1R - 428-62

REPORTS

DATE:

8-31-10

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266.0745

August 31, 2010

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

RE: **Hobbs SWD System Jct. F-24-1 Vent Site: NMOCD Case #: 1R428-62**
Termination Request
T-18-S, R-37-E, Section 24, Unit F

Mr. Hansen:

On behalf of Rice Operating Company (ROC), R.T. Hicks Consultants, Ltd. is submitting this Termination Request for the Hobbs Jct. F-24-1 Site regulatory file. ROC has completed the recommended actions detailed in the February 8, 2010 Initial Characterization Report and Corrective Action Plan (ICR-CAP).

Background
The Hobbs F-24-1 Vent site is located northwest of the city of Hobbs at T-18-S, R-37-E, Section 24, in Unit F. The pipeline and original equipment were abandoned prior to 2002. Appendix A includes previous submissions and correspondence regarding the site:

- The Investigation Characterization Plan (ICP), dated February 19, 2009. The ICP includes background information and a site vicinity map for this and five other nearby ROC sites.
- Written NMOCD approval of the ICP dated April 22, 2009.
- The Initial Characterization Report and Corrective Action Plan (ICP-CAP), dated February 8, 2010 presents the results of characterization activities.

Completed Site Restoration
ROC has completed the ICR-CAP recommended surface restoration at the site, including:

- Excavation of caliche and large rocks,
- Backfilling the site with clean topsoil,
- Seeding the area with native seed mixes.

Sandy soil was imported and spread over the approximately 780 square foot disturbed area at the site and a seed mix containing 2 lbs. Elbon Rye and 0.5 Lea County Mix seeds were hand broadcast on November 24, 2009; 1 lb of fertilizer was also applied. Appendix B presents documentation of this work.

ROC uses several strategies to encourage native vegetation including importing clean soil, removing large rocks and site infrastructure, and seeding the area. Plants capture water through their roots, thereby reducing the volume of water infiltrating below the root zone. This natural "infiltration barrier" helps protect ground water as the decreased flux of water through the subsurface slows the transportation rate of residual chloride in the subsurface. With these site restoration activities completed and documented we conclude that this site is in compliance with the requirements of 19.15.29 NMAC. This site does not and will not endanger public health or the environment; we respectfully request a termination of the regulatory file.

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. The Hobbs SWD System is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Please contact Hack Conder of ROC at 575-393-9174 if you have any questions concerning this submission. Thank you for your time and consideration.

Sincerely,
R.T Hicks Consultants, Ltd.

Katie Lee

Katie Lee
Project Scientist

Copy: Hack Conder, ROC

Appendix A

Previous Submissions

R.T. Hicks Consultants, Ltd.

901 Rio Grande Blvd. NW, Suite F-142
Albuquerque, NM 87104

R. T. HICKS CONSULTANTS, LTD.
901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266.0745

February 8, 2010

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

RE: **Hobbs SWD System F-24-1 Junction Site: T-18-S, R-37-E, Section 24, Unit F, Initial Characterization Report and Corrective Action Plan**
NMOCD CASE #: 1R428-62

Mr. Hansen:

On behalf of Rice Operating Company (ROC), R.T. Hicks Consultants, Ltd. is submitting this Initial Characterization Report (ICR) and Corrective Action Plan (CAP) for the Hobbs Junction F-24-1 site regulatory file. The investigation conducted to date demonstrates that neither chloride nor hydrocarbons are present in the vadose zone in quantities that represent a threat to ground water quality.

Background
The Hobbs Junction F-24-1 site is located northwest of the city of Hobbs at T-18-S, R-37-E, Section 24, in Unit F. The pipeline and original equipment were abandoned prior to 2002. The Investigation Characterization Plan (ICP), dated February 19, 2009 and approved by the NMOCD on April 22, 2009, is provided as Attachment A to this letter. The ICP includes background information and a site vicinity map for this and five other nearby ROC sites.

Field Program
Hicks Consultants supervised a deep soil sampling program to characterize possible hydrocarbon and chloride impact due to past activities. On September 23, 2009, soil boring No. 1 (SB-1) was drilled adjacent to the north side of the original junction box removal excavation to evaluate the deep soil directly below the former ROC equipment.

Soil samples were collected and field screened by ROC for hydrocarbons and chloride concentrations. Figure 1 is a site map depicting the location of SB-1, the surrounding area, and all the soil sample field screening and laboratory verification results. None of the soil samples measured with a photo-ionic detector (PID) contained detectable hydrocarbons. The field titration chloride concentrations encountered in the 25-foot deep soil boring ranged from 151 to 153 mg/kg, which corresponds to a laboratory concentration of <16 mg/kg. These field test results indicate that regulated hydrocarbons and chlorides are not present in the soil at concentrations that represent a threat to fresh water, human health, or the environment. Attachment B provides a soil lithology log including the field hydrocarbon and chloride screening data. Attachment C provides the laboratory report and chain of custody for verification of the September 23, 2009 field data.

Recommendations
We recommend surface restoration at the site, with work including:

- Removal of plumbing, excavated caliche, and large rocks,
- Backfilling the site with clean topsoil,
- Seeding the area with native seed mixes.

Once these activities are completed and documented, a termination of the regulatory file will be requested.

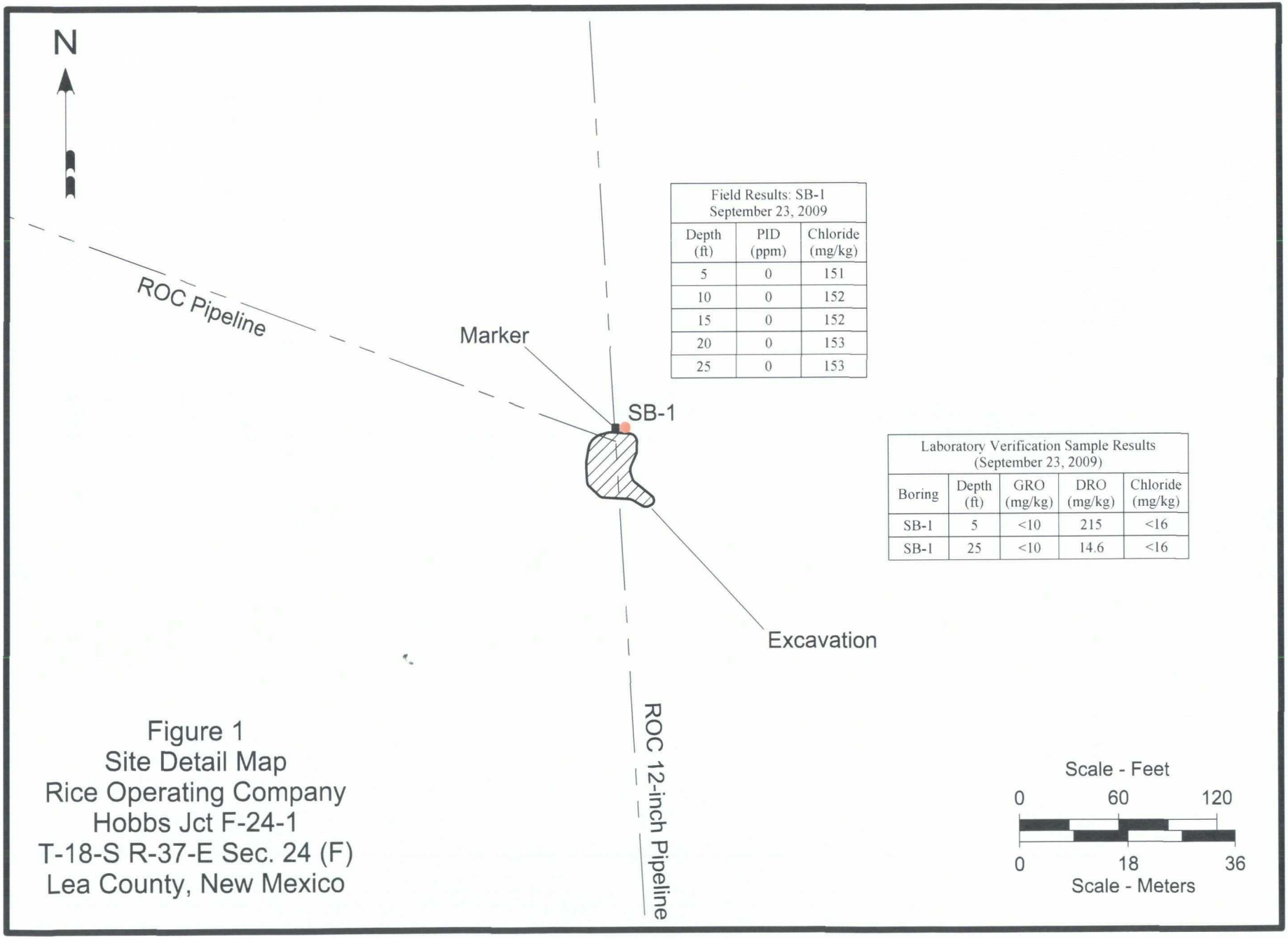
Please contact Hack Conder of ROC at 575-393-9174 if you have any questions concerning this submission. Thank you for your time and consideration.

Sincerely,
R.T Hicks Consultants, Ltd.

Dale T. Littlejohn

Dale T Littlejohn
Geologist

Copy: Hack Conder, ROC



Field Results: SB-1 September 23, 2009		
Depth (ft)	PID (ppm)	Chloride (mg/kg)
5	0	151
10	0	152
15	0	152
20	0	153
25	0	153

Laboratory Verification Sample Results (September 23, 2009)				
Boring	Depth (ft)	GRO (mg/kg)	DRO (mg/kg)	Chloride (mg/kg)
SB-1	5	<10	215	<16
SB-1	25	<10	14.6	<16

Figure 1
Site Detail Map
Rice Operating Company
Hobbs Jct F-24-1
T-18-S R-37-E Sec. 24 (F)
Lea County, New Mexico

ATTACHMENT A

Investigation Characterization Plan
Submitted on February 19, 2009

R. T. HICKS CONSULTANTS, LTD.

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

February 19, 2009

Mr. Brad Jones
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Investigation & Characterization Plan
Hobbs Salt Water Disposal System:
Jct. A-6, F-24-3 Vent, F-25 EOL, G-9 Vent, Jct. A-25, Jct. F-24-1
T18S, R37E, Sections 24 & 25, and T19S, R38E Sections 6 & 9

Dear Mr. Jones:

On behalf of Rice Operating Company (ROC), R.T. Hicks Consultants, Ltd. is pleased to submit this Investigation & Characterization Plan (ICP) for the six (6) junction box and vent sites within the Hobbs Salt Water Disposal System referenced above. Plate 1 is a map showing the sites relative to major roads in the area. Plate 2 shows the sites, nearby USGS monitoring wells, and a regional potentiometric surface map.

The work elements proposed below will allow us to characterize these sites and develop an appropriate corrective action plan.

1. ROC will identify and document the location of all current and historic equipment and pipelines associated with each site.
2. ROC will use a backhoe with a 12-foot vertical reach to install a series of sampling trenches in order to recover soil samples and delineate the lateral extent (and potentially the vertical extent) of impacted soil.
3. If characterization by the backhoe is insufficient to define the extent and magnitude of past releases, ROC and Hicks Consultants will use a drilling rig to install one soil boring at the center of the source area to delineate the vertical extent of chloride in the soil.
4. Soil samples obtained by the backhoe or drilling rig will be obtained from regular intervals below ground surface.
5. Representative soil samples will be sent to a laboratory to allow for verification of the field chloride and PID results.
6. General soil texture descriptions will be provided for each sample trench or boring.
7. The criteria to delineate the extent of impact during trenching as well as in a soil boring is 5 point chloride decline vs. depth, or:
   a. After three consecutive samples demonstrate <250 ppm chloride using field analyses and <100 ppm total hydrocarbon vapors using the headspace method (see attached ROC Quality Procedure in Appendix A), or
   b. After five consecutive samples show a decreasing trend of chloride and hydrocarbons and the last sample shows chloride < 250 ppm and total hydrocarbon vapors <100 ppm (Appendix A).
   c. Soil boring to capillary fringe should neither (a) or (b) apply

8. If the boring penetrates the capillary fringe, a monitoring well will be completed with a 2 or 4" diameter casing 25 feet down gradient from confirmed impact for use during possible corrective actions. Plate 2 presents a potentiometric surface map for the site area.
9. If field analysis of hydrocarbon vapors and observations of staining show that hydrocarbon impact is unlikely at the site or below 20-feet, collection of samples from cuttings may be substituted for split spoon sampling (chloride only).

The ROC trench characterization will be employed to identify the lateral extent of chloride at each site, if possible. If trenching does not fully characterize the lateral extent of chloride at each site, boreholes will be advanced 20 feet beyond the furthest trenches where the soil data has an average chloride concentration greater than 1,000 mg/kg. The total depth of borings installed to characterize lateral extent shall be 20 feet below ground surface with soil samples for delineation taken at 5 foot intervals.

Rice Operating Company (ROC) is the service provider (agent) for the Hobbs Saltwater Disposal System and has no ownership of any portion of pipeline, well, or facility. A consortium of oil producers who own the Hobbs System (System Partners) provide all operating capital on a percentage ownership/usage basis. Major projects require System Partner authorization for expenditures (AFE) approval and work begins as funds are received. We will implement the work outlined herein after NMOCD approval and subsequent authorization from the System Partners. The Hobbs SWD system is in abandonment.

For all environmental projects, ROC will choose a path forward that:

1. Protects public health.
2. Provides the greatest net environmental benefit.
3. Complies with NMOCD Rules.
4. Is supported by good science.

Following the site characterization described above, a Corrective Action Plan with the data and analysis supportive of a procedure for site file termination, or a termination request will be submitted, depending on characterization findings. Quality Procedures for characterization work are provided in Appendix A.

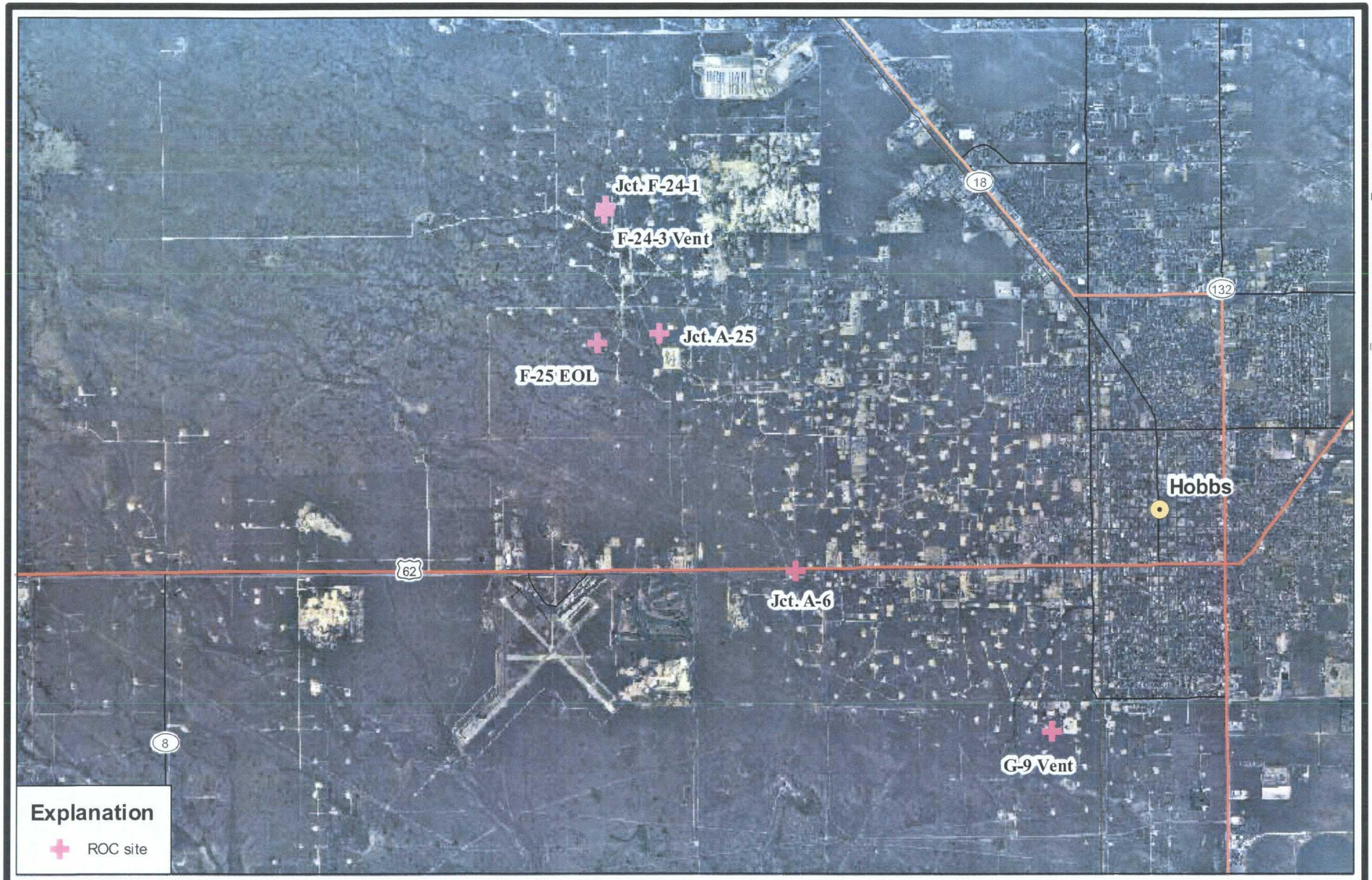
If you have any questions or comments regarding this ICP, please contact me at our Albuquerque office or Hack Conder of Rice Operating Company.

Sincerely,
R.T. Hicks Consultants, Ltd.

Katie Lee

Katie Lee
Project Scientist

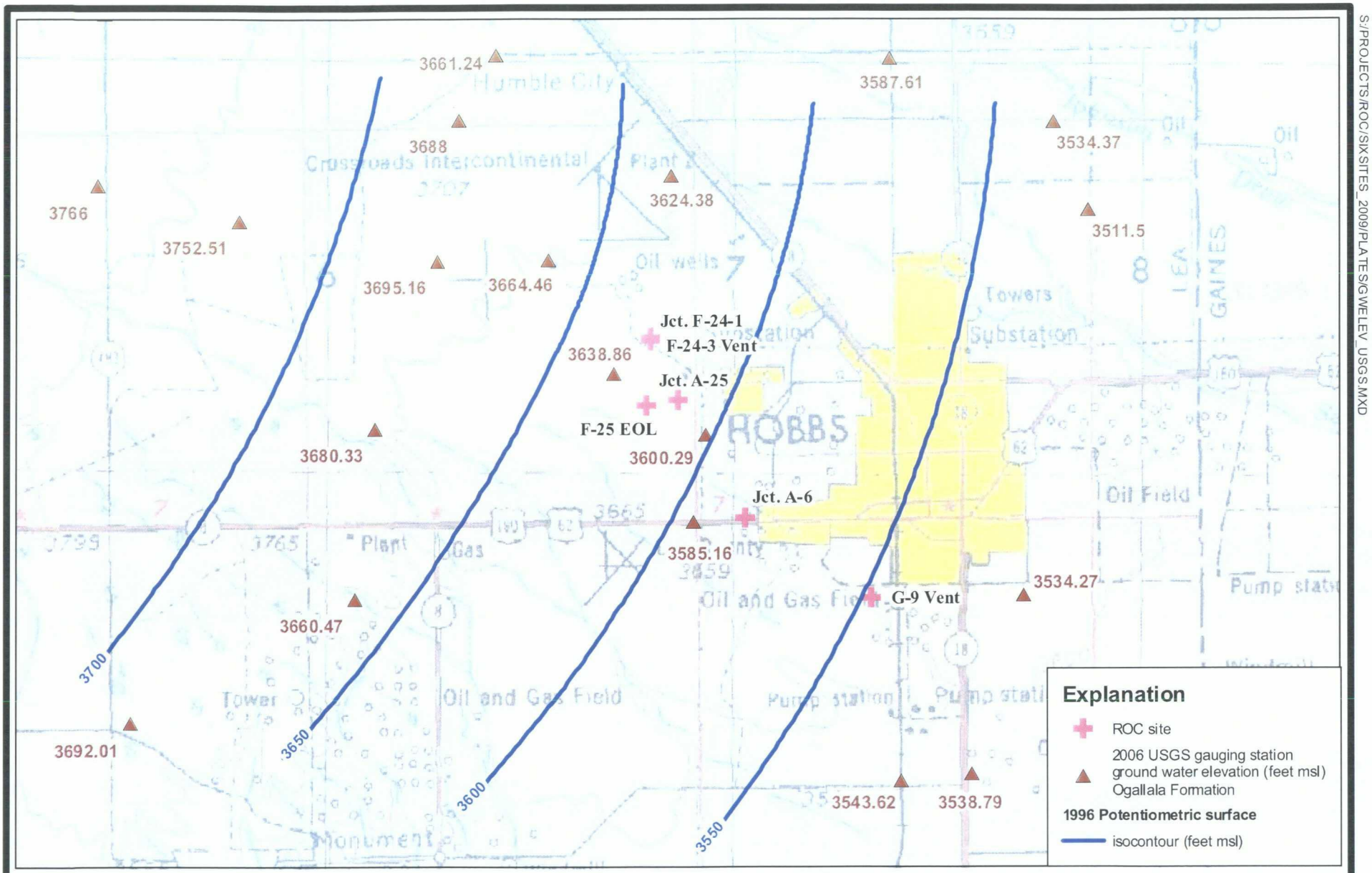
Copy: Rice Operating Company
Edward J. Hansen, NMOCD



S:/PROJECTS/ROC/SIX SITES_2009/PLATES/GWELEV_USGS.MXD

1/28/2009

R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 Ph: 505.266.5004	Site Map - 2005 Aerial Photo (RGIS) Jct. A-6, Jct. A-25, Jct. F-24-1, Jct. F-24-3 Vent, G-9 Vent	Plate 1
	Rice Operating Company 2009 Hobbs Investigation and Characterization Plan	January 2009



N
W E
S

0 1 2 Miles

R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 Ph: 505.266.5004	2006 Potentiometric Surface Map Jct. A-6, Jct. A-25, Jct. F-24-1, Jct. F-24-3 Vent, G-9 Vent	Plate 2
	Rice Operating Company 2009 Hobbs Investigation and Characterization Plan	January 2009

1/28/2009

S:/PROJECTS/ROC/SIX SITES_2009/PLATES/GWELEV_USGS.MXD

ATTACHMENT B

Lithology Log from Soil Boring (Vertical Delineation)
Conducted by ROC and RTH in September 2009

Logger:	Dale Littlejohn
Driller:	Harrison & Cooper, Inc. Drilling
Consultant:	R.T. Hicks, Consultants
Drilling Method:	Air rotary
Start Date:	9/23/2009
End Date:	9/23/2009

Comments: All samples from cuttings; too hard to split spoon
Located at source of former junction box site.
Drafted by: Lara Weinheimer
TD = 25 ft GW = 48 ft

RICE OPERATING COMPANY ROC SINCE 1955

Project Name: Hobbs jct. F-24-1 **Well ID:** SB #1
Location: UL/F sec. 24 T18S R37E
Lat: N32°44'9.826" **County:** Lea
Long: W103°12'25.869" **State:** NM

Depth (feet)	chloride field tests	LAB	PID	Description
				0 - 5 ft
				SILT AND CALICHE
5	151	Cl- <16	0	light grayish brown, no odor
		GRO <10.0		5 - 10 ft
		DRO 215		SILT AND CALICHE
10	152		0	gray, no odor
				10 - 20 ft
				SILT AND CALICHE
15	152		0	yellowish gray, no odor
20	153		0	
				20 - 25 ft
				SILTY SAND
25	153	Cl- <16	0	light brown, poorly sorted, angular,
		GRO <10.0		no odor
		DRO 14.5		

Lithology

Well Construction

bentonite seal

ATTACHMENT C

Laboratory Reports and Chain-of-Custody Documentation

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
RICE OPERATING COMPANY
ATTN: HACK CONDER
122 W. TAYLOR
HOBBS, NM 88240
FAX TO: (575) 397-1471

Receiving Date: 09/24/09
Reporting Date: 09/25/09
Project Owner: NOT GIVEN
Project Name: HOBBS JCT. F-24-1
Project Location: NOT GIVEN

Sampling Date: 09/23/09
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AB
Analyzed By: AB/HM

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/kg)	DRO (>C_{10}-C_{28}) (mg/kg)	Cl* (mg/kg)
ANALYSIS DATE		09/25/09	09/25/09	09/24/09
H18314-1	SB 1 5'	<10.0	215	<16
H18314-2	SB 1 25'	<10.0	14.6	<16
Quality Control		438	443	490
True Value QC		500	500	500
% Recovery		87.6	88.6	98.0
Relative Percent Difference		0.6	1.6	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-Cl B
*Analyses performed on 1:4 w:v aqueous extracts. Reported on wet weight.

Chemist

09/25/09
Date

H18314 TCL RICE

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 OPERATING	**BILL TO**	
Project Manager:	HACK CONDER	P.O. #:	
Address:	122 W. TAYLOR	Company:	
City:	HOBBS State: NM Zip: 88240	Attn:	
Phone #:	575 393 9174 Fax #: 397 1471	Address:	
Project #:	Project Owner:	City:	
Project Name:	HOBBS JCT F-24-1	State: Zip:	
Project Location:		Phone #:	
Sampler Name:	Tony Garcia	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 8015M									
H18314-1	SB 1 5'	G	1			✓					✓		9/23/09	1:13	✓	✓									
-2	SB 1 25'	G	1			✓					✓		9/23/09	1:26	✓	✓									

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: 9/24/09	Received By:	
	Time: 11:30a		
Relinquished By:	Date:	Received By:	
	Time:		

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

REMARKS:

Email results:
jpurvis@riceswd.com
lweinheimer@riceswd.com
hconder@riceswd.com

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

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

Rush!!

Katie Lee

From: Hansen, Edward J., EMNRD [edwardj.hansen@state.nm.us]
Sent: Wednesday, April 22, 2009 4:01 PM
To: Hack Conder
Cc: Jones, Brad A., EMNRD; Lara Weinheimer; Dale Littlejohn; Katie Jones; Katie Lee
Subject: RE: ROC ICP- 6 sites for Hobbs SWD: F-24-3 vent #1R0428-46 F-25 EOL #1R0428-47 Jct. F-24-1 #1R0428-62G-9 vent #1R0428-73; Jct. A-6 #1R0428-74

Dear Mr. Conder:

The New Mexico Oil Conservation Division (OCD) has reviewed the submitted Investigation Characterization Plans (ICPs) (combined in one document), dated February 19, 2009, for the above-referenced sites. The OCD hereby approves the following ICPs for the Rice Operating Company sites:

1. Hobbs SWD F-24-3 vent submitted by R. T. Hicks on 2/19/2009 #1R0428-46
2. Hobbs SWD F-25 EOL submitted by R. T. Hicks on 2/19/2009 #1R0428-47
3. Hobbs SWD Jct. A-25 submitted by R. T. Hicks on 2/19/2009 #1R0428-60
4. Hobbs SWD Jct. F-24-1 submitted by R. T. Hicks on 2/19/2009 #1R0428-62
5. Hobbs SWD G-9 vent submitted by R. T. Hicks on 2/19/2009 #1R0428-73
6. Hobbs SWD Jct. A-6 submitted by R. T. Hicks on 2/19/2009 #1R0428-74

Also, please be advised that OCD approval of these plans does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

If you have questions regarding this matter, please contact me at 505-476-3489.

Edward J. Hansen
Hydrologist
Environmental Bureau

P.S.: Please use the respective OCD case #s on future correspondence regarding the sites listed above.

From: Katie Lee [mailto:katie@rthicksconsult.com]
Sent: Thursday, February 19, 2009 10:58 AM
To: Hack Conder; Jones, Brad A., EMNRD
Cc: Hansen, Edward J., EMNRD; Lara Weinheimer; 'Dale Littlejohn'; Katie Jones
Subject: ROC ICP- 6 sites in Hobbs, NM

Mr. Jones,

R.T. Hicks Consultants is pleased to submit the attached Investigation and Characterization Plan on behalf of Rice Operating Company for six sites in the now abandoned Hobbs SWD system:

Jct. A-6
F-24-3 Vent

F-25 EOL
G-9 Vent
Jct. A-25
Jct. F-24-1

These sites are located in T 18S, R37E, Sections 24 & 35 and in T 19S, R 38E, Sections 6 & 9. A hard copy of this submission follows via FedEx. If you have any questions or comments, please contact me at 505-266-5004 or Hack Conder of Rice Operating Company at 575-393-9174.

Regards,

Katie Lee
Project Scientist
R.T. Hicks Consultants, Ltd.
ph. 505-266-5004
fax 505-266-0745
mobile 505-400-7925

Appendix B

Vegetation Documentation

R.T. Hicks Consultants, Ltd.
901 Rio Grande Blvd. NW, Suite F-142
Albuquerque, NM 87104

New Mexico State Land Office

Field Operations Division

(505) 827-5723 P.O. Box 1148 Santa Fe, NM 87504
(575) 392-8736 2702-D N. Grimes Hobbs, NM 88240
(575) 885-1323 N. Canal, Suite B Carlsbad, NM 88220
(575) 623-4979 1001 S. Atkinson Roswell, NM 88210
(575) 763-0796 105 E. 6th St. Clovis, NM 88101

REVEGETATION FORM

1. General Information

Site name: **HOBBS F-24-1**				Lease No.:		
U/L or Qtr/Qtr	Section	Township	Range	County	Latitude	Longitude
F	**24**	**18S**	**37E**	**LEA**	**32°44'9.755"N**	**103°12'25.932"W (NAD 83)**
Company Name: **RICE OPERATING**				Contact Name: **HACK CONDER**		
Phone no.: **(575) 393-9174**		Email:	**hconder@riceswd.com**			
Address: **122 W. TAYLOR HOBBS, NM 88240**						
Spill / Release ☐	P&A Well ☐	Pit Closure ☐	Facility Closure ☒	Other ☐		
OCD Spill No.	API No.		Type: **JUNCTION BOX**			
Site size:	acres	**780**	square feet	Map detail of site attached ☐		
Additional information:						

3. Soils **Do not rip caliche subsoils; caliche rocks brought to the surface by ripping shall be removed.*

Salvaged from site ☐	Bioremediated ☐	Imported ☒	Blended ☐	Depth (in):	
Texture: **SANDY**	Describe soil & subsoil:	**SAND OVER CALICHE**			
Soil prep methods:	Rip ☐ Depth(in):	Disc ☐ Depth (in):	Rollerpack ☐		
Date completed: **11/24/09**	Photos attached ☒	Number of photos: **1**			

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

Custom seed mix ☒	Prescribed mix ☐	Seed mix name: **2 LBS ELBON RYE 0.5 LBS LEA CO. MIX**	Seeding date: **11/24/09**
Is seed mix divided into submixes based on seed size?		Yes ☐ No ☒	
Drill Seeder ☐ Drill Type:		Broadcast ☒ Method: **HAND BROADCAST**	Hydroseeding ☐
Soil conditions during seeding:	Dry ☒	Damp ☐	Wet ☐
Photos attached ☒ Number of photos: **2**	Observations:		

5. Additional Methods

Mulching ☐ Crimping ☐ Mulch type: Tons/acre:		Fertilizer ☒ Type: **13/13/13/13** Lbs/acre: **1 LB TOTAL**	Other ☐ Describe:
Photos attached ☐ Number of photos:	Observations:		

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: **TONY GRIECO**	Title: **ENVIRONMENTAL TECH**	Date: **12/1/09**
Signature:		

Hobbs Jct. F-24-1 (1R428-62)
(UL/F, Sec. 24, T18S, R37E)

scrapped area 11/24/2009

hauling in clean, imported soil 11/24/2009

seeding the backfilled site 11/24/2009

raking in seed 11/24/2009

seeding site 5/5/2010

vegetation 8/26/2010