New Mexico Oil Conservation Division, District I 1625 N. French Drive

Form 3160-5 (August 2007) **UNITED STATES**

Hobbs, NM 88240

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

5. Lease Serial No. NMNM0145685

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals. 7. If Unit of CA/Agreement, Name and/or No. SUBMIT IN TRIPLICATE - Other instructions on page 2. Horton Federal 1. Type of Well 8. Well Name and No. Oil Well Gas Well Other WIW 2. Name of Operator EOR Operating Co 3a. Address 3b. Phone No. (include area code) 10. Field and Pool or Exploratory Area Milnesand - San Andres 200 N. Loriane, Suite 1440 Midland, TX 79701 432-687-0303 Location of Well (Footage, Sec., T., R., M., or Survey Description) 11. Country or Parish, State Sec 31 T 08S R 35E Roosevelt Co, NM 12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Acidize Deepen Water Shut-Off Production (Start/Resume) Notice of Intent Alter Casing Fracture Treat Reclamation Well Integrity Casing Repair New Construction Recomplete Subsequent Report Change Plans Plug and Abandon Temporarily Abandon Final Abandonment Notice Convert to Injection Plug Back Water Disposal 13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.) EOR Operating Co. requests approval to plug and abandon this well according to attached proposed procedure and wellbore diagram. **Note: EOR plans to use BCM & Associates to plug a total of 13 wells (for both EOR, 12 wells & Ridgeway, 1 well) and has scheduled to complete these 13 P&As prior to 6/30/11 ANN OS SOLL APPROVED FOR 3 MONTH PERIOD ENDING AUG 1 9 2011 14. I hereby certify that the foregoing is true and perfect. Name (P) Jana True Title Production Asst Signature Date 04/29/2011 THIS SPACE FOR FEDERAL OR STATE OFFICE USE Approved by PETROLEUM ENGINEER MAY 1 9 2011

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

Office

(Instructions on page 2)

entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would

CONDITIONS OF APPROVAL

Plugging Procedure

Horton Federal #24 WIW

API No. - 30-041-10118

- 1. Prepare location and test anchors
- 2. MIRU plugging rig
- 3. Notify OCD/HFO 24 hours prior to commencement of P & A procedure.
- 4. NDWH/NU BOP
- 5. RIH w-4 ½ CIBP on 2 3/8 WS @ 4630' (+/-) within 100' of top perf 4686'
 - a. Spot 35' of cement on CIBP
 - b. Let cement cure bump plug @ 4651' (+/-)
- 6. Load well with plugging mud and conduct MIT to 500 psi., test for leak off.
 - a. Bleed pressure off after MIT.
- TIH to 4651' and spot 25 SX cement plug
 - a. Wait on cement and tag
- MIRU WL and RIH w/perf gun to 3100'
 - perforate @ 2 JSPF
 - b. POOH w/WL

- TIH WAS SX cement plug @ 3100' To Have Solid Plug F/3100-3000'
 - a. Wait on cement
 - b. Tag plug @ 3000' Or Above
- 10. MIRU WL and RIH w/perf gun to 1600'
 - perforate @ 2 JSPF
 - b. POOH w/WL

- c Rig WL down move off loc.

 11. THE W/WS = SX cement plug @ 1600' To Have Solid Plug F/1600-1500'
 - Wait on cement
- b. Tag plug **@ 1500'Or Above**12. MIRU WL and RIH w/perf gun to
- - perforate @ 2 JSPF
 - b. POOH w/WL
- 13. TIH w/WS sport 25 SX cement plug @ 430 To Have Solid Plug F/462-362
 - a. 8 5/8 csng. Shoe @ 412'
 - b. Wait on cement
 - c. Tag plug
- 14. TIH to tag plug @ 410 (47) 362 Or Above

2-Spot commentate Perforate @60'& Squeeze W/255x. To Have Solid Plug F/60-0' circulate cement to surface

TOH W/WS

- 15. RDMO Plugging Rig
 - Install P & A marker plate
 - Cut off dead men
 - Remediate Location

Co. Rep	0 .	
Well Name	Horton Federal	Well No. 24 WIW
Field	MSA	
County	Roosevelt	
State	NM	
Date	1/0/1900	
Date Comp		
KB	0.00	

		1			1	
Description	0.D.	Grade	Weight	Depth	Cmt Sx	TOC
Surface Csg	<u>8 5/8</u>	0	0	412	0	0
Inter Csg	0	0	0	0	0	0
Prod Csg	4 1/2	0	0	4730	0	0
Liner O.D.	0	0	0	0.00	0	0

Failure Analysis

Lease Horton Federal	Well # 24 W	IW Field		MSA				
Well Test Data BOPD	BWPD	MCF		IVIOA				
Unit Name & Size	1 / 5 / 7 /	MICI	LL					
Perforations 4686-4728								
TBG Data 150 ts-2 3/8 Pump Size								
Strokes Per. Min. S	troke Lenath		at Nipple	······································				
Tension Rods Str	ing Taper 1	- 15	Taper 2					
IAC Rod Grade	Taper 3		Taper 4					
Predicitive Load	Actual Load	, 						
LIST DATES, REASON FOR FAILURES & MEASURES TAKEN TO DESCRIP								
L VILOVES & MON LAIFOKE DO	LLS.			IN OAID				
Well file indicates packer @ 4652	ft.							
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LIST ANY RECOMMENDATIONS	TO PREVENT FUTU	RE FAILU	RES OR A	VY				
COMMENTS ON WELL CONDITION	NS THAT WILL CO	NTRIBUTE	TO FAILU	RES.				
				·				

Packer - 4652' Open Perfs Open Hole - 4730-4767

Perforations

4686-4728 Open Hole - 4730-4767

4767

TD @ 4767

BUREAU OF LAND MANAGEMENT

Roswell Field Office 2909 West Second Street Roswell, New Mexico 88201 (575) 627-0272

Permanent Abandonment of Federal Wells Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

- 1. Plugging operations shall commence within <u>ninety (90)</u> days from the approval date of this Notice of Intent to Abandon. If you are unable to plug the well by the 90th day provide the BLM Roswell Field Office, prior to the 90th day, with the reason for not meeting the deadline and a date when the BLM Roswell Field Office can expect the well to be plugged. Failure to do so will result in enforcement action.
- 2. <u>Notification:</u> Contact the BLM Roswell Field Office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, during office hours call (575) 627-0205 or after office hours call (575) 420-2832. Engineer on call during office hours phone (575) 627-0275 or phone (after hours) call (575) 626-5749.
- 3. <u>Blowout Preventers:</u> A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The minimum BOP requirement is a 2M system for a well not deeper than 9090 feet; a 3M system for a well not deeper than 13636 feet; and a 5M system for a well not deeper than 22727 feet.
- 4. <u>Mud Requirement:</u> Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at a rate of 25 sacks (50 pounds each) of gel per 100 barrels of water. Minimum nine (9) pounds per gallon.
- 5. <u>Cement Requirement:</u> Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. In lieu of a cement plug in cased hole, a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 50 feet of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either class "C" for up to 7500 feet of depth, mixed at 14.8 lbs./gal with 6.3 gallons of fresh water per sack or class "H" for deeper than 7500 feet plugs, mixed at 16.4 lbs./gal with 4.3 gallons of fresh water per sack.

- 6. Monument: Upon abandonment of the well, all casing shall be cut-off at the base of the cellar or 3-feet below final restored ground level (whichever is deeper). The well bore shall then be covered with a metal plate at least ¼ inch thick and welded in place. The following information shall be permanently inscribed on the dry hole marker: Well name and number, the name of the operator, the lease serial number, the surveyed location (the quarter-quarter section, township and range or other authorized survey designation acceptable to the authorized officer; such as metes and bounds).
- 7. <u>Subsequent Plugging Reporting:</u> Within 30 days after plugging work is completed, file one original and five copies of the Subsequent Report of Abandonment, Form 3160-5 to the BLM Roswell Field Office. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**

Following the submittal and approval of the Subsequent Report of Abandonment, a Notice of Intent for Final Abandonment with the proposed surface restoration procedure must be submitted for approval.