1R-426-283

REPORTS

DATE:

3-22-11

Jet BD_AI-25 EOL 2010

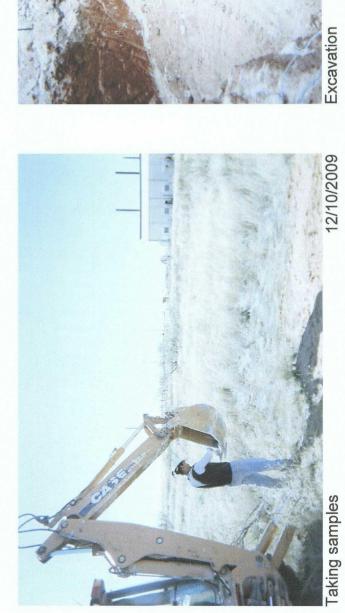


CLOSURE

RICE OPERATING COMPANY JUNCTION BOX FINAL REPORT

					CATION						
	JUNCTION	UNIT	SECTION	TOWNSHIP	RANGE	COUNTY	BOX DII	WENSIONS - FEI	<u>⊏</u> I Depth		
Blinebry-Drinkard (BD)	J24 1-25 EOL	1	25	218	36E	Lea		Eliminated	244		
LAND TYPE: BL	_м s	STATE	FEE LAI	NDOWNER	Geo	rge W. Brownlee	OTHER_				
Depth to Ground	dwater	148	feet	, N	IMOCD SIT	E ASSESSME	NT RANKING SO	CORE:	0		
Date Started _	11/3/20	009	Date Co	mpleted	5/13/20	010 00	D Witness	no			
Soil Excavated _	266.7	cubic yar	ds Ex	cavation Le	ngth	30 w	idth20	Depth 12	feet		
Soil Disposed _	126	cubic yar	ds Of	fsite Facility	Sunda	ance Services	Location _	Eunice, N	IM		
INAL ANALYTIC			-				0 Sample Dep) ft., 35 ft.		
		•	•	eted by using	•	ed lab and testi	e of sidewalls. Thing procedures pu				
				INNICCL	yuluelilles.		CHLOR	DE FIELD TE	STS		
Sample Location	PID (field	, I	RO J/kg	DRO mg/kg	Chlo mg		LOCATION	DEPTH	mg/kg		
4-WALL COMP.	0.4	<1	0.0	<10.0	1,0	70	4-wall comp.	n/a	837		
BOTTOM COMP.	1.4	<11	0.0	<10	87	0	bottom comp.	12'	695		
BACKFILL COMP.	0.4	<10	0.0	<10.0	75	52	backfill comp.	n/a	638		
BLENDED BACKFILI ITH IMPORTED SO	IL 0.0		/A	N/A	25		blended backfill with imported soil	n/a	408		
SB # 1 @ 20 ft.	0.6		0.0	<10.0	1,4			15'	649		
SB # 1 @ 35 ft.	0.4	<11	0.0	<10.0	14	14	SB #1 at the	20'	1,928		
							former junction	25'	606		
General Description of Remedial Action: This junction and line were eliminated during (source) 30' 281 35' 200											
This junction and line were eliminated during 35' 200 the pipeline replacement/upgrade program. After the former box was removed, an investigation											
s conducted using a b	ackhoe to coll	lect soil sam	nples at regu	lar intervals c	reating a 30x	20x12-ft. deep e	xcavation. Chlorid	e field test perfo	rmed on		
ch sample yielded con					`		· · · · · · · · · · · · · · · · · · ·				
e excavated soil was b	lended on site	e and repres	sentative san	nples were co	llected from	the blended back	fill, the bottom of t	he excavation, a	nd		
cavation walls. The rep	oresentative s	amples wer	e taken to a	commercial la	aboratory for	analysis of chlori	de and TPH. The	blended backfill			
s returned to the excav	ation to 5 ft. b	oelow groun	d surface (B	GS). At 5-4 fi	t. BGS, a 1-ft	thick clay barrie	r was installed with	n compaction			
st performed on 12/28/2	2009. 126 ya	rds of conta	minated soil	was hauled t	o an NMOCE	approved facilit	y. The remaining	blended backfill			
s blended on site with	clean importe	d soil. A re	presentative	sample was	collected fron	the blended ba	ckfill with clean im	ported soil and			
nt to a commercial labo	ratory for ana	lysis of chlo	oride. The re	maining exca	vation was b	ackfilled to groun	nd surface and con	toured to the			
rrounding area. On 12	/29/2009, the	site was se	eded with a	blend of nativ	e vegetation	and is expected	to return to a produ	uctive capacity a	t		
normal rate. To further	investigate th	e depth of c	chloride pres	ence, a soil b	ore was initia	ted on 5/13/2010	at the source of the	ne former junctio	n		
x. The soil boring was	advaced to 3	5 ft. BGS wi	ith samples o	collected ever	y 5 ft. betwee	n 15-35 ft. Chlo	ride field test on ea	ach sample			
lded chloride concentr	ations that did	d relent with	depth. Orga	anic vapors w	ere measure	d using a PID, w	hich yielded low co	ncentrations. T	he		
ft. and 35 ft. samples v	were sent to a	commercia	I laboratory f	or analysis of	chloride and	TPH. The entir	e bore hole was pl	ugged with			
ntonite to ground surfa	ce.										
		en	closures: pho	tos, boring log	, lab results, l	PID (field) screeni	ngs, cross-section,	compaction test,	chloride curve		
I HERE	BY CERTIFY	Y THAT TI		MATION ABO			LETE TO THE E	BEST OF MY			
TE SUPERVISOR	Darnell Mitche	ell SIGI	NATURE		n/a		COMPANY	RICE OPERATIN	G COMPANY		
			-	LBB							
ASSEMBLED BY La	J DAGGE DAKE			·		1.1		210	- [/		
OJECT LEADER La	rry Bruce Bake	er Jr. SIGI	NATURE	xarry K	ruce 1	saver ou	· DATE_	5-22	- 11		

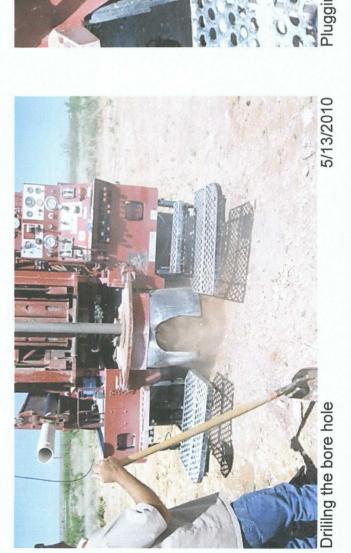
BD I-25 EOL Unit I, Section 25, T21S, R36E











5/13/2010 Plugging the bore hole with Bentonite

Logger:	Jordan Woodfin
Driller:	Harrison & Cooper
Consultant:	Rice Operating
Drilling Method	Air Rotary
Start Date:	5/13/2010
End Date:	5/13/2010

Comments:

SB-1

All samples from cuttings. Located at the source

of the former junction box.

Drafted by: Jordan Woodfin



Project Name:

Well ID:

SB # 1

BD I-25 EOL SB # Location: UL/I SEC 25 T21S R36S

Lat: N 32* 26' 54.741"

County: Lea

	TD =35	ft		Estimated depth to GW = 148 ft	Lo	n: W 103* 12	2' 46.3	64" \$	State: NM
Depth (feet)	chloride field tests	LAB	PID	Description		Lithology	V	Vell C	onstruction
5 ft				Oft-12ft CALICHE AND SAND tan to light brown, (backfill)					
				12ft-20ft					
15 ft	649		0.8	SAND white, light tan					
20 ft	1928	CI- 1490	0.6						bentonite
		GRO DRO	<10 <10						seal
25 ft	606		0.5	20ft-35ft					
				SAND					
30 ft	281		0.8	red sand					
35 ft	200	CI- 144							
		DRO	<10						





ANALYTICAL RESULTS FOR RICE OPERATING COMPANY ATTN: HACK CONDER 112 W. TAYLOR HOBBS, NM 88240

Receiving Date: 05/13/10 Reporting Date: 05/18/10

Project Number: NOT GIVEN
Project Name: BD I-25 EOL (21/36)

Project Name: BD I-25 EOL (21/36)
Project Location: BD I-25 EOL (21/36)

LAB NUMBER SAMPLE ID

Sampling Date: 05/13/10 Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: JH Analyzed By: AB/HM

GRO

DRO

 (C_6-C_{10}) (>C₁₀-C₂₈) CI*

(mg/kg)

500

101

2.7

(mg/kg)

(mg/kg)

ANALYSIS DATE	05/17/10	05/17/10	05/17/10
H19891-1 SB#1 @ 20FT.	<10.0	<10.0	1,490
H19891-2 SB#1 @ 35FT.	<10.0	<10.0	144
	OF	776	
	VI-		ı
		<u></u>	
Quality Control	505	495	500

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.

Relative Percent Difference

True Value QC

% Recovery

e.hemist

Date '

500

99.0

0.2

500

100

< 0.1

H19891 TCL RICE

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	¢
ES	0000
OR	4
DRAT	LALL
LABC	4 1 1 1 1
NAL	Land Bank Manda
ARDI	č

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

ompany Name:	e: Rice Operating Company	pany					-				BILL TO						NA	ANALYSIS		REQUEST	ايز			-	1
roject manage	roject Manager: Hack Conder							-	P.O. #:																
ddress: 122	ddress: 122 West Taylor							S	omp	Company:							SI								
ity: Hobbs	•	State: NM	Zip: 88	882	3240			⋖	Attn:								uo								
hone #: 393-9174	9174	Fax #: 397-1471	71					⋖	Address	:SS:							in/								
roject #:		Project Owner:						O	City:				(M		Н	/ /S								
roject Name:	BD 1-25 EOL 21	3.0						S	State:		Zip:		səp	91	X	ld.	uc								
roject Locatic	roject Location; BD 1-25 EOL 2	u 5w						<u>a</u> .	Phone #:	#			oric	08	Ε)	L S	ije	******							
ampler Name	mpler Name: Jordan Woodfin	•						- LE.	Fax#:				ΟĮL	3 F	18	ех	CS								
OR LAB USE ONLY				Г		ΜĀ	MATRIX	7 2 2	띱	PRESERV.	SAMPLING	NG	CI	lc		Э.	ə :								
Lab I.D.	Sample I.D.	ū	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER.	OIF	SLUDGE OTHER:	ACID/BASE:	ICE / COOL	DATE	TIME		<u>L</u>		L	Complet				-				
1-16861-1	SB #1 @ 20ft			-				-	_	>	5/13/10	02:40	>	>											
7	SB #1 @ 35ft		3	-		>				<u>`</u>	5/13/10	02:51	>	>											
						, -																			
ve.												,						((((L		/		-	
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	in the second se																,))	3	, ,	-			
7				* -	· .	<u>.</u>																			
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FASE NOTE: Liability	and Damages Cardinal's liability and elle	ant's exclusive remedy for an	vidain	arising	wheth	er hase	in con	ractor	ort ohe	il he limited to	o the amount hald	hir the client for	****	2-76.0	5.225 °.	in to and a	1					and the first	11 15 15 1	12000	

vo You's arrising whether pased in confider of crist, then be limited to the amount post by the ment for the pased emmed where made in writing and received by Cardinal within 30 days after completion of the applicable ling without limitation, business interruptions, loss of use, or loss of profit incurred by client, its subsidiants

Hconder@riceswd.com; Kjones@riceswd.com; Jwoodfin@riceswd.com email results Phone Result: Fax Result: REMARKS: Cool Intact
The Yes L Yes Received By Time: 🏭 Jordan Woedfin Same ler - UPS - Bus - Other: Pelivered By: (Circle One) Relinquished By: Mistes or successors arising Property By

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

NEED SAMPLES BACK, PLEASE

tten changes to 505-393-2476

RICE OPERATING COMPANY

PHONE: (575) 393-9174 FAX: (575) 397-1471
PID METER CALIBRATION & FIELD REPORT FORM

$\gamma_{ij} = \gamma_{ij} + \gamma$	Check 1	Model Number:		
Model: PGM 7300 Serial No	o: 590-000183		Model: PGM 7600	Serial No: 110-023920
	o: 590-000508		Model: PGM 7600	Serial No: 110-013744
Model: PGM 7300 Serial No	o: 590-000504		Model: PGM 7600	Serial No: 110-013676
			**	
GAS COMPOSITIO	ON: ISOBUTY	LENE 100PPM / AIR	BALANCE	
LOT NO: 927941		EXPIRATION DAT	1.9	12
FILL DATE: 11-17-09		METER READING	ACCURACY: 100	
	ACCURAC	CY:+/-2%		· .
SYSTEM JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
BD I-25 Ex		25	2(30
			·	
SAMPLE ID	PID	SA	MPLE ID	PID
5B#1				
15	0.8			,
70	0.6			
25'	0.5	e e		
30	0 8		·	
351	0.4			
A section 1				
		6		
·				

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

SIGNATUE: Jacoban Woodf

DATE: 5-13-10



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

Receiving Date: 12/17/09
Reporting Date: 12/18/09
Period Number: NOT CIVE

Project Number: NOT GIVEN Project Name: NOT GIVEN

Project Location: B.D. I-25 EOL

Sampling Date: 12/17/09 Sample Type: SOIL

Sample Condition: COOL & INTACT

Sample Received By: NF Analyzed By: AB/HM

GRO DRO (C_6-C_{10}) (> $C_{10}-C_{28})$ CI* (mg/kg) (mg/kg) (mg/kg)

LAB NUMBER SAMPLE ID

ANALYSIS D	ATE	12/18/09	12/18/09	12/18/09
H18902-1	5PT. BOTTOM @ 12'	<10.0	<10.0	870
H18902-2	4 WALL COMP. @ 25x30	<10.0	<10.0	1,070
H18902-3	BLAND BACKFILL 8PT. COMP.	<10.0	<10.0	752
Quality Contro	ol	497	496	500
True Value Q	С	500	500	500
% Recovery		99.4	99.2	100
Relative Perc	ent Difference	1.0	3.9	< 0.1

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.

COPY

Chemist

Date

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240

	ANALYSIS REQUEST						- td			h	7.51	08									a Térms and Conditions: Inlanest kill be charged on all accounts more than applicable 30 days past que al the yate of 24% par annum from the original date of invoice. and all costs of colections, including attorney's less.	JIC D No Add' Phone #:		15 S. Balker @ Rice Sub . Com
	BILL TO	P.O. #:	Company: SAME	Atm	Address:	City	State: Zip:	Phone #;	Fax #:	PRESERV SAMPLING		OOL ASE	OTHER ACID/8 OTHER TIME	7	12-17-5/10:300	12-17-07 11:40en					act or lon, shall be limited to the amount paid by the client for the angletion of the angletion of the angletion of the s. Joss of uses of profiles incurred by client. Its substituining, loss of the angletine in the substituining.	In is pased upoperate of the about a principle of the properate of the pro	REMARKS	\$3
(575) 393-2326 Fax (575) 393-2476		inager: BRUCE BAKER	123 W. Tarlor	de r	1616-		me:	cation (3.0 I-25 EOL	ame: Oakuell Mitchey	MATRIX	.,я⊒тл	awdr Taw	CON SOUL	1 507 Bottom 2 12"	-2 -1 well comps 0, 25 x 30 C	+ COMP C					less me	(ellinquished)	Let On 11 Ke Times	Relinquished By: Cate: Received By: Time:
	Company Name:	Project Manager:	Address: 1	City: HNK BS	Phone # 39	Project#	Project Name:	Project Location	nipler Name	FORTHBUSE ONLY		Lab I.D.		1-606811	~	. 3).		*		PLEASE NOTE: LIBBIRY andryes, Anglaims inclusions service, In no event snah	Sampler Relinquished:	6	

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

Sample Condition
Cool Infact
Tres X Yes
No No

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

DURUIS @ RIG SWD , COM

RICE OPERATING COMPANY

122 West Taylor Hobbs, NM 88240 PHONE: (505) 393-9174 FAX: (505) 397-1471 PID METER CALIBRATION & FIELD REPORT FORM

CK.		MODEL: PGM 7300	SERIAL NO:	590-001413
MODEL		MODEL: PGM 7300	SERIAL NO:	
				•, • • • • • •
NO.		MODEL: PGM 7320	SERIAL NO:	
	X .	MODEL: PGM 7300	SERIAL NO:	590-000183

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: N/A	EXPIRATION DATE: 7/05/2010
	METER READING ACCURACY: 99.9

ACCURACY: +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
BD	I-25 EOL	I	25	218	36E

PID	SAMPLE ID	PID
1.4		
0.4		
0.4		
	0.4	0.4

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

SIGNATURE:

Larry Bruce Baker In.

DATE: 12/17/2009

* PID numbers compiled from field data and accurate to the best of my knowledge.



ANALYTICAL RESULTS FOR RICE OPERATING CO. ATTN: BRUCE BAKER 122 WEST TAYLOR HOBBS, NM 88240 FAX TO: (575) 397-1471

Receiving Date: 12/23/09
Reporting Date: 12/28/09
Project Number: NOT GIVEN

Project Name: BLENDED BACKFILL WITH IMPORTED SOIL

Project Location: B.D. JCT. I-25 EOL

Analysis Date: 12/28/09 Sampling Date: 12/23/09 Sample Type: SOIL

Sample Condition: INTACT Sample Received By: AB

Analyzed By: HM

LAB NO. SAMPLE ID CI (mg/kg)

H18946-1	BLENDED BACKFILL WITH	256
	IMPORTED SOIL	
		:
Ovality Cant		540
Quality Cont		510
True Value 0	QC	500
% Recovery		102
Relative Per	cent Difference	2.0

METHOD: Standard Methods 4500-CIB

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

COPY 12/30/09

Date

101 East Marland, Hobbs, NM 88240 * ARDINAL LABORATORIES

ö

Page

ANALYSIS REQUEST 1) \$369 10 SOA TIME SAMPLING DATE BILL TO SAME Zip: PRESERV. **ABHTO** Company: ICE,\ COOF Address: Phone #: P.O. #: State: Fax #: ACID/BASE Attn: City: ЯЭНТО SCUDGE MATRIX 710 SOL Fax #: 575 -397-197 7108 State: NM Zip: 8834 **MASTEWATER** Project Name: Blande Brickeil with Imparied # CONTAINERS (575) 393-2326 Fax (575) 393-2476 0 G)RAB OR (C)OMP Project Owner: Project Location: B.D JCT, I 35 EOL KTCE Generals BRUCE Bakel HISTYL-I GRADBED BARESEII WITH mpler Name: Daniell in itchel Sample I.D. Phone #: 515 391-7468 Address: 122 W Project Manager: CITY: 43665 Company Name: Lab I.D. Project #:

Termis and Conditions: (glenestwill by charged on all accounts more than 90 days passidge at the rate of 24% per amunition the original date of anoice, and all costs of collections, including attorney's fees. เลร์จะระ 🥫 อุลิการ การอุโยสาร สาม จะสาร สาม จะสาร จะสะ รายมรุง พกสรรจะจะ ราคม โรค สมารายจะจะ ราคม และจะสามาราย สามาราย จะสามาราย สามารายจะจะ ราคมาราย สามารายจะจะ ราคมาราย สามารายจะจะ ราคมาราย สามารายจะจะ ราคมาราย สามาราย สามารายจะจะ ราคมาราย สามารายจะจะ ราคมาราย สามาราย and severities at September 1 of consequents of consequents of consequents of consequents of consequents of plant its subjections. amount paid by the client for the Sampler Relinguished

F. MATL TO B. BAKER ORICE SUB. · COM Purviso RICE S.C.D Add'l Phòne #: Add'l Fax #: 22 Phone Result: Fax Result: REMARKS: CHECKED BY (Initials) Brince Badren Cool Intact
Yes X Yes Sample Condition Received By: 井26/135℃ Date: (2.33 OF) Date: /2/23/09 11me 30p

Bruce Buker

Relinguished By:

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

500

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

RICE OPERATING COMPANY

122 West Taylor Hobbs, NM 88240 PHONE: (505) 393-9174 FAX: (505) 397-1471 PID METER CALIBRATION & FIELD REPORT FORM

CK.		MODEL: PGM 7300	SERIAL NO:	590-001413
MODEL		MODEL: PGM 7300	SERIAL NO:	590-000508
NO.		MODEL: PGM 7320	SERIAL NO:	592-903318
	X	MODEL: PGM 7300	SERIAL NO:	590-000183

GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: N/A	EXPIRATION DATE: 7/05/2010	
METER READING ACCURACY: 100		

ACCURACY: +/- 2%

SYSTEM	JUNCTION	UNIT	SECTION	TOWN SHIP	RANGE
BD	I-25 EOL	I	25	218	36E

PID	SAMPLE ID	PID
0		
1		

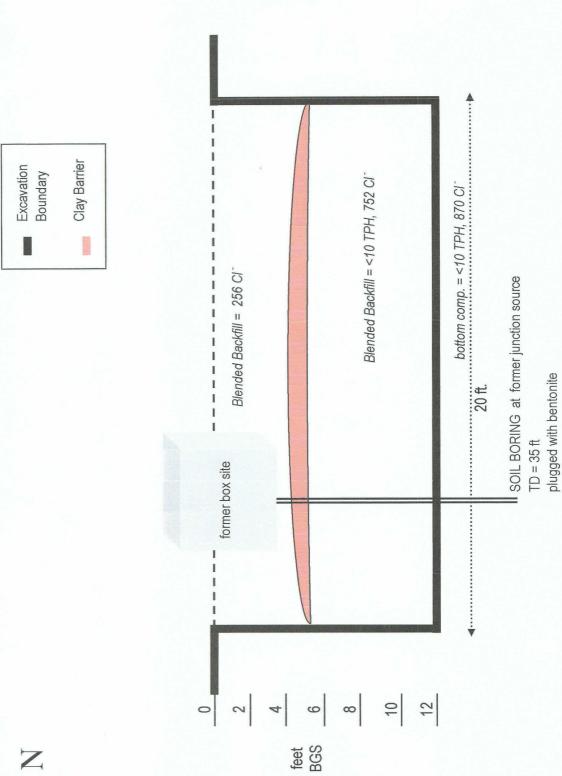
I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

URE: Larry Bruce Baher Gr.
* PID numbers compiled from field data and accurate to the best of my knowledge. SIGNATURE:

DATE: 12/23/2009

Excavation Cross-Section

S





LABORATORY TEST REPORT PETTIGREW & ASSOCIATES, P.A.

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



WILLIAM M. HICKS, III, P.E./P.S.

To:

Rice Operating Company

122 W. Taylor

Hobbs, NM 88240

Material;

Wallach Red Clay

Project:

Project No. 2009.1260

December 28, 2009

Test Method:

ASTM: D 2922

Date of Test:

BD Junction JI25

Depth:

See Below

Depth of Probe:

*Dry Density

Test No.

Location

% Max

% Moisture

Depth

SG 7.

BDJ - 125 - 10' N. & 6' E. of SW Corner of Pad

92.8

15.3

5' Below FG



Control Density:

100.7

ASTM: D 698

Optimum Moisture:

20.7%

Required Compaction: 91%

Densometer ID:

5572

Lab No.:

09 8375-8376

Copies To:

Rice Operating

PETTIGREW & ASSOCIATES

BD I-25 EOL Unit 'I', Sec. 25, T21S, R36E

Soil bore at former junction box (source)

[Cl ⁻] ppm	649	1928	909	281	200
Depth bgs (ft)	15	20	25	30	35

undwater =	148 ft.
\sim	_

