30-045-24573

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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101
Revised 1-1-65

# APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. Type of Well
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. Name of Operator
Southland Royalty Company

3. Address of Operator
P. O. Drawer 570, Farmington, NM 87401

4. Location of Well UNIT LETTER A LOCATED 790 FEET FROM THE North LINE AND 830 FEET FROM THE East LINE OF SEC. 33 TWP. 32N RGE. 12W NMPM

5A. Indicate Type of Lease STATE [ ] FEE [X]

5. State Oil & Gas Lease No.

7. Unit Agreement Name

8. Farm or Lease Name
Culpepper Martin

9. Well No.
#20

10. Field and Pool, or Wildcat
~~Blanco~~ Pictured Cliffs ~~& Ext~~

12. County
San Juan

| 19. Proposed Depth | 19A. Formation | 20. Rotary or C.T. |
|---|---|---|
| 2630' | Pict. Cliffs | Rotary |

| 21. Elevations (Show whether DF, RT, etc.) | 21A. Kind & Status Plug. Bond | 21B. Drilling Contractor | 22. Approx. Date Work will start |
|---|---|---|---|
| 6037' GR | | | September 30, 1980 |

23.

## PROPOSED CASING AND CEMENT PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | SACKS OF CEMENT | EST. TOP |
|---|---|---|---|---|---|
| 12 1/4" | 8 5/8" | 24# | 140' | 100 sx | Surface |
| 6 3/4" | 2 7/8" | 6.5# | 2630' | ~~285 sx~~ sufficient to | ~~Ojo Alamo~~ circulate |

Surface formation is Nacimiento.
Top of Ojo Alamo sand is at 1300'.
Top of Pictured Cliffs sand is at 2472'.
Fresh water mud will be used to drill from surface to total depth.
It is anticipated that an IES and a GR-Density log will be run at total depth.
No abnormal pressures or poisonous gases are anticipated in this well.
It is expected that this well will be drilled before March 31, 1981. This depends on time required for approvals, rig availability and the weather.
Gas is dedicated.

APPROVAL VALID
FOR 90 DAYS UNLESS
DRILLING COMMENCED,
EXPIRES 11-13-80

RECEIVED
AUG 15 1980
OIL CON. COM.
DIST. 3

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 R. E. Fielder Title District Engineer Date 8-15-80

(This space for State Use)

APPROVED BY Fred T. Kanz TITLE SUPERVISOR DISTRICT # 3 DATE AUG 18 1980

CONDITIONS OF APPROVAL, IF ANY:

Note cementing change

# OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

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

| Operator | Lease | Well No. |
|---|---|---|
| SOUTHLAND ROYALTY COMPANY | CULPEPPER-MARTIN | 20 |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| A | 33 | 32N | 12W | San Juan |

Actual Footage Location of Well:
790 feet from the North line and 830 feet from the East line

| Ground Level Elev. | Producing Formation | Pool | Dedicated Acreage: |
|---|---|---|---|
| 6037 | Pictured Cliffs | ~~Blanco~~ Aztec Ext | 160 Acres |

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

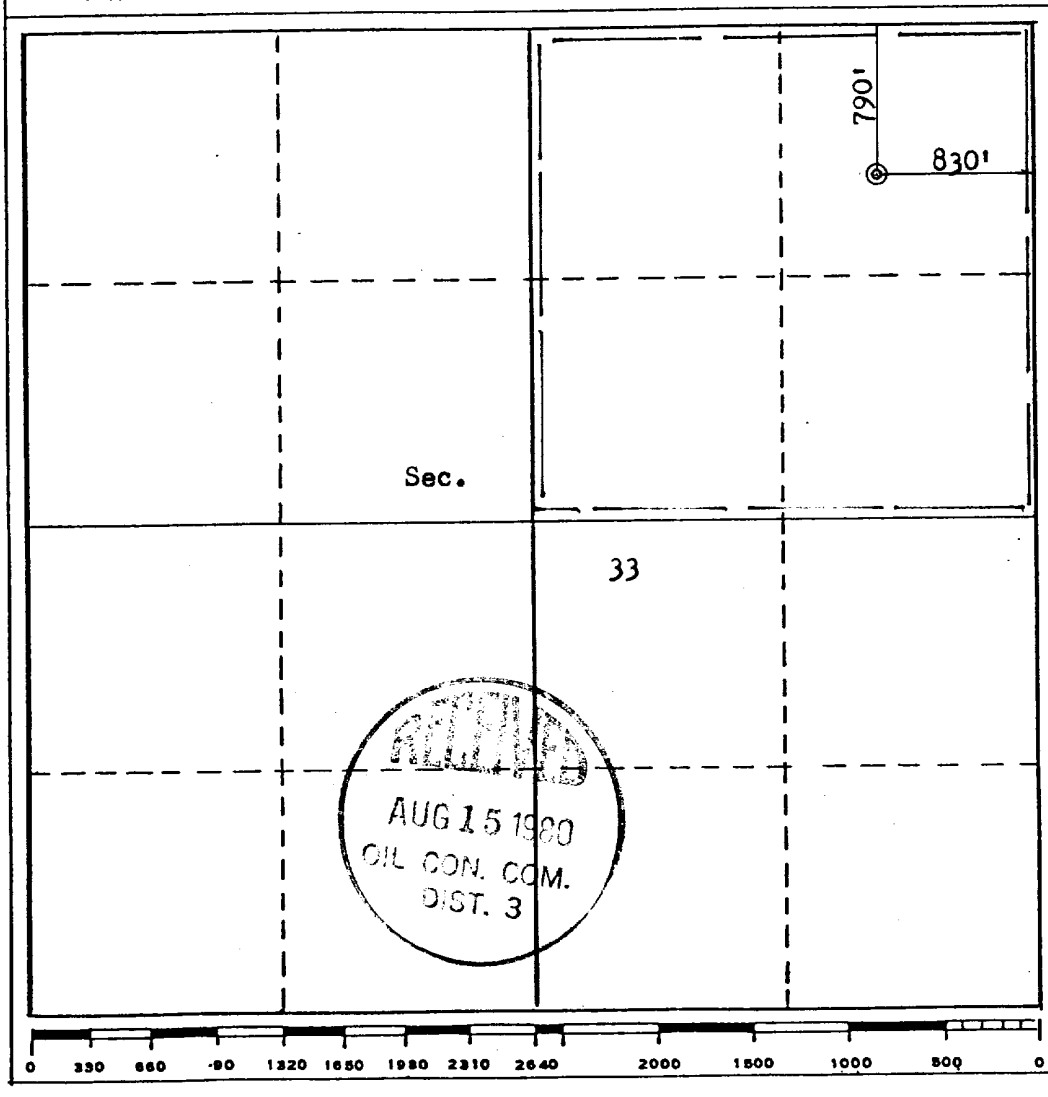
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 Commission.




## CERTIFICATION

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

R. E. Fielder

Name: Robert E. Fielder
Position: District Engineer
Company: Southland Royalty Company
Date: August 15, 1980

*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 21, 1980
Registered Professional Engineer and/or Land Surveyor: Fred B. Kerr Jr.
Certificate No. 3950

REGISTERED LAND SURVEYOR — STATE OF NEW MEXICO — FRED B. KERR, JR.

DRILLING SCHEDULE - CULPEPPER MARTIN #20

Location: 790' FNL & 830' FEL, Section 33, T32N, R12W
San Juan County, NM

Field: Blanco Pictured Cliffs

Elevation: 6037' GR
6049' KB

Geology:

| Formation Tops: | | |
|---|---|---|
| | Ojo Alamo | 1300' |
| | Fruitland | 2055' |
| | Pictured Cliffs | 2472' |
| | Total Depth | 2630' |

Logging Program: IES and GR-Density at Total Depth.

Coring Program : None

Natural Gauges : None

Drilling

Contractor:

Tool Pusher:
SRC Answering Service: 325-184
Dispatch Number: 325-7391

SRC Representative:

Mud Program: Fresh water mud from surface to Total Depth.

Materials

| Casing Program: | Hole Size | Depth | Casing Size | Wt. & Grade |
|---|---|---|---|---|
| | 12 1/4" | 140' | 8 5/8" | 24# K-55 |
| | 6 3/4" | 2630' | 2 7/8" | 6.5# K-55 |

Float Equipment

8-5/8" Surface Casing: Pathfinder cement guide shoe (#1003-1-010).

2-7/8" Production Casing: Sawtooth collar guide shoe. Howco 2 7/8" latch down baffle (PR 60). Two 3 1/16" rubber balls and one 2 7/8" Omega latching plug (PR 59). Use 3 1/4" plug container head. Six B & W stabilizers on bottom 6 joints.

Wellhead Equipment: 8 5/8" X 2 7/8", EUE, screwed head.

DRILLING SCHEDULE - CULPEPPER MARTIN #20



Cementing

8-5/8" Surface Casing: 118 cu. ft. (100 sx) Class "B" with 1/4# gel flake per sack and 3% $CaCl_2$. (100% excess.)

2-7/8" Production Casing: 407 cu. ft. ( 235 sx) of 50/50 Class "B" Poz with 6% gel mixed with 7.2 gals water per sack to weigh 12.85 ppg. Tail in with (50 sx) Class "B" with 2% $CaCl_2$. If lost circulation occurs, add 1/4 cu. ft. of fine gilsonite per sack. (50% excess to cover Ojo Alamo). Displace cemen with 50 gallons of 7 1/2% acetic acid. Run temperature survey after 12 hours.

L. O. Van Ryan
District Production Manager

REF _____
Date _____

Southland Royalty Company

August 15, 1980

Oil Conservation Division
Mr. Frank Chavez
1000 Rio Brazos Road
Aztec, NM 87410

RE: Blowout Preventer Plan

Dear Mr. Chavez:

All drilling and completion rigs will be equipped with 6" or larger double gate hydraulic blowout preventers and a hydraulic operated closing unit with steel lines.

The preventer is 3000# working pressure and 6000# test pressure.

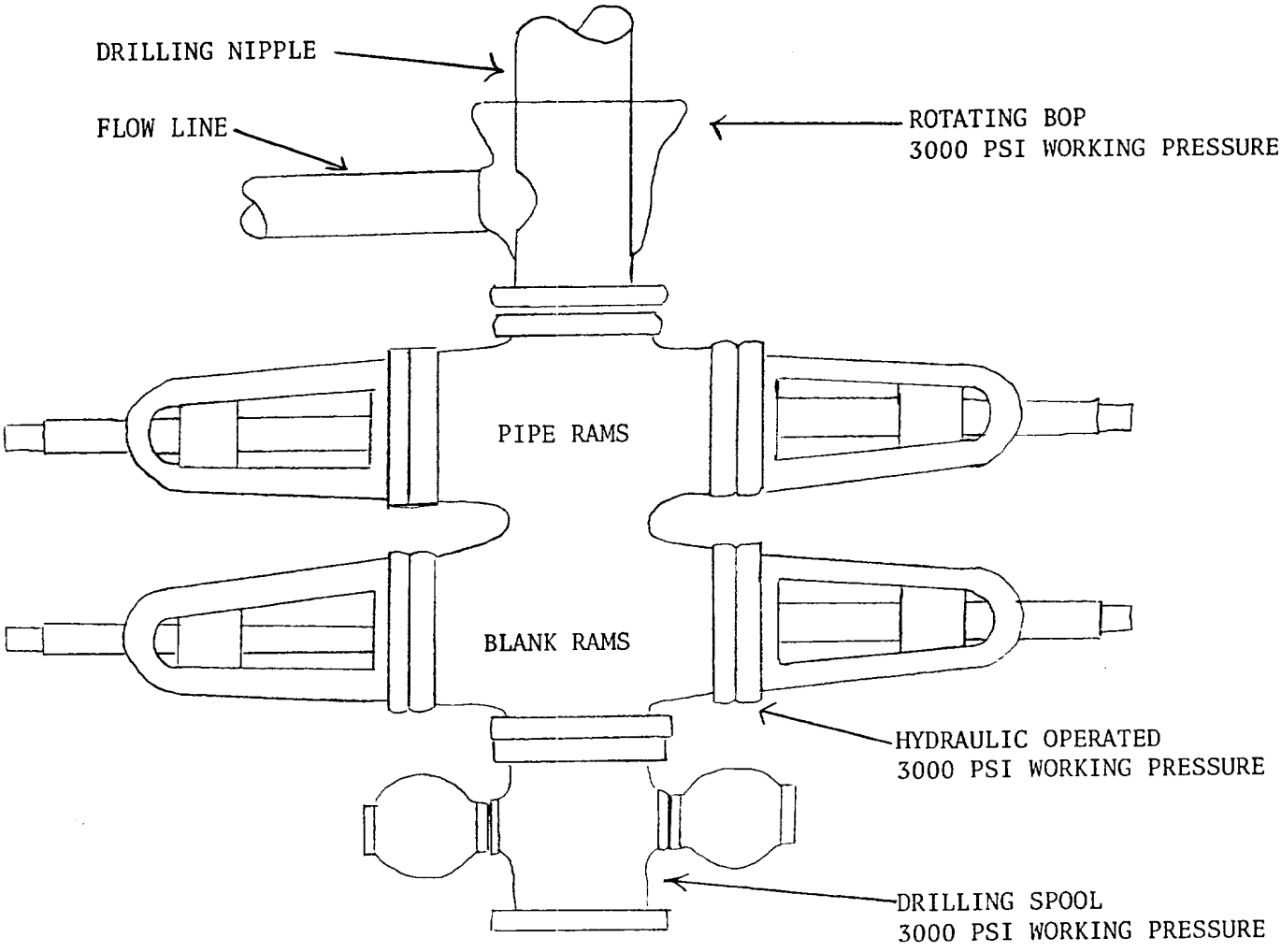
All crews will be thoroughly trained in the operation of this preventer. The preventer will be tested frequently enough to ensure proper operation.

Sincerely,

SOUTHLAND ROYALTY COMPANY

R. E. Fielder

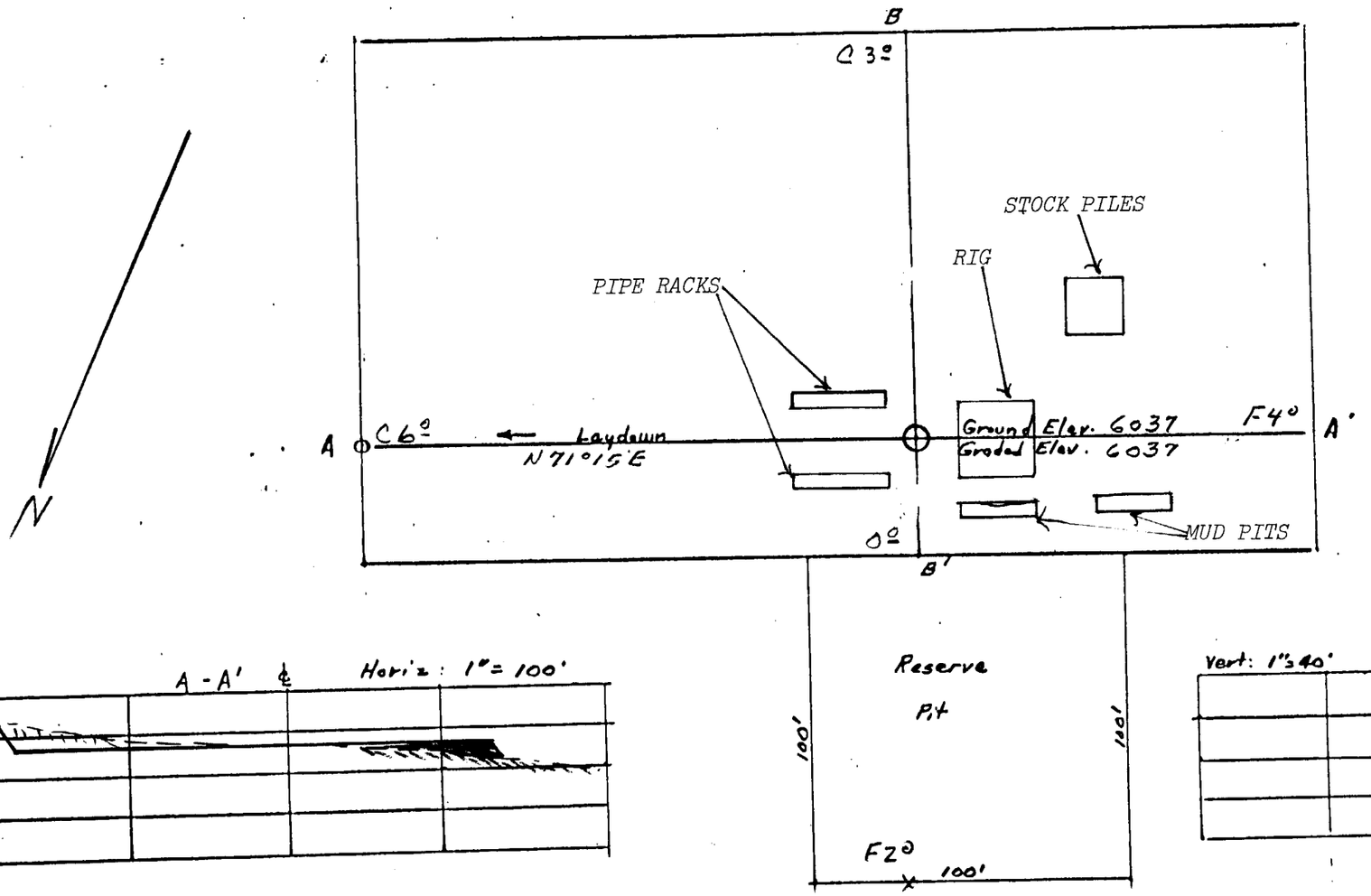
Robert E. Fielder
District Engineer




PREVENTERS AND SPOOLS ARE TO HAVE
THROUGH BORE OF 6" - 3000 PSI OR LARGER

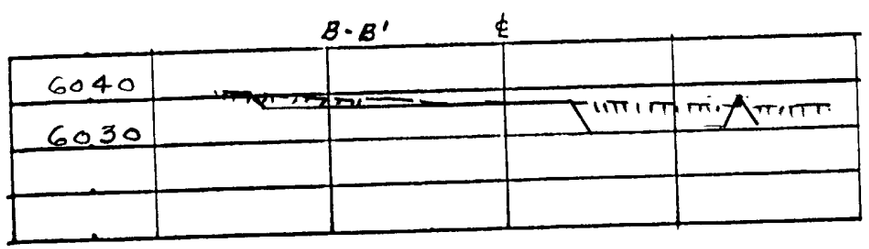
Southland Royalty Company
Culpepper Martin #20
790' FNL & 830' FEL
Section 33, T32N, R12W
San Juan County, NM

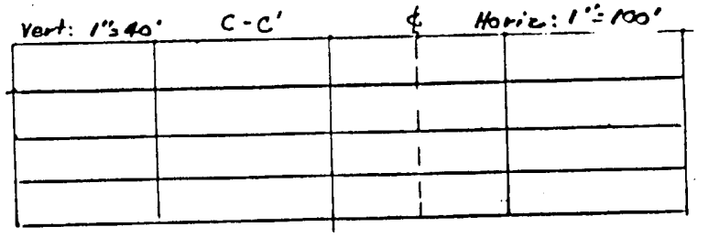
Location Profile for
SOUTHLAND ROYALTY COMPANY #20 CULPEPPER-MARTIN
790'FNL 830'FEL Sec. 33-T32N-R12W
SAN JUAN COUNTY, NEW MEXICO

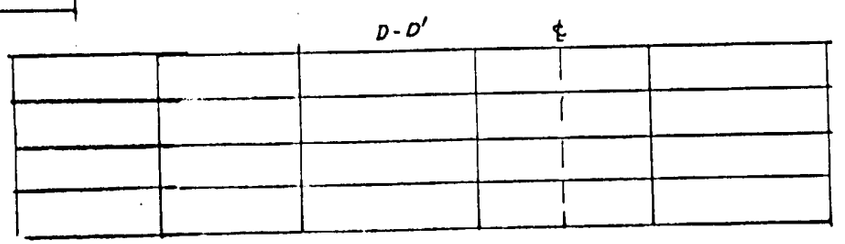




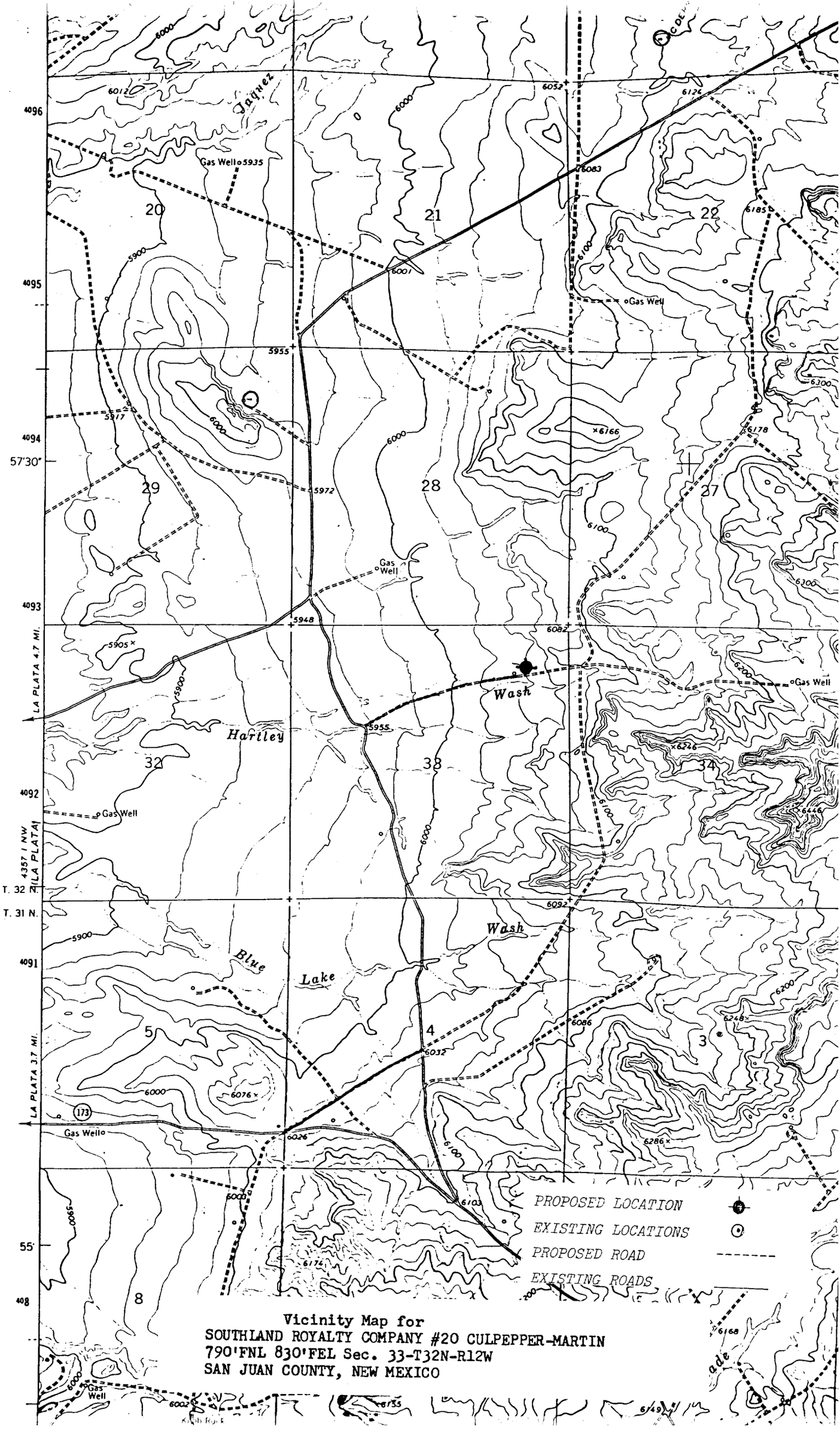





KERR LAND SURVEYING
Date: 5-21-80




Vicinity Map for
SOUTHLAND ROYALTY COMPANY #20 CULPEPPER-MARTIN
790'FNL 830'FEL Sec. 33-T32N-R12W
SAN JUAN COUNTY, NEW MEXICO