

Form 3160-3

(December 1990)

N.M. OIL & GAS COMMISSION

SUBMIT 'RU' 'TE'

Form approved.

DEPARTMENT OF THE INTERIOR
ARTESIA, N.M. 88210
BUREAU OF LAND MANAGEMENT(See other instructions
reverse side)

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 OPERATING CORPORATION

136025

3. ADDRESS AND TELEPHONE NO.

20 N. BROADWAY, SUITE 1500, OKC, OK 73102 (405) 552-4530

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

At surface 1341 FSL & 10 FEL

At top proposed prod. zone (SAME)

SUBJECT TO
LIKE APPROVAL
BY STATE

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

4 miles east & 4 miles north of Loco Hills, N.M.

15. DISTANCE FROM PROPOSED
LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT. 10' FEL

(Also to nearest title unit line if any)

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 1300'

16. NO. OF ACRES IN LEASE

1885.0

19. PROPOSED DEPTH

4000

17. NO. OF ACRES ASSIGNED

TO THIS WELL

40

20. ROTARY OR CABLE TOOLS*

Rotary

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

3886' GR

22. APPROX. DATE WORK WILL START*

DECEMBER 1, 1994

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8" J-55	24.0#	400'	165 sk lite cmt + 200 sk Class "C"
7 7/8"	5 1/2" J-55	15.5#	4000'	500 sk Class "C" 35/65 + 500 sk Class "C" + 1/4 lb/sk cellophane flakes

We plan to circulate cement to surface on all casing strings. Devon Energy Operating Corporation proposes to drill to 4000' to test the Grayburg-Jackson formation for commercial quantities of oil. If the Grayburg-Jackson is deemed non-commercial, the wellbore 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

Exhibits #1/1-A = Blowout Prevention Equipment

Exhibit #2 = Location and Elevation Plat

Exhibit #3/3-A = Road Map and Topo Map

Exhibit #4 = Wells Within 1 Mile Radius

Exhibit #5 = Production Facilities Plat

Exhibit #6 = Rotary Rig Layout

Exhibit #7 = Casing Design

H2S Operating Plan

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

Lease No. LC029435-B

Legal Description: Section 5-T17N-R31E

Bond Coverage: Nationwide

BLM Bond No.: PENDING

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

Randy Jackson

TITLE DISTRICT ENGINEER

DATE October 27, 1994

*(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:

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

APPROVED BY _____

TITLE _____

DATE _____

See Instructions On Reverse Side

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

DISTRICT II
P. O. Drawer DD
Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd.
Aztec, NM 87410

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

Submit to the Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

DISTRICT IV
P. O. Box 2088
Santa Fe, NM 87507-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ **AMENDED REPORT**

1 API Number		2 Pool Code		3 Pool Name					
4 Property Code I		5 Property Name KEEL 'B' FEDERAL						6 Well Number 85	
7 OGRID No.		8 Operator Name DEVON ENERGY OPERATING COMPANY						9 Elevation 3886'	
10 SURFACE LOCATION									
UL or lot no.	Section 5	Township 17 SOUTH	Range 31 EAST, N.M.P.M.	Lot Ida	Feet from the 1341'	North/South line SOUTH	Feet from the 10'	East/West line EAST	County EDDY
11 BOTTOM HOLE LOCATION IF DIFFERENT FROM SURFACE									
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres 40		13 Joint or Infill		14 Consolidation Code		15 Order No.			

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

A 4x4 grid of squares. The bottom-right square is shaded with diagonal lines. A right triangle is formed within this square, with its right angle at the bottom-left corner of the square. The vertical leg of the triangle is labeled $10'$ and the horizontal leg is labeled $1341'$.

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Barry Jackson

Printed Name

RANDY JACKSON

Title

DISTRICT ENGINEER

Date _____

November 1, 1994

SURVEYOR CERTIFICATION

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.

Date of Survey

OCTOBER 19, 1984

Signature and Seal of Professional Surveyor

V. LYNN
BEZNER
NO. 7920

V. I. BEZNER R.F.S. #7920

JOB #35908-25 / 98 SW / V.H.B

DRILLING PROGRAM

Attached to Form 3160-3
Devon Energy Operating Corporation
20 North Broadway, Suite 1500
Keel "B", # 85 1341 FSL & 10 FEL
Section 5-T17S-R31E
Eddy County, New Mexico

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

<u>Zones</u>	<u>Tops</u>
Rustler	335'
Salado	635'
Tansill	1585'
Yates	1735'
Seven Rivers	2035'
Artesia (Queen)	2635'
Grayburg	3055'
San Andres	3375'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Water

Upper Permian: Surface - 300'

Oil

Grayburg:/San Andres 3055' - TD

MINIMUM BLOWOUT PREVENTER EQUIPMENTS

3,800 psi Working Pressure

3 MW

Eddy County, New Mexico
Exhibit #1

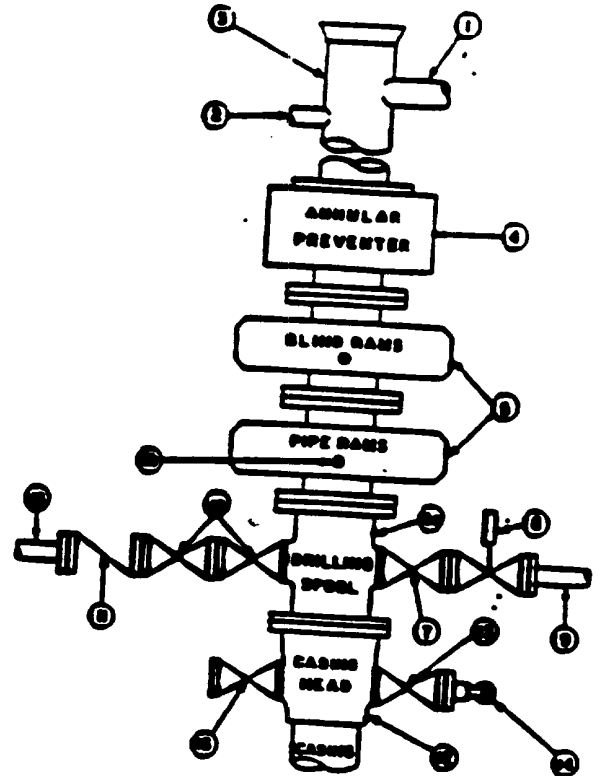
STACK REQUIREMENTS

No.	Item	Min. LD.	Min. Nominal
1	Flange		
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two angle 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		2"
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 mast 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 brodenhead or casinghead. Working pressure of preventers to be 3,800 psi. minimum.
2. Automatic accumulator (50 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 derrick 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 cover-out 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 FK ring gaskets in place of Type R.

MEC TO FURNISH:

1. Brodenhead or casinghead and side valves.
2. Wear testing, 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 horns. Replaceable parts for adjustable chokes, other horn sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with hand-wheel or handle 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 American steel control piping (3,800 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.

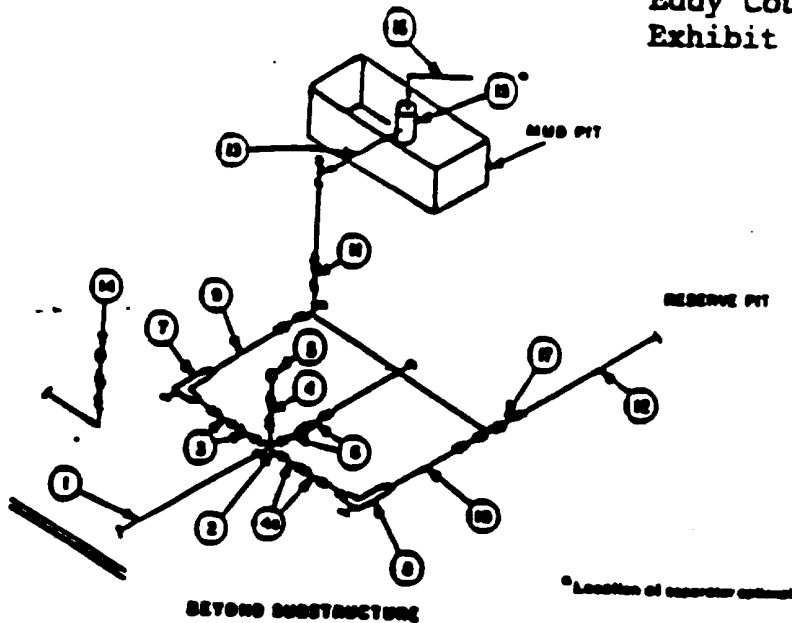
Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTORS
Grayburg-Jackson Field
Eddy County, New Mexico

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOPE 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 W.P. 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 Pressure

3 MWP • 5 MWP • 10 MWP

Eddy County, New Mexico
Exhibit #1-A



MINIMUM REQUIREMENTS										
No.		3,000 MWP			5,000 MWP			10,000 MWP		
		LD	NOMINAL	RATING	LD	NOMINAL	RATING	LD	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
2	Class 3"x3"x3"x3"			3,000			5,000		3"	10,000
3	Valves (1) Gate <input type="checkbox"/> Plug <input type="checkbox"/> (R)	3-1/2"		3,000	3-1/2"		5,000	3-1/2"		10,000
4	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/> (R)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"		10,000
4a	Valves (1)	3-1/2"		3,000	3-1/2"		5,000	3-1/2"		10,000
5	Pressure Gauge			3,000			5,000	3-1/2"		10,000
6	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (R)	3-1/2"		3,000	3-1/2"		5,000			10,000
7	Adjustable Choke (R)	2"		3,000	2"		5,000	3-1/2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000	2"		10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (R)	3-1/2"		3,000	3-1/2"		5,000		3"	10,000
12	Lines		3"	1,000		3"	1,000	3-1/2"		10,000
13	Lines		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000		3"	2,000
15	Gas Separator		2-1/2"			2-1/2"				10,000
16	Line		4"	1,000		4"	1,000		4"	
17	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (R)	3-1/2"		3,000	3-1/2"		5,000	3-1/2"		10,000

(1) Only one required in Class 3M.

(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, threaded, flanged or Cameron clamp of comparable rating.
- All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or EX. Use only EX 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 shall be as straight as possible.