

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

GREAT WESTERN DRILLING COMPANY

RECEIVED (Kenneth Smith)  
(505-396-5538)

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

1980' FNL & 1830' FEL of Section 22.

At proposed prod. zone

O. C. D. (Unit G)

Same

ARTESIA, OFFICE (SW $\frac{1}{4}$ NE $\frac{1}{4}$ )

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

26 air miles north-northeast of Roswell, New Mexico

15. DISTANCE FROM PROPOSED\*

660'

16. NO. OF ACRES IN LEASE

1759.06

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160

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

(660')

18. DISTANCE FROM PROPOSED LOCATION\*

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

2640'

19. PROPOSED DEPTH

4250' Abo

20. ROTARY OR CABLE TOOLS

Rotary

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

3879' GR

22. APPROX. DATE WORK WILL START\*

June 26, 1989

23.

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#	920'	Sufficient to circulate
9 7/8 & 7 7/8"	4 1/2"	9.50#	4250'	300 sacks

9 7/8" hole will be reduced to 7 7/8" at  $\pm 1800'$  (200-300' below top of the Glorietta).  
Production casing will be cemented with sufficient cement to come back to a minimum of  
600' above the Abo.

Abo pay zone will be selectively perforated and stimulated as needed for maximum  
production.

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. Knauf

TITLE

Permit Agent

DATE June 9, 1989

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

S/Phil Kirk

TITLE

Area Manager

DATE

JUL 6 1989

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL OF THIS APPLICATION DOES NOT WARRANT OR  
CERTIFY THAT THE APPLICANT HOLDS LEGAL OR EQUITABLE  
TITLE TO THOSE RIGHTS IN THE SUBJECT LEASE WHICH WOULD  
ENTITLE THE APPLICANT TO CONDUCT OPERATIONS THEREON.

PLEASE BE ADVISED THAT THERE WILL BE NO EXCAVATION  
OF FEDERALLY OWNED MINERAL MATERIAL FOR CONSTRUCTION  
OF THE ACCESS ROAD OR PAD WITHOUT PAYMENT  
IN ADVANCE.

The applicant certifies that he or she, makes no claim for any person knowingly and willfully to make to any department or agency of the  
United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102  
Revised 1-1-89

JUN 15 1989

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

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

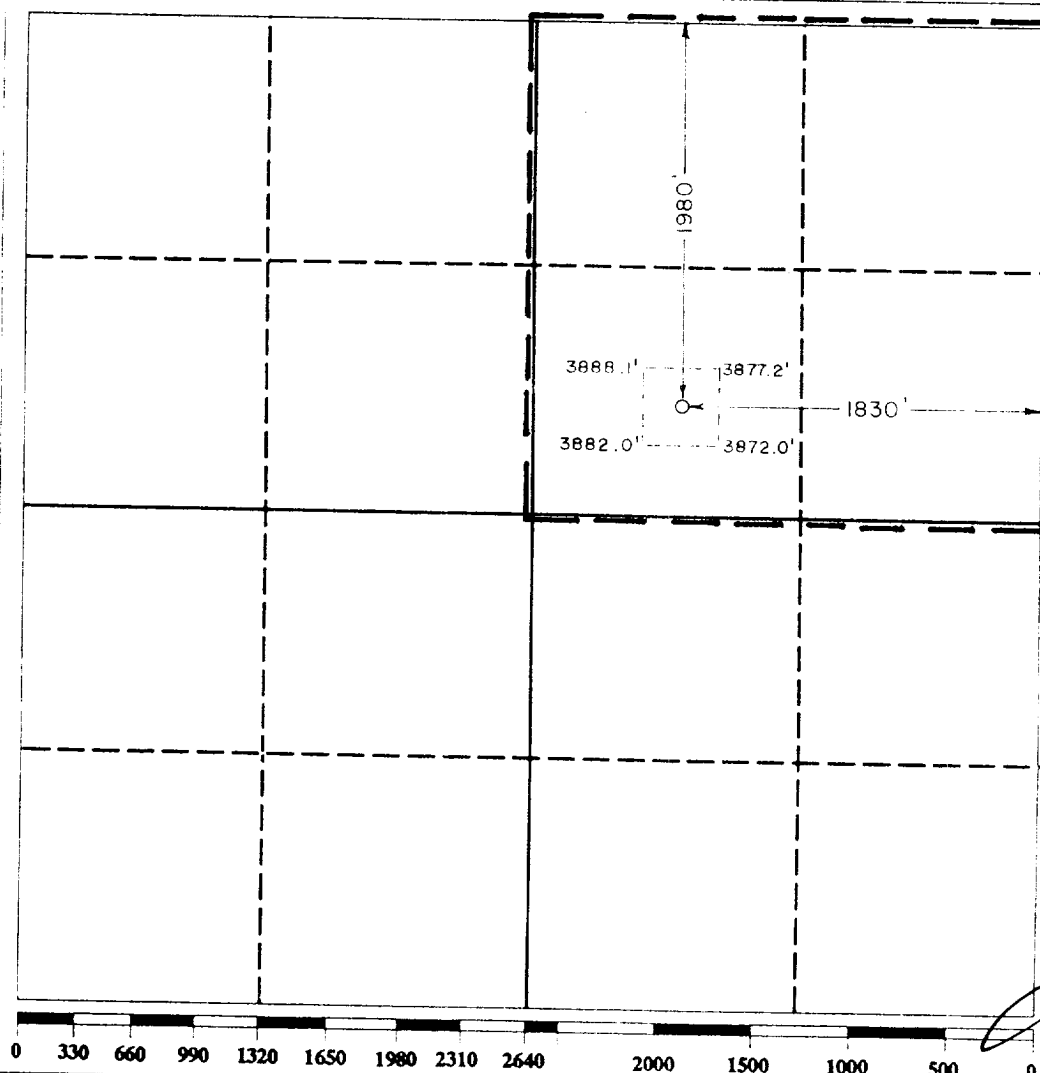
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <b>GREAT WESTERN DRILLING COMPANY</b>			Lease <b>QUAIL FEDERAL</b>		Well No. <b>5</b>
Unit Letter <b>G</b>	Section <b>22</b>	Township <b>6 South</b>	Range <b>25 East</b>	County <b>Chaves</b>	
Actual Footage Location of Well:			NMPM		
1980 feet from the North line and		1830 feet from the East line			
Ground level Elev. <b>3879.0</b>	Producing Formation <b>Abo</b>	Pool <b>Pecos Slope Abo</b>	Dedicated Acreage: <b>160</b> Acres		

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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

**James A. Knauf**

Printed Name

Position

**PERMIT AGENT**

Company

**GREAT WESTERN DRLG. CO.**

Date

**May 31, 1989**

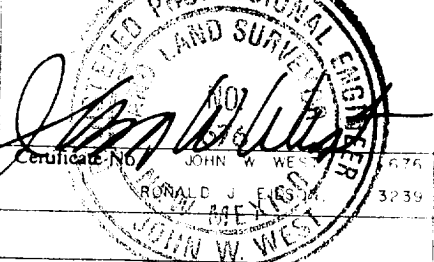
SURVEYOR CERTIFICATION

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.

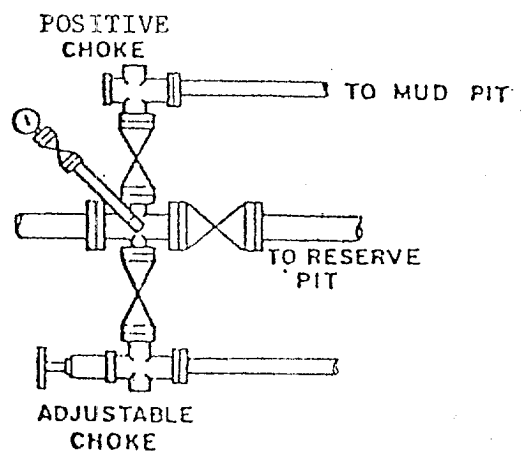
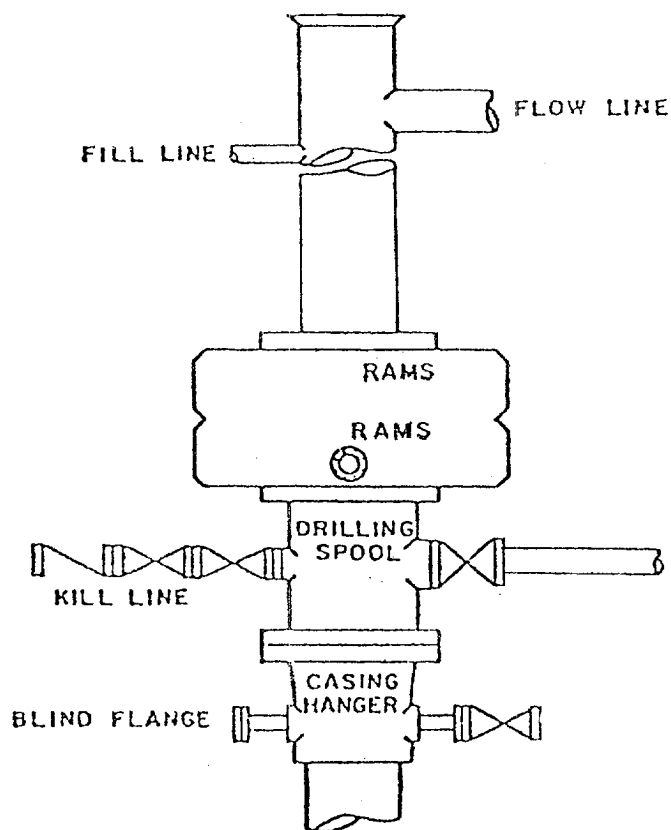
Date Surveyed

**May 25, 1989**

Signature & Seal of  
Professional Surveyor

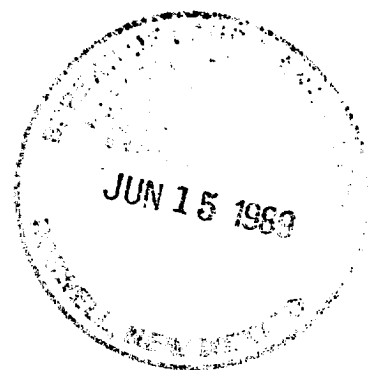


# BLOWOUT PREVENTOR SKETCH



SUPPLEMENTAL DRILLING DATA

GREAT WESTERN DRILLING COMPANY  
WELL #5 QUAIL FEDERAL  
1980' FNL & 1830' FEL 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.

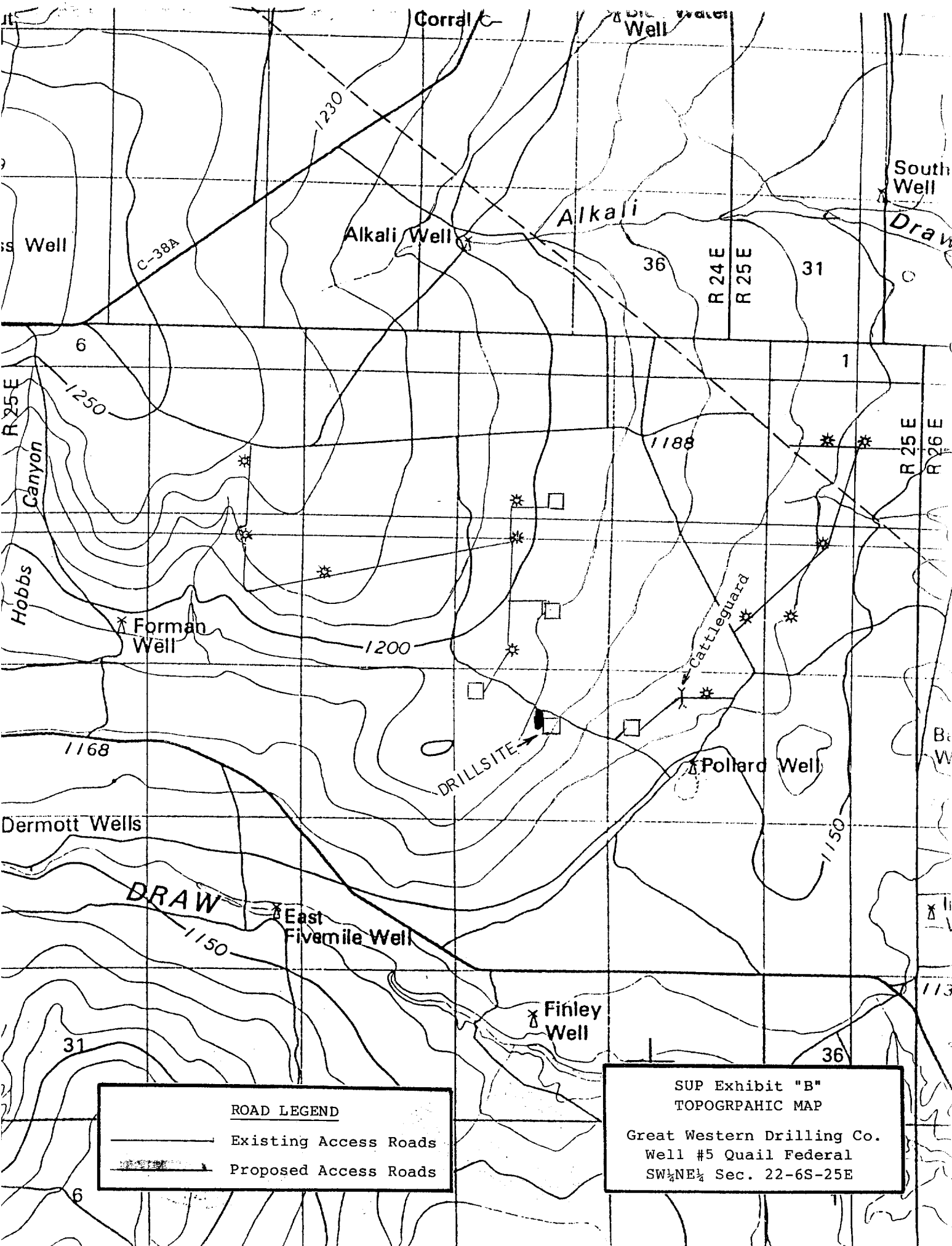
6. CIRCULATING MEDIUM: Fresh water mud conditioned as necessary for control of viscosity and water loss.

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 (O-TD).

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

10. ANTICIPATED STARTING DATE: It is planned that operations will commence about June 26, 1989. Duration of drilling, testing, and completion operations should be 2 to 5 weeks.



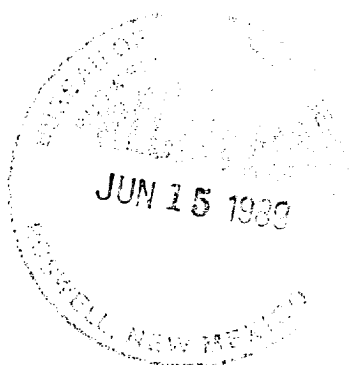
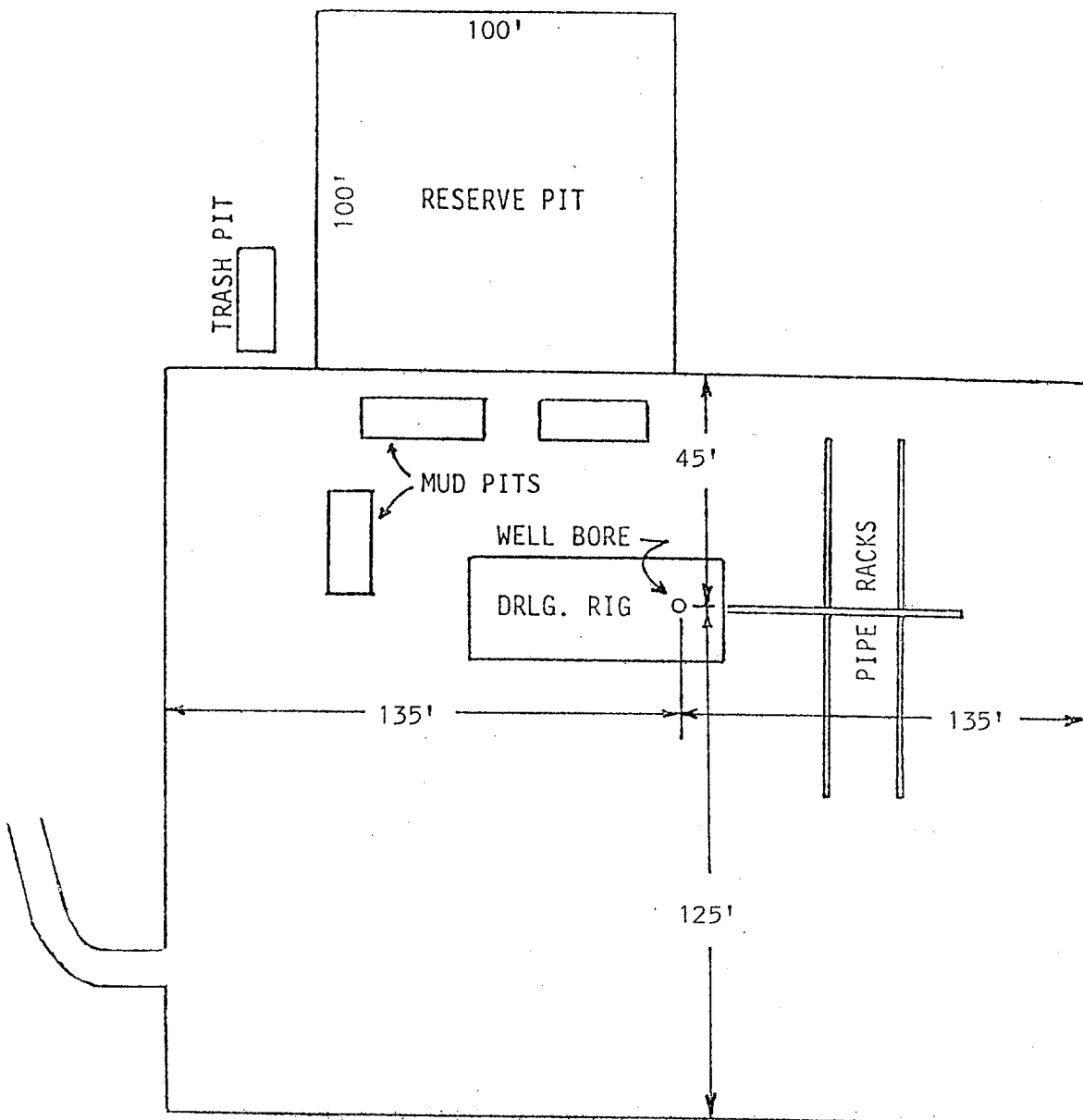
ROAD LEGEND

- Existing Access Roads
- Proposed Access Roads

SUP Exhibit "B"  
TOPOGRAPHIC MAP

Great Western Drilling Co.  
Well #5 Quail Federal  
SW $\frac{1}{4}$ NE $\frac{1}{4}$  Sec. 22-6S-25E





SUP Exhibit "D"  
 SKETCH OF WELL PAD  
 Great Western Drilling Co.  
 Well #5 Quail Federal  
 SW $\frac{1}{4}$ NE $\frac{1}{4}$  Sec. 22-6S-25E