OCD-HOBBS

Form 3160-5
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an HOBBS OCD abandoned well. Use Form 3160-3 (APD) for such proposals.

***SUBMIT IN TRIPLICATE** – Other instructions on page 2.* SEP 22 2014

RECEIVED

5. Lease Serial No.	
6. If Indian, Allottee or Tribe Name	
7. If Unit of CA/Agreement, Name and/or No.	
1. Type of Well: ☐ Oil Well ☐ Gas Well ☑ Other Water Disposal Well	8. Well Name and No. Pan Am Federal "25" #1
2. Name of Operator: Endeavor Energy Resources, LP	9. API Well No. 30-025-23155
3a. Address: 110 N Marienfeld st, suite 200 Midland, TX 79701 / 3b. Phone No. *(include area code)*: 432 687 1575	10. Field and Pool or Exploratory Area: Delaware
4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*: 1977 FSL, 653 FWL, UNIT "L", Sec. 25, T25S, R33E, Lea CO. NM	11. County or Parish, State: Lea, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ 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.)

Squeeze tight casing leak at 1577'

See attachments for proceedure.

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*: Bradley Bates — Title: Petroleum Engineer

Signature: [signature] — Date: 09/11/2014

APPROVED

SEP 16 2014

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by — Title — Date

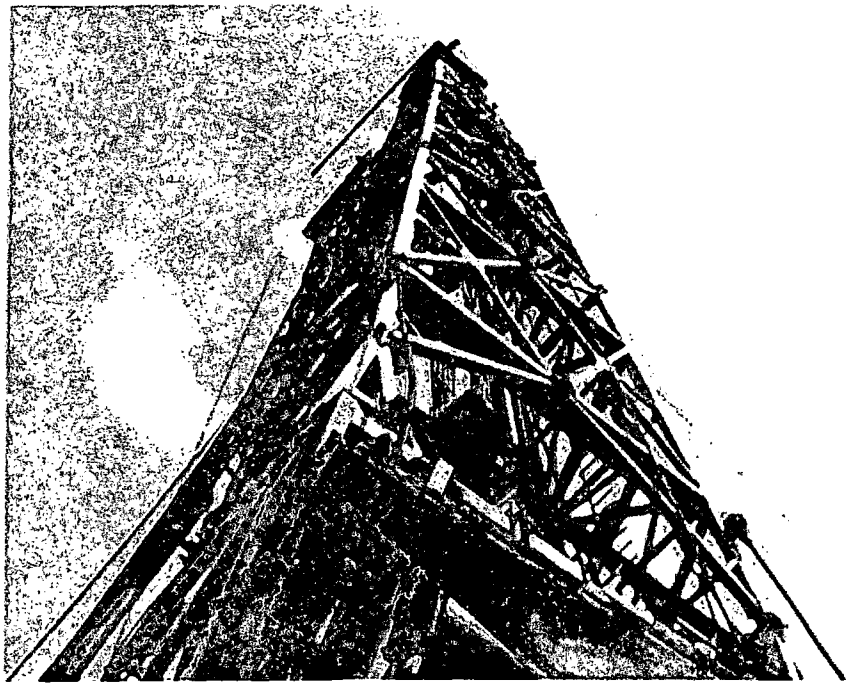
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. — Office

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.

(Instructions on page 2)

SEP 22 2014

300PSI



Project Proposal and Procedure

Client:	Endeavor Energy Resources
Prepared For:	**Mr. Bradley S. Bates** Petroleum Engineer, Special Projects
Tel:	432-262-4034
Mobile:	432-638-0543
eMail:	brad@eeronline.com

	DOCUMENT INFORMATION	CONTACT INFORMATION
Field: Well Name: Location:	Pan Am Federal 25 #1 SWD New Mexico	**300PSI** Olney, Illinois Phone: 618-395-7395
Prepared By:	Todd K. Harris Phone: 618-292-9650 Email: todd.harris@sealmaker.net	Cleveland, OK 74020 Phone: 918-358-5713
Date:	August 22, 2014	Minden, Louisiana Phone: 318-469-4409
Document Name:	P08222014_Endeavor_PanAmFed25#1	

300PSI

1. PROJECT SCOPE

Objective

To perform a **300PSI** SEALMAKER CRS leak repair squeeze on Pan Am Federal 25 #1SWD across the existing squeezed perforations located at 1577' to restore integrity and comply with the BLM MIPT test at 500-psi.

a. The objective is to seal off the existing leaking perforations at 1577'.

b. A plug will be set 30' below the leaking perforations. SEALMAKER CRS would be circulated through the tubing and around the packer unset at 1577'

c. The packer will then be pulled above the sealant and set.

d. The tubing-packer assembly will be pressurized with a pump-truck to initiate squeezing of the leak point(s) to 750-psi as determined by the client.

e. After an initial seal is established, the tubing will be shut-in and the CRS allowed to cure as determined by the onsite SEALMAKER Engineer.

f. The pressure will be cycled throughout the sealant operation and shut-in periods during incremental pressure step-ups may be required until a complete seal at the final pressure is achieved.

g. The casing will then be pressure tested above the plug to verify integrity.

h. The packer will then be released and the tubing and casing will be reverse circulated clean for plug retrieval.

Well-Bore Data:

CLIENT:	Endeavor Energy Resources
INSTALLATION/ WELL ID:	Pan Am Federal 25 #1 SWD
Surface Casing:	8-5/8" x 24# @ xxxx'
Production Casing:	4-1/2" x 17# @ xxxx'
Tubing (LS):	2-3/8" x 4.7# @ xxxx
Packer Depth:	@ ~xxxx'

Volumes:

Tubing (LS) Volume:	0.0039 bbls/ft
Prod x Tubing Ann Vol:	0.0105 bbls/ft
Surface x Prod Annulus Volume:	0.0440 bbls/ft
Tubing Total Volume @ 3677':	X bbls
Annulus Volume to Packer:	X bbls
Annulus Volume 2610-3621':	X bbls (X-gallons)
Tubing Volume @ 3621':	X bbls (X-gallons)

2. PROCEDURE

1 Mobilize personnel, sealant, and equipment to Location

2 CHEMICALS
   1. Vortex A
   2. Vortex B
   3. SEALMAKER
   4. Fresh Water

3 Prior to the operation a toolbox meeting with all the involved personnel will be conducted. Focus on importance of communication, awareness, working with pressure, and general safety

4 Coordinate with Well Service Supervisor, secure PTW, inspect well, verify any wellhead ports to be utilized, and verify all valves to be accessed or isolated during procedure

5
   1. Load casing with water and rig up on casing so the wellhead can be packed off to minimize U-tubing effect after treatment is displaced
   2. Verify leak depths and recalculate volumes as required on-site
   3. RIH to lowest leak depth with tubing/packer
   4. Rig-up 300PSI centrifugal pump onto tubing with injection manifold and tubing shut-off valve
   5. Open Annulus Wing Valve to circulate out from the annulus
   6. Pump SEALMAKER-CRS and circulate in to tubing, around, and spot lead 50-100 gallons above the upper leak depth displacing with fresh water during the tail of the displacement to leave water in the tubing at the surface
   7. Close Annulus Wing Valve
   8. Break tubing injection manifold from tubing
   9. Pull tubing as required until the packer is above the upper leak point and at the top of the displaced CRS.
   10. Set Packer.
   11. Rig-up triplex/rig pump onto tubing and pressurize to initiate squeeze as directed by 300PSI personnel
   12. Pressurize and bleed as directed until a stabilized seal has been established
   13. Step pressure up incrementally until target pressure is reached
   14. Disconnect triplex pump and connect Nitrogen (N2)
   15. Set N2 at desired overnight pressure and feed overnight
   16. Bleed N2 and load tubing measuring volume required to fill
   17. Pressurize back to test pressure and record leak-off. If pressure stable then go to step 2.7 and pressure test
   18. If leak-off is still present continue squeezing with triplex pump as directed by 300PSI.
   19. Repeat steps 2.5.11 through 2.5.17 herein until a complete seal is achieved

6 **DIAGNOSTIC NOTES:**

1. Primary objective is to determine the pump-in leak rates on each suspected leak depth and pressure leak-off rates for each leak point to precisely isolate and treat the leak interval as efficiently as possible.

SEALANT OPERATION NOTES:

1. During the squeeze operation, the pressure shall be shut-in as determined by the on-site 300PSI field engineer. The shut-in period will be determined by the progression of the seal being established during the operation.
2. If difficulty establishing a stable pressure at maximum pressure is encountered, the pressure will be typically reduced to establish a seal at a lower pressure and locked in to allow to cure before stepping up towards the maximum pressure. The curing period may be up to 8-10 hours if severe difficulty is encountered. The seal will be incrementally stepped up as pressure indications show a stable seal has been established at each pressure step-up. This is unpredictable until the actual operation begins and the sealant response is determined
3. If multiple chemical treatments are required, the tubing shall be circulated clean each time with water to maintain the tubing clear and prevent plugging within.
4. Each leak point may need to be treated individually based on the diagnostics report to be furnished by the client. If this is the case the lowest leak point shall be treated first. After a stabilized seal is established, the packer will be released and pulled above the next leak point and a successive treatment will be ran on the leak point with the lower leak point remaining exposed to each successive run.
5. The pressures will be cycled multiple times by bleeding and pressurizing as determined by the 300PSI engineer throughout each squeeze interval.
6. The tubing depth may need to be adjusted and additional sealant may need to be injected as needed to achieve a complete seal and will be determined on-site based upon well responses.

7 Pressure test tubing/packer squeeze interval at target pressure

8 Bleed tubing pressure to Zero (0)

9 POOH with tubing and remove packer

10 RIH with latch tool to top of plug

11 Circulate tubing and well-bore clean to remove remaining sealant form hole

12 Pressure test casing from surface to plug as per TRRC standards @ 500-psi

13 Rig-down 300PSI equipment and demobilize

14 End of Procedure

300PSI

3. CHEMICALS & EQUIPMENT

SMI CHEMICALS & EQUIPMENT		
Equipment:	300PSI Transport Truck w/ transfer Pump	Valve manifold, pressure gauges, hoses, fittings, crossovers
Chemicals:	Sealmaker Vortex B Vortex A Freshwater	10-Gal 550-Gal 550-Gal 500-Gal

CLIENT SUPPLIED MATERIALS		
Work-over Unit		Resettable packer Plug w/ running and retrieving and circulating tools
Triplex pump unit	1/4-bpm @ 5000-psi capacity	Hardline, hoses, connections
Displacement Water or Packer fluid		To be determined