

AP - 98

**STAGE 1 & 2  
REPORTS**

**DATE:**  
9-16-13

RECEIVED OCD

2013 SEP 18 PM 1:54

**L. Peter Galusky, Jr. Ph.D., P.G.**

**Texerra LLC**

20055 Laredo Lane Monument, CO 80132  
Tel: 719-339-6791 E-mail: [lpg@texerra.com](mailto:lpg@texerra.com)

September 16<sup>th</sup>, 2013

**Mr. Edward Hansen**

New Mexico Energy, Minerals, & Natural Resources  
Oil Conservation Division, Environmental Bureau  
1220 S. St. Francis Drive  
Santa Fe, New Mexico 87504

Re: **Termination Request**

Rice Operating Company – Hobbs Jct. E-4  
UL E, Sec 4, T19S, R38E  
**OCD Case No. AP-98**

Sent via Certified Mail w/ Return Receipt No. 7007 2560 0001 9729 0706

**Mr. Hansen:**

Rice Operating Company (ROC) has completed the remedial work outlined in their Abatement Plan and Addendum of April 23, 2013, approved by NMOCD on April 25, 2013, for the Hobbs Jct E-4 site, as summarized below:

- On May 10, 2013, all five monitor wells (MW-1 through MW-5) were plugged and abandoned using a 1-3% bentonite/concrete slurry and a 3 ft cap of concrete.
- Beginning on June 14, 2013, soils encompassing an area of approximately 20 by 60 ft were excavated to a depth of 5 +/- ft bgs. A total of approximately 264 yds of chloride-impacted soils were hauled to and disposed at the Sundance facility. These were replaced by an equivalent volume of clean soil imported from Wallach. Laboratory analysis of the imported soil (blow sand 8 pt comp) resulted in a chloride concentration of <16 mg/kg and a field PID reading of 1.5 ppm.
- Approximately 6 inches of clean blow sand were added to the bottom of the excavation to serve as padding.
- A 20 mil reinforced synthetic liner was carefully installed above the blow sand padding and approximately 6 more inches of clean blow sand were padded above the liner.
- The excavation was backfilled to ground surface using the remaining excavated soil and imported blow sand. Laboratory analysis of the excavated soil (backfill 8 pt comp) resulted in a chloride concentration of 160 mg/kg and a field PID reading of 2.5 ppm.
- Silt net fencing was installed, the site was tilled, and amendments were added to the soil. Then the area was seeded with a blend of native vegetation.

As these actions have ensured the protection of groundwater from potential future impacts, we respectfully request remediation termination or similar regulatory closure status for this

**Rice Operating Company – Hobbs Jct E-4**

project. ROC acknowledges they have met the requirements of 19.15.30 NMAC and no further action is warranted.

ROC is the service provider (agent) for the Hobbs 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.

Please do not hesitate to contact either Rice Operating Company or myself if you have any questions or need additional information.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'L. Peter Galusky, Jr.', with a stylized flourish at the end.

L. Peter Galusky, Jr. Ph.D.  
Principal

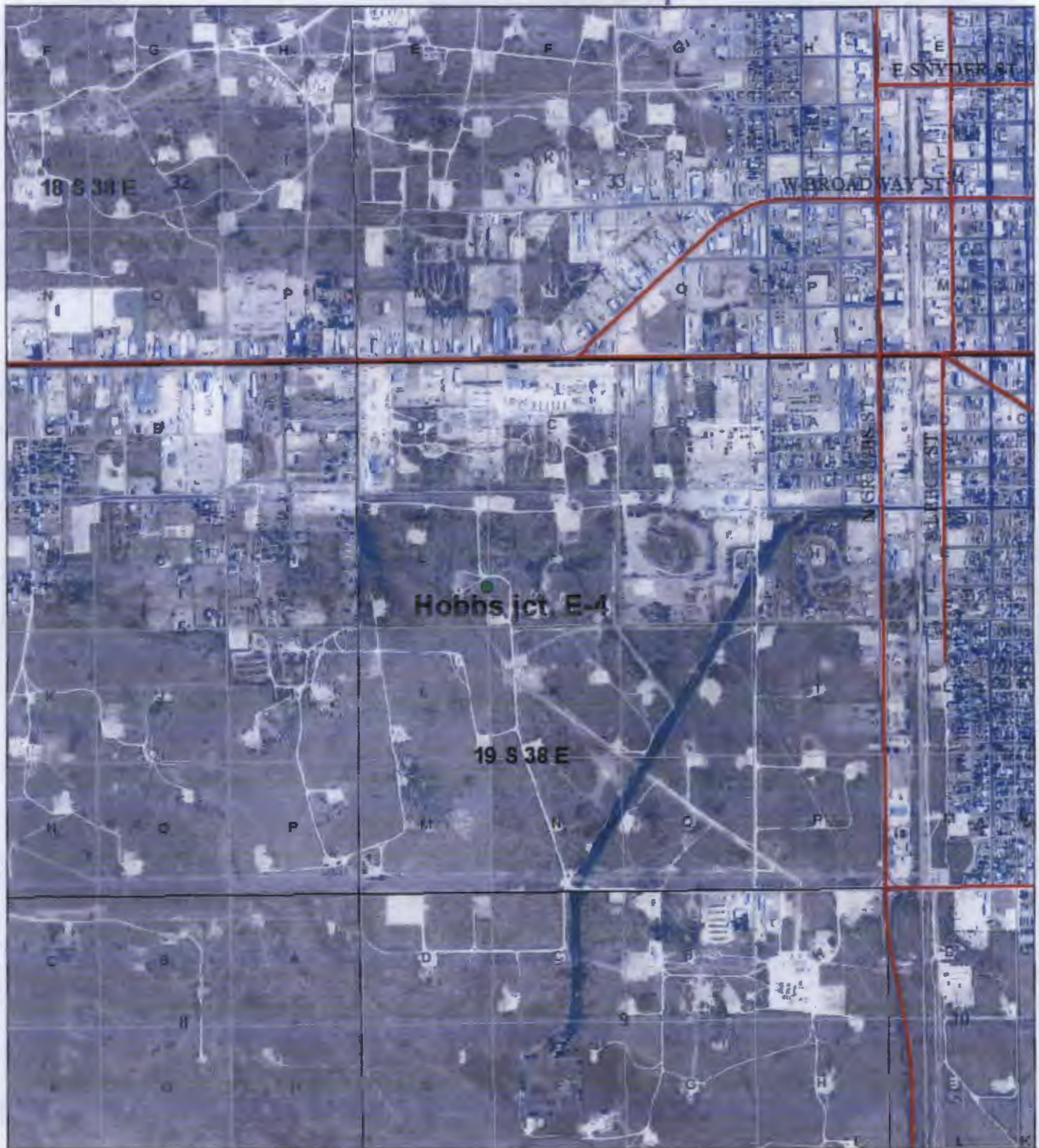
Copy: Rice Operating Company

**Rice Operating Company – Hobbs Jct E-4**

**Appendix:**

- ✓ Site Location Map
- ✓ Installed Liner Dimensions
- ✓ Driller's Monitor Well Plugging Report
- ✓ Photographs of Monitor Well Plugging & Removal
- ✓ Photographs of Soil Work, Liner Installation and Surface Restoration
- ✓ Revegetation Form
- ✓ Field PID Report
- ✓ Cardinal Laboratory Report

# Site Location Map



## Hobbs jct. E-4

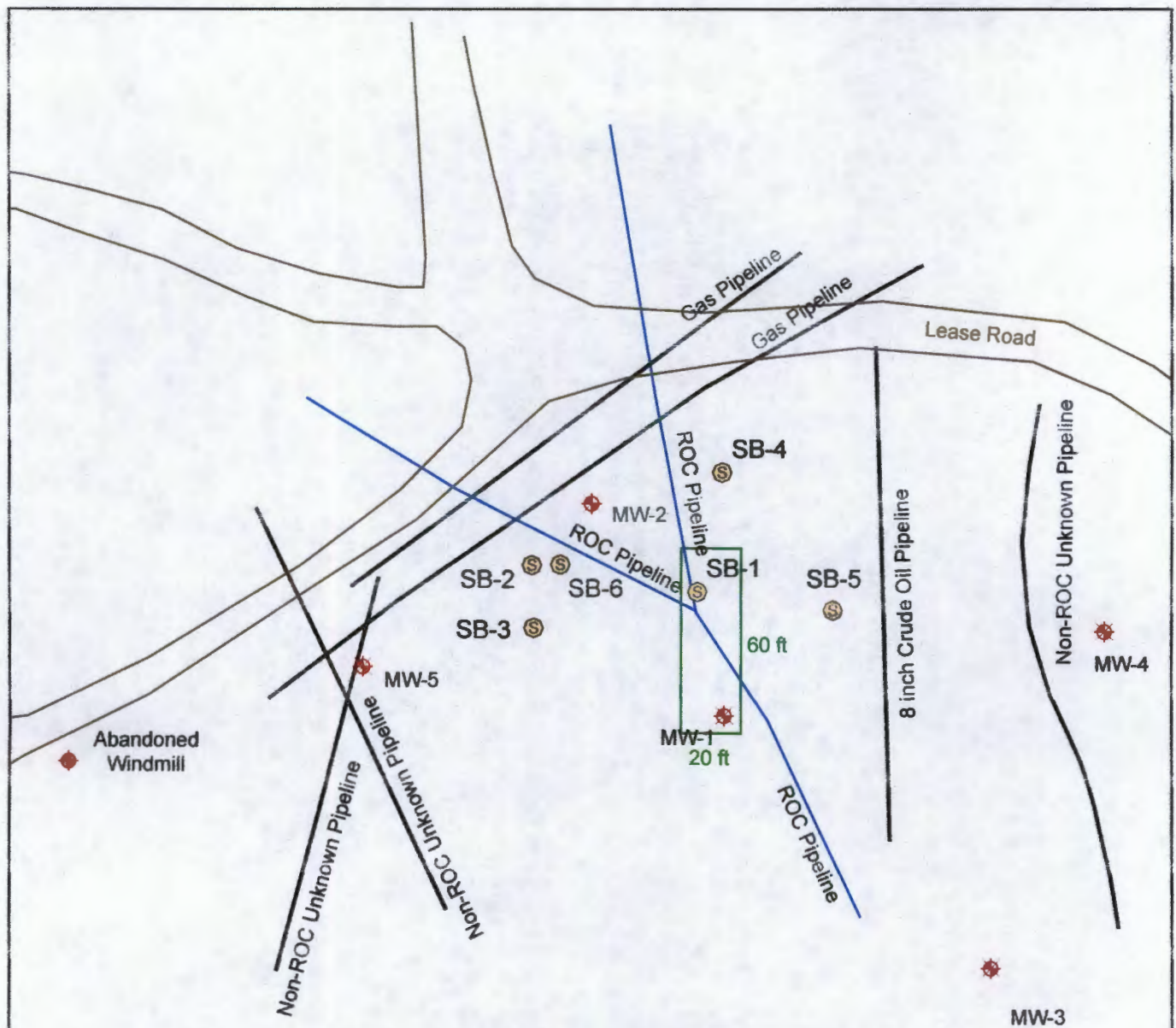
Legals: UL/E sec. 4  
T19S R38E  
NMOCD Case #: AP-98



0 0.1 0.2 0.4  
Miles

Drawing date: 4/29/13  
Drafted by: L. Weinheimer





## Legend

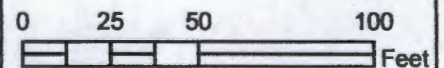
- SOIL BORES
- ABANDONED WINDMILL
- INSTALLED 20-mil REINFORCED LINER @ 4-5 ft bgs
- PLUGGED MONITOR WELL

DGW = 42 ft



## Hobbs jct. E-4

Legals: UL/E sec. 4  
T19S R38E  
NMOCD Case #: AP-98



Drawing date: 9/6/13  
Drafted by: LS

# HARRISON & COOPER, INC.

*Drilling & Pump Professionals*

7414 85<sup>th</sup> Street, Lubbock, Texas 79424-4951

P.O. Box 96, Wolfforth, Texas 79382-0096

Ph: (806) 866-4026

Fax: (806) 866-4044

[hcidrill.com](http://hcidrill.com)

## Plugging Report

Client	Rice Operating
Contractor	Harrison & Cooper
Date Completed	5/10/2013
Site	Hobbs Jct. E-4
Well ID	MW-1
Casing Diameter	2"
Well Depth	50'
Casing Material	PVC
Plugging Material	Portland/Bentonite Slurry
Slurry Interval	3'-50'
Cement Interval	0'-3'

Copies: File  
Email (Rice)

Regulated by: Texas Dept. of Licensing & Regulation, Water Well Division, P.O. Box 12157, Austin, TX 78711, (800) 803-9202

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## Plugging Report

Client	Rice Operating
Contractor	Harrison & Cooper
Date Completed	5/10/2013
Site	Hobbs Jct. E-4
Well ID	MW-2
Casing Diameter	2"
Well Depth	50'
Casing Material	PVC
Plugging Material	Portland/Bentonite Slurry
Slurry Interval	3'-50'
Cement Interval	0'-3'

Copies: File  
Email (Rice)

Regulated by: Texas Dept. of Licensing & Regulation, Water Well Division, P.O. Box 12157, Austin, TX 78711, (800) 803-9202



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## Plugging Report

Client	Rice Operating
Contractor	Harrison & Cooper
Date Completed	5/10/2013
Site	Hobbs Jct. E-4
Well ID	MW-3
Casing Diameter	2"
Well Depth	50'
Casing Material	PVC
Plugging Material	Portland/Bentonite Slurry
Slurry Interval	3'-50'
Cement Interval	0'-3'

Copies: File  
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## Plugging Report

Client	Rice Operating
Contractor	Harrison & Cooper
Date Completed	5/10/2013
Site	Hobbs Jct. E-4
Well ID	MW-4
Casing Diameter	2"
Well Depth	50'
Casing Material	PVC
Plugging Material	Portland/Bentonite Slurry
Slurry Interval	3'-50'
Cement Interval	0'-3'

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## Plugging Report

Client	Rice Operating
Contractor	Harrison & Cooper
Date Completed	5/10/2013
Site	Hobbs Jct. E-4
Well ID	MW-5
Casing Diameter	2"
Well Depth	50'
Casing Material	PVC
Plugging Material	Portland/Bentonite Slurry
Slurry Interval	3'-50'
Cement Interval	0'-3'

Copies: File  
Email (Rice)

Regulated by: Texas Dept. of Licensing & Regulation, Water Well Division, P.O. Box 12157, Austin, TX 78711, (800) 803-9202

**Hobbs Jct. E-4 (AP-98)**  
**Unit E, Section 4, T19S, R38E**



Pulling MW-1, facing south 5/10/2013



Plugging MW-1 with a 1-3% bentonite/concrete slurry with a 3 ft concrete cap, facing north 5/10/2013



MW-1 plug and abandon completed, facing north 5/10/2013



Pulling MW-2, facing north 5/10/2013



Plugging MW-2 with a 1-3% bentonite/concrete slurry with a 3 ft concrete cap, facing northeast 5/10/2013



MW-2 plug and abandon completed, facing north 5/10/2013





Pulling MW-3, facing east 5/10/2013



Plugging MW-3 with a 1-3% bentonite/concrete slurry with a 3 ft concrete cap, facing east 5/10/2013



MW-3 plug and abandon completed, facing east 5/10/2013



Pulling MW-4, facing north 5/10/2013



Plugging MW-4 with a 1-3% bentonite/concrete slurry with a 3 ft concrete cap, facing north 5/10/2013



MW-4 plug and abandon completed, facing north 5/10/2013





Pulling MW-5, facing north 5/10/2013



Plugging MW-5 with a 1-3% bentonite/concrete slurry with a 3 ft concrete cap, facing northeast 5/10/2013



MW-5 plug and abandon completed, facing north 5/10/2013

**Hobbs Jct. E-4 (AP-98)**  
**Unit Letter E, Section 4, T19S, R38E**



Site prior to excavation,  
facing south 6/14/2013



Excavating,  
facing east 6/14/2013



Exporting soil,  
facing south 6/14/2013



Excavation final,  
facing west 6/14/2013



Installing 6" bottom sand pad,  
facing north 6/18/2013



Installing liner,  
Facing south 6/19/2013



**Hobbs Jct. E-4 (AP-98)**  
**Unit Letter E, Section 4, T19S, R38E**



Padding liner with blowsand,  
Facing southwest 6/19/2013



Backfilling,  
Facing south 6/19/2013



Contouring the site with blow sand,  
facing south 6/24/2013



Spreading amendments,  
facing north 7/2/2013



Spreading seed,  
facing east 7/2/2013



Site complete,  
facing south 7/3/2013



PO Box 5630  
Hobbs, NM 88241  
Phone: (575) 393-4411  
Fax: (575) 393-0293

## REVEGETATION FORM

### 1. General Information

Site name: Hobbs Jct. E-4						
U/L E	Section 4	Township 19S	Range 38E	County Lea	Latitude N 32°41'25.21"	Longitude W 103°09'28.29"
Contact Name: Hack Conder						
Email: hconder@rice-ecs.com						
Site size: 80'x70' 6,000 square feet Map detail of site attached <input type="checkbox"/>						
Additional information:						

### 2. Soils

*\*Do not rip caliche subsoils: caliche rocks brought to the surface by ripping shall be removed.*

Salvaged from site <input checked="" type="checkbox"/>	Bioremediated <input type="checkbox"/>	Imported <input checked="" type="checkbox"/>	Blended <input type="checkbox"/>	Depth (in):
Texture: Sandy Describe soil & subsoil: Caliche Sand Mix and Top Soil on Top				
Soil prep methods: Rip <input type="checkbox"/>	Depth(in):	Disc <input checked="" type="checkbox"/>	Depth (in): 3"	Rollerpack <input type="checkbox"/>
Date completed: 6/24/2013				

### 3. Bioremediation

Fertilizer <input type="checkbox"/>	Hay <input type="checkbox"/>	Other <input checked="" type="checkbox"/>
Type:		Describe: 1 bag of manure; 20 bags potting mix 20 bags BioNance
Lbs/acre:		

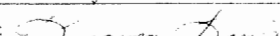
### 4. Seeding

*\*Attach seed bag tags to this form. Seed bag tags shall contain the site name and S-T-R.*

Custom seed mix <input checked="" type="checkbox"/>	Prescribed mix <input type="checkbox"/>	Seed mix name: 15 lbs blue grama; 25 lbs race horse oats; 15 lbs Lea county mix	Seeding date: 7/2/2013
Broadcast <input checked="" type="checkbox"/>			
Method: Used the Mechanical seeder to seed the site.			
Soil conditions during seeding: Dry <input checked="" type="checkbox"/> Damp <input type="checkbox"/> Wet <input type="checkbox"/>			
Photos attached <input type="checkbox"/>	Observations:		
Number of photos:	The seed was tilled in to the soil.		

### 5. Certification

I hereby certify that the information in this form and attachments is true and complete to the best of my knowledge and belief.

Name: Karanja Lewis	Title:	Date: 7/2/13
Signature: 		







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

June 20, 2013

KYLE NORMAN

RICE ENVIRONMENTAL CONSULTING & SAFETY LLC

112 W. TAYLOR

HOBBS, NM 88240

RE: HOBBS JUNCTION E-4

Enclosed are the results of analyses for samples received by the laboratory on 06/19/13 16:30.

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/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

Cardinal Laboratories is accredited 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,

A handwritten signature in black ink that reads "Coley D. Keene". The signature is written in a cursive style with a large, stylized 'C' at the beginning.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

RICE ENVIRONMENTAL CONSULTING & SAFETY  
KYLE NORMAN  
112 W. TAYLOR  
HOBBS NM, 88240  
Fax To: (575) 397-1471

Received:	06/19/2013	Sampling Date:	06/19/2013
Reported:	06/20/2013	Sampling Type:	Soil
Project Name:	HOBBS JUNCTION E-4	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: BLOW SAND 8 PT COMP (H301426-01)**

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	06/20/2013	ND	400	100	400	0.00	

**Sample ID: BACKFILL 8 PT. COMP (H301426-02)**

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	06/20/2013	ND	400	100	400	0.00	

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 claim 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.

*Ceiley D. Keene*

Ceiley 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 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.

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



# **CARDINAL LABORATORIES**

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

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

Page 4 of 4

Company Name: <u>Rice</u>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																
Project Manager: <u>KYLE NORMAN</u>				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <div>Chlorides</div> <div>TPH 8015 M</div> <div>BTEX</div> <div>Texas TPH</div> <div>Complete Cations/Anions</div> <div>TDS</div> </div>																
Address: <u>419 W. Cain</u>				Company:																				
City:		State:		Zip: <u>88240</u>		Attn:																		
Phone #:		Fax #:		Address:		City:																		
Project #:		Project Owner:		State:		Zip:																		
Project Name:		Project Location: <u>Hobbs Jct. E-4</u>		Phone #:		Fax #:																		
Sampler Name: <u>KARANTA LEWIS</u>																								
FOR LAB USE ONLY				MATRIX		PRESERV		SAMPLING																
Lab I.D.	Sample I.D.	GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME													
<u>H301426</u>	<u>1 Blow Sand Spt. Comp</u>	<input checked="" type="checkbox"/>								<u>6/19/13</u>	<u>9:40</u>	<input checked="" type="checkbox"/>												
	<u>2 Backfill Spt. Comp</u>	<input checked="" type="checkbox"/>								<u>6/19/13</u>	<u>9:42</u>	<input checked="" type="checkbox"/>												

PLEASE NOTE: Liability and Damages, Cardinal's liability and client's acceptance hereby for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be accepted and resolved by Cardinal within 30 days after completion of the applicable services. 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 rendered by Cardinal, regardless of whether such claim is based upon any of the above stated remedies or otherwise.

Relinquished By:	Date:	Received By:	Phone Result:	Yes	No	Add'l Phone #:
<u>KARANTA LEWIS</u>	<u>6/19/13</u>	<u>Jodi Benson</u>	Fax Result:	Yes	No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:			
	<u>4:30</u>		<u>lpona@rice-swd.com</u> <u>kwjones@rice-swd.com</u> <u>knorman@rice-ecs.com</u> <u>klewis@rice-ecs.com</u> <u>Zconder@rice-ecs.com</u> ; <u>Bbaker@rice-ecs.com</u> ; <u>hconder@rice-ecs.com</u> ; <u>Lweinheimer@rice-ecs.com</u>			
Delivered By: (Circle One)	Sample Condition:	CHECKED BY:				
Sampler - UPS - Bus - Other:	Cool Intake	<u>[Signature]</u>				
	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

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

#54

LUH!!