

HINKLE, COX, EATON, COFFIELD & HENSLEY

ATTORNEYS AT LAW

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ANDREW J. CLOUTIER\*

July 26, 1988

OF COUNSEL  
O. M. CALHOUN  
MACK EASLEY  
JOE W. WOOD  
STEPHEN L. ELLIOTT

CLARENCE E. HINKLE (1901-1985)  
W. E. BONDURANT, JR. (1913-1973)  
ROY C. SNOODGRASS, JR. (1915-1987)

\*NOT LICENSED IN NEW MEXICO

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JUL 26 1988

OIL CONSERVATION DIVISION

Case 91159

HAND DELIVERED

Florene Davidson  
New Mexico Oil Conservation Division  
State Land Office Building  
Santa Fe, New Mexico 87501

Re: Application of Exxon Corporation for an Unorthodox Well Location and Simultaneous Dedication, Unit O, Section 28-Township 17 South-Range 35 East, Vacuum Glorieta Pool, Lea County, New Mexico (New Mexico K State Well No. 35)

Dear Florene:

In Exxon's application dated July 25, 1988, there is a typographical error in the third paragraph on page 1. Three lines from the bottom of the paragraph, number 34 should be number 35.

Very truly yours,

HINKLE, COX, EATON,  
COFFIELD & HENSLEY

*James Bruce*  
James Bruce

JB:jr

**EXXON** COMPANY, U.S.A.

POST OFFICE BOX 1600 - MIDLAND, TEXAS 79702-1600

PRODUCTION DEPARTMENT  
NORTH-WESTERN DIVISION

July 25, 1988

RECEIVED

JUL 26 1988

OIL CONSERVATION DIVISION

Unorthodox Well Location and  
Simultaneous Acreage Dedication  
New Mexico K State - Well No. 35  
Unit 0, Section 28, T17S, R35E  
Vacuum Glorieta Pool  
Lea County, New Mexico

Mr. William J. LeMay, Director  
New Mexico Oil Conservation Division  
State Land Office Building, Room 206  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87504

*Case 9459*

Dear Mr. LeMay:

Exxon Corporation requests permission to drill the captioned well as an unorthodox oil well location in the Vacuum Glorieta Pool, and to simultaneously dedicate Unit 0 to this well and to the existing New Mexico K State Well No. 21. In addition, we request permission to directionally drill from a surface location 125' FNL and 122' FWL in Unit 0 of Section 28. All locations are shown on the attached Form C-102.

The proposed bottom hole location (BHL) is within a window bounded by lines 10' and 250' FNL and FWL of Unit 0. This location area is unorthodox because it is too close to interior quarter-quarter section lines and to other wells on the same lease.

The New Mexico K State #35 will be a replacement well for Unit 0, Section 28, T17S, R35E, of the Vacuum Glorieta Pool. The proposed unorthodox bottom hole location in the northwest corner of unit 0 is necessary to capture the maximum possible remaining reserves on this proration unit. The natural water drive in this pool is watering out this proration unit from the southeast; the northwest corner will be the last portion of this proration unit to water out. Therefore, the northwest corner is the best location for a replacement well. Furthermore, it is anticipated that the Vacuum Glorieta Pool will someday be CO2 flooded on 20-acre well spacing. The proposed unorthodox location for well #35 is almost an exact 20-acre infill location and ideal for any future CO2 project. Simultaneous dedication is requested since well No. 21 continues to produce.

Directional drilling authority is also requested. The proposed well will start drilling as a straight hole; however, if inclination surveys indicate that unacceptable deviation is taking place, then the well will be directionally controlled to bottom within the bottomhole tolerance window

shown on this application. Both the surface and bottom hole locations are on Unit 0.

We are notifying offset operators by copy of this letter. A list of those operators is attached. Please set this request for hearing on August 17, 1988.

Sincerely,

A handwritten signature in cursive script that reads "Charlotte Harper".

Charlotte Harper  
Permits Supervisor

CHH:djr  
Attachments

Certified Mail - Return Receipt Requested

c: NMOCD District I, P. O. Box 1980, Hobbs, NM 88240 - w/attach.  
Offset Operators - w/attach.

Offset Operators  
New Mexico K State #35

Phillips Petroleum Company  
4001 Pembroke  
Odessa, TX 79762

Attn: Larry Sanders

Shell Western E&P, Inc.  
P.O. Box 1950  
Hobbs, NM 88240

Exxon Corporation  
P. O. Box 1600  
Midland, TX 79702

Texaco Producing Inc.  
P.O. Box 728  
Hobbs, NM 88240

Attn: John L. Seeman

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OPERATOR	

5A. Indicate Type of Lease  
STATE  FEE

5. State Oil & Gas Lease No.  
A-1320

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

7. Unit Agreement Name

8. Farm or Lease Name  
New Mexico K State

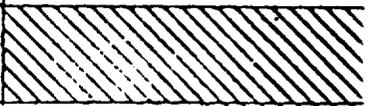
2. Name of Operator  
Exxon Corp.

9. Well No.  
35

3. Address of Operator  
P. O. Box 1600, Midland, Texas 79702

10. Field and Pool, or Wildcat  
Vacuum Glorieta

4. Location of Well  
\*See below UNIT LETTER \_\_\_\_\_ LOCATED \_\_\_\_\_ FEET FROM THE \_\_\_\_\_ LINE  
AND \_\_\_\_\_ FEET FROM THE \_\_\_\_\_ LINE OF SEC. 28 TWP. 17S RGE. 35E NMPM



12. County  
Lea

19. Proposed Depth 6300'	19A. Formation Glorietta/Paddock	20. Rotary or C.T. Rotary
21. Elevations (show weather DF, RT, etc.) GR 3938	21A. Kind & Status Plug. Bond Blanket	21B. Drilling Contractor Unknown
		22. Approx. Date Work will start Upon Approval

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	400'	300 CLC	Surf.
12 1/2" or 11"	8 5/8"	32, 24	4800'	1300 CLC	Surf.
7 7/8"	5 1/2"	14	6300'	380 CLC	4300'

This well will be allowed to drift naturally as long as it does not leave the bottom hole window depicted on the attached C-102. A multishot survey will be run at the 8 5/8" casing point. If necessary the well will be directionally drilled to the bottom hole window.

This location is both unorthodox and simultaneous dedication.

A sketch of the blow out preventers and component specifications are attached.

\* Surface Location: Unit O, 1195' FSL & 2518' FEL. Proposed bottom hole location will fall in the window depicted in Unit O on the attached C-102.

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.

Signed Charlotte Harper Title Permits Supervisor Date 7-25-88

Charlotte Harper

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

Exxon Lse. No. \_\_\_\_\_

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

State Lse. No. \_\_\_\_\_

Federal Lse. No. \_\_\_\_\_

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

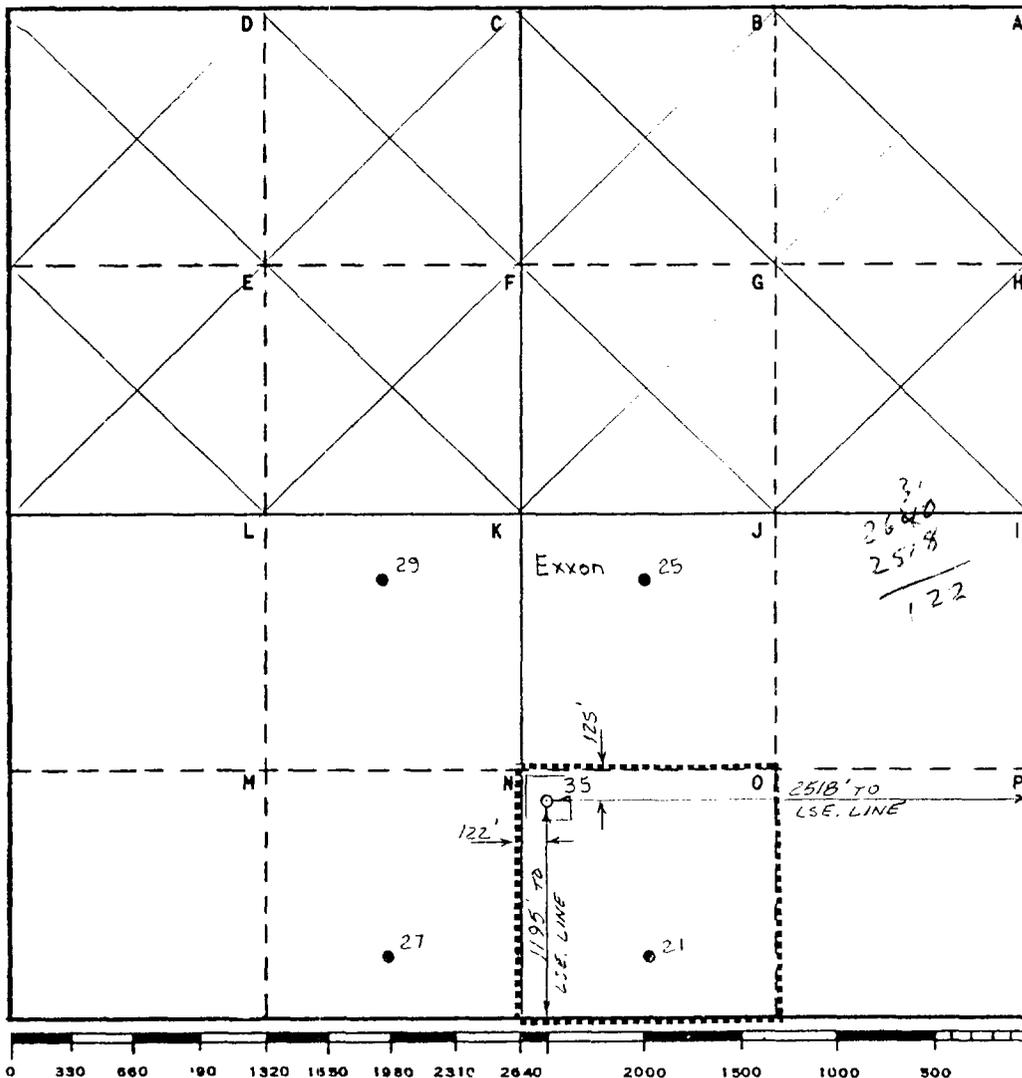
Operator Exxon Corporation		Lease NEW MEXICO "K" STATE			Well No. 35
Unit Letter O	Section 28	Township 17S	Range 35E	County LEA	
Actual Footage Location of Well: S.H.L. MIN. 10' FWL; MAX. 250' FWL; UNIT "O" S.L. 1195 feet from the SOUTH line and 2518 feet from the EAST line					
Ground Level Elev. 3938	Producing Formation GLORIETTA/PADDOCK	Pool VACUUM GLORIETTA	Dedicated Acreage: 40 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.  
SIMULTANEOUS DEDICATION WITH WELL No. 21
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.

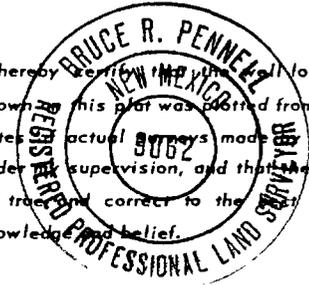


CERTIFICATION

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

Name *Charlotte Harper*  
 Position Charlotte Harper  
 Permits Supervisor  
 Company Exxon Corporation  
 Box 1600 Midland, Texas  
 Date 7-25-88

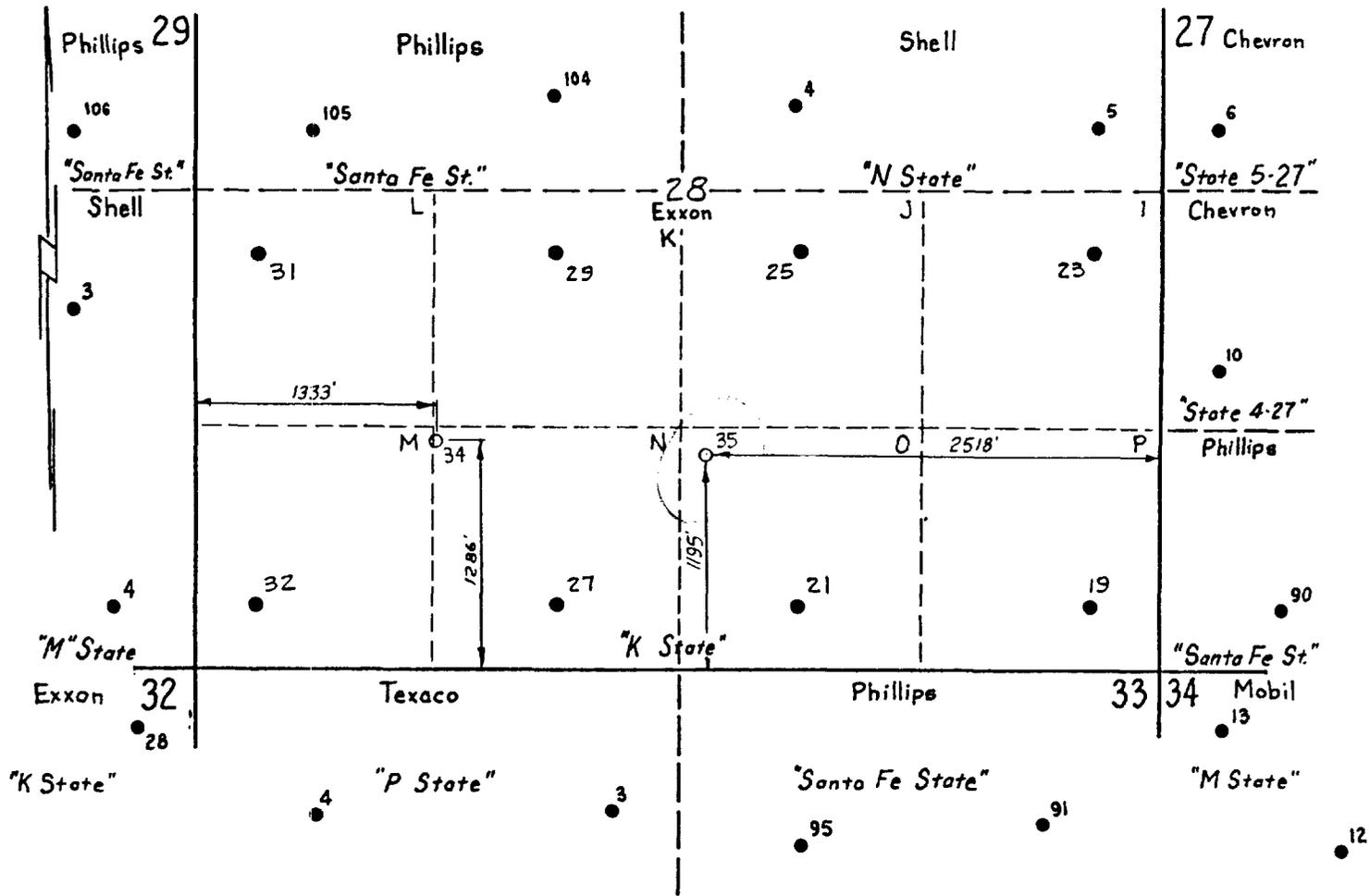
I hereby certify that the well location shown on this plat was plotted from field notes and actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.



Date Surveyed 6-27-88.  
 Registered Professional Engineer and/or Land Surveyor  
*Bruce R. Penwell*  
 Certificate No. #9062

28 Miles WEST of HOBBS, New Mexico

C.E. Sec. File No. A-10126-B



18 mi. West of Hobbs, N.M.

Application for well no. 35

PORTION OF N. MEXICO STATE "K" LSE.

SEC. 28, T17S, R35E

VACUUM GLORIETA FLD.

LEA CO., N.M.

**EXXON COMPANY, U.S.A.**

A DIVISION OF EXXON CORPORATION

**PRODUCTION DEPARTMENT**

DRAWN Derek Cobb

ENGR. SECTION \_\_\_\_\_ REVISED \_\_\_\_\_

SCALE  $1"=1000'$

JOB NO. \_\_\_\_\_

FILE NO. \_\_\_\_\_

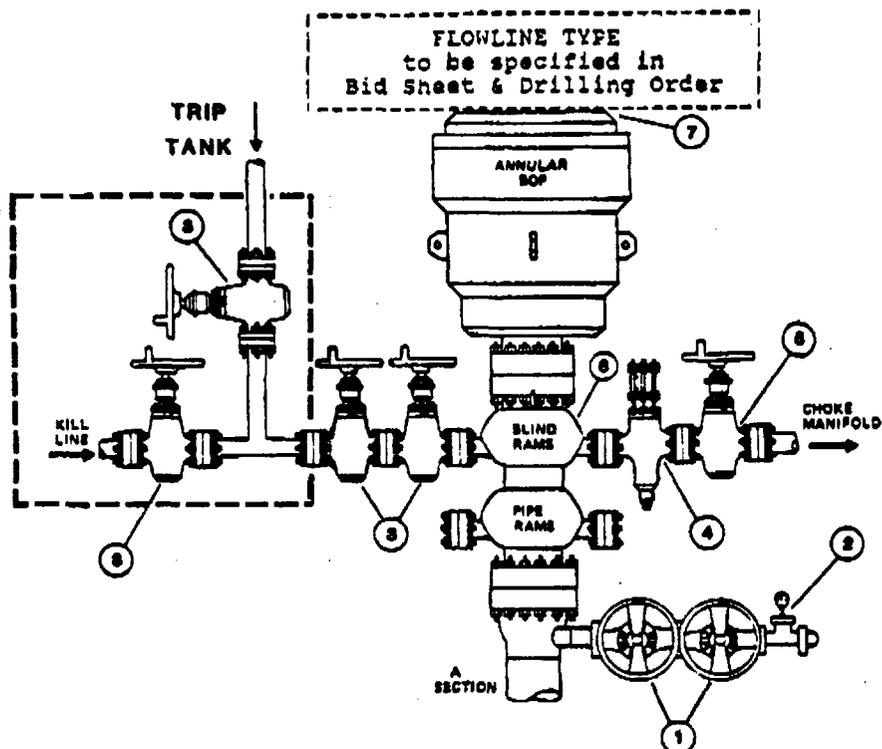
CHECKED \_\_\_\_\_

APPROVED \_\_\_\_\_

DATE 7-22-88

W-A-10126

**TYPE-RRR BOP STACK  
THREE PREVENTERS**



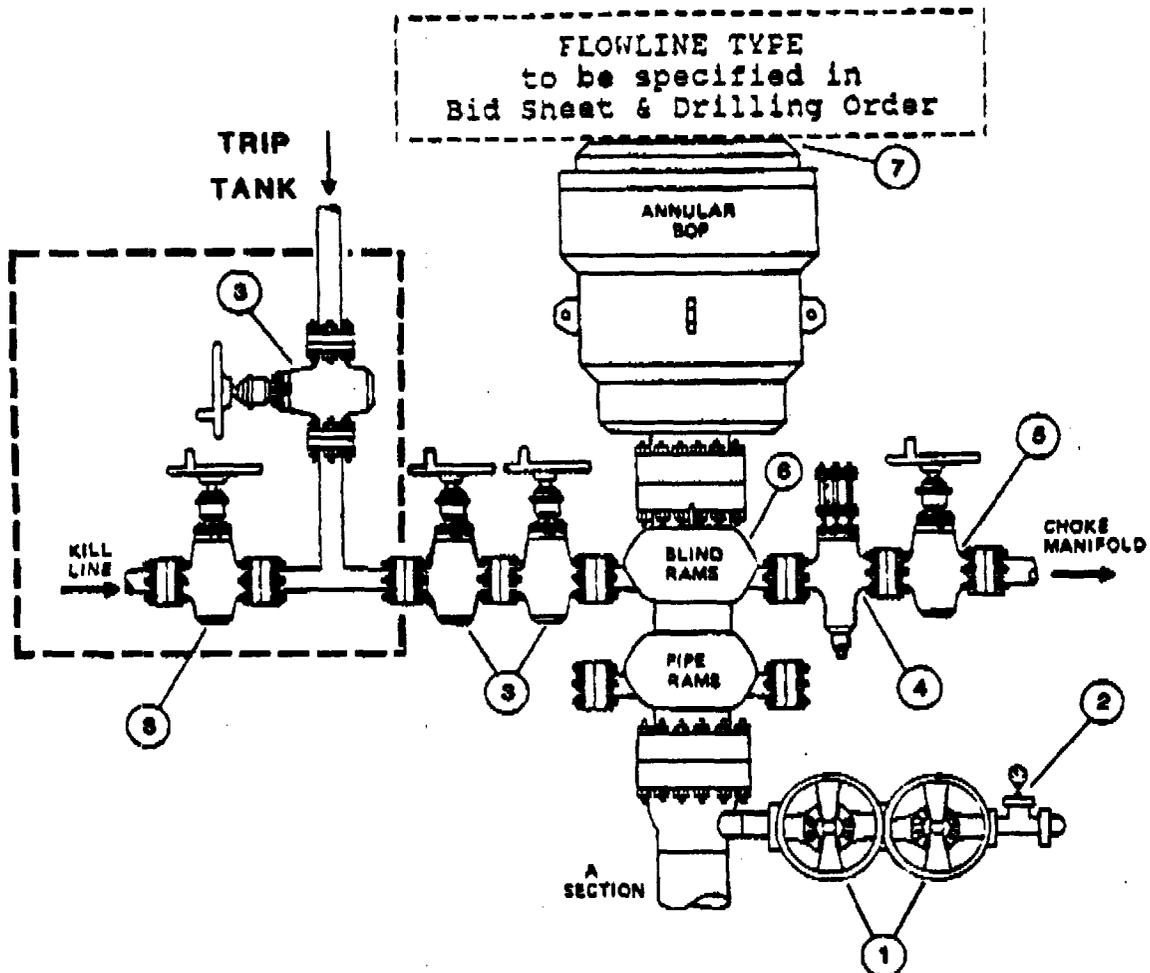
**COMPONENT SPECIFICATIONS**

1. Screwed or flanged plug or gate valves -- 2" minimum nominal dia. -- same working pressure as "A" section.
2. Tee with tapped bullplug, needle valve, and pressure gauge.
3. Flanged plug or gate valve -- 2" minimum nominal dia. -- same working pressure as BOP stack. NOTE: Outer valves are optional if pump type trip tank is tied into Flowline Type.
4. Flanged hydraulically controlled gate valve -- 3" minimum nominal dia. -- same working pressure as BOP stack.
5. Flanged plug or gate valve -- 3" minimum nominal dia. -- same working pressure as BOP stack.
6. BOP outlets must be 2" minimum nominal dia. for kill line and 3" minimum dia. for choke line.
7. Top of annular preventer must be equipped with an API flange ring gasket. All flange studs must be in place or holes filled in with screw type plugs.

**NOTE:**

- A. Unless specified otherwise in the Bid Letter and/or Contract, the contractor will furnish and maintain all components shown above Exxon's wellhead.
- B. The choke line between the drilling spool and choke manifold should not contain any bend or turn in the pipe body. Any bend or turn required should be made with a running tee with a blind flange or welded bullplug. All connections should be flanged or welded. All fabrications requiring welding must be done by a certified welder. Welds should be stress relieved when required.
- C. Plug valves should be equivalent to the Howco Lo-Torc and gate valves equivalent to the Cameron Type 'F'.

## TYPE-RRR BOP STACK THREE PREVENTERS



### COMPONENT SPECIFICATIONS

1. Screwed or flanged plug or gate valves -- 2" minimum nominal dia. -- same working pressure as "A" section.
2. Tee with tapped bullplug, needle valve, and pressure gauge.
3. Flanged plug or gate valve -- 2" minimum nominal dia. -- same working pressure as BOP stack. NOTE: Outer valves are optional if pump type trip tank is tied into Flowline Type.
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#### NOTE:

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LAND OFFICE	
OPERATOR	

5A. Indicate Type of Lease  
STATE  FEE

5. State Oil & Gas Lease No.  
A-1320

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		7. Unit Agreement Name
b. Type of Well OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		8. Form or Lease Name New Mexico K State
2. Name of Operator Exxon Corp.		9. Well No. 35
3. Address of Operator P. O. Box 1600, Midland, Texas 79702		10. Field and Pool, or Wildcat Vacuum Glorieta
4. Location of Well *See below UNIT LETTER _____ LOCATED _____ FEET FROM THE _____ LINE AND _____ FEET FROM THE _____ LINE OF SEC. 28 TWP. 17S REC. 35E NMPM		12. County Lea
19. Proposed Depth 6300'		19A. Formation Glorietta/Paddock
20. Rotary or C.T. Rotary		
1. Elevations (Show whether DF, KI, etc.) GR 3938	21A. Kind & Status Plug. Bond Blanket	21B. Drilling Contractor Unknown
		22. Approx. Date Work will start Upon Approval

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	400'	300 CLC	Surf.
12 1/2" or 11"	8 5/8"	32, 24	4800'	1300 CLC	Surf.
7 7/8"	5 1/2"	14	6300'	380 CLC	4300'

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This location is both unorthodox and simultaneous dedication.

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\* Surface Location: Unit O, 1195' FSL & 2518' FEL. Proposed bottom hole location will fall in the window depicted in Unit O on the attached C-102.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PROD TIVE 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.

Signed Charlotte Harper Title Permits Supervisor Date 7-25-88

Charlotte Harper

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY

Exxon Lse. No. \_\_\_\_\_

NEW MEXICO OIL CONSERVATION COMMISSION

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

State Lse. No. \_\_\_\_\_

Federal Lse. No. \_\_\_\_\_

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

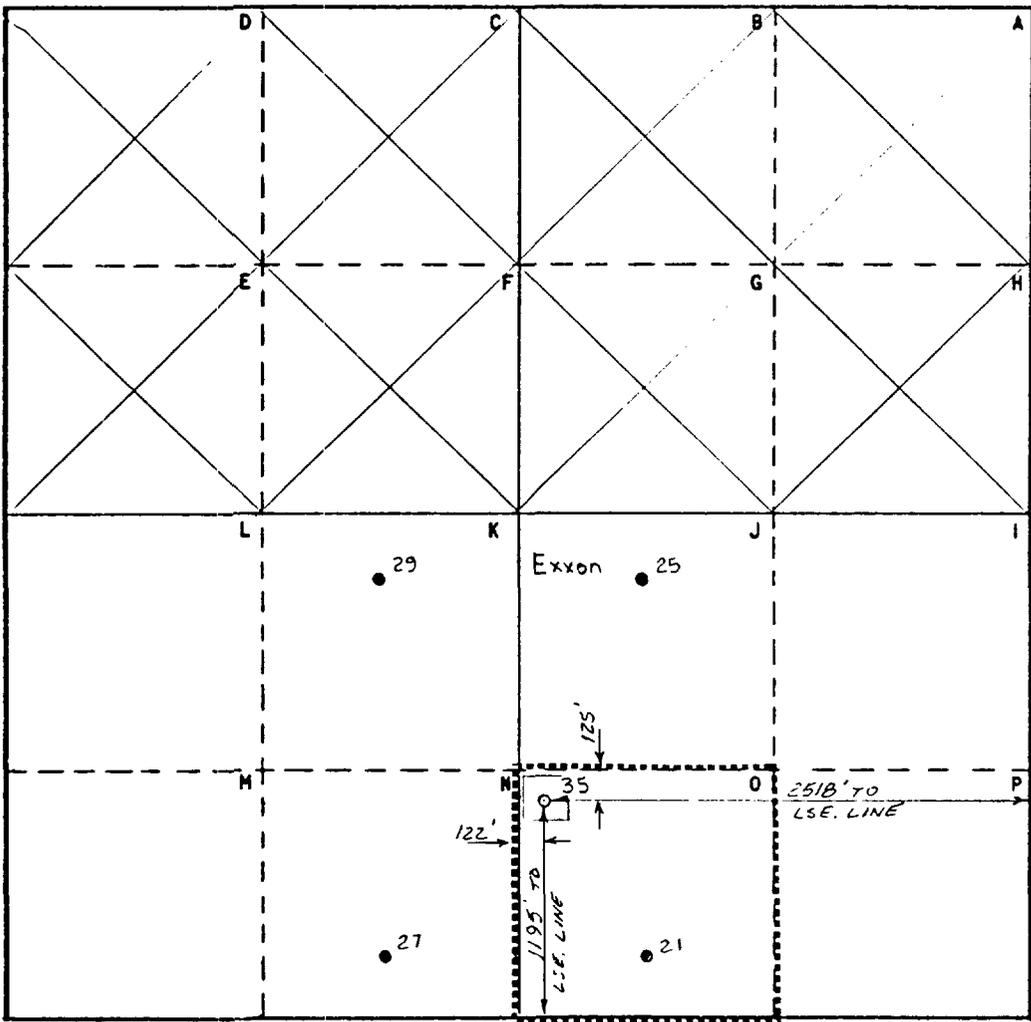
Operator <b>Exxon Corporation</b>		Lease <b>NEW MEXICO "K" STATE</b>			Well No. <b>35</b>
Unit Letter <b>0</b>	Section <b>28</b>	Township <b>17S</b>	Range <b>35E</b>	County <b>LEA</b>	
Actual Footage Location of Well: S.H.L. MIN. 10' FNL; MAX. 250' FNL & MIN. 10' FWL; MAX. 250' FWL, UNIT "0" S.L. 1195 feet from the SOUTH line and 2518 feet from the EAST line					
Ground Level Elev. <b>3938</b>	Producing Formation <b>GLORIETTA/PADDOCK</b>		Pool <b>VACUUM GLORIETTA</b>	Dedicated Acreage: <b>40</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.  
**SIMULTANEOUS DEDICATION WITH WELL No. 21**
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

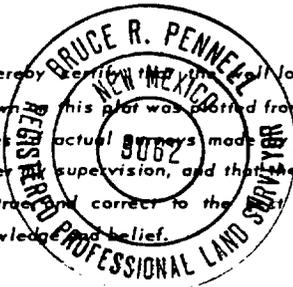
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name  
*Charlotte Harper*  
Position **Charlotte Harper**  
**Permits Supervisor**

Company **Exxon Corporation**  
**Box 1600 Midland, Texas**

Date  
**7-25-88**

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.



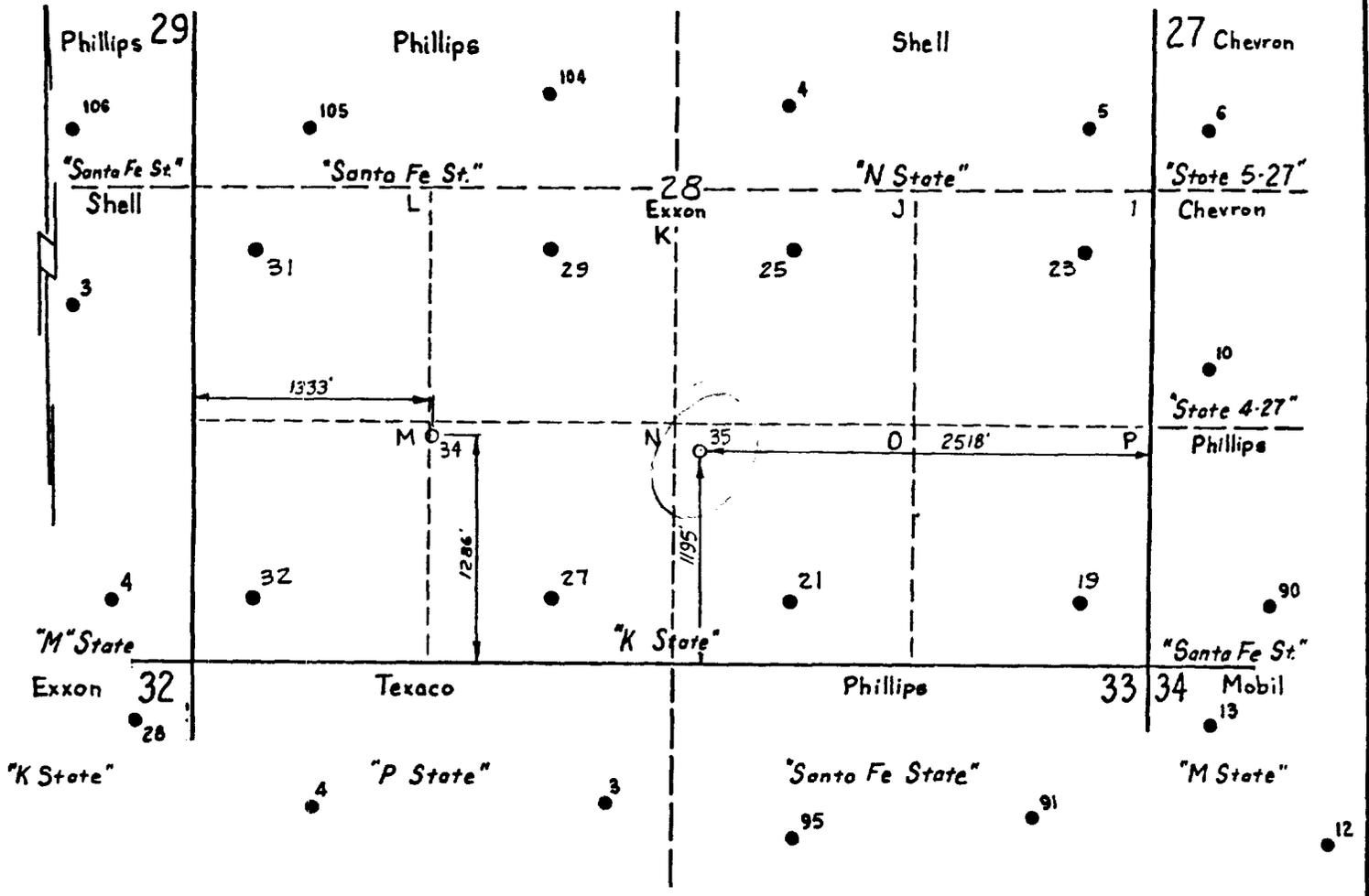
Date Surveyed  
**6-27-88**

Registered Professional Engineer and/or Land Surveyor

*Bruce R. Pennell*  
Certificate No.  
**#9062**

**28** Miles WEST of **HOBBS**, New Mexico

C.E. Sec. File No. **A-10126-B**



18 mi. West of Hobbs, N.M.

Application for well no. 35

PORTION OF N. MEXICO STATE "K" LSE.  
 SEC. 28, T17S, R35E  
 VACUUM GLORIETA FLD. LEA CO., N.M.

**EXXON COMPANY, U.S.A.**  
 A DIVISION OF EXXON CORPORATION  
**PRODUCTION DEPARTMENT**

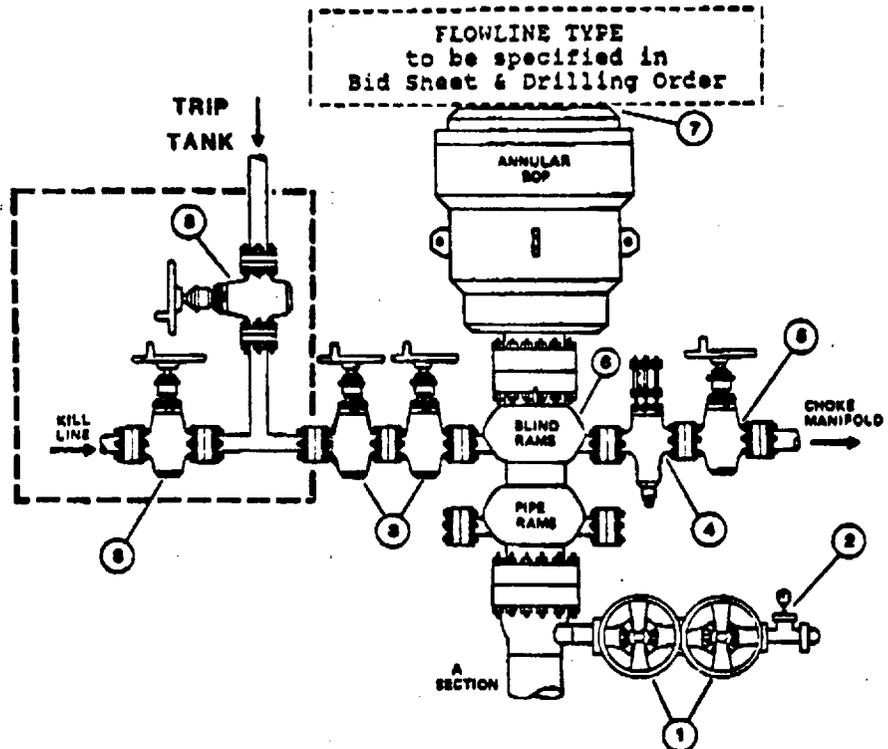
DRAWN Derek Cobb  
 CHECKED \_\_\_\_\_

ENGR. SECTION \_\_\_\_\_ REVISED \_\_\_\_\_  
 APPROVED \_\_\_\_\_

SCALE  $1"=1000'$   
 DATE 7-22-88

JOB NO. \_\_\_\_\_ FILE NO. W-A-10126

**TYPE-RRR BOP STACK  
THREE PREVENTERS**



**COMPONENT SPECIFICATIONS**

1. Screwed or flanged plug or gate valves -- 2" minimum nominal dia. -- same working pressure as "A" section.
2. Tee with tapped bullplug, needle valve, and pressure gauge.
3. Flanged plug or gate valve -- 2" minimum nominal dia. -- same working pressure as BOP stack. NOTE: Outer valves are optional if pump type trip tank is tied into Flowline Type.
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7. Top of annular preventer must be equipped with an API flange ring gasket. All flange studs must be in place or holes filled in with screw type plugs.

**NOTE:**

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- B. The choke line between the drilling spool and choke manifold should not contain any bend or turn in the pipe body. Any bend or turn required should be made with a running tee with a blind flange or welded bullplug. All connections should be flanged or welded. All fabrications requiring welding must be done by a certified welder. Welds should be stress relieved when required.
- C. Plug valves should be equivalent to the Howco Lo-Torc and gate valves equivalent to the Cameron Type 'F'.