

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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 an 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

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

2. Name of Operator
Endeavor Energy Resources, LP

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

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

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

9. API Well No.
30-025-41370

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.

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 checked="" 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 <i>not</i>	<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.)

Due to availability, Endeavor proposes to change the connection on the vertical portion of the 5-1/2" 17# P110 production casing string from UltraDQX to GB CD Butt. Both are comparable modified buttress connections. The casing design forces will change as follows: See attached plans.

Directional Plan: *Contains Lateral Target Change*

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		330ft from N line

Previous 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 (3.4) dry 137.3k (4.0) buoy
	8655 -	5 1/2"	17	P110	UltraFJ	4629 psi (9.5 MW 9370' TVD)	7480 (1.62)		

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

Title Regulatory Analyst

Signature

Date 08/29/2014

THIS SPACE FOR FEDERAL OR STATE OFFICIAL USE

ACCEPTED FOR RECORD

SEP 16 2014

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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

Due to availability, Endeavor proposes to change the connection on the vertical portion of the 5-1/2" 17# P110 production casing string from UltraDQX to GB CD Butt. Both are comparable modified buttress connections. The casing design forces will change as follows:

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		330 ft from N line

PREVIOUS CASING PROGRAM: All casing will be NEW.

Hole	Depth	Casing	Wt	Grade	Conn.	Collapse Force	Collapse Rating (SF)	Burst (SF)	Tension (SF)
8-3/4"	0 – 8655'	5 1/2"	17	P110	UltraDQX			8500 psi (1.25)	159.3k (3.4) dry 137.3k (4.0) 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)

UltraDQX above KOP and UltraFJ below KOP to PBHL.

PREVIOUS CASING PROGRAM: All casing will be NEW.

Hole	Depth	Casing	Wt	Grade	Conn.	Collapse Force	Collapse Rating (SF)	Burst (SF)	Tension (SF)
8-3/4"	0 – 8655'	5 1/2"	17	P110	GB CD Butt			8500 psi (1.25)	159.3k (3.57) dry 137.3k (4.14) 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) (GBCD Butt = 568k joint strength)

*See spec sheet.

Please see the attached spec sheet from GB Tubulars.

GB Connection Performance Properties Sheet

Rev. 1 (02/05/2014)

ENGINEERING THE RIGHT CONNECTIONS™

Casing: 5.5 OD, 17 ppf
Grade: P-110

Connection: GB CD Butt 6.050
Grade: API P-110



PIPE BODY GEOMETRY					
Nominal OD (in.)	5 1/2	Wall Thickness (in.)	0.304	Drift Diameter (in.)	4.767
Nominal Weight (ppf)	17.00	Nominal ID (in.)	4.892	API Alternate Drift Dia. (in.)	N/A
Plain End Weight (ppf)	16.89	Plain End Area (in. ²)	4.962		

PIPE BODY PERFORMANCE					
Material Specification	P-110	Min. Yield Str. (psi)	110,000	Min. Ultimate Str. (psi)	125,000
Collapse		Tension		Pressure	
API (psi)	7,480	Pl. End Yield Str. (kips)	546	Min. Int. Yield Press. (psi)	10,640
High Collapse (psi)	8,580	Torque		Bending	
		Yield Torque (ft-lbs)	64,680	Build Rate to Yield (°/100 ft)	91.7

GB CD Butt 6.050 COUPLING GEOMETRY			
Coupling OD (in.)	6.050	Makeup Loss (in.)	4.2500
Coupling Length (in.)	8.500	Critical Cross-Sect. (in. ²)	6.102

GB CD Butt 6.050 CONNECTION PERFORMANCE RATINGS/EFFICIENCIES					
Material Specification	API P-110	Min. Yield Str. (psi)	110,000	Min. Ultimate Str. (psi)	125,000
Tension		Efficiency		Bending	
Thread Str. (kips)	568	Internal Pressure (%)	100%	Build Rate to Yield (°/100 ft)	83.3
Min. Tension Yield (kips)	638	External Pressure (%)	100%	Yield Torque	
Min. Tension Ult. (kips)	725	Tension (%)	100%	Yield Torque (ft-lbs)	17,030
Joint Str. (kips)	568	Compression (%)	100%		
		Ratio of Areas (Cplg/Pipe)	1.23		

MAKEUP TORQUE					
Min. MU Tq. (ft-lbs)	6,470	Max. MU Tq. (ft-lbs)	12,940	Running Tq. (ft-lbs)	See GBT RP
				Max. Operating Tq. (ft-lbs)*	16,180

Units: US Customary (lbm, in., °F, lbf)

1 kip = 1,000 lbs

* See Running Procedure for description and limitations.

See attached: Notes for GB Connection Performance Properties.

GBT Running Procedure (GBT RP): www.gbtubulars.com/pdf/RP_GB_DWC_Connections.pdf

Blanking Dimensions: www.gbtubulars.com/pdf/GB_DWC_Blanking_Dimensions.pdf