

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

HOBBS OCD

AUG 17 2015

OCD-HOBBS

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.  
Fee NMNM 119277, St VB15060000

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator  
Endeavor Energy Resources, LP

3a. Address  
110 N. Marienfeld Street, Suite 200  
Midland, Texas 79701

3b. Phone No. (include area code)  
(432) 687-1575

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
2260' FNL, 380 FWL, UNIT "E", SEC. 2, T26S, R33E, Lea CO. NM.

7. If Unit of CA/Agreement, Name and/or No.  
E

8. Well Name and No.  
BATTLE AXE FED COM # 2H

9. API Well No.  
30-025-41370

10. Field and Pool or Exploratory Area  
RED HILLS, UPPER BONE SPRINGS SHALE (97900)

11. Country 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			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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.)

After running open hole logs, Endeavor would like to change the lateral target to 9370' TVD in the Avalon Shale. Field and Pool: Red Hills (Upper Bone Spring Shale), Pool ID 97900.

\*\*\* See attached revised drilling plan\*\*\*

*Verbal approval granted 8/15/2014.  
Hard copies lost in mail room for sometime & appeared recently. 8/13/2015 PR Swartz*

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)  
Jan South

Title Regulatory Analyst

Signature *[Signature]* Date 08/15/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE **APPROVED**

Approved by

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.

Title

Office

Date **AUG 13 2015**



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)

AUG 31 2015

# ENDEAVOR ENERGY RESOURCES, LP

110 N. Marienfeld St., Suite 200

Midland, TX 79701

Rev. 4: Aug. 15, 2014

After running open hole logs, Endeavor would like to change the lateral target to 9370' TVD in the Avalon Shale. Field and Pool: Red Hills (Upper Bone Spring Shale), Pool ID 97900

Endeavor proposes the following changes to our drilling plan:

## **DRILLING PLAN Battle Axe Fed. Com. #2H**

API# 30-025-41370

AFE #

EER Prop Code:

Driving Directions: From Jal, NM: Go W on hwy #128 for 15 mi, turn L on Battle Axe rd go 12 mi SW, turn R go 0.6 mi N, turn L go W into location.

Surface Location: 660 ft from N line & 660 ft from W line (UL "D") of Sec. 3, T-26S, R-33E, Lea Co., NM

### **FORMATION TOPS:**

Elevation: 3322 ft GL, 3348 ft KB elevation (26 ft RKB).

Formation	Top	Base	Comments
Rustler anhydrite	920		
Surface casing point	±950		
Salt	~1120		
Lamar Lime	~4800		
9-5/8" casing point	±4900		
Bell Canyon	5016		
Cherry Canyon	6300		Oil
Brushy Canyon	7580		Oil
Bone Spring lime	9100		
Avalon shale	9150		
<b>H<sub>z</sub> Target</b>	<b>9355</b>	<b>9385</b>	<b>Oil</b>
1 <sup>st</sup> Bone Spring sand	10,100		Oil
2 <sup>nd</sup> Bone Spring sand	10,660		Oil
3 <sup>rd</sup> Bone Spring sand	11,745		Oil
Wolfcamp	12,200		Oil & gas
Permitted TD	12,250		

### **DIRECTIONAL PLAN:**

Critical Point	Hole Size	MD	Incl.	Az.	TVD	VS	Build Rate	Comments
KOP	8-3/4"	8654	0		8654			
End of Curve	8-3/4"	9779	90		9370	716	8	Build curve w/ motor.
PBHL	8-1/2"	16,259	90		9370	7196		100 ft from S line

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**CASING PROGRAM:** All casing will be NEW.

Hole	Depth	Casing	Wt	Grade	Conn.	Collapse Force	Collapse Rating (SF) ≥1.125	Burst (SF) ≥1.0	Tension (SF) ≥1.6 dry ≥1.8 buoy
8-3/4"	0 – 8655	5 1/2"	17	P110	UltraDQX			8500 psi (1.25)	159.3k (3.43) dry 137.3k (3.97) buoy
8-1/2"	8655 - 16,259'  (9370' TVD )	5 1/2"	17	P110	UltraFJ	4629 psi (9.5 MW 9370' TVD)	7480 (1.62)	(8500 psi max on frac job)	(9.0 MW) (UltraDQX = 545.9k yield)

\*See spec sheet.

UltraDQX above KOP and UltraFJ below KOP to PBHL.

**CEMENTING PROGRAM:**

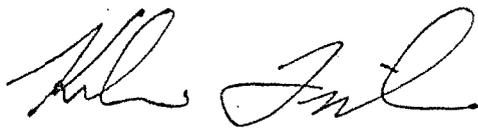
Pilot Hole Plugback: Hole volume: 8-3/4" = 0.4176 cu ft/ft

- Plug 1: 913 sx H + 0.02 gps D206 Antifoam + 0.06 gps D080 dispersant + 0.085 gps D197 Retarder (may adjust for TT). (15.6 ppg, 1.18 cu ft/sk)
  - Interval: 12,250' (Pilot Hole TD) – 10,000' (975 cu ft log caliper + 10% excess).
  - Est BHST = 174<sup>0</sup>F BHST at 12,250' (from 167<sup>0</sup>F BHLT)
- Plug 2: 263 sx H + 0.02 gps D206 Antifoam + 0.06 gps D080 dispersant + 0.085 gps D197 Retarder (may adjust for TT). (17.5 ppg, 0.94 cu ft/sk)
  - Interval: 9,000' – 8500 (220 cu ft log caliper + 12% excess)
  - Est BHST = 148<sup>0</sup>F
  - Plug #2 will be tagged and dressed to 100' short of KOP, then sidetrack operations will begin.

5-1/2" Production Casing: annular volume: 8-1/2" = 0.2291 cu ft/ft

8-3/4" = 0.2526 cu ft/ft

- Lead cement: 695 sx 50/50/10 Poz/H/gel + 5% BWOW salt + 4 pps kolite/gilsonite/phenoseal (11.8 ppg, 2.54 cu ft/sk)
  - Interval: 9779 ft MD (EOC) to 4400' (calc. with 30% excess) = 1766 cu ft
- Tail cement: 1451 sx 50/50/2 Poz/H/gel + 5% BWOW salt (14.4 ppg, 1.33 cu ft/sk)
  - Interval: 16,259 ft MD (shoe) to 9,779 ft MD (EOC), calc. with 30% excess) = 1930 cu ft
  - Est BHST = 151<sup>0</sup>F
  - WOC time prior to drill-out: N/A



Kelvin Fisher  
Drilling Manager  
Endeavor Energy Resources, LP