

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☐ RE-ENTRY ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL

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

2. NAME OF OPERATOR

PETROLEUM DEVELOPMENT CORPORATION

3. ADDRESS OF OPERATOR

9720-B Candelaria, NE, Albuquerque, NM 87111

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

At surface

660' FNL & 2280' FWL, Sec. 24, T21S, R22E

At proposed prod. zone

Same

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

25 miles west of Carlsbad, New Mexico

15. DISTANCE FROM PROPOSED*

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

660'

16. NO. OF ACRES IN LEASE

1120

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION*

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

9820'

19. PROPOSED DEPTH

9300

20. ROTARY OR CABLE TOOLS

Rotary

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

4148 GL

22. APPROX. DATE WORK WILL START*

Dec. 5, 1979

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	54#	505	625 sx. Redi-mix to surf. (set 5-1-79)
12-1/4"	8-5/8"	24#	1975	1300 sx Cem. circ. (set 5-19-79)
7-7/8"	4-1/2"	10.5# & 11.6#	9300	725 c.f.

Originally drilled by Inexco Oil Co.: TD 9300'; P & A 6-25-79. Propose to move in reverse rig, 900 series double preventer. Drill out cement plugs @: 0-100, 1900-2000, 3850-4000, 5900-6100, 8800-9000. Maintain mud below 10 cc water loss, condition hole, run and cement 4 1/2" casing back to 7500'. Centralizers and sand-blasting of casing will be utilized opposite prospective pay zones. Completion will be jet perforating indicated pay zones and acidizing or fracturing as need is indicated.

Multi-point drilling and surface use plans and archeological clearance were approved for original drilling of this well earlier this year. No changes or additional surface use is planned.

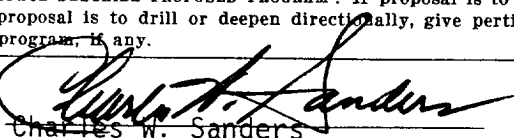
Gas from this well is not dedicated.

Please attach "Designation of Operator" from Inexco, which was forwarded from Inexco to you.

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



TITLE Vice President

DATE 11-16-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

12-11-79

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-4-65

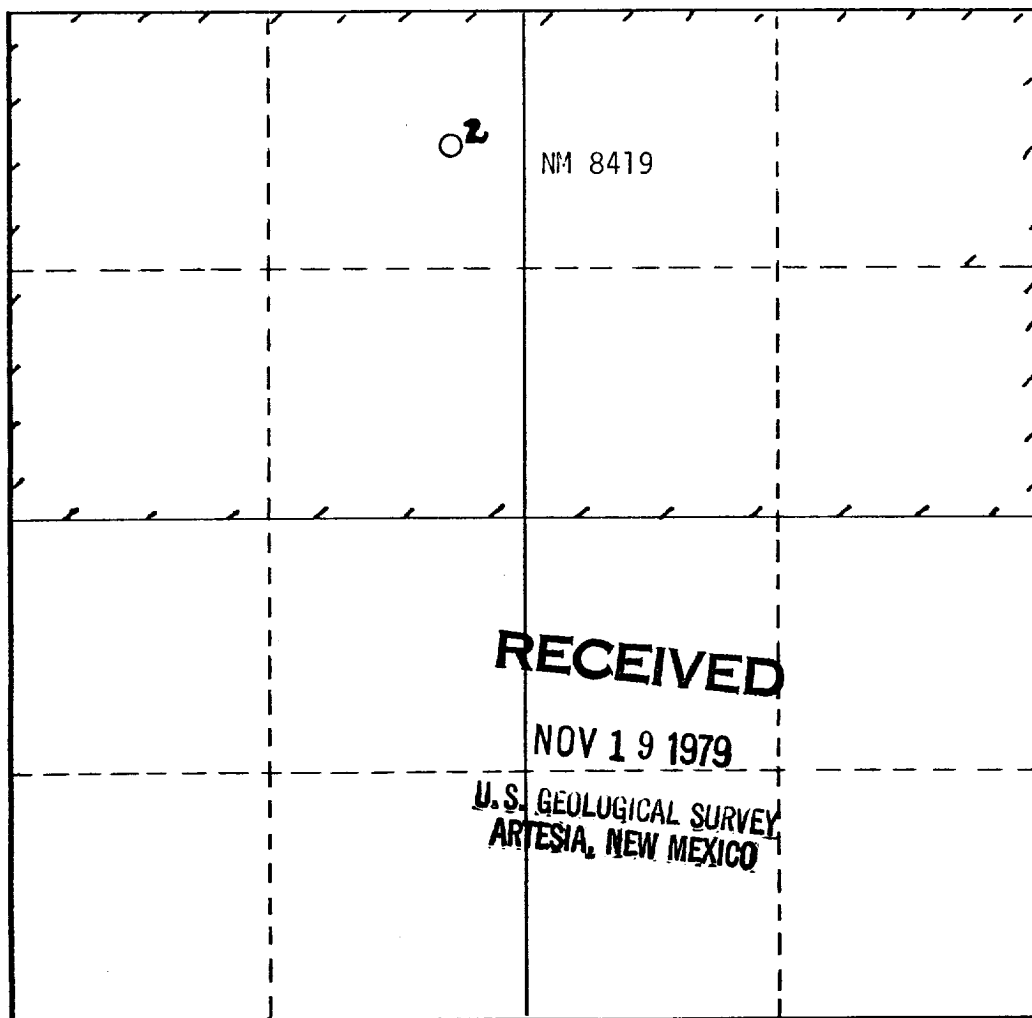
All distances must be from the outer boundaries of the Section.

Operator PETROLEUM DEVELOPMENT CORPORATION			Lease Arroyo Federal		Well No. 2
Unit Letter C	Section 24	Township 21 South	Range 22 East	County Eddy	
Actual Footage Location of Well: 660 feet from the North line and 2280 feet from the West line					
Ground Level Elev. 4148	Producing Formation Morrow	Pool Undesignated		Dedicated Acreage: 320 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 of all owners been consolidated by communitization, unitization, force-pooling, etc? **O.C.C.**
ARTESIA, OFFICE
- ☐ 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.



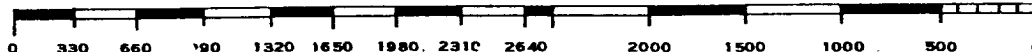
CERTIFICATION

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

Name
Charles W. Sanders
Position
Vice President
Company
Petroleum Development Corp.
Date
11-16-79

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.
Originally drilled as
Inexco Oil Co.-Arroyo Fed.

See original plat dated
April 23, 1979
Registered Professional Engineer
and/or Land Surveyor





United States Department of the Interior

RECEIVED

GEOLOGICAL SURVEY
P. O. Drawer U
Artesia, New Mexico 88210

DEC 13 1979

O. C. C.
ARTESIA, OFFICE

December 11, 1979

Petroleum Development Corp.
9720-B Candelaria NE
Albuquerque, New Mexico 87111

Gentlemen:

PETROLEUM DEVELOPMENT CORPORATION
Arroyo Fed No. 2
660 FNL 2280 FWL Sec. 24 T.21S R.22E
Eddy County Lease No. NM 8419

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO RE-ENTER the above-described well to a depth of 9,300 feet to test the Morrow is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
3. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should not be less than 8" x 5" in size and each page should identify the well.
4. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
5. Before drilling out the 4000' cement plug, the blowout preventer assembly will be installed and will consist of a minimum of one annular type and two ram type preventers.
6. A kelly cock will be installed and maintained in operable condition.



7. Before drilling below the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.
8. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling below the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
 - (1) A recording pit level indicator to determine pit volume gains and losses.
 - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
 - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
9. Notify the Survey in sufficient time to witness the cementing of the 4-1/2" casing.
10. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

GEORGE H. STEWART

George H. Stewart
Acting District Engineer