

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

ARCO Oil & Gas Company
Division of Atlantic Richfield Company

3. ADDRESS OF OPERATOR

P.O. Box 1710, Hobbs, New Mexico 88240

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

1980' FEL & 660' FSL (Unit Letter "O")

At proposed prod. zone

as above

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

9 miles South Eunice, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT. 660' West
(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.

1195' East

16. NO. OF ACRES IN LEASE

320 40

19. PROPOSED DEPTH

3750'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

3331.8' GL

22. APPROX. DATE WORK WILL START*

6-1-81

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" OD	54.5#	30'	4 yds Redi-Mix to surf.
12 1/4"	8-5/8" OD	24# K-55	1200'	925 sx circ to surf.
7 7/8"	5-1/2" OD	15.5# K-55	3750'	1000 sx circ to surf.

Propose to drill a development well and test producing capabilities of the Langlie Mattix 7 Rivers Queen formation.

Blowout Preventer 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

George H. Stewart

TITLE

Dist. Drlg. Supt.

DATE

5-27-81

(This space for approval by State office use)

PERMIT NO.

GEORGE H. STEWART

APPROVAL DATE

APPROVED BY

MAY 23 1981

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

FOR

JAMES A. GILLHAM
DISTRICT SUPERVISOR

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

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

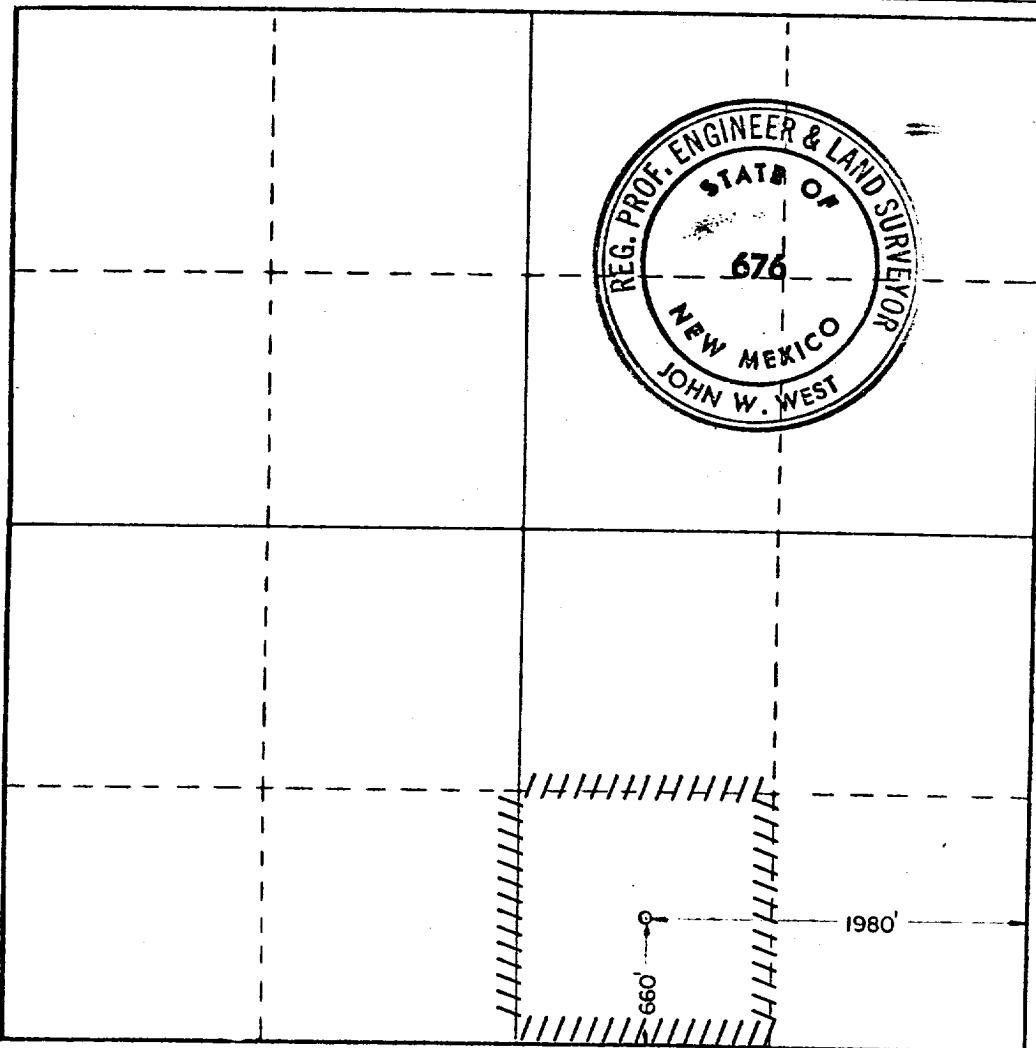
Operator Arco Oil & Gas Company			Lease Duthie Andrews W.R. Fed			Well No. 81
Unit Letter 0	Section 18	Township 23 South	Range 37 East	County Lea		
Actual Footage Location of Well: 1980 feet from the east line and 660 feet from the south line						
Ground Level Elev. 3331.8	Producing Formation Seven Rivers Queen		Pool Langlie Mattix		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 Commission.



CERTIFICATION

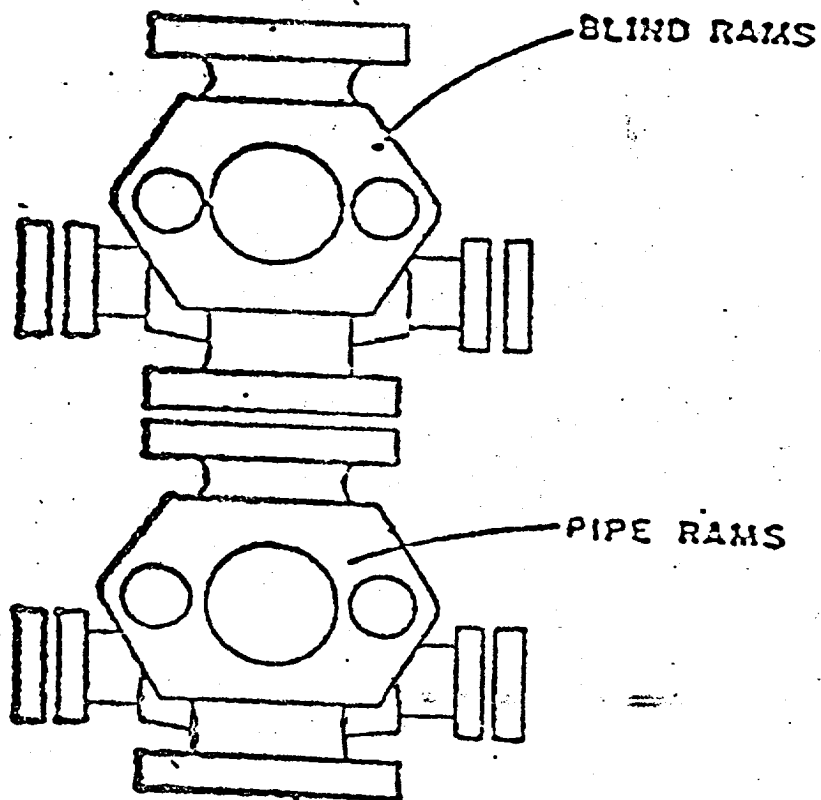
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name
Gerard Schmidt
Position
Dist. Drlg. Supt.
ARCO Oil & Gas Company
Division of Atlantic Richfield
Date
May 27, 1981

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
5/19/81
Registered Professional Engineer and/or Land Surveyor

John W. West
Certificate No. **JOHN W. WEST 876**
PATRICK A. ROMERO 8883
Ronald J. Eidson 3239



ARCO Oil & Gas Company

Division of Atlantic Richfield Company

Blow Out Preventer Program

Lease Name Duthie Andrews WN Fed

Well No. 61

Location 1980' FEL & 660' FSL
Sec. 18-23S-37E

Lea County, N.M.

BOP to be tested before installed on well and will be maintained in good working condition during drilling. All wellhead fittings to be of sufficient pressure to operate in a safe manner.

RECEIVED

JUN 9 1981

OIL CONSERVATION DIV

173

Petroleum Information.

COUNTY LEA

FIELD Langlie-Mattix

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OPR ARCO OIL & GAS CO.

STATE NM

NO. 1 LEASE Andrews, Duthie Federal

API 30-025-27446

Sec 18, T23S, R37E

MAP

660 FSL, 1980 FEL of Sec

CO-ORD

10 mi SW/Eunice

11-1-29 NM

CSC

SPD 6-19-81

CMP 10-12-81

14-30-70 sx

8 5/8-1165-850 sx

5 1/2-3755-750 sx

2 3/8-3629

WELL CLASS: INIT D FIN DO LSE CODE			
FORMATION	DATUM	FORMATION	DATUM

TD 3755 (QUEN)

PBD 3645

IP (Seven Rivers-Queen) Perfs 3394-3633 P 27 BOPD + 28 BW. Pot based on 24 hr test. GOR 4630; gty. (NR)

CONTR BBH #7/Marc #792

OPRSELEV 3332 GL

sub-s 10

F.R. 6-15-81
 PD 3750 RT (Seven Rivers-Queen)
 TD 30; MIRT
 TD 1165; NU BOP's
 TD 1165; PBD 1155; SI
 Twisted off kelly sub above RT
 DOC to 1155
 Operator temporarily abandoned operations
 Drlg 1515
 Resumed operations 8-6-81
 TD 3755; LDDP
 TD 3755; SI
 TD 3755; PBD 3710; Swbg
 Perf (Seven Rivers-Queen) @ 3394, 3399, 3487,
 3491, 3524, 3532, 3542, 3546, 3554, 3570, 3582,
 3586, 3596, 3606, 3611, 3618, 3633, 3651, 3655,
 3668, 3673, 3677 w/1 SPI
 Acid (3394-3677) 3000 gals

11-1-29 NM

LEA
ARCO OIL & GAS CO.

Langlie-Mattix
1 Andrews, Duthie Federal NM
Sec 18, T23S, R37E Page 2

8-28-81 Continued
Swbg 40 BF (3-4% oil) w/GSG in 3 hrs 30 mins
(3394-3677)
9-3-81 TD 3755; PBD 3710; SI
9-14-81 TD 3755; PBD 3645; Plg Pkr
Sqzd (3651-77) 150 sx
BP @ 3645
Acid (3394-3633) 1500 gals
Swbd 3 BO + 6 BW in 10 hrs (3394-3633)
Frac (3394-3633) 40,000 gals + 13,500 gals CO₂ +
92,000# sd
Flwd 57 BO + 80 BW in 24 hrs (3394-3633)
9-18-81 TD 3755; PBD 3645; TOP
10-13-81 TD 3755; PBD 3645; WOSP
11-1-29 NM

10-13-81 Continued
Ppd 27 BO + 28 BW + 125 MCFCPD in 24 hrs
(3394-3633)
11-2-81 TD 3755; PBD 3645; Complete
LOGS RUN: GRL, CNL, FDC, DILL, CAL, CORL
Released Rig 6-27-81
11-7-81 COMPLETION ISSUED

11-1-29 NM
IC 30-025-70301-81