

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED  
OMB NO. 1004-0135  
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.  
NMNM107392

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

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

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
COG OPERATING LLC  
Contact: MAYTE X REYES  
E-Mail: mreys1@concho.com

3a. Address  
ONE CONCHO CENTER 600 W ILLINOIS AVENUE  
MIDLAND, TX 79701-4287

3b. Phone No. (include area code)  
Ph: 575-748-6945

8. Well Name and No.  
NIGHTCAP 6 FEDERAL COM 3H

9. API Well No.  
30-025-41589-00-X1

10. Field and Pool, or Exploratory  
LUSK

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 6 T20S R32E Lot 3 330FNL 2020FWL

11. County or Parish, and State  
LEA COUNTY, NM

**12. CHECK 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	Change to Original APD
	<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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall 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 LLC, respectfully requests approval for the following changes to the original approved APD.

**Change in Production Cement Program**

The 8-3/4" vertical, curve and lateral section of the Nightcap 6 Fed #3H has been drilled. Fluid calipers were obtained at TD (19,060' MD) and at the top of the curve at 8800' MD in order to properly size the Lead and Tail cementing volumes to minimize the hydrostatic loading on the lateral. The fluid caliper results are attached. The cement volumes requested are designed for cement to surface. BLM minimum requirements are for 500' tie in to intermediate casing. Fluid Caliper Annulus Volume between Hole and 5-1/2" casing (Lead Cement) 0 to 8800' Vertical from Surface to Kick Off Point = 2691 cuft. Fluid Caliper Annulus Volume between Hole and 5-1/2" casing (Tail Cement)

*Original COAs plus additional sundry COAs still kind.*

*Cement to tie back 50' above Capitan Reef.*

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #284313 verified by the BLM Well Information System

For COG OPERATING LLC, sent to the Hobbs

Committed to AFMSS for processing by JENNIFER MASON on 12/09/2014 (15JAM0014SE)

Name (Printed/Typed) MAYTE X REYES

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 12/08/2014

**APPROVED**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

**DEC 9 2014**

Approved By

Title

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

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD 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.

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

DEC 19 2014

**Additional data for EC transaction #284313 that would not fit on the form**

**32. Additional remarks, continued**

8800? to 19,090? Curve/Lateral = 2938 cuft.  
Total Annular Volume = 5629 cu ft.

COG Operating LLC.  
RE: Nightcap 6 Fed #3H  
LSN: NMNM107392  
Location: Sec. 6, T20S, R32E  
Lea Co., NM  
Rig: Precision 105  
Date: 8 December 2014

#### Change in Production Cement Program

The 8-3/4" vertical, curve and lateral section of the Nightcap 6 Fed #3H has been drilled. Fluid calipers were obtained at TD (19,060' MD) and at the top of the curve at 8800' MD in order to properly size the Lead and Tail cementing volumes to minimize the hydrostatic loading on the lateral. The fluid caliper results are attached.

Fluid Caliper Annulus Volume between Hole and 5-1/2" casing (Lead Cement)

0 to 8800' Vertical from Surface to Kick Off Point = **2691 cuft.**

Fluid Caliper Annulus Volume between Hole and 5-1/2" casing (Tail Cement)

8800' to 19,090' Curve/Lateral = **2938 cuft.**

Total Annular Volume = 5629 cu ft.

As result of the fluid calipers, the following changes to the cementing program are requested.

Lead Cement Volume – Vertical from 8800' to surface.

Was: 1100 SX. at 12.7 ppg Yield 2.0 cu ft/sx 10 gallons/sx (2200 cuft. Slurry)

Now: **1400 sx** at 12.7 ppg Yield 2.0 cu ft/sx 10 gallons/sx (**2800 cuft. Slurry**) (2691 cuft. Caliper)

Tail Cement Volume – Kickoff Point at 8800' thru the Curve and Lateral to 19,090'.

Was: 2700 sx at 14.4 ppg Yield 1.24 cuft/sx 5.66 gallons/sx (3348 cuft. Slurry)

Now: **2400 sx** at 14.4 ppg Yield 1.24 cuft/sx 5.66 gallons/sx (**2976 cuft. Slurry**) (2938 cuft. Caliper)

Total Slurry Volume = Lead 2800 cuft. Tail 2976 cuft. = 5776 cuft. Slurry

Total Caliper Annular Volume = 5629 cuft

Excess 147 cuft. Excess based on cement to surface.

# Davis Fluid Calipers, Inc.

WORK ORDER

P.O. BOX 1033 OFFICE (575) 393-7463 CELL (575) 390-8080  
HOBBS, NEW MEXICO 88241

DATE 12/7/14  
RIG Precision #105  
LEASE Nighthawk 6 Fed #3-H  
CUST. ORDER NO. JASON  
COUNTY Lea  
STATE N.M.

QUANTITY	DESCRIPTION	AMOUNT
	TO RUN THE DAVIS FLUID CALIPER TO DETERMINE IN CUBIC FEET THE TOTAL	
	ANNULAR VOLUME BEHIND <u>5 1/2"</u> CASING	
	IN A <u>8 3/4"</u> HOLE TO THE DEPTH OF <u>19,060</u> FEET	
	<u>OVERALL 5629 cuft 17%</u>	
<u>19,060</u>	TOTAL ANNULAR VOLUME OF THE 1st STAGE <u>2935</u> CUBIC FEET	<u>13%</u>
<u>0</u>	TOTAL ANNULAR VOLUME OF THE 2nd STAGE <u>2261</u> CUBIC FEET	<u>21%</u>
	PUMP DATA: MAKE & MODEL: <u>FB-1000 x 2</u>	
	LINER SIZE <u>6x12</u> S.P.M. <u>65 65</u> C.F.M. <u>71</u>	
	PUMP EFFICIENCY: <u>93%</u> P.S.I. ON STAND PIPE	
	WASH:OUT	
<u>2</u>	BASE CHARGE @ <u>995<sup>00</sup></u>	<u>1990 00</u>
	DEPTH CHARGE 1st STAGE <u>19,060 @ .12</u>	<u>2287 20</u>
	DEPTH CHARGE 2nd STAGE <u>8,800 @ .12</u>	<u>1056 00</u>
	MILEAGE CHARGE <u>200 miles @ 1.95 (2-TRIPS)</u>	<u>390 00</u>

THANK YOU  
M. 12/10/14

SUBTOTAL 5723 20  
TAX 339 89  
TOTAL 6113 09

RECEIVED BY \_\_\_\_\_

# Davis Fluid Calipers, Inc.

WORK ORDER

P.O. BOX 1033

OFFICE (575)393-7463 CELL (575)390-8080  
HOBBS, NEW MEXICO 88241

DATE 12/6/14

RIG Precision 105

LEASE NIGHTCAP 6 FEDERAL #3H

CUST. ORDER NO. Jason

COUNTY Lea

STATE NM.

COG \_\_\_\_\_

AFE# \_\_\_\_\_

QUANTITY	DESCRIPTION	AMOUNT
	TO RUN THE DAVIS FLUID CALIPER TO DETERMINE IN CUBIC FEET THE TOTAL	
	ANNULAR VOLUME BEHIND <b>5 1/2"</b> CASING	
	IN A <b>8 3/4"</b> HOLE TO THE DEPTH OF <b>19,060'</b> FEET	
	PULLED UP TO <b>0'</b> FEET	
	OVERALL JOB <b>17%</b> <b>5,629 cu. ft.</b>	
	TOTAL ANNULAR VOLUME OF THE 1st STAGE CUBIC FEET	
	TOTAL ANNULAR VOLUME OF THE 2nd STAGE CUBIC FEET	
	PUMP DATA: MAKE & MODEL <b>FB1600</b>	
	LINER SIZE <b>6 X 12</b> S.P.M. <b>133</b> C.F.M. <b>73</b>	
	PUMP EFFICIENCY <b>93%</b> P.S.I. ON STAND PIPE <b>3400#</b>	
	WASH-OUT 1st Stage 2nd Stage <b>#VALUE!</b>	
<b>2</b>	BASE CHARGE @ \$995.00	\$1,990.00
<b>19,060'</b>	DEPTH CHARGE 1st STAGE @ \$0.12	\$2,287.20
<b>0'</b>	DEPTH CHARGE 2nd STAGE @ \$0.12	\$0.00
<b>0</b>	STANDBY CHARGE @ \$200	\$0.00
<b>200</b>	MILEAGE CHARGE @ \$1.95	\$390.00
	SUBTOTAL	\$4,667.20
	TAX	\$317.95
	TOTAL	\$4,985.15

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