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NEW MEXICO OIL CONSERVATION COMMISSION

30-095-24060  
Form C-101  
Revised 1-1-65

5A. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work b. Type of Well OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> 2. Name of Operator 3. Address of Operator 4. Location of Well UNIT LETTER J LOCATED 1710' FEET FROM THE South LINE AND 1800' FEET FROM THE East LINE OF SEC. 21 TWP. 29N RGE. 11W NMPM	DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/> Southland Royalty Company P. O. Drawer 570, Farmington, NM 87401 1710' South 1800' East 21 29N 11W NMPM
5. State Oil & Gas Lease No.	7. Unit Agreement Name
8. Farm or Lease Name Sateqna	9. Well No. #2E
10. Field and Pool, or Wildcat Basin Dakota	12. County San Juan
19. Proposed Depth 6300'	19A. Formation Dakota
20. Rotary or C.T. Rotary	21. Elevations (Show whether DF, RT, etc.) 5423' GR
21A. Kind & Status Plug. Bond	21B. Drilling Contractor
22. Approx. Date Work will start March 15, 1980	

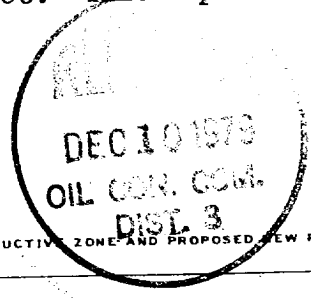
23. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/4"	8 5/8"	24#	200'	140 Sacks	Circ to surface
7 7/8"	4 1/2"	10.5#	6300'	265 Sacks (#1)	Cover Gallup
				315 Sacks (#2)	Cover Cliff House
				255 Sacks (#3)	Cover Ojo Alamo

Surface formation is Nacimiento.  
Top of Ojo Alamo sand is at 665'.  
Top of Mesa Verde sand is at 3145'.  
Fresh water mud will be used to drill from surface to Total Depth.  
It is anticipated that an IES and 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 August 31, 1980. This depends on time required for approval, rig availability and the weather.  
Gas is dedicated.

APPROVAL VALID  
FOR 90 DAYS UNLESS  
DRILLING COMMENCED

EXPIRES 3-9-80



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 C. Parsons Title District Engineer Date 12-4-79

(This space for State Use)  
APPROVED BY Frank S. Dwyer TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE DEC 10 1979  
CONDITIONS OF APPROVAL, IF ANY:

## OIL CONSERVATION DIVISION

P. O. BOX 2088

Form C-107  
Revised 10-1-78

STATE OF NEW MEXICO

SANTA FE, NEW MEXICO 87501

ENERGY AND MINERALS DEPARTMENT

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

Operator <b>SOUTHLAND ROYALTY COMPANY</b>			Lease <b>SATEGNA</b>		Well No. <b>2-E</b>
Unit Letter <b>J</b>	Section <b>21</b>	Township <b>29N</b>	Range <b>11W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1710</b> feet from the <b>South</b> line and <b>1800</b> feet from the <b>East</b> line					
Ground Level Elev. <b>5423</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage:  Acres

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

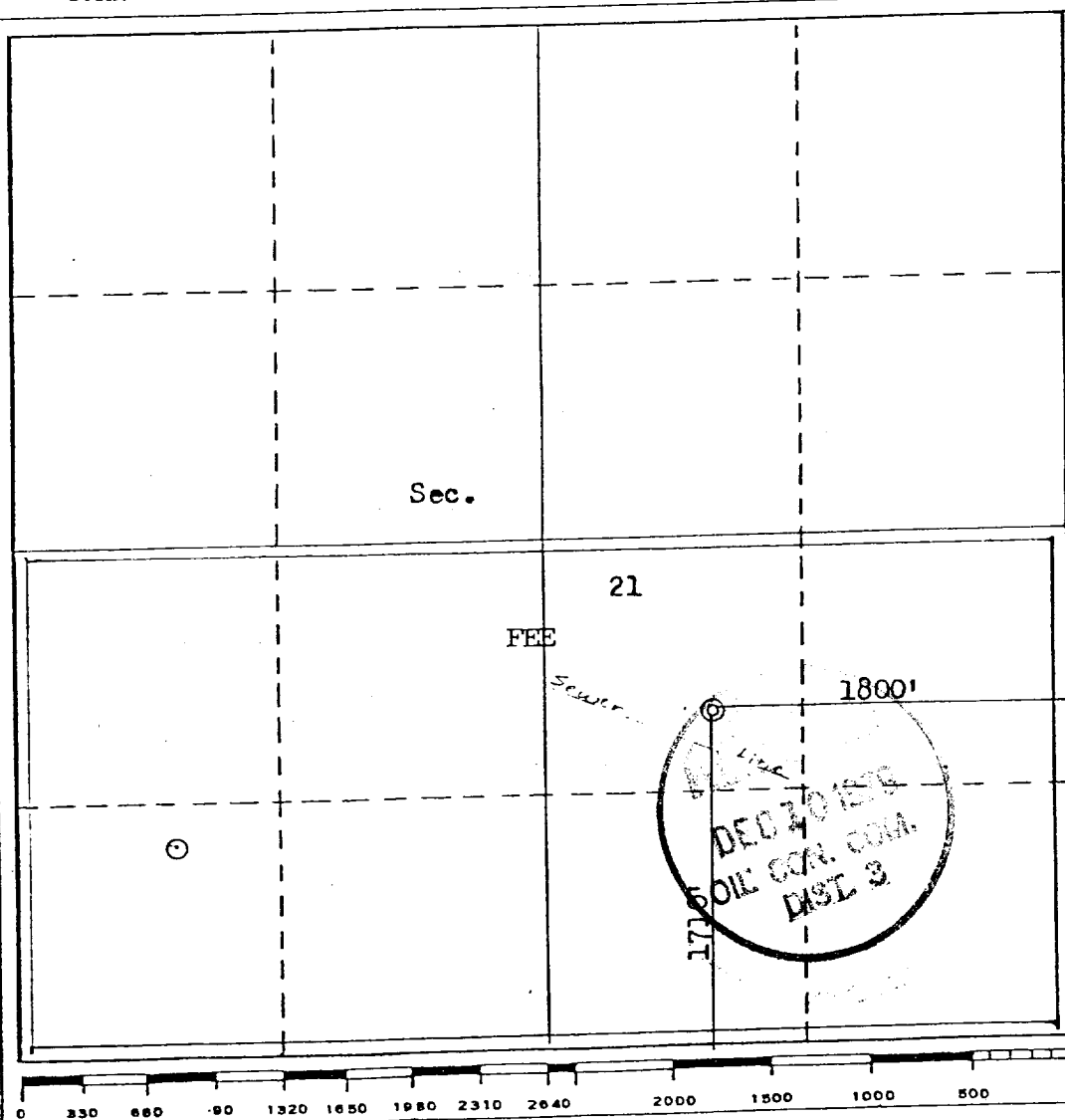
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.

*C. C. Parsons*

Name

Curtis C. Parsons

Position

District Engineer

Company

Southland Royalty Company

Date

December 4, 1979

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

November 9, 1979

Registered Professional Engineer and/or Land Surveyor No.

3950

*Fred B. Kern*  
Fred B. Kern, P.E.  
Certificate No. 3950

3950

SOUTHLAND ROYALTY COMPANY - DRILLING SCHEDULE

S A T E G N A # 2 E

1710' FSL & 1800' FEL  
Section 21, T29N, R11W  
San Juan County, New Mexico

Field: Basin Dakota

Elevation: 5423' GR

Geology:

Formation Tops:	Ojo Alamo	665'	Gallup	5185'
	Fruitland	1295'	Graneros	5985'
	Pictured Cliffs	1575'	Dakota	6113'
	Cliff House	3145'	Total Depth	6300'
	Point Lookout	3925'		

Logging Program: IES and GR-Density from Total Depth to surface casing.

Drilling:

Contractor:

Tool Pusher:

SRC Representative:

SRC Answering Service: 325-1841  
Dispatch Number: 325-7391

Mud Program: Fresh water to 5100'. Mud up at 5100'. Maintain mud weight of 8.9 to 9.4, viscosity of 35 to 40 sec, water loss of 10 to 12.

Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
	12 1/4"	200'	8 5/8"	24# K-55
	7 7/8"	6300'	4 1/2"	10.5# K-55

Float Equipment:

8 5/8" Surface Casing: Pathfinder type "A" guide shoe.

4 1/2" Production Casing: Pathfinder type "A" guide shoe. Self-fill flapper type float collar run one joint above shoe. Run 5 Pathfinder bow-type stabilizers every other joint above shoe. Run Dowell stage tools at 4300' and 1775'. Run one cement basket below and 5 Pathfinder rigid stabilizers above each tool.

Wellhead Equipment: 8 5/8" x 10", 2000# casing head with 4 1/2" casing hanger 6", 2000# x 10", 2000# tubing head and tree

Cementing:

8 5/8" Surface Casing: 140 sacks (165 cu. ft.) of Class "B" with 1/4# gel flake per sack and 3%  $\text{CaCl}_2$ . WOC 12 hours. Test to 600# prior to drilling out. (Volume is 100% excess.)

4 1/2" Production Casing: STAGE ONE: 215 sacks (317 cu. ft.) of 50/50 Poz with 6% gel, 1/4# gel flake per sack, followed by 50 sacks of neat with 2%  $\text{CaCl}_2$ . (Volume is 25% excess to cover top of Gallup.)

STAGE TWO: 265 sacks (395 cu. ft.) of 50/50 Poz w/6% gel, followed by 50 sacks of neat with 2%  $\text{CaCl}_2$ . (Volume is 50% excess to cover top of Cliff House.)

STAGE THREE: 255 sacks (379 cu. ft.) of 50/50 Poz w/6% gel. (Volume is 50% excess to cover top of Ojo Alamo.)

WOC and circulate between stages as required by well conditions.

---

L. O. Van Rayan  
District Production Manager

BJM/ke



**Southland Royalty Company**

December 4, 1979

Oil Conservation Division  
Mr. Al Kendrick  
1000 Rio Brazos Road  
Aztec, NM 87410

RE: Blowout Preventer Plan

Dear Sir:

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.

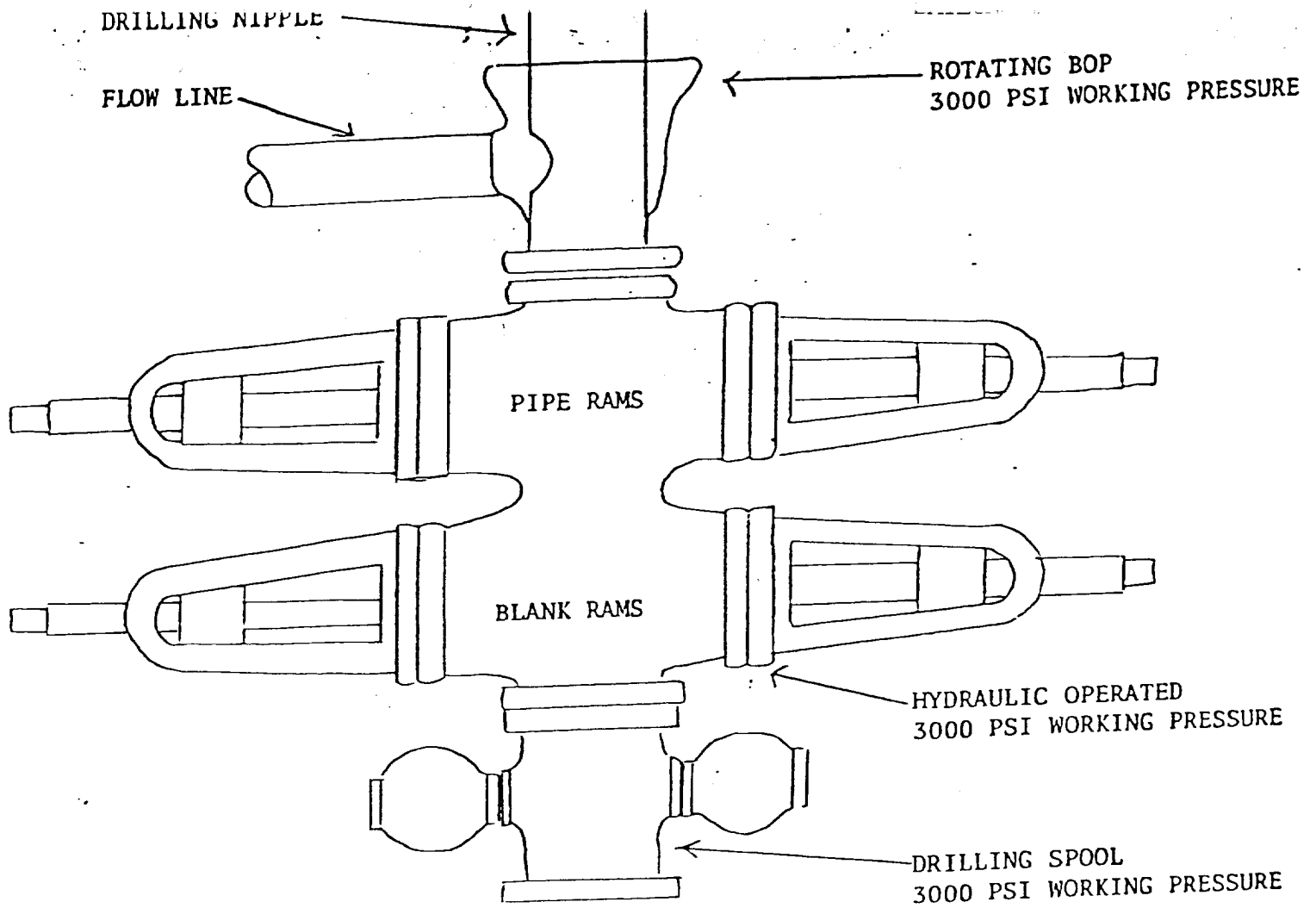
The preventer is 3000# working pressure and 6000# test pressure.

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

Yours truly,

Curtis C. Parsons  
District Engineer

CCP/ke



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