1R - 426-237

REPORTS

DATE:

5-15-09

BD A-6 Vent
2009

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APP - 6 2010
Environmental Bureau
Oil Conservation Division

IR426-237

CLOSURE

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APP - 6 2010
Environmental Bureau
Oil Conservation Division

RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length 6'	Width 5'	Depth 4'
Blinebry-Drinkard (BD)	vent A-6	A	6	22S	37E	Lea	eliminated		

LAND TYPE: BLM ___ STATE ___ FEE LANDOWNER GP Sims OTHER ___

Depth to Groundwater 91 feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 7/9/2008 Date Completed 2/9/2009 OCD Witness no

Soil Excavated 400.0 cubic yards Excavation Length 30 Width 30 Depth 12 feet

Soil Disposed 12 cubic yards Offsite Facility Sundance Location Eunice, NM

FINAL ANALYTICAL RESULTS: **Sample Date** 7/28/2008, 2/9/2009 **Sample Depth** 12 ft, 50 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.	0.3	<10.0	94	128
BOTTOM COMP.	1.2	<10.0	<10.0	608
BLENDED BACKFILL	1.4	<10.0	132	240
SOIL BORING 50 ft grab	0.0			192

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	247
bottom comp.	12'	510
blended backfill	n/a	404
background	1'	138
SOIL BORING at the former junction (source) 2/9/2009	15'	376
	20'	289
	25'	242
	30'	339
	35'	339
	40'	336
	45'	232
	50'	232

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 30x30x12-ft-deep excavation. Chloride field tests were performed on each sample, which yielded chloride levels that increased with depth. Organic vapors were measured using a PID, which yielded low concentrations. Representative composite samples were sent to a commercial laboratory for analysis of chloride and TPH. The excavated soil was blended on-site and returned to the excavation up to 5 ft below ground surface (BGS). At 5-4 ft BGS, a 1-ft thick clay barrier was installed. On 8/5/2008, a density test was performed on the clay barrier. The remaining soil was returned to the excavation to ground surface and contoured to the surrounding area. An identification plate was placed on the surface at the former junction box site to mark the presence of the clay below. On 8/5/2008, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate. To further investigate depth of chloride presence, a soil boring was initiated on 2/9/2009 at the former junction box site. The boring was advanced to a depth of 50 ft BGS with soil samples collected at regular intervals. Chloride field tests performed on each samples yielded low concentrations that decreased with depth. Laboratory analysis confirmed low concentrations of chloride. The entire borehole was plugged with bentonite to the ground surface.

enclosures: photos, boring log, lab results, PID (field) screenings, cross-section, clay test, 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 5/15/09

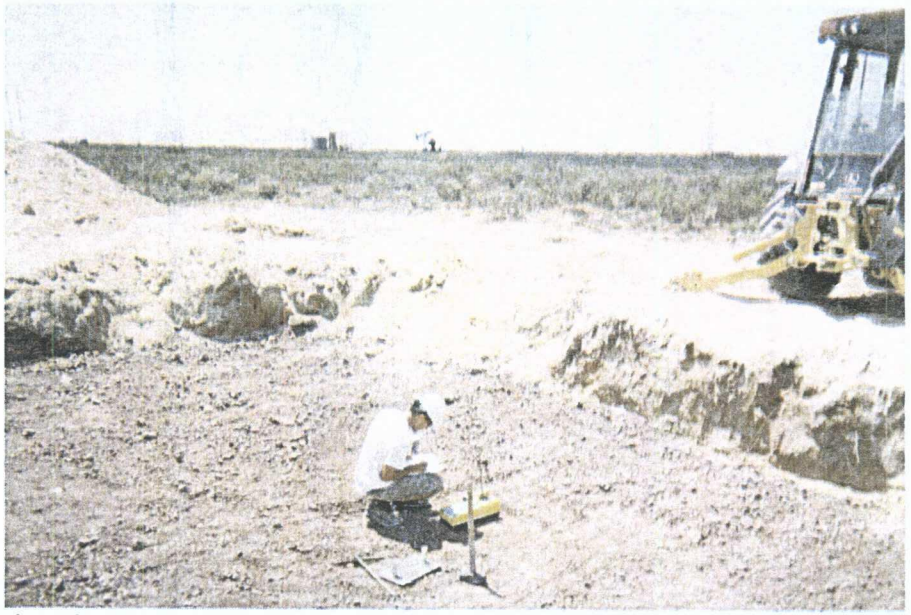
BD vent A-6

Unit A, Section 6, T22S, R37E

former junction box, facing south 7/9/2008

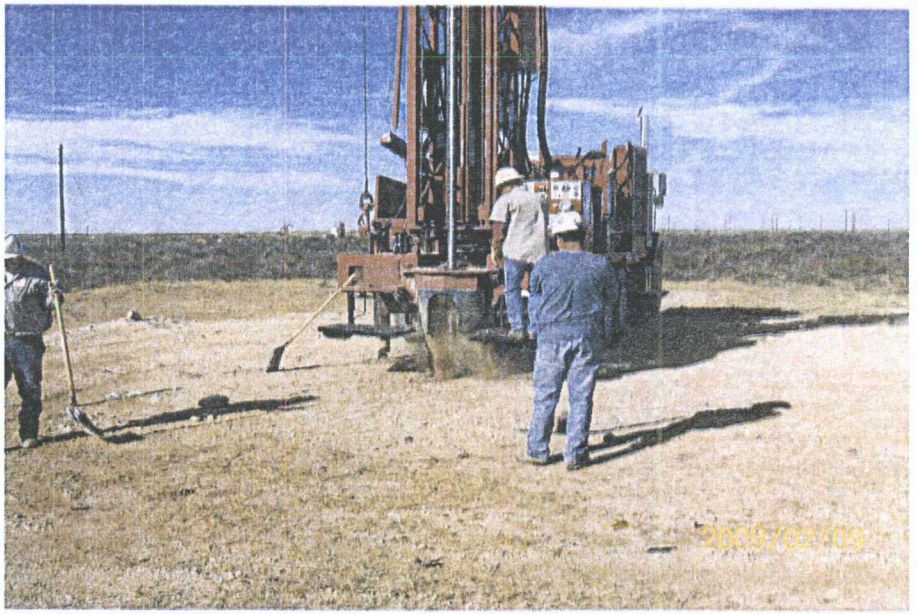
collecting a soil sample 7/22/2008

excavating site to 30x30x12-ft 7/23/2008



density test on clay barrier 8/5/2008

seeding backfilled site 8/5/2008



soil boring at former junction box site 2/9/2009

RICE OPERATING COMPANY

122 West Tayor Hobbs, NM 88240
PHONE: (505) 393-9174 FAX: (505) 397-1471
PID METER CALIBRATION & FIELD REPORT FORM

CK.			
MODEL	MODEL: PGM 7600	SERIAL NO: 110-013676	
NO.	MODEL: PGM 7600	SERIAL NO: 110-013744	
	MODEL: PGM 7600	SERIAL NO: 110-12383	
✓	MODEL: PGM 7600	SERIAL NO: 110-023920	

COPY

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : 073353	EXPIRATION DATE: 10-4-09
FILL DATE: 10-4-07	METER READING ACCURACY: 100 PPM

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
B.D	Vent A-6	A	6	T22S	R-37E

SAMPLE ID	PID	SAMPLE ID	PID
5PT Bottom	1.2		
WEST WALL	0.7		
NORTH WALL	0.5		
SOUTH WALL	0.4		
EAST WALL	0.4		
4 WALL COMPOSIT	0.3		
BLENDED BACK FILL	1.4		

I verify that I have calibrated the above insrument in accordance to the namufacture operation manual.

SIGNATUE: Donnell Mitchell DATE: 7-28-08

Logger:	Tony Grieco	Client:	Well ID:
Driller:	Harrison & Cooper, Inc. Drilling	RICE Operating Company	
Drilling Method:	Air rotary	Project Name: BD A-6 vent	
Start Date:	2-9-09		
End Date:	2-9-09	Location: BD SWD System unit 'A' Sec.6 T22S, R37E Lea County, NM	SB - 1
Comments: Located: center of former juction box site TD = 50 ft GW = 90 ft			

Depth (feet)	chloride field tests	PID	Description	Lithology	Soil Bore Construction
			COPY		
15	376	0			
20	289	0.2			
25	242	0.1			
			15 - 50 ft		
			VERY FINE TO FINE SAND		
30	339	0	dry		bentonite seal
35	339	0			
40	336	0			
45	232	0			
50	232	0			
Lab	192				

CARDINAL LABORATORIES

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

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

Receiving Date: 02/10/09
Reporting Date: 02/10/09
Project Number: NOT GIVEN
Project Name: BD A-6 VENT
Project Location: BD A-6 VENT

COPY

Analysis Date: 02/10/09
Sampling Date: 02/09/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ZL
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl^- (mg/kg)
H16864-1	SB #1 50'	192
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		2.0

METHOD: Standard Methods	4500-Cl^-B

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

Chemist

02/10/09
Date

H16864 RICE

CARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	RICE OPERATING	**BILL TO**	
Project Manager:	HACK CONDER	P.O. #:	
Address:	122 W. TAYLOR	Company:	
City:	HOBBS State: NM Zip: 88240	Attn:	
Phone #:	393-9174 Fax #: 397-1471	Address:	
Project #:	Project Owner:	City:	
Project Name:	BL A-6 VENT	State: Zip:	
Project Location:		Phone #:	
Sampler Name:	TONY GRICCO	Fax #:	

ANALYSIS REQUEST: CHLORIDE

FOR LAB USE ONLY				MATRIX							PRESERV.			SAMPLING		
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	
H16864-1	SB #1 50'	G	1			✓					✓		2/9/09	3:06	✓

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.

Relinquished By:	Date:	Received By:		Phone Result: ☐ Yes ☐ No	Add'l Phone #:
	Time:		2/10/09 7:45 AM	Fax Result: ☐ Yes ☐ No	Add'l Fax #:
Relinquished By:	Date:	Received By:		REMARKS: email results	
	Time:			lakinheimer@riceswd.com	
				hconder@riceswd.com	
				jpurvis@riceswd.com	

Delivered By: (Circle One)	Sample Condition	CHECKED BY:
Sampler - UPS - Bus - Other:	Cool: ☑ Yes ☐ No Intact: ☐ Yes ☐ No	(Initials)

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

CARDINAL LABORATORIES

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

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

Receiving Date: 07/28/08
Reporting Date: 07/29/08
Project Number: NOT GIVEN
Project Name: NOT GIVEN
Project Location: B-D VENT A-6

Sampling Date: 07/28/08
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: AB/HM

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE		07/29/08	07/29/08	07/29/08
H15253-1	BLENDED BACKFILL 30X30X12	<10.0	132	240
H15253-2	5 PT BOTTOM COMPOSITE 30X30X12	<10.0	<10.0	608
H15253-3	4 WALL COMPOSITE 30X30X12	<10.0	94.0	128
Quality Control		592	435	500
True Value QC		500	500	500
% Recovery		118	87.0	100
Relative Percent Difference		5.8	15.3	< 0.1

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

Chemist

07/29/08
Date

H15253TCL RICE

CARDINAL LABORATORIES

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

Page_____ of _____

Company Name:	Rice Operating	**BILL TO**	
Project Manager:	Darnell Mitchell	P.O. #:	
Address:	122 W. Taylor	Company:	SAME
City:	Hobbs	State: NM Zip: 88240	Attn:
Phone #:	393-9174	Fax #:	Address:
Project #:		Project Owner:	City:
Project Name:			State: Zip:
Project Location:	B.D Vent A-6		Phone #:
Sampler Name:	Darnell Mitchell		Fax #:

ANALYSIS REQUEST

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	8015 TPH	CL.	COE
H15253-1	Blended Borrow 30x30x12	C	1			✓					✓		7-28-08	11:45am	✓	✓	
-2	E of Bottom Compost 30x30x12	C	1			✓					✓		7-28-08	12:10pm	✓	✓	
-3	West Compost 30x30x12	C	1			✓					✓		7-28-08	1:30pm	✓	✓	

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:	Date: 7-28-08	Received By:	Phone Result: ☐	No	Add'l Phone #:
	Time: 4:45		Fax Result: ☐	No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: RESULTS B. Baker @ Rice Swd .com		
	Time:		J Duruis @ Rice Swd .com		
Delivered By: (Circle One)	Temp.	Sample Condition: Cool ☑ Yes ☐ No / Intact ☐ Yes ☐ No	CHECKED BY: (Initials) MC&B		
Sampler - UPS - Bus - Other:					

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

BD vent A-6
Unit 'A', Sec. 6, T22S, R37E

Excavation Cross-Section

LABORATORY TEST REPORT
PETTIGREW & ASSOCIATES, P.A.
1110 N. GRIMES
HOBBS, NM 88240
(505) 393-9827

AASHTO R18

DEBRA P. HICKS, P.E./L.S.I.
WILLIAM M. HICKS, III, P.E./P.S.

To:	Rice Operating Company Attn: Hack Conder 122 W. Taylor Hobbs, NM 88240	**Material:**	Wallach Red Clay
		Test Method:	ASTM: D 2922
Project:	General Information BD Vent A-6 *Project No. 2008.1069*		
Date of Test:	August 5, 2008	**Depth:**	See Below
		Depth of Probe:	6"

Test No.	Location	Dry Density % Max	% Moisture	Depth
SG 7	Building Pad - 15' N. & 15' E. of SW Corner	93.3	14.6	FSG

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AUG 19 2008
HOBBS, NM

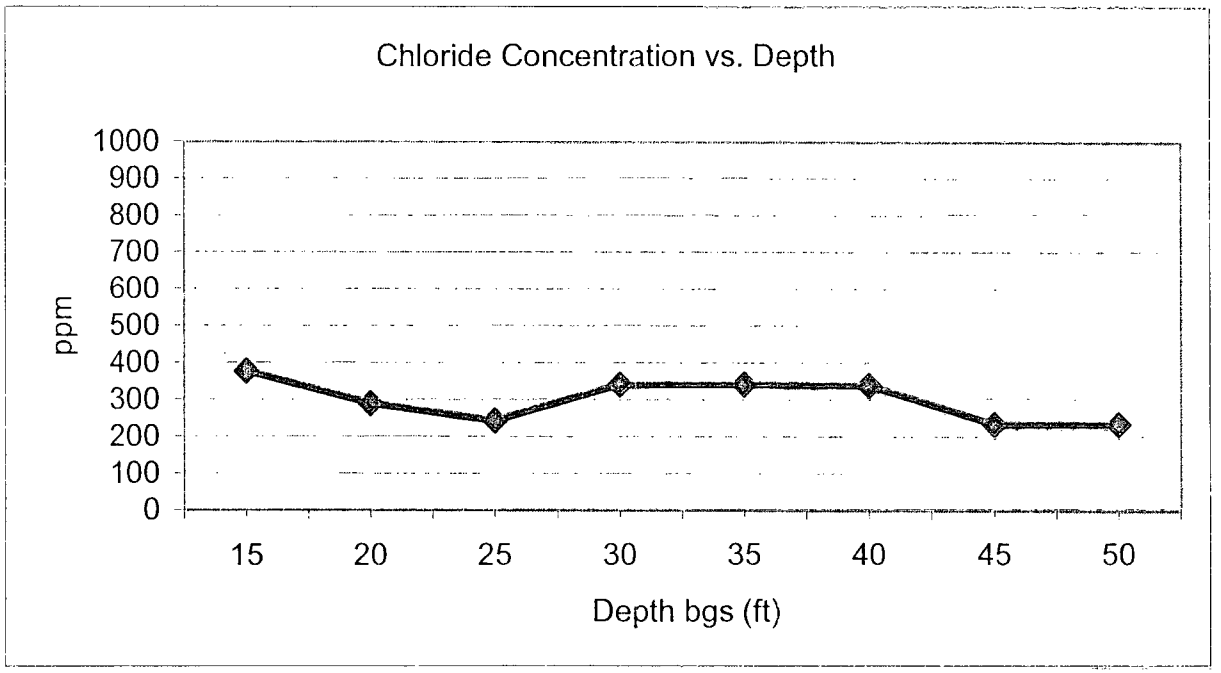
Control Density:	102.8 ASTM: D 698	**Optimum Moisture:**	22.6%
Required Compaction:	90 - 95%	**Densometer ID:**	815
Lab No.:	08 6363-6364		PETTIGREW & ASSOCIATES
Copies To:	Rice Operating	BY:	Erica Nut
		BY:	Debra Hicks P.E.

BD vent A-6

Unit 'A', Sec. 6, T22S, R37E

SOIL BORING samples at the junction (source)

Depth bgs (ft)	[Cl-] ppm
15	376
20	289
25	242
30	339
35	339
40	336
45	232
50	232



Groundwater = 91 ft