

UNITED STATES N.M. Oil Cons. Div. Dist. 2
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
1301 W. Grand Avenue
Artesia, NM 88210

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 PRODUCTION COMPANY, L.P.
3. ADDRESS AND TELEPHONE NO.: 20 N. BROADWAY, SUITE 1500, OKC, OK 73102 Wally Frank Senior Ops Engr
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 1500' FSL & 1080' FWL, Unit L, Section 8-T22S-R24E, Eddy Cnty, NM 405-552-4595
At top proposed prod. zone (same)

DESIGNATION AND SERIAL NO. NM-NM83552
INDIAN, ALLOTTEE OR TRIBE NAME N/A
UNIT AGREEMENT NAME
FARM OR LEASE NAME, WELL NO. Old Ranch Knoll "8" Federal Com. #8
API WELL NO. 30-015-32825
FIELD AND POOL, OR WILDCAT Indian Basin (Upper Penn) Assoc.
SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Unit L, Section 8-T22S-R24E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
30 miles NW of Carlsbad, NM
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 1080'
16. NO. OF ACRES IN LEASE 160.00
17. NO. OF ACRES ASSIGNED TO THIS WELL 320.00
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
19. PROPOSED DEPTH 8,600'
20. ROTARY OR CABLE TOOLS* Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) GL 4145'
22. APPROX. DATE WORK WILL START* January, 2003

23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor 20"		40'	Redi-mix to surface
12 1/4"	H-40 9 5/8"	36#	1,600'	400 sx Pozmix C+ 200 sx Class C
8 3/4"	L-80/HCL-80 7"	23#	8,600'	500 sx Pozmix C

We plan to circulate cement to surface on the 9 5/8" casing string. The cement top will be brought to approximately 6,000' on the 7" casing string.

Devon Energy proposes to drill a Penn gas well to TD 8,600'± for commercial quantities. If the well is deemed noncommercial, the well bore will be plugged and abandoned per Federal regulations. Programs to adhere to onshore oil and gas regulations are outlined in the following exhibits and attachments.

Drilling Program

Surface Use and Operating Plan
Exhibits #1 = Blowout Prevention Equipment
Exhibit #2 = Location and Elevation Plat
Exhibits #3 = Road Map and Topo Map
Exhibit #4 = Wells Within 1 Mile Radius
Exhibits #5 = Production Facilities Plat
Exhibit #6 = Rotary Rig Layout
Exhibit #7 = Casing Design
H₂S Operating Plan

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or: portions thereof, as described below.

Legal Description:

NM-NM83552; all of the SW/4 of Section 8-T22S-R24E, Eddy Cnty, NM

Bond Coverage: Nationwide
BLM Bond #: CO-1104

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

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.

SIGNED Candace R. Graham

Candace R. Graham
TITLE Engineering Technician

(405) 235-3611 X4520
DATE November 18, 2002

*(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 /s/ LESLIE A. THEISS

TITLE FIELD MANAGER

DATE APR 22 2003

See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001, makes 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

NSL- 4896 (SD)

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 86211-0719

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

EXHIBIT 2

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

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-	Pool Code 33658	Pool Name Indian Basin (Upper Penn) Assoc.
Property Code 46875 30648	Property Name OLD RANCH KNOLL 8 FEDERAL COM.	Well Number 8
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION, CO., LP	Elevation 4145

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	8	22 S	24 E		1500	SOUTH	1080	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	8	22 S	24 E		1650	SOUTH	1100	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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>PROPOSED SURFACE LOC. NAD 27 NM EAST ZONE N=510089 E=440882</p> <p>GEOGRAPHIC LOCATION NAD 27 LAT. = 32°24'07.93" N LONG. = 104°31'29.57" W</p> <p>BOTTOM HOLE 1100' 1080'</p> <p>SEE DETAIL</p> <p>4131.6' 4120.3' 4144.1' 4141.0'</p> <p>DETAIL</p>	<p>PROPOSED BOTTOM HOLE LOCATION NAD 27 NM EAST ZONE N=510239 E=440902</p>	<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><u>Candace R. Graham</u> Signature Candace R. Graham Printed Name Engineering Tech. Title November 18, 2002 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>OCTOBER 18, 2002</p> <p>Date Surveyed LMP</p> <p>Signature & Seal of Professional Surveyor <u>Ronald J. Eidson</u> 10/24/02 02.11.0783</p> <p>Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641</p>
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MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

EXHIBIT # 1

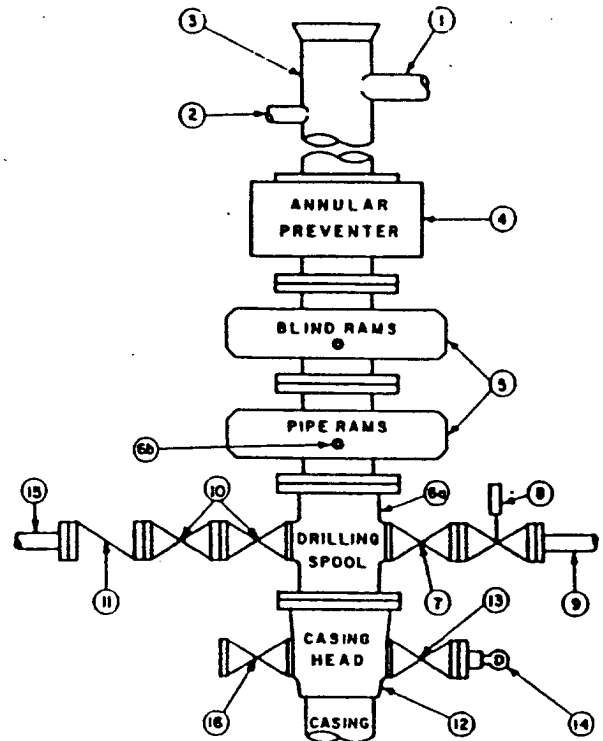
STACK REQUIREMENTS

No.	Item	Min. I.D.	Min. Nominal
1	Flowline		
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 RX ring gaskets in place of Type R.

MEC TO FURNISH:

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

GENERAL NOTES:

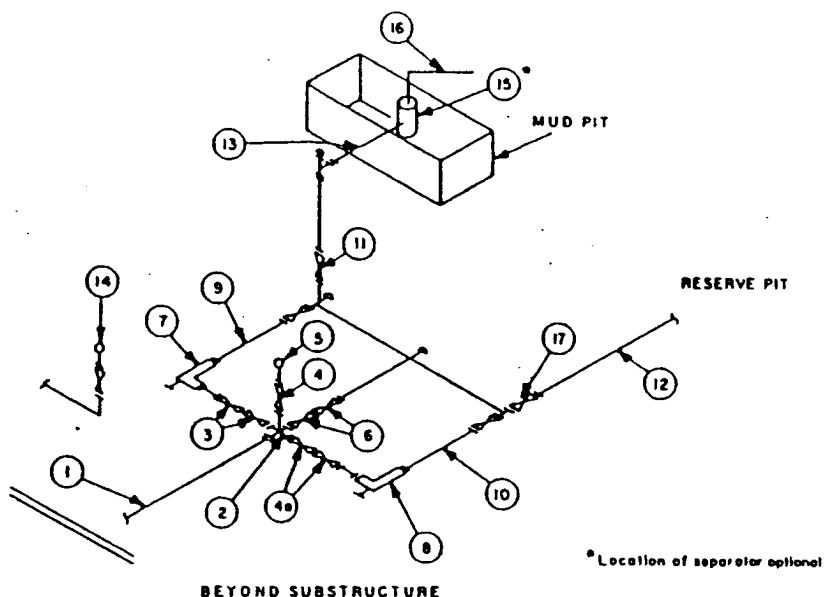
1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke. 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 choke, 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.

MINIMUM CHOKE MANIFOLD
3,000, 5,000 and 10,000 PSI Working Pressure

3 MWP - 5 MWP - 10 MWP

EXHIBIT # 1



MINIMUM REQUIREMENTS									
No.		3,000 MWP			5,000 MWP			10,000 MWP	
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	RATING
1	Line from drilling spool		3"	3,000		3"	5,000	3"	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000		
	Cross 3"x3"x3"x3"								10,000
3	Valves (1) Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"	10,000
4	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/> (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	3-1/8"	10,000
5	Pressure Gauge			3,000			5,000		10,000
6	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"	10,000
7	Adjustable Choke (3)	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"	10,000
10	Line		2"	3,000		2"	5,000	3"	10,000
11	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (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"	2,000
13	Lines		3"	1,000		3"	1,000	3"	2,000
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"	2,000
17	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (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 choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

- All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable 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.

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTORS
Devon Energy Production Company, L.P.
OLD RANCH KNOLL "8" FEDERAL COM. #8
1500' FSL & 1080' FWL, Unit L, Section 8-T22S-R24E
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.

June 10, 2003

Devon Energy Production Company, L. P.
20 North Broadway
Oklahoma City, Oklahoma 73102-8260

Telefax No. (405) 552-8113

Attention: Ken Gray

Administrative Order NSL-4896 (SD)

Dear Mr. Gray:

Reference is made to the following: (i) your application (*administrative application reference No. pKRV0-314031875*) that was submitted to the New Mexico Oil Conservation Division ("Division") on May 19, 2003; and (ii) the Division's records in Artesia and Santa Fe: all concerning Devon Energy Production Company, L. P.'s ("Devon") request for an exception to Rule 2 (b) of the "*Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool*", as promulgated by New Mexico Oil Conservation Division ("Division") Order Nos. R-9922, R-9922-A, R-9922-B, R-9922-C, R-9922-D, and R-9922-E and the "*General Rules and Regulations for the Associated Oil and Gas Pools of Northwest New Mexico and Southeast New Mexico*," as promulgated by Division Order No. R-5353, as amended, for an unorthodox location within an existing standard 320-acre lay-down spacing and proration unit comprising the S/2 of Section 8, Township 22 South, Range 24 East, NMPM, Indian Basin-Upper Pennsylvanian Associated Pool (33685), Eddy County, New Mexico.

This unit is currently dedicated to Devon's Old Ranch Knoll "8" Federal Com. Well No. 2 (API No. 30-015-27674), a vertical well located at a standard location 660 feet from the South line and 1980 feet from the West line (Unit N) of Section 8. It is the Division's understanding that Devon's recently drilled (spud date: March 14, 2003) Old Ranch Knoll "8" Federal Com. Well No. 7 (API No. 30-015-32621), a deviated well, located on the surface 1790 feet from the North line and 2170 feet from the East line (Unit G) of Section 8, with an expected bottom-hole location at a depth of 9,040 feet within the Indian Basin-Upper Pennsylvanian Associated Pool 1980 feet from the South and East lines (Unit J) of Section 8, will be simultaneously dedicated to this 320-acre unit.

The subject application has been duly filed under the provisions of Division Rule 104.F and Rule 2 (c) of the Division's associated pool rules.

By the authority granted me under the provisions of Division Rule 104.F (2) and the applicable provisions of the special rules governing the Indian Basin-Upper Pennsylvanian Associated Pool the following described well to be drilled at an unorthodox infill well location within the S/2 of Section 8 is hereby approved:

**Old Ranch Knoll "8" Federal Com. Well No. 8
1500' FSL & 1080' FWL (Unit L).**

Further, the aforementioned well and spacing/proration unit will be subject to all existing rules, regulations, policies, and procedures applicable to the Indian Basin-Upper Pennsylvanian Associated Pool.

Devon is further authorized to simultaneously dedicate production attributed to the Indian Basin-Upper Pennsylvanian Associated Pool from the aforementioned Old Ranch Knoll "8" Federal Com. Wells No. 2, 7, and 8. Furthermore, Devon is permitted to produce the allowable assigned the subject 320-acre spacing and proration unit from all three wells in any proportion.

Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

Lori Wrotenbery
Director

LW/MES/kv

cc: New Mexico Oil Conservation Division – Artesia
U. S. Bureau of Land Management – Carlsbad