

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

AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR

P.O. DRAWER A, LEVELAND, TEXAS 79336

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

At surface
830' FWH X 2321' FWH SEC 7 (UNIT 4, SEC 4, T. 14 N., R. 10 E.)

At proposed prod. zone 830' FWH

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.

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

3118.4 GR

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'	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

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

Allen V. Handley

TITLE

STAFF ASSISTANT [SG]

DATE

3-23-77

(This space for Federal or State official use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

04- USGS-ARTESIA

1-DIV
1-SUSP
1-RC
2-BASS

*See Instructions On Reverse Side

copy to 01

30-015-22111

5. LEASE DESIGNATION AND SERIAL NO.

NM-0429825

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

OLD INDIAN DRAW UNIT

8. FARM OR LEASE NAME

OLD INDIAN DRAW UNIT

FEDORAC

9. WELL NO.

31

10. FIELD AND POOL, OR WILDCAT

INDIAN DRAW-DELAWARE

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA

7-22-28 NMPM

12. COUNTY OR PARISH

EDDY

13. STATE

NM

16. NO. OF ACRES IN LEASE

ARTESIA, OFFICE

17. NO. OF ACRES ASSIGNED
TO THIS WELL

35.46

20. ROTARY OR CABLE TOOLS

ROTARY

22. APPROX. DATE WORK WILL START*

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U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

JUL

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION AT

Form O-102
Supersedes O-101
Effective 1-1-75

All distances must be from the outer boundaries of the Section

Operator Amoco Production Company		Lease Old Indian Draw Unit		Well No. 31
Tract Letter E	Section 7	Township 22 South	Range 28 East	County Eddy
Actual Portage Location of Well: 830 feet from the West line and 2321 feet from the North line				
Ground Level Elev. 3118.4	Producing Formation DELAWARE	Pool INDIAN DRAW DELAWARE	Dedicated Acreage 35.46 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 actually been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

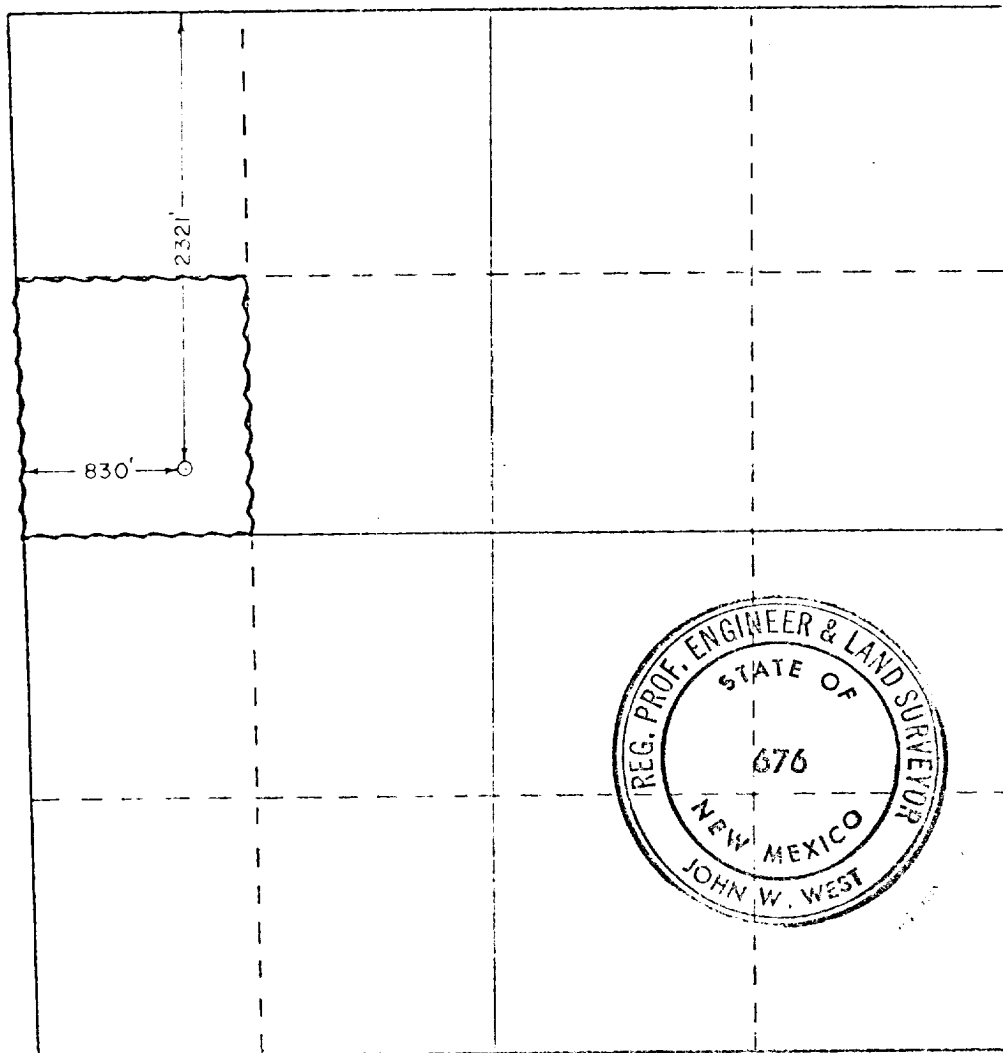
If answer is "no," list the owners and tract descriptions which have actually been consolidated on the reverse side of this form if necessary.) _____

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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ARTESIA, NEW MEXICO



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 12, 1977

Registered Professional Engineer and/or Land Surveyor

John W. West
 Certificate No. 676

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

Old Indian Draw Unit Well No. 31, Unit E, 830' FWL and 2321' FNL, Section 7,
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)

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

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

Dual Laterolog Micro - SFL

Borehole Compensated Sonic Log

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

14. Anticipated starting date and duration of operation.

ASAP

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. 31
LOCATION UNIT E, SEC. 7, 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

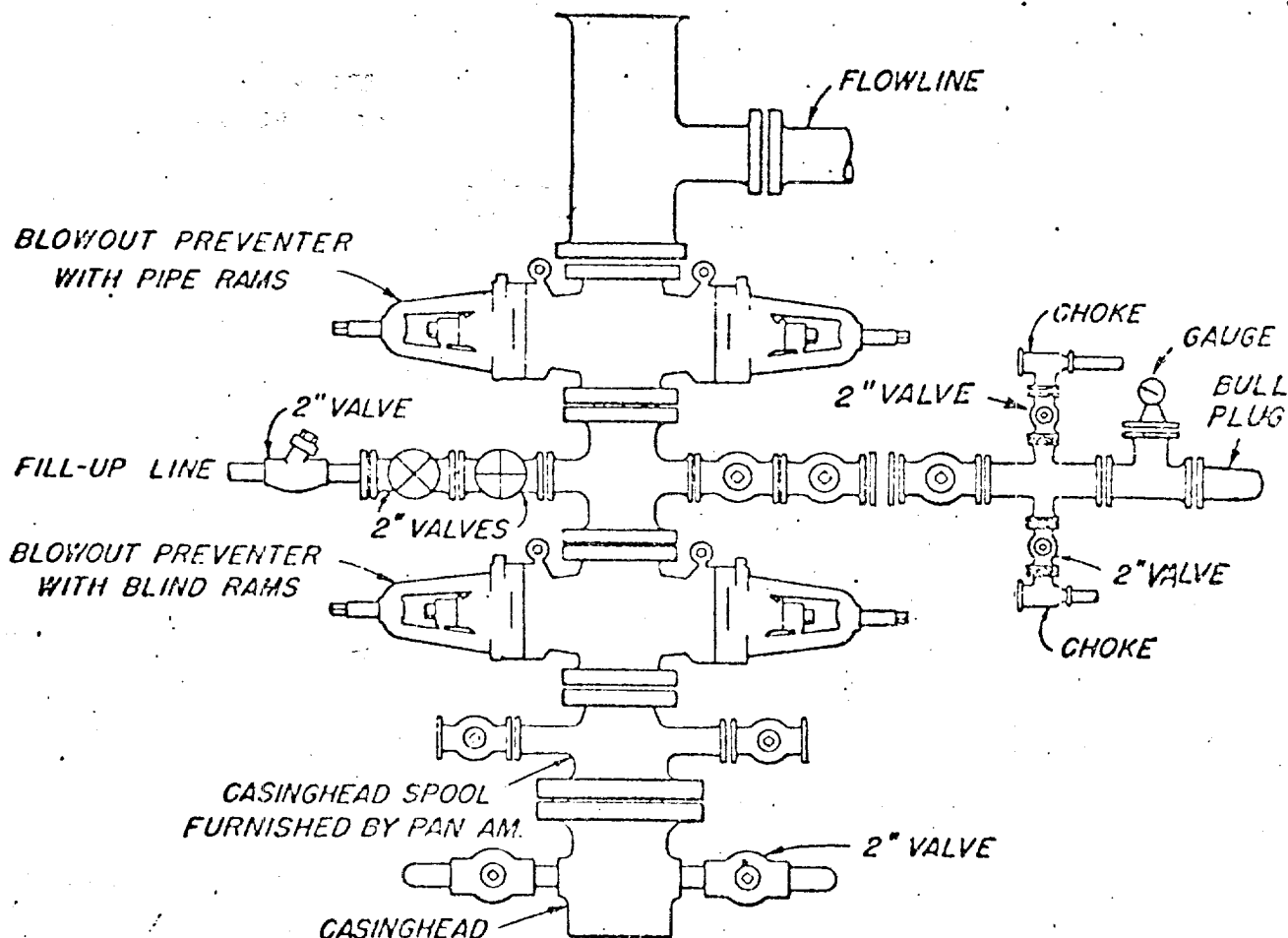
1. Blow-out preventer and master valve to be fluid operated and all fittings must be in good condition, 3,000# W.P. (6,000 p.s.i. test), minimum.
2. Equipment through which bit must pass shall be as large as the inside diameter of the casing that is being drilled through.
3. Nipple above blow-out preventer 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. 31

Surface Use Plan ----- See info. attached to
Well No. 23, Unit L,
NW/4 SW/4 Sec. 7, T-22-S,
R-28-E.

Exhibits A, B, C, & E ----- See info. attached to
Well No. 23, Unit L,
NW/4 SW/4 Sec. 7, T-22-S,
R-28-E.

Archaeological Report ----- See info. attached to
Well No. 23, Unit L,
NW/4 SW/4 Sec. 7, T-22-S,
R-28-E.

LEASE & WELL NUMBER 31

LOCATION _____

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: AMUCO 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

Operator (J) Aca-Zimmerman
NAME AND TITLE



Amoco Production Company,
ENGINEERING CHART

SHEET NO. OF

FILE

APPN

DATE 10-29-76

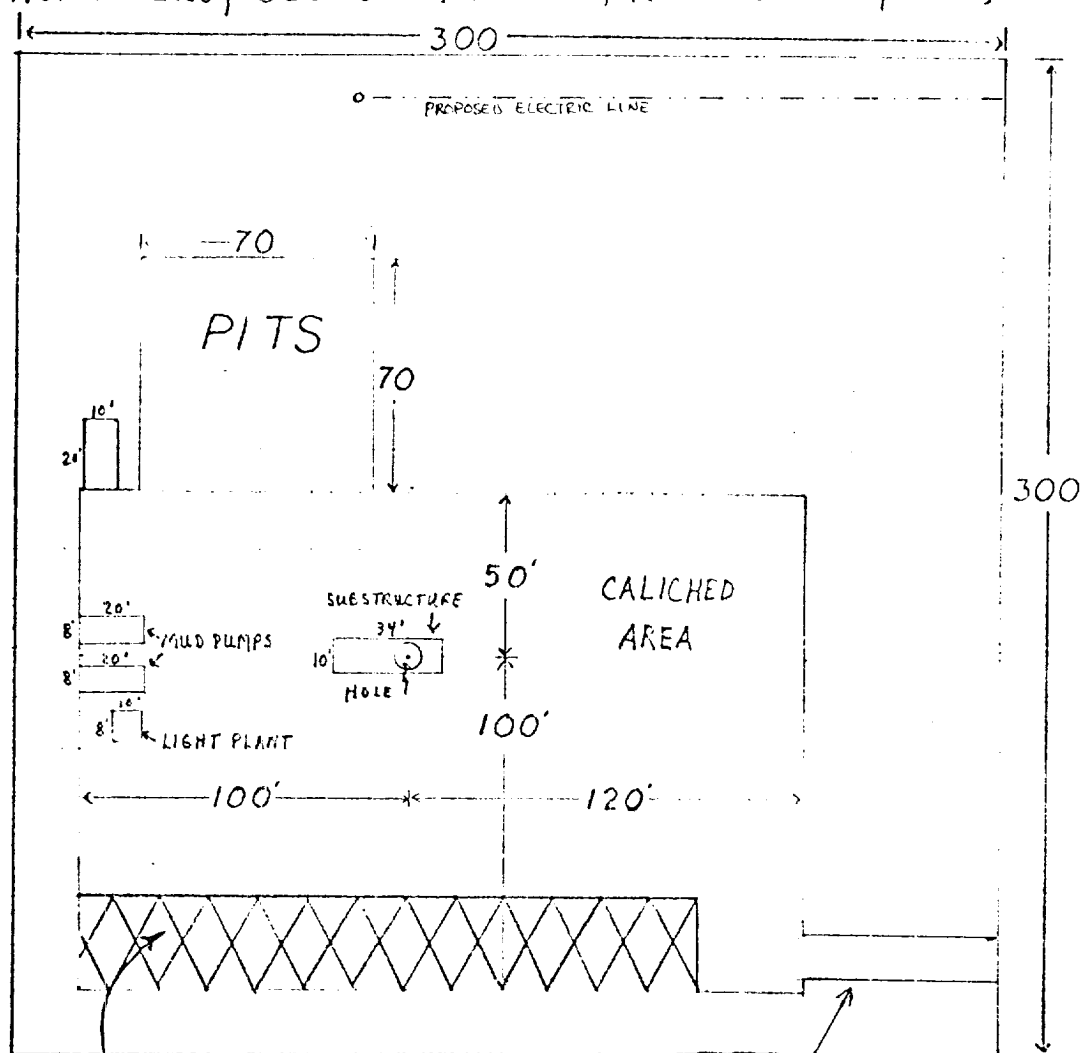
BY R.C.
SCALE - 1" = 60'

SUBJECT DRILL SITE LIME ROCK

SHALLOW WELLS (LESS THAN 7500')

OLD INDIAN DRAW UNIT WELL NO. 31

UNIT E (SW 1/4 - NW 1/4) 830 FT FROM WEST LINE, 2321 FT
FROM NORTH LINE, SECTION 7, T-22-S, R-28-E EDDY CO., NM



PRODUCTION FACILITIES TO BE LOCATED
HERE IF WELL IS PRODUCTIVE
(TANKS, SEPARATORS, TREATERS, DEHYDRATORS, ETC.)

CELLAR SIZE

5'X5'X4'