

UNITED STATES N.M. Oil Cons. & Vision
DEPARTMENT OF THE INTERIOR 811 (See other instructions on reverse side)
BUREAU OF LAND MANAGEMENT ARTESIA, NM 83210-2834

Form approved.

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL ☒ DEEPEN ☐

b. TYPE OF WELL:

OIL WELL ☒ GAS WELL ☐ Other ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR

DEVON ENERGY CORPORATION (NEVADA)

3. ADDRESS AND TELEPHONE NO.

20 N. BROADWAY, SUITE 1500, OKLAHOMA CITY, OK 73102

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

At surface 596' FSL & 1771' FEL

At top proposed prod. zone (SAME)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST/OFFICE

Approximately 6 miles southeast of Artesia, NM

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT. 596

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 500

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

GL 3505'

ROSWELL CONTROLLED WATER DISTRICT

5. LEASE DESIGNATION AND SERIAL NO.

NV-025604

6. INDIAN, ALLOTTEE OR TRIBE NAME

NA

7. UNIT AGREEMENT NAME

NA

8. FARM OR LEASE NAME, WELL NO.

Hack "30" Federal #2

9. APP. WELL NO.

30-115-

10. FIELD AND POOL, OR WILDCAT

Red Lake (Q-GB-SA)

11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA

Section O-3-T18S-R27E

12. COUNTY OR PARISH

Eddy County

13. STATE

NM

16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED

TO THIS WELL

40

19. PROPOSED DEPTH

2800'

20. ROTARY OR CABLE TOOLS*

Rotary

22. APPROX. DATE WORK WILL START*

June 1, 1997

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	14"	Conductor	40'	Redimix
12 1/4"	8 5/8", J-55	24 ppf	4050' 1150'	300 sx Lite + 200 sx Class C
7 7/8"	5 1/2", J-55	15.5 ppf	2800'	150 sx Lite + 350 sx Class C

* Cement will be circulated to surface on all casing strings.

Devon Energy plans to drill to 2800' +/- to test the San Andres Formation for commercial quantities of oil. If the San Andres is deemed non-commercial, the wellbore will be plugged and abandoned per Federal regulations. Programs to adhere to onshore oil and gas regulation are outlined in the following exhibits and attachments.

Drilling Program

concerning:

Surface Use and Operating Plan

Exhibit #1 - Blowout Prevention Equipment

Exhibit #1-A - Choke Manifold

Exhibit #2 - Location and Elevation Plat

Exhibit #3 - Planned Access Roads

Exhibit #4 - Wells Within a One Mile Radius

Exhibit #5 - Production Facilities Plan

Exhibit #6 - Rotary Rig Layout

Exhibit #7 - Casing Design Parameters and Factors

H₂S Operating Plan

The undersigned accepts all applicable terms, conditions, stipulation, and restrictions

operations conducted on the leased land or portion thereof, as described above.

Bond Coverage: Nationwide

BLM Bond File No.: CO-1104

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL SPECIFICATIONS
ATTACHED

acs
4/23/97

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24

SIGNED E. L. Buttross Jr.

TITLE E. L. BUTTROSS, JR.
DISTRICT ENGINEER

DATE

4/2/97

*(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval 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.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY (ORIG. SGD.) JAMES G. PETTENGILL

TITLE DISTRICT ENGINEER, MINERALS

DATE 5-2-97

See Instructions On Reverse Side

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Instruction on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		Red Lake (Q-GB-SA)
Property Code	Property Name	Well Number
	HAWK 3 O FEDERAL	2
OGRID No.	Operator Name	Elevation
	DEVON ENERGY CORPORATION	3505'

Surface Location

UL or 1st No.	Section	Township	Range	Lot 1st	Feet from the	North/South line	Feet from the	East/West line	County
0	3	18 S	27 E		596	SOUTH	1771	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or 1st No.	Section	Township	Range	Lot 1st	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill		Consolidation Code		Order No.			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>E. L. Buttross, Jr.</i> Signature</p> <p>E. L. Buttross, Jr. Printed Name</p> <p>District Engineer Title</p> <p>April 2, 1997 Date</p>
	<p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>March 18, 1997 Date Surveyed</p> <p><i>W. O. Jones</i> Signature & Seal of Professional Surveyor</p> <p>W.O. Num. 7022</p> <p>Certificate No. 7977</p>

MINIMUM BLOWOUT PREVENTER REQ

3,000 psi Working Pressure

EXHIBIT 1

3 MWP

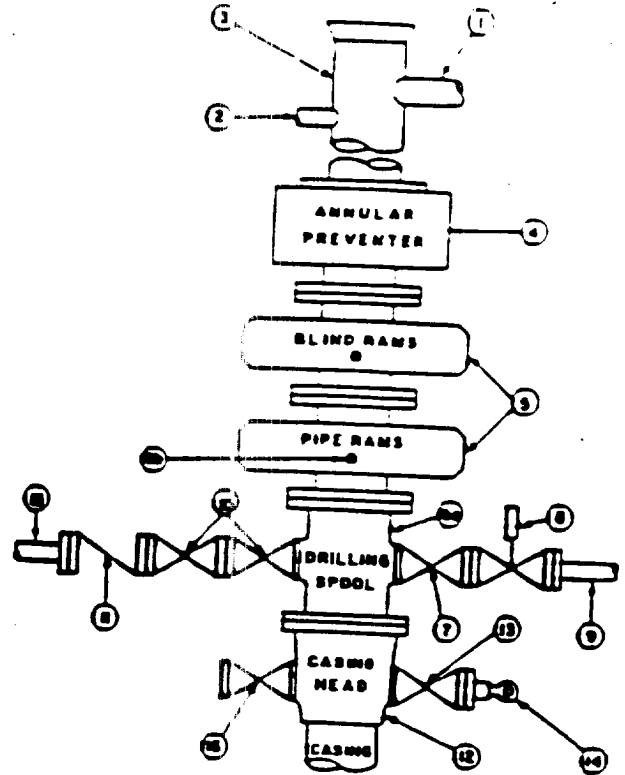
STACK REQUIREMENTS

No	Item	Min I.D	Min Nominal
1	Fiberline		
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/>	3-1/8"	
8	Gate valve—power operated	3-1/8"	
9	Line to choke manifold		3"
10	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/>	2-1/16"	
11	Check valve	2-1/16"	
12	Casing head		
13	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/>	1-13/16"	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"

OPTIONAL

16	Flanged valve	1-13/16"	
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CONFIGURATION A



CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers position.
4. Kelly equipped with Kelly cock.
5. Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type PX ring gaskets in place of Type R.

MEC TO FURNISH:

1. Bradenhead or casinghead and side valves.
2. Wear bushing, if required.

GENERAL NOTES:

1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through chokes. Valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position.
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable chokes, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with handwheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.

7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Do not use kill line for routine fill-up operations.

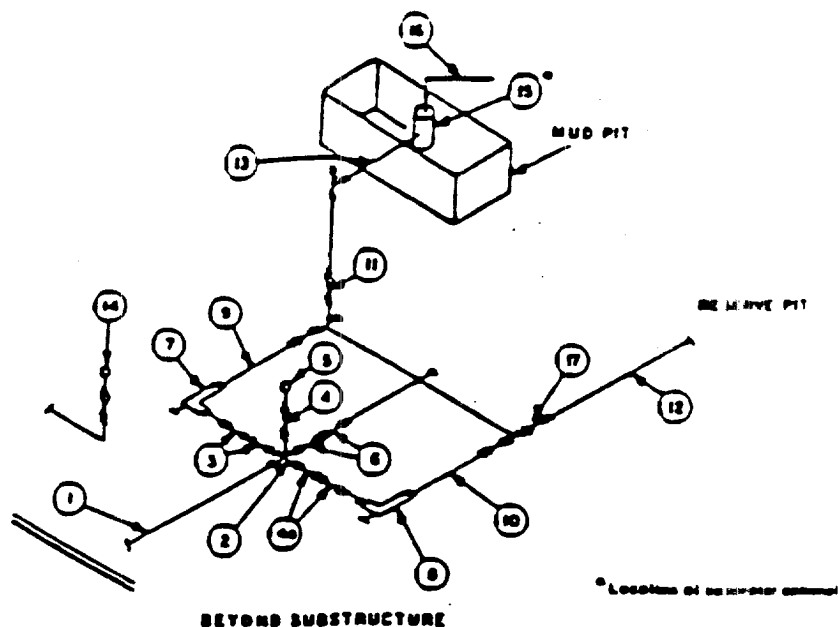
Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTORS
Devon Energy Corporation (Nevada)
Hawk "30" Federal #2
596' FSL & 1771' FEL
Section O-3-T18S-R27E
Eddy County, New Mexico

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
2. Wear ring will be properly installed in head.
3. Blowout preventor and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
6. All choke lines will be anchored to prevent movement.
7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
8. Will maintain a kelly cock attached to the kelly.
9. Hand wheels and wrenches will be properly installed and tested for safe operation.
10. Hydraulic floor control for blowout preventor will be located as near in proximity to driller's controls as possible.
11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

MINIMUM CHOKE MANIFOLD
3,000, 5,000 and 10,000 PSI Working Pr.

3 MWP - 5 MWP - 10 MWP

EXHIBIT 1A



MINIMUM REQUIREMENTS									
No		3,000 MWP			5,000 MWP			10,000 MWP	
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL
1	Line from drilling spool		3"	3,000		3"	5,000		3"
2	Cross 3"x3"x3"x3"			3,000			5,000		
	Cross 3"x3"x3"x3"								10,000
3	Valves (1) Gate □ Plug □ (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"	10,000
4	Valve Gate □ Plug □ (2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"	10,000
4a	Valves (1)	2-1/16"		3,000	2-1/16"		5,000	2-1/8"	10,000
5	Pressure Gauge			3,000			5,000		
6	Valves Gate □ Plug □ (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"	10,000
7	Adjustable Choke (2)	2"		3,000	2"		5,000	2"	10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"	10,000
9	Line		3"	3,000		3"	5,000		3"
10	Line		2"	3,000		2"	5,000		3"
11	Valves Gate □ Plug □ (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"	10,000
12	Lines		3"	1,000		3"	1,000		3"
13	Lines		3"	1,000		3"	1,000		3"
14	Remote reading compound standpipe pressure gauge			3,000			5,000		10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'
16	Line		4"	1,000		4"	1,000		4"
17	Valves Gate □ Plug □ (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"	10,000

(1) Only one required in Class 3M.

(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydraulic chokes required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

- All connections in choke manifold shall be welded, mudded, flanged or Cameron clamp of considerable rating.
- All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- All lines shall be securely anchored.
- Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
- Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.
- Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.