

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SUNDRY NOTICES AND REPORTS ON WELLS

OCD-ARTESIA

FORM APPROVED
OMB NO. 1004-0135
EXPIRES: March 31, 2007

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

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

DEVON ENERGY PRODUCTION COMPANY, LP

3. Address and Telephone No.

20 North Broadway, Oklahoma City, OK 73102-8260

405-552-8198

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

300' FNL & 330' FEL Unit A Sec 8 T18S R27E

360 FNL & 330 FWL Unit D Sec 8 T18S R27E

5. Lease Serial No.

SHL: NMLC054205 BHL: NMLC070678-A

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

8. Well Name and No.

Condor 8 Federal Com 2H

9. API Well No.

30-015-37389

10. Field and Pool, or Exploratory

Red Lake; Glorieta-Yeso

11. County or Parish State

Eddy

NM

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 checked="" 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 Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work and approximate duration thereof. If the proposal deepens directionally or recompletes horizontally, give subsurface location 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 requirement, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection)

Devon Energy Production Company, LP respectfully requests approval of the Rig layout, BOP language, and pilot hole changes from our original APD.

Rig Change to Patterson 41 (see attached rig layout and BOP schematic).

BOP Language Change:

The BOP system used to drill the intermediate hole will consist of an 11" 5M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 3M system prior to drilling out the surface casing shoe.

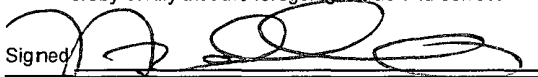
The BOP system used to drill the production hole will consist of an 11" 5M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 5M system prior to drilling out the intermediate casing shoe.

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 5,000 psi WP.

Pilot Hole Changes:

This well was originally planned to utilize a Pilot Hole and set 7" casing through the curve. It has been determined that a Pilot Hole will not be required. Devon would like to drill to ~2200' and set 7" casing. The casing grade will be 26#, L-80, LTC. The directional plan will not change. Safety factors for the casing are: Burst 5.14, Collapse 6.8, and Tensile 2.77. Cement amount for the 7" casing will be 162 sacks of 35:65 Poz Class C, yield 1.94 and 181 sacks of 60:40 Poz Class C, yield 1.38.

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

Signed 

Name Norvella Adams
Title Sr. Staff Engineering Technician

Date 4/29/2010

(This space for Federal or State Office use)

/s/ Don Peterson

FIELD MANAGER

Approved by

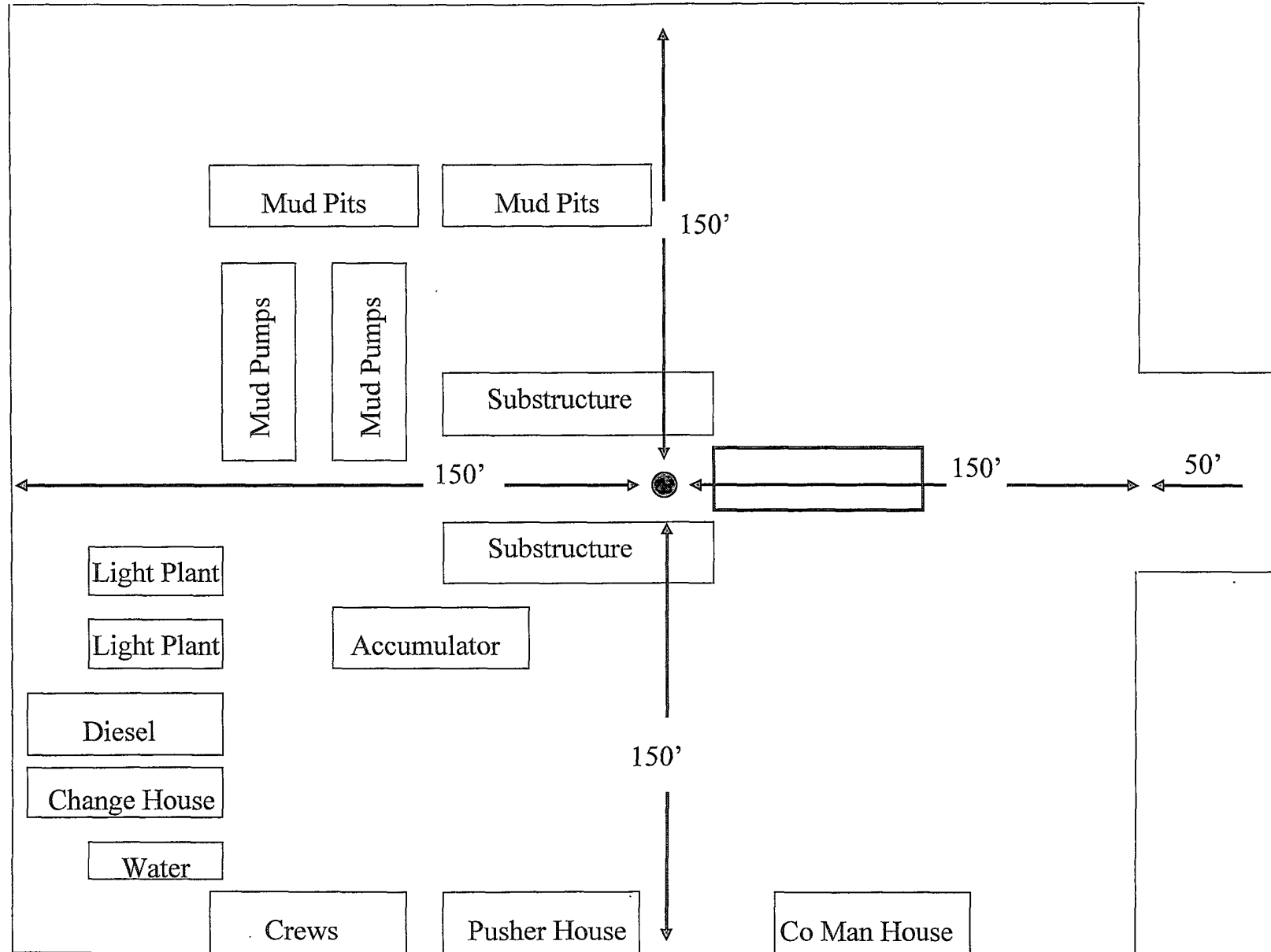
Date JUN 21 2010

Conditions of approval, if any:

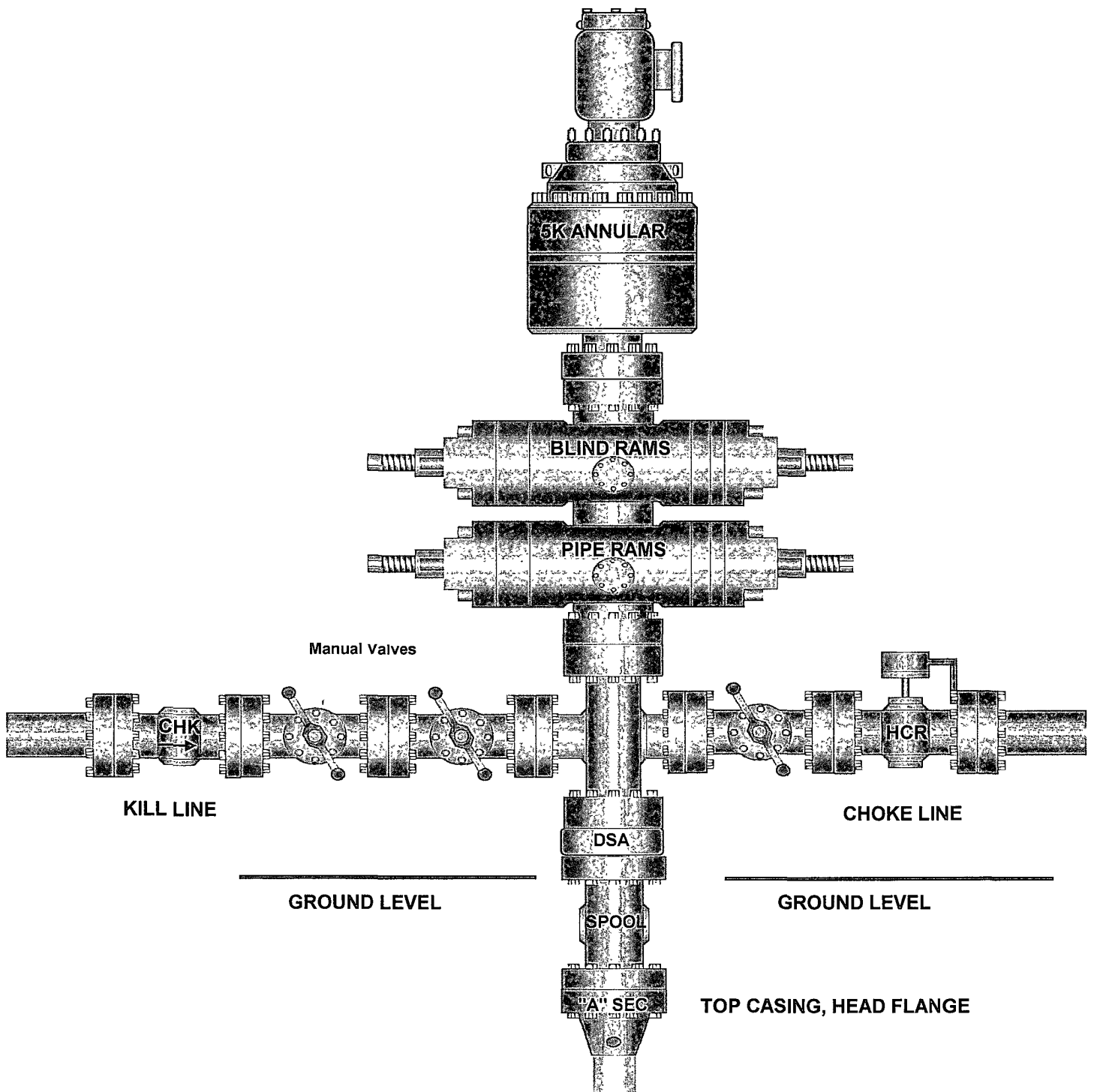
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations to any matter within its jurisdiction

*See Instruction on Reverse Side

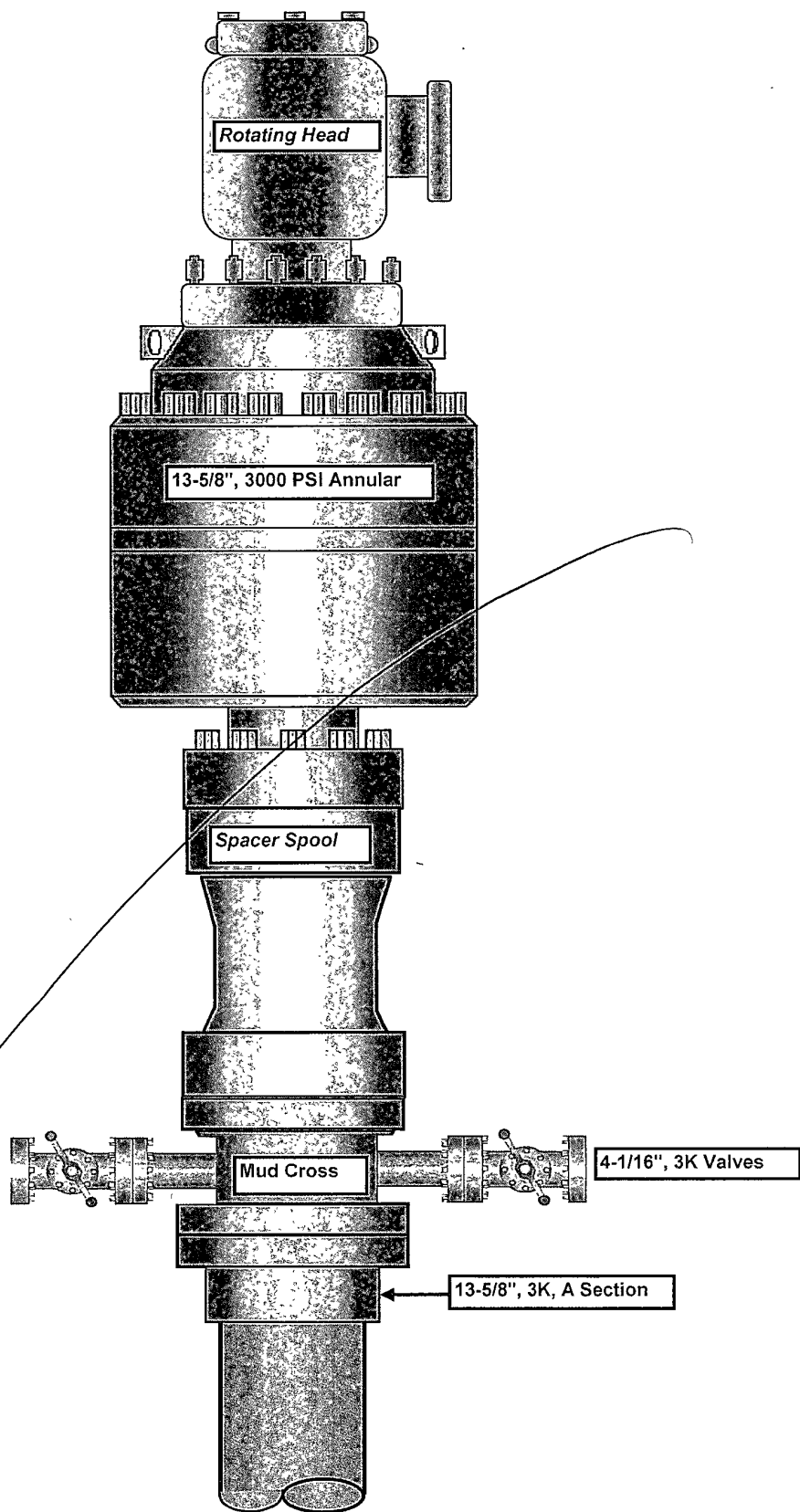
PATTERSON RIG 41



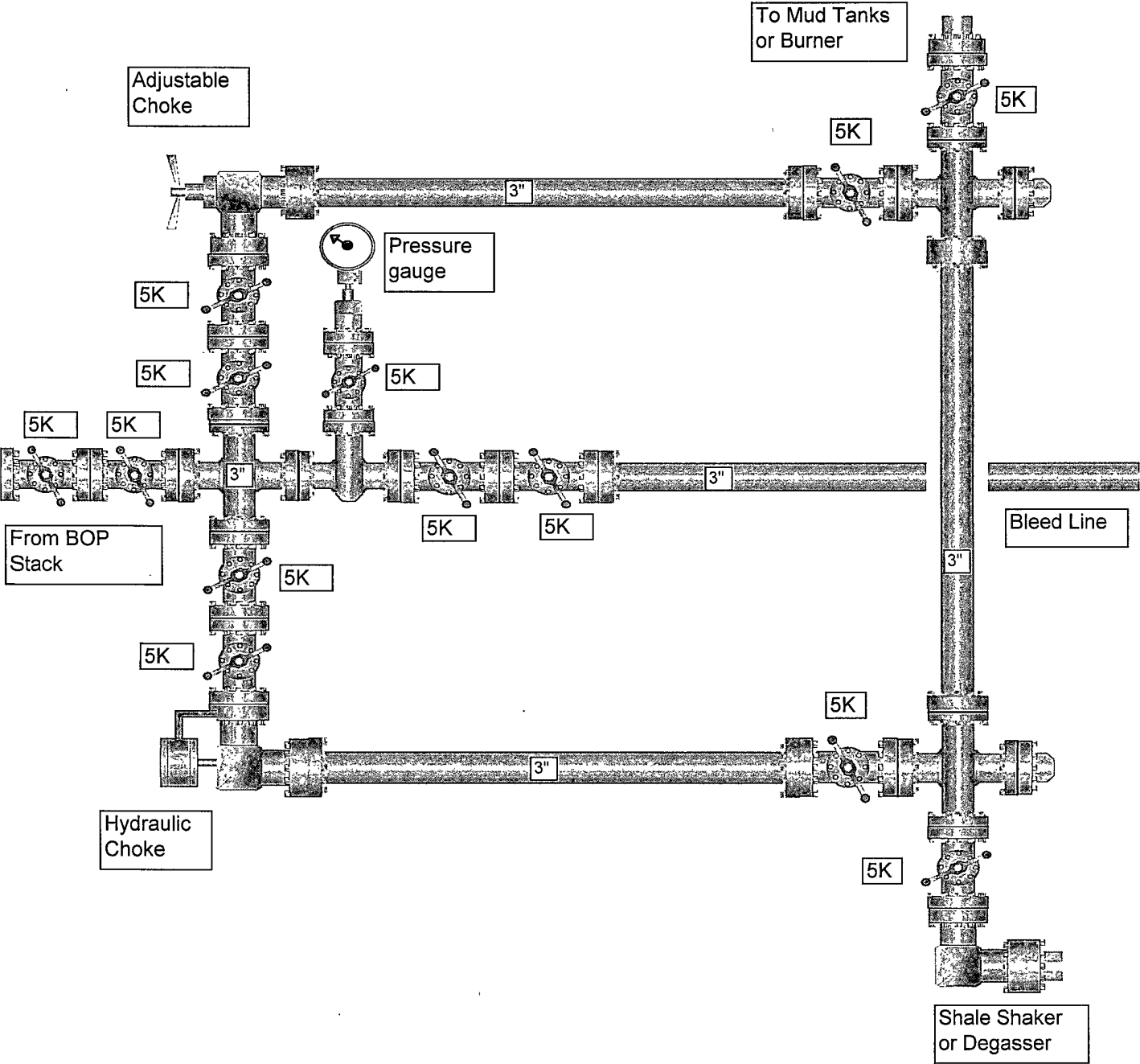
11" x 5,000 psi BOP Stack



13-5/8" 3K Annular



5,000 PSI CHOKE MANIFOLD



CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Devon Energy Production Company, LP
LEASE NO.:	SL: NMLC054205, BL: NMLC-070678A
WELL NAME & NO.:	Condor 8 Federal Com #2H
SURFACE HOLE FOOTAGE:	330' FNL & 330' FEL (Ut A)
BOTTOM HOLE FOOTAGE:	360' FNL & 330' FWL (Ut D)
LOCATION:	Section 08, T. 18 S., R 27 E., NMPM
COUNTY:	Eddy County, New Mexico

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

1. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated 500 feet prior to drilling into the **Grayburg** formation. **As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a “Major” violation.**
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

4. The record of the drilling rate along with the CAL/GR/N well log run from TD to surface will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

HIGH CAVE/KARST – CONTINGENCY CASING WILL BE REQUIRED IF LOST CIRCULATION OCCURS WHILE DRILLING THE SURFACE HOLE. THE SURFACE HOLE WILL HAVE TO BE REAMED AND A LARGER CASING INSTALLED. IF LOST CIRCULATION OCCURS WHILE DRILLING THE 8-3/4" HOLE, THE CEMENT PROGRAM FOR THE 7" CASING WILL NEED TO BE MODIFIED AND THE BLM IS TO BE CONTACTED PRIOR TO RUNNING THE CASING. A MINIMUM OF TWO CASING STRINGS CEMENTED TO SURFACE IS REQUIRED IN HIGH CAVE/KARST AREAS. THE CEMENT MUST BE IN A SOLID SHEATH THEREFORE, ONE INCH OPERATIONS WILL NOT BE PERMITTED. A DV TOOL WILL BE REQUIRED.

Possible lost circulation in the Grayburg and San Andres formations.

1. The 9-5/8 inch surface casing shall be set at approximately 1030 feet in the Grayburg formation and cemented to the surface. Freshwater mud to be used to setting depth. Additional cement will be required due to additional casing length.

- a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the 7 inch intermediate casing is:
Take care not to set this casing into the Slaughter Zone of the San Andres.
 - ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst concerns.
3. The minimum required fill of cement behind the 4-1/2 inch production casing/liner is:
 - ☒ Not required as operator is using the Peak Systems Iso-Pack liner completion assembly. **Liner must overlap a minimum of 200 feet into previous string.**
4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M) psi. The operator is using a 5M, but testing as a 3M.**

- a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 7 inch intermediate casing shoe shall be **5000 (5M) psi. 5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.**
4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. Casing cut-off and BOP installation will not be initiated until the cement has had a minimum of 8 hours setup time for a water basin. The casing shall remain stationary and under pressure for at least eight hours after the operator places the cement. In the potash area, the minimum time is 12 hours and the casing shall remain stationary and under pressure during this time period. Casing shall be under pressure if the operator uses some acceptable means of holding pressure or if the operator employs one or more float valves to hold the cement in place. Testing the BOP/BOPE against a plug can commence after meeting the above conditions plus the BOP installation time.
 - b. The tests shall be done by an independent service company utilizing a test plug.
 - c. The results of the test shall be reported to the appropriate BLM office.
 - d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
 - e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

CRW 061110

#N/A	Cave Potential	#N/A	#N/A	#N/A					
9 5/8	inches O.D. of Surface Casing				Design Factors				
Segment	Grade	#/ft	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	J 55	36.00	ST & C	10.63	4.02	3.08	1,030	37,080	
"B"							0	0	
							Totals:	1,030	37,080
Compare Cement Volumes, Proposed to Minimum									
Hole Size	Annular Volume	Proposed Sx Cmt	CuFt Cmt Proposed	Min Cu Ft	Excess % Cmt	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.3132	290	464	389	19	9.40	659	2M	0.81
Comments for 9 5/8 " Csg									

Tail cmt proposed for the csg below could overlap the previous csg shoe.

7	<< Casing inside the		9 5/8	Design Factors					
Segment	Grade	#/ft	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	L 80	26.00	LT&C	8.93	4.73	4.50	2,200	57,200	
"B"							0	0	
"C"							0	0	
"D"							0	0	
2,200	= Max Vertical Depth of the Lateral Portion of Wellbore.					Totals:	2,200	57,200	
Compare Cement Vol(s), Proposed to Min, with 1030 ft overlap above 1st csg shoe.									
Hole Size	Annular Volume	Proposed Sx Cmt	CuFt Cmt Proposed	Min Cu Ft	Excess % Cmt	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 3/4	0.1503	343	564	357	58	10.00	928	2M	0.55
Comments for 7 " Csg									

4 1/2	Liner w/top @	2000	<u>Design Factors</u>						
Segment	Grade	#/ft	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	L 80	11.60	Buttress	3.11	3.22	4.83	5,239	60,769	
"B"							0	0	
"C"							0	0	
"D"							0	0	
2,870	= Max Vertical Depth of the Lateral Portion of Wellbore.						Totals:	5,239	60,769
A Segment Design Factors would be: 4.79 4.26 if it were a vertical wellbore.									
<u>Compare Cement Vol(s), Proposed to Min, with</u>					<u>2200</u>	<u>ft overlap above 2nd csg shoe.</u>			
Hole Size	Annular Volume	Proposed Sx Cmt	CuFt Cmt Proposed	Min Cu Ft	Excess % Cmt	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
6 1/8	0.0942			708		10.00			0.56
Comments for 4 1/2 " Csg									