

1R - 428-76

**Annual GW Mon.  
REPORTS**

**DATE:**

2010

# R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

March 14, 2011

Edward J. Hansen  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: 2010 Annual Ground Water Monitoring Report  
Hobbs M-4 Vent, Sec 04, T19S, R38E, Unit "M"  
NMOCD Case #: 1R0428-76

Mr. Hansen,

R.T. Hicks Consultants, Ltd. is pleased to submit this 2010 Annual Ground Water Monitoring Report for the M-4 Vent site located in the Hobbs Salt Water Disposal System (SWD). This report contains:

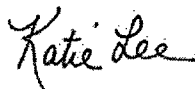
1. A table presenting all laboratory results and depth to ground water for each well at the site.
2. Graphs showing the concentration of chloride and TDS in ground water over time.
3. A plate presenting the location of the monitoring well and the most recent ground water sampling results.
4. The laboratory analysis from the most recent ground water sampling event.

Quarterly ground water monitoring continues at the site.

ROC is the service provider (agent) for the Hobbs Salt Water Disposal System and has no ownership of any portion of pipeline, well or facility. A consortium of oil producers who own the Hobbs Salt Water Disposal System (System Parties) provide all operating capital on a percentage ownership/usage basis. Major projects require System Parties' authorization for expenditures (AFE); approval and work begins as funds are received.

Thank you for your consideration. If you have any questions, please contact us at 505-266-5004, or Hack Conder at Rice Operating Company, 575-393-9174.

Sincerely,  
R.T. Hicks Consultants



Katie Lee  
Project Scientist

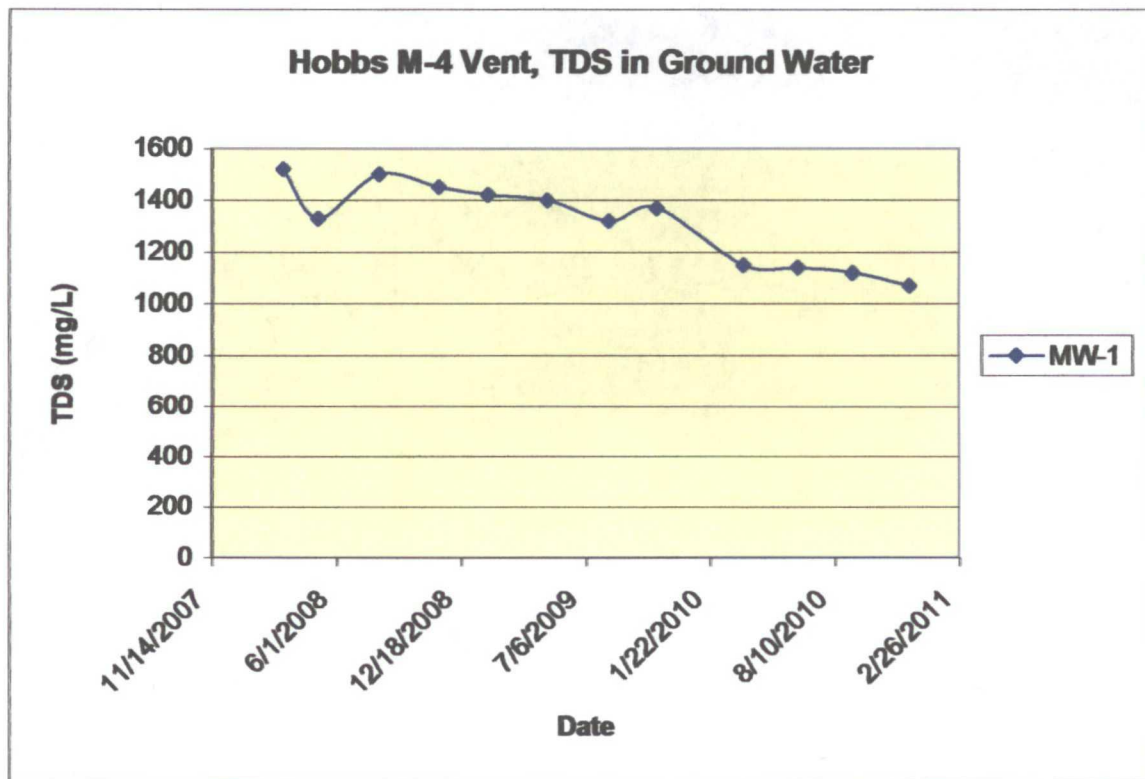
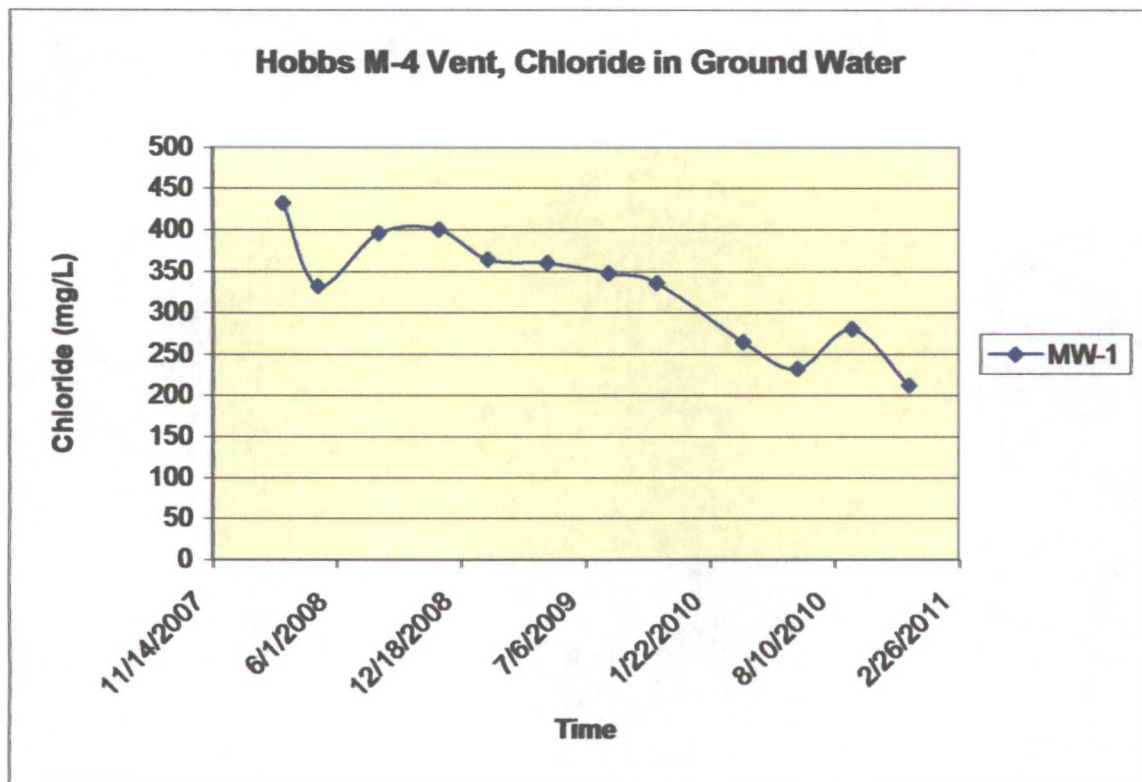
Copy: Rice Operating Company

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2011 MAR 16 2:20 PM

Hobbs M-4 Vent, NMOCD Case # 1R428-76

MW	Depth to Water (ft)	Sample Date	CI	TDS	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Sulfate
							(mg/L)		
1	26.78	3/7/2008	432	1520	<0.001	<0.001	<0.001	<0.003	262
1	27.02	5/2/2008	332	1330	<0.002	<0.002	<0.002	<0.006	240
1	27.64	8/8/2008	396	1500	<0.001	<0.001	<0.001	<0.003	286
1	27.83	11/12/2008	400	1450	<0.001	<0.001	<0.001	<0.003	297
1	28.01	1/30/2009	364	1420	XXX	XXX	XXX	XXX	264
1	28.39	5/5/2009	360	1400	XXX	XXX	XXX	XXX	258
1	28.85	8/12/2009	348	1320	XXX	XXX	XXX	XXX	240
1	28.92	10/28/2009	336	1370	XXX	XXX	XXX	XXX	242
1	29.33	3/16/2010	264	1150	XXX	XXX	XXX	XXX	288
1	29.53	6/11/2010	232	1140	XXX	XXX	XXX	XXX	238
1	28.85	9/7/2010	280	1120	XXX	XXX	XXX	XXX	196
1	28.79	12/7/2010	212	1070	XXX	XXX	XXX	XXX	266

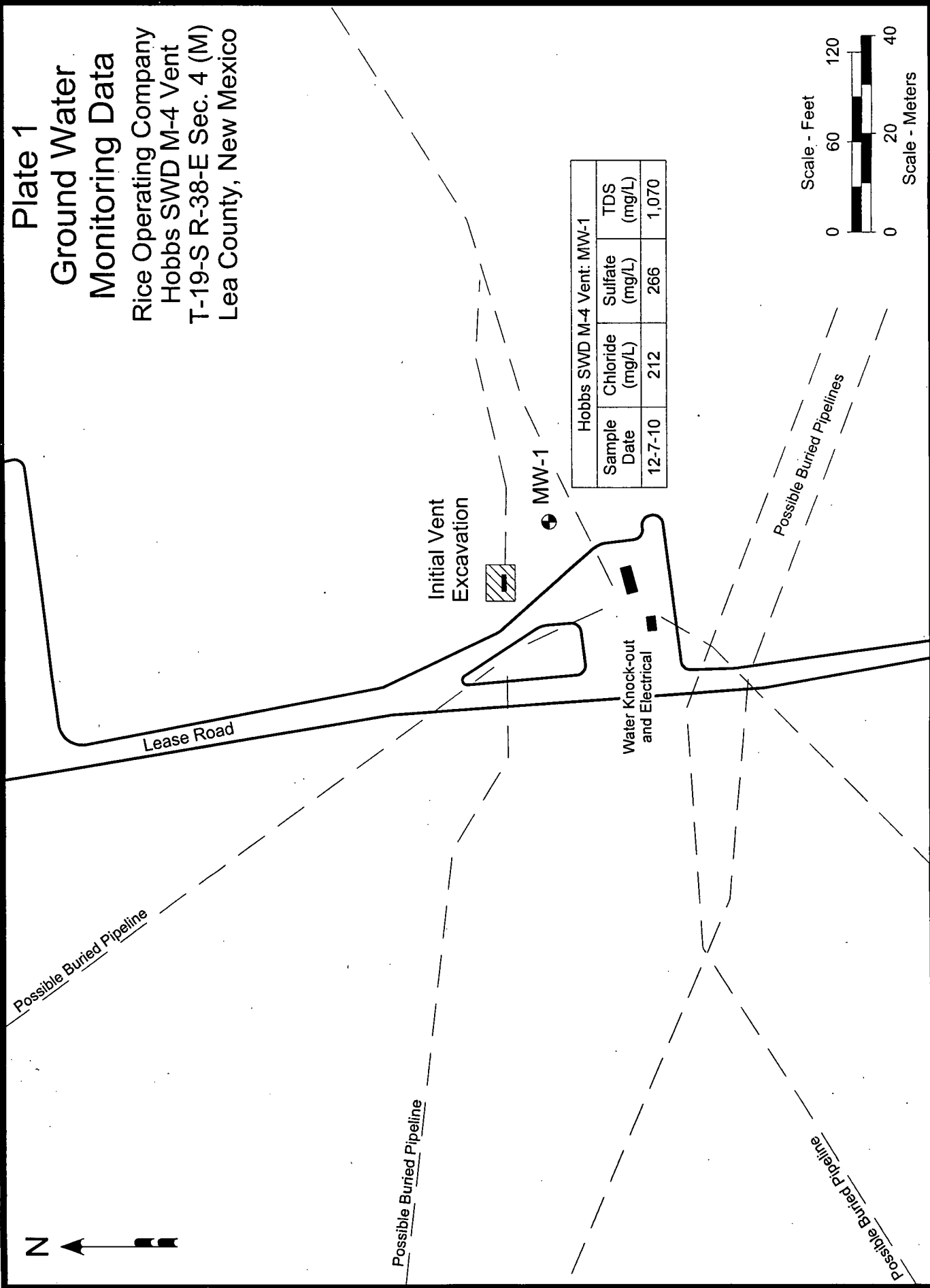
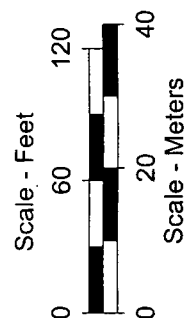
XXX: Not Analyzed with NMOCD Permission



# Plate 1

## Ground Water Monitoring Data

Rice Operating Company  
Hobbs SWD M-4 Vent  
T-19-S R-38-E Sec. 4 (M)  
Lea County, New Mexico



Hobbs SWD M-4 Vent: MW-1			
Sample Date	Chloride (mg/L)	Sulfate (mg/L)	TDS (mg/L)
12-7-10	212	266	1,070



December 17, 2010

Hack Conder

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: HOBBS M-4 VENT

Enclosed are the results of analyses for samples received by the laboratory on 12/10/10 12:25.

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 Hydrocarbons

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

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 (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

Lab Director/Quality Manager

### Analytical Results For:

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

Received: 12/10/2010  
Reported: 12/17/2010  
Project Name: HOBBS M-4 VENT  
Project Number: NONE GIVEN  
Project Location: T19S-R38E-SEC4 M-LEA CTY., NM

Sampling Date: 12/07/2010  
Sampling Type: Water  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

### Sample ID: MONITOR WELL #1 (H021492-01)

Chloride, SM4500Cl-B		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>212</b>	4.00	12/14/2010	ND	108	108	100	3.77	
Sulfate 375.4		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Sulfate</b>	<b>266</b>	10.0	12/15/2010	ND	38.3	95.8	40.0	0.536	
TDS 160.1		mg/L		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>TDS</b>	<b>1070</b>	5.00	12/10/2010	ND				2.86	

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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**Cardinal Laboratories****\*=Accredited Analyte**

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Celey D. Keene, Lab Director/Quality Manager



# Cardinal Laboratories, Inc.

101 East Marland - Hobbs, New Mexico 88240  
Tel (575) 393-2326  
Fax (575) 393-2476

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

Project #	Project Name
1	Hobbs M-4 Vent

Project Location: T19S-R38E-Sec4 M ~ Lea County - New Mexico

				MATRIX	PRESERVATIVE METHOD	SAMPLING

LAB #	FIELD CODE	INSTRUMENT	VOA	HDPE	0

LAB USE ONLY

[illegible]

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[illegible][illegible][illegible]

Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Rept Name	Johnson, Rozanne
Date	12-10-2010
Time	12:25
Received By	Wendi Menden
Date	12/10/10
Time	12:25

Received by: (Laboratory Name)  
Date: \_\_\_\_\_  
Time: \_\_\_\_\_

Delivered By: (Circle One)	Sample Condition Cool <input checked="" type="checkbox"/> Intact <input type="checkbox"/>	CHECKED BY:
----------------------------	--	-------------

Sampler	-	UPS	-	Bus	-	Other:					(Initials)	
							Yes	No	Yes	No		

07/16/18

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID.#

## ANALYSIS REQUEST

(Circle or Specify Method No.):

[illegible][illegible]

## Easy Results

	Yes	No
Since 1980:		
Demanded:		

Email Results: [hconder@riceswd.com](mailto:hconder@riceswd.com)

[dweltchevmar@nrc-ecs.com](mailto:dweltchevmar@nrc-ecs.com)

[vicines@rice.edu](mailto:vicines@rice.edu)

rozanne@valornet.com

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