

1R-428-67

2013

Annual Report

DATE

March 10, 2014

From: [Laura Flores](#)
To: [Lowe, Leonard, EMNRD](#); [VonGonten, Glenn, EMNRD](#)
Cc: ["Hack Conder"](#); ["Katie Jones"](#)
Subject: ROC - Hobbs Jct. E-33-1 (1R428-67) 2013 Annual Groundwater Report
Date: Monday, March 10, 2014 1:37:15 PM
Attachments: [ROC - Hobbs jct. E-33-1 \(1R428-67\) 2013 Annual Groundwater Report.pdf](#)

Mr. Lowe,

Attached is the 2013 Annual Groundwater Report for Hobbs jct. E-33-1 (1R428-67). Annual Reports are submitted yearly to update the NMOCD about groundwater quality for a particular site. This report does not require NMOCD approval; therefore, a flow chart is not included.

If you have any questions or require any additional information, please contact Hack Conder at 575-631-6432.

Thank you,

Laura Flores
Project Manager
Rice Environmental Consulting & Safety (RECS)

Rice Environmental Consulting & Safety

P.O. Box 2948, Hobbs, NM 88241

Phone 575.393.2967

March 10th, 2014

Mr. Leonard Lowe

New Mexico Energy, Minerals, & Natural Resources

Oil Conservation Division, Environmental Bureau

1220 S. St. Francis Drive

Santa Fe, New Mexico 87505

**RE: 2013 Annual Groundwater Monitoring Report
Rice Operating Company – Hobbs SWD System
Hobbs Jct. E-33-1 (1R428-67): UL/E sec. 33 T18S R38E**

Mr. Lowe:

RICE Operating Company (ROC) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site in the abandoned Hobbs Salt Water Disposal (SWD) system. 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.

With the abandonment of the Hobbs SWD system in 2002, ROC removed the Hobbs E-33-1 junction box and the upper four feet of the vadose zone. The resultant excavation was then backfilled with a mixture of silty loam and some caliche. On May 2nd, 2006, one soil bore was advanced through the former junction box site and was completed into a monitoring well (MW-1). An Update Report was submitted to the NMOCD on December 11th, 2012, requesting an up-gradient well (MW-2) be installed. NMOCD approved this on December 26th, 2012, and MW-2 was installed on February 14th, 2013. Both monitoring wells have been sampled quarterly since installation.

This 2013 Annual Groundwater Monitoring Report contains:

1. A site location map.
2. A map showing well locations.
3. A table presenting all laboratory results and depth to groundwater for each well at the site.
4. Graphs showing the concentrations of chloride and TDS in groundwater over time.
5. The laboratory analytical results for the most recent sampling event.

Quarterly groundwater sampling will continue in 2014.

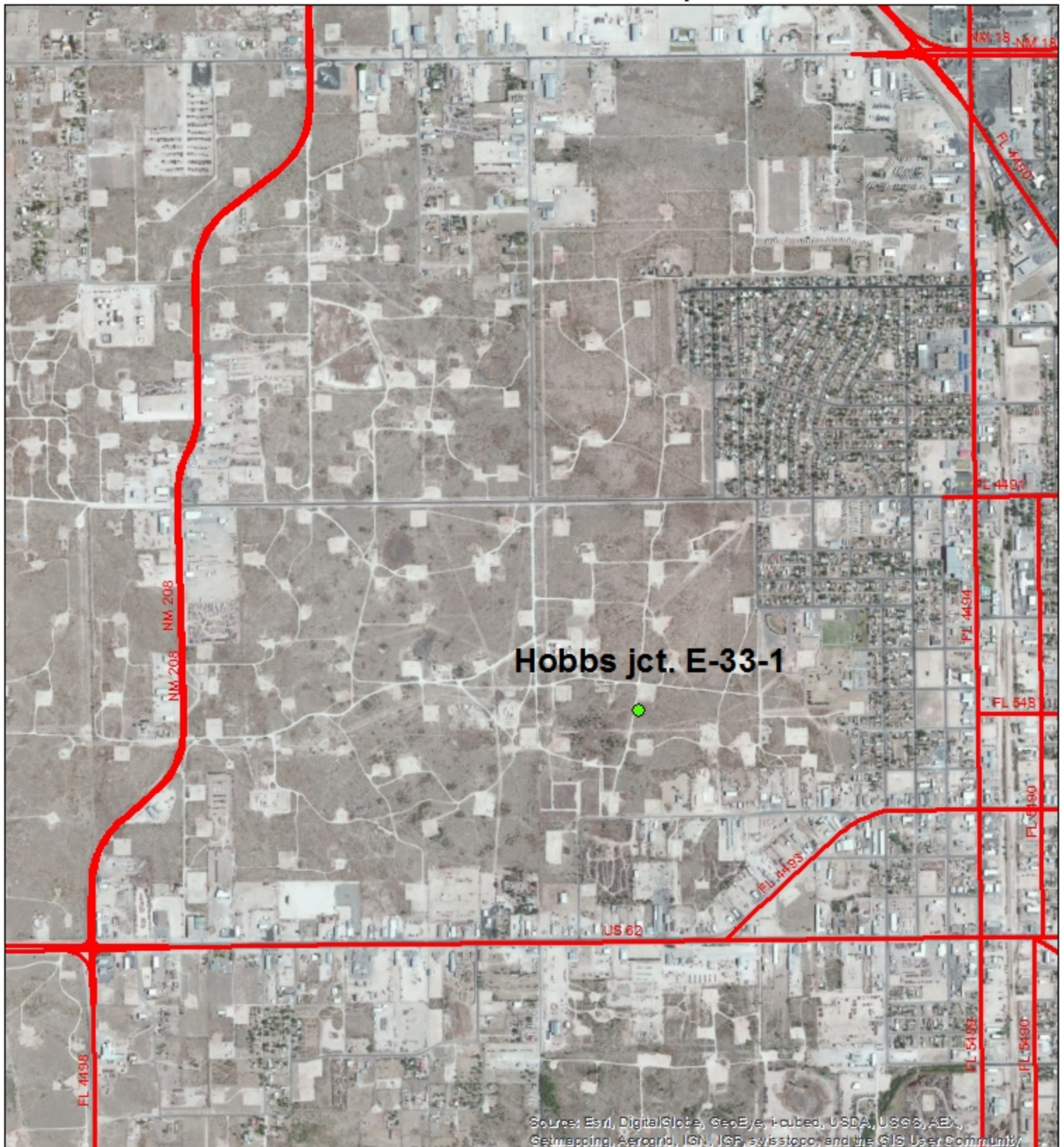
RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-2967 or me if you have any questions or wish to discuss the site.

Sincerely,

A handwritten signature in cursive script, appearing to read "L. Flores".

Laura Flores
Rice Environmental Consulting & Safety (RECS)
Project Manager

Site Location Map



Hobbs jct. E-33-1

NMOCD Case #: 1R428-67

LEGALS: UL/E sec. 33
T-18-S E-38-E



0 0.275 0.55
Miles

Drawing date: 1/24/12
Drafted by: L. Weinheimer

Site Map



Hobbs jct. E-33-1

NMOCD Case #: 1R428-67

LEGALS: UL/E sec. 33
T-18-S E-38-E



0 25 50 100
Feet

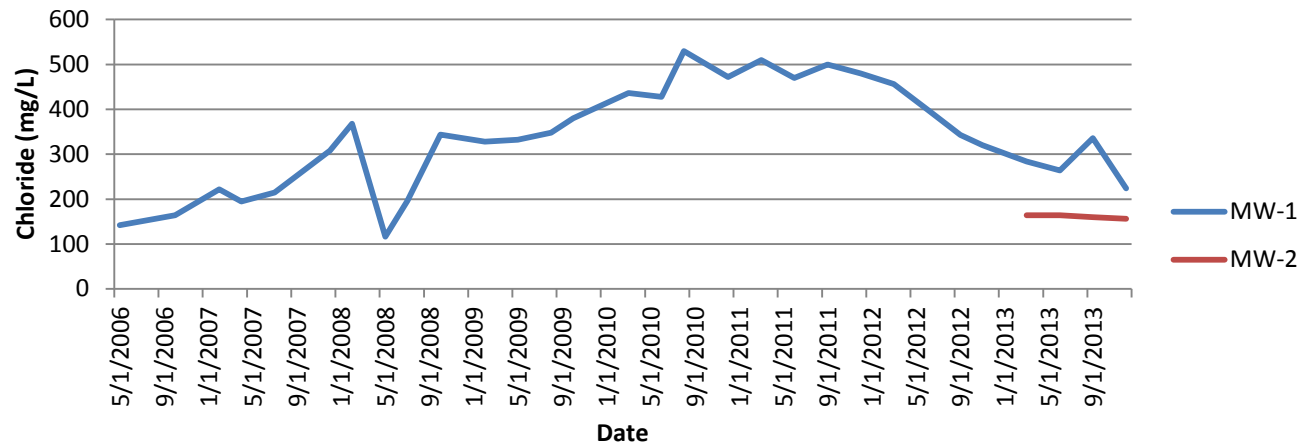
Drawing date: 2/25/14
Drafted by: L. Flores

Hobbs jct. E-33-1 (1R428-67)

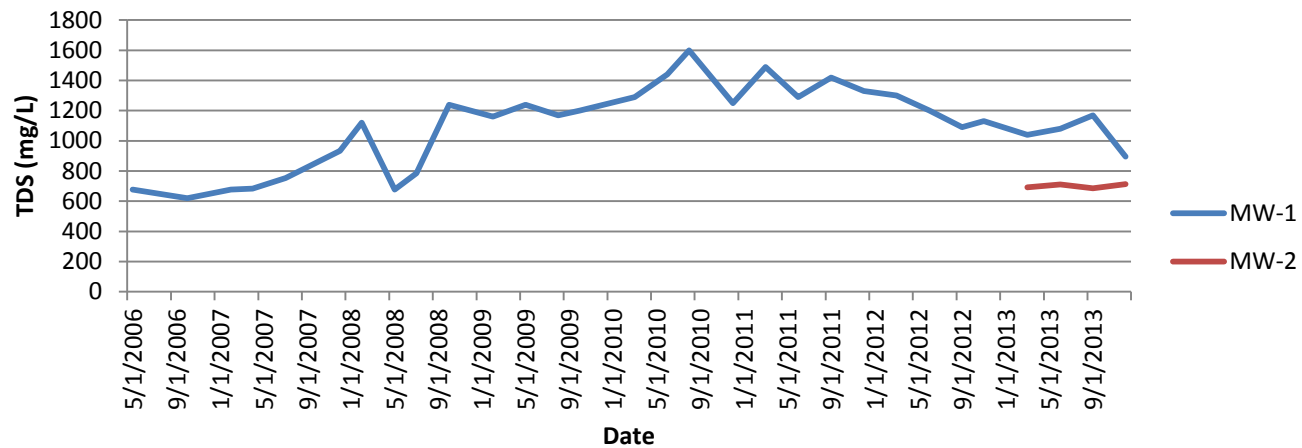
MW	Depth to Water	Total Depth	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
				(mg/L)						
MW-1	64.44	79.35	5/17/2006	142	678	<0.001	<0.001	<0.001	<0.001	93.4
	64.48	79.35	10/31/2006	164	620	<0.001	<0.001	<0.001	<0.001	96.2
	64.67	79.12	2/22/2007	222	678	<0.001	<0.001	<0.001	<0.001	112
	65.21	79.1	5/1/2008	116	677	<0.002	<0.002	<0.002	<0.006	178
	64.77	79.12	4/25/2007	195	684	<0.001	<0.001	<0.001	<0.001	101
	64.89	79.12	7/30/2007	215	754	<0.001	<0.001	<0.001	<0.001	115
	65.03	79.12	12/19/2007	308	933	<0.002	<0.002	<0.002	<0.006	174
	65.08	79.1	2/8/2008	368	1120	<0.002	<0.002	<0.002	<0.004	176
	65.28	79.1	7/25/2008	196	785	<0.002	<0.002	<0.002	<0.006	100
	65.47	79.4	10/29/2008	344	1240	<0.001	<0.001	<0.001	<0.003	170
	65.68	79.36	2/2/2009	328	1160	XXX	XXX	XXX	XXX	166
	65.73	79.36	5/4/2009	332	1240	XXX	XXX	XXX	XXX	158
	65.85	79.36	8/10/2009	348	1170	XXX	XXX	XXX	XXX	159
	65.98	79.36	10/27/2009	380	1200	XXX	XXX	XXX	XXX	168
	66.21	79.38	3/12/2010	436	1290	XXX	XXX	XXX	XXX	198
	66.32	79.38	6/4/2010	428	1440	XXX	XXX	XXX	XXX	160
	66.42	79.38	8/30/2010	530	1600	XXX	XXX	XXX	XXX	130
	66.54	79.38	12/10/2010	472	1250	XXX	XXX	XXX	XXX	202
	66.68	79.38	3/23/2011	510	1490	XXX	XXX	XXX	XXX	193
	66.84	79.38	6/20/2011	470	1290	XXX	XXX	XXX	XXX	188
	66.94	79.38	9/20/2011	500	1420	XXX	XXX	XXX	XXX	221
	67.14	79.38	12/15/2011	480	1330	XXX	XXX	XXX	XXX	222
	67.27	79.38	3/13/2012	456	1300	XXX	XXX	XXX	XXX	214
	67.46	79.38	6/11/2012	400	1200	XXX	XXX	XXX	XXX	220
	67.69	79.38	9/6/2012	343	1090	XXX	XXX	XXX	XXX	195
	67.88	79.38	11/29/2012	320	1130	XXX	XXX	XXX	XXX	139
	67.97	79.38	3/1/2013	284	1040	XXX	XXX	XXX	XXX	190
	68.25	79.38	6/24/2013	264	1080	XXX	XXX	XXX	XXX	190
	68.43	79.38	9/16/2013	336	1170	XXX	XXX	XXX	XXX	193
	68.62	79.38	12/12/2013	224	896	XXX	XXX	XXX	XXX	164

MW	Depth to Water	Total Depth	Sample Date	Cl	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
				(mg/L)						
MW-2	68.09	79.1	3/1/2013	164	691	XXX	XXX	XXX	XXX	111
	68.32	79.1	6/24/2013	164	710	XXX	XXX	XXX	XXX	109
	68.49	79.1	9/16/2013	160	686	XXX	XXX	XXX	XXX	87
	68.71	79.1	12/12/2013	156	714	XXX	XXX	XXX	XXX	107

Chloride Concentration Versus Time Graph



Total Dissolved Solids Concentrations Versus Depth





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

December 19, 2013

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: HOBBS JUNCTION E-33-1

Enclosed are the results of analyses for samples received by the laboratory on 12/13/13 15:16.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 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 "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

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

Received:	12/13/2013	Sampling Date:	12/12/2013
Reported:	12/19/2013	Sampling Type:	Water
Project Name:	HOBBS JUNCTION E-33-1	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVNE	Sample Received By:	Celey D. Keene
Project Location:	T18S-R38E-SEC33 E-LEA CTY., NM		

Sample ID: MONITOR WELL #1 (H303032-01)

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	224	4.00	12/17/2013	ND	104	104	100	3.92		
Sulfate 375.4		mg/L		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	164	25.0	12/17/2013	ND	21.2	106	20.0	10.8		
TDS 160.1		mg/L		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	896	5.00	12/18/2013	ND	243	101	240	2.49		

Sample ID: MONITOR WELL #2 (H303032-02)

Chloride, SM4500Cl-B		mg/L		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride*	156	4.00	12/17/2013	ND	100	100	100	3.92		
Sulfate 375.4		mg/L		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	107	25.0	12/17/2013	ND	21.2	106	20.0	10.8		
TDS 160.1		mg/L		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	714	5.00	12/18/2013	ND	243	101	240	2.49		

Cardinal Laboratories

*=Accredited Analyte

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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 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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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Cardinal Laboratories, Inc.

LAB Order ID

BILL TO	Company:	PO#
RICE Operating Company		
Address:		(Street, City, Zip)
122 W Taylor Street ~ Hobbs, New Mexico 88240		
Phone#:		Fax#:
(575) 393-9174		(575) 397-1471

28

Sampler Signature: Rozanne Johnson (575)631-9310
rozanne@valornet.com

[illegible]

Received by: _____ Date: _____ Time: _____

Received By: (Laboratory Staff) Date: 12/13/2013 Time: 15:16

e Condition Yes <input checked="" type="checkbox"/> Cool Yes <input checked="" type="checkbox"/> Intact No <input type="checkbox"/> No <input type="checkbox"/>		CHECKED BY: (Initials) <i>Cph</i>
---	--	--------------------------------------

ANALYSIS REQUEST

(Circle or Specify Method No.)

REMARKS:

Email Results to: hconder@riceswd.com

hconder@riceswd.com
lweinheimer@rice-ecs.com
kiones@riceswd.com
rozanne11@windstream.net

#54