

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

DYCO PETROLEUM CORPORATION

3. ADDRESS OF OPERATOR

420 NBT Building, 320 South Boston, Tulsa, Oklahoma 74103

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

At surface

1930' FSL & 400' FEL Sec. 33-T9S-R38E Lea County, New Mexico

At proposed prod. zone

Same as above

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

16 miles east and 2 miles south of Crossroads, Lea County, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

400' FEL

18. DISTANCE FROM PROPOSED LOCATION*

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

None

16. NO. OF ACRES IN LEASE

30.00 GEOLOGICAL SURVEY

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

19. PROPOSED DEPTH

5100'

20. ROTARY OR CABLE TOOLS

Rotary

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

3922' GR

22. APPROX. DATE WORK WILL START*

Immediately after approval

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	400'	300 sks
7 7/8"	4 1/2"	9.5#	5100'	300 sks on bottom. DV tool @ 230 and cmt. to surface w/325 sks.

Dyco proposes to drill said well to test the San Andres Formation for production of oil and gas, See attached drilling programs.

Unless otherwise specified, this permit
Commences on the date of approval
Expires 6-21-77

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.

24.

SIGNED

Charles L. Simons

TITLE

Area Engineer

DATE February 1, 1977

(This space for Federal or State office use)

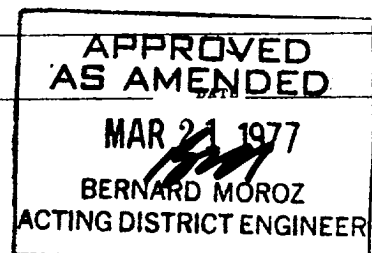
PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:



*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-102
Supersedes O-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

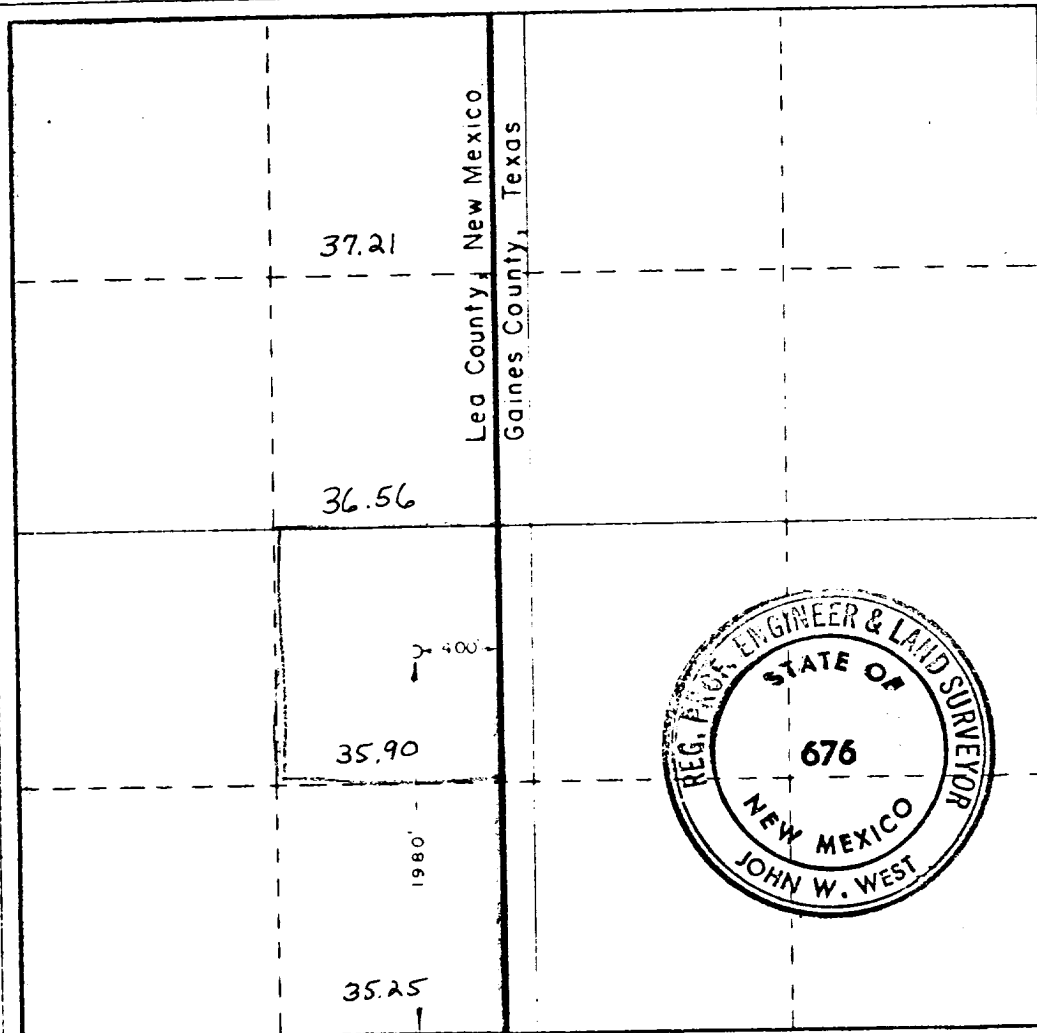
Operator DYCO PETROLEUM COMPANY			Lease Federal 33		Well No. 2
Tract Letter K	Section 33	Township 9 South	Range 38 East	County Lea	
Actual Footage Location of Well:					
1980 feet from the south line and		400 feet from the east line			
Ground Level Elev. 3922.0	Producing Formation San Andres	Pool Sawyer	Sealed Area 402 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 Commission.



CERTIFICATION

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

Charles L. Linman

Area Engineer

DYCO PETROLEUM CORPORATION

February 1, 1977

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:
Oct. 29, 1976

Registered Professional Engineer
and Professional Surveyor

John W. West

676

DYCO PETROLEUM CORPORATION
FEDERAL-33 Well No. 2
1980' FSL & 400' FEL
Section 33-T9S-R38E
Lea County, New Mexico
5100' San Andres Test
Attachment to Form 9-331C

1. Surface Formation: Ogallala Sand of the Tertiary Series.
2. Tops of Geological Markers: Depths from GL elevation 3922'.

Anhydrite	- 2200'
Yates	- 2950'
Queen	- 3380'
San Andres	- 4230'
San Andres (Pay Zone)	- 4910'
3. San Andres (Pay Zone) - 4910' (-938' Sub-Sea).
4. Proposed Casing Program:
400', 8 5/8" O.D., 24#, K-55, ST&C new casing cemented with 300 sks of cement.
5100', 4 1/2" O.D., 9.50#, K-55, ST&C new casing cemented with 300 sks on bottom and with 325 sks through DV tool at 2300'-cement from 2300' to surface.
5. Specifications for Pressure Control Equipment:
10" Series 900 double ram blowout preventor and
10" Series 900 Hydril annular preventor (hydraulically operated system) with associated control valves and choke manifold will be installed and tested after setting the 8 5/8" casing string.
6. The circulating medium from spud to 300' will be fresh water-gel-native solids mud with chemicals added if required to provide hole stability. From 300' to T.D., brackish or brine water will be used as a drilling fluid, with gel and chemicals added to control fluid weight, viscosity, and water loss from approximately 4800' to T.D. Anticipated mud weight will be 9.5 to 10.0 lbs. per gallon, which will provide pressure over-balance for any anticipated formation pressure.

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HOBBBS, A. M.

7. Auxiliary Rig Equipment:
 1. The rig will be equipped with upper and lower Kelly safety valves and a drill string safety valve located on the rig floor.
 2. The mud system used on this well will not require special monitoring equipment, but rig personnel will routine visually monitor the circulating system for possible fluid losses or flows, or abnormal conditions.
8. Testing: A Gamma Ray Neutron Log will be run, no other tests are proposed.
9. Abnormal Pressures: No abnormal pressures or temperatures are anticipated in the drilling of this well. Bottom hole pressure should be 1700 psi or less, and bottom hole temperature should be about 105°F.
10. Anticipated Starting Date: The drilling of this well will commence upon receipt of approval and operations should continue for approximately 30 days.

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