

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018**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.***SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. BROT HELM FEDERAL COM 601H
2. Name of Operator COG OPERATING LLC Contact: MAYTE X REYES E-Mail: mreyes1@concho.com		9. API Well No. 30-025-46065-00-X1
3a. Address ONE CONCHO CENTER 600 W ILLINOIS AVENUE MIDLAND, TX 79701-4287	3b. Phone No. (include area code) Ph: 575-748-6945	10. Field and Pool or Exploratory Area RED HILLS-BONE SPRINGS
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 35 T24S R34E NENE 250FNL 407FEL 32.180561 N Lat, 103.433655 W Lon		11. County or Parish, State LEA COUNTY, 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 type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<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	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

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 recompleat 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 recompleat 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.

COG Operating respectfully requests approval for the following changes to the originally approved APD.

**Wellhead**

The operator request to use multi-bowl wellhead assembly.

Surface Unchanged - 13.375? 54.5# J55 BTC has been set to 1116? and cement circulated to surface.

**Description of Design forward****Intermediate**

5M BOP System

14. I hereby certify that the foregoing is true and correct. <b>Electronic Submission #484374 verified by the BLM Well Information System</b> <b>For COG OPERATING LLC, sent to the Hobbs</b> <b>Committed to AFMSS for processing by PRISCILLA PEREZ on 09/24/2019 (19PP3240SE)</b>	
Name (Printed/Typed) MAYTE X REYES	Title SENIOR REGULATORY ANALYST
Signature (Electronic Submission)	Date 09/23/2019

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

Approved By <u>DYLAN ROSSMANGO</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>09/27/2019</u>
<b>Conditions of approval, if any, are attached:</b> 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 Hobbs

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)

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

# PERFORMANCE DATA

**TMK UP ULTRA™ SF**  
**Technical Data Sheet**

**5.500 in**

**23.00 lbs/ft**

**P110 CY**

## Tubular Parameters

Size	5.500	in	Minimum Yield	110,000	psi
Nominal Weight	23.00	lbs/ft	Minimum Tensile	125,000	psi
Grade	P110 CY		Yield Load	729,000	lbs
PE Weight	22.54	lbs/ft	Tensile Load	828,000	lbs
Wall Thickness	0.415	in	Min. Internal Yield Pressure	14,530	psi
Nominal ID	4.670	in	Collapse Pressure	14,540	psi
Drift Diameter	4.545	in			
Nom. Pipe Body Area	6.630	in <sup>2</sup>			

## Connection Parameters

Connection OD	5.696	in
Connection ID	4.626	in
Make-Up Loss	5.441	in
Critical Section Area	6.110	in <sup>2</sup>
Tension Efficiency	91.9	%
Compression Efficiency	91.9	%
Yield Load In Tension	670,000	lbs
Min. Internal Yield Pressure	14,530	psi
Collapse Pressure	14,540	psi
Uniaxial Bending	84	°/ 100 ft

## Make-Up Torques

Min. Make-Up Torque	12,800	ft-lbs
Opt. Make-Up Torque	14,100	ft-lbs
Max. Make-Up Torque	15,500	ft-lbs
Operating Torque	16,405	ft-lbs
Yield Torque	19,300	ft-lbs



Printed on: November-13-2018

### NOTE:

The content of this Technical Data Sheet is for general information only and does not guarantee performance or imply fitness for a particular purpose, which only a competent drilling professional can determine considering the specific installation and operation parameters. Information that is printed or downloaded is no longer controlled by TMK IPSCO and might not be the latest information. Anyone using the information herein does so at their own risk. To verify that you have the latest TMK IPSCO technical information, please contact TMK IPSCO Technical Sales toll-free at 1-888-258-2000.



**EC484374 – Change to Original APD  
CONDITIONS OF APPROVAL**

<b>OPERATOR'S NAME:</b>	<b>COG Operating LLC</b>
<b>LEASE NO.:</b>	<b>NMNM123535</b>
<b>WELL NAME &amp; NO.:</b>	<b>Brot Helm Federal Com 601H</b>
<b>LOCATION:</b>	<b>Section 35, T 24S, R 34E, NENE</b>
<b>COUNTY:</b>	<b>Lea County, New Mexico</b>

1. Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.
  - a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with the second stage.
  - b. Second stage via DV tool: Cement to surface. If cement does not circulate, contact the appropriate BLM office.

**All previous Conditions of Approval still apply.**

9/27/2019 DR