

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-101
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088 RECEIVED
Santa Fe, New Mexico 87504-2088

SEP 04 '90

API NO. (assigned by OCD on New Wells)

30-015-26463

5. Indicate Type of Lease

STATE ☒

FEE ☐

6. State Oil & Gas Lease No.

NM-4681

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:

DRILL ☒

RE-ENTER ☐

DEEPEN ☐

PLUG BACK ☐

b. Type of Well:

OIL
WELL ☒

GAS
WELL ☐

OTHER ☐

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

7. Lease Name or Unit Agreement Name

State "2"

2. Name of Operator

ARCO OIL AND GAS COMPANY ✓

8. Well No.

5

3. Address of Operator

Box 1610, Midland, Texas 79702

9. Pool name or Wildcat

Shugart Yts SRQ GB

4. Well Location

Unit Letter M : 660 Feet From The South Line and 330 Feet From The West Line

Section 2

Township

19S

Range

30E

NMPM

Eddy

County

10. Proposed Depth

3200

11. Formation

Queen

12. Rotary or C.T.

Rotary

13. Elevations (Show whether DF, RT, GR, etc.)

3409.GR

14. Kind & Status Plug. Bond

Statewide Blanket

15. Drilling Contractor

NA

16. Approx. Date Work will start

8-30-90

17.

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
17 1/2	13 3/8	48	700	430 sx	surf
12 1/4	8 5/8	24	1800	900 sx	surf
7 7/8	5 1/2	15.5	3200	350 sx	1300

Post ID-1
9-7-90
New Loc 4 ART

180 DAYS
3/5/91

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. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

SIGNATURE Ken W. Gosnell TITLE Engr. Tech. DATE 8/8/90

TYPE OR PRINT NAME Ken W. Gosnell 915/688-5672 TELEPHONE NO.

(This space for State Use)

ORIGINAL SIGNED BY
MIKE WILLIAMS
SUPERVISOR, DISTRICT II

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

SEP 5 1990

133/8 + 85/8

Submit to Appropriate
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State Lease - 4 copies
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State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

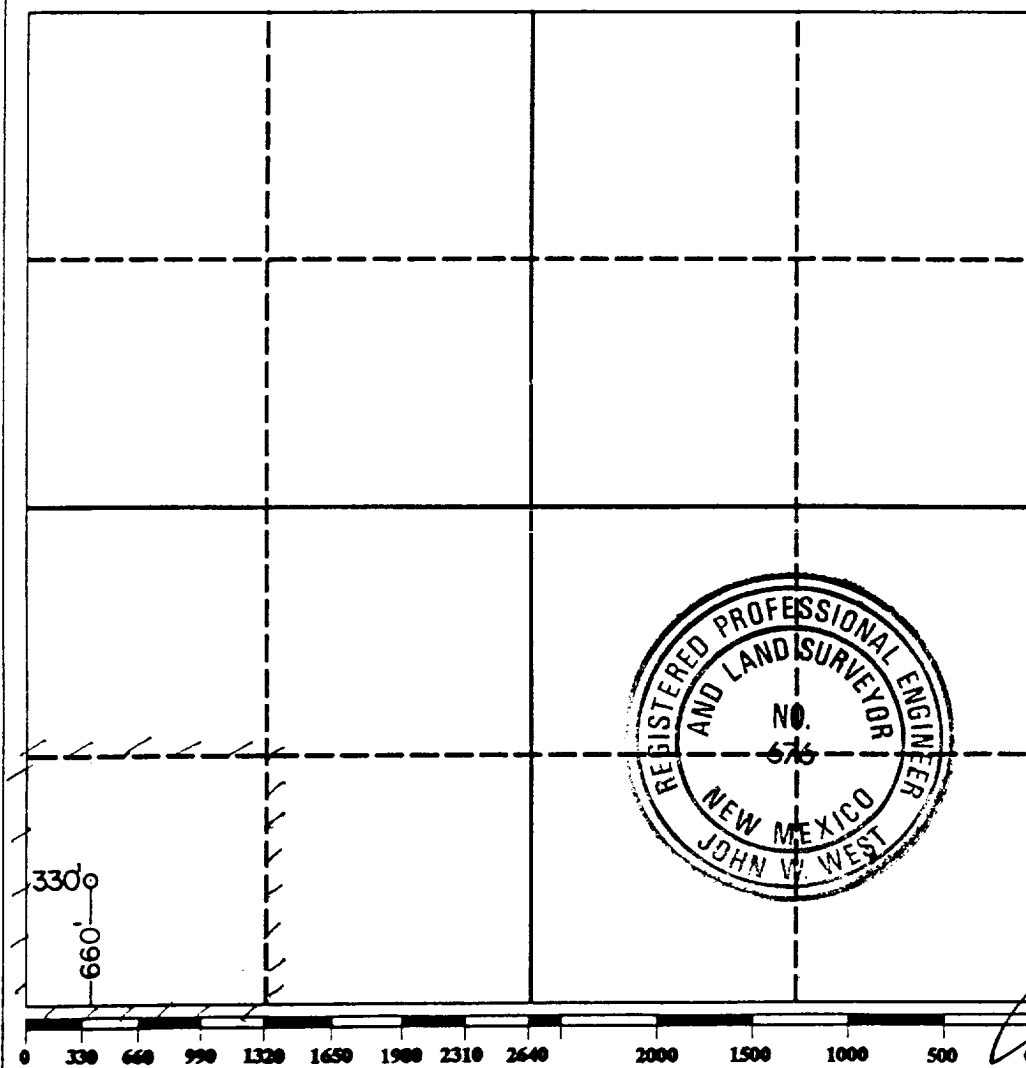
All Distances must be from the outer boundaries of the section

Operator ARCO OIL & GAS COMPANY			Lease State 2		Well No. 5
Unit Letter M	Section 2	Township 19 South	Range 30 East	County NMPM	Eddy

Actual Footage Location of Well:

660	feet from the	South	line and	330	feet from the	West	line
Ground level Elev. 3409.0	Producing Formation Queen		Pool Shugart		Dedicated Acreage: 40		Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 interest 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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature Ken W. Gosnell
Printed Name Ken W. Gosnell
Position Regulatory Coordinator
Company ARCO Oil & Gas Co.
Date 8-8-90

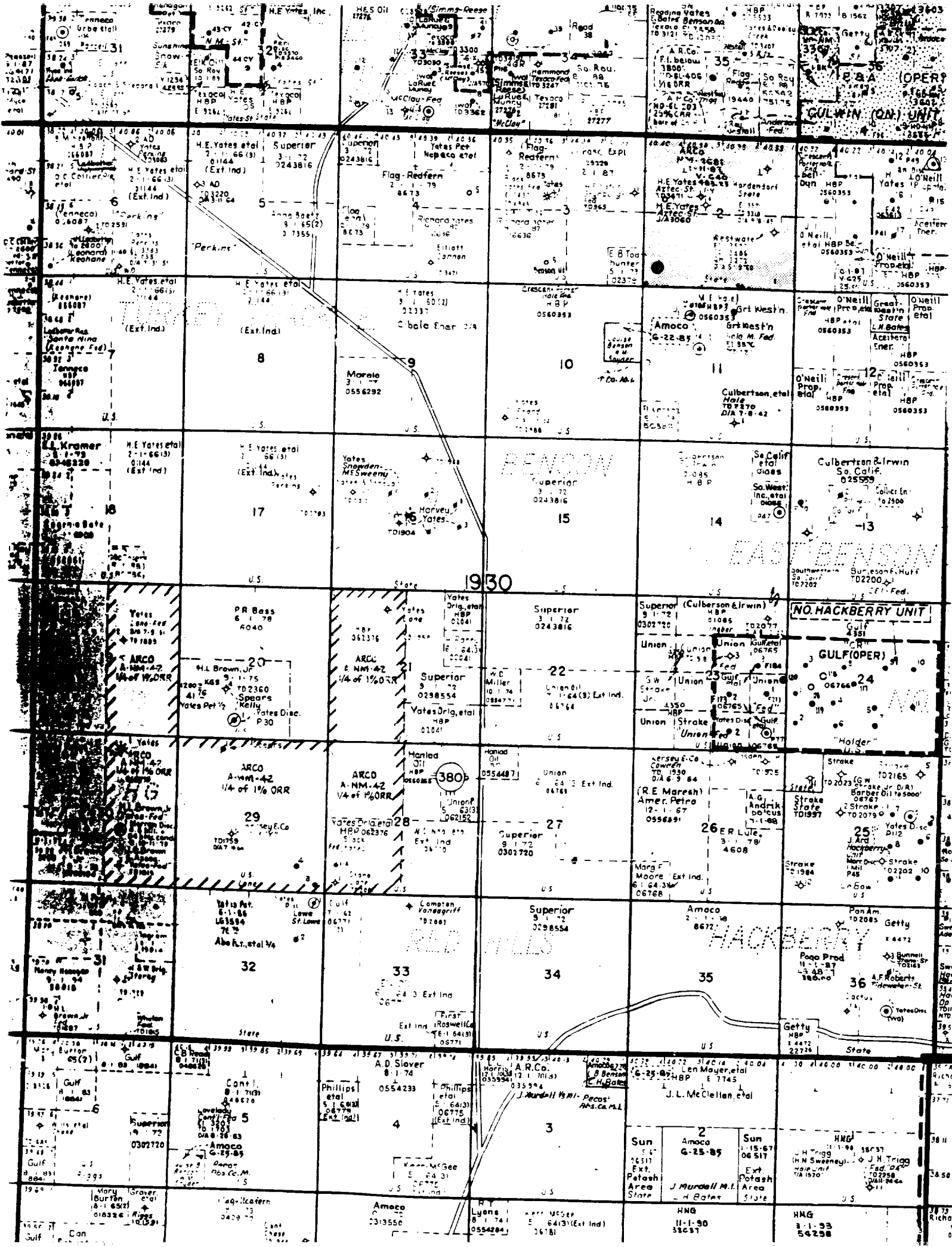
SURVEYOR CERTIFICATION

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 July 31, 1990
Signature & Seal of Professional Surveyor John W. West
Certificate No. JOHN W. WEST, 676 RONALD J. EIDSON, 3239

PROPOSED WELLBORE

<u>Casing Points</u>	<u>Formation Tops</u>	<u>Mud</u>	<u>Problems</u>
13-3/8" @ 700'		<u>0-700'</u> FW Spud Mud Keep weight as low as possible. Use paper for seepage and lime for pH	Potential Lost circulation f/ 550'-650'
8-5/8" @ 1800'	Salt @ 720' Base Salt @ 1720'	<u>700'-2200'</u> SBW Lime for pH Paper for seepage	Deviation and keyseating
	Yates @ 2200' Seven Rivers @ 2325'	<u>2200'-3100'</u> SBW	
5-1/2" @ 3200'	Queen @ 2960'	<u>3100'- TD</u> Saturated BW 10 ppg w/ WL 10-12 cc and viscosity 38-40	



Map showing land ownership and geographical features. Key locations and owners include:

- Top Left:** H.E. Yates, Inc., Superior, Flag, Redfern, Amoco, etc.
- Top Right:** H.E. Yates, Superior, Flag, Redfern, Amoco, etc.
- Middle Left:** H.E. Yates, Superior, Flag, Redfern, Amoco, etc.
- Middle Right:** H.E. Yates, Superior, Flag, Redfern, Amoco, etc.
- Bottom Left:** H.E. Yates, Superior, Flag, Redfern, Amoco, etc.
- Bottom Right:** H.E. Yates, Superior, Flag, Redfern, Amoco, etc.

Geographical features include the Gulf of Mexico, the Red Hills, and the Hackberry area.