

1R - 426 - 292

REPORTS

DATE:

3-29-11

1R426-292

BD Jct. I-25-1

2010

APR -1 2011
St. Vincent Valley District
1200 S. St. Francis Dr.
P.O. Box 1000

DISCLOSURE

RICE OPERATING COMPANY
JUNCTION BOX DISCLOSURE* REPORT

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length	Width	Depth
Brineby-Drinkard (BD)	Jct. I-25-1	I	25	21S	36E	Lea	eliminated		

LAND TYPE: BLM ___ STATE ___ FEE LANDOWNER George Brownlee OTHER _____

Depth to Groundwater 148 feet NMOCD SITE ASSESSMENT RANKING SCORE: 20*

Date Started 7/20/2009 Date Completed 9/23/2009 OCD Witness no

Soil Excavated 44.4 cubic yards Excavation Length 10 Width 10 Depth 12 feet

Soil Disposed 120 cubic yards Offsite Facility Sundance Location Eunice, NM

FINAL ANALYTICAL RESULTS: Sample Date 9/29/2009 Sample Depth 25 ft., 100 ft.

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 @ 25'	0.0	<10.0	<10.0	4080
SB#1 @ 100'	0.6	<10.0	<10.0	2400

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
Soil Bore at former junction box 10 ft. east (source)	Background	179
	6"	2447
	15'	2445
	20'	3644
	25'	3415
	30'	2473
	35'	2963
	40'	1572
	45'	2156
	50'	2910
	55'	2963
	60'	3639
	65'	2213
	70'	2532
75'	2144	
80'	1583	
85'	2868	
90'	2793	
95'	2531	
100'		

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 10x10x12-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. The excavated soil was disposed of at a NMOCD approved facility. The excavation was backfilled with clean imported soil to 5 ft. BGS., a 1-ft. thick clay layer shelved 5 ft. in every direction was installed and compaction test performed on 8/06/2009. The remaining excavation was backfilled with clean imported soil contoured to the surrounding area. On 8/12/2009, 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 9/29/2009 at 10 ft. east of the former junction box. The borings were advanced to a depth of 100 ft. BGS., while soil samples were collected every 5 ft. and field tested for chlorides and organics. The 25 ft. and 100 ft. samples were sent to a commercial laboratory for analysis of chloride and organics, which confirmed low organics and elevated chloride concentrations. The entire bore hole was plugged with bentonite to the ground surface. NMOCD was notified of potential groundwater impact on 3/08/2010.

* sanitation well located 1000 ft. northwest

ADDITIONAL EVALUATION IS HIGH PRIORITY

enclosures: photos, soil bore log, lab analysis, compaction results, PID (field) screenings, cross-section, chloride curve

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

SITE SUPERVISOR Jordan Woodfin SIGNATURE Jordan Woodfin COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Larry Bruce Baker Jr. INITIAL LBB

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE Larry Bruce Baker Jr. DATE 3-29-11

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

BD Junction I-25-1

Unit I, Section 25, T21S, R36E



Delineation trench at former junction box

7/20/2009



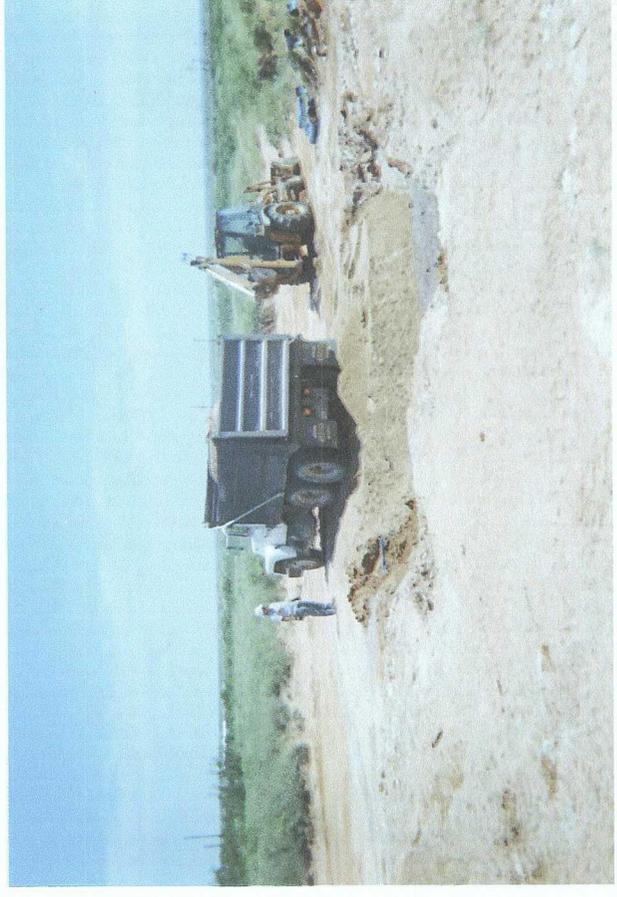
Compaction test

8/06/2009



Clay liner complete

8/06/2009

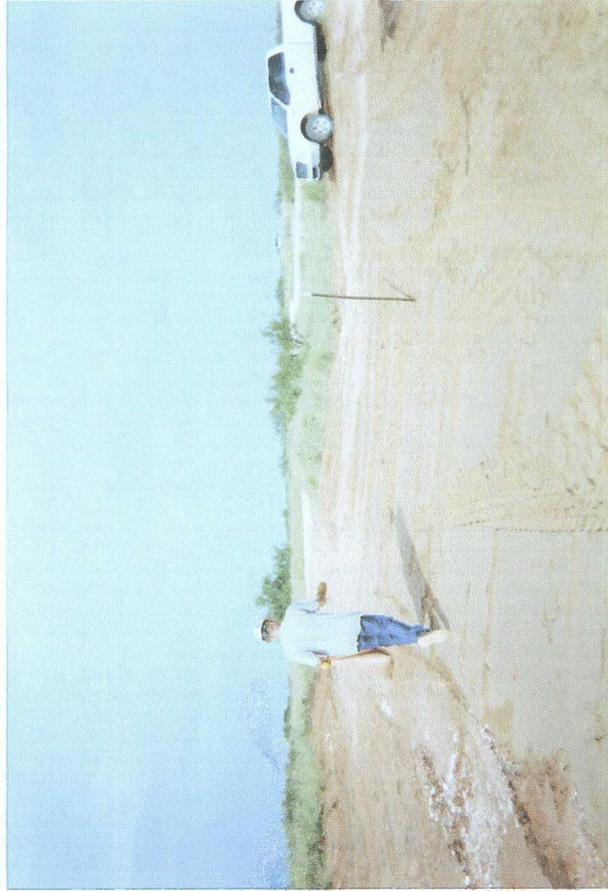


Backfilling excavation

8/06/2009

BD Junction I-25-1

Unit I, Section 25, T21S, R36E



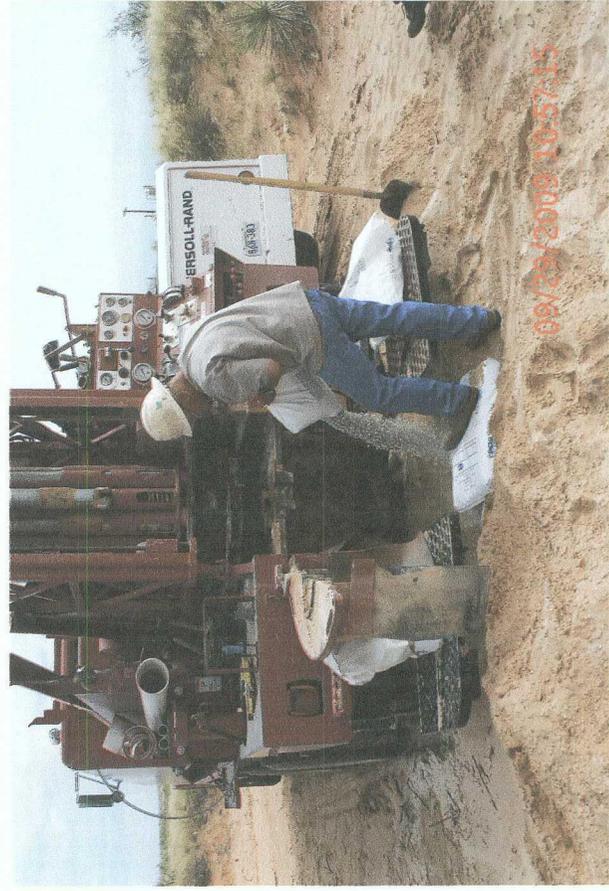
Seeding excavation

8/06/2009



Soil bore # 1

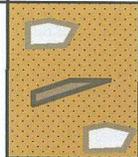
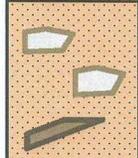
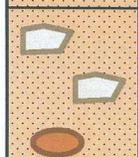
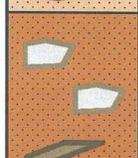
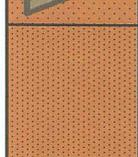
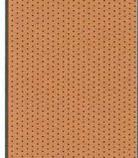
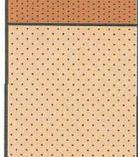
9/29/2009



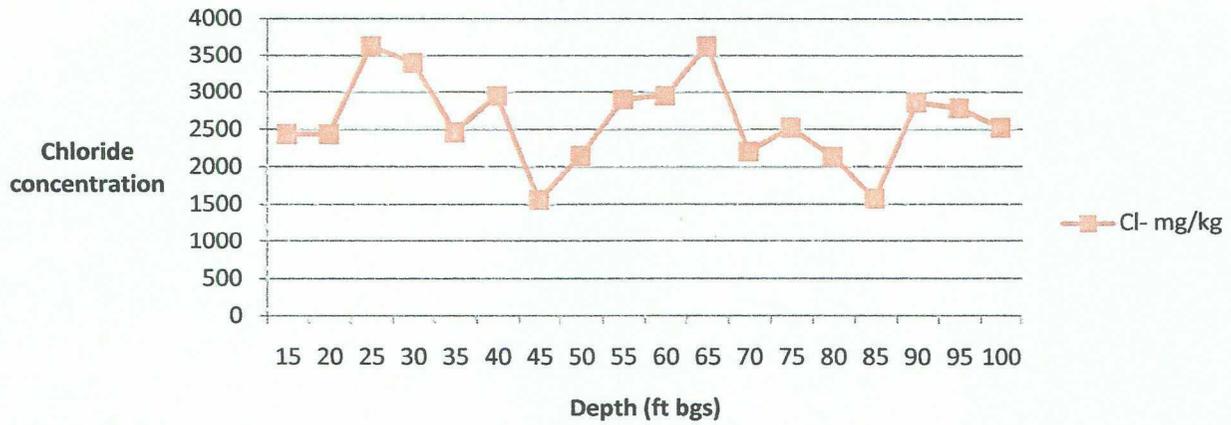
Plugging bore with bentonite

9/29/2009

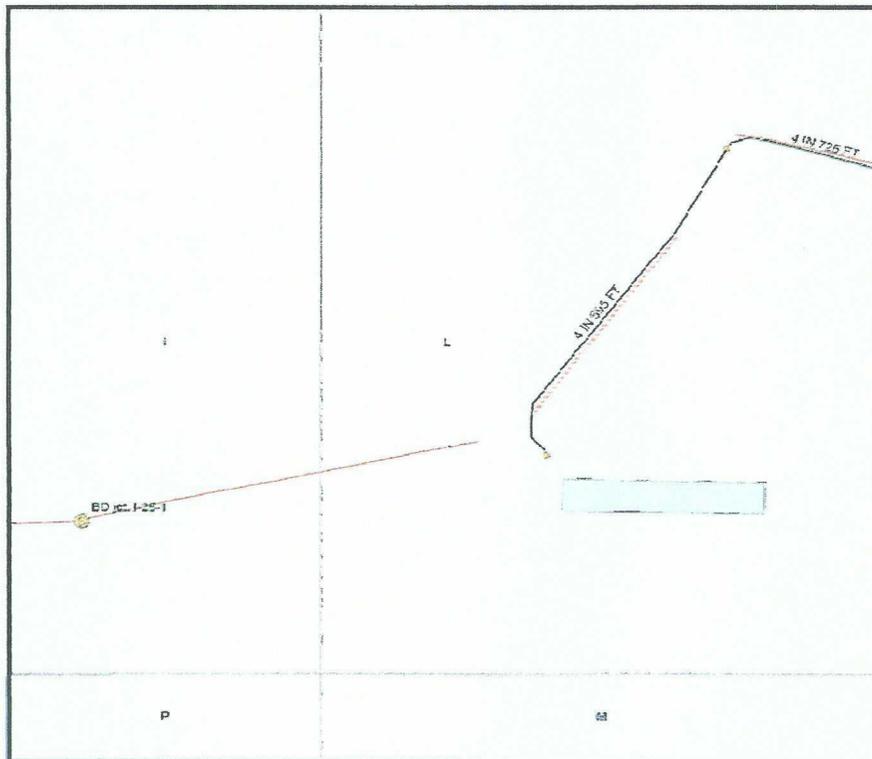
Logger:	Lara Weinheimer	
Driller:	Harrison & Cooper, Inc. Drilling	
Consultant:	None - junction box upgrade plan	
Drilling Method:	Air rotary	
Start Date:	9/29/2009	
End Date:	9/29/2009	
Comments: All samples from cuttings. Located 10 feet east of the former junction box site. Drafted by: Lara Weinheimer TD = 100 ft Estimated depth to GW = 148		Project Name: BD jct. I-25-1 Well ID: SB #1 Location: UL/I sec. 25 T21S R36E Lat: N32°26'49.194" County: Lea Long: W103°12'41.222" State: NM

Depth (feet)	chloride field tests	LAB	PID	Description	Lithology	Well Construction
15	2447		0	10 - 15 ft VERY FINE TO FINE SAND, CALICHE, SANDSTONE light brown, slightly moist, no odor		
20	2445		0	15 - 20 ft VERY FINE TO FINE SAND, CALICHE, SANDSTONE light orangey brown, slightly moist, no odor		
25	3644	Cl-4080 GRO <10.0 DRO <10.0	0	20 - 25 ft VERY FINE TO FINE SAND, CALICHE, CONSOL. ROCK light orangey brown, slightly moist, no odor		
30	3415		0	25 - 30 ft VERY FINE TO FINE SAND, CALICHE, SANDSTONE orangey brown, slightly moist, no odor		
35	2473		0	30 - 40 ft VERY FINE TO FINE SAND orangey brown, dry, no odor		
40	2963		0			
45	1572		0	40 - 50 ft VERY FINE TO FINE SAND light orangey brown, dry, no odor		
50	2156		0			
55	2910		0	50 - 60 ft VERY FINE TO FINE SAND; SANDSTONE light brown, dry, no odor		

Chloride concentration versus depth



Soil Bore Location



122 W. Taylor
 Hobbs, NM 88340
 Phone (575) 395-9174
 Fax (575) 397-1471

BD jct. I-25-1

Legals: UL/1 sec. 25 T21S R36E
 NMOCD Case Number: N/A
 Consultant: N/A
 ROC Junction Box Upgrade Plan

- BD Soil Bore
- LOCATED
- - - PROJECTED
- PIPELINE TYPE
- 10" 12" 18" 24" 30" 36" 42" 48" 54" 60" 66" 72" 78" 84" 90" 96" 102" 108" 114" 120" 126" 132" 138" 144" 150"
- BD NON ROC BATTERED
- BD PAD JCT BE DATA

Drawing date: 10-6-09
 Revision date:
 Crafted by: Lara Weinheimer



Figure 1

COPY

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

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 Company		BILL TO		ANALYSIS REQUEST	
Project Manager: Hack Conder		P.O. #:		Texas TPH	
Address: 122 West Taylor		Company:		BTEX	
City: Hobbs		Attn:		TPH 8015 M	
Phone #: 393-9174		Address:		Chlorides	
Fax #: 397-1471		City:			
Project #: [blank]		State:			
Project Name: BD jct I-25-1		Phone #:			
Project Location: BD jct I-25-1		Fax #:			
Sampler Name: Lara Weinheimer		PRESERV		DATE	
FOR LAB USE ONLY		MATRIX		TIME	
Sample I.D.		# CONTAINERS			
H18375-1		(G) RAB OR COMP.		9-24-04 8:50	
-2		GROUNDWATER		9-24-04 9:46	
		WASTEWATER			
		SLUDGE			
		OIL			
		OTHER:			
		ACID/BASE			
		ICE/COOL			
		OTHER:			

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: *L. Weinheimer* Date: 10-1-04
 Received By: *Allyson BeBut* Date: 9-25-04
 Relinquished By: L. Weinheimer Date: 9-25-04
 Received By: [blank] Date: [blank]
 Remarks: email results
 Phone Result: Yes No Add'l Phone #:
 Fax Result: Yes No Add'l Fax #:
 Delivered By: (Circle One) Hconder@riceswd.com; jpurvis@riceswd.com
 Sampler - UPS - Bus - Other: Lweinheimer@riceswd.com

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476
 NEED SAMPLES BACK, PLEASE

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"/>
	<input type="checkbox"/>

MODEL: PGM 7300	SERIAL NO: 590-000183
MODEL: PGM 7300	SERIAL NO: 590-000508
MODEL: PGM 7600	SERIAL NO: 110-12383
MODEL: PGM 7600	SERIAL NO: 110-02920

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: 924908924908	EXPIRATION DATE: 7-29-2012
FILL DATE: 7-30-09 7-30-09	METER READING ACCURACY: 99.9

ACCURACY: +/- 2%

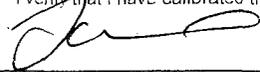
SYSTEM	SITE	UNIT	SECTION	TOWNSHIP	RANGE
BD	sect I-25-1	I	25	F36	R36E

T215

SAMPLE ID: soil bore #1

DEPTH	PID	DEPTH	PID	DEPTH	PID	DEPTH	PID
15'	0	65'	0				
20'	0	70'	0				
25'	0	75'	1.0				
30'	0	80'	0.7				
35'	0	85'	0				
40'	0	90'	1.1				
45'	0	95'	0.3				
50'	0	100'	0.6				
55'	0						
60'	0						

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

Signature 

Date 9-29-09

SITE MAP

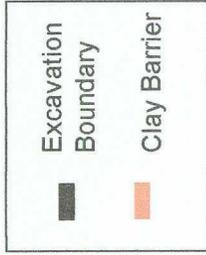


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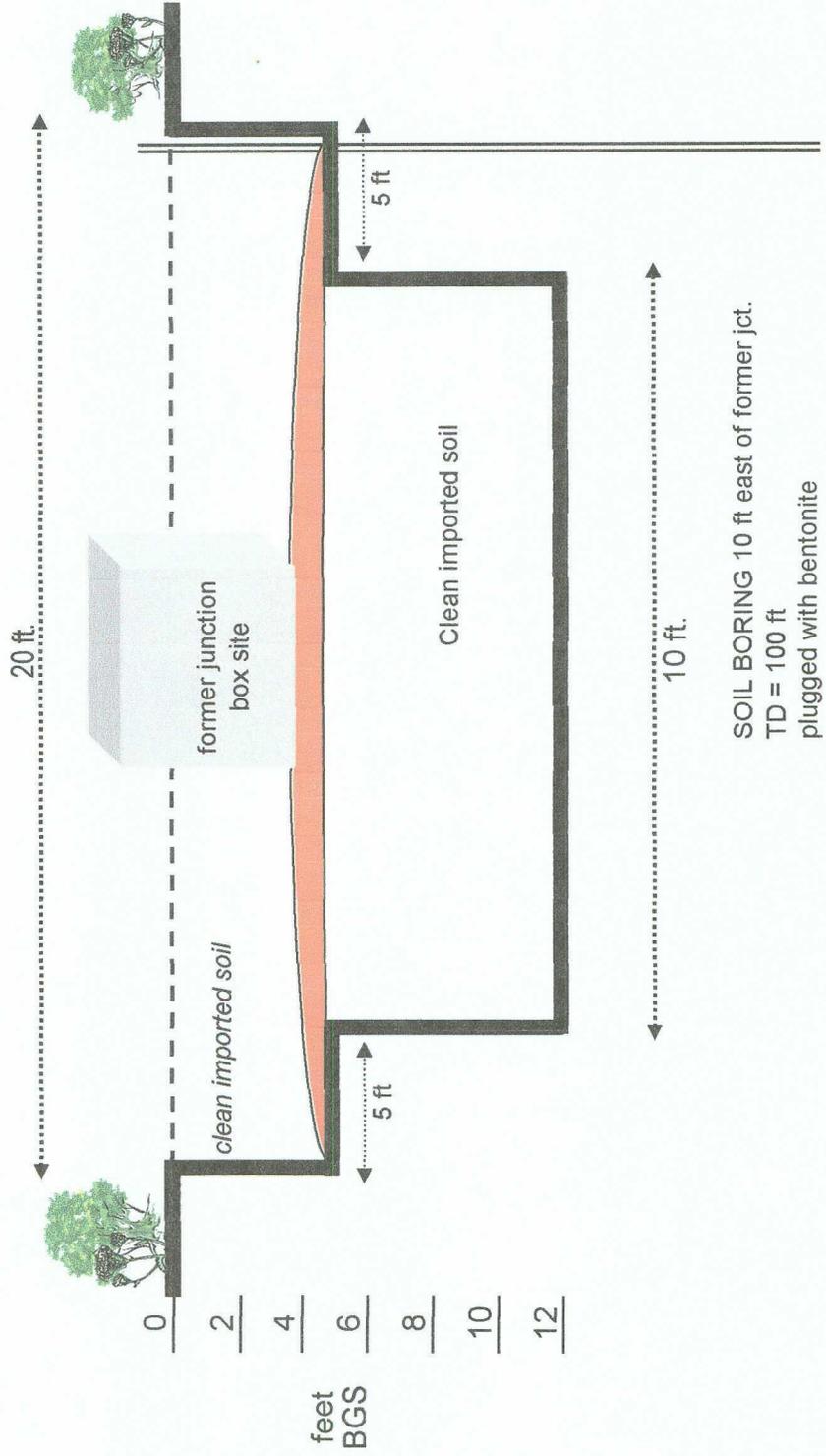
BD Junction I-25-1
Unit 'I', Sec. 25, T21S, R36E

Excavation Cross-Section

N



S



SOIL BORING 10 ft east of former jct.
TD = 100 ft
plugged with bentonite



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

Project: General Information
BD - JCT I-25-1
Project No. 2008.1069

Test Method: ASTM: D 2922

Date of Test: August 6, 2009

Depth: See Below

Depth of Probe: 6"

Test No.	Location	Dry Density		Depth
		% Max	% Moisture	
SG 17	Pit - 15' W. & 40' S. of NE Corner	92.5	16.6	FSG

COPY

Control Density: 100.4
ASTM: D 698

Optimum Moisture: 21.6%

Required Compaction: 90 - 95%

Densometer ID: 5071

PETTIGREW & ASSOCIATES

Lab No.: 09 4694-4696

Copies To: Rice Operating

BY: *Erica M Hart*

BY: *C. J. [Signature]* P.E.

CHLORIDE CONCENTRATION CURVE

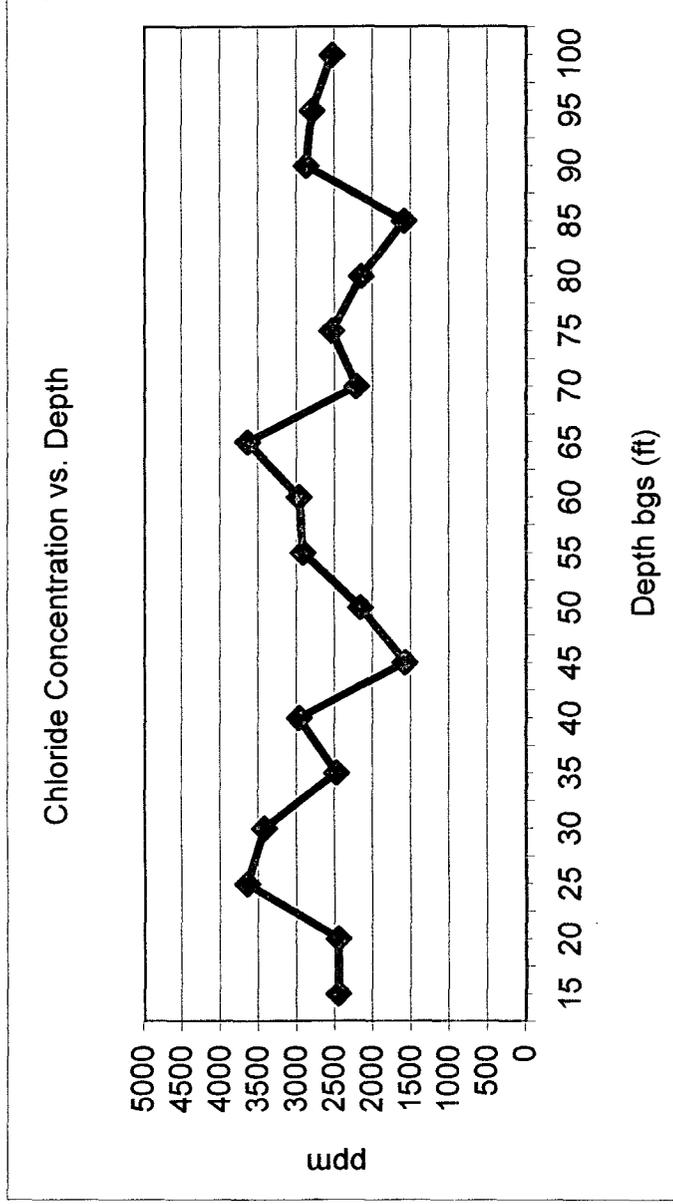
RICE Operating Company

BD Junction I-25-1

Unit 1', Sec. 25, T21S, R36E

Soil bore 10' east of former junction box

Depth bgs (ft)	[Cl ⁻] ppm
15	2447
20	2445
25	3644
30	3415
35	2473
40	2963
45	1572
50	2156
55	2910
60	2963
65	3639
70	2213
75	2532
80	2144
85	1583
90	2868
95	2793
100	2531



Groundwater = 148 ft.