

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Southland Royalty Company

3. ADDRESS OF OPERATOR

P. O. Drawer 570, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)

At surface

1750' FNL & 1045' FEL

At proposed prod. zone

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

Approximately 4 1/2 miles northwest of Bloomfield, NM

15. DISTANCE FROM PROPOSED*

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

1045'

16. NO. OF ACRES IN LEASE

480

18. DISTANCE FROM PROPOSED LOCATION*

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

1000'

19. PROPOSED DEPTH

6581'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

E 320

20. ROTARY OR CABLE TOOLS

Rotary

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

5767' GR

22. APPROX. DATE WORK WILL START*

September 15, 1980

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	200'	140 sacks
7 7/8"	4 1/2"	10.5#	6581'	220 sacks - Stage 1
				252 sacks - Stage 2
				347 sacks - Stage 3

Surface formation is Nacimiento.

The top of the Ojo Alamo sand is at 476'. The top of the Kirtland shale is at 675'.

The top of the Pictured Cliffs sand is at 1871'.

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 December 31, 1980. This depends on time required for approval, rig availability and the weather.

Gas is 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

TITLE

District Engineer

DATE

4-18-80

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
AS AMENDED
DATE

JUL 16 1980

JAMES F. SIMS

DISTRICT ENGINEER

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

All distances must be from the outer boundaries of the Section

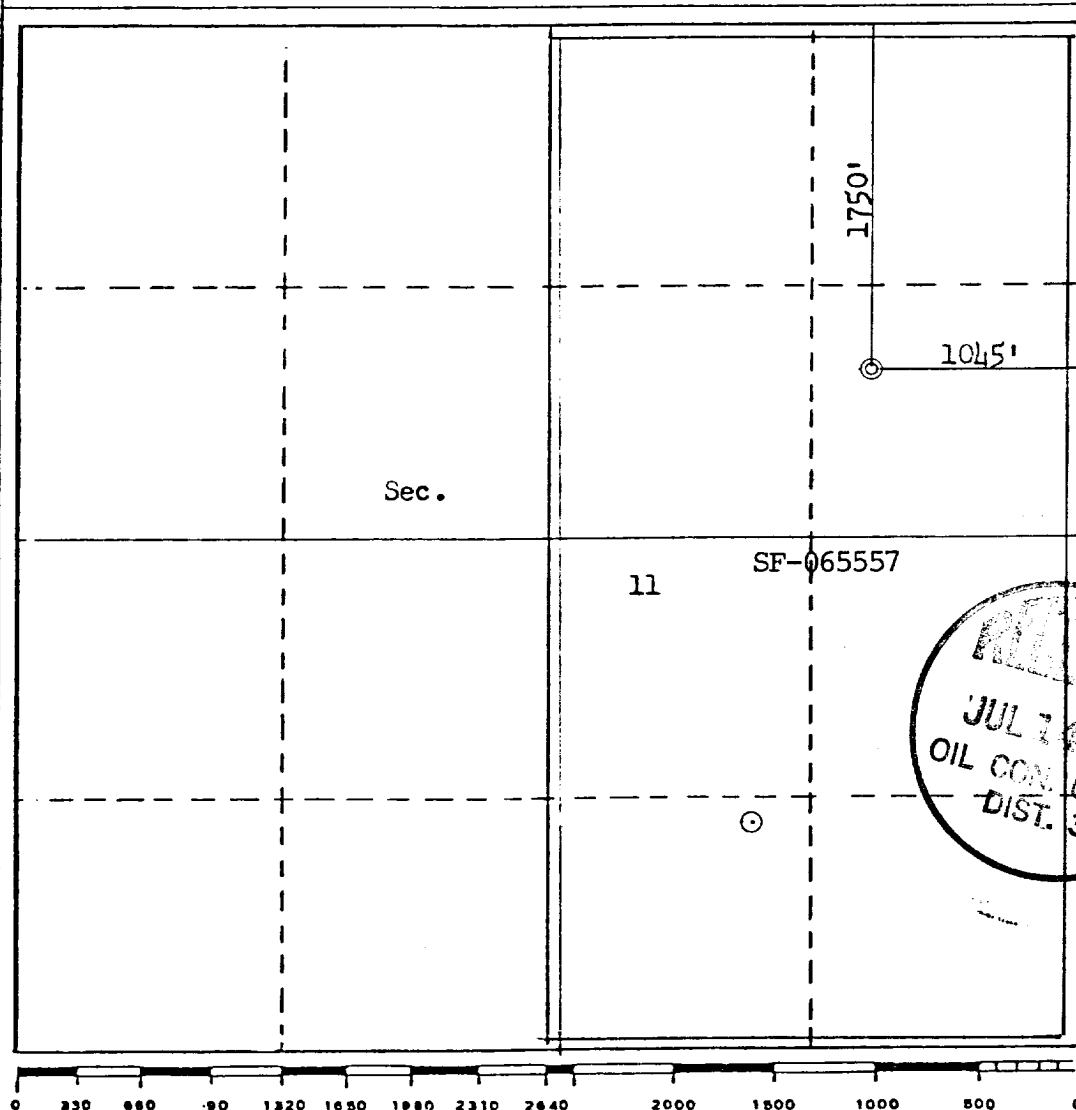
Operator SOUTHLAND ROYALTY COMPANY			Lease FEDERAL PRI		Well No. 1-E
Unit Letter H	Section 11	Township 29N	Range 12W	County San Juan	
Actual Footage Location of Well:					
1750 feet from the North line and		1045 feet from the East line			
Ground Level Elev. 5767	Producing Formation Dakota	Pool Basin Dakota	Dedicated Acreage: 320 Acres		

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



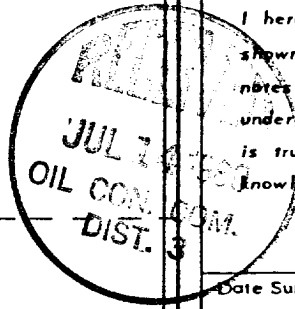
CERTIFICATION

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

Curtis C. Parsons

Name
Curtis C. Parsons
Position
District Engineer
Company
Southland Royalty Company
Date
April 18, 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
February 26, 1980
Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr, Jr.
Fred B. Kerr, Jr.
Certificate No. **3950**

SOUTHLAND ROYALTY COMPANY - DRILLING SCHEDULE

Federal PRI #1E
1750' FNL & 1045' FEL
Section 11, T29N, R12W
San Juan County, New Mexico

Field: Basin Dakota

Elevation: 5767' GR

Geology:

Formation Tops:	Ojo Alamo	476'	Graneros	6341'
	Pictured Cliffs	1871'	Dakota	6410'
	Cliff House	3459'	Total Depth	6581'
	Gallup	5485'		
	Greenhorn	6232'		

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

Drilling:

Contractor:

Tool Pusher:

SRC Representative:

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

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

Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
	12 1/4"	200'	8 5/8"	24# K-55
	7 7/8"	6581'	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. Five Pathfinder bow-type centralizers (run every other joint above shoe). Run Dowell stage tools at 1980' and 4550' with one cement basket below and five centralizers above each tool.

Wellhead Equipment: 8 5/8" X 10" 2000 psi casing head with 4 1/2" slips
10" 2000 X 6" 2000 tubing head with 2 3/8" EUE hanger

Cementing:

8 5/8" Surface Casing: 140 sacks (165 cu. ft.) of Class "B" with 1/4# gel flake per sack and 3% CaCl_2 . WOC for 12 hours. Test to 600# prior to drilling out. (Volume is 100% excess.)

4 1/2" Production Casing: STAGE ONE
170 sacks (253 cu. ft.) of 50/50 Poz with 6% gel & 1/4# gel flake per sack followed by 50 sacks of neat with 2% CaCl_2 . (Volume is 25% excess to cover top of Gallup.)

STAGE TWO
252 sacks (373 cu. ft.) of 50/50 Poz with 6% gel. (Volume is 50% excess to cover top of Cliff House.)

STAGE THREE
347 sacks (514 cu. ft.) of 50/50 Poz with 6% gel. (Volume is 50% excess to cover top of the Ojo Alamo.)

WOC and circulate between stages as required by well conditions.

L. O. Van Ryan
District Production Manager

OCP/ke



Southland Royalty Company

April 18, 1980

United States Geological Survey
Mr. James Sims
P. O. Box 959
Farmington, NM 87401

RE: Blowout Preventer Plan

Dear Sir:

All drilling and completion rigs will be equipped with 6" or larger double hydraulic blowout preventers and a hydraulic 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.

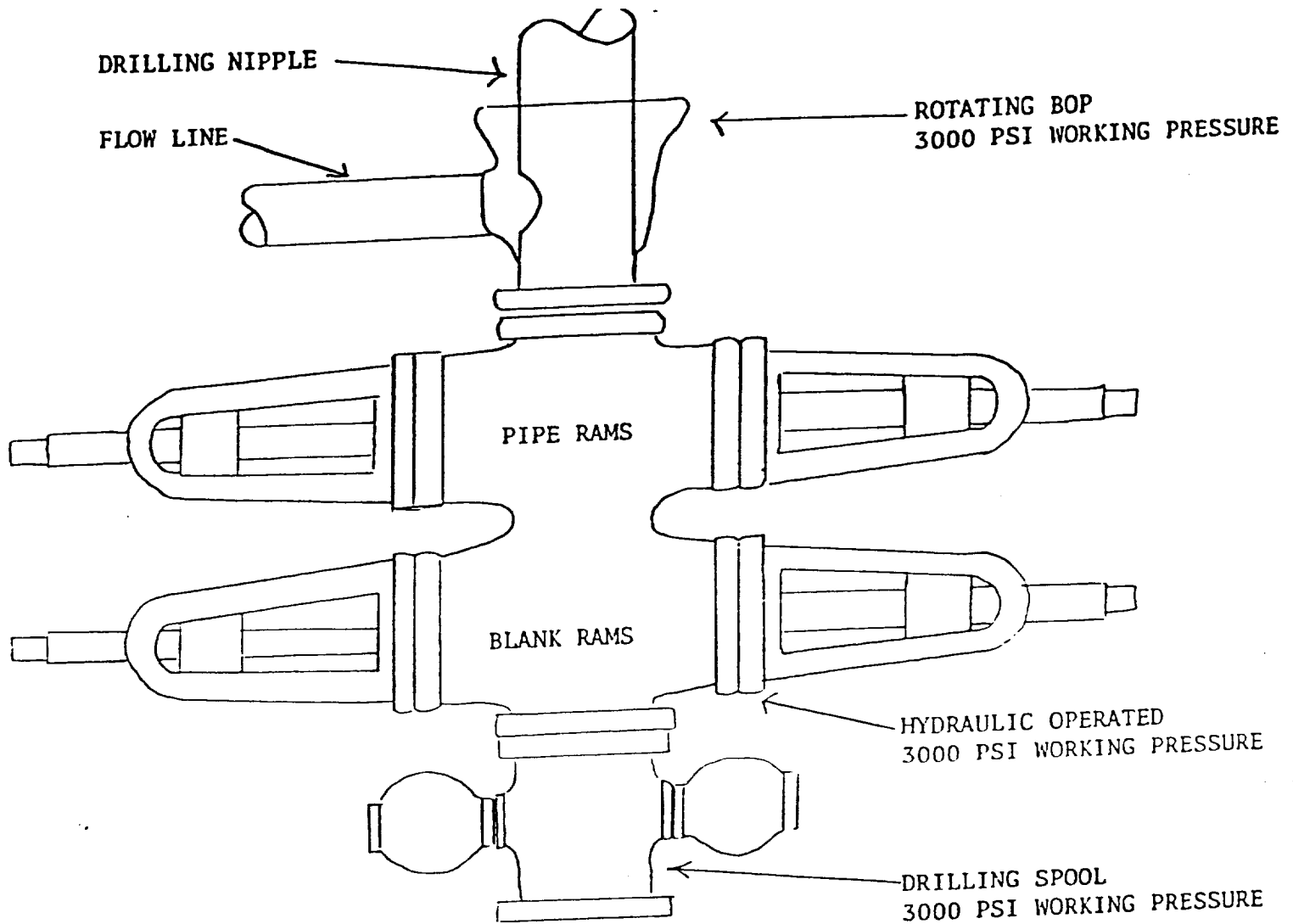
Yours truly,

A handwritten signature in cursive script that reads "Curtis C. Parsons". The signature is fluid and extends to the right.

Curtis C. Parsons
District Engineer

CCP/ke

Southland Royalty Company
Federal PRI #1E
1750' FNL & 1045' FEL
Section 11, T29N, R12W
San Juan County, New Mexico



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



Southland Royalty Company

April 18, 1980

United States Geological Survey
Mr. James Sims
P. O. Box 959
Farmington, NM 87401

Dear Sir:

Enclosed please find a map showing existing roads and planned access roads to Southland Royalty Company's Federal PRI #1E well.

The locations of tank batteries and flow lines will be on location with well. A burn pit will be provided for disposal of trash. Cuttings, drilling fluid and produced fluids will be put into the reserve pit and properly disposed of depending on amount and type of fluids.

There will be no camps or airstrips.

Also, enclosed is a location layout showing approximate location of rig, pits and pipe racks.

Water supply will be the San Juan River.

The location will be restored according to Bureau of Land Management standards. This work will begin when all related construction is finished.

Mr. Ross Lankford will be Southland Royalty Company's field representative supervising these operations.

Yours truly,

Curtis C. Parsons
Curtis C. Parsons
District Engineer

CCP/ke



Southland Royalty Company

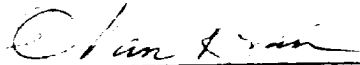
April 18, 1980

United States Geological Survey
Mr. James Sims
P. O. Box 595
Farmington, NM 87401

Dear Sir:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Southland Royalty Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date:



L. O. Van Ryan
District Production Manager

LOVR/ke