, no odor		and the second		
	0.54						1.35	
24	651	-	1.6					
121								
27	662		3.9					bentonite
-								seai
				27 - 33 ft		C. Parts		
30	662		4.1	VERY FINE TO FINE SAND		and the second		
				light brown, dry, no odor		and the g		
33	605		4.1					
				and an and a second		調査である。		

Depth (feet)	chloride [·] field tests	LAB	PID	Description	Lithology	Well Construction
36	513		3.4	33 - 39 ft	and the second	
				VERY FINE TO FINE SAND		
				orangey brown, slightly moist, no odor	al march	
39	360	CI- 304	3.5			
		GRO <10.0		1		
		DRO <10.0				

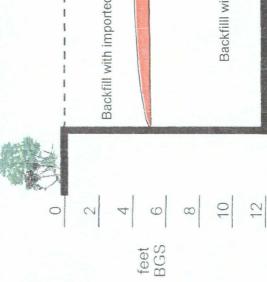


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	PID.			PID	DEPTH		PID	DEPT	ru c	210
15'	2.5				DEITH					
18'	4,4									
21	3.5									
24'	1.10									
DEPTH	PID]	DEPTH	PID	DEPTH		PID	DEPT	TH F	 iD
30'	Y.I									
<u>B</u> '	4.1									
361	3.4									
- 39'	3.5									
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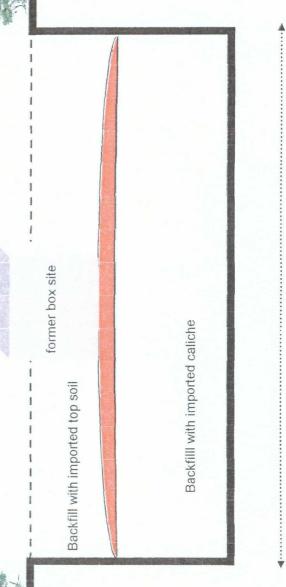
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Unit 'M', Sec. 34, T21S, R37E BD M-34 Vent

Excavation Cross-Section







..... 20'

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ENGLISHER SUBJ	LABOR PETTIGRE	Corrected Copy 11/189/09 ATORY TEST REPORT W & ASSOCIATES, P.A. 1110 N. GRIMES OBBS, NM 88240 (575) 393-9827		AASHTÖ RIB RA P. HICKS, P.E./L.S.I. M. HICKS. III, P.E./P.S.
To:	Rice Operating Company Attn: Bruce 122 W. Taylor Hobbs, NM 88240		lach Red Clay	
		Test Method:	ASTM: D 2922	
Project:	BD Junction 25 EOL 21-37 Project No. 2009.1260			
Date of Test:	November 5, 2009	Depth:	See Below	
		Depth of Probe:	6"	
Test No.	Location	*Dry Density % Max %	Moisture	Depth
*SG 5	BD M-34 Vent	89.5	17.1	4' Below Surface

RECEIVED

DEC 0 9 2009

RICE OPERATING HOBBS, NM

GOPY

*89.5 = 90.0 Per Rice Operating Representative

Control Density:	100.7
	ASTM: D 698

Required Compaction: 90% - 95%

09 7103-7104 Lab No.:

Copies To: **Rice Operating** Optimum Moisture: 20.7%

Densometer ID: 5572

PETTIGREW & ASSOCIATES

BY: Grilan Hart

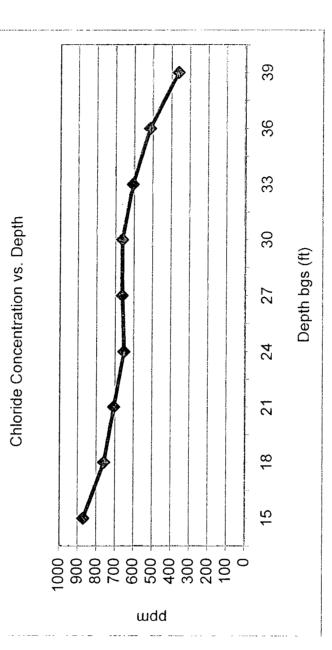
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CHLORIDE CONCENTRATION CURVE

BD M-34 Vent Unit 'M', Sec. 34, T21S, R37E

Soil bore at former junction

ilœ[i] pom	870	758	705	651	662	662	605	513	360
Depth bgs (ft)	15	18	21	24	27	30	33	36	39



Groundwater = 75 ft.