

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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.

OCD Artesia

5. Lease Serial No.
NMNM92177

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No
AIR'S HORZ FED 19. API Well No.
30-015-33066-00-S110. Field and Pool, or Exploratory
BRUSHY DRAW-DELAWARE11. County or Parish, and State
EDDY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

NOV 07 2012

NMOC D ARTESIA

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

COG OPERATING LLC

Contact. STORMI DAVIS

E-Mail: sdavis@concho.com

3a. Address

ONE CONCHO CENTER 600 W ILLINOIS AVENUE
MIDLAND, TX 79701

3b. Phone No. (include area code)

Ph: 575-748-6946

Fx: 575-748-6968

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 10 T26S R29E NWNW 380FNL 330FWL

12. CHECK 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"/> 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 type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input checked="" 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 to convert this well to SWD as follows (OCD Order SWD-1355).

1) Set CIBP + 35' cmt @ 4850'. *See COA*

2) Perf Delaware 3210-3248', 3268-3384', 3416-3482', 3532-3556', 3612-3786', 3848-3876', 3936-4046', 4144-4266', 4276-4296', 4312-4336', 4358-4402', 4416-4424', 4470-4514', 4562-4574', 4636-4650', 4696-4750', 4778-4800'.

3) Set nickel plated injection pkr on 3.5"/9.3/J55/EUE Glassbore internally-lined tbg @ 3160'. Circ annulus full of clean inhibited pkr fluid and test annulus to 500# for 30 mins.

Accepted for record
NMOC D RESUBJECT TO LIKE
APPROVAL BY STATE*- BLM DOES NOT HAVE
AUTHORITY TO REQUIRE
WELL WITH A PACKER - OPERATIONS***WITNESS
PLUG BACK****SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

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

Electronic Submission #149456 verified by the BLM Well Information System

For COG OPERATING LLC, sent to the Carlsbad

Committed to AFMSS for processing by KURT SIMMONS on 09/20/2012 (12KMS3115SE)

Name (Printed/Typed) STORMI DAVIS

Title PREPARER

Signature

(Electronic Submission)

Date 09/10/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED

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

NOV 3 2012

WESLEY W. INGRAM

PETROLEUM ENGINEER

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 ****

Additional data for EC transaction #149456 that would not fit on the form

32. Additional remarks, continued

Current and proposed schematics are attached.

Accepted

380' N, 330' W Surface
2301' N, 441' W BHL
10-26s-29s
Eddy NM

Zero: 10' AGL
KB: 3003'
GL: 2993'

Size	Wt.	Grade	Conn	Depth
9 5/8	36	J55	STC	552'
5 1/2	17	J55	LTC	4181'
	17	J55	FL45	6801'
2 1/8"	6.5	J55	BVE	4.

9 7/8" @ 552'
3.75" C" (circ 100 ft)

TOC Above 1860' CBL

Before SWD Conversion

 $12^{14}H$

42-382	100 SHEETS EYE-GLASS	5 SQUARE
42-389	200 SHEETS EYE-GLASS	5 SQUARE
42-382	100 RECYCLED WHITE	5 SQUARE
42-399	200 RECYCLED WHITE	5 SQUARE

made in U.S.A.

DeWitt's National Brand

83 1/4" to 541' AD

77' 8" MD
5441' MD
to
5812' MD

N/ECP 4170'

Poor Cmt
Coverage
4170-4710' CBL
KOP 4550'

Horizontal
@ $\pm 540'$ MD

$$\begin{array}{r} 330^{\circ} \text{C} \\ + \\ 330^{\circ} \text{C} \end{array}$$

5300'

TVD 5124-5140' Delaware

5'1/2" e 6812' MC

1st: 400 "C" 290 Zirconia
2nd: 1200 HLC + 100 "C"
(Didn't circ. either stage)
KBC Collins

1 SWD

KB : 3003

GL: 2993'

380' N, 330' W. Surface

2301'N, 441'W BHL

10-265-29c

Eddy NM

Size	Wt.	Grade	Conn	Depth
9 5/8	36	J55	STC	552'
5 1/2	17	J55	LTC	4181'
	17	J55	FL45	6801'
2 1/8"	6.5	J55	B/E	7.
3 1/2"	9.3	J55	Sp CI	

9 3/4" @ 552'

3.75 "C" (cite 100 g x)

2 7/8" or 3 1/2" Inj Tbg

TOC Above 1860' CBL

After SWD Conversion

$$I_{nj} P_{kr} \pm 3160'$$

Delaware Sand
3210 - 4800'

5395' (3) 5566' (3) 5672' (3) 5802' (3) 5977' (3) 6086' (3) 6159' (3) 6359' (3) 6434' (3) 6500' (3) 6570' (3) 6775' (3) 6995' (3)

CIBP + 35' (cont)
4850'

Poor Cont
Coverage
4170-4710' CBL
KOP 4550'

Horizontal
@ ±540' MD

TVD 5124-5140' Delaware

5' 1/2" e 68 12' m.

1st: 400 "C" 2% Zirconium
2nd: 1200 HLC + 100 "C"
(Didn't circ. either stage)
KBCollins /

Conditions of Approval

COG Operating LLC

JR's Horz Federal -1

API 30-015-33066

T26S-R29E, Sec 10

November 3, 2012

1. Activity is subject to like approval by the New Mexico Oil Conservation Division.
2. Notify BLM 575-200-7902 Eddy Co. a minimum of 24 hours prior to beginning work. The procedures are to be witnessed. If no answer, leave a voice mail with the API#, workover purpose and a call back phone number. Note the contact, time and date in your subsequent report.
3. **Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from 5200' or below to top of cement. The CBL may be attached in an e-mail to pswartz@blm.gov. The CFO BLM on call engineer may be reached at 575-706-2779. The CBL shall be reviewed prior to placing cement on the proposed CIBP.**
4. Surface disturbance beyond the existing pad shall have prior approval.
5. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
6. Functional H₂S monitoring equipment shall be on location.
7. A 2000 (2M) BOPE to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 (attachment 1, 2M diagrams of choke manifold equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.
8. All waste (i.e. trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
9. **Step 1. – Set the CIBP at approximately 5050'. Test the CIBP and casing to 1000 psi to verify a seal. This test shall be witnessed by the BLM, charted and a copy of the chart included with the Subsequent Report sundry. Once a seal has been verified, place a 25 sack neat Class C cement plug on the CIBP. The BLM PET witness is to run tbgt tally and agree to cement placement. Sample each plug for cement curing time and tag and/or pressure test (WOC time of 4 hours recommended) as requested by BLM PET witness.**

**WITNESS
PLUG BACK**

10. Operator shall submit an evaluation of existing logs and shall perform production tests to verify that the injection zone cannot produce in paying quantities.
11. Approval is granted for disposal of water produced by the operator from the Delaware and Bone Spring formations. Disposal of water from other sources requires that the well be designated as a commercial disposal well and requires further BLM approvals.
12. Workover approval is good for 90 days (completion to be within 90 days of approval). A detailed justification is necessary for an extension.
13. Operator shall submit a Subsequent Report with details of all work completed within 30 days of completing the work. In addition, a Completion report is also required.

PRS / WWI 110312

Well with a Packer – Operations

BLM NOT
AUTHORIZED
TO REQUIRE
THESE

- 1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established. Repair that seal any time more than five barrels of packer fluid is replaced within 30 days.
- 2) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with 200 psig differentials between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.
- 3) The pressure test shall be documented on a calibrated recorder chart registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
- 4) At least 24 hours before the test: In Eddy County email Paul R. Swartz pswartz@blm.gov phone 575-200-7902. Note the contact notification method, time, & date in your subsequent report.
- 5) Submit a subsequent Sundry Form 3160-5 relating the MIT activity. Include a copy of the recorded MIT pressure chart. List the name of the BLM witness, or the notified person and date of notification. NMOCD is to retain the original recorded MIT chart.
- 6) Use of tubing internal protection, tubing on/off equipment just above the packer, a profile nipple, and an in line tubing check valve below the packer or between the on/off tool and packer is a "Best Management Practice". The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore workover.
- 7) **Submit the original subsequent sundry along with three copies to BLM Carlsbad.**

- 8) Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization.
 - a) Approved injection pressure compliance is required.
 - b) If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours.
 - c) When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
- 9) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 10) The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity. A BLM inspector may request verification of the annular fluid level at any time.
- 11) A "Best Management Practice" is to maintain the annulus full of packer fluid at atmospheric pressure. Equipment that will display on site, continuous open to the air fluid level is necessary to achieve this goal.
- 12) Loss of packer fluid above five barrels per month indicates a developing problem. Notify BLM Carlsbad Field Office, Petroleum Engineering within 5 days.
- 13) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office.
- 14) Gain of annular fluid requires notification within 24 hours. Cease injection and maintain a production casing pressure of 0 psia. Notify the BLM's authorized officer ("Paul R. Swartz" <pswartz@blm.gov>, cell phone 575-200-7902). If there is no response phone 575-361-2822.
- 15) Submit a (Sundry Form 3160-5) subsequent report (daily reports) describing all wellbore activity and Mechanical Integrity Test as per item 1) above. Include the date(s) of the well work, and the setting depths of equipment: internally corrosive protected tubing, tubing on/off equipment just above the packer, and an in-line tubing check valve below the packer or between the on/off tool and packer. The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore workover.

Access information for use of Form 3160-5 "Sundry Notices and Reports on Wells"

NM Fed Regs & Forms - http://www.blm.gov/nm/st/en/prog/energy/oil_and_gas.html

§ 43 CFR 3162.3-2 Subsequent Well Operations.

§ 43 CFR 3160.0-9 (c)(1) Information collection.

§ 3162.4-1 (c) Well records and reports.