

1R - 426-256

**REPORTS**

**DATE:**

3-8-10

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**BD Jct B-1 (3 boxes)  
2009**

RECEIVED

AUG 13 2009

Environmental Bureau  
Oil Conservation Division

1R426-256

**DISCLOSURE**

RECEIVED

RICE OPERATING COMPANY  
JUNCTION BOX DISCLOSURE\* REPORT

APP - 6 2010  
Environmental Bureau  
Oil Conservation Division

BOX LOCATION									
SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
Blinebry-Drinkard (BD)	Jct. B-1 (3 boxes)	B	1	22S	36E	Lea	Length	Width	Depth
							moved 30 ft east		

LAND TYPE: BLM \_\_\_\_\_ STATE \_\_\_\_\_ FEE LANDOWNER Nymeyer Properties. OTHER \_\_\_\_\_  
 Depth to Groundwater 137 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20  
 Date Started 6/26/2009 Date Completed 9/28/2009 OCD Witness no  
 Soil Excavated 533.3 cubic yards Excavation Length: 30 Width 40 Depth 12 feet  
 Soil Disposed 240 cubic yards Offsite Facility Sundance Location Eunice, NM

FINAL ANALYTICAL RESULTS: Sample Date 7/10/2009, 7/13/2009, 7/24/2009, 9/28/2009 Sample Depth 12 ft, 25 ft, 115 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.

CHLORIDE FIELD TESTS

Sample Location	PID (field) ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
4-WALL COMP.	22.5	<10.0	17.4	3,840
BOTTOM COMP.	65.8	<10.0	482	2,600
BLENDED BACKFILL BELOW CLAY	69.6	<10.0	617	2,240
BLENDED BACKFILL ABOVE CLAY		<10.0	<10.0	<16
SB #1 @ 25'	0.8	<10.0	<10.0	4,640
SB #1 @ 115'	0.0	<10.0	<10.0	576

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	2558
bottom comp.	12'	2839
blended backfill below clay	n/a	1766
blended backfill above clay	n/a	n/a
background	6"	177
SB #1 at 8 ft west of the junction (9/28/2009)	15'	2636
	20'	4574
	25'	4618
	30'	3027
	35'	1985
	40'	2028
	45'	2260
	50'	2178
	55'	2124
	60'	1998
	65'	1823
	70'	1859
	75'	1264
	80'	1363
	85'	1121
90'	1228	
95'	1292	
100'	1623	
105'	960	
110'	841	
115'	723	

**General Description of Remedial Action:** These junction boxes were addressed during the pipeline replacement/upgrade program. After the former junction boxes were removed, an investigation was conducted using a backhoe to collect soil samples at regular intervals producing a 30x40x12-ft deep excavation. Chloride field tests were performed on each sample and yielded elevated concentrations that did not relent with depth. Organic vapors were measured using a PID which yielded some elevated concentrations. The excavated soil was blended on site with clean, imported soil. Representative composite samples were collected from the blended excavated soil, the bottom of the excavation, and the excavation walls. Laboratory analysis of the representative samples confirmed elevated concentrations of chloride. The blended excavated soil was 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 with a compaction test performed on 7/16/2009. The remaining backfill was blended with clean, imported soil and used to backfill the excavation to ground surface and to contour to the surrounding area. A new, watertight junction box was built 30 ft east of the former. On 9/9/2009, 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 bore was initiated on 9/28/2009 at 8 ft west of the former junction boxes. The boring was advanced to depth of 115 ft BGS with soil samples collected every 5 ft and field tested for chloride and organic vapors. Laboratory analysis of the 25 ft and 115 ft samples confirmed elevated concentrations of chloride that decreased with depth and low concentrations of TPH. The entire bore hole was plugged with bentonite to the ground surface. NMOCD was notified of potential groundwater impact on 2/26/2010.

**ADDITIONAL EVALUATION IS HIGH PRIORITY**

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

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 available COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Katie Jones INITIAL KJ

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE Larry Bruce Baker Jr. DATE 3-8-10

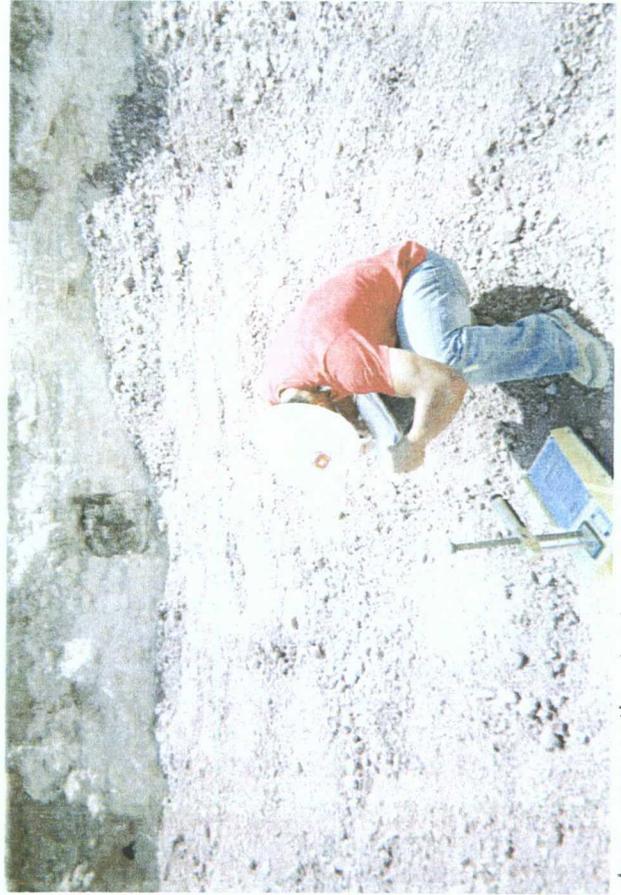
\*This site is a "DISCLOSURE." It will be placed on a prioritized list of similar sites for further consideration.

# BD Jct. B-1

Unit B, Section 1, T22S, R36E



excavating the former junction box site, facing south 7/8/2009



clay compaction test

7/16/2009



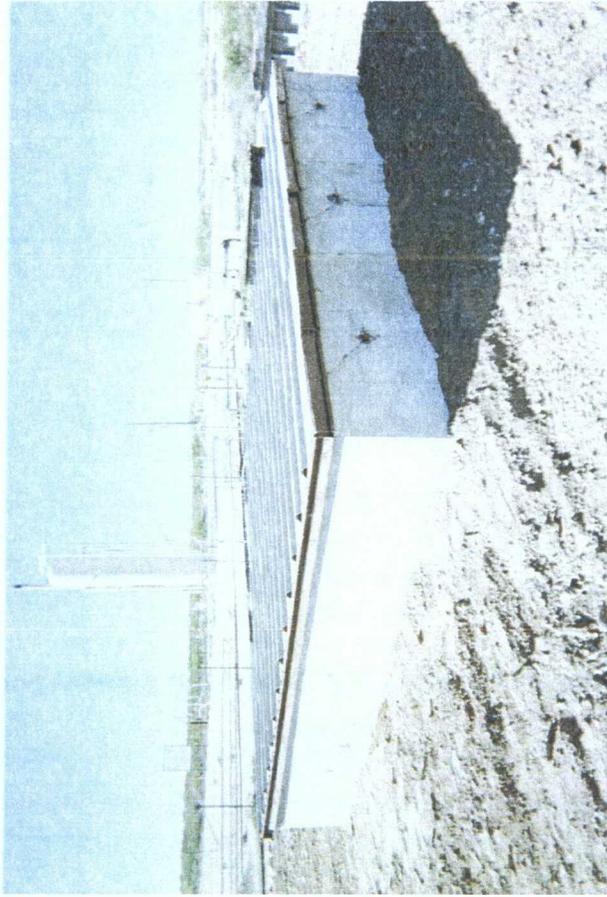
backfilling the excavation, facing west

7/28/2009



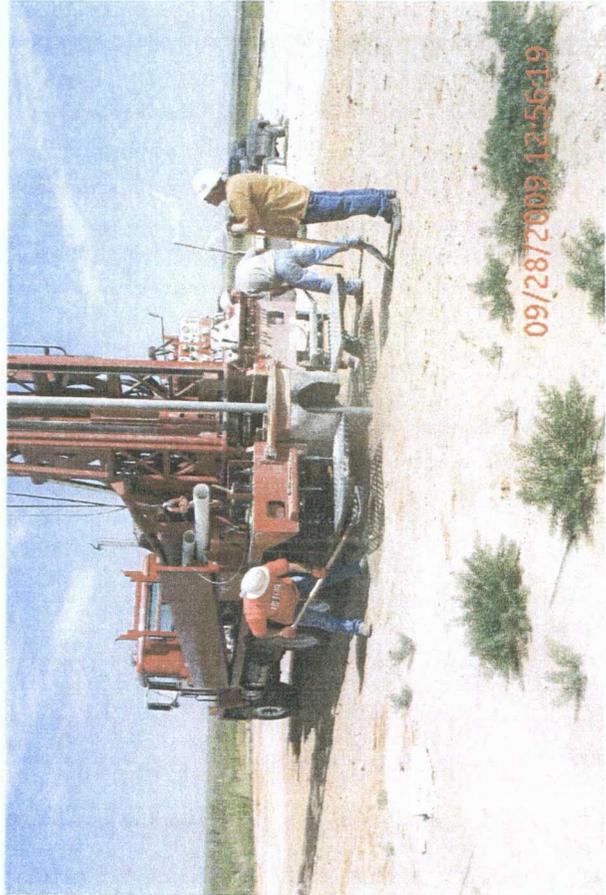
seeding the backfilled site, facing west

9/9/2009



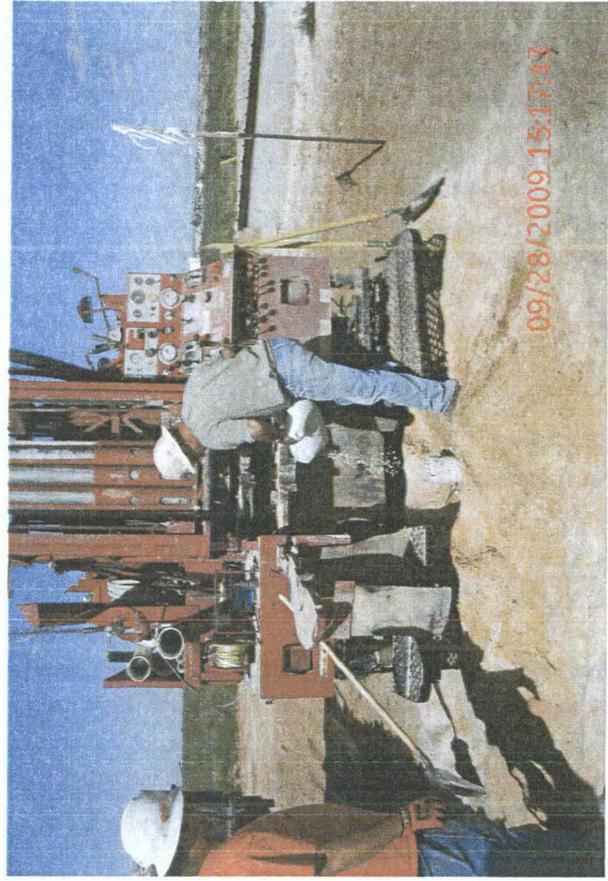
new, watertight junction box 30 ft east

11/4/2008



drilling SB #1

9/28/2009



plugging SB #1 with bentonite

9/28/2009

Logger:	Lara Weinheimer
Driller:	Harrison & Cooper, Inc. Drilling
Consultant:	None - junction box upgrade plan
Drilling Method:	Air rotary
Start Date:	9/28/2009
End Date:	9/28/2009



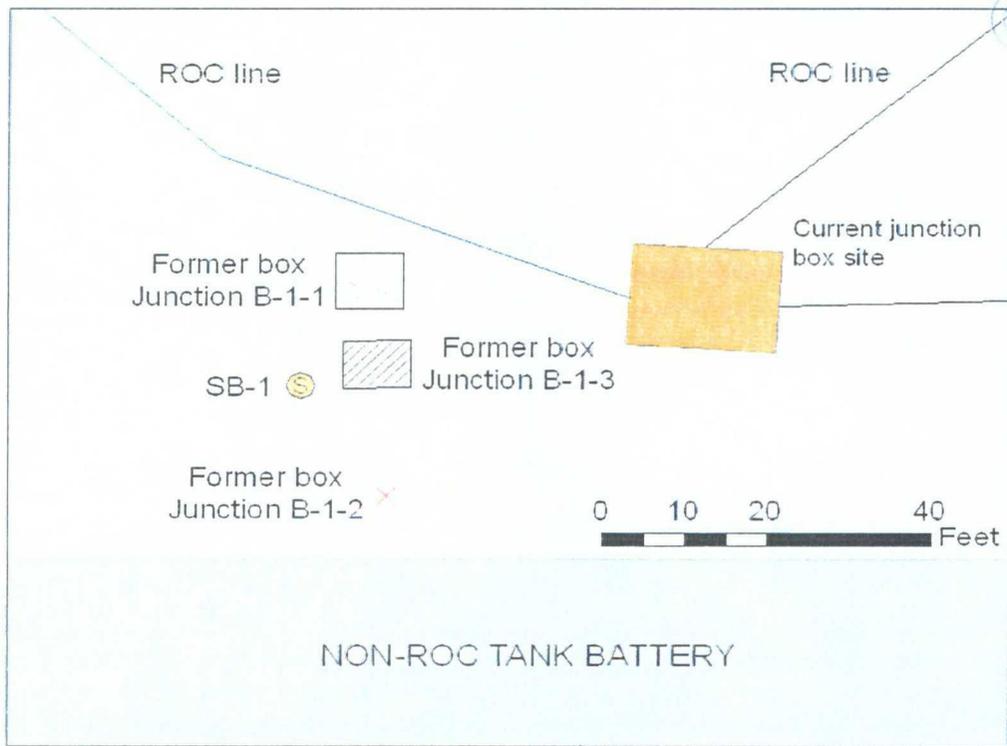
**Comments:** All samples from cuttings. Bruce Baker and Darnell Mitchell titrated.  
 Located 8 ft west of the former junction box sites  
 TD = 115 ft Estimated Depth to GW = 137 ft

**Project Name:** BD jct. B-1 **Well ID:** SB #1  
**Location:** UL/B sec. 1 T22S R36E  
**Lat:** N32°25'35.205" **County:** Lea  
**Long:** W103°12'53.643" **State:** NM

Depth (feet)	chloride field tests	LAB	PID	Description	Lithology	Well Construction
15	2636		4.8	10 - 25 ft VERY FINE TO FINE SAND WITH CONSOL. ROCK light brown, dry, slight hydrocarbon odor		
20	4574		1.9			
25	4618	Cl- 4640 GRO <10.0 DRO <10.0	0.8			
30	3027		0.1			
35	1985		0	25 - 55 ft VERY FINE TO FINE SAND orangey-brown, dry, no odor		
40	2028		0.5			
45	2260		0.1			
50	2178		0			
55	2124		0			



## Chloride Concentration versus Depth







# RICE OPERATING COMPANY

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

CK	<input type="checkbox"/>
MODEL	<input checked="" type="checkbox"/>
NO.	<input type="checkbox"/>

MODEL: PGM 7300	SERIAL NO: 590-000183
MODEL: PGM 7300	SERIAL NO: 590-000504
MODEL: PGM 7600	SERIAL NO: 110-12383
MODEL: PGM 7600	SERIAL NO: 110-02920

COPY

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: 924908	EXPIRATION DATE: 7-29-2012
FILL DATE: 7-30-09	METER READING ACCURACY: 100.5

ACCURACY: +/- 2%

SYSTEM	SITE	UNIT	SECTION	TOWNSHIP	RANGE
88	Just B-1	B	1	T 22S	R 36E

SAMPLE ID: SB #1

DEPTH	PID
15'	4.8
20'	1.9
25'	0.8
30'	0.1
35'	0

DEPTH	PID
65'	0.1
70'	0.4
75'	0
80'	0
85'	0

DEPTH	PID
115'	0

DEPTH	PID

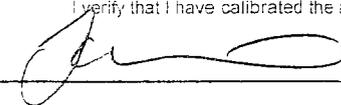
DEPTH	PID
40'	0.5
45'	0.1
50'	0
55'	0
60'	0

DEPTH	PID
90'	0
95'	0
100'	0
105'	0.2
110'	0

DEPTH	PID

DEPTH	PID

I verify that I have calibrated the above instrument in accordance to the manufacturer's operation manual.

Signature 

Date 9-28-09

SITE MAP

N ↑



# ARDINAL LABORATORIES

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

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

Receiving Date: 07/10/09  
Reporting Date: 07/13/09  
Project Number: NOT GIVEN  
Project Name: BD JCT B-1  
Project Location: BD JCT B-1

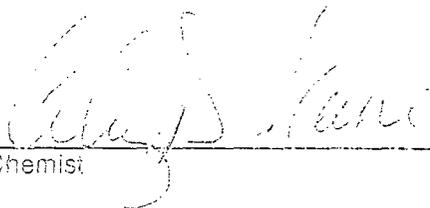
Sampling Date: 07/10/09  
Sample Type: SOiL  
Sample Condition: COOL & INTACT  
Sample Received By: ML  
Analyzed By: AB/HM

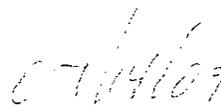
COPY

LAB NUMBER	SAMPLE ID	GRO	DRO	CI*
		(C <sub>9</sub> -C <sub>10</sub> ) (mg/kg)	(>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	(mg/kg)

ANALYSIS DATE	07/11/09	07/11/09	07/13/09
H17783-1 5PT BTM @ 12'	<10.0	482	2,600
H17783-2 4 WALL COMP @ 30X40	<10.0	17.4	3,840
Quality Control	598	598	490
True Value QC	500	500	500
% Recovery	120	120	98.0
Relative Percent Difference	19.6	18.3	2.0

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

  
\_\_\_\_\_  
Chemist

  
\_\_\_\_\_  
Date

H17783 TOL RICE

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101 East Marland, Hobbs, NM 88240

(575) 393-2326 Fax (575) 393-2476

<b>Company Name:</b> <i>THE CARPENTERS</i>		<b>P.O. #:</b>	
<b>Project Manager:</b> <i>THE CARPENTERS</i>		<b>Company:</b>	
<b>Address:</b> <i>122 E. TULSA</i>		<b>Attn:</b>	
<b>City:</b> <i>HOBBS</i>		<b>Address:</b>	
<b>Phone #:</b> <i>(575) 573-7174</i>		<b>City:</b>	
<b>State:</b> <i>NM</i> <b>Zip:</b> <i>88240</i>		<b>State:</b>	
<b>Fax #:</b> <i>(575) 393-2471</i>		<b>Phone #:</b>	
<b>Project #:</b>		<b>Fax #:</b>	
<b>Project Name:</b> <i>BAJETA B-1</i>		<b>PRESERV.</b>	
<b>Project Location:</b> <i>BAJETA B-1</i>		<b>ICE / COOL</b>	
<b>Sampler Name:</b> <i>THE CARPENTERS</i>		<b>ACID/BASE</b>	
		<b>OTHER</b>	
		<b>MATRIX</b>	
		<b>GROUNDWATER</b>	
		<b>WASTEWATER</b>	
		<b>SOIL</b>	
		<b>OIL</b>	
		<b>SLUDGE</b>	
		<b>OTHER</b>	
<b># CONTAINERS</b>		<b>SAMPLING</b>	
<b>(G)RAB OR (C)OMP</b>		<b>DATE</b>	
		<b>TIME</b>	
		<i>7-10-09 12:11</i>	
		<i>7-10-09 2:10</i>	
<b>Lab I.D.:</b> <i>H17783-1</i>			
<i>2 YANKEE CUP R-301AC</i>			
<b>Sample I.D.:</b>			

<b>Bill To</b>		<b>Analysis Request</b>	
<b>Received By:</b> <i>Myra - the Post</i>		<b>Phone Result:</b> <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #	
<b>Date:</b> <i>7-10-09</i>		<b>Fax Result:</b> <input type="checkbox"/> No <input type="checkbox"/> Add'l Fax #	
<b>Time:</b> <i>4:00</i>		<b>REMARKS:</b> <i>results Baker Rice sud.com Starline Rice sud.com egart home Rice sud.com</i>	
<b>Delivered By:</b> (Circle One)			
<b>Temp:</b>			
<b>Sample Condition:</b>			
<input type="checkbox"/> Cool <input type="checkbox"/> Intact			
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>Sampler - UPS - Bus - Other:</b>			

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



**ARDINAL  
LABORATORIES**

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

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

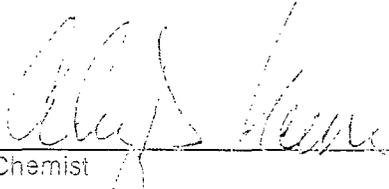
Receiving Date: 07/13/09  
Reporting Date: 07/16/09  
Project Number: NOT GIVEN  
Project Name: BD-JCT B-1  
Project Location: BD-JCT B-1

COPY

Sampling Date: 07/13/09  
Sample Type: SOIL  
Sample Condition: INTACT  
Sample Received By: ML  
Analyzed By: AB/HM

LAB NUMBER SAMPLE ID	GRO	DRO	CI*
	(C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	(>C <sub>10</sub> -C <sub>25</sub> ) (mg/kg)	
ANALYSIS DATE	07/14/09	07/14/09	07/14/09
H17802-1 BLENDED BACKFILL	<10.0	617	2,240
Quality Control	588	592	490
True Value QC	500	500	500
% Recovery	118	118	98.0
Relative Percent Difference	6.4	5.6	2.0

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

  
\_\_\_\_\_  
Chemist

  
\_\_\_\_\_  
Date

H17802 TCL RICE

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

Receiving Date: 07/24/09  
Reporting Date: 07/28/09  
Project Number: NOT GIVEN  
Project Name: BD JCT B-1  
Project Location: BD JCT B-1

COPY

Sampling Date: 07/24/09  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: ML  
Analyzed By: AB/HM

LAB NUMBER	SAMPLE ID	GRO	DRO	CI*
		(C <sub>5</sub> -C <sub>10</sub> ) (mg/kg)	(>C <sub>10</sub> -C <sub>29</sub> ) (mg/kg)	

ANALYSIS DATE	07/27/09	07/27/09	07/27/09
H17868-1 BLENDED BACKFILL	<10.0	<10.0	<16
Quality Control	533	586	490
True Value QC	500	500	500
% Recovery	107	117	98.0
Relative Percent Difference	19.4	4.5	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CIB  
\*Analysis performed on a 1:4 w/v aqueous extract.  
Reported on wet weight.  
Second surrogate out of historical limits due to matrix interference.

\_\_\_\_\_  
Chemist

\_\_\_\_\_  
Date

H17868 TCL RICE

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(575) 393-2326 Fax (575) 393-2476

<b>Company Name:</b> _____		<b>Project Owner:</b> _____	
<b>Object Manager:</b> _____		<b>Object Name:</b> _____	
<b>Address:</b> _____		<b>Object Location:</b> _____	
<b>City:</b> _____		<b>State:</b> _____	
<b>Phone #:</b> _____		<b>Zip:</b> _____	
<b>Fax #:</b> _____		<b>Project #:</b> _____	
<b>Company:</b> _____		<b>Project Name:</b> _____	
<b>Attn:</b> _____		<b>Address:</b> _____	
<b>Address:</b> _____		<b>City:</b> _____	
<b>State:</b> _____		<b>Phone #:</b> _____	
<b>Zip:</b> _____		<b>Fax #:</b> _____	
<b>P.O. #:</b> _____		<b>Project #:</b> _____	

<b>MATRIX</b>	<b>PRESERV</b>	<b>SAMPLING</b>
WASTEWATER	ICE/COOL	DATE
GROUNDWATER	ACID/BASE	TIME
SLUDGE	OTHER	
SOL		
OIL		
OTHER		

<b>Sample I.D.</b>	<b>DATE</b>	<b>TIME</b>
176681	7/24/97	1:30

<b>Matrix</b>	<b>Container</b>	<b>Preservative</b>	<b>Sampling</b>
GROUNDWATER	(G)RAB OR (COMP)		
WASTEWATER			
SOL			
OIL			
SLUDGE			
OTHER			

COPY

<b>Phone Result:</b> <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #:	<b>Phone Result:</b> <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #:
<b>Fax Result:</b> <input type="checkbox"/> No <input type="checkbox"/> Add'l Fax #:	<b>Fax Result:</b> <input type="checkbox"/> No <input type="checkbox"/> Add'l Fax #:
<b>REMARKS:</b>	
Kernally Blumenfeld Munich Egan's	

<b>Received By:</b> _____	<b>Received By:</b> _____
<b>Date:</b> 7/24/97	<b>Date:</b> 7/24/97
<b>Time:</b> 1:30	<b>Time:</b> 1:30

<b>Delivered By:</b> (Circle One)	<b>Temp.:</b> _____	<b>Sample Condition:</b>
Printer - UPS - Bus - Other:		Cool - Intact
		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
		Yes <input type="checkbox"/> No <input type="checkbox"/>

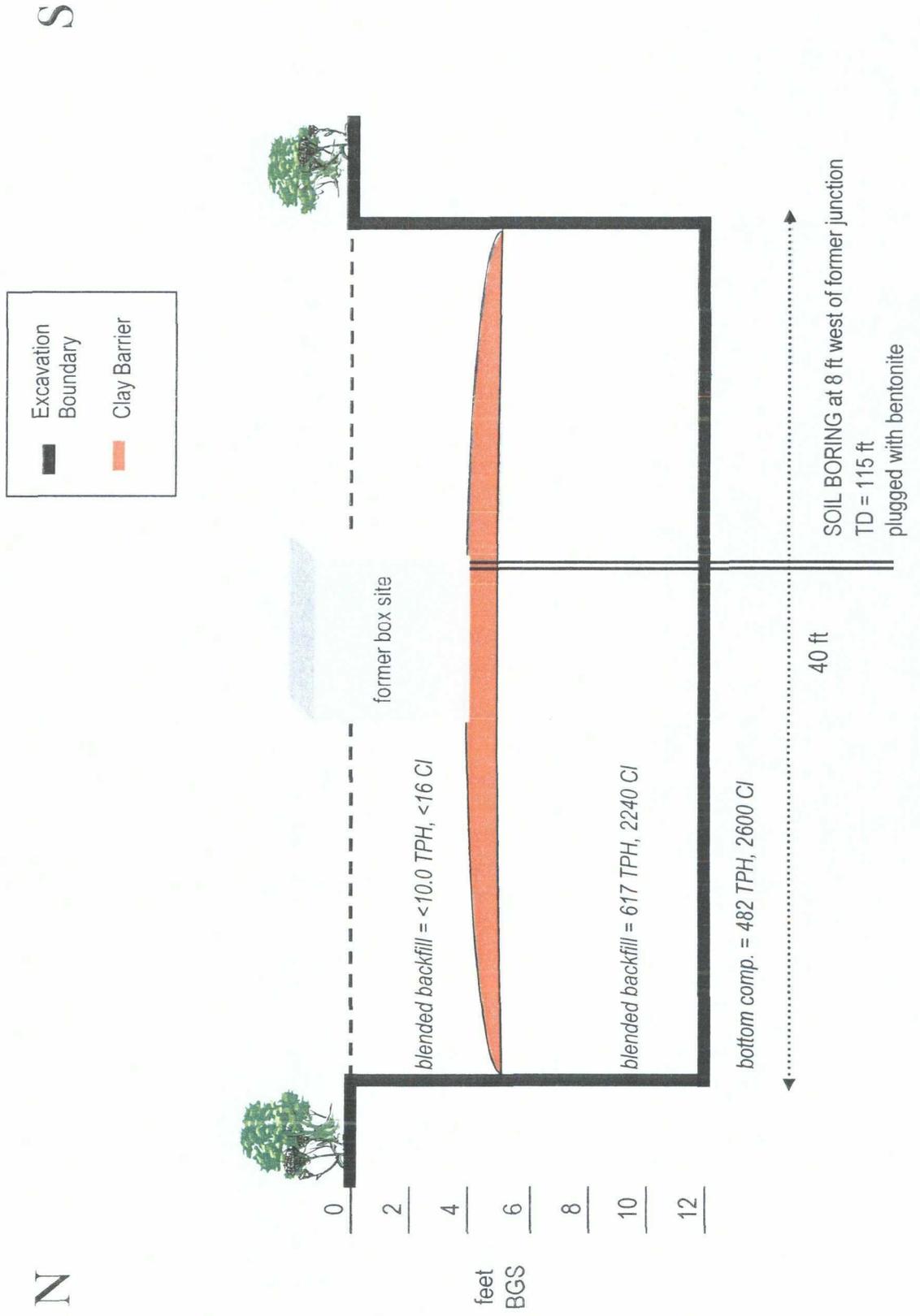
  

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.



BD Jct B-1  
Unit 'B', Sec. 1, T22S, R36E

### Excavation Cross-Section





LABORATORY TEST REPORT  
**PETTIGREW & ASSOCIATES, P.A.**  
 1110 N. GRIMES  
 HOBBS, NM 88240  
 (575) 393-9827



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

**To:** Rice Operating Company  
 Attn: Bruce  
 122 W. Taylor  
 Hobbs, NM 88240

**Material:** Cooper Red Clay

**Test Method:** ASTM: D 2922

**Project:** General Information  
 Project No. 2008.1069

**Date of Test:** July 16, 2009

**Depth:** See Below

**Depth of Probe:** 6"

Test No.	Location	Dry Density % Max	% Moisture	Depth
SG 16	BD - JCT B-1 - 15' E. & 65' S. of NW Corner of Junction Box	90.7	17.8	5' Below Surface

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RICE OPERATING  
 HOBBS, NM

**Control Density:** 100.4  
 ASTM: D 698

**Optimum Moisture:** 21.6%

**Required Compaction:** 90 - 95%

**Densometer ID:** 5357  
 PETTIGREW & ASSOCIATES

**Lab No.:** 09 4444-4445

**Copies To:** Rice Operating

BY: Erica M Hart

BY: Conner P.E.

CHLORIDE CONCENTRATION CURVE

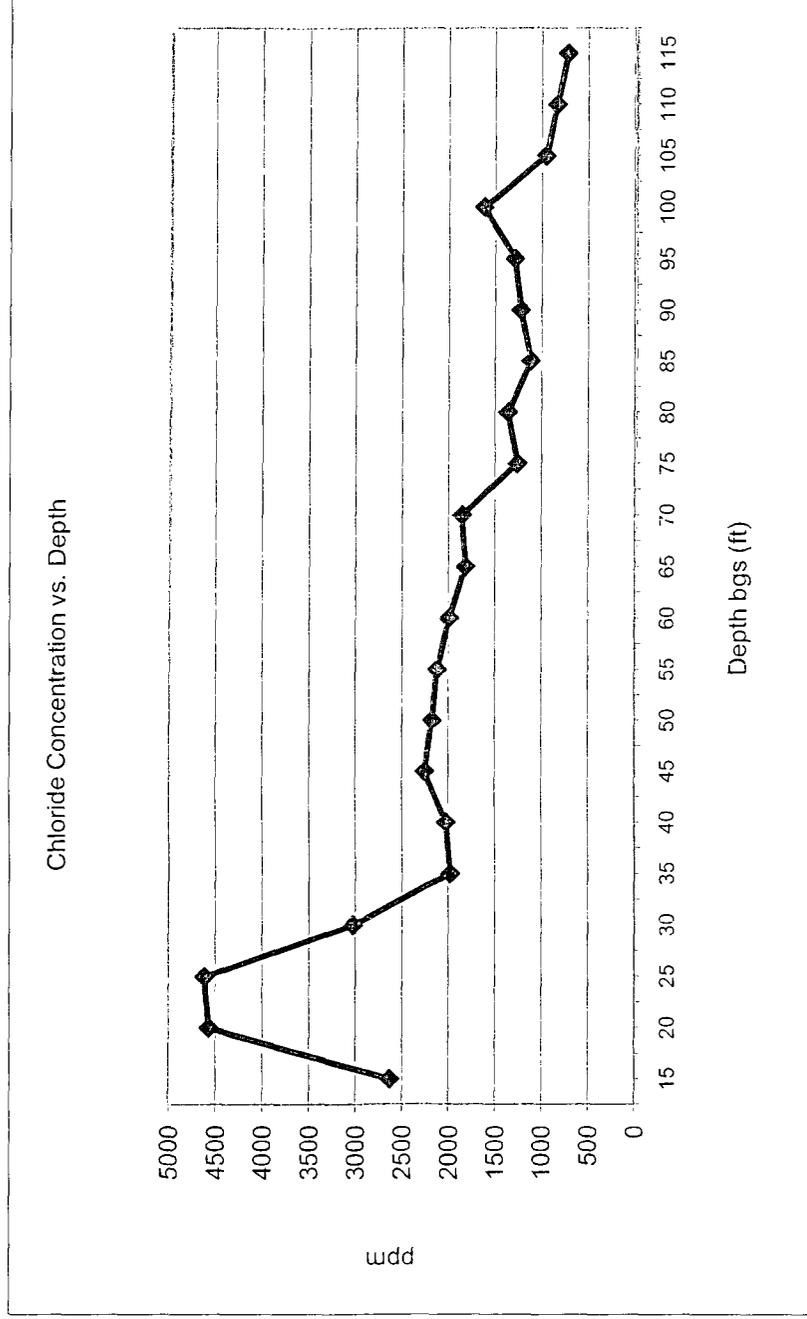
RICE Operating Company

**BD Jct. B-1**

Unit 'B', Sec. 1, T22S, R37E

SOIL BORE samples at 8 ft west of the junction (source)

Depth, bgs (ft)	Cl <sup>-</sup> , ppm
15	2636
20	4574
25	4618
30	3027
35	1985
40	2028
45	2260
50	2178
55	2124
60	1998
65	1823
70	1859
75	1264
80	1363
85	1121
90	1228
95	1292
100	1623
105	960
110	841
115	723



Groundwater = 137 ft