1R - 427-318

REPORTS

DATE:

9-5-12

ARCADIS
Infrastructure, environment, buildings

RECEIVED OCD
2012 SEP 11 P 12:38

ARCADIS U.S., Inc.
1004 North Big Spring Street
Suite 300
Midland
Texas 79701
Tel 432.687.5400
Fax 432.687.5401
www.arcadis-us.com

Sent Certified Mail
Return Receipt No. 7002 2410 0001 5813 4071

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

Environmental

Subject:

ICP Report
EME Jct. F-29-2
Unit F, SEC. 29, T19S, R37E, Monument, Lea County, New Mexico
NMOCD CASE # 1R427-318

Date:
September 5, 2012

Contact:
Sharon Hall

Phone:
432.687.5400

Email:
sharon.hall@arcadis-us.cc

Our ref:
MT001104.0001

ARCADIS U.S., Inc.
TX Engineering License # F-533

Mr. Hansen:

RICE Operating Company (ROC) has retained ARCADIS U.S., Inc. (ARCADIS) to address potential environmental concerns at the above-referenced site. ROC is the service provider (agent) for the EME 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. Environmental projects of this nature require System Party AFE approval prior to work commencing at the site. In general, project funding is not forthcoming until NMOCD approves the work plan. Therefore, your timely review of this submission is greatly appreciated.

On behalf of ROC, ARCADIS respectfully submits this ICP Report and Corrective Action Plan (CAP) for the above-referenced site.

SITE HISTORY AND BACKGROUND

The site is located approximately one mile northwest of Monument, New Mexico as shown on the Site Location Map. Groundwater at the site will likely be encountered at a depth of 23 feet below ground surface (bgs). The junction box was eliminated and initial delineation was conducted from November 17th, 2008 through January 2nd, 2009. Initial delineation was completed with the drilling of a soil boring on November 3rd, 2009.

A backhoe was used to excavate soils from an excavation measuring 30 feet by 30 feet by 12 feet deep around the former junction box. Soil samples were collected at regular intervals and analyzed in the field for chlorides using field-adapted Standard Method 4500-Cl⁻B and screened in the field using a photoionization detector (PID).

A five-point wall composite sample was collected from each of the four walls and combined to make a representative four-wall composite sample, and a five-point composite sample was collected from the bottom of the excavation and submitted to Cardinal Laboratories for gasoline range organics (GRO), diesel range organics (DRO) and chloride analysis. DRO was detected at a concentration of 219 milligrams per kilogram (mg/kg) in the four-wall composite sample and 324 mg/kg in the five-point bottom composite sample. Chlorides were detected at a concentration of 272 mg/kg in the four-wall composite sample and 352 mg/kg in the five-point composite bottom sample. GRO was not detected in either of the samples.

Based on the results of the soil sampling analytical results, elevated hydrocarbon concentrations are present at the subject site.

Excavated soils were blended on site with clean imported back soil and backfilled into the excavation to ground surface. The area was contoured to the surrounding landscape.

A sample of the blended backfill material was submitted to Cardinal Laboratories for GRO, DRO and chloride analysis. DRO was detected at a concentration of 474 mg/kg. Chlorides were detected at a concentration of 144 mg/kg. GRO was not detected.

ROC disclosed potential groundwater impact at the site to New Mexico Oil Conservation Division (NMOCD) via e-mail on May 7th, 2009.

To further investigate the depth of hydrocarbon impact at the site, a soil boring was advanced 13 feet south of the former junction box location. Soil samples were collected every three feet and analyzed in the field for chlorides using field-adapted Standard Method 4500-Cl⁻B and screened in the field using a photoionization detector (PID). Two samples were submitted to Cardinal Laboratories for laboratory analysis. The 15 foot sample was submitted for GRO, DRO and chloride analysis. Chlorides were detected at a concentration of 400 mg/kg. GRO and DRO were not detected. The 19-21 foot sample was submitted for GRO, DRO, benzene, toluene, ethylbenzene, xylenes and chloride analysis. GRO was detected at a concentration

of 139 mg/kg and DRO was detected at a concentration of 1,180 mg/kg. Chlorides were detected at a concentration of 352 mg/kg. Benzene was not detected. Toluene, ethylbenzene and xylenes were detected at concentrations of 0.136, 0.310 and 2.52 mg/kg, respectively.

The borehole was plugged with bentonite from surface to total depth.

A disclosure report was submitted to NMOCD in the 2009 junction box closures and disclosures. ROC submitted an ICP to NMOCD on May 30, 2012 and was approved by NMOCD on June 7, 2012.

ICP INVESTIGATION RESULTS

Seven soil borings (SB-2 through SB-8) were drilled at the site. Soil boring (SB-2) was advanced at the former junction box location and the other six soil borings were advanced 20 feet S/SW (SB-3), 25 feet E/SE (SB-4), 28 feet N/NE (SB-5), 23 feet W/NW (SB-6), 32 feet SE (SB-7) and 30 feet NW (SB-8) of the former junction box location.

Five soil borings (SB-2 through SB-6) were drilled July 11 and 12, 2012, and two soil borings (SB-7 and SB-8) were drilled on August 9, 2012. The soil borings were drilled to depths of 6 to 21 feet bgs. Soil samples were collected every three feet and analyzed in the field for chlorides using field-adapted Method 4500-Cl-B and screened in the field using a PID. Two samples from each boring were submitted to Cardinal Laboratories and analyzed for chlorides, GRO and DRO.

SB-2 laboratory analysis resulted in a decrease in chloride concentration from 160 mg/kg at 15 feet bgs to 144 mg/kg at 21 feet bgs. SB-3 concentrations were low throughout, all below 128 mg/kg. SB-4 decreased from 528 mg/kg at 9 feet bgs to 192 mg/kg at 15 feet bgs. SB-5 and SB-6 concentrations were also low, all below 80 mg/kg. SB-7 decreased from 336 mg/kg at 3 feet bgs to 304 mg/kg at 9 feet bgs. SB-8 remained the same with 304 mg/kg at 6 and 9 feet bgs.

GRO was non-detect throughout all borings. SB-2 laboratory analysis resulted in a DRO concentration of 333 mg/kg at 15 feet bgs and 367 mg/kg at 21 feet bgs. SB-3 decreased from 60.8 mg/kg at surface to <50 mg/kg at 6 feet bgs. SB-4 resulted in a DRO concentration of 16.4 mg/kg at 9 feet bgs to 92.5 mg/kg at 15 feet bgs. SB-5 decreased from 16.9 mg/kg at surface to <10 mg/kg at 6 feet bgs. SB-6 decreased from 701 mg/kg at surface to 446 mg/kg at 6 feet bgs. SB-7 decreased from 11.6

mg/kg at 3 feet bgs to <10 mg/kg at 9 feet bgs. SB-8 decreased from 398 mg/kg at 6 feet bgs to 215 mg/kg at 9 feet bgs.

In addition to chloride, GRO and DRO, the sample at SB-2 (15 feet bgs) was submitted for benzene, toluene, ethylbenzene and xylenes (BTEX). BTEX was not detected in the sample (see attached figures and soil boring logs).

ARCADIS recommends analyzing the data to determine the next corrective action. Upon completion of analyzation, a report documenting Corrective Actions based upon these results will be submitted.

Thank you for your consideration concerning this ICP Report. If you have any questions, do not hesitate to contact Hack Conder or me.

Sincerely,

ARCADIS U.S., Inc.

Sharon E. Hall

Sharon E. Hall
Associate Vice President

Copies:
Hack Conder, ROC

Attachments:
Site Location Map
Soil Boring Soil Data and Proposed Liner Figure
Soil Boring Logs and Laboratory Analysis
Photographs

Site Location Map

RICE ENVIRONMENTAL
RECS
CONSULTING & SAFETY, LLC

EME jct. F-29-2

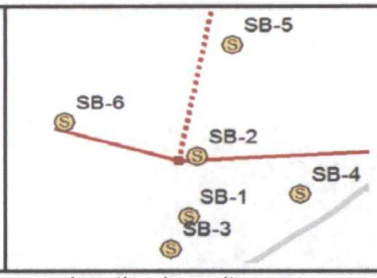
Legals: UL/F sec. 29
T-19-S R-37-E
LEA COUNTY, NM

Case #: 1R427-318

N
W E
S

0 0.125 0.25 0.5
Miles

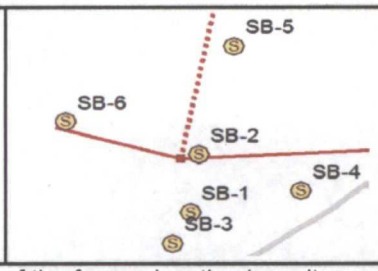
Drawing date: 5-1-12
Drafted by: L. Weinheimer

Logger:	Kyle Norman		RICE ENVIRONMENTAL RECS CONSULTING & SAFETY, LLC
Driller:	Harrison & Cooper, Inc.		**Project Name:** EME Jct. F-29-2 **Well ID:** SB-2
Drilling Method:	Air Rotary		**Project Consultant:** ARCADIS U.S., Inc.
Start Date:	7/11/2012		
End Date:	7/11/2012		

Comments: Located at the former junction box site.
All samples were from cuttings.
DRAFTED BY: A.C. Ruth
TD = 21 ft. GW = 23 ft.

Location: UL/F sec. 29 T-19-S R-37-E
Lat: 32°38'4.595"N **Long:** 103°16'31.912"W **County:** Lea **State:** NM

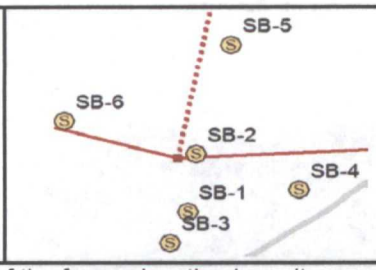
Depth (feet)	Chloride field	LAB	PID	Description	Lithology	Well Construction
				Regolith		
SS						
3 ft						
6 ft						
9 ft						
12 ft						
15 ft	196	Cl- 160	399.7	Tan Sand with Caliche		bentonite seal
B: <0.05	E: <0.05	GRO <50				
T: <0.05	X: <0.15	DRO 333				
18 ft	177		182			
21 ft	166	Cl- 144	82.2			
		GRO <50				
		DRO 367				

Logger:	Kyle Norman		RICE ENVIRONMENTAL RECS CONSULTING & SAFETY, LLC
Driller:	Harrison & Cooper, Inc.		**Project Name:** EME Jct. F-29-2 **Well ID:** SB-3
Drilling Method:	Air Rotary		**Project Consultant:** ARCADIS U.S., Inc.
Start Date:	7/11/2012		
End Date:	7/11/2012		

Comments: Located 20 ft. S/SW of the former junction box site. All samples were from cuttings.
DRAFTED BY: A.C. Ruth
TD = 6 ft. GW = 23 ft.

Location: UL/F sec. 29 T-19-S R-37-E
Lat: 32°38'4.389"N **County:** Lea
Long: 103°16'31.973"W **State:** NM

Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
				Brown Sand		
SS	121	Cl- <16	20.4			
		GRO <50		Tan Sand with Caliche		
		DRO 60.8				
3 ft	142		4.4			
6 ft	157	Cl- 128	9.6			
		GRO <50				
		DRO <50				

Logger:	Kyle Norman		**Project Name:** EME Jct. F-29-2 **Well ID:** SB-4
Driller:	Harrison & Cooper, Inc.		**Project Consultant:** ARCADIS U.S., Inc.
Drilling Method:	Air Rotary		
Start Date:	7/11/2012		
End Date:	7/11/2012		

Comments: Located 25 ft. E/SE of the former junction box site.
All samples were from cuttings.
DRAFTED BY: A.C. Ruth

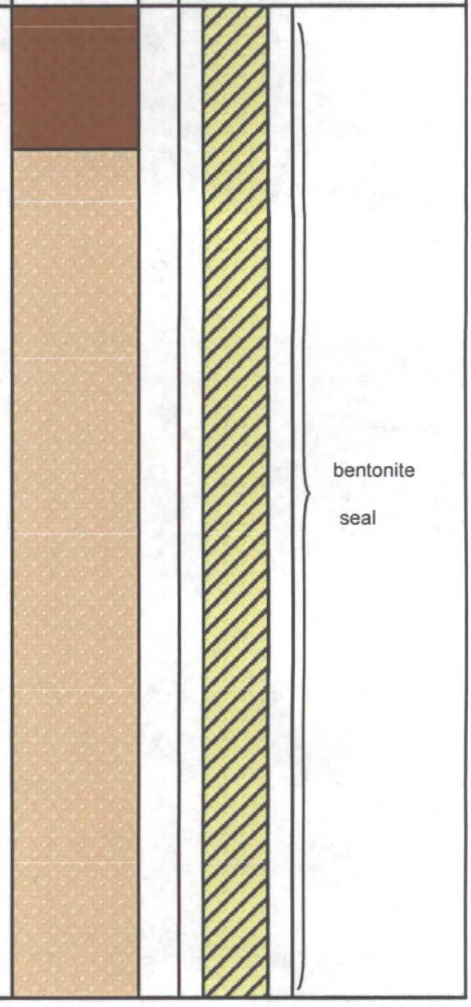
TD = 15 ft. GW = 23 ft.

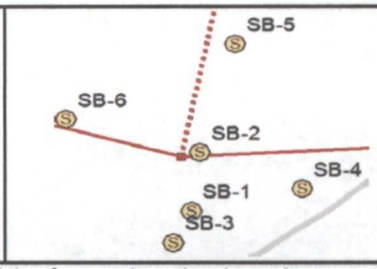
Location: UL/F sec. 29 T-19-S R-37-E

Lat: 32°38'4.509"N **County**: Lea

Long: 103°16'31.68"W **State**: NM

Depth (feet)	Chloride field tests	LAB	PID	Description
				Brown Sand
SS	141		0.9	
				Tan Sand with Caliche
3 ft	146		12.9	
6 ft	420		4.8	
9 ft	483	Cl- 528	3.4	
		GRO <10		
		DRO 16.4		
12 ft	285		1.6	
15 ft	171	Cl- 192	3.6	
		GRO <50		
		DRO 92.5		



Logger:	Kyle Norman		RICE ENVIRONMENTAL RECS CONSULTING & SAFETY, LLC
Driller:	Harrison & Cooper, Inc.		**Project Name:** EME Jct. F-29-2 **Well ID:** SB-5
Drilling Method:	Air Rotary		**Project Consultant:** ARCADIS U.S., Inc.
Start Date:	7/12/2012		
End Date:	7/12/2012		

Comments: Located 28 ft. N/NE of the former junction box site.
All samples were from cuttings.
DRAFTED BY: A.C. Ruth

TD = 6 ft. GW = 23 ft.

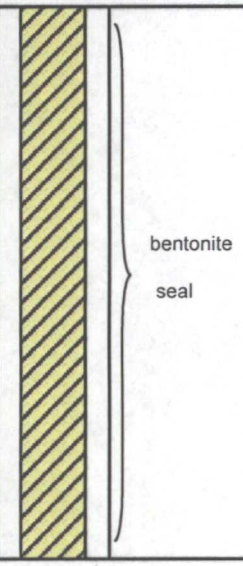
Location: UL/F sec. 29 T-19-S R-37-E

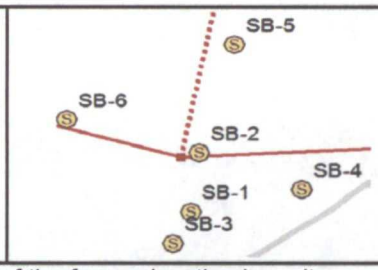
Lat: 32°38'4.835"N **County**: Lea
Long: 103°16'31.827"W **State**: NM

Depth (feet)	Chloride field tests	LAB	PID	Description
				Brown Sand
SS	86	Cl- <16	11	
		GRO <10		Tan Sand with Caliche
		DRO 16.9		
3 ft	82		17.6	
6 ft	117	Cl- 80	14.5	
		GRO <10		
		DRO <10		

Lithology

Well Construction



Logger:	Kyle Norman		**Project Name:** EME Jct. F-29-2 **Well ID:** SB-6
Driller:	Harrison & Cooper, Inc.		**Project Consultant:** ARCADIS U.S., Inc.
Drilling Method:	Air Rotary		
Start Date:	7/12/2012		
End Date:	7/12/2012		

Comments: Located 23 ft. W/NW of the former junction box site.
All samples were from cuttings.
DRAFTED BY: A.C. Ruth
TD = 6 ft. GW = 23 ft.

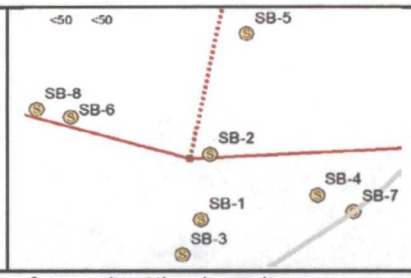
Location: UL/F sec. 29 T-19-S R-37-E
Lat: 32°38'4.669"N **County**: Lea
Long: 103°16'32.209"W **State**: NM

Depth (feet)	Chloride field tests	LAB	PID	Description
				Brown Sand
SS	121	Cl- <16	9.9	
		GRO <50		Tan Sand with Caliche
		DRO 701		
3 ft	93		6.2	
6 ft	89	Cl- 48	3.4	
		GRO <50		
		DRO 446		

Lithology

Well Construction

bentonite seal

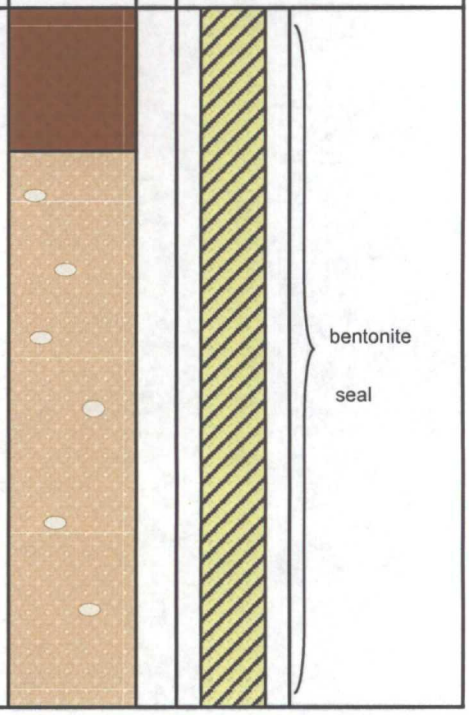
Logger:	Kyle Norman		RICE ENVIRONMENTAL RECS CONSULTING & SAFETY, LLC
Driller:	Harrison & Cooper, Inc.		**Project Name:** EME Jct. F-29-2 **Well ID:** SB-7
Drilling Method:	Air Rotary		**Project Consultant:** ARCADIS U.S., Inc.
Start Date:	8/9/2012		
End Date:	8/9/2012		

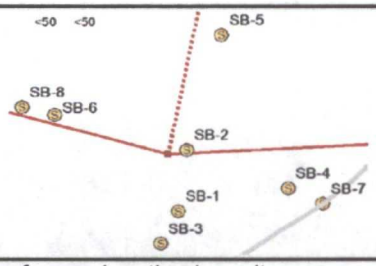
Comments: Located 32 ft. SE of the former junction box site.
All samples were from cuttings.
DRAFTED BY: Amy C. Ruth
TD = 9 ft. GW = 23 ft.

Location: UL/F sec. 29 T-19-S R-37-E

Lat: 32°38'4.474"N **Long:** 103°16'31.605"W **County**: Lea **State**: NM

Depth (feet)	Chloride field tests	LAB	PID	Description
				Brown Sand
SS	116		8	
				Tan Sand With Some Caliche
3 ft	320	Cl- 336	5.5	
		GRO <10		
		DRO 11.6		
6 ft	299		51.5	
9 ft	244	Cl- 304	39.2	
		GRO <10		
		DRO <10		



Logger:	Kyle Norman		RICE ENVIRONMENTAL RECS CONSULTING & SAFETY, LLC
Driller:	Harrison & Cooper, Inc.		**Project Name:** EME Jct. F-29-2 **Well ID:** SB-8
Drilling Method:	Air Rotary		**Project Consultant:** ARCADIS U.S., Inc.
Start Date:	8/9/2012		
End Date:	8/9/2012		

Comments: Located 30 ft. NW of the former junction box site.
All samples were from cuttings.
DRAFTED BY: **Amy C. Ruth**

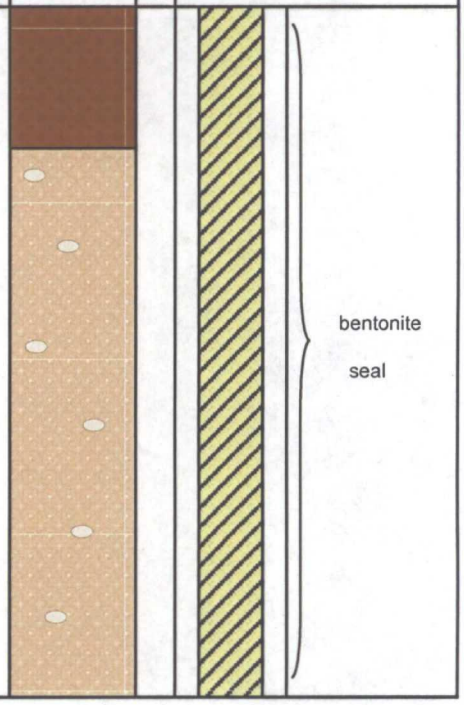
TD = 9 ft. GW = 23 ft.

Location: UL/F sec. 29 T-19-S R-37-E

Lat: 32°38'4.685"N **County**: Lea

Long: 103°16'32.285"W **State**: NM

Depth (feet)	Chloride field tests	LAB	PID	Description
				Brown Sand
SS	91		2.6	
				Tan Sand With Some Caliche
3 ft	116		4	
6 ft	331	Cl- 304	13.2	
		GRO <50		
		DRO 398		
9 ft	233	Cl- 304	1.4	
		GRO <50		
		DRO 215		



EME Jct. F-29-2
Unit F, Section 29, T-19-S, R-37-E

Drilling SB-7, facing south 8/9/12

Plugging SB-7 in total with bentonite 8/9/12

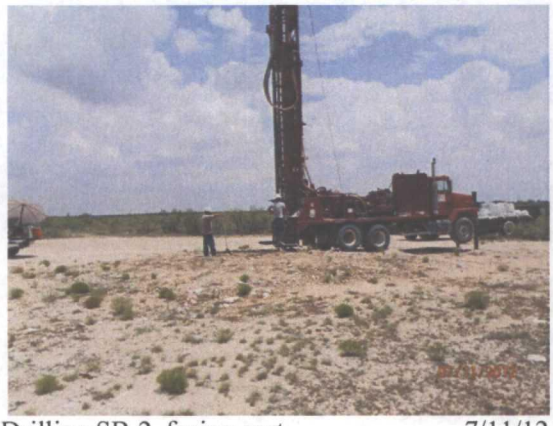
Completed SB-7, facing west 8/9/12

Drilling SB-8, facing north 8/9/12


Plugging SB-8 in total with bentonite 8/9/12

Completed SB-8, facing west 8/9/12

EME Jct. F-29-2
Unit F, Section 29, T-19-S, R-37-E



Drilling SB-2, facing east 7/11/12

Plugging SB-2 in total with bentonite 7/11/12

Completed SB-2, facing north 7/11/12

Drilling SB-3, facing west 7/11/12

Plugging SB-3 in total with bentonite 7/11/12

Completed SB-3, facing west 7/11/12

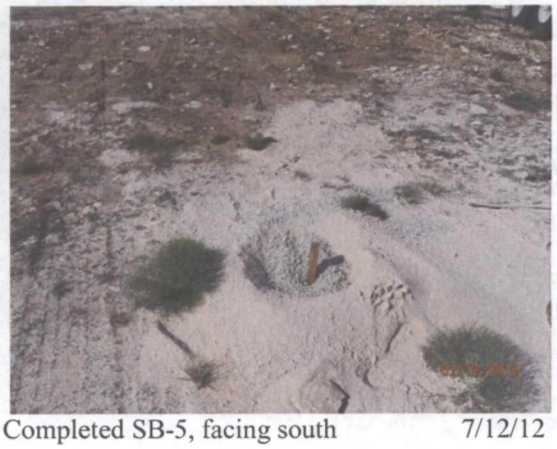
Drilling SB-4, facing south 7/11/12

Plugging SB-4 in total with bentonite 7/11/12

Completed SB-4, facing south 7/13/12

Drilling SB-5, facing south 7/12/12

Plugging SB-5 in total with bentonite 7/12/12



Completed SB-5, facing south 7/12/12

Drilling SB-6, facing west 7/12/12

Plugging SB-6 in total with bentonite 7/12/12

Completed SB-6, facing west 7/13/12

CARDINAL Laboratories

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

July 17, 2012

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: EME F-29-2 JCT. 19S/37E

Enclosed are the results of analyses for samples received by the laboratory on 07/11/12 16:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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 (V1, 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. 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:	07/11/2012	Sampling Date:	07/11/2012
Reported:	07/17/2012	Sampling Type:	Soil
Project Name:	EME F-29-2 JCT. 19S/37E	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SB 2 @ 15' (H201587-01)

BTEX 8021B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/17/2012	ND	1.88	93.9	2.00	2.82	
Toluene*	<0.050	0.050	07/17/2012	ND	1.89	94.5	2.00	3.09	
Ethylbenzene*	<0.050	0.050	07/17/2012	ND	1.94	97.1	2.00	4.36	
Total Xylenes*	<0.150	0.150	07/17/2012	ND	5.85	97.4	6.00	4.60	

Surrogate: 4-Bromofluorobenzene (PID *104 %* *89.4-126*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**160**	16.0	07/13/2012	ND	400	100	400	0.00	

TPH 8015M mg/kg **Analyzed By: AM** **S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	07/13/2012	ND	164	82.2	200	0.261	
DRO >C10-C28	**333**	50.0	07/13/2012	ND	166	83.0	200	0.729	

Surrogate: 1-Chlorooctane *61.3 %* *65.2-140*

Surrogate: 1-Chlorooctadecane *124 %* *63.6-154*

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 whatsoever 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 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.

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:	07/11/2012	Sampling Date:	07/11/2012
Reported:	07/17/2012	Sampling Type:	Soil
Project Name:	EME F-29-2 JCT. 19S/37E	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SB 2 @ 21' (H201587-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	07/13/2012	ND	400	100	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	07/13/2012	ND	164	82.2	200	0.261	
DRO >C10-C28	**367**	50.0	07/13/2012	ND	166	83.0	200	0.729	

Surrogate: 1-Chlorooctane	*66.6 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*140 %*	*63.6-154*

Sample ID: SB 3 @ SURFACE (H201587-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/13/2012	ND	400	100	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	07/13/2012	ND	164	82.2	200	0.261	
DRO >C10-C28	**60.8**	50.0	07/13/2012	ND	166	83.0	200	0.729	

Surrogate: 1-Chlorooctane	*68.4 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*105 %*	*63.6-154*

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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:	07/11/2012	Sampling Date:	07/11/2012
Reported:	07/17/2012	Sampling Type:	Soil
Project Name:	EME F-29-2 JCT. 19S/37E	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SB 3 @ 6' (H201587-04)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	07/13/2012	ND	400	100	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	07/13/2012	ND	164	82.2	200	0.261	
DRO >C10-C28	<50.0	50.0	07/13/2012	ND	166	83.0	200	0.729	

Surrogate: 1-Chlorooctane	*73.7 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*102 %*	*63.6-154*

Sample ID: SB 4 @ 9' (H201587-05)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**528**	16.0	07/13/2012	ND	400	100	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/13/2012	ND	164	82.2	200	0.261	
DRO >C10-C28	**16.4**	10.0	07/13/2012	ND	166	83.0	200	0.729	

Surrogate: 1-Chlorooctane	*86.5 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*110 %*	*63.6-154*

Cardinal Laboratories

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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:	07/11/2012	Sampling Date:	07/11/2012
Reported:	07/17/2012	Sampling Type:	Soil
Project Name:	EME F-29-2 JCT. 19S/37E	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SB 4 @ 15' (H201587-06)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**192**	16.0	07/13/2012	ND	400	100	400	0.00	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	07/13/2012	ND	164	82.2	200	0.261	
DRO >C10-C28	**92.5**	50.0	07/13/2012	ND	166	83.0	200	0.729	

Surrogate: 1-Chlorooctane	*72.8 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*112 %*	*63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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 SM4500Cl-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

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 whatsoever 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 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.

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		**BILL TO**	
Project Manager: Hack Conder		P.O. #:	
Address:		Company:	
City: Hobbs	State: NM Zip: 88240	Attn:	
Phone #:	Fax #:	Address:	
Project #:	Project Owner:	City:	
Project Name:		State: Zip:	
Project Location: EME F29-2 Sec. 14S-37E		Phone #:	
Sampler Name: Kyle Norman		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	TDS					
H20156																									
1	SB2 @ 15'	C	1			X					X		7-9-12	8:00	✓	✓	✓								
2	SB2 @ 21'	C	1			X					X		"	8:30	✓	✓									
3	SB3 @ Surface	C	1			X					X		"	21:45	✓	✓									
4	SB3 @ 6'	C	1			X					X		"	2:40	✓	✓									
5	SB4 @ 9'	C	1			X					X		"	3:30	✓	✓									
6	SB4 @ 15'	C	1			X					X		"	4:00	✓	✓									

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Relinquished By: Kyle	Date: 7-9-12 Time: 4:40	Received By: Jodi Henson	
Relinquished By:	Date: Time:	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	

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

REMARKS:

email results: zconder@rice-ecs.com
Knorman@rice-ecs.com; lpena@riceswd.com
Kjones@riceswd.com; Bbaker@rice-ecs.com;
hconder@rice-ecs.com; Lweinheimer@rice-ecs.com

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

#26

CARDINAL Laboratories

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

July 17, 2012

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: EME F-29-2 JCT. 19S/37E

Enclosed are the results of analyses for samples received by the laboratory on 07/12/12 15:26.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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 (V1, 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. 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:	07/12/2012	Sampling Date:	07/12/2012
Reported:	07/17/2012	Sampling Type:	Soil
Project Name:	EME F-29-2 JCT. 19S/37E	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SB 5 @ SURFACE (H201595-01)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/16/2012	ND	416	104	400	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/16/2012	ND	174	87.0	200	0.184	
DRO >C10-C28	**16.9**	10.0	07/16/2012	ND	185	92.6	200	5.08	

Surrogate: 1-Chlorooctane	*79.1 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*104 %*	*63.6-154*

Sample ID: SB 5 @ 6' (H201595-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	07/16/2012	ND	416	104	400	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	07/16/2012	ND	174	87.0	200	0.184	
DRO >C10-C28	<10.0	10.0	07/16/2012	ND	185	92.6	200	5.08	

Surrogate: 1-Chlorooctane	*75.7 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*95.6 %*	*63.6-154*

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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:	07/12/2012	Sampling Date:	07/12/2012
Reported:	07/17/2012	Sampling Type:	Soil
Project Name:	EME F-29-2 JCT. 19S/37E	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SB 6 @ SURFACE (H201595-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/16/2012	ND	416	104	400	3.92	

TPH 8015M mg/kg **Analyzed By: AM** **S-06**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	07/16/2012	ND	174	87.0	200	0.184	
DRO >C10-C28	**701**	50.0	07/16/2012	ND	185	92.6	200	5.08	

Surrogate: 1-Chlorooctane	*59.9 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*175 %*	*63.6-154*

Sample ID: SB 6 @ 6' (H201595-04)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	07/16/2012	ND	416	104	400	3.92	

TPH 8015M mg/kg **Analyzed By: AM** **S-04**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	07/16/2012	ND	174	87.0	200	0.184	
DRO >C10-C28	**446**	50.0	07/16/2012	ND	185	92.6	200	5.08	

Surrogate: 1-Chlorooctane	*64.0 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*130 %*	*63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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 SM4500Cl-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. 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	**BILL TO**	
Project Manager:	Hack Conder	P.O. #:	
Address:		Company:	
City: Hobbs	State: NM Zip: 88240	Attn:	
Phone #:	Fax #:	Address:	
Project #:	Project Owner:	City:	
Project Name:		State: Zip:	
Project Location:	EME F-29 Jct. 195-37E	Phone #:	
Sampler Name:	Kyle Norman	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	TDS
H201595																				
1	SB5 @ Surface	G	1			✓					✓		7-12-13	9:15	✓	✓				
2	SB5 @ 6'	G	1			✓					✓		"	9:25	✓	✓				
3	SB6 @ Surface	G	1			✓					✓		"	10:15	✓	✓				
4	SB6 @ 6'	G	1			✓					✓		"	10:30	✓	✓				

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 the client for the 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 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 services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 7-12-13 Time: 3:26	Received By:	Jodi Henson
Relinquished By:	Date: Time:	Received By:	

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

Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No

CHECKED BY: (Initials)

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

email results: zconder@rice-ecs.com
Knorman@rice-ecs.com; lpena@riceswd.com
Kjones@riceswd.com; Bbaker@rice-ecs.com;
hconder@rice-ecs.com; Lweinheimer@rice-ecs.com

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

#26

CARDINAL Laboratories

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

August 14, 2012

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: EME F-29-2 JCT. 19S/37E

Enclosed are the results of analyses for samples received by the laboratory on 08/09/12 15:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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 (V1, 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. 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:	08/09/2012	Sampling Date:	08/09/2012
Reported:	08/14/2012	Sampling Type:	Soil
Project Name:	EME F-29-2 JCT. 19S/37E	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SB 7 @ 3' (H201852-01)

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	08/13/2012	ND	400	100	400	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/13/2012	ND	188	94.1	200	0.729	
DRO >C10-C28	**11.6**	10.0	08/13/2012	ND	190	95.1	200	0.877	

Surrogate: 1-Chlorooctane	*89.7 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*91.4 %*	*63.6-154*

Sample ID: SB 7 @ 9' (H201852-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**304**	16.0	08/13/2012	ND	400	100	400	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/13/2012	ND	188	94.1	200	0.729	
DRO >C10-C28	<10.0	10.0	08/13/2012	ND	190	95.1	200	0.877	

Surrogate: 1-Chlorooctane	*91.7 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*90.8 %*	*63.6-154*

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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:	08/09/2012	Sampling Date:	08/09/2012
Reported:	08/14/2012	Sampling Type:	Soil
Project Name:	EME F-29-2 JCT. 19S/37E	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: SB 8 @ 6' (H201852-03)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**304**	16.0	08/13/2012	ND	400	100	400	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	08/13/2012	ND	188	94.1	200	0.729	
DRO >C10-C28	**398**	50.0	08/13/2012	ND	190	95.1	200	0.877	

Surrogate: 1-Chlorooctane	*76.6 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*128 %*	*63.6-154*

Sample ID: SB 8 @ 9' (H201852-04)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**304**	16.0	08/13/2012	ND	400	100	400	3.92	

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	08/13/2012	ND	188	94.1	200	0.729	
DRO >C10-C28	**215**	50.0	08/13/2012	ND	190	95.1	200	0.877	

Surrogate: 1-Chlorooctane	*78.0 %*	*65.2-140*
Surrogate: 1-Chlorooctadecane	*116 %*	*63.6-154*

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

QM-4X	The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance 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 SM4500Cl-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. 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		**BILL TO**	
Project Manager: Hack Conder		P.O. #:	
Address:		Company:	
City: Hobbs	State: NM Zip: 88240	Attn:	
Phone #:	Fax #:	Address:	
Project #:	Project Owner:	City:	
Project Name:		State: Zip:	
Project Location: EME F-29-L Sec 25-T		Phone #:	
Sampler Name: Kyle Norman		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	TDS
H201852																				
1	SB 7 @ 3'	G	1			✓					✓		5-7-12	10:00	✓	✓				
2	SB 7 @ 9'	G	1			✓					✓		"	10:25	✓	✓				
3	SB8 @ 6'	G	1			✓					✓		"	11:00	✓	✓				
4	SB8 @ 9'	G	1			✓					✓		"	11:15	✓	✓				

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Relinquished By:	Date: 5-7-12	Received By: Jodi Henson	
	Time: 3:50		
Relinquished By:	Date:	Received By:	
	Time:		

Delivered By: (Circle One)	Sample Condition	CHECKED BY:	
Sampler - UPS - Bus - Other:	Cool ☑ Yes ☐ No	Intact ☑ Yes ☐ No	(Initials)

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

REMARKS:

email results: zconder@rice-ecs.com
Knorman@rice-ecs.com; lpena@riceswd.com
Kjones@riceswd.com; Bbaker@rice-ecs.com;
hconder@rice-ecs.com; Lweinheimer@rice-ecs.com

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

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