

1R - 426-241

REPORTS

DATE:

3-23-10

BD Jct J-25
2009

RECEIVED

APR - 6 2010

Environmental Bureau
Oil Conservation Division

1R426-241

CLOSURE

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APR - 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	Width	Depth
Blinebry-Drinkard (BD)	Junction J-25	J	25	21S	37E	Lea	Eliminated		

LAND TYPE: BLM _____ STATE _____ FEE LANDOWNER Wallach Ranch OTHER _____

Depth to Groundwater none feet NMOCSD SITE ASSESSMENT RANKING SCORE: 0

Date Started 9/10/2009 Date Completed 11/6/2009 OCD Witness no

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

Soil Disposed 372 cubic yards Offsite Facility Sundance Location Eunice, NM

FINAL ANALYTICAL RESULTS: Sample Date 9/25/2009, 10/15/2009, 11/04/09 Sample Depth 27 ft., 42 ft., & 12 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 NMOCSD guidelines.

Sample Location	PID (field) ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
SB#1 @ 27'	0.9	<10.0	<10.0	2800
SB#1 @ 42'	1.2	<10.0	<10.0	112
4-WALL COMP.	2.2	<10.0	21.9	592
BOTTOM COMP.	2.1	<10.0	<10.0	3440
BLENDED BACKFILL	1.7	<10.0	<10.0	1060
BLENDED BACKFILL	0.0	<10.0	17	160

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	1174
bottom comp	12'	2579
Blended Backfill	n/a	1049
Blended Backfill	n/a	240
Background	6"	240
Soil bore 15 ft. south of former junction box	15'	1985
	18'	2351
	21'	2546
	24'	1544
	27'	2620
	30'	1405
	33'	842
	36'	619
	39'	449
	42'	364

General Description of Remedial Action: This junction was eliminated 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 30x30x12-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. A one foot thick clay layer was installed at 12 ft. BGS and compaction test performed. The backfill was blended with clean imported soil and returned to the excavation to ground surface and contoured to the surrounding area.

To further investigate the depth of chloride presence, a soil boring was initiated on 11/04/2009 15 ft. south of the former junction box site. The bore was advanced to 30 ft. BGS, while soil samples were collected every 3 ft. and tested for chloride concentrations and organics. At 27 ft. and 42 ft BGS, the soil samples were sent to a commercial laboratory for analysis. The groundwater data suggested that water would be encounter at approximately 35 ft. BGS. At 62 ft. BGS the soil lithology changed to chindle red bed clay and bore was advanced to 80 ft. BGS. The bore hole was left open and after 48 hrs no moisture content was detected when gauging bore hole. The entire bore hole was plugged with bentonite to ground surface. On 11/25/2009, site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate.

enclosures: photos, lab results, compaction results, PID (field) screenings, soil bore log, bore hole condition report, 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 available COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Larry Bruce Baker Jr. INITIAL LB

PROJECT LEADER Larry Bruce Baker Jr. SIGNATURE Larry Bruce Baker Jr. DATE 3-23-10

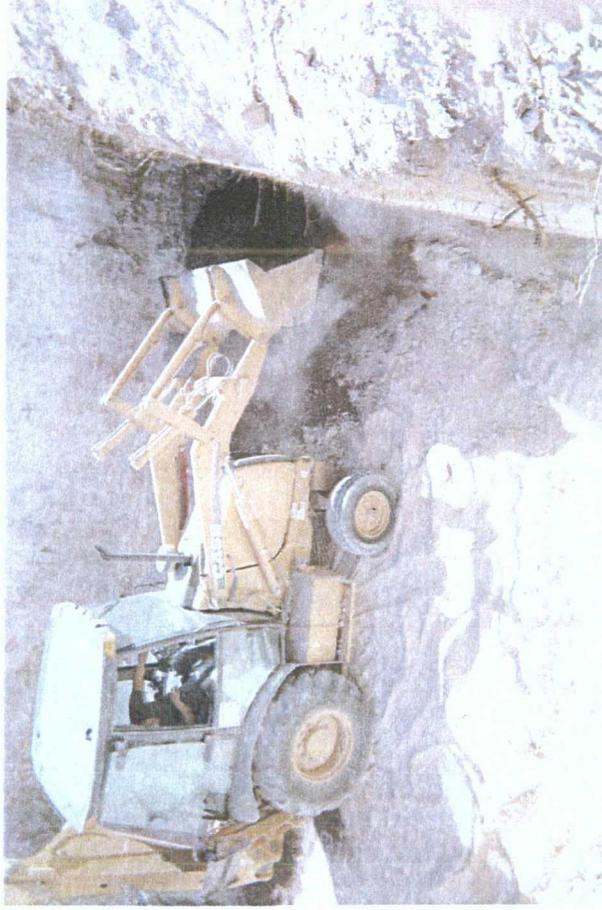
BD Junction J-25

Unit J, Section 25, T21S, R37E



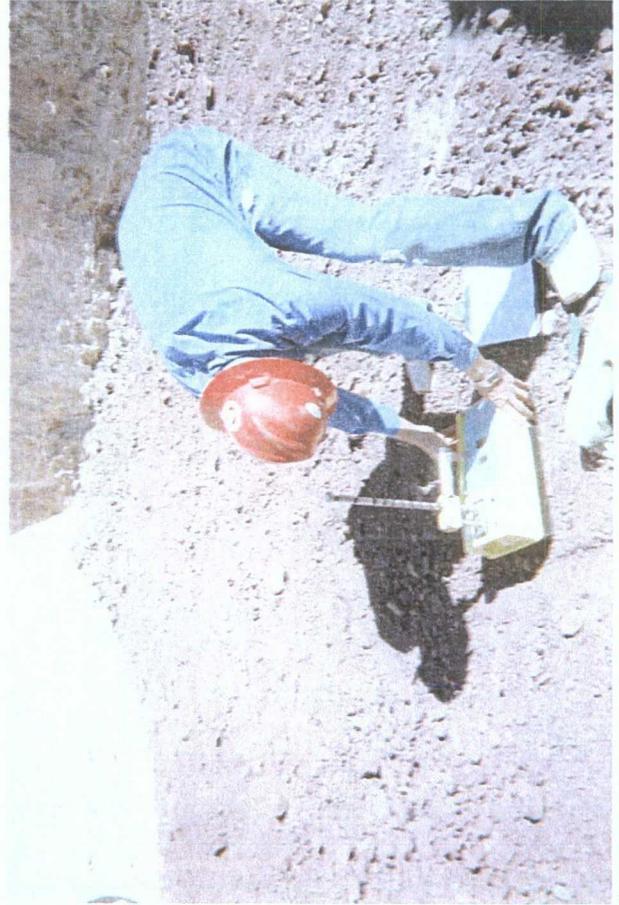
Delineation trench at former junction box

9/21/2009



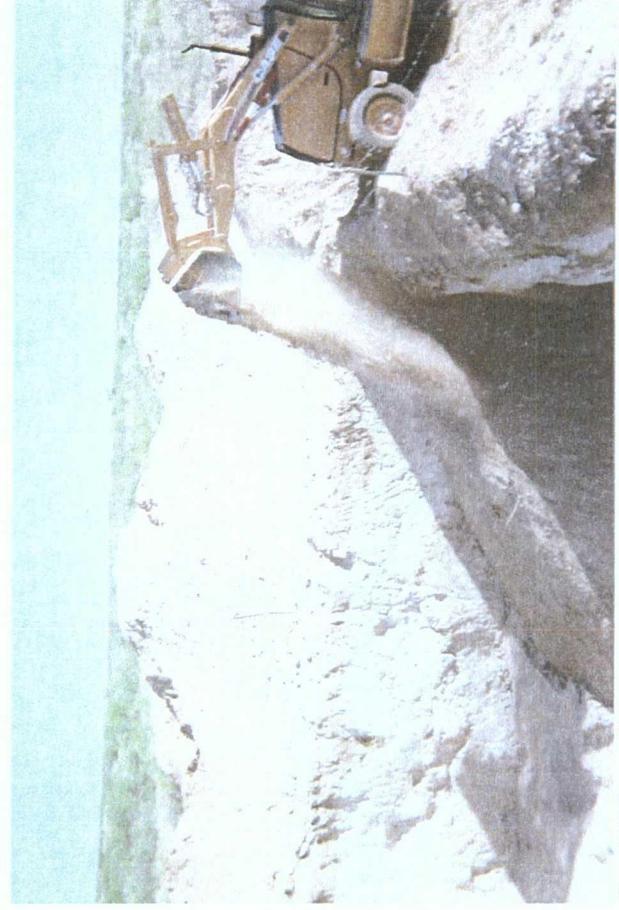
Installing clay layer

10/16/2009



Compaction test

10/16/2009

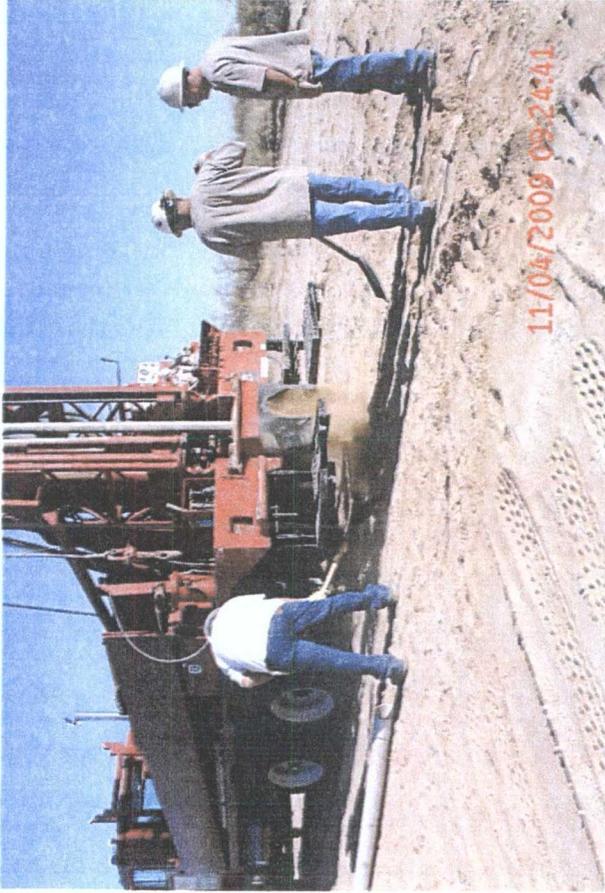


Backfilling site

10/22/2009

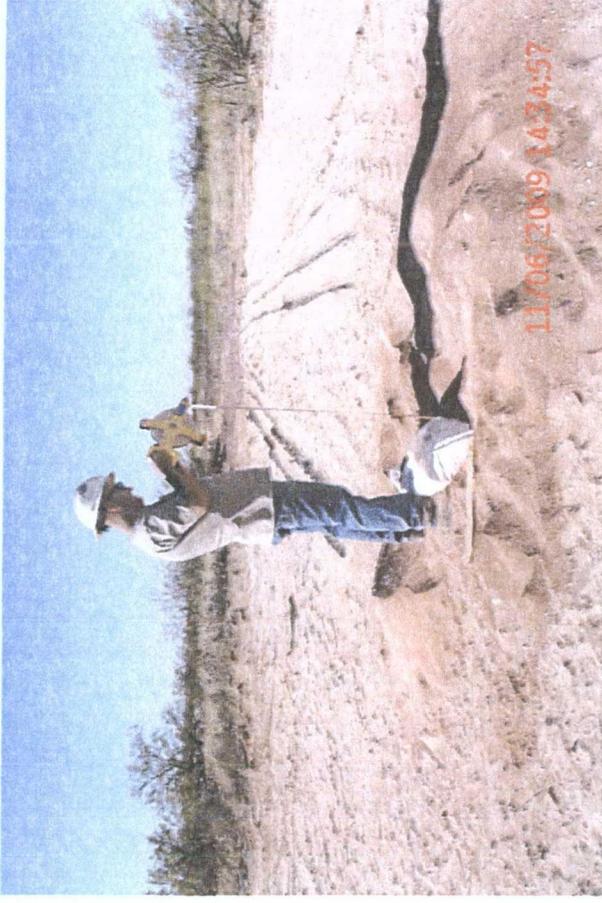
BD Junction J-25

Unit J, Section 25, T21S, R37E



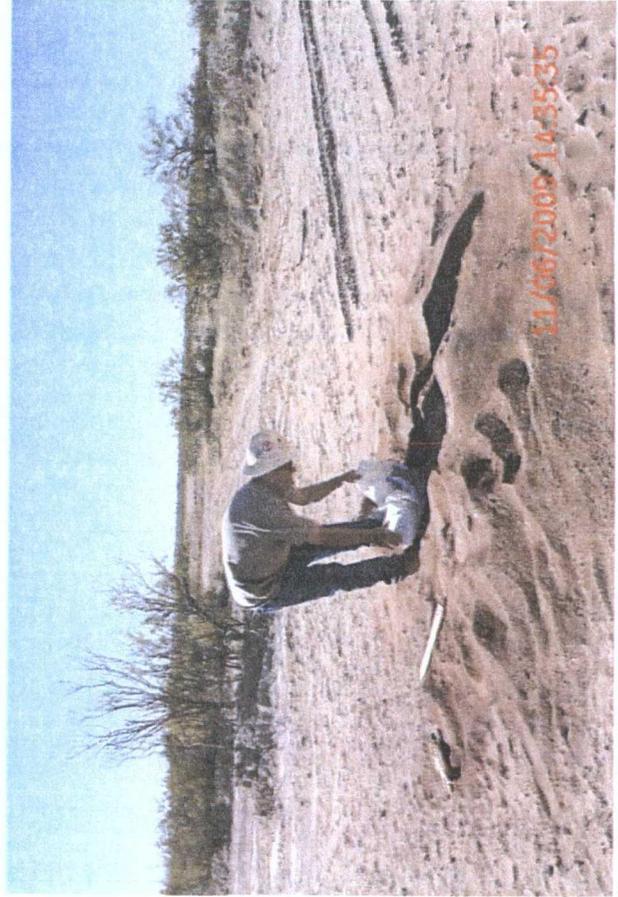
Soil Bore # 1

11/04/2009



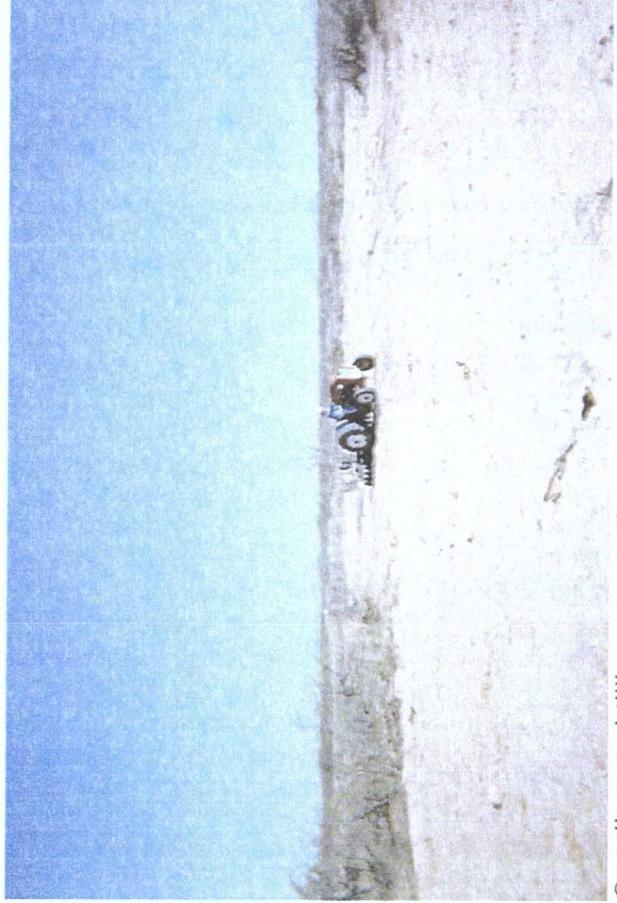
Measuring groundwater

11/06/2009



Plugging soil bore with bentonite

11/06/2009



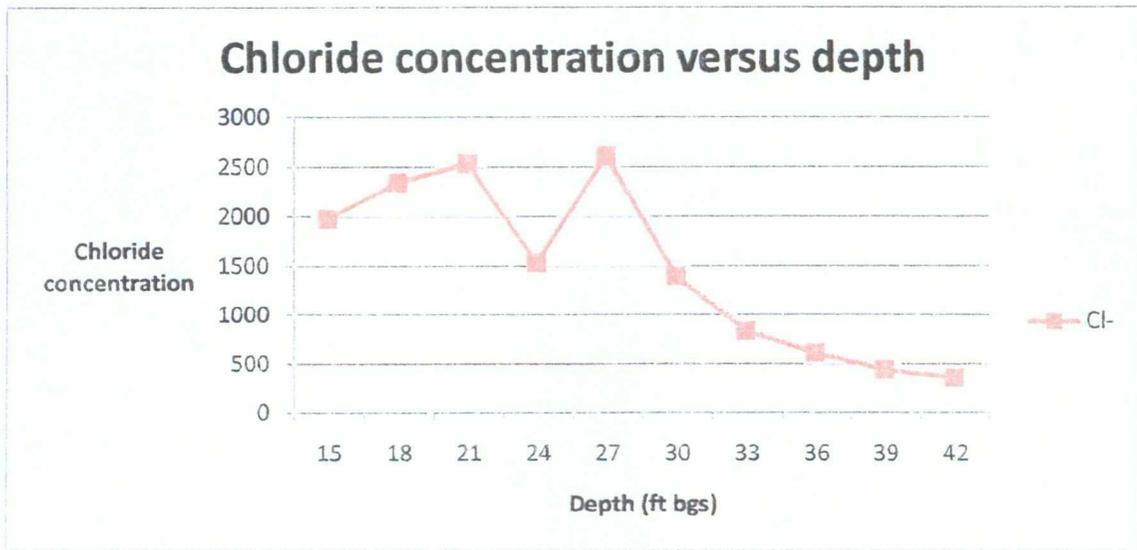
Seeding and tilling excavation

11/25/2009

Logger:	Lara Weinheimer		
Driller:	Harrison & Cooper, Inc. Drilling		
Consultant:	N/A - ROC junction box upgrade plan		
Drilling Method:	Air rotary		
Start Date:	11/4/2009		
End Date:	11/4/2009		
Comments: All samples from cuttings. Drilled down to 80 feet and left open for 48 hours to determine status of groundwater. Located 15 feet south of the former jct. box. Drafted by: Lara Weinheimer TD = 80 ft GW = None			Project Name: BD jct. J-25 Well ID: SB #1 Location: UL/J sec. 25 T21S R37E Lat: 32°26'47.455"N County: Lea Long: 103°6'48.983"W State: NM

Depth (feet)	chloride field tests	LAB	PID	Description	Lithology	Well Construction
15	1985		0.4	12 - 18 ft VERY FINE TO FINE SAND, SANDSTONE & CALICHE light brown, dry, no odor		
18	2351		0.8	18 - 21 ft VERY FINE TO FINE SAND slight orangey brown, dry, no odor		
21	2546		0.8	21 - 24 ft VERY FINE TO FINE SAND, SANDSTONE & CALICHE slight orangey brown, dry, no odor		
24	1544		0.7	24 - 27 ft VERY FINE TO FINE SAND orangey brown, dry, no odor		
27	2620	Cl- 2200 GRO <10.0 BRO <10.0	0.9	27 - 39 ft VERY FINE TO FINE WITH SANDSTONE orangey brown, dry, no odor		bentonite seal
30	1405		1			
33	842		0.9			
36	619		1.4			

39	449		1				
				39 - 62 ft			
				VERY FINE TO FINE WITH SANDSTONE			
42	364	Cl- 112	1.2	reddish orange, dry, no odor			
		GRO <10.0					
		DRO <10.0					
62							
				62 - 80 ft			
				RED BED CLAY			
80				chirle red bed, dry, no odor			



COPY

**HARRISON &
COOPER, INC.**
Drilling & Pump Professionals

7414 85th Street, Lubbock, Texas 79424-4951

P.O. Box 96, Wolfforth, Texas 79382-0096

Ph: (806) 866-4026

Fax: (806) 866-4044

harrisoncooper-drilling.com

December 2, 2009

Rice Operating Co.
122 W. Taylor
Hobbs, NM 88240

Attn: Lara Weinheimer

**RE: BD Jct. J-25, Eunice, NM
Bore Hole Condition**

To whom it may concern:

On November 4, 2009, Harrison and Cooper were contracted by Rice Operating to drill and sample a soil boring at the subject site. The soil boring was drilled to approximately 80 feet in an effort to determine whether or not a saturated interval existed. After a forty-eight hour holdover time the moisture content at that depth was NON-detectable.

If any questions arise from this issue, do not hesitate to contact a representative with Harrison and Cooper.

Sincerely,

Kenny Cooper
Operations Manager

COPIES

Copies: File
Mail (Rice, Hobbs)
Email (Lara Weinheimer)



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

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

Receiving Date: 11/04/09
 Reporting Date: 11/09/09
 Project Owner: NOT GIVEN
 Project Name: BD JCT J-25
 Project Location: BD JCT J-25

Sampling Date: 11/04/09
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: ML
 Analyzed By: AE

	GRO	DRO	
	(C ₆ -C ₁₀)	(>C ₁₀ -C ₂₈)	Cl*
LAB NUMBER SAMPLE ID	(mg/kg)	(mg/kg)	(mg/kg)

ANALYSIS DATE	11/06/09	11/06/09	11/06/09
H18547-1 SB#1 @ 27'	<10.0	<10.0	2,800
H18647-2 SB#1 @ 42'	<10.0	<10.0	112
Quality Control	590	591	500
True Value QC	500	500	500
% Recovery	118	118	100
Relative Percent Difference	11.3	15.0	<0.1

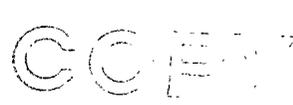
METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-ClB
 *Analyses performed on 1:4 w:v aqueous extracts. Reported on wet weight.

Chap Keene

 Chemist

11/10/09

 Date



H18647 TCL RICE

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

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: 924908	EXPIRATION DATE: 7-29-2012
FILL DATE: 7-30-09	METER READING ACCURACY: 100.1

ACCURACY: +/- 2%

SYSTEM	SITE	UNIT	SECTION	TOWNSHIP	RANGE
BD	J4 J-25	J	25	T21S	R37E

SAMPLE ID: Soil bore #1

DEPTH	PID
15'	0.4
18'	0.8
21'	0.8
24'	0.7
27'	0.9

DEPTH	PID

DEPTH	PID

DEPTH	PID

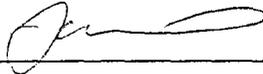
DEPTH	PID
30'	1.0
33'	0.9
36'	1.4
39'	1.0
42'	1.2

DEPTH	PID

DEPTH	PID

DEPTH	PID

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

Signature 

Date 11-4-09

SITE MAP



COPY



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

Receiving Date: 09/25/09
 Reporting Date: 10/01/09**
 Project Number: NOT GIVEN
 Project Name: BD JCT J-25 (21-37)
 Project Location: BD JCT J-25 (21-37)

Sampling Date: 09/25/09
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: ML
 Analyzed By: AS/HM

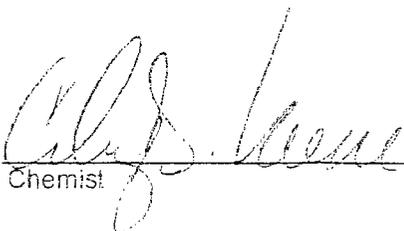
LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/kg)	DRO (>C ₁₀ -C ₂₈) (mg/kg)	CI* (mg/kg)
ANALYSIS DATE		09/29/09	09/29/09	10/01/09
H18345-1	5PT BTTM @ 12'	<10.0	<10.0	3,440
H18345-2	4 WALL COMP @ 30X30	<10.0	21.9	592
H18345-3	BLENDED BACKFILL	<10.0	<10.0	1,060
Quality Control		509	505	490
True Value QC		500	500	500
% Recovery		102	101	98.0
Relative Percent Difference		0.6	1.6	2.0

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.

**Revised Report.


 Chemist


 10/01/09
 Date

H18345 TCL RICE

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ARDINAL LABORATORIES
 101 East Marland, Hobbs, NM 88240
 (575) 393-2328 Fax (575) 393-2476

BILL TO				ANALYSIS REQUEST											
Company Name: <i>Cardinal Laboratories</i>															
Project Manager: <i>Michelle Taylor</i>															
Address: <i>1200 W Taylor</i>															
City: <i>Las Cruces</i>															
Phone #: <i>575-777-7774</i>															
State: <i>NM</i> Zip: <i>88240</i>															
Fax #: <i>575-777-7774</i>															
Project #: _____															
Project Name: <i>WALTON J-25 (21-37)</i>															
Project Location: <i>WALTON J-25 (21-37)</i>															
Sampler Name: <i>Michelle Taylor</i>															
FOR LAB USE ONLY															
Lab I.D. _____															
Sample ID _____															
Matrix: _____															
WASTEWATER _____															
GROUNDWATER _____															
SLUDGE _____															
OIL _____															
OTHER: _____															
ACID/BASE _____															
ICE/COOL _____															
OTHER: _____															
PRESERV _____															
SAMPLING DATE: TIME _____															
9-25-09 13:10															
9-25-09 13:50															
9-25-09 15:10															
8015 MTPH															
CL															

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Sampler Relinquished: *Michelle Taylor* Date: *9-25-09* Time: *4:21P*

Received By: *Michelle Taylor* Received By: _____

Relinquished By: _____

Delivered By: (Circle One) _____

Temp. _____ Sample Condition: _____

Cool Intact: Yes No

Sampler - UPS - Bus - Other: _____

Phone Result: No No

Fax Result: No No

REMARKS: *Results Garrison@rdicesand.com
 Tamar@rdicesand.com
 B.Baker@rdicesand.com*



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
 FAX TO: (575) 397-1471

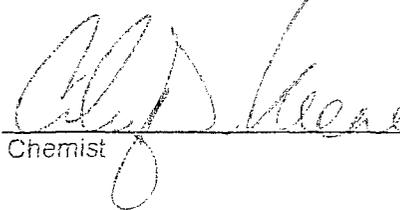
Receiving Date: 10/15/09
 Reporting Date: 10/19/09
 Project Owner: NOT GIVEN
 Project Name: B.D. JCT J-25 (21-37)
 Project Location: B.D. JCT J-25 (21-37)

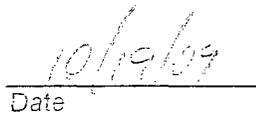
Sampling Date: 10/15/09
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: ML
 Analyzed By: AB/HM

		GRO	DRO	
		(C ₆ -C ₁₀)	(>C ₁₀ -C ₂₃)	Cl ⁻
LAB NUMBER	SAMPLE ID	(mg/kg)	(mg/kg)	(mg/kg)

ANALYSIS DATE		10/17/09	10/17/09	10/16/09
H18511-1	BLENDED BACKFILL	<10.0	17.0	160
Quality Control		494	539	500
True Value QC		500	500	500
% Recovery		98.8	108	100
Relative Percent Difference		2.0	3.0	< 0.1

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


 Chemist

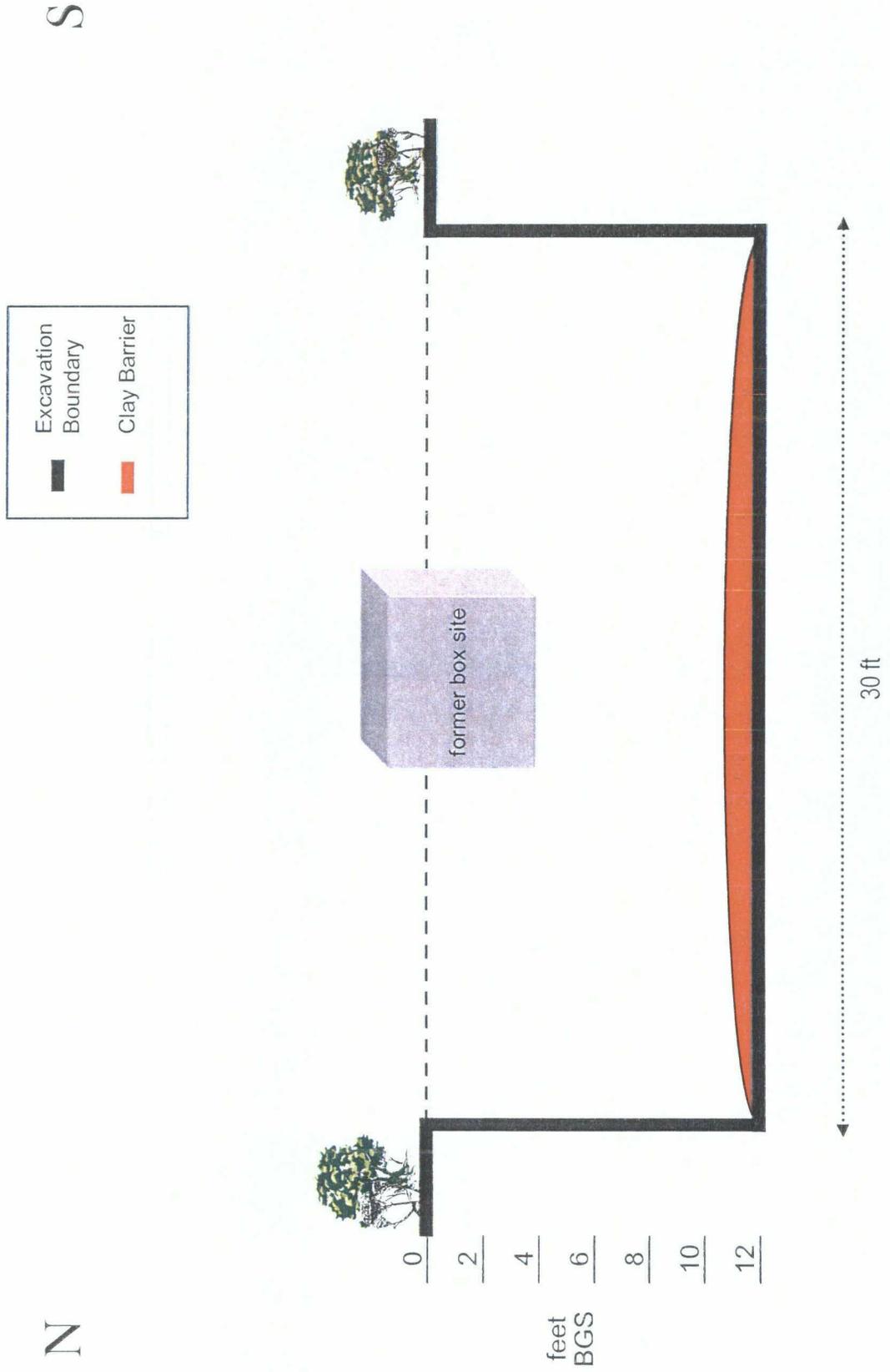

 Date

H18511 TCL RICE

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BD Junction J-25
Unit 'J', Sec. 25, T21S, R37E

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: Wallach Red Clay

Project: BD Junction J-25
 2137
 Project No. 2009.1260

Test Method: ASTM: D 2922

Date of Test: October 16, 2009

Depth: See Below

Depth of Probe: 6"

Test No.	Location	Dry Density		Depth
		% Max	% Moisture	
SG 1	Pit - 20' N. & 20' W. of SE Corner	90.0	13.5	FSG

COPY

Control Density: 100.7
 ASTM: D 698

Optimum Moisture: 20.7%

Required Compaction: 90 - 95%

Densometer ID: 815
 PETTIGREW & ASSOCIATES

Lab No.: 09 6051-6052

Copies To: Rice Operating

BY: Erica M Hart

BY: [Signature] P.E.

CHLORIDE CONCENTRATION CURVE

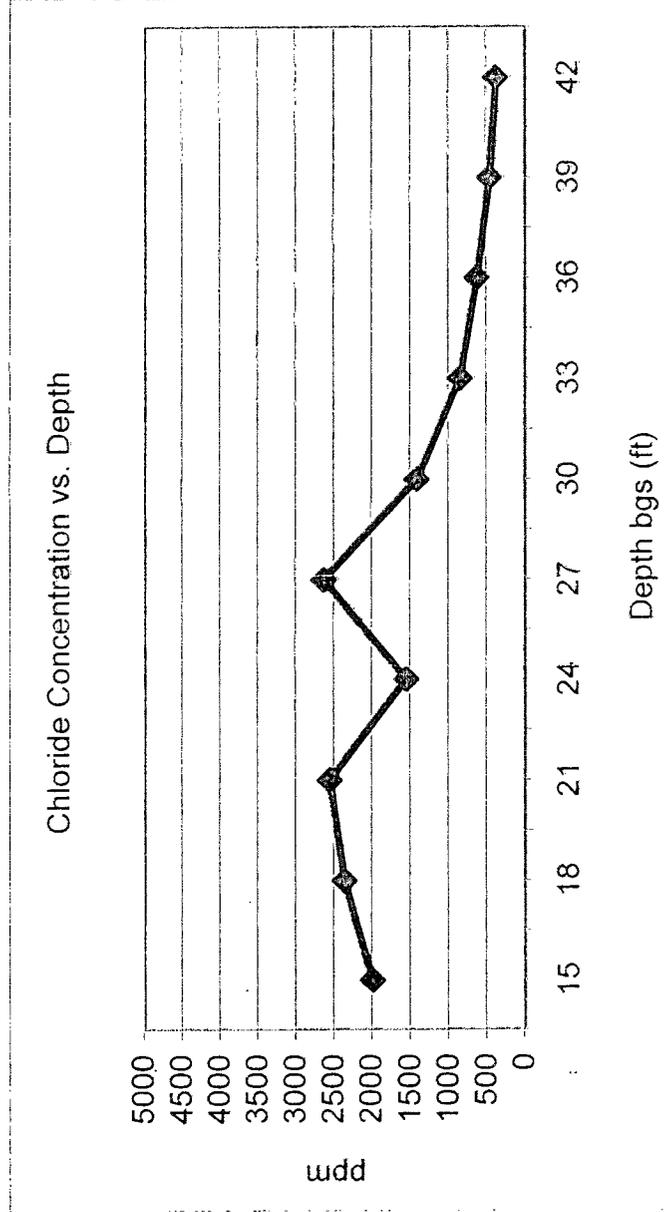
RICE Operating Company

BD Junction J-25

Unit 'J', Sec. 25, T21S, R37E

Soil bore samples 15ft. south of former junction box

Depth bgs (ft)	Cl ⁻ ppm
15	1985
18	2351
21	2546
24	1544
27	2620
30	1405
33	842
36	619
39	449
42	364



Groundwater = none