

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

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## 2. NAME OF OPERATOR

AMOCO PRODUCTION COMPANY

APR 8 1977

## 3. ADDRESS OF OPERATOR

P.O. DRAWER A, LEVELLAND, TEXAS 79336

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

At surface

662' FSL x 1879' FWL SEC 19 (UNIT N SE 1/4 SW 1/4)

At proposed prod. zone

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

9 MILES SE OF CARLSBAD, NM

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

## 18. DISTANCE FROM PROPOSED LOCATION\*

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

## 16. NO. OF ACRES IN LEASE

## 19. PROPOSED DEPTH

5900'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

## 20. ROTARY OR CABLE TOOLS

ROTARY

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

3049.8 GR

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

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 7/8"	24#	400'	CIRCULATE
7 7/8"	5 1/2"	14-15.5#	5900'	SUFFICIENT TO TIE BACK INTO SURFACE PIPE.

After drilling well, logs will be run and evaluations made, perforating and  
or stimulating as necessary in attempting commercial production.

MUD PROGRAM: O-SCP WATER & NATIVE MUD  
SCP-TD BRINE & NATIVE MUD

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BOP PROGRAM: ATTACHED

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

Alla V. Hendley

TITLE

STAFF ASSISTANT [SG]

DATE

3-23-77

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:

THIS APPROVAL IS RESCINDED IF OPERATIONS  
ARE NOT COMPLETED WITHIN 3 MONTHS.  
EXPIRES JUL - 7 1977

DATE

\*See Instructions On Reverse Side

4- USGS-ART

1- DIV

1- SUSP

1- RC

2- BASS

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form 7-102  
Supersedes 6-12d  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator <b>Amoco Production Company</b>		Lease <b>Old Indian Draw Unit</b>		Well No. <b>28</b>
Unit Letter <b>N</b>	Section <b>19</b>	Township <b>22 South</b>	Range <b>28 East</b>	County <b>Eddy</b>
Actual Four-Corner Location of Well <b>662</b> feet from the <b>South</b> line and <b>1879</b> feet from the <b>West</b> line				
Ground Level Elev. <b>3049.8</b>	Producing Formation <b>DELAWARE</b>	Pool <b>INDIAN DRAW DELAWARE</b>	Dedicated Acreage <b>40</b> Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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.

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CERTIFICATION

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

Name **Ray W. Cox**  
Position **Administrative Assistant**

Company  
**AMOCO PRODUCTION COMPANY**

Date  
**MARCH 7, 1977**

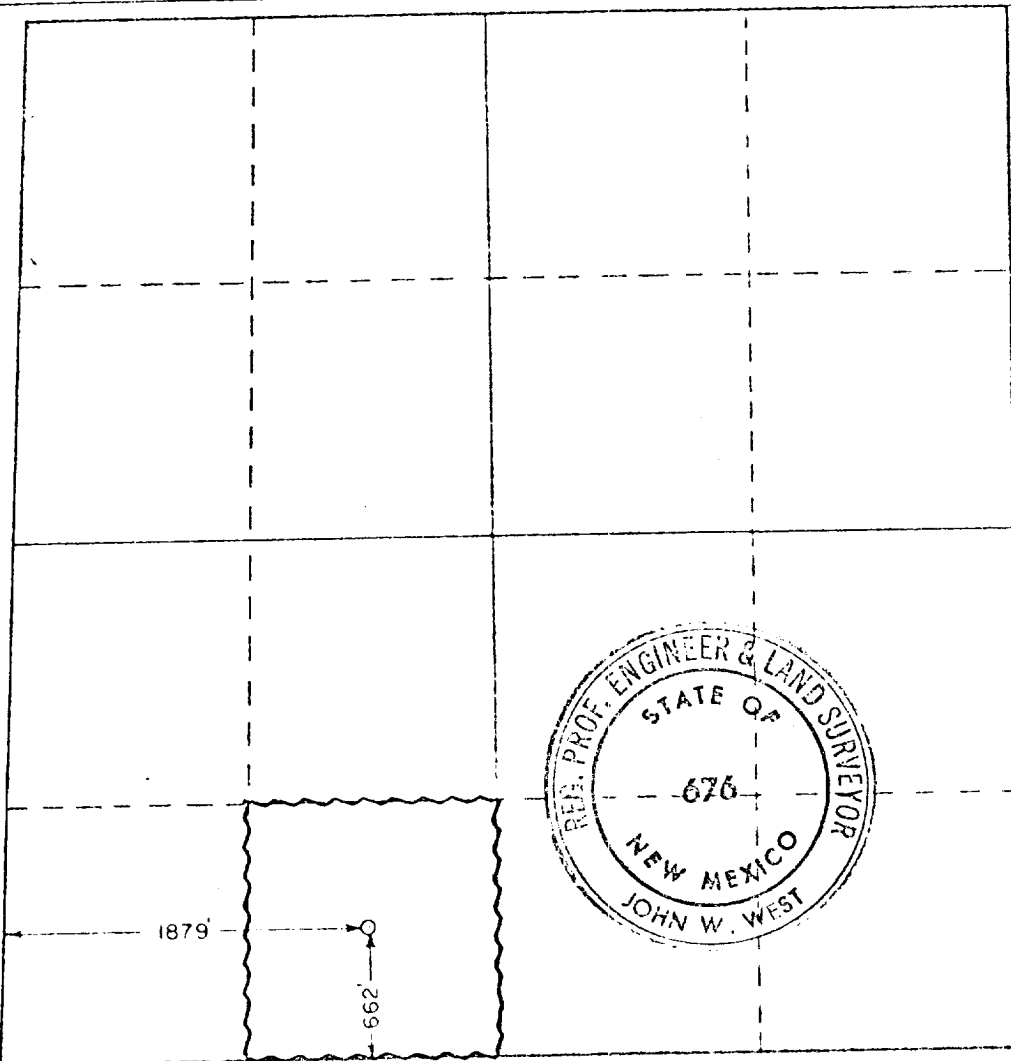
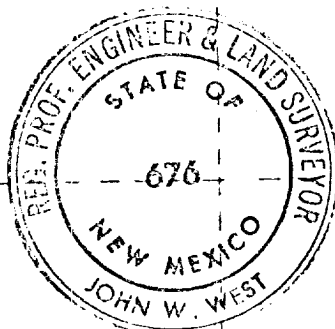
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
**February 16, 1977**

Registered Professional Engineer  
in Oil and Land Surveying

**John W. West**

Certificate No. **676**



0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600 6930 7260 7590 7920 8250 8580 8910 9240 9570 9900

Attachment to "Application for Permit to Drill" Form 9-331 C

Old Indian Draw Unit Well No. 28, Unit N, 662' FSL and 1879' FWL, Section 19,  
Township 22 South, Range 28 East, Eddy County, New Mexico

1. Location (See Attached Form C-102)
2. Elevation (See Attached Form C-102)
3. Geologic name of surface formation

Unknown

4. Type of drilling tools and associated equipment to be utilized.  
(See Form 9-331 C)

5. Proposed drilling depth. (See Form 9-331 C)

6. Estimated tops of important geologic markers.

Base Salt - 2300'

Delaware Sand - 2400'

Old Indian Draw Sand - 3260'

Bone Springs - 5820'

7. Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered.

Indian Draw Sand - 3260'

Bone Springs - 5820'

8. Proposed casing program including size, grade, and weight of each string and whether it is new or used. (See Form 9-331 C)

9. Proposed setting depth of each casing string and the amount and type of cement (including additives) to be used. (See Form 9-331 C)

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ARTESIA, NEW MEXICO

10. Operator's minimum specifications for pressure control equipment which is to be used, a schematic diagram thereof showing sizes, pressure ratings (or API series) and the testing procedures and testing frequency. (See Attached BOP Program)

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11. Type and characteristics of the proposed circulating medium or mediums to be employed for rotary drilling and the quantities and types of mud and weighting material to be maintained.

0 to Surface Casing Point -- Water x Native Mud

SCP to Total Depth -- Brine x Native Mud

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12. Testing, logging and coring programs to be followed with provisions made for required flexibility.

Dual Laterolog Micro - SFL

Borehole Compensated Sonic Log

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13. Any anticipated abnormal pressures or temperatures expected to be encountered or potential hazards such as hydrogen sulfide gas, along with plans for mitigating such hazards.

None

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14. Anticipated starting date and duration of operation.

ASAP

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15. Other facets of the proposed operation, operator wishes to point out for the Geological Survey's consideration of the application.

None

ATTACHMENT TO FORM 9-331C

APPLICATION FOR PERMIT TO DRILL

LEASE OLD INDIAN DRAW UNIT FED. WELL NO. 28  
LOCATION UNIT N, SEC. 19, T-22-S, R-28-E  
POOL INDIAN DRAW DELAWARE  
COUNTY EDDY STATE NM

The undersigned hereby states that Amoco's representative, Mr. J.H. HANKINS, personally contacted MR. HENRY H. GRANDI, CARLSBAD the ~~owner~~/lessee of the surface land where the proposed work is to be conducted and advised him of the proposed work, the construction site and pertinent roads included in the project. It is further stated that, upon being fully advised of the extent of the work and the effect upon the surface, said owner has consented to the said work and that agreement as to the compensation for damages to the surface estate has been reached.

Ray W. Cox  
Ray W. Cox  
Administrative Assistant

3-23-77  
Date

# NOTES

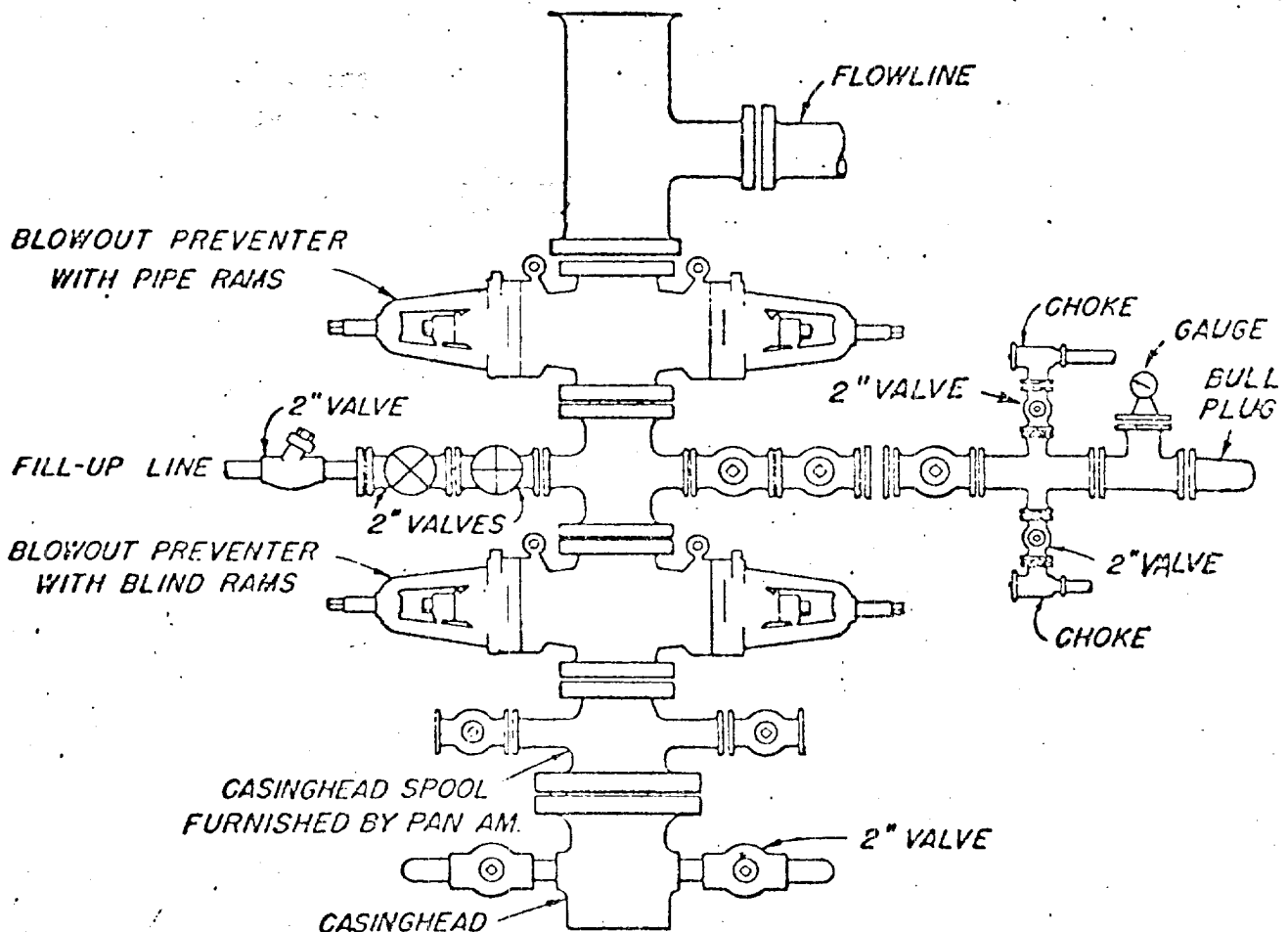
1. Blow-out preventer and master valve to be fluid operated and all fittings must be in good condition, 3,000# W.P. (6,000 p.s.i. test), minimum.
2. Equipment through which bit must pass shall be as large as the inside diameter of the casing that is being drilled through.
3. Nipple above blow-out preventer shall be same size as casing being drilled through.
4. Kelly cock required, 3,000# W.P. (6,000 p.s.i. test), minimum.
5. OMSCO or comparable safety valve must be available on rig floor at all times with proper connection or sub, 3,000# W.P. (6,000 p.s.i. test), minimum.
6. Blow-out preventers and master valve while drilling intermediate hole to 6,000' may be 2,000# W.P. (4,000 p.s.i. test), minimum.
7. Choke assembly, beyond second valve from cross, may be positioned (Optional) outside of derrick foundation.
8. Spool or cross may be eliminated if connections are available in the lower part of the blow-out preventer body.
9. Plug valves - gate valves are optional. Valves shown as 2" are minimum size.
10. Casing head and casing head spool, including attached valves, to be furnished by Pan American.
11. Rams in preventers will be installed as follows:

When drilling, use:

Top Preventer - Drill pipe rams  
Bottom Preventer - Blind rams or master valve

When running casing, use:

Top Preventer - Casing rams  
Bottom Preventer - Blind rams or master valve.



BLOWOUT PREVENTER HOOK-UP  
PAN AMERICAN PETROLEUM CORP.

OLD INDIAN DRAW UNIT FEDERAL  
WELL NO. 28

Surface Use Plan ----- See info. attached to  
Well No. 20, Unit K,  
NE/4 SW/4 Sec. 19, T-22-S,  
R-28-E.

Exhibits A, B, C, & E ----- See info. attached to  
Well No. 20, Unit K,  
NE/4 SW/4 Sec. 19, T-22-S,  
R-28-E.

Archaeological Report ----- See info. attached to  
Well No. 20, Unit K,  
NE/4 SW/4 Sec. 19, T-22-S,  
R-28-E.

## ATTACHMENT TO PROPOSED DEVELOPMENT PLAN FOR SURFACE USE, AND FORM 9-331C

13. Certification: The following statement is to be incorporated in the plan and must be signed by the lessee's or operator's field representative who is identified in Item No. 12 of the plan.

I hereby certify that I, or persons under my direct supervision have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by: Amoco Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

3-23-77

DATE

Okell Williams Area Foreman

NAME AND TITLE





Amoco Production Compar  
ENGINEERING CHART

SHEET NO OF

FILE **D'**  
APPN

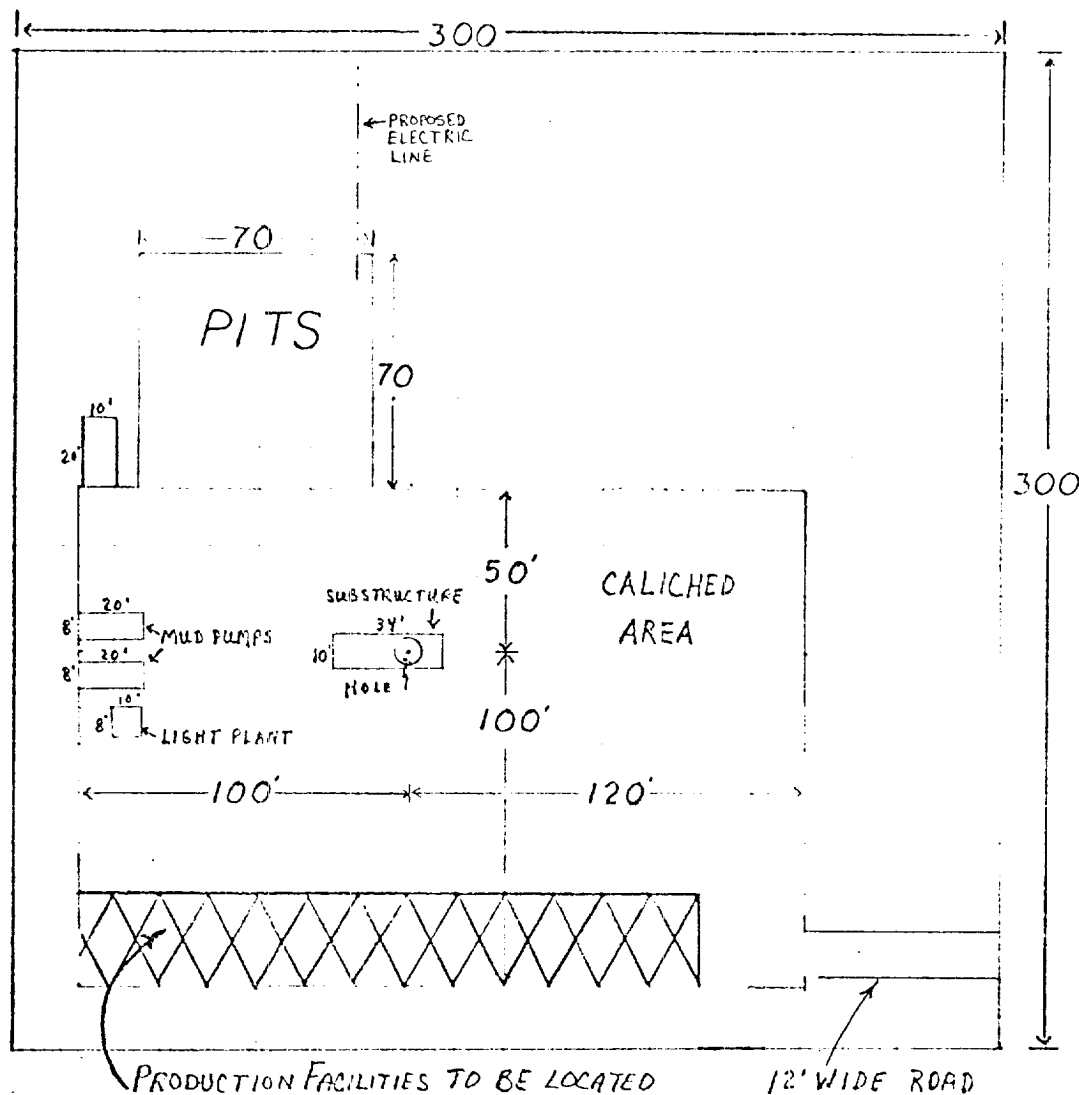
SUBJECT DRILL SITE LIME ROCK

DATE 10-29-76

SHALLOW WELLS (LESS THAN 7500')

BY RC  
SCALE - 1" = 60'

OLD INDIAN DRAW UNIT WELL NO. 28  
UNIT N (SE 1/4, SW 1/4) 662 FT FROM SOUTH LINE, 1879 FT  
FROM WEST LINE, SECTION 19, T-22-S, R-28-E, EDDY CO., NM



HERE IF WELL IS PRODUCTIVE  
(TANKS, SEPARATORS, TREATERS, DEHYDRATORS, ETC.)

CELLAR SIZE

5'X5'X4'