

30-005-62712  
4/6F

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

(Kenneth Smith)

(505-396-5538)

RECEIVED

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' FSL & 1880' FEL of Section 15.

At proposed prod. zone

Same

JUL 10 '89

(Unit J)

O. C. D.

(NW 1/4 SE 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 LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 560' (660')

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. 3730'

19. PROPOSED DEPTH 4250' Abo

20. ROTARY OR CABLE TOOLS Rotary

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

3901' GR 3900.8

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 ±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 production.

- Attached are:
- Well Location & Acreage Dedication Plat
  - Supplemental Drilling Data
  - 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 depth. 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

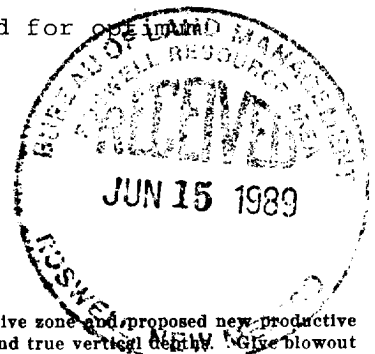
CONDITIONS OF APPROVAL, IF ANY:

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.

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.

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime 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.



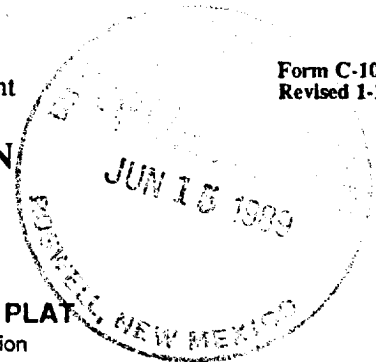
POST ID-1  
N & A P I  
7-14-89

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

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



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

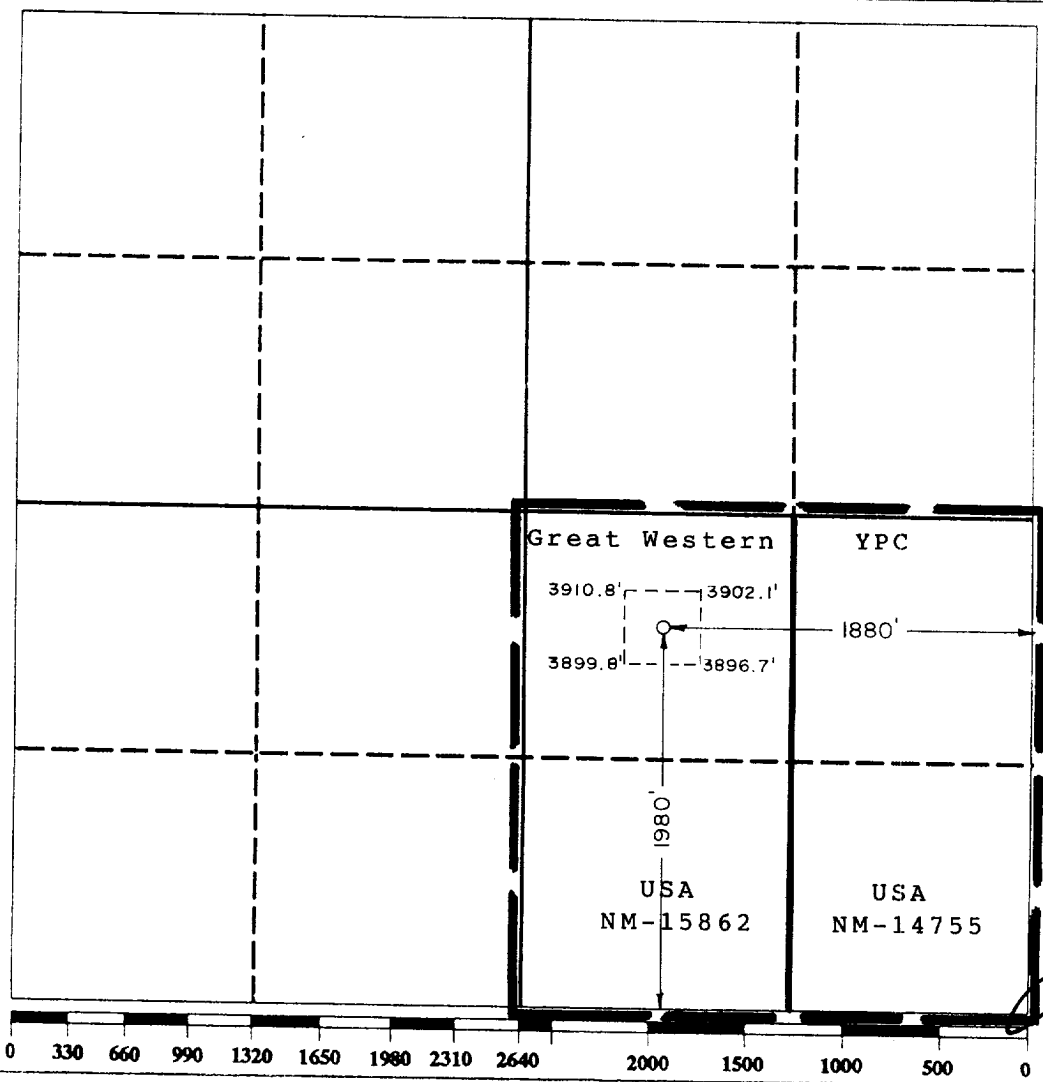
DISTRICT II  
 P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
 6000 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 COM</b>			Well No. <b>6</b>		
Unit Letter <b>J</b>	Section <b>15</b>	Township <b>6 South</b>	Range <b>25 East</b>	County <b>Chaves</b>		NMPM		
Actual Footage Location of Well:								
1980 feet from the <b>South</b> line and			1880 feet from the <b>East</b> line					
Ground level Elev. <b>3900.8</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 Com. Agr. being processed.
 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.



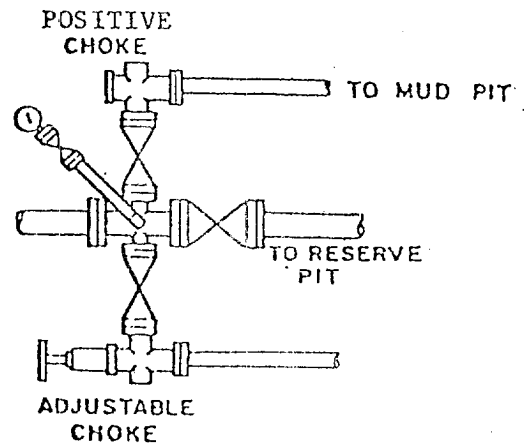
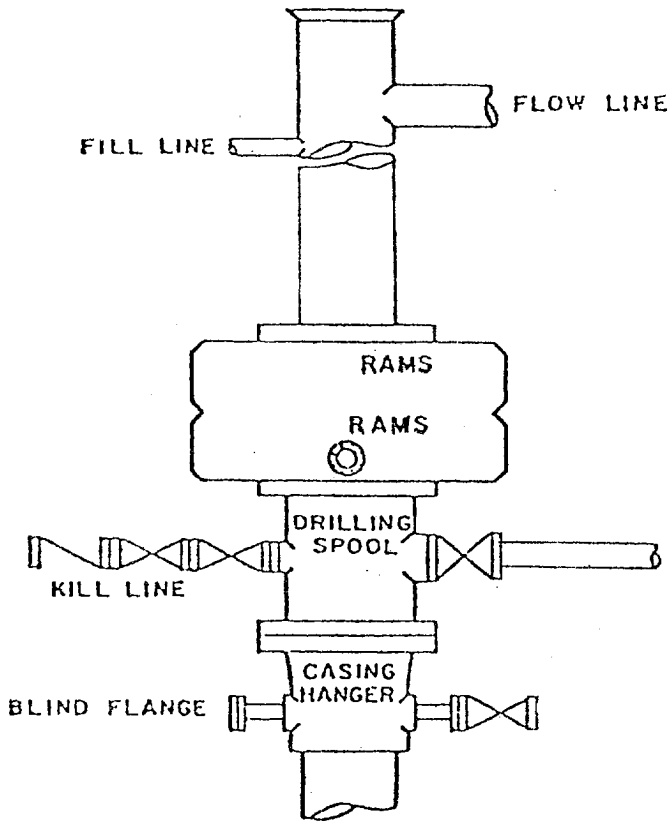
**OPERATOR CERTIFICATION**  
 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *James A. Knauf*  
 Printed Name: **James A. Knauf**  
 Position: **Permit Agent**  
 Company: **GREAT WESTERN DRLG. CO.**  
 Date: **May 31, 1989**

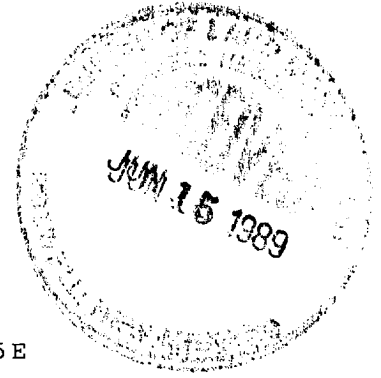
**SURVEYOR CERTIFICATION**  
 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: **May 25, 1989**  
 Signature & Seal of Professional Surveyor: *John W. West*  
 Certificate No. **JOHN W. WEST**  
**JOHN W. WEST**  
**NEW MEXICO**

# BLOWOUT PREVENTOR SKETCH



SUPPLEMENTAL DRILLING DATA



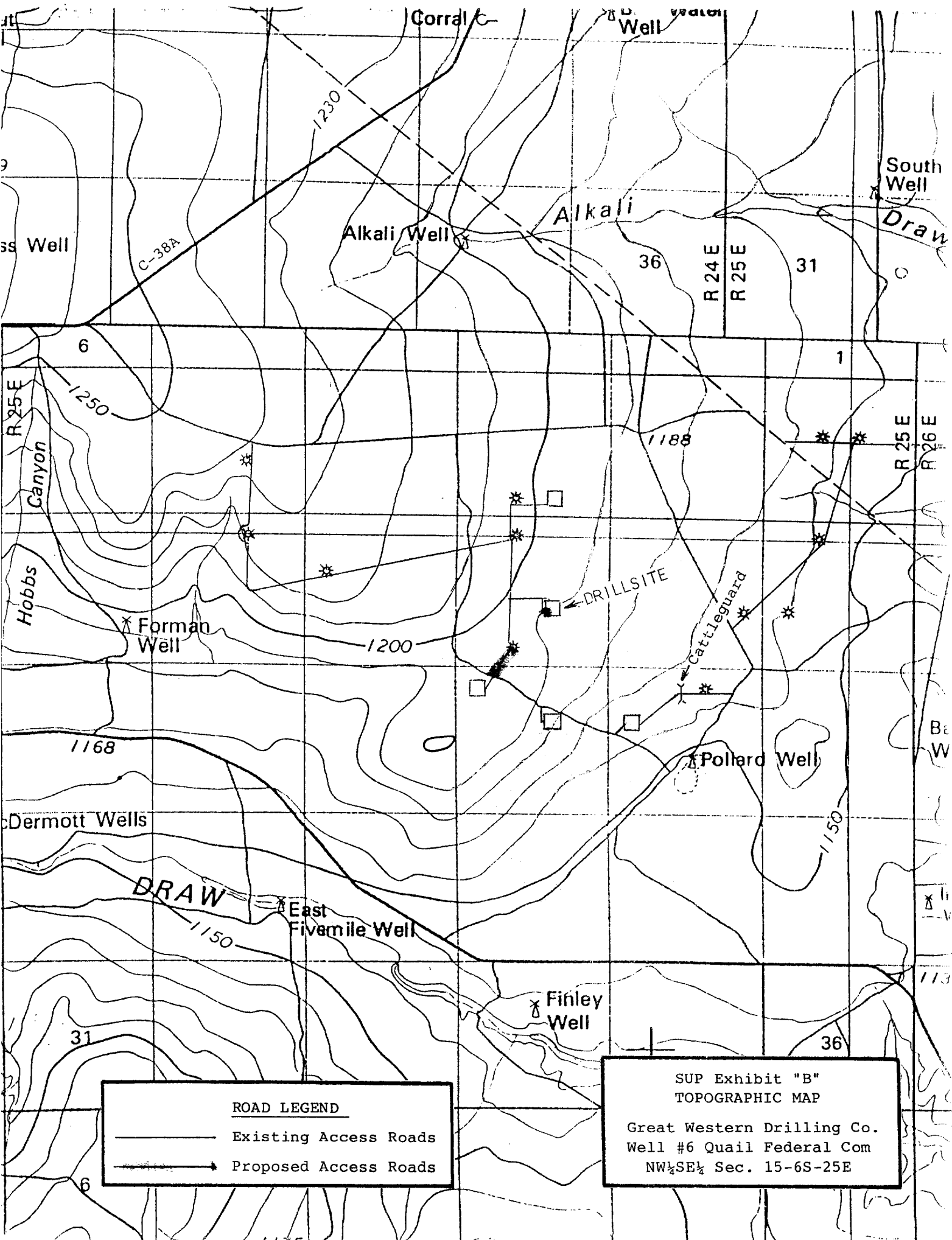
GREAT WESTERN DRILLING COMPANY  
WELL #6 QUAIL FEDERAL COM  
1980' FSL & 1880' FEL SEC. 15-6S-25E  
CHAVES COUNTY, NEW MEXICO

1. SURFACE FORMATION: Artesia Group of Permian Age.
2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

San Andres	575'	Tubb	3015'
Glorietta	1595'	Abo	3650'
3. ANTICIPATED POROSITY ZONES:

Water	50-150', 575-660'
Oil	995-1210'
Gas	3690-4050'
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 - 920'	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 June 26, 1989. Duration of drilling, testing, and completion operations should be 2 to 5 weeks.



**ROAD LEGEND**

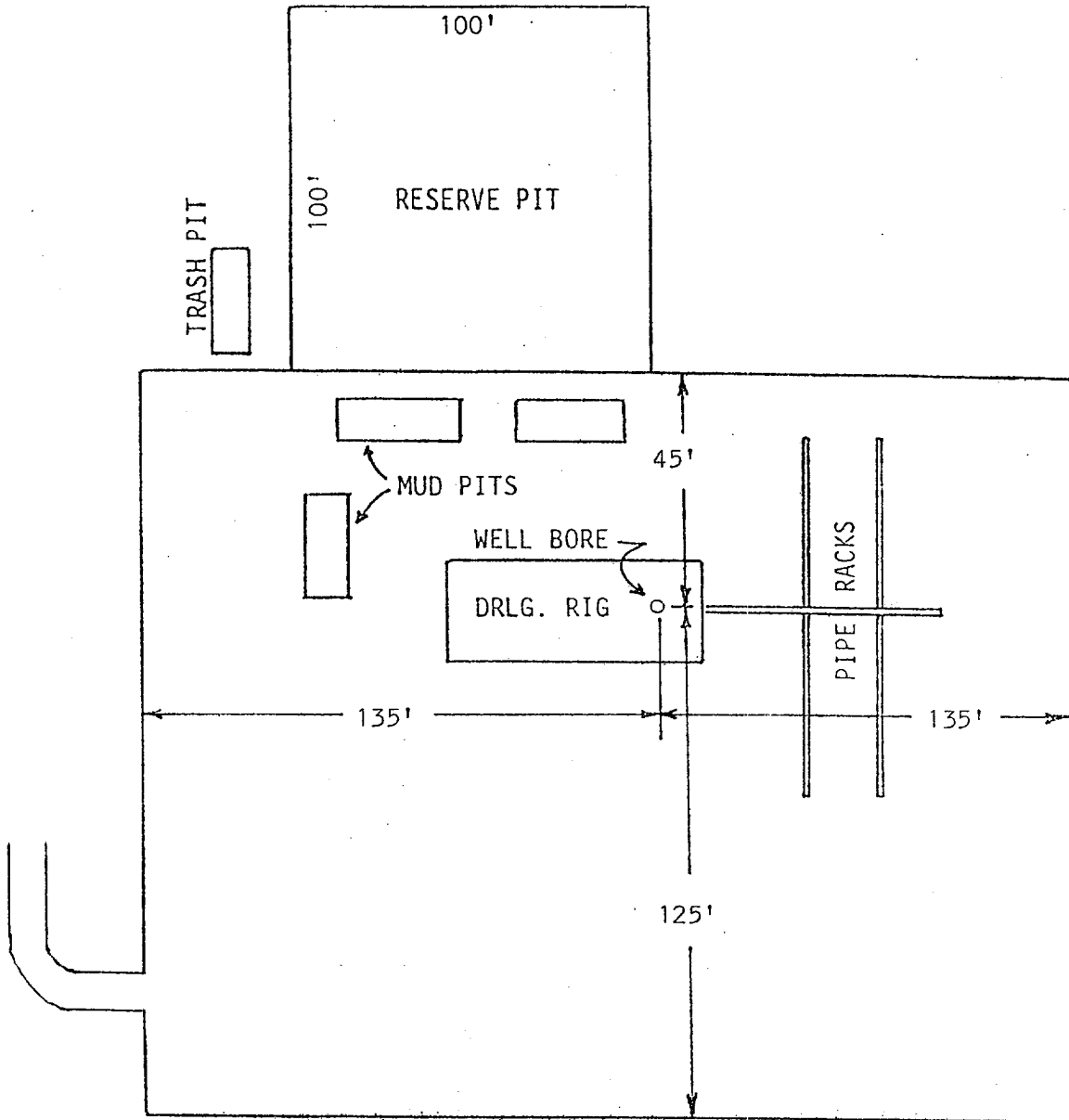
— Existing Access Roads

→ Proposed Access Roads

SUP Exhibit "B"  
TOPOGRAPHIC MAP

Great Western Drilling Co.  
Well #6 Quail Federal Com  
NW¼SE¼ Sec. 15-6S-25E





JUN 15 1989  
 RUSSELL, NEW MEXICO

SUP Exhibit "D"  
 SKETCH OF WELL PAD  
 Great Western Drilling Co.  
 Well #6 Quail Federal Com  
 NW $\frac{1}{4}$ SE $\frac{1}{4}$  Sec. 15-6S-25E