

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN THE DATE  
(Other instructions on reverse)  
NM OIL CONS. COMMISSION  
Drawer DD  
Artesia, NM 88210

Form approved.  
Budget Bureau No. 42 R1425.  
30.005-61703

RECEIVED

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 ☐

2. NAME OF OPERATOR  
GREAT WESTERN DRILLING COMPANY (Ph. 915-682-5241)

3. ADDRESS OF OPERATOR  
P. O. Box 1659, Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
At surface 990' FNL & 990' FEL of Sec. 22-6S-25E  
At proposed prod. zone same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
26 air miles north-northeast of Roswell, N. M.

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any) 990'

16. NO. OF ACRES IN LEASE 1759.06

17. NO. OF ACRES ASSIGNED TO THIS WELL 160

18. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1/2 mile

19. PROPOSED DEPTH 4300' Abo

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
3877' G.L.

22. APPROX. DATE WORK WILL START\*  
July 6, 1982

5. LEASE DESIGNATION AND NUMBER  
NM-15862

6. IF INDIAN, ALLOTTEE, OR TRUST NAME  
---

7. UNIT AGREEMENT NAME  
O. C. D.

8. FARM OR LEASE NAME  
ARTESIA, OFFICE  
QUAIL FEDERAL

9. WELL NO.  
4

10. FIELD AND POOL, OR WILDCAT  
Pecos Slope Abo

11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA  
Sec. 22-6S-25E

12. COUNTY OR PARISH Chaves

13. STATE N.M.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14 3/4"	10 3/4"	32.75#	910'	Sufficient to circulate
9 7/8 & 7 7/8"	4 1/2"	9.50#	4250'	*

\* 9 7/8" hole will be reduced to 7 7/8" at 1850' +/- (200-300' below top of the Glorietta). Production casing will be cemented around the shoe with 250 sacks and staged at 1850' +/- with sufficient cement to circulate or tie back into the 10 3/4" casing. Abo pay zone will be perforated and stimulated as needed.

Attached are: 1. Well Location & Acreage Dedication Plat.  
2. Supplemental Drilling Data  
3. Surface Use Plan

Gas for this acreage is not dedicated.

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 James A. Knaut TITLE Agent DATE June 16, 1982

(This space for Federal or State office use)  
(Orig. Sgd.) GEORGE H. STEWART

PERMIT NO. JUL 9 1982 APPROVAL DATE \_\_\_\_\_

APPROVED BY JAMES A. CLARK TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
DISTRICT SUPERVISOR

CONDITIONS OF APPROVAL, IF ANY:

Partial ID-1  
API & NL Book  
7-23-82

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

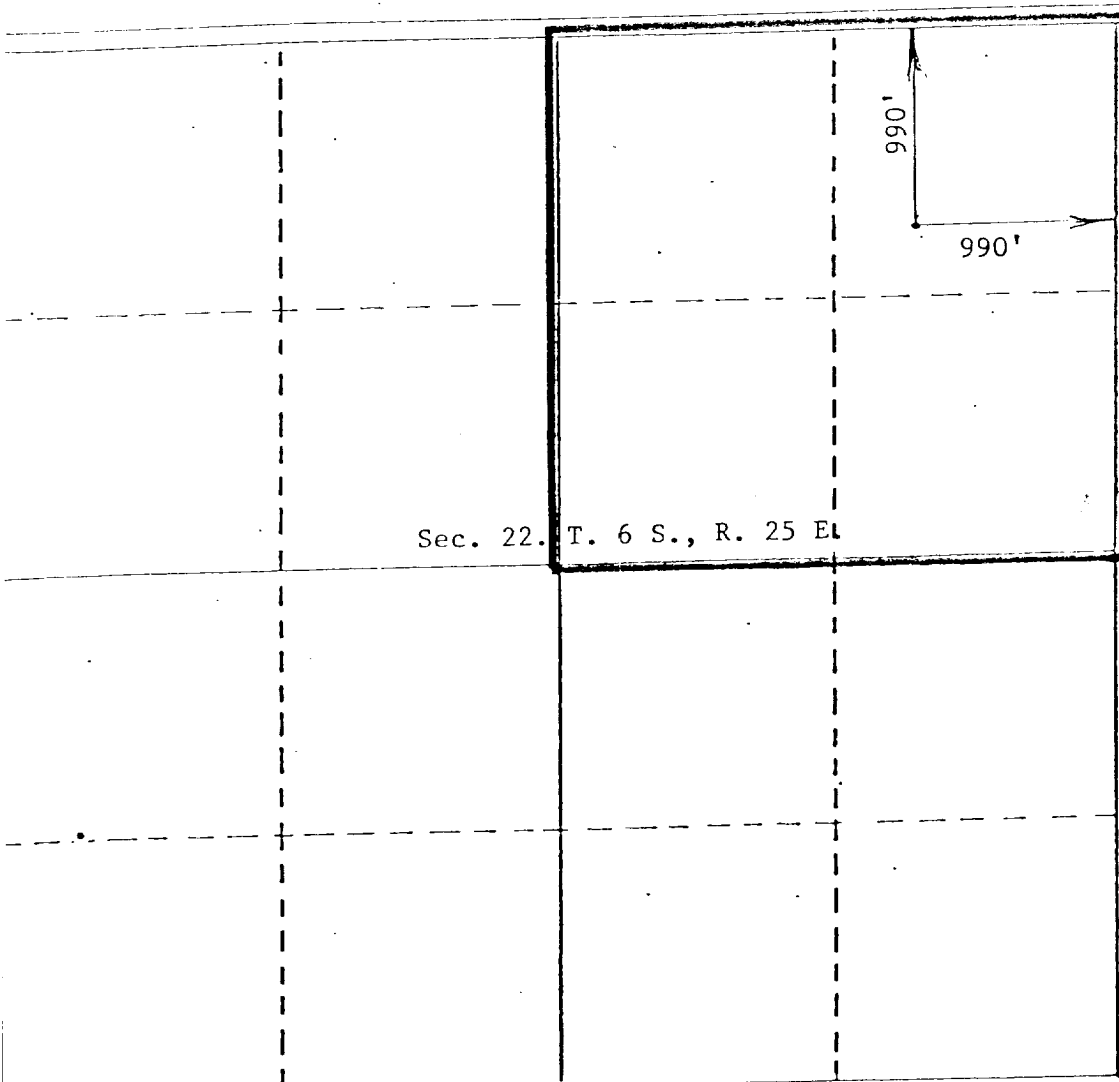
Great Western Drilling Co.			Lease Quail Federal		Well No. #4
Section A	Section 22	Township 6S	Range 25E	County Chaves	
Closest Postage Location of Well:					
990	feet from the North	line and	990	feet from the East	line
Round Level Elev. 3877	Producing Formation Abo	Pool Pecos Slope Abo	Dedicated Acreage: 160		Acre

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?

☐ 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 Division.



CERTIFICATION

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

*James A. Knauf*

Name James A. Knauf

Position Agent

Company GREAT WESTERN DRILLING CO.

Date June 11, 1982

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.

JOHN D. JAQUESS  
NEW MEXICO  
5-12-82  
6290  
Registered Professional Engineer  
and/or Licensed Surveyor  
John D. Jaquess, P.E.  
Certificate No. 6290

SUPPLEMENTAL DRILLING DATA

GREAT WESTERN DRILLING COMPANY  
WELL #4 QUAIL FEDERAL  
NE $\frac{1}{4}$ NE $\frac{1}{4}$  SEC. 22-6S-25E  
CHAVES COUNTY, NEW MEXICO

1. SURFACE FORMATION: Artesia Group of Permian Age.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

San Andres	570'	Tubb	3010'
Glorietta	1590'	Abo	3645'

3. ANTICIPATED POROSITY ZONES:

Water	50-150', 570-655'
Oil	990-1205'
Gas	3685-4045'

4. CASING DESIGN:

<u>Size</u>	<u>Interval</u>	<u>Weight</u>	<u>Grade</u>	<u>Joint</u>	<u>Condition</u>
10 3/4"	0 - 910'	32.75#	K-55	STC	New
4 1/2"	0 - 4250'	9.5 #	K-55	STC	New

5. SURFACE CONTROL EQUIPMENT: A double ram-type BOP will be used.

6. CIRCULATING MEDIUM: Fresh water mud conditioned as necessary for control of viscosity and water loss.

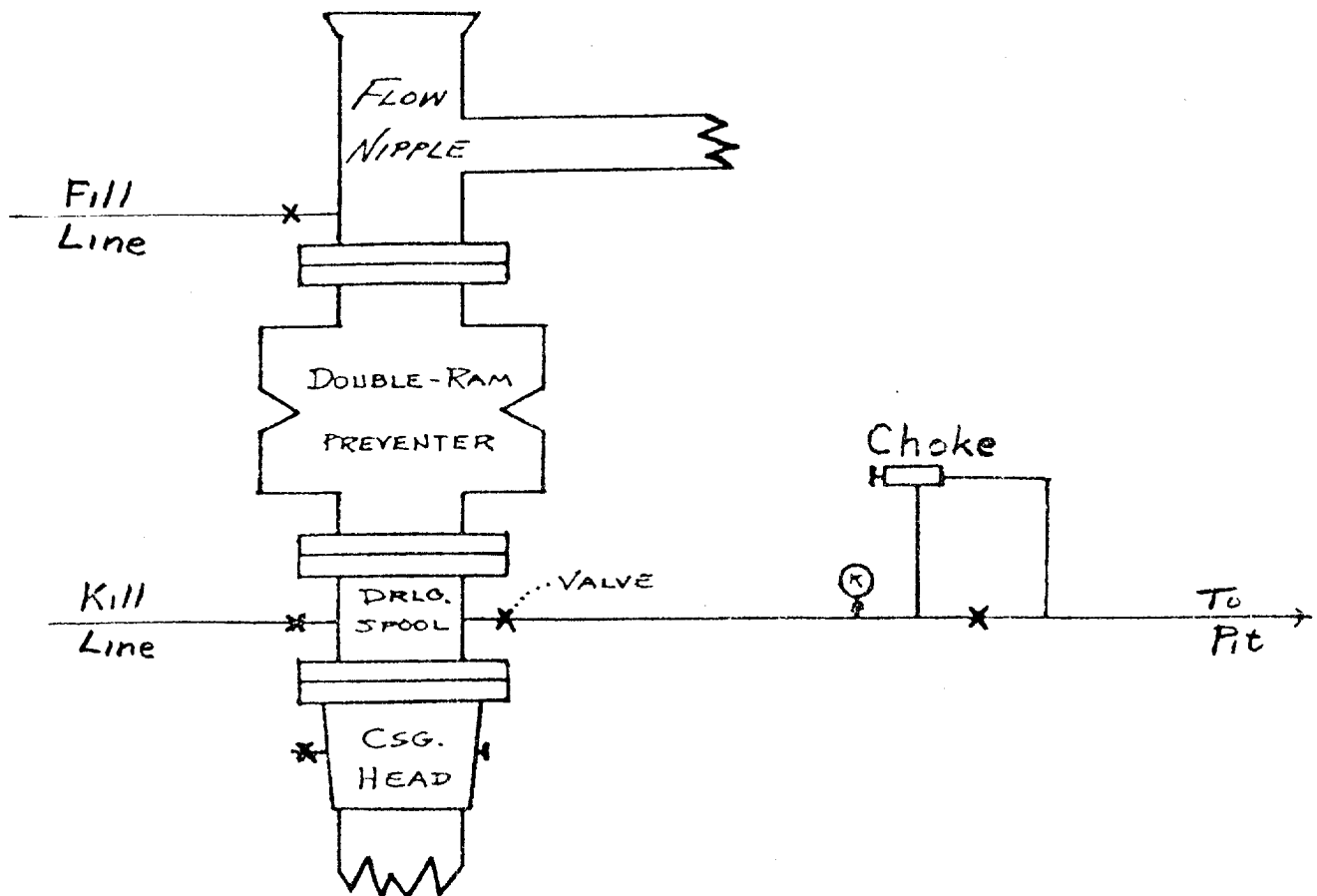
7. AUXILIARY EQUIPMENT: A full opening safety valve will be kept on rig floor in open position at all times.

8. LOGGING PROGRAM: Compensated Neutron/Formation Density Log (0-TD).

9. ABNORMAL PRESSURES, TEMPERATURES OR GASES: None anticipated.

10. ANTICIPATED STARTING DATE: It is planned that operations will commence about July 6, 1982. Duration of drilling, testing, and completion operations should be 2 to 5 weeks.

# B O P & CHOKE MANIFOLD



SURFACE USE PLAN  
FOR  
DRILLING, COMPLETING AND PRODUCING

GREAT WESTERN DRILLING COMPANY  
WELL #4 QUAIL FEDERAL  
990' FNL & 990' FEL SEC. 22-6S-25E  
CHAVES COUNTY, NEW MEXICO

LOCATED: 26 air miles north-northeast of Roswell, N. M.

FEDERAL LEASE NUMBER: NM-15862

LEASE ISSUED: 7-1-72 for a primary term of 10 years (HBP).

RECORD LESSEE: Great Western Drilling Company (64.476%)  
Davoil, Inc. (35.524%)

OPERATOR'S AUTHORITY: Record lessee and a Designation of Operator from Davoil, Inc.

BOND COVERAGE: Lessees' \$150,000 Nationwide Bonds.

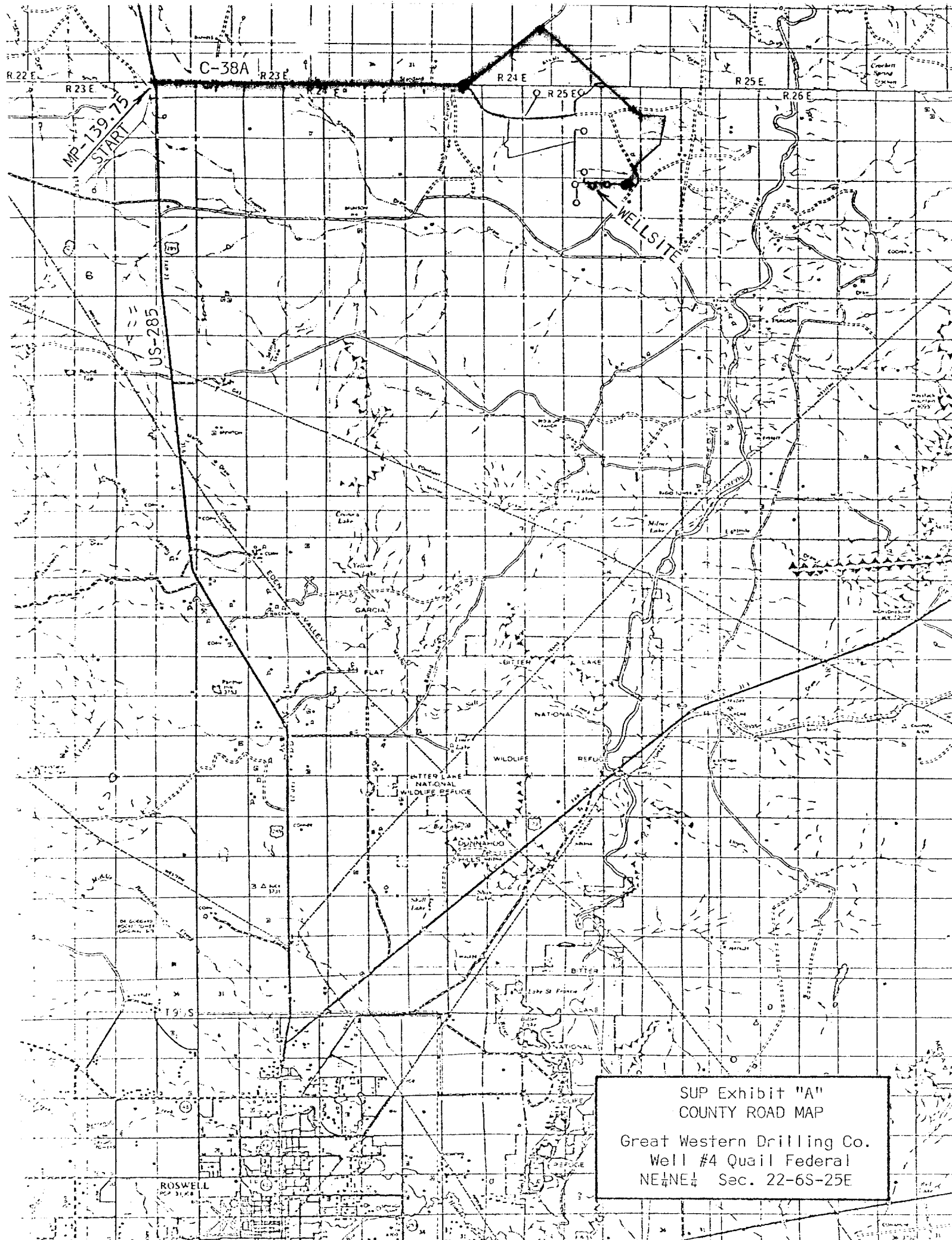
ACRES IN LEASE: 1759.06

SURFACE OWNERSHIP: U. S. Government with a grazing permit issued to Thomas Cooper, 410 First National Bank Building, Las Cruces, New Mexico 88001

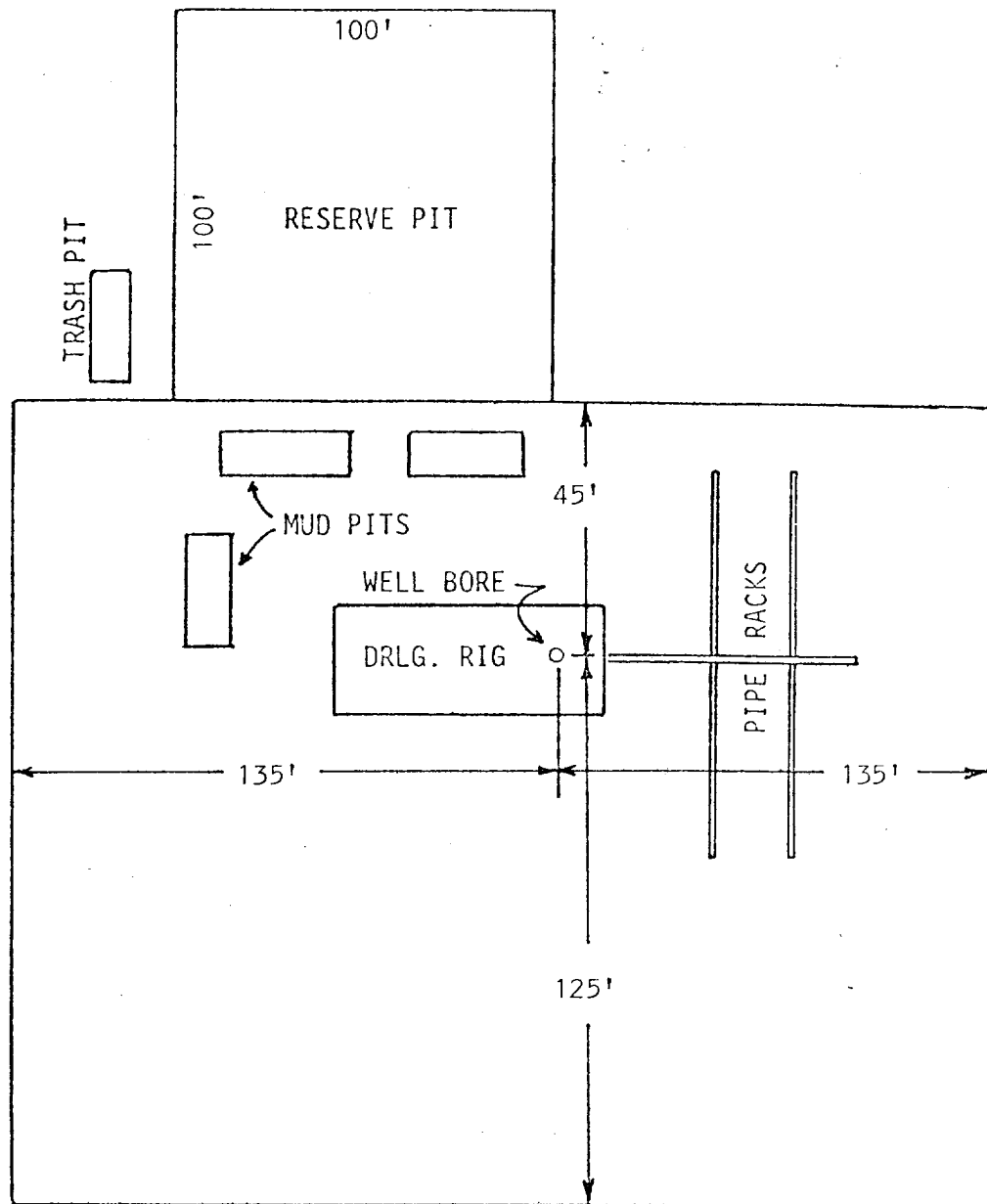
WELL SPACING: 160-acre (Pecos Slope Abo Gas Pool)

EXHIBITS:

- A. County Road Map
- B. Topographic Map
- C. Oil and Gas Map
- D. Sketch of Well Pad



SUP Exhibit "A"  
COUNTY ROAD MAP  
Great Western Drilling Co.  
Well #4 Quail Federal  
NE $\frac{1}{4}$ NE $\frac{1}{4}$  Sec. 22-6S-25E



SUP Exhibit "D"  
SKETCH OF WELL PAD  
Great Western Drilling Co.  
Well #4 Quail Federal  
NE $\frac{1}{4}$ NE $\frac{1}{4}$  Sec. 22-6S-25E