

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

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

## 2. NAME OF OPERATOR

Highland Production Company

## 3. ADDRESS OF OPERATOR

810 N. Dixie Blvd., Suite 202

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

At surface

1650' FEL and 2310' FSL

At proposed prod. zone

1650' FEL and 2310' FSL

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

21 Miles SW of Jal, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

330'

## 18. DISTANCE FROM PROPOSED LOCATION\*

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

None

## 16. NO. OF ACRES IN LEASE

40

## 19. PROPOSED DEPTH

4550'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS Rotary to 4350'  
and cable tool to total depth.

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

3205.0 GR

## 22. APPROX. DATE WORK WILL START\*

May 15, 1990

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/2"	8 5/8"	24 #	1100'	200 Sks. Class C - Circulate
7 7/8"	5 1/2"	15.5 #	4550'	1200 Sks. HLC w/Class C - Circulate

## Additional Information:

1. Surface formation is Tertiary with some Triassic exposed.
2. Estimated geological tops: Rustler - 950'; Anhydrite - 1,050'; Top Salt 1,300'; Castile - 3,000'; Lamar Lime - 4,100'; Top of Delaware - 4,300'.
3. Pressure control equipment: Double hydraulic pressure tested to 3,000 PSI, full closing hydril on top tested to 3,000 PSI. Pressure control diagram is attached. Testing will be on installation, daily and on trips.
4. Proposed circulating medium: 0 - 1,100' Spud Mud; 1,100 - 4,500' Brine Water.
5. Estimate will encounter water from 890' to 950'.
6. Estimate will encounter oil at 4,370'.
7. Logging Program: Acoustic velocity gamma ray caliper log; FoRoxo guard log.
8. No coring or drill stem testing.
9. No abnormal pressures or temperatures are expected to be encountered.
10. Anticipated starting date is May 15, 1990.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 Marvin L. Smith TITLE President DATE April 26, 1990  
(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE 5-16-90

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT MSPECIAL STIPULATIONS SEE

ATTACHED

All distances must be from the outer boundaries of the Section.

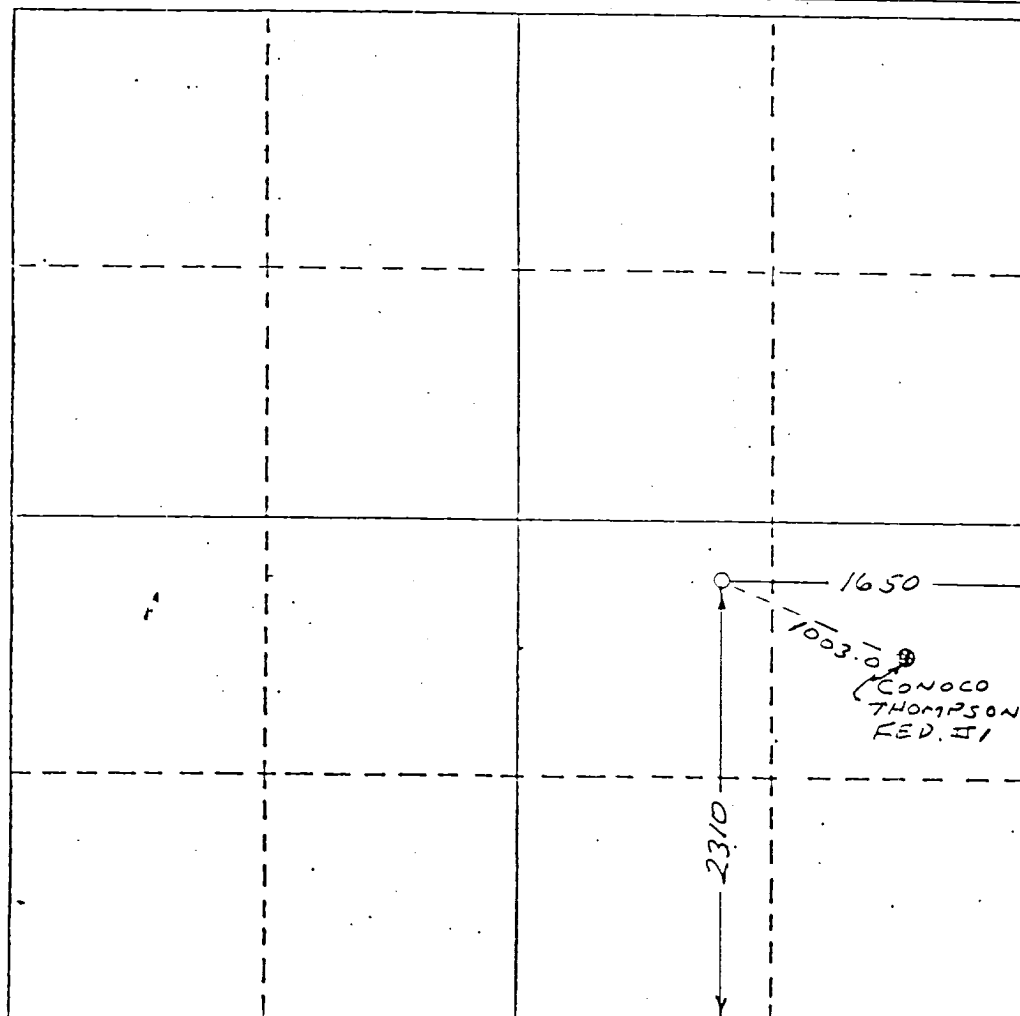
Operator Highland Production Company		Lease Conoco Federal		Well No. D-1
Unit Letter J	Section 18	Township 26 South	Range 32 East	County Lea
Actual Footage Location of Well: 2310 feet from the South line and 1650 feet from the East line				
Ground Level Elev. 3205.0	Producing Formation Delaware	Pool North Mason	Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☒ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division



CERTIFICATION

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

Name  
Marvin L. Smith  
Position  
President

Company  
Highland Production Company

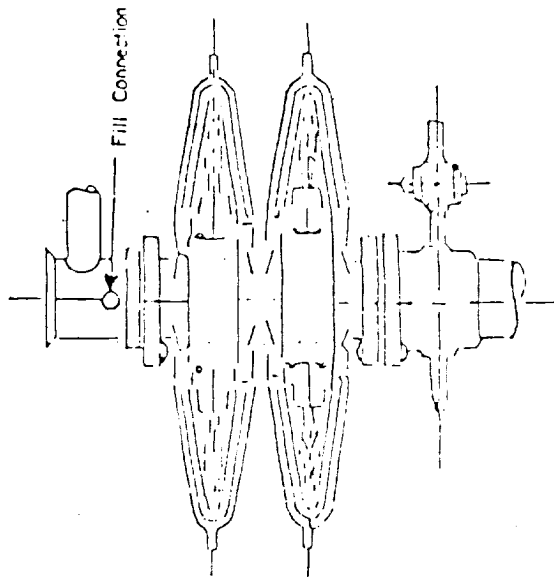
Date  
April 26, 1990

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 knowledge and belief.

Date Surveyed  
4-19-1990

Registered Professional Engineer and/or Land Surveyor  
Truman Gaskin

Certificate No.  
2126



Shaffer Type E Series 900 Hydraulic B.O.P.

3000 PSI WORKING PRESSURE  
BLOWOUT PREVENTER HOOK-UP

Series 900 Flanges, or Better.

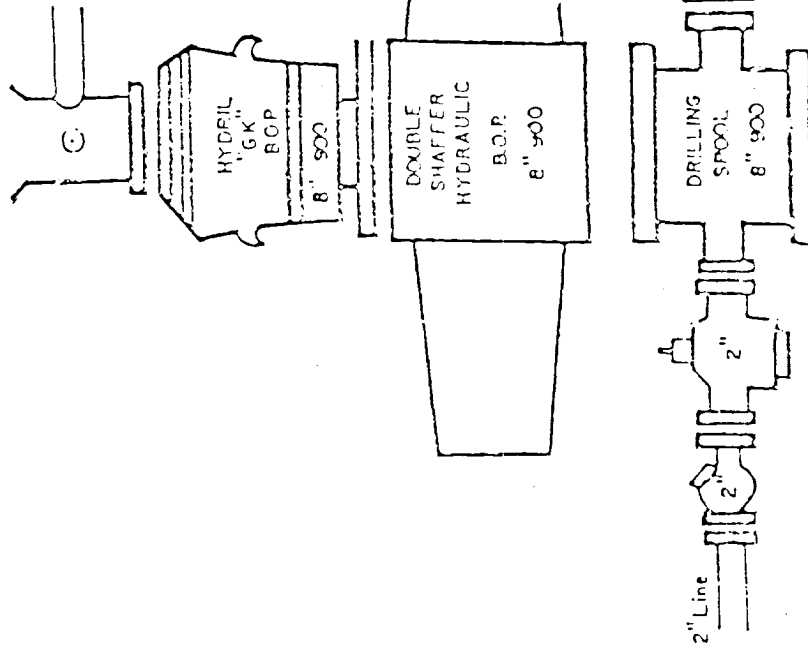
Note: B.O.P. system will meet the conditions of drilling approval  
required by the USGS District Office in Hobbs, New Mexico.

Application to Drill  
Conoco "D" Federal Well No. 1  
Highland Production Company

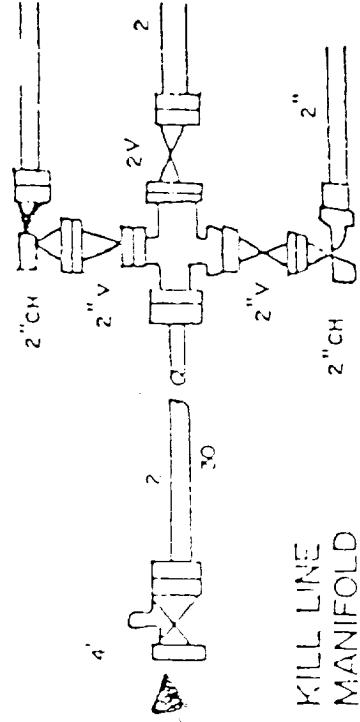
# ASE ROTARY TABLE

Flow line will have to be made  
to fit UNDER Rotary.

*Optional*



2" 1500  
4" 900



Application to Drill  
Conoco "D" Federal Well No. 1  
Highland Production Company

06-81-9 8024

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RECEIVED

MAY 14 1990

OCD  
HOBBS OFFICE