

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

E 1650' FNL & 915' FWL
At proposed prod. zone

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

40 miles south/southwest of Dulce, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any) 1650'

16. NO. OF ACRES IN LEASE

2561.86

17. NO. OF ACRES ASSIGNED
TO THIS WELL

W320.36 + W/320.36

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

1825'

19. PROPOSED DEPTH

8254'

20. ROTARY OR CABLE TOOLS

Rotary

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

7062' GR

22. APPROX. DATE WORK WILL START*

September 30, 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 sx - circ. to surface
9 7/8"	7 5/8"	26.40#	4086'	390'sx - to cover to 1500'
6 3/4"	5 1/2"	15.50#	3966'-6800'	410 sx - circ. liner top
			6800'-8254'	"

Surface formation is San Jose.

Top of Ojo Alamo sand is at 3519'.

Top of Pictured Cliffs sand is at 3786'.

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

Gas will be used to drill from intermediate TD to TD.

It is anticipated that an IES and GR-Density log will be run at TD.

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

R. E. Fildes

TITLE District Engineer

DATE 8-12-80

(This space for Federal or State office use)

APPROVED

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

James F. Sims
JAMES F. SIMS
DISTRICT ENGINEER

APPROVAL DATE

TITLE

DATE

SEE PAGE

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

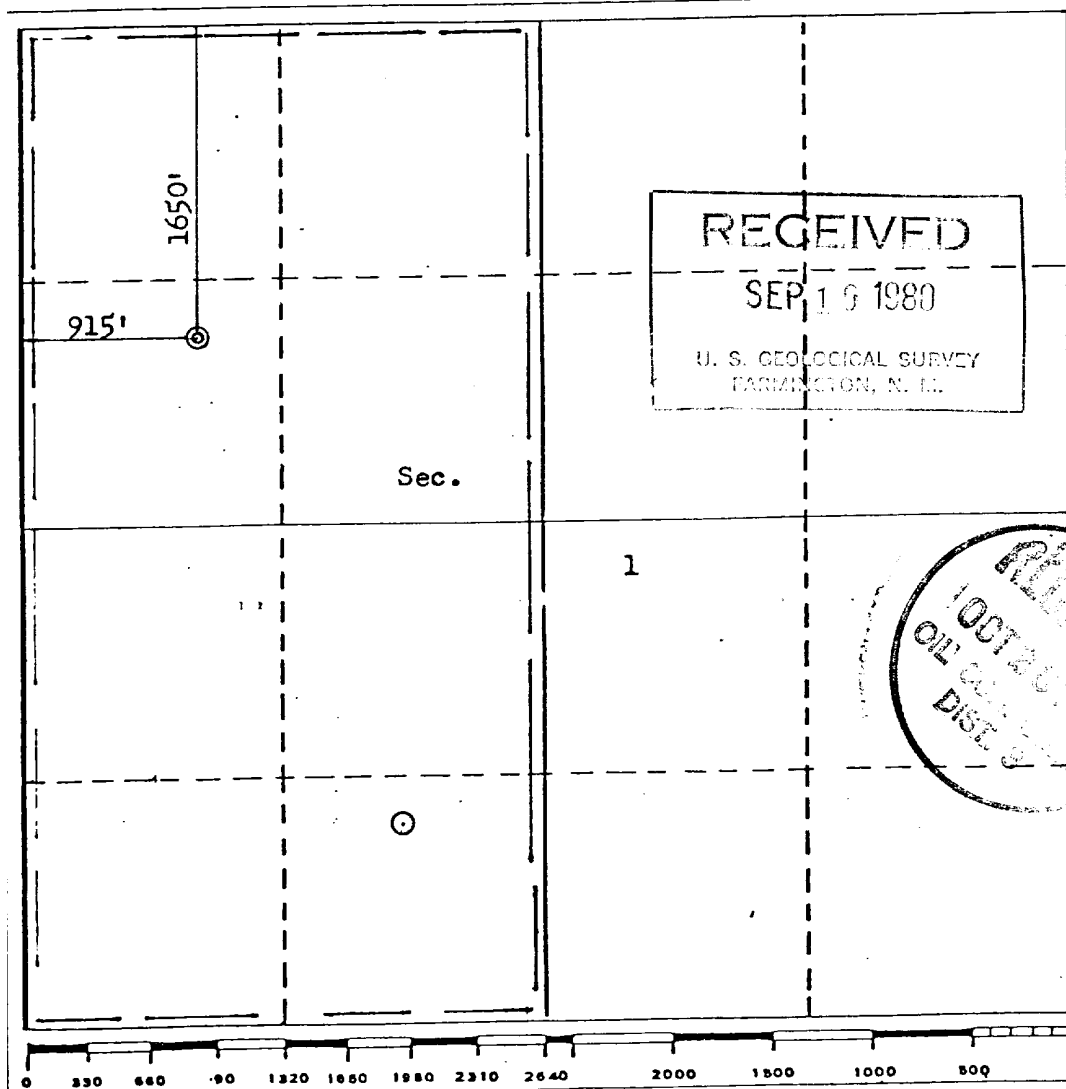
Operator SOUTHLAND ROYALTY COMPANY			Lease JICARILLA 101		Well No. 3M
Unit Letter E	Section 1	Township 26N	Range 4W	County Rio Arriba	
Actual Footage Location of Well:					
1650 feet from the North line and		915 feet from the West line			
Ground Level Elev. 7062	Producing Formation Mesa Verde-Dakota	Pool Blanco Mesa Verde-Basin Dakota		Dedicated Acreage: 320/160 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
9-11-80

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.

Reissued August 17, 1980
Date Surveyed

June 22, 1980
Registered Professional Engineer
and/or Land Surveyor
Fred B. Kerr Jr.
Certificate No. MEX
3950 F. KERR, JR.

SOUTHLAND ROYALTY COMPANY - DRILLING SCHEDULE

JICARILLA 101 #3-M

1650' FNL & 915' FWL
Section 1, T26N, R4W
Rio Arriba County, New Mexico

Field: Blanco Mesa Verde/Basin Dakota

Elevation: 7062' GR

Geology:

Formation Tops:	Ojo Alamo	3519'	Cliff House	5496'
	Fruitland	3644'	Point Lookout	5927'
	Pictured Cliffs	3786'	Gallup	6928'
	Intermediate TD	4086'	Graneros	7975'
			Dakota	8074'
			Total Depth	8254'

Logging Program: IES from Intermediate TD to Surface Casing Shoe,
GR-Density from Intermediate TD to 3000'.
GR-Induction from Total Depth to Intermediate Casing shoe.
GR-Density from Total Depth to 6800' and from
6300' to 5400'. Log any shows.

Coring Program: None

Natural Gauges: Gauge at last connection above Cliff House, Point
Lookout, Gallup, Graneros, Dakota, and Total Depth.
Gauge any increase in gas flow. Note all depths and
gauges on daily drilling report.

Drilling:

Contractor:

Tool Pusher:

SRC Representative:

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

Mud Program: Fresh water mud from surface casing shoe to Intermediate
Total Depth. Gas from Intermediate casing point to
Total Depth.

Materials:

Casing Program:	<u>Hole Size</u>	<u>Depth Set</u>	<u>Casing Size</u>	<u>Weight & Grade</u>	
	13-3/4"	200'	10-3/4"	32.75#	K-55
	9-7/8"	4086'	7-5/8"	26.40#	N-80
	6-3/4"	3966'-6800'	5-1/2"	15.50#	K-55
		6800'-8254'	5-1/2"	17.0 #	K-55

Float Equipment:

10-3/4" Surface Casing: B&W FC01 Cement Guide Shoe.
7-5/8" Intermediate Casing: B&W FC01 Cement Guide Shoe, B&W F255 self fill float collar, 5 B&W CA01 rigid centralizers spaced every other joint above shoe. Run float two joints above shoe..
5-1/2" Liner: B&W FC03 Geyser Guide Shoe and B&W FP01 flapper float collar.
7-5/8" X 5-1/2" liner hanger with neoprene packoff.

Tubing:

5950' of 1-1/2", 2.76#, V-55, IJ (Mesa Verde) and 8200' of 1-1/2", 2.9#, J-55 EUE (Dakota).

Wellhead:

10-3/4" Female 8rd X 10", 2000# casing head.
10", 2000# X 6", 2000# tubing head with dual 1-1/2" tubing hanger.

Cementing:

10-3/4" Surface Casing: Use 135 sacks (160 cu.ft.) of Class "B" with 2% CaCl₂ and 1/4# gel flake per sack. 100% excess to circulate. WOC 12 hours. Test to 600 psi prior to drilling out.
7-5/8" Intermediate Casing: Use 320 sacks of 50/50 Class "B" Poz with 6% gel and 1/4# gel flake per sack followed by 70 sacks (556 cu.ft.) of Class "B" with 2% CaCl₂ and 1/4# gel flake per sack. To cover to 1500'. Run temperature survey 8 hours after plug down. WOC 12 hours. Test to 1000 psi prior to drilling out.
5-1/2" Liner: Use 410 sacks (607 cu.ft.) of 50/50 Class "B" Poz with 6% gel, 0.5% CFR-2, 0.4% HR-7 and 1/4# gel flake per sack. 70% excess to circulate liner top. Precede cement with 40 barrels gel water.

L. O. Van Ryan
District Production Manager

9/10/80

REF/eg



Southland Royalty Company

September 15, 1980

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

Dear Mr. Sims:

Enclosed please find a map showing existing roads and planned access roads to Southland Royalty Company's Jicarilla 101 #3M well.

The location of tank batteries and flow lines will be on location with the 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, pipe racks and cut required to build this location.

Water supply will be water holes along the Tapacitos Wash.
All water will be transported by truck and stored on location.

The location will be restored according to the Bureau of Indian Affairs 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.

Sincerely,

SOUTHLAND ROYALTY COMPANY

Robert E. Fielder
District Engineer

REF/ke



Southland Royalty Company

September 12, 1980

United States Geological Survey
Mr. James F. Sims
District Oil and Gas Supervisor
P. O. Box 959
Farmington, NM 87401

RE: Blowout Preventer Plan

Dear Mr. Sims:

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

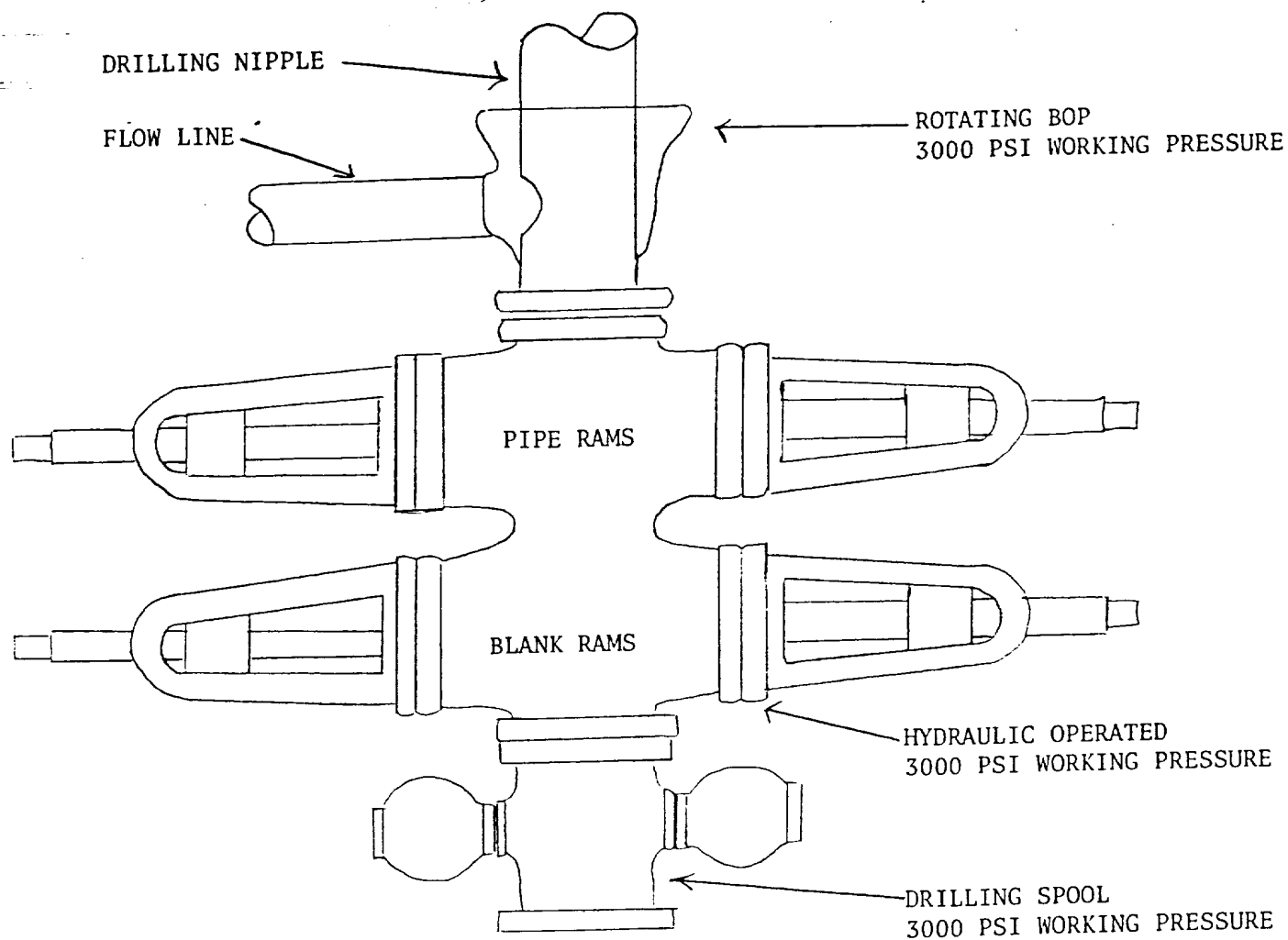
The preventer is 3000# working pressure and 6000# test pressure.
All crews will be thoroughly trained in the operation of this
preventer. The preventer will be tested frequently enough to
insure proper operation.

Sincerely,

SOUTHLAND ROYALTY COMPANY

Robert E. Fielder
District Engineer

REF/ke



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

Southland Royalty Company
Jicarilla 101 #3M
1650' FNL & 915' FWL
Section 1, T26N, R4W
Rio Arriba Co., NM



Southland Royalty Company

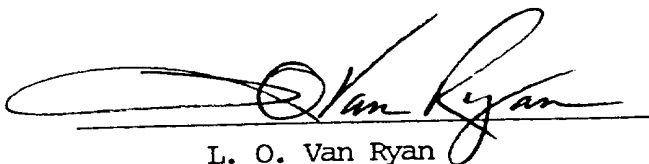
September 12, 1980

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

Dear Sir:

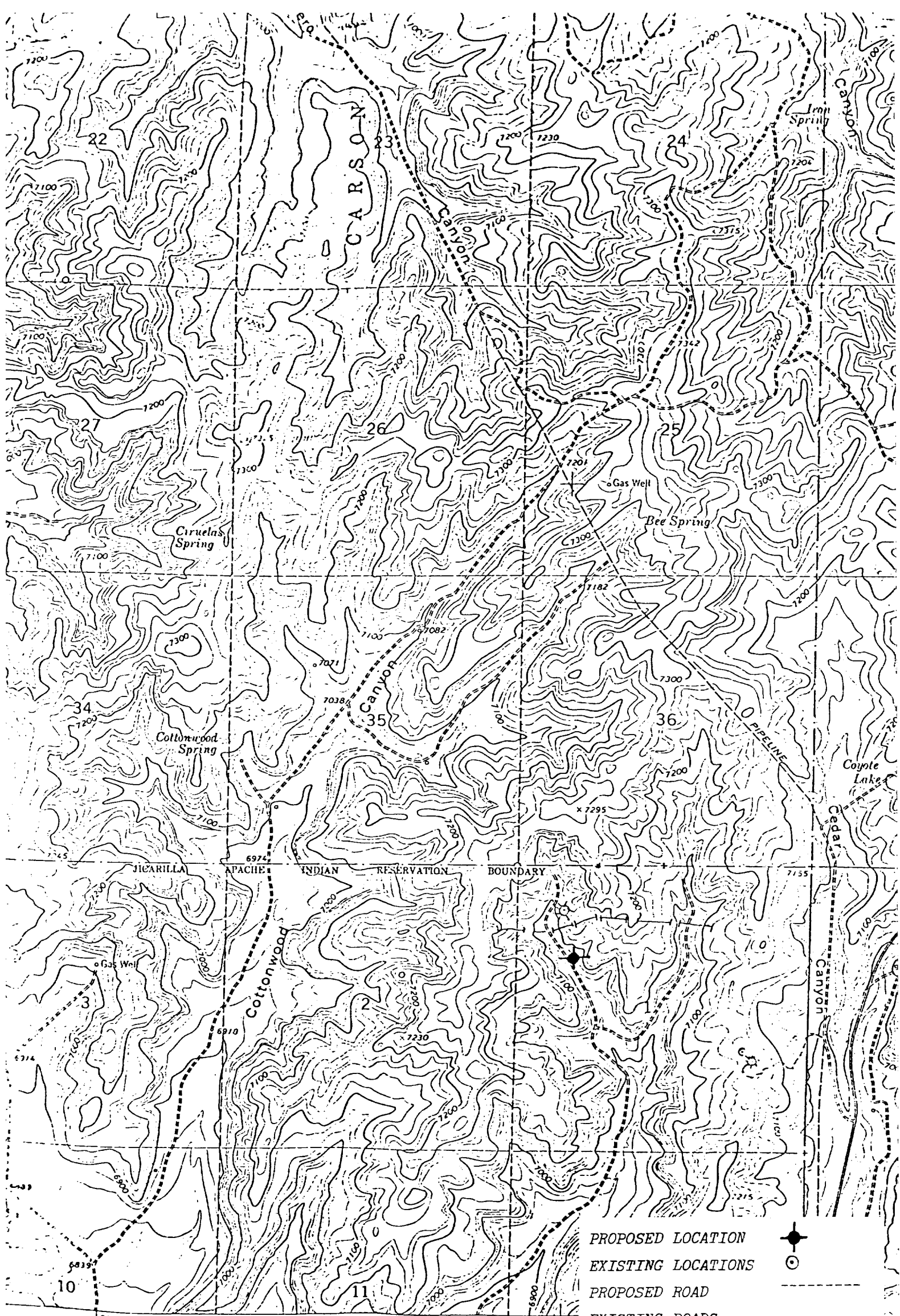
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated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

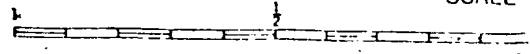
LOVR/ke



PROPOSED LOCATION
 EXISTING LOCATIONS
 PROPOSED ROAD
 EXISTING ROADS



ISCHMIT
 4556
 SCALE



Published by the Geological Survey
 1963

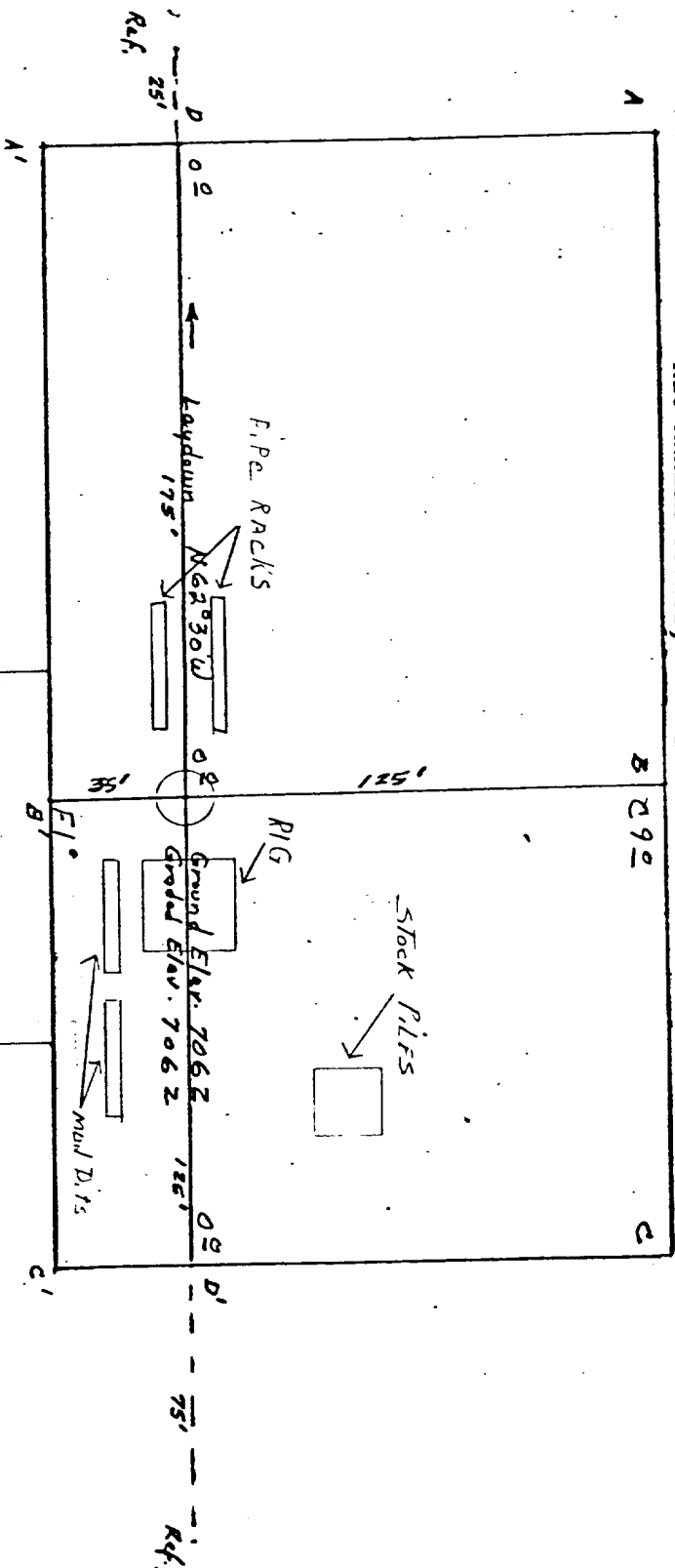
Methods from aerial
 1962 field checked 1963
 datum
 coordinate system, central zone
 and ticks

1"=18'
 23 MILES

Vicinity Map for
 SOUTHLAND ROYALTY CO. #3^M JICARILLA 101
 1650' FNL 915' FWL Sec. 1-T26N-R4W
 RIO ARRIEA COUNTY, NEW MEXICO

EST
 1111
 10 VF

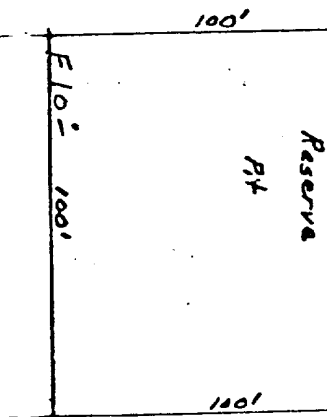
TITLE OF LOCATION
 SOUTHLAND ROYALTY CO. #3M JICARILLA 101
 1650' ENL 915' ENL Sec. 1 T26N-R4W
 RIO ARriba COUNTY, NEW MEXICO



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

D-D' E

7070					
7060					
7050					
7040					



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

B-B' E

7070					
7060					
7050					
7040					

KERR LAND SURVEYING
 Date: 6/12/78

Jack Keras