1R - 426-285

REPORTS

DATE:

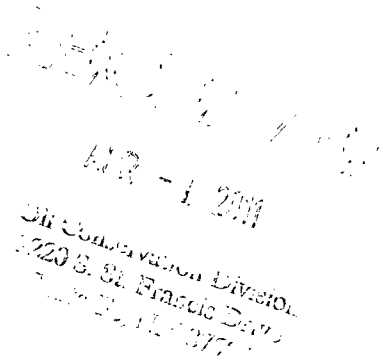
3-18-11

IR426-285

BD Jct. N-17

(2 Boxes)

2010



DISCLOSURE

RICE OPERATING COMPANY
JUNCTION BOX DISCLOSURE* REPORT

BOX LOCATION

SWD SYSTEM	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DIMENSIONS - FEET		
							Length 5 ft.	Width 5 ft.	Depth 3 ft.
Blinebry-Drinkard (BD)	Jct. N-17 (2 boxes)	N	17	21S	37E	Lea	eliminated		

LAND TYPE: BLM ___ STATE ___ FEE LANDOWNER Millard Deck OTHER ___

Depth to Groundwater 72 feet NMOCD SITE ASSESSMENT RANKING SCORE: 10

Date Started 9/21/2010 Date Completed 10/15/2010 OCD Witness NO

Soil Excavated 266.7 cubic yards Excavation Length 30 Width 20 Depth 12 feet

Soil Disposed 288 cubic yards Offsite Facility Sundance Location Eunice, NM

FINAL ANALYTICAL RESULTS: **Sample Date** 9/29/2010, 10/13/2010 **Sample Depth** 12'

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.	11.9	<10.0	<10.0	1,730
BOTTOM COMP.	83.8	<10.0	<10.0	672
BACKFILL COMP.	73.7	<10.0	92.9	1,060
BLENDED BACKFILL	N/A	N/A	N/A	336

CHLORIDE FIELD TESTS

LOCATION	DEPTH	mg/kg
4-wall comp.	n/a	1,098
bottom comp.	12'	488
backfill comp.	n/a	840
background	6"	60
vertical delineation 10 ft. north of the junction (source)	4'	742
	6'	1,235
	8'	935
	10'	1,658
	12'	2,285

General Description of Remedial Action: These junctions was eliminated during the pipeline replacement/upgrade program. After the former boxes were removed, an investigation was conducted using a backhoe to collect soil samples at regular intervals producing a 30x20x12-ft deep excavation. Chloride field tests were performed on each sample which did not relent with depth. Organic vapors were measured using a PID, which yielded some elevated concentrations. The excavated soil was blended on site and representative composite samples were collected from the blended backfill, the bottom of the excavation, and the excavation walls. The representative samples were sent to a commercial laboratory for analysis of chloride and TPH. At 12-11 ft. BGS, a 1-ft. thick clay layer was installed and compaction test performed on 10/14/2010. 288 yards of the blended backfill was hauled to a NMOCD approved facility. The remaining blended backfill was blended with clean imported soil and a representative sample was collected and sent to a commercial laboratory for analysis of chloride, which confirmed low concentrations. The remaining excavation was backfilled with the blended backfill with clean imported soil to ground surface and contoured to the surrounding area. An identification marker was placed at the site of the former junction boxes to mark the presence of clay below. On 10/15/2010, the site was seeded with a blend of native vegetation and is expected to return to a productive capacity at a normal rate. NMOCD was notified of potential groundwater impact on 3/02/2011.

ADDITIONAL EVALUATION IS MEDIUM PRIORITY

enclosures: photos, lab reports, PID (field) screenings, cross-section, compaction test, hydraulic conductivity, proctor, chloride curve

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

SITE SUPERVISOR John R. Harrison SIGNATURE Not Available 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 3-18-11

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

BD Jct. N-17

Unit 'N', Sec. 17, T21S, R37E

Site prior to delineation 9/13/2010

Collecting final sample 9/29/2010

Compaction test 10/14/2010

Seeding excavation 10/15/2010

CARDINAL Laboratories

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

Analytical Results For:

Rice Operating Company
Hack Conder
112 W. Taylor
Hobbs NM, 88240
Fax To: (575) 397-1471

Received:	09/29/2010	Sampling Date:	09/29/2010
Reported:	10/06/2010	Sampling Type:	Soil
Project Name:	BD JCT. N-17 (21/37)	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: 5 PT. BOTTOM COMP (H020952-01)

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**672**	16.0	09/30/2010	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: AB

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/01/2010	ND	166	83.0	200	0.563	
DRO >C10-C28	<10.0	10.0	10/01/2010	ND	241	120	200	3.37	

Surrogate: 1-Chlorooctane	*101 %*	*70-130*
Surrogate: 1-Chlorooctadecane	*103 %*	*70-130*

Sample ID: 4 WALL COMPOSITE (H020952-02)

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1730**	16.0	09/30/2010	ND	400	100	400	7.69	

TPH 8015M mg/kg Analyzed By: AB

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/01/2010	ND	166	83.0	200	0.563	
DRO >C10-C28	<10.0	10.0	10/01/2010	ND	241	120	200	3.37	

Surrogate: 1-Chlorooctane	*94.9 %*	*70-130*
Surrogate: 1-Chlorooctadecane	*93.4 %*	*70-130*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Rice Operating Company
Hack Conder
112 W. Taylor
Hobbs NM, 88240
Fax To: (575) 397-1471

Received:	09/29/2010	Sampling Date:	09/29/2010
Reported:	10/06/2010	Sampling Type:	Soil
Project Name:	BD JCT. N-17 (21/37)	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: BLENDED BACKFILL (H020952-03)

Chloride, SM4500Cl-B mg/kg **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1060**	16.0	09/30/2010	ND	400	100	400	7.69	

TPH 8015M mg/kg **Analyzed By: AB**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/02/2010	ND	166	83.0	200	0.563	
DRO >C10-C28	**92.9**	10.0	10/02/2010	ND	241	120	200	3.37	

Surrogate: 1-Chlorooctane	*97.4 %*	*70-130*
Surrogate: 1-Chlorooctadecane	*97.8 %*	*70-130*

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Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

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 Company	**BILL TO**
Project Manager: Hack Conder	P.O. #:
Address: 122 West Taylor	Company:
City: Hobbs State: NM Zip: 88240	Attn:
Phone #: 575-393-9174 Fax #: 575-397-1471	Address:
Project #: Project Owner:	City:
Project Name: BOJCT N-17 21.37	State: Zip:
Project Location:	Phone #:
Sampler Name: Robert Harrison	Fax #:

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST									
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	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions						
H20952-1	5 PT BOT. COMP	C	1			✓					✓		9/24/10	1:13	✓	✓								
2	4 WALL COMPOSITE	C	1			✓					✓		9/29/10	1:28	✓	✓								
3	BLENDED BACKFILL	C	1			✓					✓		9/29/10	2:13	✓	✓								

COPY

Relinquished By: Robert Harrison	Date: Time:	Received By:	
Relinquished By:	Date: 9/29/10 Time: 4:30	Received By: Jodi Henson	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool: Yes / No Intact: Yes / No	CHECKED BY: (Initials)	
.5°C			

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

REMARKS:

email results

Bbaker@riceswd.com; Kjones@riceswd.com;
Regans@riceswd.com Rharrison@riceswd.com

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

#26

NEED SAMPLES BACK, PLEASE

RICE OPERATING COMPANY

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

Check Model Number:

	Model: PGM 7300	Serial No: 590-000183		Model: PGM 7600	Serial No: 110-023920
✓	Model: PGM 7300	Serial No: 590-000508		Model: PGM 7600	Serial No: 110-013744
	Model: PGM 7300	Serial No: 590-000504		Model: PGM 7600	Serial No: 110-013676

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : 930360	EXPIRATION DATE: 5/24/13
FILL DATE:	METER READING ACCURACY: 100.0

ACCURACY : +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
BD	N-17	N	17	21S	37E

SAMPLE ID	PID	SAMPLE ID	PID
5 PT BOT COMP @ 12'	83.8		
4 WALL COMP	11.9		
BLENDED BACKFILL	73.7		
		COPY	

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

SIGNATUE: [signature] DATE: 9/29/10

CARDINAL Laboratories

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

Analytical Results For:

Rice Operating Company
Hack Conder
112 W. Taylor
Hobbs NM, 88240
Fax To: (575) 397-1471

Received:	10/13/2010	Sampling Date:	10/13/2010
Reported:	10/14/2010	Sampling Type:	Soil
Project Name:	BD N-17 EOL 21/37	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: BLENDED BACKFILL (H021049-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**336**	16.0	10/14/2010	ND	416	104	400	3.77	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

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 Company
Project Manager:	Hack Conder
Address:	122 West Taylor
City:	Hobbs State: NM Zip: 88240
Phone #:	575-393-9174 Fax #: 575-397-1471
Project #:	Project Owner:
Project Name:	BDN-17EOL 21.37
Project Location:	
Sampler Name:	Robert Harrison

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

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	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions
H21049-1	BLENDED BACKFILL	C	1			✓					✓		10/13/10	1:56	✓				

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Relinquished By:	Date: 10/13/10 Time:	Received By:	
Robert Harrison			
Relinquished By:	Date: 10/13/10 Time: 4:15	Received By: Jodi Henson	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition: Cool ☐ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)

3°

Phone Result: ☐ Yes ☑ No Add'l Phone #:
Fax Result: ☐ Yes ☑ No Add'l Fax #:
REMARKS:
email results RUSH! as per Robert
Bbaker@riceswd.com; Kjones@riceswd.com;
Regans@riceswd.com 4:25 10/13/10

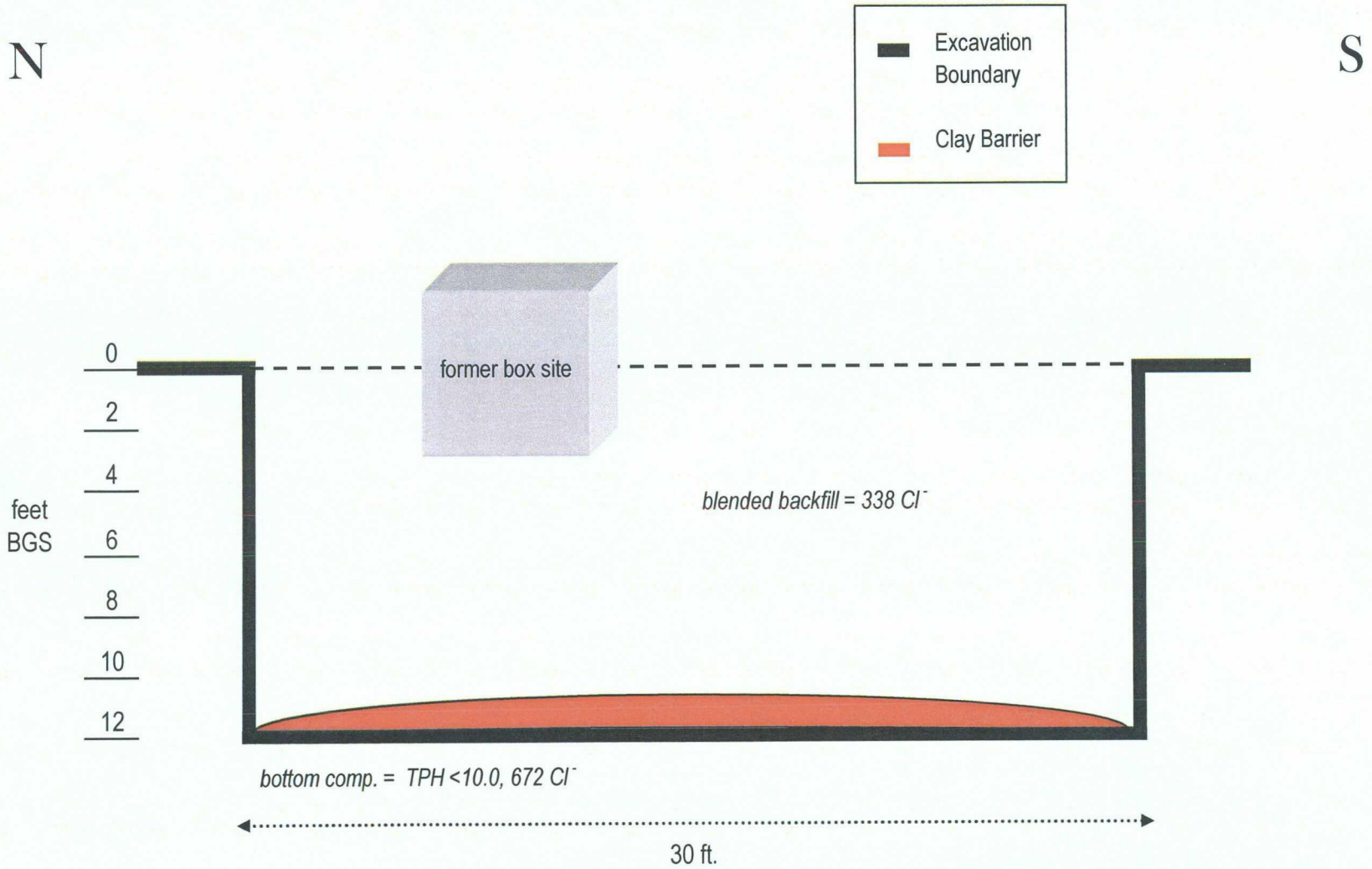
† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#26

NEED SAMPLES BACK, PLEASE

BD JCT N-17
Unit 'N', Sec. 17, T21S, R37E

Excavation Cross-Section



LABORATORY TEST REPORT

PETTIGREW & ASSOCIATES, P.A.

1110 N. GRIMES
HOBBS, NM 88240
(575) 393-9827

AASHTO R18

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

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

Material: Wallach Red Clay

Test Method: ASTM: D 2922

Project: BD N 17 EOL (21/37)
Project No. 2010.1311

Date of Test: October 14, 2010

Depth: See Below

Depth of Probe: 6"

Test No.	Location	Dry Density % Max	% Moisture	Depth
SG 1	Pit - 5' N. & 6' E. of SW Corner	93.9	12.6	10 ½' Below Natural Ground

COPY

Control Density: 101.1
ASTM: D 698

Optimum Moisture: 19.0%

Required Compaction: 90-95%

Densometer ID: 5071

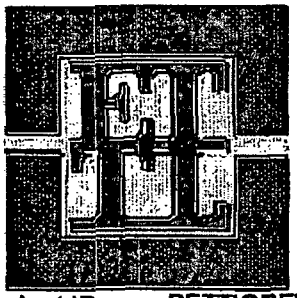
Lab No.: 10 10164-10165

Copies To: Rice Operating

PETTIGREW & ASSOCIATES

BY: _____

BY: _____ for Debra Hicks P.E.



Home Office - 1717 East Erwin Street
Tyler, Texas 75702-6398
Office: (903) 595-4421 Lab: (903) 595-6402 Fax: (903) 595-6113
Area Offices
210 Beech Street Texarkana, AR 71854 (870) 772-0013
707 West Cotton St. Longview, TX 75604 (903) 758-0402

Acct ID: PETTIGREW File ID: C4535-101 Date Sampled: 08/19/2010
Report Date: 08/27/2010 Sampled By: Client
Project: Pettigrew Associates - Project #2010.1026, Hobbs, NM By Order Of: Erica Hart
Location: Material Origin: Wallach Pit, Sample Location: N/G Order Number:
Client: Pettigrew & Associates, Hobbs, NM
Contractor: Not Given

REPORT: **FLEXIBLE WALL PERMEAMETER** LAB NO: 9881
Test Method: See Below

TEST RESULTS Report No: 1-1201-000005
Page 1 of 2

HYDRAULIC CONDUCTIVITY DETERMINATION
FLEXIBLE WALL PERMEAMETER - CONSTANT VOLUME
(Mercury Permometer Test)

Project : Rice Operating Project 2010.1026 for Pettigrew & Associates, P.A., Hobbs, NM
Date: 8/25/2010 Panel Number : P 2 ; ASTM D 5084
Project No. : C 4535-101 Permometer Data

Boring No.:		ap =	0.031416 cm2		Set Mercury to Pipet Rp at	Equilibrium	1.8	cm3
Sample:	9881	aa =	0.767120 cm2			Pipet Rp	6.7	cm3
Depth (ft):		M1 =	0.030180	C =	0.000448509	Annulus Ra	1.5	cm3
Other Location:	Wallach Pit	M2 =	1.040953	T =	0.203785086			

Material Description : Red Clay (Clients Sample No 10 5904-5906) Lab Molded @~95% ASTM D 698

SAMPLE DATA

					Before Test		After Test	
Wet Wt. sample + ring or tare :			507.52	g				
Tare or ring Wt. :			0.0	g	Tare No.:	T 9	Tare No.:	T 2
Wet Wt: of Sample :			507.52	g	Wet Wt.+tare:	850.96	Wet Wt.+tare	728.58
Diameter :	2.72	in	6.90	cm2	Dry Wt.+tare:	716.43	Dry Wt.+tare	621.60
Length :	2.75	in	6.99	cm	Tare Wt:	220.51	Tare Wt:	216.59
Area:	5.79	in^2	37.35	cm2	Dry Wt.:	495.92	Dry Wt.:	405.01
Volume :	15.94	in^3	261.23	cm3	Water Wt.:	134.53	Water Wt.:	106.98
Unit Wt.(wet):	121.23	pcf	1.94	g/cm^3	% moist.:	27.1	% moist.:	26.4
Unit Wt.(dry):	95.38	pcf	1.53	g/cm^3				

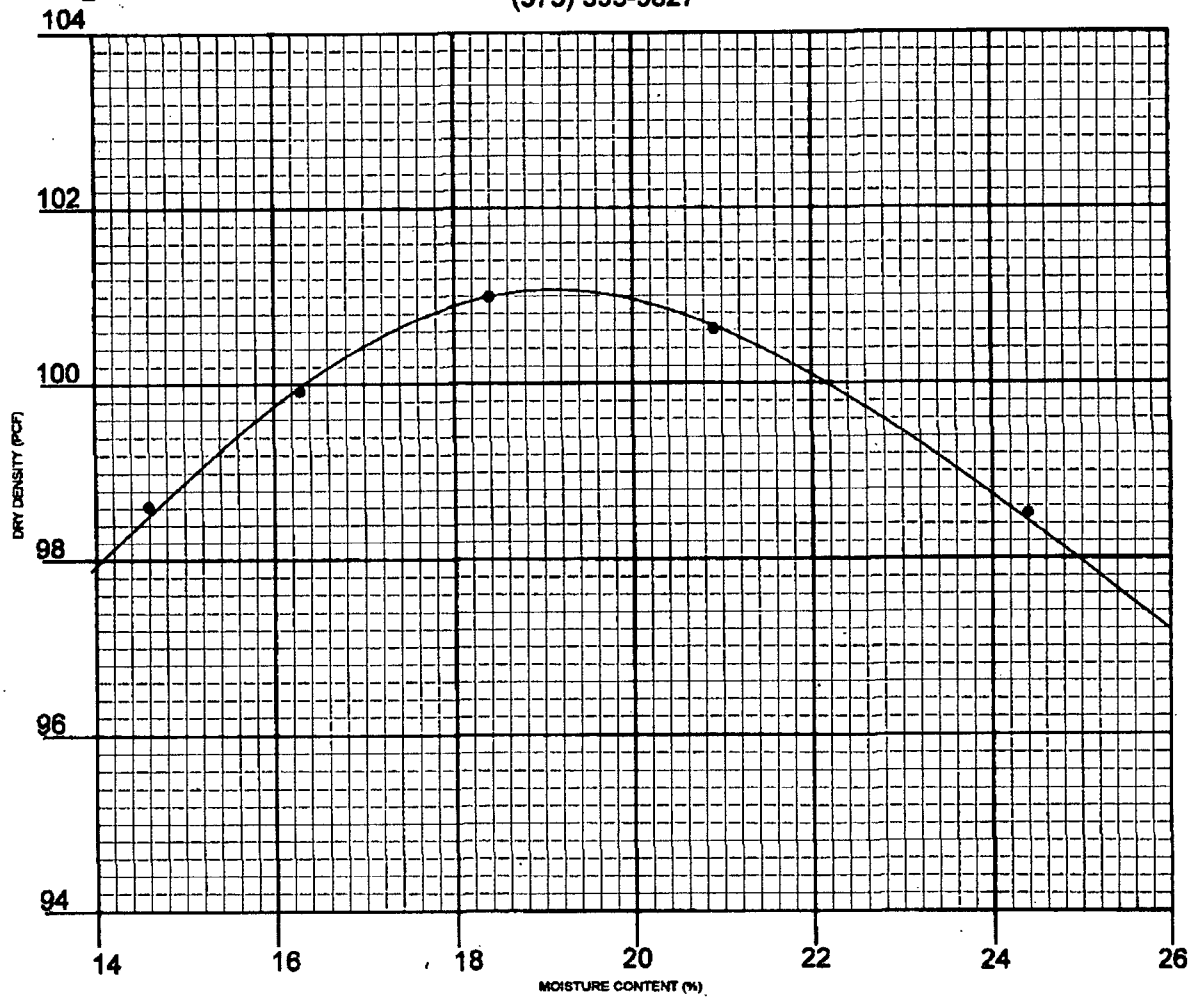
Assumed Specific Gravity:	2.65	Max Dry Density(pcf) =	101.1	OMC =	19
		% of max =	94.3	+/- OMC =	8.13
Calculated % saturation:	95.26	Void ratio (e) =	0.73	Porosity (n)=	0.42

COPY

Charge: Pettigrew & Associates Attn: Erica Hart
Orig: Pettigrew & Associates, Hobbs, NM Attn: Erica Hart
1-ec Pettigrew & Associates, Hobbs, NM Attn: Erica Hart
E-Mail: ehart@pettigrew.us

PETTIGREW & ASSOCIATES, P.A.
1110 N. GRIMES ST.
HOBBS, NM 88240
(575) 393-9827

AASHTO R15



General Information

CLIENT: Rice Operating PROJECT: Project No. 2010.1026

SAMPLE LOCATION: Wallach Pit

SOIL DESCRIPTION: Wallach Red Clay

SOIL CLASSIFICATION: _____ TEST METHOD: ASTM: D 698

ATTERBERG: LL ____ PI ____ Sampled & Delivered 8/13/10

DATE: 8/13/10 LAB NO. 10 5904-5906

DRY WEIGHT LB/CU. FT. 101.1 MOISTURE CONTENT % 19.0

SIEVE ANALYSIS - % PASSING									

PETTIGREW & ASSOCIATES

COPY

BY: Erica Hart

COPIES: Rice Operating

BY: for Kendrick P.E

BD Jct. N-17

Unit 'N', Sec. 17, T21S, R37E

Backhoe samples 10 ft. north of junction (source)

Depth bgs (ft)	[Cl⁻] ppm
4	742
6	1235
8	935
10	1658
12	2285

Groundwater = 72 ft