

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 surfaceN 1045' FSL & 1695' FWL
At proposed prod. zone

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

5 miles northwest of Aztec, New Mexico

15. DISTANCE FROM PROPOSED*

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

1045'

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

960'

16. NO. OF ACRES IN LEASE

2560

17. NO. OF ACRES ASSIGNED
TO THIS WELL

W/320

19. PROPOSED DEPTH

7211'

20. ROTARY OR CABLE TOOLS

Rotary

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

6069' GR

22. APPROX. DATE WORK WILL START*

February 1, 1980

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	10 3/4"	32.75#	200'	135 Sacks
9 5/8"	7 5/8"	26.4#	4760'	135 Sacks (Stage One)
				295 Sacks (Stage Two)
6 3/4"	5 1/2"	15.5#	4760'-7211'	250 Sacks

Surface formation is Nacimiento.

Top of Ojo Alamo sand is at 1231'.

Top of Pictured Cliffs sand is at 2486'.

Top of Point Lookout sand is at 4811'.

Fresh water mud will be used to drill from surface to Intermediate TD.

Gas will be used to drill from Intermediate TD to Total Depth.

No abnormal pressures or poisonous gases are anticipated in this well.

It is expected that this well will be drilled before July 31, 1980. This depends on time required for approvals, rig availability and the weather.

It is anticipated that an IES and GR-Density log will be run from Total Depth to surface casing.

Gas is dedicated.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present 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 Production Manager

DATE 11-19-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

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

NMOCC

All distances must be from the outer boundaries of the Section

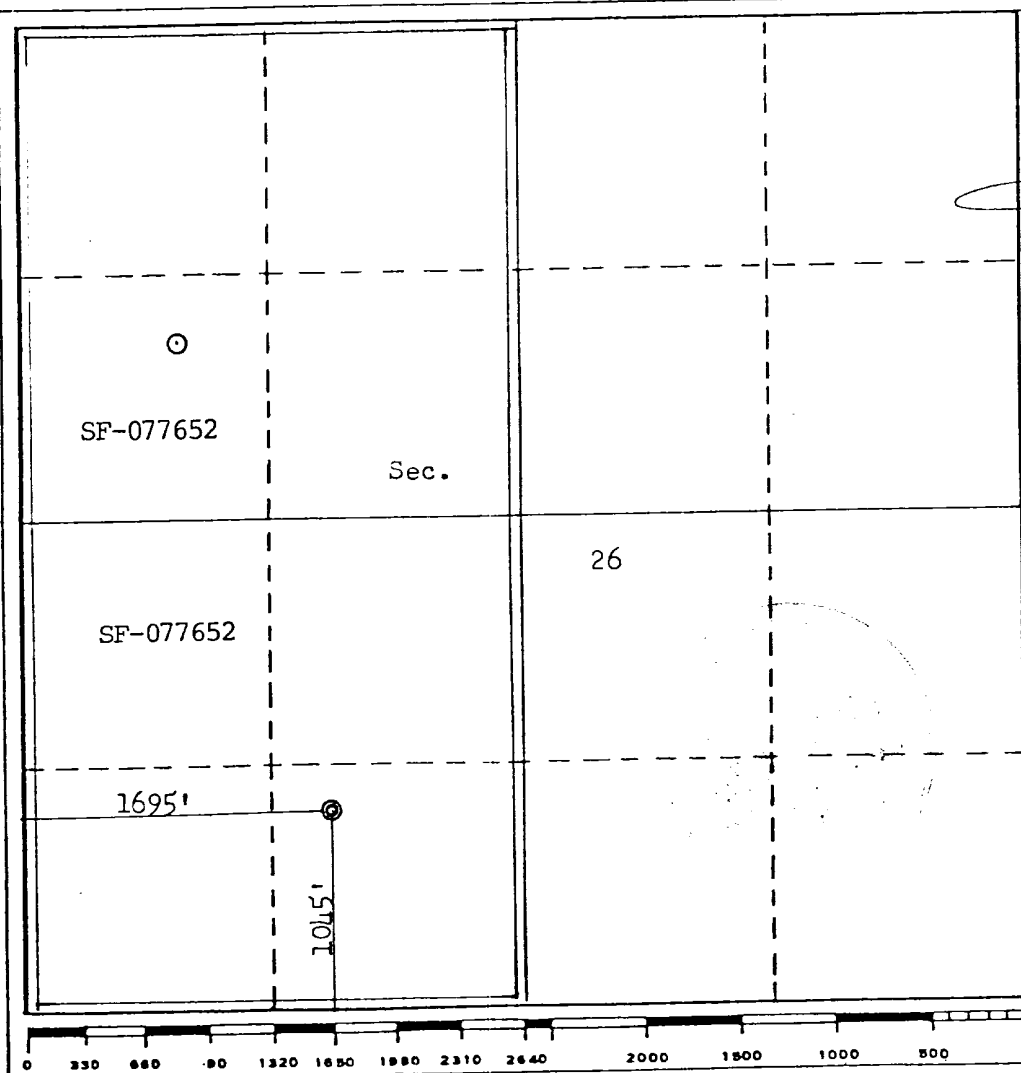
Operator SOUTHLAND ROYALTY COMPANY			Lease EAST		Well No. 10M
Unit Letter N	Section 26	Township 31N	Range 12W	County San Juan	
Actual Footage Location of Well: 1045 feet from the South line and 1695 feet from the West line					
Ground Level Elev. 6069	Producing Formation Dakota - Mesa Verde	Pool Basin - Blanco	Dedicated Acreage: 320 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.

Name
L. O. Van Ryan
Position
District Production Manager
Company
Southland Royalty Company
Date
November 19, 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 16, 1979
Registered Professional Engineer
and/or Land Surveyor
Fred B. Ekerdt

Certificate No.
3950

DRILLING SCHEDULE - EAST #10M

Location: 1045' FSL & 1695' FWL, Section 26, T31N, R12W, San Juan County, New Mexico

Field: Basin Dakota/Blanco Mesa Verde

Elevation: 6069' GR

Geology:

Formation Tops:	Ojo Alamo	1231'	Point Lookout	4811'
	Fruitland	2071'	Gallup	6091'
	Pictured Cliffs	2486'	Graneros	6946'
	Cliff House	4041'	Dakota	7011'
	Intermediate TD	4760'*	Total Depth	7211'

*INTERMEDIATE TD IS CRITICAL. DO NOT DRILL PAST 4760'. ACCURATE STRAP WILL BE NECESSARY.

Logging Program: IES and GR-Density from Intermediate TD to surface casing.
GR-Induction and GR-Density from TD to Intermediate casing.

Natural Gauges: Gauge well at TD. Also gauge any noticeable increases in gas. Record all gauges in tour book and turn in on morning report.

Drilling:

Contractor:

Tool Pusher:

SRC Ans. Service: 325-1841

SRC Representative:

Dispatch Number: 325-7391

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

Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
	13 3/4"	200'	10 3/4"	32.75# K-55
	9 5/8"	4760'	7 5/8"	26.4# K-55
	6 3/4"	4610'-7211	5 1/2"	15.5# K-55

Float Equipment:

10 3/4" Surface Casing: Pathfinder type "A" guide shoe.

7 5/8" Intermediate Casing: Pathfinder type "A" guide shoe. Self-fill insert float valve run 2 joints above shoe. 5 Pathfinder rigid stabilizers run every other joint above shoe. Run Dowell stage tool at 2700'. Run cement basket below and 5 Pathfinder rigid stabilizers above tool.

5 1/2" Liner: Liner hanger with neoprene pack -off. Pathfinder type "AP" guide shoe and type "A" float collar.

Wellhead Equipment: 10 3/4" X 10", 2000# casing head with 7 5/8" casing hanger
10", 2000# X 6", 2000# tubing head and tree

Cementing:

10 3/4" Surface Casing: 135 sacks (160 cu. ft.) of Class "B" with 1/4# gel flake/sk & 3% CaCl₂. WOC 12 hours. Test to 600# prior to drilling out. (Volume is 100% excess.)

7 5/8" Intermediate Casing: STAGE ONE
135 sacks (203 cu. ft.) of 50/50 Class "B" Poz w/6% gel (mixed w/7.2 gals wtr/sk). (Volume is 50% excess to cover top of Cliff House.)

STAGE TWO
225 sacks (415 cu. ft.) of 50/50 Class "B" Poz w/6% gel, followed by 70 sx Class "B" w/2% CaCl₂. (Volume is 50% excess to cover top of Ojo Alamo.)

WOC and circulate between stages as required by well conditions.

WOC 12 hours. Test to 1000 psi prior to drilling out.

5 1/2" Liner: 250 sacks (369 cu. ft.) of 50/50 Poz w/6% gel, 1/4# gel flake per sx, 0.6% Halad 9 or equivalent (70% excess). If hole gets wet and mist drilling is required, use 290 sacks (434 cu. ft.) for 100% excess.

Precede cement with 20 barrels of gelled water.

L. O. Van Ryan
District Production Manager

BJM/ke

OCP _____

DATE _____



Southland Royalty Company

November 19, 1979

United States Geological Survey
P. O. Box 959
Farmington, New Mexico

Attention: James Sims

Dear Sir:

Enclosed please find a map showing existing roads and planned access roads to Southland Royalty Company's East #10M 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.

Contractor will furnish restroom facilities on location.

There will be no air strips or camps.

Also, enclosed is a location layout showing approximate location of rig, pits and pipe racks and cut required to build this location.

Water supply will be Farmers Ditch.

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,

L. O. Van Ryan
District Production Manager

LOVR/dg



Southland Royalty Company

November 19, 1979

United States Geological Survey
P. O. Box 959
Farmington, New Mexico

Attention: James Sims

Re: Blowout Preventer Plan

Dear Sir:

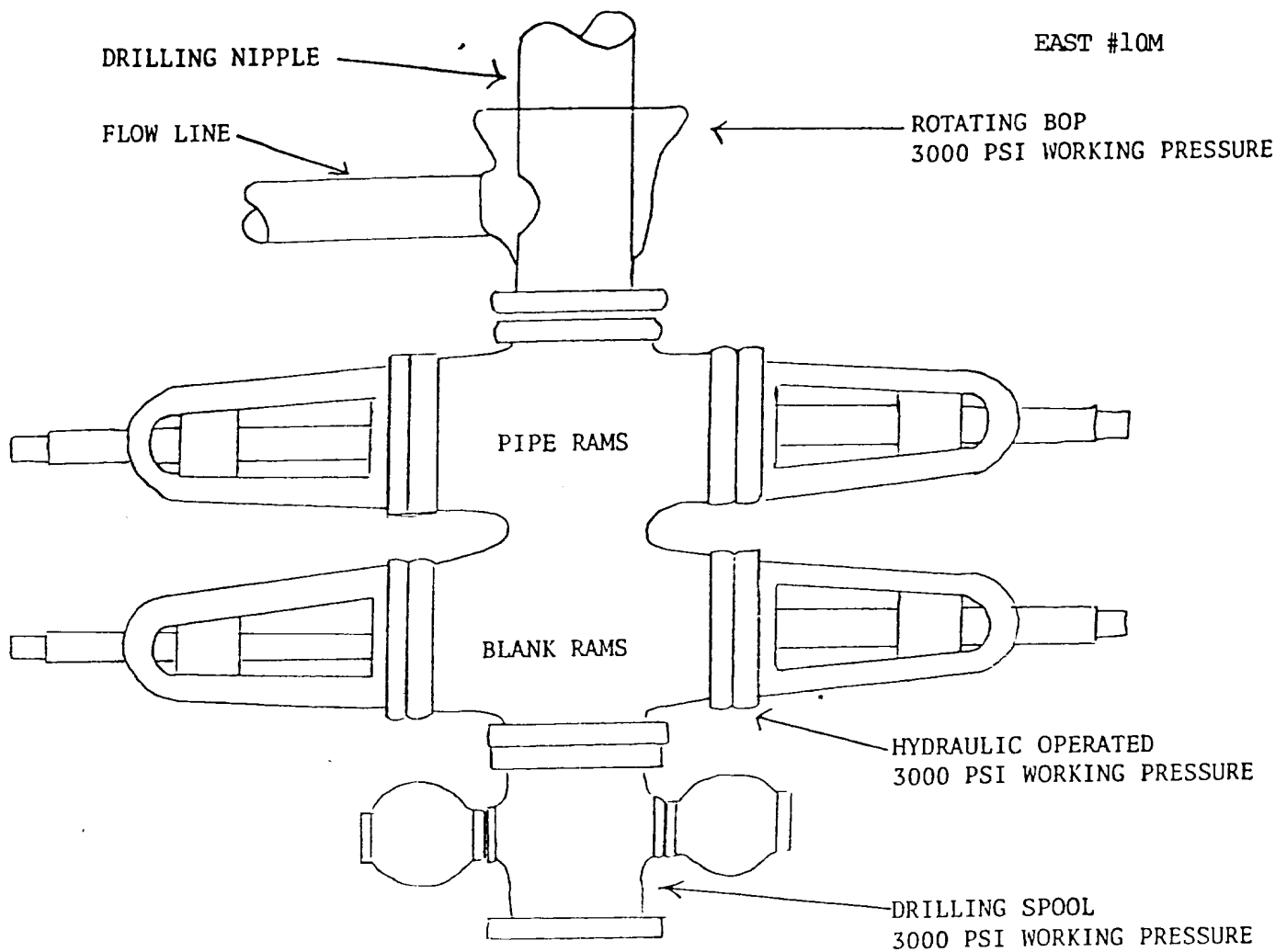
All drilling and completion rigs will be equipped with 6" or larger double hydraulic blowout preventers and a hydraulic closing unit with steel lines.

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

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,

L. O. Van Ryan
District Production Manager



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



Southland Royalty Company

United States Geological Survey
P. O. Box 959
Farmington, New Mexico 87401

Attention: James Sims

Dear Sir:

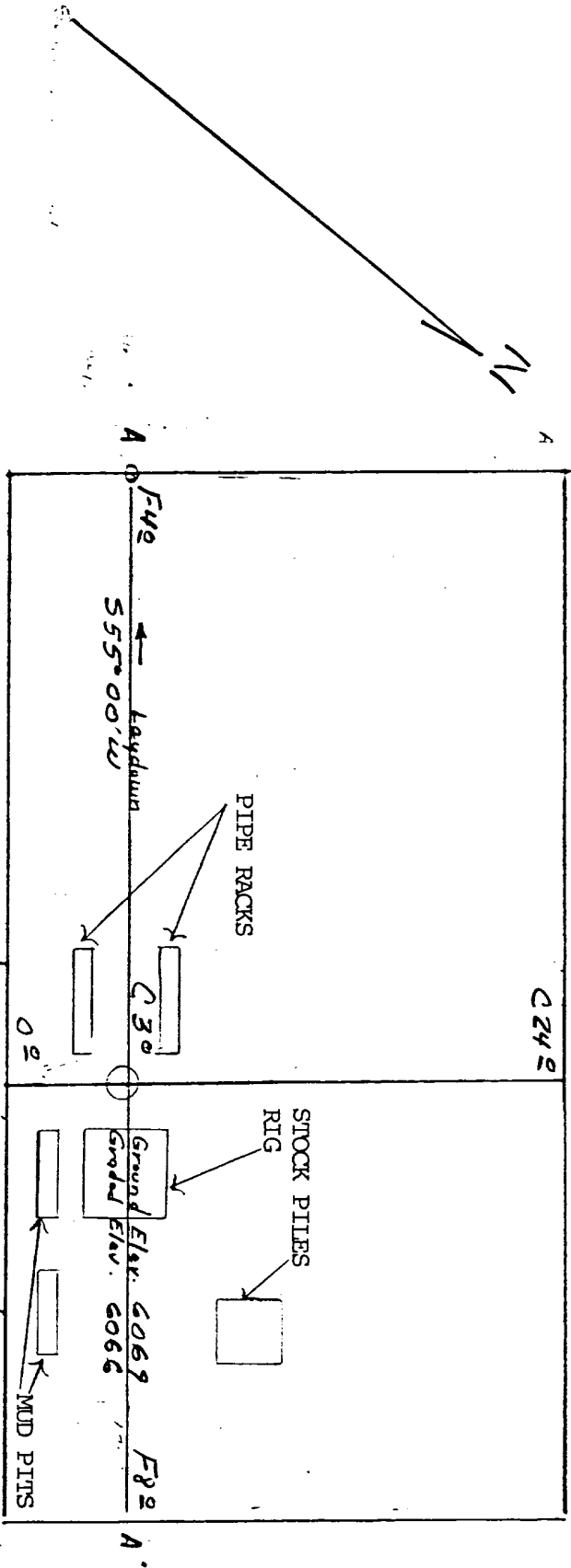
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein 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: November 19, 1979

Name: 

Title: District Production Manager

SOUTHLAND ROYALTY CO. #10M EAST
 1045' FSL 1695' FWL Sec 26-T31N-R12W SAN JUAN COUNTY, NEW MEXICO



Vert. 1"=40' A-A' Horiz: 1"=100'

6080				
6070				
6060				
6050				

B-B' E

6080				
6070				
6060				
6050				

Vert: 1"=40' C-C' Horiz: 1"=100'

D-D' E

KERR LAND SURVEYING
 Date: 10-16-79



PROPOSED LOCATION
EXISTING LOCATIONS
PROPOSED ROAD
EXISTING ROADS



Vicinity Map for
SOUTHLAND ROYALTY CO. #10M EAST
1045' FSL 1695' FWL Sec 26-T31N-R12W
SAN JUAN COUNTY, NEW MEXICO