

1R - 426-242

REPORTS

DATE:

3-3-10

Jet
BD J-25 EOL
^ 2009

1R426-242

RECEIVED

APR - 6. 2010
Environmental Bureau
Oil Conservation Division

CLOSURE

RICE OPERATING COMPANY
JUNCTION BOX FINAL REPORT

RECEIVED

APP - 6 2010

Environmental
Outsourcing

Bureau
Division

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS IN FEET		
							Length	Width	Depth
Blinebry-Drinkard (BD)	J-25 EOL	J	25	21S	37E	Lea	Eliminated		

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

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

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

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

Soil Disposed 196 cubic yards Offsite Facility Sundance Location Eunice, NM

FINAL ANALYTICAL RESULTS: Sample Date 10/28/2009, 10/30/2009, 11/04/09 Sample Depth 30 ft., 54 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 NMOCD guidelines.

Sample Location	PID (field) ppm	GRO mg/kg	DRO mg/kg	Chloride mg/kg
SB#1 @ 30'	1.5	<10.0	<10.0	5900
SB#1 @ 54'	1.4	<10.0	<10.0	8600
4-WALL COMP.	1.7	<10.0	<10.0	1170
BOTTOM COMP.	2.1	<10.0	<10.0	2600
BLENDED BACKFILL	n/a	<10.0	<10.0	368

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	1174
bottom comp.	12'	2579
Background	6"	206
Soil bore 10 ft. east of former junction box	15'	2706
	18'	3627
	21'	3446
	24'	3831
	27'	3520
	30'	5470
	33'	1050
	36'	2802
	39'	600
	42'	3169
	45'	3471
48'	4305	
51'	1506	
54'	2127	

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. The excavated soil was then blended on site and returned to the excavation to 5 ft. BGS. A one foot thick clay layer was installed and compaction test performed. The remaining blended backfill was 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 10 ft. east of the former junction box site. The boring was advanced to 80 ft. BGS, while soil samples were collected every 3 ft and tested for chloride concentrations and organics. At 30 ft and 54 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 57 ft. BGS the soil lithology changed to chinle 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.

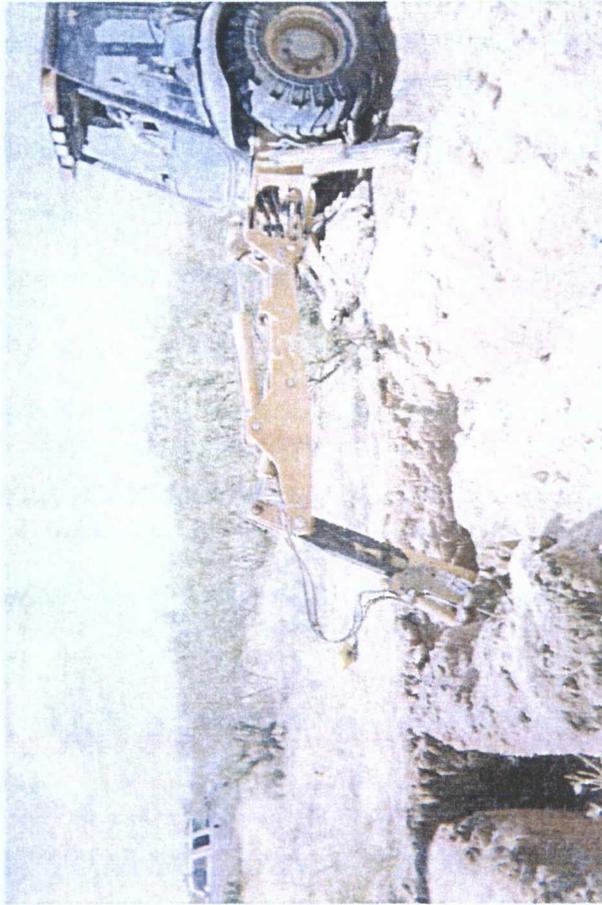
SITE SUPERVISOR Eric Garrison SIGNATURE _____ not available COMPANY RICE OPERATING COMPANY

REPORT ASSEMBLED BY Larry Bruce Baker Jr. INITIAL LB

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

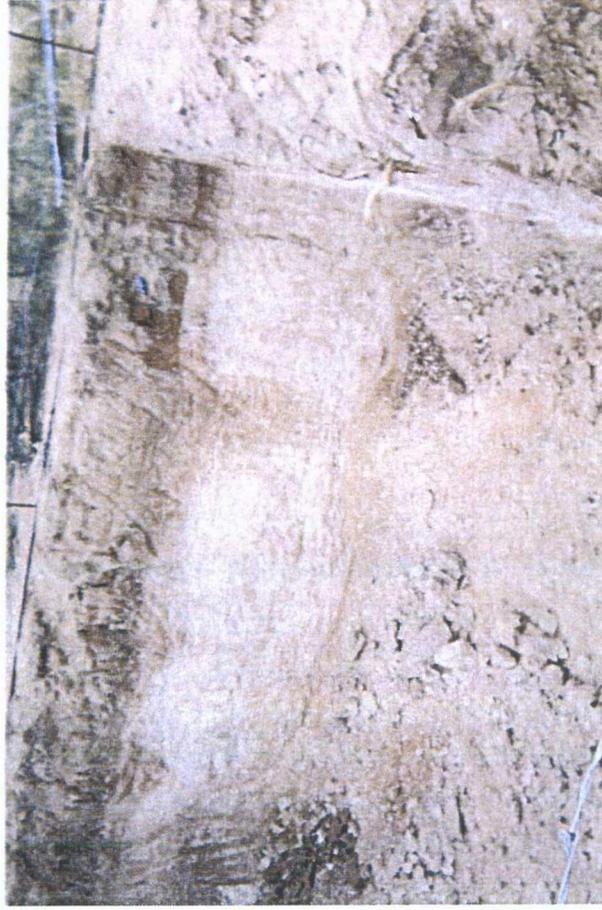
BD J-25 EOL

Unit J, Section 25, T21S, R37E



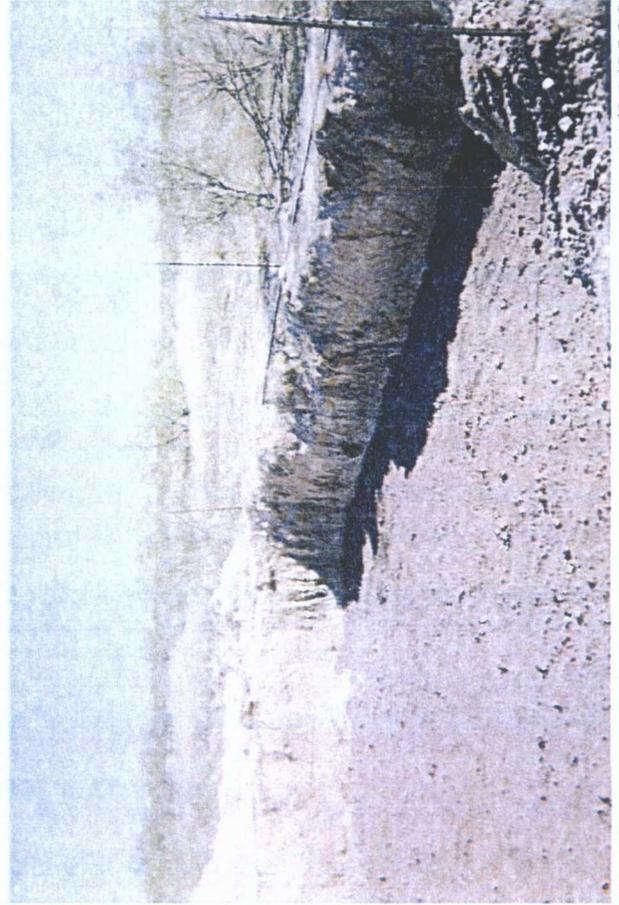
Delineation trench at former junction box

9/28/2009



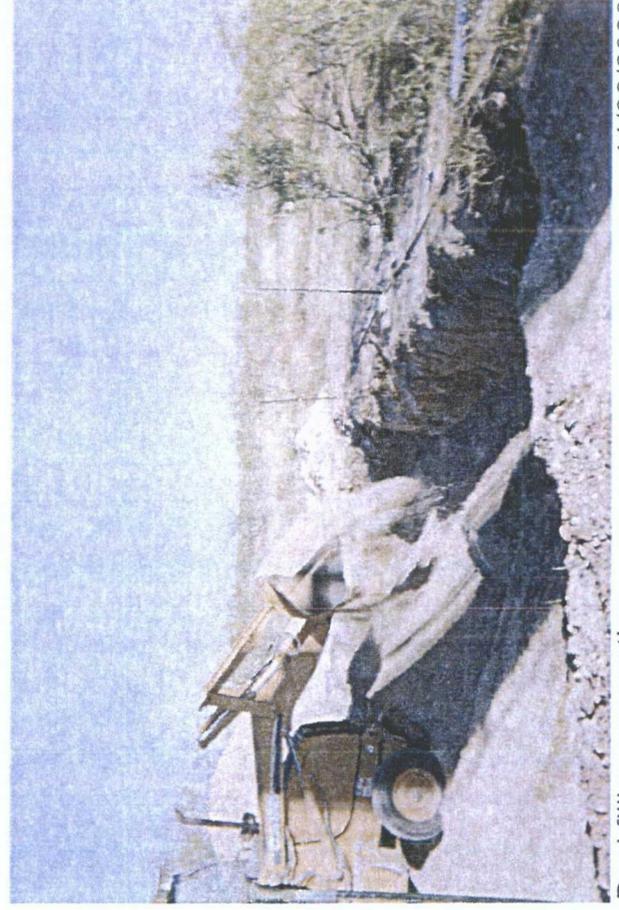
Excavation complete

10/29/2009



Clay layer complete

11/02/2009

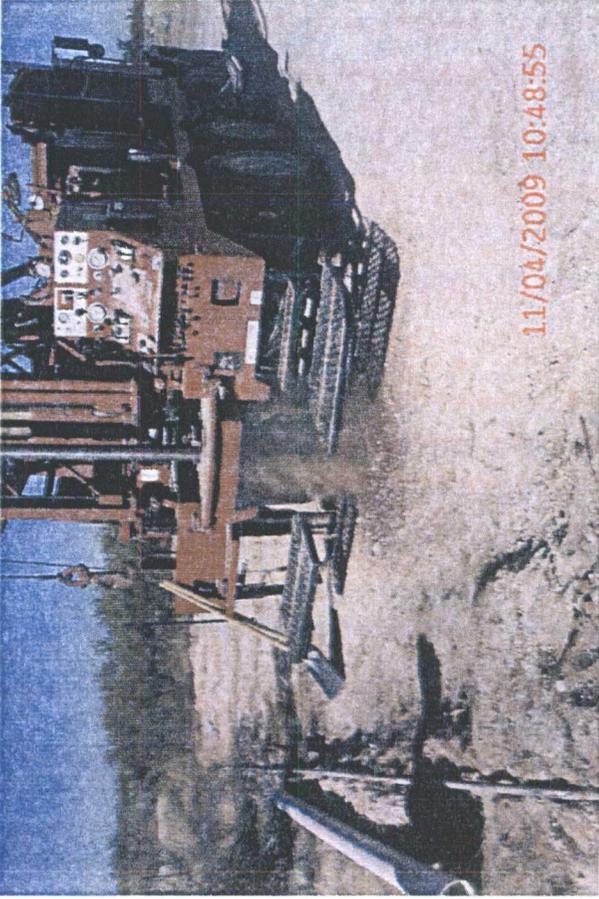


Backfilling excavation

11/02/2009

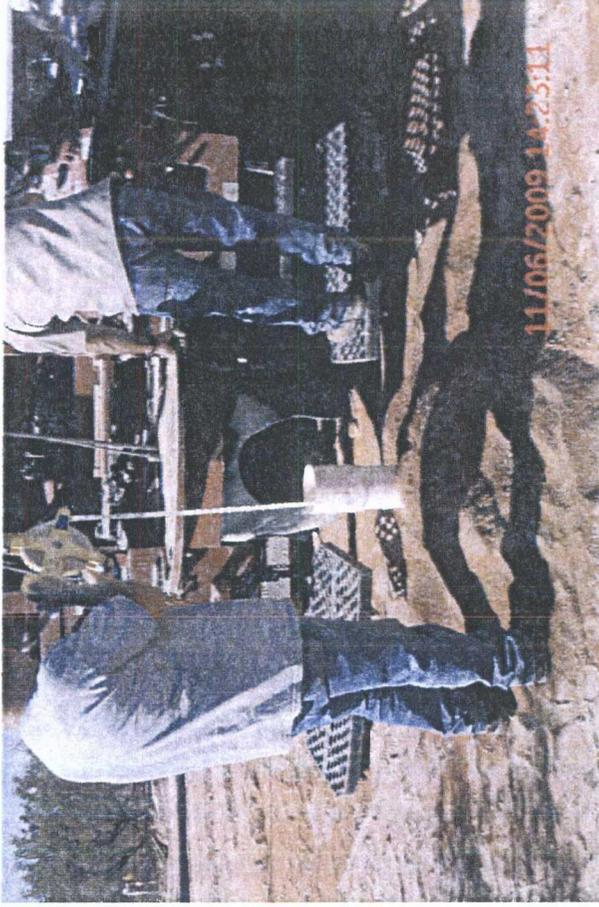
BD J-25 EOL

Unit J, Section 25, T21S, R37E



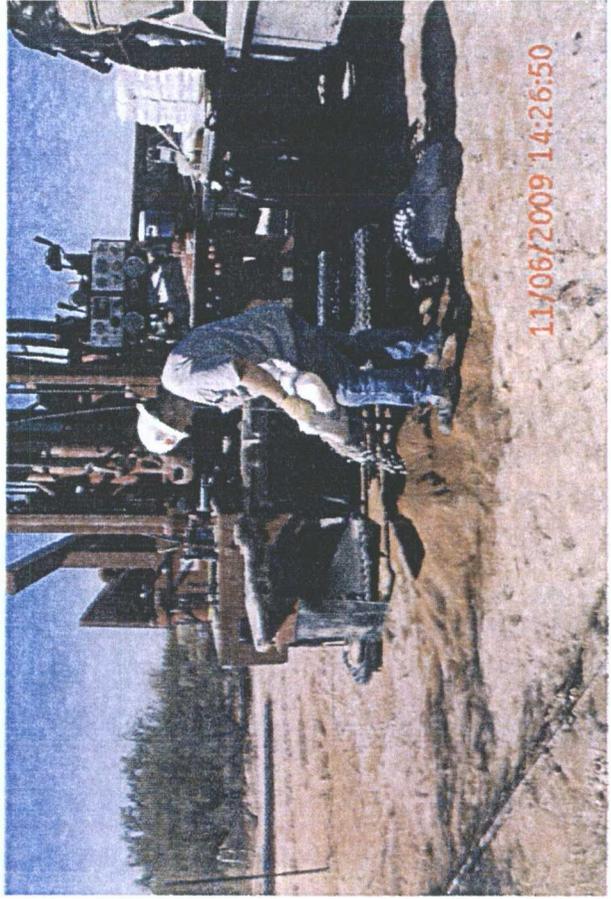
Soil Bore # 1

11/04/2009



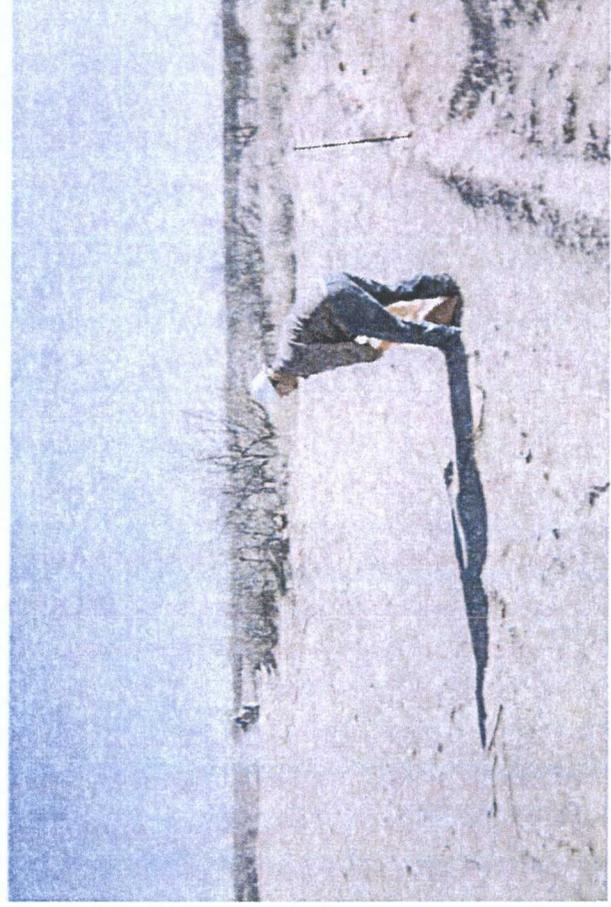
Measuring for groundwater after 48 hrs.

11/06/2009



Plugging soil bore with bentonite

11/06/2009



Seeding site

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	BD J-25 EOL	Project Name: BD J-25 EOL Well ID: SB #1
Comments: All samples from cuttings. Drilled to 80 feet and left open for 48 hours to check for groundwater. Located 10 feet east for former jct. box. Drafted by: Lara Weinheimer TD = 80 ft GW = none			Location: UL/J sec. 25 T21S R37E Lat: 32°26'46.322"N County: Lea Long: 103°6'49.902" W State: NM

Depth (feet)	chloride field tests	LAB	PID	Description	Lithology	Well Construction
12 - 15 ft				VERY FINE TO FINE SAND; CALICHE & SANDSTONE light orangey brown, dry, no odor		
15	2706		1.9			
15 - 21 ft				VERY FINE TO FINE SAND; CALICHE & SANDSTONE orangey brown, dry, no odor		
18	3627		1.7			
21 - 24 ft				VERY FINE TO FINE SAND slight orangey brown, dry, no odor		
21	3446		2			
24 - 36 ft				VERY FINE TO FINE SAND; SANDSTONE light brown, dry, no odor		
24	3831		2.1			
27	3520		2.1			
30	5470	Cl 5-900 GRD <13.0 DRO <13.0	1.5			
33	1050		1.2			

Depth (feet)	chloride field tests	LAB	PID	Description	Lithology	Well Construction
36	2802		1.8			
39	600		3.4			
42	3169		1.8	36 - 57 ft VERY FINE TO FINE SAND; SANDSTONE reddish orange, dry, no odor		
45	3471		2.2			
48	4305		2.9			
51	1506		0.7			
54	2127	CI-8300	1.4			
		GRD				
		<10.0				
		DRO				
		<10.0				
57				57 - 80 ft CLAY Chinle red bed clay		
80						

bentonite seal

COPY

Chloride concentration versus depth



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 J-25 EOL, 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

The logo for Harrison & Cooper, Inc. features the word "COOPER" in a stylized, outlined font. The letters are arranged in a slightly curved line, with the "O"s being notably larger and more prominent than the other letters.

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



ARDINAL LABORATORIES

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

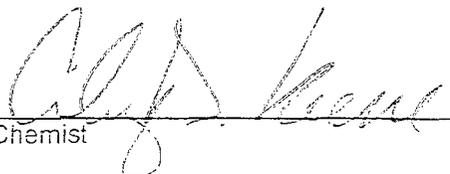
Receiving Date: 11/04/09
Reporting Date: 11/09/09
Project Owner: NOT GIVEN
Project Name: BD J-25 EOL
Project Location: BD J-25 EOL

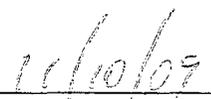
Sampling Date: 11/04/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: ML
Analyzed By: AB

LAB NUMBER	SAMPLE ID	GRO	DRO	CI*
		(C ₆ -C ₁₀) (mg/kg)	(>C ₁₀ -C ₂₈) (mg/kg)	(mg/kg)
ANALYSIS DATE		11/06/09	11/06/09	11/06/09
H18648-1	SB#1 @ 30'	<10.0	<10.0	5,900
H18648-2	SB#1 @ 54'	<10.0	<10.0	8,600
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; CI: Std. Methods 4500-CIB

*Analyses performed on 1:4 w:v aqueous extracts. Reported on wet weight.


Chemist


Date



H18648 TCL RICE

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(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

CHAIN OF CUSTODY AND ANALYSIS REQUEST

Company Name: Rice Operating Company
Project Manager: Hack Conder
Address: 122 West Taylor
City: Hobbs **State:** NM **Zip:** 88240
Phone #: 393-9174 **Fax #:** 397-1471
Project #:
Project Name: 00 J-23 EOL
Project Location: 30 J-23 EOL
Sampler Name: Lara Weinheimer

Lab I.D.	Sample I.D.	# CONTAINERS	(GRAB OR (COMP.	MATRIX			DATE	TIME
				GROUNDWATER	WASTEWATER	SLUDGE		
H1000-1	SB # 1 e 30	1	1	WASTEWATER	✓	11-4-04	7:55	
-2	SB # 1 e 54	1	1	WASTEWATER	✓	11-4-04	10:52	
				OTHER:				
				ACID/BASE:				
				ICE / COOL				
				OTHER:				

FOR LAB USE ONLY

Relinquished By: L. Weinheimer
Date: 11-4-04
Time: 4:00

Received By: [Signature]
Date: 11-4-04
Time:

Delivered By: (Circle One)
 Sampler - UPS - Bus - Other:

Sample Condition:
 Cool Intact
 Yes No

Checked By: [Signature]

BILL TO ANALYSIS REQUEST

Chlorides	TPH 8015 M	BTEX	Texas TPH
-----------	------------	------	-----------

Phone Result: Yes No
Fax Result: Yes No
Add'l Phone #:
Add'l Fax #:

REMARKS:
 email results

Hcoonder@riceswd.com; jpurvis@riceswd.com;
Lweinheimer@riceswd.com

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

NEED SAMPLES BACK, PLEASE

COPIES

RICE OPERATING COMPANY

122 West Taylor ~ Hobbs, NM 88240

PHONE: (575) 393-9174 FAX: (575) 397-1471

PID METER CALIBRATION & FIELD REPORT FORM

CK	✓
MODEL	
NO.	

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	Jct J-25	J	25	T21S	R37E

SAMPLE ID: soil bore #1

DEPTH	PID
15'	1.9
18'	1.7
21'	2.0
24'	2.1
27'	2.1

DEPTH	PID
45'	2.2
48'	2.9
51'	0.7
54'	1.4

DEPTH	PID

DEPTH	PID

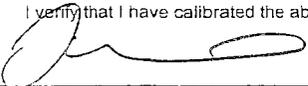
DEPTH	PID
30'	1.5
33'	1.2
36'	1.8
39'	3.4
42'	1.8

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



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: 10/28/09
 Reporting Date: 10/29/09
 Project Owner: NOT GIVEN
 Project Name: BD J-25 EOL (21-37)
 Project Location: BD J-25 EOL (21-37)

Sampling Date: 10/27/09
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: ML
 Analyzed By: AB/HM

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

ANALYSIS DATE	10/28/09	10/28/09	10/28/09
H18587-1** 5PT BTTM @ 12'	<10.0	<10.0	2,600
H18587-2 4 WALL COMP @ 30x30	<10.0	<10.0	1,170
Quality Control	435	452	500
True Value QC	500	500	500
% Recovery	87.0	90.4	100
Relative Percent Difference	5.3	4.7	< 0.1

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.

**TPH second surrogate out of historical limits due to matrix interference.

Alyssa Keene
 Chemist

10/29/09
 Date

H18587 TCL RICE

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RICE OPERATING COMPANY

122 West Taylor Hobbs, NM 85246
 PHONE: (575) 393-9174 FAX: (575) 397-1471
 PID METER CALIBRATION & FIELD REPORT FORM

Check Model Number:

5

Model: PGM 7300 Serial No: 590-000183
 Model: PGM 7300 Serial No: 590-000508
 Model: PGM 7300 Serial No: 590-000504

Model: PGM 7600 Serial No: 110-023920
 Model: PGM 7600 Serial No: 110-013744
 Model: PGM 7600 Serial No: 110-013676

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: 924908	EXPIRATION DATE: 07-23-12
FILL DATE: 07-20-09	METER READING ACCURACY: 100%

ACCURACY: +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
B/D	J-25-80L	J	25	21 S	37E

35' NORTH

SAMPLE ID	PID	SAMPLE ID	PID
2	0.2	5 FT BTM @ 12'	2.1
4	0	4 WALL COMP @ 30 FT	1.7
6	0		
8	0		
10	0		
12	0		

COPY

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

SIGNATURE *[Signature]*

DATE: 07-27-09



ARDINAL LABORATORIES

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: 10/30/09
Reporting Date: 11/04/09
Project Number: NOT GIVEN
Project Name: BD J-25 (21-37)
Project Location: BD J-25 (21-37)

Sampling Date: 10/30/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AB
Analyzed By: AB/HM

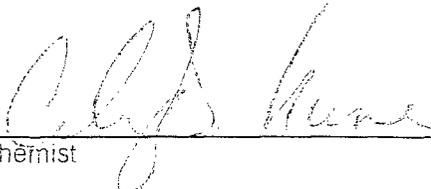
LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/kg)	DRO (>C ₁₀ -C ₂₈) (mg/kg)	CI* (mg/kg)
------------	-----------	--	--	----------------

ANALYSIS DATE		11/03/09	11/03/09	11/02/09
H18613-1	BLENDED BACKFILL	<10.0	<10.0	368
Quality Control		570	618	500
True Value QC		500	500	500
% Recovery		114	124	100
Relative Percent Difference		1.3	9.9	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-C1/B

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

Reported on wet weight.



Chemist



11/05/09

Date

H18613 TCL RICE

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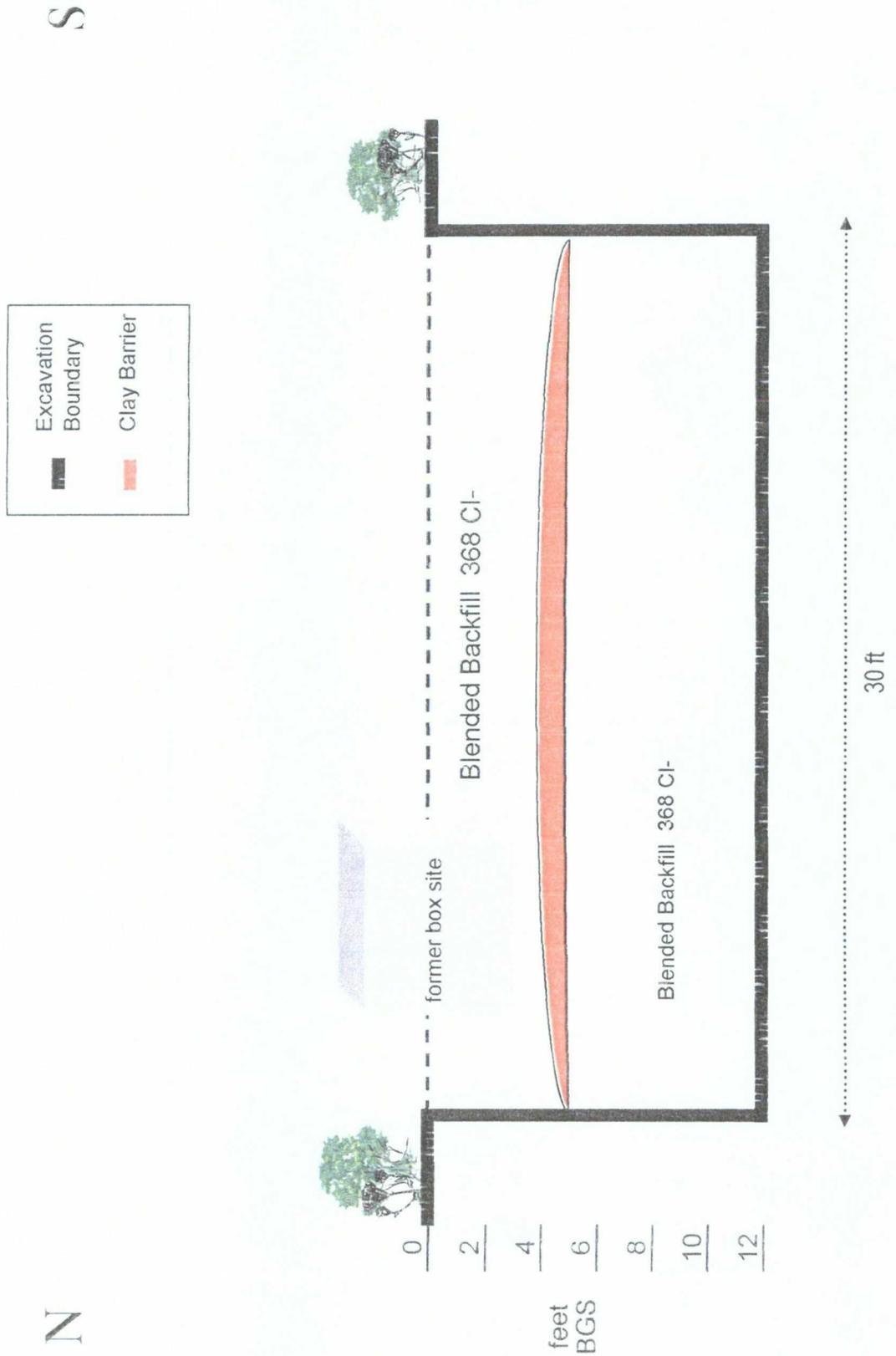
BILL TO				ANALYSIS REQUEST														
Company Name: <i>Erie Carrington Rice Operations</i>				P.O. #:														
Project Manager: <i>Eric Carrington</i>				Company:														
Address: <i>122 W Taylor</i>				Attn:														
City: <i>HD 665</i>				Address:														
Phone #: <i>(575) 393-9174</i>				City:														
State: <i>NM</i>				State:														
Zip: <i>88240</i>				Phone #:														
Fax #: <i>(575) 393-1471</i>				Fax #:														
Project #:				Project Name:														
Project Name: <i>BOJ-25 EOL (21-37)</i>				Project Location: <i>BDJ-25 EOL (21-37)</i>														
Sampler Name:				Sampler Name:														
FOR LAB USE ONLY				FOR LAB USE ONLY														
Lab I.D.:				MATRIX			PRESERV			SAMPLING			DATE			TIME		
Sample I.D.:				GROUNDWATER			ICE / COOL			OTHER			DATE			TIME		
118613-1				WASTEWATER			ACID/BASE			OTHER			10-30-09			12:15		
Blended B.C. Field				SLUDGE			OTHER			OTHER								
				SOIL														
				OIL														
				# CONTAINERS														
				(G) RAB OR (C) MP														
				61														
				Received By:			Date:			Time:			Phone Result:			Add'l Phone #:		
				S. Garrison			10/30/09			10:43:50			RESULTS			Egarrison@riceswd.com		
				Received By:			Date:			Time:			Fax Result:			Add'l Fax #:		
				S. Garrison			10/30/09			10:43:50			RESULTS			S. Garrison@riceswd.com		
				Relinquished By:			Date:			Time:			REMARKS:			S. Barker@riceswd.com		
				S. Garrison			10/30/09			10:43:50			RESULTS			S. Barker@riceswd.com		
Delivered By: (Circle One)				Temp.				Sample Condition				CHECKED BY:						
Cool Intact				Cool Intact				Cool Intact				(Initials)						
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				S. Barker						
Sampler - UPS - Bus - Other:																		

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

BD J-25 EOL
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 25
EOL 21-37
Project No. 2009.1260

Test Method: ASTM: D 2922

Date of Test: November 2, 2009

Depth: See Below

Depth of Probe: 6"

Test No.	Location	Dry Density		Depth
		% Max	% Moisture	
SG 4	BDJC-25 EOL 21-37	90.6	15.0	4' Below Surface

Junction J-25 EOL 21/37

RECEIVED

DEC 09 2009

RICE OPERATING
HOBBS, NM

Control Density: 100.7
ASTM: D 698

Optimum Moisture: 20.7%

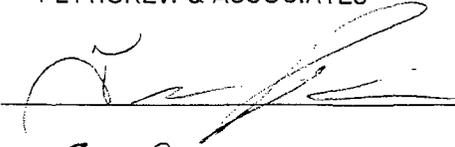
Required Compaction: 90%

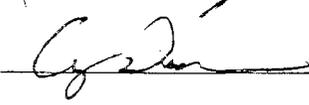
Densometer ID: 5572

PETTIGREW & ASSOCIATES

Lab No.: 09 7004-7005

Copies To: Rice Operating

BY: 

BY:  P.E.

CHLORIDE CONCENTRATION CURVE

RICE Operating Company

BD J-25 EOL

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

Soil bore samples 10 ft. east of former junction box

Depth bgs (ft)	Cl ppm
15	2706
18	3627
21	3446
24	3831
27	3520
30	5470
33	1050
36	2802
39	600
42	3169
45	3471
48	4305
51	1506
54	2127

Groundwater = none

