1R-426-04

# WORKPLANS

Date:

11-17-

### Rice Environmental Consulting & Safety

P.O. Box 5630 Hobbs, NM 88241 Phone 575.393.4411 Fax 575.393.0293

CERTIFIED MAIL RETURN RECIEPT NO. 7008 1140 0001 3070 6006

November 17<sup>th</sup>, 2011

### Mr. Edward Hansen

New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Drive Santa Fe, New Mexico 87505

### RE: Report of Further Investigation Rice Operating Company – BD SWD System BD M-26-1 (1R426-04): UL/M sec. 26 T21S R37E

Mr. Hansen:

RICE Operating Company (ROC) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site in the BD Salt Water Disposal (SWD) system. ROC is the service provider (agent) for the BD SWD System and has no ownership of any portion of the pipeline, well, or facility. The system is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

The site is located approximately 1 mile northeast of Eunice, New Mexico at UL/M sec. 26 T21S R37E as shown on the Site Location Map (Figure 1). Groundwater is located at approximately 40 feet bgs.

In 2003, ROC initiated work on the former BD M-26-1 junction box. The site was delineated using a backhoe to form a 30 ft x 30 ft x 12 ft deep excavation and soil samples were screened at regular intervals for both hydrocarbons and chlorides. From the excavation, the four-wall composite, the bottom composite and the remediated backfill were taken to a commercial laboratory for analysis. Laboratory tests of the four-wall composite showed a chloride reading of 1,900 mg/kg, negligible gasoline range organics (GRO) and diesel range organics (DRO), and negligible BTEX. The bottom composite showed a chloride laboratory reading of 851 mg/kg, a GRO reading of 114 mg/kg, and a DRO reading of 867 mg/kg. BTEX for the bottom composite showed negligible benzene and toluene, an ethyl benzene reading of 0.334 mg/kg, and a total xylene reading of 0.674 mg/kg. A 20 mil poly liner was placed at the bottom of the excavation. The excavated soil was blended on site and backfilled over the liner. Laboratory analysis of the blended backfill showed a chloride reading of 248 mg/kg, a GRO reading of 26 mg/kg, and a DRO reading of 324 mg/kg. BTEX reading for the backfill showed negligible benzene, toluene, and ethyl-benzene. Total xylenes showed a reading of 0.070 mg/kg.

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2011 NOV 21 P 2:09

The area was contoured to the surrounding landscape and seeded. NMOCD was notified of potential groundwater impact on March 17<sup>th</sup>, 2003, and a junction box disclosure report was submitted to NMOCD with all the 2003 junction box closures and disclosures.

As part of the Investigation and Characterization Plan approved by NMOCD on May 19<sup>th</sup>, 2011, seven soil bores (SB-1 through SB-7) were advanced through the former junction box site on May 23<sup>rd</sup>, 2011, May 24<sup>th</sup>, and June 6<sup>th</sup>, 2011 (Figure 2). RECS personnel field tested the soil for chlorides and screened in the field with a photo-ionization detector (PID) for hydrocarbons. Representative samples from the bores were taken to a commercial laboratory for confirmation of chloride and hydrocarbon field numbers (Appendix A). SB-1, SB-2 and SB-5 had low laboratory chloride readings which tapered off (below 250 mg/kg) prior to reaching the capillary fringe. SB-3, SB-4, SB-6 and SB-7 had laboratory chloride readings which indicated that chlorides may have affected the groundwater beneath the site. GRO readings in all seven bores were non-detect and DRO readings were also low. Additional soil samples will be collected to determine dimensions of an infiltration barrier.

On October 25<sup>th</sup>, 2011, a monitor well was installed 18 ft southeast of the former junction box site to determine if groundwater beneath the site has been affected by residual chlorides. The monitor well will be sampled quarterly and if the evaluation of the well shows no impact to groundwater from residual chlorides, then only a vadose zone remedy will be undertaken. However, if groundwater shows impact from residual chlorides, a groundwater remedy will be developed to address these concerns. Additional monitor wells may be added to the site as necessary to adequately delineate groundwater quality. Once groundwater quality is fully delineated, a Corrective Action Plan (CAP) will be submitted to the NMOCD and will include proposed liner dimensions and a groundwater remedy if necessary.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-9174 or me if you have any questions or wish to discuss the site.

Sincerely,

AC.W-

Lara Weinheimer Project Scientist RECS (575) 441-0431

Attachments:

Figure 1 – Site Location Map Figure 2 – Soil bore and MW installation Map Appendix A – Soil bore and MW logs with laboratory confirmation



# Figures

RICE Environmental Consulting and Safety (RECS) P.O. Box 5630 Hobbs, NM 88241 Phone 575.393.4411 Fax 575.393.0293

## Site Location Map



LEGALS: UL/M sec. 26 T21S R37E

NMOCD Case #: 1R426-04

CONSULTING & SAFET

1,460

Feet

365 730

H

Drawing date: 7-1-11 Drafted by: L. Weinheimer

0

### SB-1 SB-2 SB-3 Depth CI- PID LAB CI-GRO DRO LAB CI-Depth CI-Depth CI- PID GRO DRO PID LAB CI- GRO DRO 15 346 6.6 240 <10 <10 SS 531 0 SS 203 0 20 228 10.7 5 570 4.5 672 <10 30 5 393 1 25 169 9.9 80 <10 <10 229 3.6 10 0.1 10 1473 15 209 3.9 15 2779 0.2 4120 <10 <10 208 <10 20 181 9 <10 20 2713 0.2 25 2019 0 30 1573 0.7 35 5700 <10 <10 3210 2.7 40 1953 0.7 3040 <10 <10 Battery Lease Road Petroleum pipeline Petroleum pipeline Electrical lines SB-5 \$ 30 ft SB-4 Depth CI-PID LAB CI-GRO DRO SS 802 0.1 5 782 2.2 SB-3SB-6 SB-4 10 720 2.3 SB-7 S 30 ft S 15 935 1.8 S 20 1212 1.9 25 2165 2840 <10 <10 23 **MW 1** 30 1954 1.8 SB-1 35 ROC 2 in PVC abandoned 1577 1.2 S <10 40 1800 1 1650 <10 ROC 3 in poly M26 SB-2 S ROC 3 in poly Gas s pipeline ROC 2 in PVC abandoned SB-5 Depth CI-GRO DRO SB-6 SB-7 PID LAB CI-Depth CI- PID LAB CI- GRO DRO Depth CI-PID LAB CI-GRO DRO SS 173 0 32 <10 21.1 SS 2483 2320 5 169 1.5 SS 399 0 0 <10 31 5 632 1 5 1742 0.1 10 170 0.4 10 661 10 1919 0.9 1600 <10 <10 15 177 1.1 192 <10 24.6 1 1443 15 875 1.5 15 1.9 20 915 1.5 20 690 1.7 25 1000 25 1192 1.9 2.1 30 30 1247 27.2 1009 2.6 1600 Clay layer @ 12 ft bgs <10 <10 35 924 2 35 1341 38.6 DGW: 40 ft 2280 40 1007 1.9 1600 40 1563 26.3 <10 12.3 <10 <10 Figure 2 BD M-26-1 RICE ENVIRONMENTAL LEGALS: UL/M sec. 26 **T21S R37E** 10 20 40 0 CONSULTING & SAFET Feet NMOCD Case #: 1R426-04 Drawing date: 5-31-11 Drafted by: L. Weinheimer

## Soil bore and MW installation

# Appendix A Soil bore and MW logs with laboratory confirmation

RICE Environmental Consulting and Safety (RECS) P.O. Box 5630 Hobbs, NM 88241 Phone 575.393.4411 Fax 575.393.0293

Logger: Driller: H		Jordan Woodfin Harrison & Cooper, Inc.		SB-5 (5) SB-7 SB-4 SB-3 SB-6 (6) (6) (6) SB-7 (6) (6)		RECS				
Drilling N	lethod:	Air rota	ry ,	SB-1	Pro	ject Name:		Well ID:		
Start Date	e:	5/23/201	11	SB-2		BD M-26-	1	SB-1		
End Date		5/23/201	11		Pro	ject Consult	ant: RECS	S		
Comme	TD =	All sam DRAF 25 ft	ples wer TED BY:	re from cuttings. L. Weinheimer GW = 40 ft	Location: UL/M sec. 26 121S R3/E Lat: 32°26'46.092"N Long: 103°8'23.838"W County: Lea State: NM					
Depth (feet)	Depth chloride (feet) field tests LAB		PID	Description		Lithology	Well	Construction		
15 ft	346	CI- 240 GRO <10	6.6	Tan silty sand with caliche						
20 ft	228	<10	10.7					bentonite		
			10.7							
25 ft	169	CI- 80	9.9	Tan to red silty sand with caliche						
		GRO <10								
		DRO <10								

						-				
Logger:		Jo	rdan Wo	odfin	SB-5 (0) 30 ft SB-7 SB-4 SB-3 SB-6	RECS			5	
Driller:		Harris	on & Coo	per, Inc.	6 6 30 n 6 6		CONS	ULTING & SAFET	V. LLC	
Drilling I	Method:		Air rotar	У	SB-1	Pr	oject Name:		Well ID:	
Start Dat	te:		5/24/201	1	68.2		BD M-26-	1	SB-2	
End Date	e:	1.1	5/24/201	1	e e e e e e e e e e e e e e e e e e e	Pr	oject Consulta	nt: RECS	5	
Comme	ents: Lo	ocated	d 38 ft s All sam	outh of ples w	the former junction box site. ere from cuttings.	Lo	cation: UL/M	sec. 26 T	21S R37E	
			DRA	FTED B	Y: L. Weinheimer	Lat: 32 °26'45.894"N County: 1				
	T	D = 20	ft		GW = 40 ft	Lo	ng: 103°8'23.8	356"W	State: NM	
Depth (feet)	chlo field t	ride tests	LAB	PID	Description		Lithology	Well	Construction	
									)	
					Brown very fine sand with caliche					
SS	53	81		0.0						
	1.12	- 1				1			States .	
			CI-			12				
5 ft	57	0	672	4.5						
1.00	1		GRO							
		1.0	DRO							
N			30.0						bentonite	
10 ft	22	29	6.2	3.6					seal	
					Light brown to tan very fine silty sand					
1.0										
15 ft	20	)9		3.9						
20 ft	18	81	208	9.0		14				
			GRO							
			DRO		1				Sher -	
	1.1		<10							

Logger: Driller:		Jo Harrise	rdan Woo on & Coo	odfin per, Inc.	SB-5 (3) SB-7 SB-4 (5) (5) (5) (5) (5) (5) (5) (5)	RECS			
Drilling M Start Dat End Date Comme	Drilling Method:Air rotaryStart Date:5/24/2011End Date:5/24/2011Comments:Located at the source		y 1 1 source	of the former junction box site.	Project Name: Well ID: BD M-26-1 SB-3 Project Consultant: RECS				
	TC	) = 40	All sam DRAI	ples we	ere from cuttings. <b>/: L. Weinheimer</b> GW = 40 ft	Lat: 32 °26'46.27"N County: Le Long: 103 °8'23.854"W State: NM			
Depth (feet)	chlor field t	ride ests	LAB	PID	Description	Lithology	Well Construction		
					Brown very fine sand with some small caliche fragments				
	20,	3		0	Brownish red fine sand with small				
5 ft	39	3		1					
10 ft	147	3		0.1					
15 ft	277	9	CI- 4120 GRO <10	0.2	Tan very fine sand				
20 ft	271	3	DRO <10	0.2			bentonite		
25 ft	201	9		0	Red very fine sand with some clay		seal		
				0.7	Tan very fine silty sand				
30 TT	15/	3		0.7					
35 ft	321	0	Cl- 5700 GRO <10	2.7	Tan very fine sand with mixed in fine gravel				
40 ft	195	3	DRO <10 CI- 3040	0.7	9,4,0,				
			GRO <10 DRO <10						

Logger: Jordan Woodfin Driller: Harrison & Cooper, Inc.		odfin per, Inc.	SB-5 © SB-7 SB-4 SB-3 SB-6 © © ©	RECS				
Drilling I Start Dat End Date	Orilling Method: Air rotary   Start Date: 6/6/2011   End Date: 6/6/2011		y 1 1	SB-1 6 SB-2 0	Project Name: Well ID: BD M-26-1 SB-4 Project Consultant: PECS			
Comments: Located 24 ft west of t All samples we DRAFTED BY TD = 40 ft					the former junction box site. ere from cuttings. Y: L. Weinheimer GW = 40 ft	Location: UL/M sec. 26 T21S R37E Lat: 32°26'46.26"N County: Long: 103°8'24.133"W State: N		
Depth (feet)	chlo field t	ride tests	LAB	PID	Description	Lithology	Well Construction	
SS	80	12		0.1	Light brown to tan very fine sand			
5 ft	78	2		2.2	Brown slightly consolidated fine sand			
10 ft	72	20		2.3	Light brown very fine silty sand			
15 ft	93	5		1.8	Tan very fine silty sand with caliche			
20 ft	12	12		1.9	Light brown very fine silty sand with caliche		bentonite seal	
25 ft	216	65	CI- 2840 GRO <10 DRO	2.3				
30 ft	19	54	<10	1.8				
35 ft	15	77		1.2	Tan medium sand with some gravel			
40 ft	180	00	Cl- 1650 GRO	1				
			DRO <10					

						_					
Logger:		Jo	rdan Woo	odfin	SB-5 ©		RIC	RECS	44		
Driller:	· · · · · ·	Harris	on & Coo	per, Inc.	SB-7 SB-4 SB-3SB-5		CONST	TING & SAFETY	SAFETYLLC		
Drilling I	Method:	1.5	Air rotar	у	SB-1	Project Name: Well ID:			Well ID:		
Start Dat	te:		6/6/201	1	SE.2		BD M-26	-1	SB-5		
End Date	e:		6/6/201	1	() ()	Pr	oject Consult	ant: RECS	S		
Comme	ents: Lo	ratec	All sam	orth of ples w FTED B	the former junction box site. ere from cuttings. Y: L. Weinheimer	Location: UL/M sec. 26 T21S R37E Lat: 32 °26'46.476"N County: Le					
Denth		1 = 15			GVV = 40 It		ing: 103 623	VV 000.	State. INIVI		
Depth chlo (feet) field		tests LAB		PID	Description		Lithology	Well	Construction		
SS	17:	3	Cl- 32	0.0	Brown slightly consolidated very fine sand						
					Brown medium to fine sand						
5 ft	16	9		1.5		1					
						14			bentonite		
									seal		
10 ft	17	0		0.4		S.					
					I an very fine silty sand						
					]						
15 ft	17	7	CI- 192	1.1							
			GRO <10								
			DRO		1						
			24.6								

Logger:		Jo	rdan Woo	odfin	SB-5 (8) 30 ft	RICE ENVIRONMENTAL			L.
Driller:		Harriso	on & Coo	per, Inc.	SB-7 SB-4 SB-3 SB-6		CONSUL		re
Drilling N	Method:		Air rotar	ý	SB-1	Project Name: Well ID:			Well ID:
Start Dat	Start Date: 6/6/2011				BD M-26-1				SB-6
End Date	e:	ootoo	6/6/2011	oot of t	so former junction hav site	Pro	oject Consulta	nt: RECS	
Comme	ents: Lo	cateo	All sam	bles we	ere from cuttings.		cation: UL/M	sec. 26 12	215 R3/E
			DRA	TED BY	: L. Weinheimer	La	t: 32°26'46.282	2"N	County: Lea
	TD	= 40	ft		GW = 40 ft	Long: 103 °8'23.715"W State: NM			State: NM
Depth (feet)	chlor field te	ide ests	LAB	PID	Description		Lithology	Construction	
					Drawn ymr fina gand				)
					Brown very fine sand	13			
SS	399	)		0					
						1			
					Light brown very fine sand				
5 ft	632	2		1					
10 ft	661			1					
					Tan very fine silty sand				
15 ft	875	5		1.5					
20.4	015			15					bentonite
2011	915	,		1.5		1.			seal
					Light brown to red very fine silty				
	1.00				sand				
25 ft	100	0		2.1	the second s	4			
									No.
	-	-	CL						
30 ft	100	9	1600	2.6					
×	11/2/11	191	GRO <10						
	100	11	DRO		Tan medium sand with caliche and				
05.4	001		<10	0	some gravel				2
35 11	924	+		2					
	1		CI-						
40 ft	100	7	1600	1.9					
	1		GRO						
			DRO						
			<10						U

Logger		le	rdan We	odfin	SB-6		RICE	ENVIRONMENT	le le	
Driller.		JO	on & Coo	per Inc	30 ft SB-7 SB-4 SB-3 SB-6	RECS				
Drilling M Start Dat	Drilling Method:   Air rotary     Start Date:   6/6/2011		y I	SB-1		Project Name: Well ID: BD M-26-1 SR-7				
End Date	End Date: 6/6/2011				he former junction box site	Pro	oject Consulta	nt: RECS	015 B37E	
Comme	TD	= 40	All sam	ples we	re from cuttings. L. Weinheimer GW = 40 ft		t: 32°26'46.257	"N 7"W	County: Lea	
Depth (feet)	chlor field to	ide	LAB	PID	Description		Lithology	Well (	Construction	
			5.5		Light brown very fine sand some					
SS	248	3	Cl- 2320 GBO	0	caliche					
		201	<10 DRO 31.0		Red to brown fine silt					
5 ft	174	2		0.1						
-										
10 ft	191	9	GRO	0.9		6				
			<10 DRO <10							
15 ft	144	3		1.9	Tan very fine silty sand					
20 ft	690	)		1.7					bentonite	
25 ft	119	2		1.9		3.,				
30 ft	124	7		27.2						
35 #	124	1		38.6	Tan medium sand with gravelly calcihe					
00 11	134	-								
40 ft	156	3	CI- 2280	26.3						
			<10 DRO							

Logger: Driller:	На	Kyle Nor	man oper, Inc.	SB-7 SB-4 SB-3 SB-3 SB-7 SB-4 SB-3 SB-3 SB-6 SB-3 SB-3 SB-7 SB-4 SB-3 SB-3 SB-7 SB-3 SB-3 SB-3 SB-3 SB-7 SB-3 SB-3 SB-3 SB-3 SB-3 SB-3 SB-3 SB-3	Project Name: Well ID: BD M-26-1 MW- Project Consultant: RECS Location: UL/M sec. 26 T21S R37E Lat: 32 °26'46.136"N County Long: 103 %'23.706"W State: N			
Drilling M Start Date End Date Comme	Method: e: ents: MW-1 site. I	Mud rot 10/25/2 10/25/2 located No samp DRA 80 ft	ary 011 011 18 ft southwe les were tak FTED BY: L.	est of the former junction box en during installation. Weinheimer GW = 40 ft				
Depth (feet)	Chloride field test	LAB	PID	Description	Lithology	Well Constructio		
SS								
5 ft								
10 ft						bentonit		
15 ft	30					4 in PVC		
20 ft		_						
25 ft								
30 ft								
35 ft								
40 ft								
45 ft								
50 ft								
55 ft						sand pack		

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology		Well Construction
60 ft							
65 ft							
						N	
70 ft						1	
75 ft						3	
90.ft							



May 24, 2011

KATY JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD JCT. M-26-1

Enclosed are the results of analyses for samples received by the laboratory on 05/23/11 15:15.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D.Keine

Celey D. Keene Lab Director/Quality Manager



NOT GIVEN

### Analytical Results For:

	Rice Oper	ating Company		
	KATY JON	IES	•	
	112 W. Ta	aylor		
	Hobbs NM	1, 88240		
	Fax To:	(575) 397-1471		
Received: 05/23/2	011	Sampl	ing Date:	05/23/2011
Reported: 05/24/2	011	Sampl	ing Type:	Soil
Project Name: BD JCT.	M-26-1	Sampl	ing Condition:	** (See Notes)
Project Number: NONE G	IVEN	Sampl	e Received By:	Jodi Henson

### Sample ID: SB 1 @ 15' (H101048-01)

Project Location:

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	05/24/2011	ND	448	112	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/23/2011	ND	168	84.1	200	0.698	
DRO >C10-C28	<10.0	10.0	05/23/2011	ND	152	75.8	200	1.48	,
Surrogate: 1-Chlorooctane	98.9	% 70-130	)			**********			
Surrogate: 1-Chlorooctadecane	96. I	% 70-130	)						

### Sample ID: SB 1 @ 25' (H101048-02)

Chloride, SM4500CI-B	mg,	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	05/24/2011	ND	448	112	400	0.00	
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	05/23/2011	ND	168	84.1	200	0.698	
DRO >C10-C28	<10.0	10.0	05/23/2011	ND	152	75.8	200	1.48	
Surrogate: 1-Chlorooctane	105	% 70-130	•	-					
Surrogate: 1-Chlorooctadecane	100	% 70-130	1						

### Cardinal Laboratories

### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by client for 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 thirty (30) days after competion 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 use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celuy D.Kune

Celey D. Keene, Lab Director/Quality Manager



### Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

### **Cardinal Laboratories**

### \*=Accredited Analyte

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 client for analyses. All claims, including those for negligence and any other cause whitsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (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 the services hereunder by Cardinal, regardless of whether such chain is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D.Kune

Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES

# **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

1

(505) 393-2326 FAX (505) 393-247	76 (325) 673-7001	FAX (325)673-7020		İ					,	
Company Name: Rice Operating Company		OL TTIR				ANAL	YSIS F	REQUEST		
Project Manager: Katie Jones		P.O. #:						 		
Address: 122 W. Taylor		Company:			_	รเ				
City: Hobbs State: NM Z	Zip: 88240	Attn:				JO				
Phone #: 575-393-9174 Fax #: 575-397-	7-1471	Address:				įu∖				
Project #: Project Owner:		City:		W	H	//S				_
Project Name: 80 504, M-26-1		State: Zip:		91		uo				
Project Location:		Phone #:		-08		bite	sc			
Sampler Name: Jordan		Fax #:		3 F		s)	<u>іТ</u>			_
FOR LAB USE ONLY	MATRIX	PRESERV SAMPLI	U BN	19	.ə_	əì				
Lab I.D. Sample I.D.	900() яС 8язии ЯЭТАМС ЯЭТАМ	07 :25		1	L	əlqmo	<u> </u>			
Shund	(G)RAB ( 2ROUNI 3ROUNI 50IL 50IL 50IL 50IL	отнек Acid/BA CE / CO DAHER	TIME	<	<u> </u>	C				
1 58 1 2151		1/2-23-11	\$145an				╞			Γ
2561 8351	-	V 5-23-11	Sissan N	, _ /						
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LEASE KOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any or any end of the second second second second and other cause whether and be deep any end of the second cardinal cardinal behavior and any other cause whatsoever shall be deep the second second cardinal cardinal behavior and any other cause whatsoever shall be deep the second second cardinal cardinal behavior and any other cause whether and be behavior and the second sec	r claim artsing whether based in contra erned waived unless made in writing a	ict or tort, shall be limited to the amount pai not received by Cardinal within 30 days after the second use of the or house instruction	id by the client for the er completion of the app	altcable	-	]	1		-	1
filiates or successors arising out of or related to the performance of services hiereards by Call A Caling uished By:   Date:   Date:   Date:   Date:   Date:   Date:   Date:   P	dinal, regardless of whether such claim Received By:	n is based upon any of the above stated re-	Phone Result	: D Yes	No No	Add'I	hone #:			Г
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t Cardinal cannot accept verbal changes. Please fa	fax written changes to	505-39342476								
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May 27, 2011

Hack Conder Rice Operating Company 112 W. Taylor Hobbs, NM 88240

RE: BD JCT. M-26-1

Enclosed are the results of analyses for samples received by the laboratory on 05/25/11 8:15.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celez D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	05/25/2011	Sampling Date:	05/24/2011
Reported:	05/27/2011	Sampling Type:	Soil
Project Name:	BD JCT. M-26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

### Sample ID: SB 2 @ 5' (H101067-01)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BŞ	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	05/27/2011	ND	464	116	400	3.51	
трн 8015м	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	05/26/2011	ND	192	95.8	200	1.14	
DRO >C10-C28	30.0	10.0	05/26/2011	ND	164	81.8	200	5.38	
Surrogate: 1-Chlorooctane	88.9	% 70-130	1						
Surrogate: 1-Chlorooctadecane	89.5	% 70-130							

### Sample ID: SB 2 @ 20' (H101067-02)

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	05/27/2011	ND	464	116	400	3.51	
TPH 8015M mg/kg		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	05/26/2011	ND	192	95.8	200	1.14	
DRO >C10-C28	<10.0	10.0	05/26/2011	ND	164	81.8	200	5.38	
Surrogate: 1-Chlorooctane	89.1	% 70-130							
Surrogate: 1-Chlorooctadecane	97.3	% 70-130							

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	05/25/2011	Sampling Date:	05/24/2011
Reported:	05/27/2011	Sampling Type:	Soil
Project Name:	BD JCT. M-26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

### Sample ID: SB 3 @ 15' (H101067-03)

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4120	16.0	05/27/2011	ND	464	116	400	3.51	
TPH 8015M	mg/	kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/26/2011	ND	192	95.8	200	1.14	
DRO >C10-C28	<10.0	10.0	05/26/2011	ND	164	81.8	200	5.38	
Surrogate: 1-Chlorooctane	93.8 9	6 70-130							
Surrogate: 1-Chlorooctadecane	94.8 %	6 70-130							

### Sample ID: SB 3 @ 35' (H101067-04)

Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5700	16.0	05/27/2011	ND	464	116	400	3.51	
TPH 8015M mg/kg		/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	05/26/2011	ND	192	95.8	200	1.14	
DRO >C10-C28	<10.0	10.0	05/26/2011	ND	164	81.8	200	5.38	
Surrogate: 1-Chlorooctane	107 \$	% 70-130							
Surrogate: 1-Chlorooctadecane	103 9	% 70-130							

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Celez D. Kune

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 6



	Rice Operati	ng Company				
	Hack Conde					
	112 W. Taylor					
·	Hobbs NM, 8	38240				
•	Fax To:	(575) 397-1471				

Received:	05/25/2011	Sampling Date:	05/24/2011
Reported:	05/27/2011	Sampling Type:	Soil
Project Name:	BD JCT. M-26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

### Sample ID: SB 3 @ 40' (H101067-05)

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3040	16.0	05/27/2011	ND	464	116	400	3.51	
ТРН 8015М	mg/	kg	Analyze	d By: AB					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/26/2011	ND	192	95.8	200	1.14	
DRO >C10-C28	<10.0	10.0	05/26/2011	ND	164	81.8	200	5.38	
Surrogate: 1-Chlorooctane	. 107 %	6 70-130	)						
Surrogate: 1-Chlorooctadecane	97.4 %	6 70-130	)						

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### \*=Accredited Analyte

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Celuz D. Kune

Celey D. Keene, Lab Director/Quality Manager

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### **Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celuz D. Kune

Celey D. Keene, Lab Director/Quality Manager

PLEASE Lweinheimer@rice-ecs.com kjones@riceswd.com Hconder@riceswd.com; jwoodfin@rice-ecs.com; ANALYSIS REQUEST BACK, Add'l Phone # Add'l Fax #: TPH 8015 M Extended Thru C40 SAMPLES **Complete Cations/Anions** H9T sexaT D Yes 20 No **BTEX** TPH 8015 M NEED > > email results > ontreat or tork, shell be limited to the amount paid by the client for the. Ing wed received by Condinal within 30 days after completion of the applicable blows, loss of use, or loss of profils incurred by client, its subsidiaries Chlorides Phone Result: Fax Result: REMARKS: 03:00 03:45 TIME 02:30 02:50 03:30 SAMPLING 5/24/11 BILL TO DATE 101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603 CHECKED BY (505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020 • • 3 1 3 ZID (sheintui) ð † Cardinal cannot accept verbal changes. Please fax written changes to 505-393-24% : ЯЭНТО PRESERV Company: ICE / COOL Address: Phone #: 少24 P.O.#: State: Fax #: Attn: SA8/010A city: : ABHTO Sample Condition Cool Infact BOULT such clain ηιο MATRI lios > > waived unless made γ V Received By: Received By: *<u>SETAWETSAW</u>* Zip: 88240 **REOUNDWATER** Fax #: 575-397-1471 **& CONTAINERS** (G) AO BAR(D) 5 9 5 - ARDINAL LABORATORIES Project Owner: other cause whatspever shall be State: NM 2 i i i Company Name: Rice Operating Company Sample I.D. Project Location: BD Jct M-26-1 Jordan Woodfin once and any vilicat ale Project Manager: Hack Conder Sampler Name: Jordan Woodfin Sampler - UPS: - Bus - Other: Project Name: BD Jct M-26-1 (Circle One) Address: 122 West Taylor SB 3 @ 15' SB 3 @ 35' SB 3 @ 40' SB 2 @ 20' SB 2 @ 5' ses. All claims including those for medilg c. in no event shall Cardinal be liable to Phone #: 575-393-9174 and Damage Relinquis hed By: Relinquished By: Delivered Bv 5 FOR LAB USE ONLY 24 LEASE NOTE: Lability HIDICLe 7 city: Hobbs Ŀ Lab I.D. Project #:

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 6 of 6



June 14, 2011

Hack Conder Rice Operating Company 112 W. Taylor

Hobbs, NM 88240

RE: BD JCT M-26-1

Énclosed are the results of analyses for samples received by the laboratory on 06/07/11 16:12.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D.Keine

Celey D. Keene Lab Director/Quality Manager



BD JCT M-26-1

### Analytical Results For:

	Rice Oper	ating Company	
	Hack Con	der	
	112 W. Ta	aylor	
	Hobbs NM	1, 88240	
	Fax To:	(575) 397-1471	
Received: 06/07/20	11	Sampling Date:	06/06/2011
Reported: 06/14/20	11	Sampling Type:	Soil
Project Name: BD JCT M	-26-1	Sampling Condition:	Cool & Intact
Project Number: NONE GIV	/EN	Sample Received By:	Jodi Henson

### Sample ID: SB 4 @ 25' (H101180-01)

Project Location:

Chloride, SM4500CI-B	mg/l	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2840	16.0	06/09/2011	ND	448	112	400	0.00	
TPH 8015M	mg/l	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/10/2011	ND	180	89.9	200	1.10	
DRO >C10-C28	<10.0	10.0	06/10/2011	ND	207	103	200	2.50	
Surrogate: I-Chlorooctane	93.9%	6 70-130	1						
Surrogate: 1-Chlorooctadecane	116 %	6 70-130							

### Sample ID: SB 4 @ 40' (H101180-02)

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM		<u> </u>			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1650	16.0	06/09/2011	ND	448	112	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/11/2011	ND	180	89.9	200	1.10	
DRO >C10-C28	<10.0	10.0	06/11/2011	ND	207	103	200	2.50	
Surrogate: 1-Chlorooctane	97.4 9	% 70-130	•	•					
Surrogate: 1-Chlorooctadecane	119 %	6 70-130	•						

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	06/07/2011	Sampling Date:	06/06/2011
Reported:	06/14/2011	Sampling Type:	Soil
Project Name:	BD JCT M-26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	BD JCT M-26-1		

### Sample ID: SB 5 SURFACE SAMPLE (H101180-03)

Chloride, SM4500Cl-B mg/kg Analyzed By: HM Analyte Result Reporting Limit Method Blank Qualifier Analyzed BS % Recovery True Value QC RPD Chloride 32.0 16.0 06/09/2011 ND 448 112 400 0.00 TPH 8015M mg/kg Analyzed By: CK Analyte Result Reporting Limit Analyzed Method Blank BS % Recovery True Value QC RPD Qualifier GRO C6-C10 <10.0 10.0 06/11/2011 ND 180 89.9 200 1.10 DRO >C10-C28 21.1 10.0 06/11/2011 ND 207 103 200 2.50 Surrogate: 1-Chlorooctane 132 % 70-130 Surrogate: 1-Chlorooctadecane 141 % 70-130

### Sample ID: SB 5 @ 15' (H101180-04)

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	06/09/2011	ND	448	112	400	0.00	
TPH 8015M	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/11/2011	ND	180	89.9	200	1.10	
DRO >C10-C28	24.6	10.0	06/11/2011	ND	207	103	200	2.50	
Surrogate: 1-Chlorooctane	130 9	% 70-130							
Surrogate: 1-Chlorooctadecane	140 9	% 70-130							

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 8



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

Received:	06/07/2011	Sampling Date:	06/06/2011
Reported:	06/14/2011	Sampling Type:	Soil
Project Name:	BD JCT M-26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	BD JCT M-26-1		

### Sample ID: SB 6 @ 30' (H101180-05)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1600	16.0	06/09/2011	ND	448	112	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/11/2011	ND	180	89.9	200	1.10	
DRO >C10-C28	<10.0	10.0	06/11/2011	ND	207	103	200	2.50	
Surrogate: 1-Chlorooctane	96.0	% 70-130	)						
Surrogate: 1-Chlorooctadecane	117	% 70-130	)						

### Sample ID: SB 6 @ 40' (H101180-06)

Chloride, SM4500CI-B	mg,	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1600	16.0	06/09/2011	ND	448	112	400	0.00	
TPH 8015M	mg	'kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/11/2011	ND	180	89.9	200	1.10	
DRO >C10-C28	<10.0	10.0	06/11/2011	ND	207	103	200	2.50	
Surrogate: 1-Chlorooctane	109	% 70-130	)						
Surrogate: 1-Chlorooctadecane	126	% 70-130	)						

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Celuz D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	06/07/2011	Sampling Date:	06/06/2011
Reported:	06/14/2011	Sampling Type:	Soil
Project Name:	BD JCT M-26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	BD JCT M-26-1		

### Sample ID: SB 7 SURFACE SAMPLE (H101180-07)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2320	16.0	06/09/2011	ND	432	108	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/11/2011	ND	180	89.9	200	1.10	
DRO >C10-C28	31.0	10.0	06/11/2011	ND	207	103	200	2.50	
Surrogate: 1-Chlorooctane	96.4	% 70-130	)						
Surrogate: 1-Chlorooctadecane	99.7	% 70-130	)						

### Sample ID: SB 7 @ 10' (H101180-08)

Chloride, SM4500CI-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1600	16.0	06/09/2011	ND	432	108	400	3.64	
TPH 8015M	mg/	kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/11/2011	ND	180	89.9	200	1.10	
DRO >C10-C28	<10.0	10.0	06/11/2011	ND	207	103	200	2.50	
Surrogate: 1-Chlorooctane	175 %	% 70-130							
Surrogate: I-Chlorooctadecane	183 %	% 70-130							

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### \*=Accredited Analyte

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Celuz D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

Received:	06/07/2011	Sampling Date:	06/06/2011
Reported:	06/14/2011	Sampling Type:	Soil
Project Name:	BD JCT M-26-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	BD JCT M-26-1		

### Sample ID: SB 7 @ 40' (H101180-09)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2280	16.0	06/09/2011	ND	432	108	400	3.64	
TPH 8015M	mg	/kg	Analyze	d By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	06/11/2011	ND.	180	89.9	200	1.10	
DRO >C10-C28	12.3	10.0	06/11/2011	ND	207	103	200	2.50	
Surrogate: 1-Chlorooctane	130	% 70-130							
Surrogate: 1-Chlorooctadecane	137	% 70-130							

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



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

### **Notes and Definitions**

Z-01	One or more surrogates above historical limits.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500CI-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST ARDINAL LABORATORIES

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city: Hobbs	State: N	M	p: 88	240			Attn									<u>uo</u>	nı 						
Phone #: 575-393-917	4 Fax #: 57	5-397-	1471				Add	ress:									Ч <u>Т</u>						
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