

Form 3160-3
(December 1990)

NM OIL CONS. COMMISSION
DRAWER DD
ARTESIA, NEW MEXICO
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate
(Only instructions on
reverse side)

Form approved
Budget Bureau No. 1004-0136
Expires: December 31, 1991

C/SF

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL ☒ DEEPEN ☐			1. LEASE DESIGNATION AND SERIAL NO. LC-029435-B		
2. TYPE OF WELL OIL WELL ☒ GAS WELL ☐ OTHER ☐ SINGLE BORE ☐ MULTIPLE BORE ☐			2. IF SHALAR, ALLOTTEE OR TRUST NAME NA		
3. NAME OF OPERATOR DEVON ENERGY OPERATING CORPORATION 136025			3. SURVEY AGREEMENT NAME NA		
4. ADDRESS AND TELEPHONE 20 N. Broadway, Suite 1500, Oklahoma City, Oklahoma 73102 (405) 552-4530			4. FEDERAL LEASE NAME WELL NO. Keel "B" Federal # 62		
5. LOCATION OF WELL (Report location clearly and in accordance with any lease requirements.) At surface: 2650' FSL & 2650' FWL Non-standard Location... SUBJECT TO LIKE APPROVAL BY STATE			5. APPROVED 30-015-28293		
6. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 4 Miles East and 4 miles North of Loco Hills, N.M. WLG			6. FIELD AND POOL OR WELDCAT GRAYBURG-JACKSON 29509		
7. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRAINAGE, COMPLETION, OR APPLIED FOR ON THIS LEASE, FT. 1000'			7. SEC. T. R. N. OR B.L. AND SURVEY OR AREA SEC. 6-T175-R31E		
8. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRAINAGE, COMPLETION, OR APPLIED FOR ON THIS LEASE, FT. 1000'			8. COUNTY OR PARISH EMERY COUNTY		
9. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRAINAGE, COMPLETION, OR APPLIED FOR ON THIS LEASE, FT. 1000'			9. STATE NM		
10. ELEVATION (Show whether DV, RT, GR, etc.) 3769' GR			10. NO. OF ACRES ASSIGNED TO THIS WELL 40		
11. APPROVAL DATE WHEN WILL START November 1, 1994			11. REPORT ON CABLE TOOLS ROTARY		

PROPOSED CEMENT AND CEMENTING PROGRAM

SIZE OF HOLE	CEMENTING DEPTH	WEIGHT PER FOOT	CEMENTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8" J-55	24.04	370'	165 sk 11te cnt + 200 sk Class "C"
7 7/8"	5 1/2" J-55	15.54	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 6 T17N-R31E
Bond Coverage: Nationwide
BLM Bond No.: PENDING

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

SIGNED: Randy Jackson
TITLE: DISTRICT ENGINEER
DATE: September 22, 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 enable the applicant to develop the lease.

CONDITIONS OF APPROVAL, IF ANY:

(ORIG. SGD.) RICHARD L. MANUS

AREA MANAGER

APPROVED BY

TITLE

NSW-3456 Appv 12-28-94 See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make a false statement to the United States any false, fictitious or fraudulent statement.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

12-8-94

MINIMUM BLOWOUT PREVENTER REQUIREMENTS
3,000 psi Working Pressure

3 MW

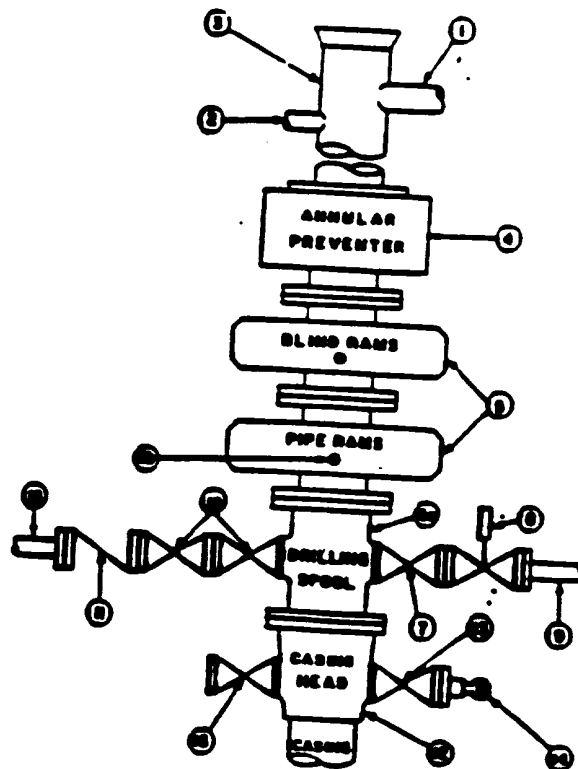
Eddy County, New Mexico
Exhibit #1

STACK REQUIREMENTS

No.	Item	Min. LD.	Min. Nominal
1	Flowline		
2	Fill up line		2"
3	Drilling supply		
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 ☐ Plug ☐	2-1/8"	
8	Gate valve—power operated	2-1/8"	
9	Line to choke manifold		3"
10	Valves Gate ☐ Plug ☐	2-1/8"	
11	Check valve	2-1/8"	
12	Casing head		
13	Valve Gate ☐ Plug ☐	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"	

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 (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-cab 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 FL.

MEC TO FURNISH:

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

GENERAL NOTES:

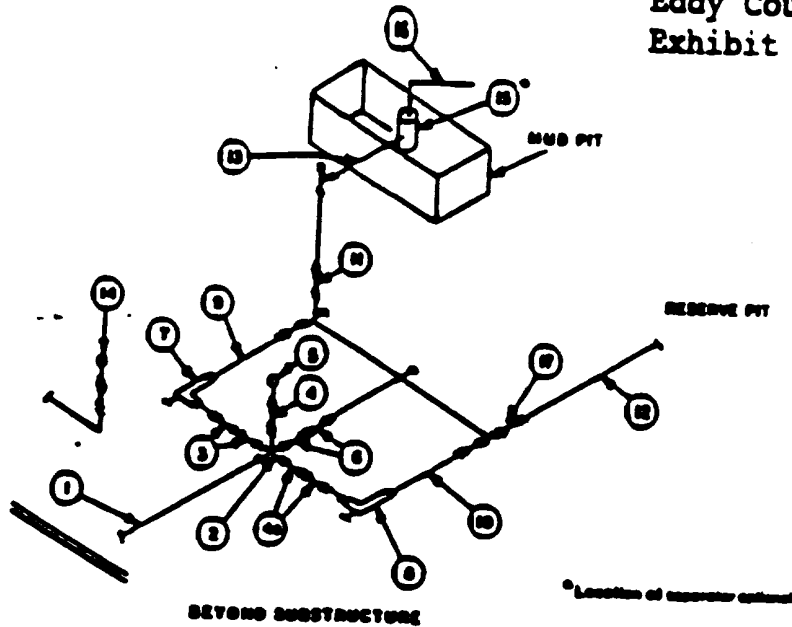
1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through shut-in. 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 lines. Replaceable parts for adjustable chokes, other beam chokes, 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 (3,000 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

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
1	Line from drilling spool		3"	3,000		3"	5,000		3"
2	Cross 3"x3"x3"x3"			3,000			5,000		10,000
3	Valves (1) Gate □ Plug □ (2)	3-1/2"		3,000	3-1/2"		5,000	3-1/2"	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	2-1/16"	10,000
5	Pressure Gauge			3,000			5,000		10,000
6	Valves Gate □ Plug □ (2)	3-1/2"		3,000	3-1/2"		5,000	3-1/2"	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		10,000
10	Line		2"	3,000		2"	5,000		10,000
11	Valves Gate □ Plug □ (2)	3-1/2"		3,000	3-1/2"		5,000	3-1/2"	10,000
12	Lines		3"	1,000		3"	1,000		2,000
13	Lines		3"	1,000		3"	1,000		2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000		10,000
15	Gas Separator		2"x5"			2"x5"			
16	Line		4"	1,000		4"	1,000		2,000
17	Valves Gate □ Plug □ (2)	3-1/2"		3,000	3-1/2"		5,000	3-1/2"	10,000

(1) Only one required in Class 3M.

(2) Gate valves only shall be used for Class 3M.

(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, cladded, flanged or Cameron clamp of comparable rating.
- All flanges shall be API 5B or 6BX and ring gaskets shall be API 6X or 6Y. Use only 6Y 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 to atmosphere.