SUBMIT IN TRIPLICATE*

(Other instructions on

Form approved. Budget Bureau No. 42-R1425.

UNITED STATES reverse side) DEPARTMENT OF THE INTERIOR

	3	2)	_	C	3	7	-,	7	/	8.	3	3	
1	5.	LE	ASE	DES	IGN2	TIO	(A)	(I)	SE	BIA	L l	١٥,	

GEOLOGICAL SURVEY							Jicarilla 101		
APPLICA	TION I	FOR PERMIT	TO DRILL, I	DEEP	EN, OR PLUG B	ACK	6. IF INDIAN, ALLOTTE	E OR TRIBE NAME	
1a. TYPE OF WORK	DRILL		DEEPEN [PLUG BAC		7. UNIT AGREEMENT A	AME	
b. TYPE OF WELL	GAS WELL	X OTHER			INGLE MULTIPI	E	8. FARM OR LEASE NA	ME	
2. NAME OF OPERA							Jicarilla 101		
	South1	and Royalty	Company				9. WELL NO.		
3. ADDRESS OF OPE							#8		
	P. O.	Drawer 570,	Farmington,	New	Mexico		10. FIELD AND POOL, OR WILDCAT		
4. LOCATION OF W	ELL (Repor	t location clearly ar	d in accordance wi	th any s	State requirements.*)		Basin Dakota 🕳		
At surface	2510'	FSL & 1450'	FWL				11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA		
At proposed pr	ođ. zone				•	_	Section 25, T	26N, R4W	
14. DISTANCE IN	MILES AND	12. COUNTY OR PARISH 13. STATE							
	43 mil	es south/sou	uthwest of E	ulce	, New Mexico		Rio Arriba	New Mexico	
15. DISTANCE FROM LOCATION TO PROPERTY OR 1 (Also to near	NEAREST LEASE LINE,			16. N	O. OF ACRES IN LEASE		or ACRES ASSIGNED HIS WELL 32	0	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.					E030'	20. ROTA	0. ROTARY OR CABLE TOOLS ROTARY		
21. ELEVATIONS (Sh	6950'	GR GR, etc.)		·			August 1, 1		
23.			PROPOSED CASI	NG AN	D CEMENTING PROGRA	М			
SIZE OF HOL	E	SIZE OF CASING	WEIGHT PER F	сот	SETTING DEPTH		QUANTITY OF CEME	NT	
12-1/4'	·	9-5/8''	32#		200'	13	30 cu. ft.		
8-3/4'		7''	23#		38961	40	68 cu. ft.		
6-1/4'	1	4-1/2"	10.50#		3746'-7000' 666 cu. ft.		66 cu. ft.		
	ł	4-1/2"	11.60#		70(0'-8030'				

Surface formation is San Jose.

Top of Ojo Alamo is at 1808'.

Top of Pictured Cliffs is at 3596'.

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

An air system will be used to drill from intermediate depth to total depth.

It is expected that a Gamma Ray Density and a Gamma Ray Induction log be run at total depth.

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

It is expected that this well be drilled by December 31, 1978. This depends on time required for approvals, rig availability and the weather.

Gas is dedicated.

BIGNED Jan Ky	District Production Manager July 3, 1978
(This space for Federal or State office use)	Table 1982
PERMIT NO.	APPROVAL DATE
APPROVED BY	TITLE DATE
CONDITIONS OF APPROVAL, IF ANY:	JUL 71978

		All distances must be f		les of the Section.	
Operator SOUTHLAND R	ROYALTY COMPAN	IX	Lease JICARILLA	101	Well No.
Unit Letter	Section	Township	Range	County	
K	25	26N	754	Rio A	Arriba 🖊
Actual Footage Loca	ation of Well:				
2510	feet from the SOU	ith line and	1450	feet from the V	West Hine
Ground Level Elev. 6950	Producing Form Dakota	nation	Pool	Basin	Dedicated Acreage; 320 Acres
2. If more the interest and3. If more than	an one lease is ad royalty). an one lease of di	dedicated to the well	l, outline each an	d identify the ow	arks on the plat below. Thereof (both as to working terests of all owners been consoli-
Yes If answer in this form it No allowab	No If an is "no," list the of necessary.)	ed to the well until all	f consolidation _ riptions which ha interests have b	een consolidated	consolidated. (Use reverse side of I (by communitization, unitization, has been approved by the Commis-
			 		CERTIFICATION
		Ì 		I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
	+	ec	 		Company Southland Royalty Company Date July 3, 1978
11,50	©	25	 	1 1	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.
FACE COMMAND	90 1320 1650 198		1202	22.22	June 12, 1978 Registered Professional Engineer and/or Land Surveyor. Fred B. Kerr Jr. Certificate No. 3950



United States Geological Survey P. O. Box 1809 Durango, Colorado

Attention: Mr. Jerry Long

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:	July 3, 1978	Name: Varsa.
		Title: District Engineer



July 3, 1978

United States Geological Survey P. O. Box 1809
Durango, Colorado

Attention: Mr. Jerry Long

Dear Sir:

Enclosed please find map showing existing roads and planned access roads to Southland Royalty Company's Jicarilla 101 #8 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, pipe racks and cut required to build this location.

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

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

Mr. Max Larson will be Southland Royalty Company's field representative supervising these operations.

Yours truly,

L. O. Van Ryan

District Production Manager

LOVR/dg



July 3, 1978

United States Geological Survey P. O. Box 1809 Durango, Colorado

Attention: 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.

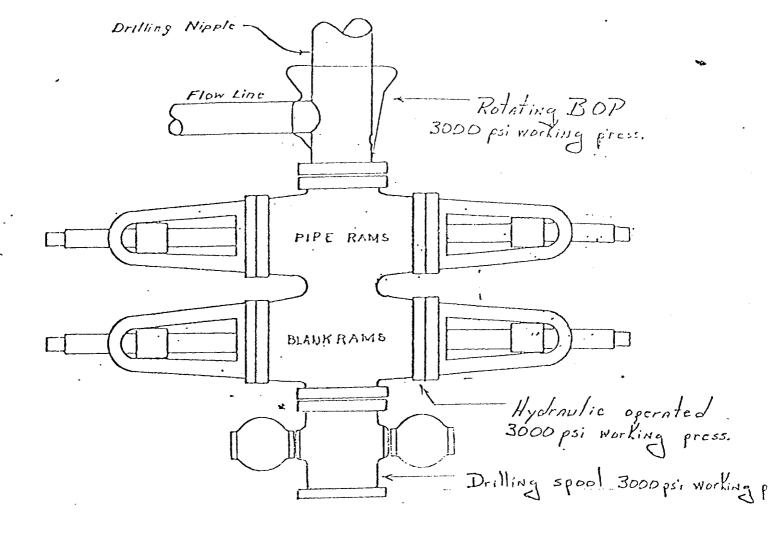
All crews will be throughly trained in the operation of this preventer. The preventer will be tested frequently enough to insure proper operation.

Yours truly,

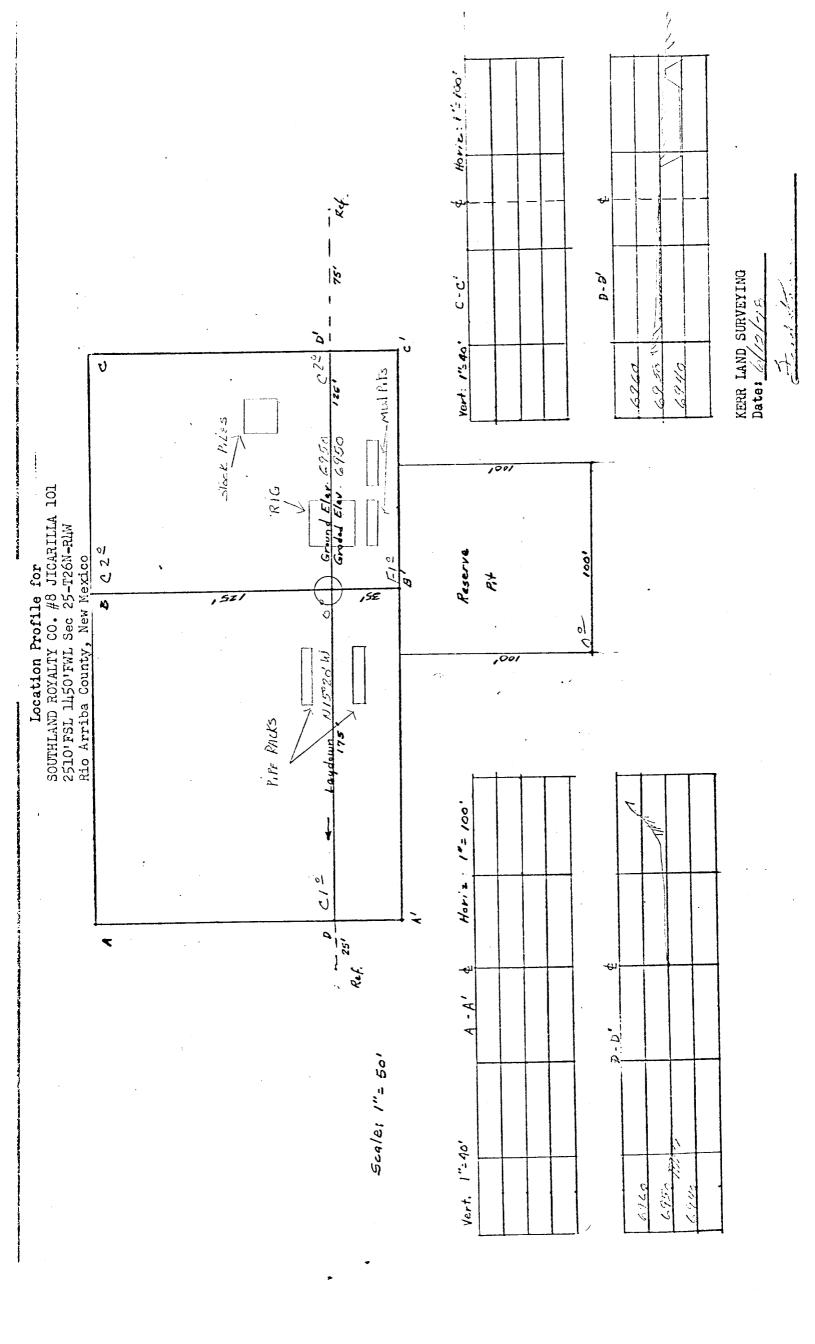
L. O. Van Ryan

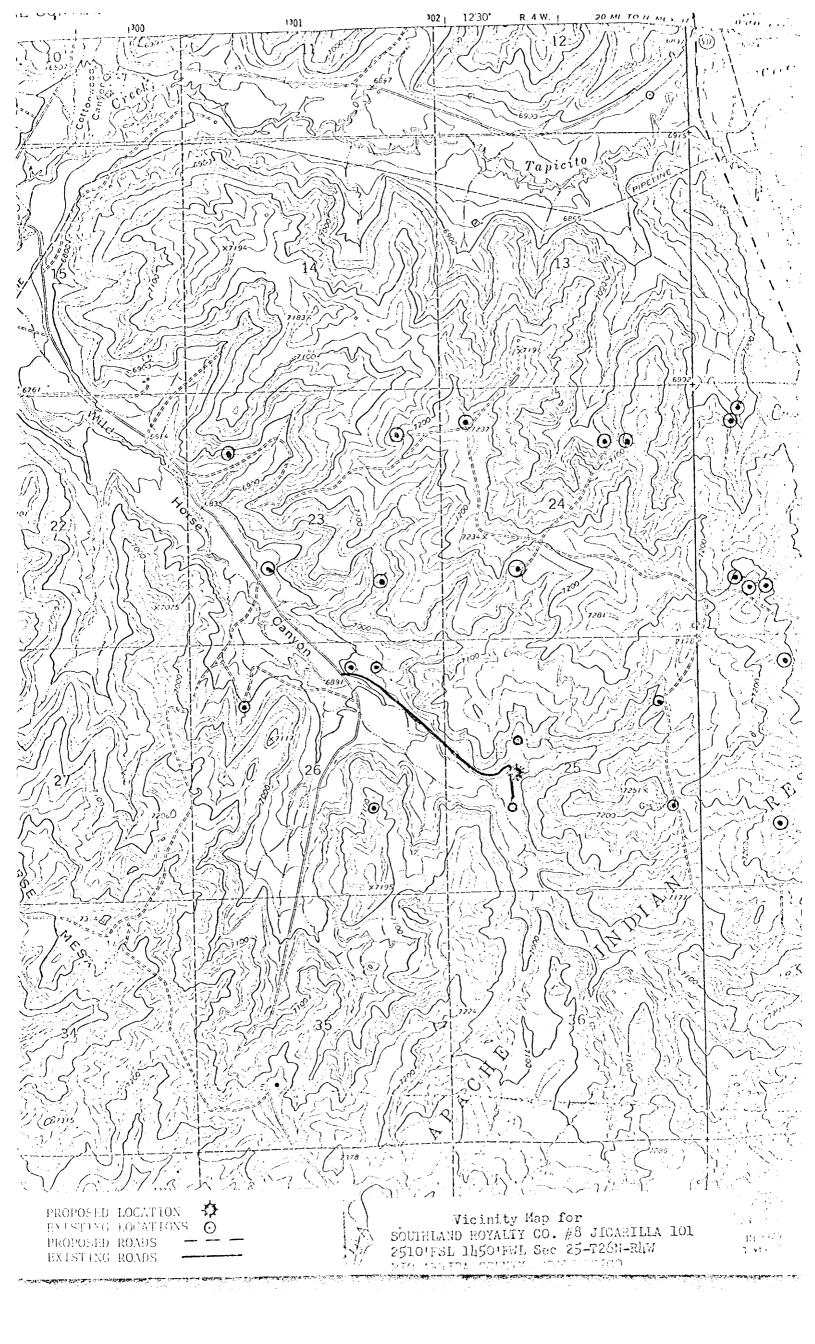
District Production Manager

LOVR/dg



Preventers and spools are to have through bore of 6" - 3000# PSI or larger.





DRILLING SCHEDULE - JICARILLA 101 #8

Location: 2510' FSL & 1450' FWL, Section 25, T26N, R4W, Rio Arriba, New Mexico

Field: Basin Dakota <u>Elevation</u>: 6963' KB

Geology:

1808' Point Lookout 57281 Ojo Alamo Formation Tops: 34691 67701 Gallup Fruitland 78041 Pictured Cliffs 35961 Graneros Intermediate 38961 Dakota 7880' Cliff House 52671 Total Depth 80301

Logging Program: Gamma Ray Density and Gamma Ray Induction at TD.

Coring Program: None

Natural Gauges: Gauge 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 Answering Service: 325-1841

SRC Representative: Dispatch Number: 325-7391

Mud Program: Fresh water mud to intermediate. Pretreat with 5% LCM at 3480'.

Air from intermediate to TD.

Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
5 0	12 1/4"	200'	9 5/8"	32# H-40
	8 3/4"	38961	7''	23# K-55
	6 1/4"	3746' - 7000'	4 1/2"	10.5# K-55
	•	7000' - 8030'	4 1/2"	11.6# K-55

Float Equipment:

9 5/8" surface casing - Pathfinder cement guide shoe.

7" intermediate casing- Pathfinder type A guide shoe. Howco self-fill insert float valve. 5 Pathfinder rigid centralizers. Run float valve 2 joints above shoe. Run centralizers every other joint above shoe.

4 1/2" liner - BOT liner hanger with PBR and neoprene pack-off. Pathfinder type AP guide shoe and type A float collar.

Tubing:

Wellhead Equipment: 9 5/8" X 10", 2000# casing head.

10", 2000# X 6", 2000#, tubing head with donut for 2 3/8"

tubing.

DRILLING SCHEDULE - JICARILLA 101 #8 (Page 2)

Cementing:

- 9 5/8" surface casing- 110 sacks Class "B" with 3% CaCl₂. (130 cu. ft.) WOC for 12 hours. Test to 600 psi before drilling
- 7" intermediate casing-260 sacks 50/50 poz with 6% gel and .6% Halad 9 (12.8PPG) followed by 70 sacks of Class "B" with 2% CaCl₂ and .6% Halad 9 (468 cu. ft.). Run temp. survey after 8 hours. WOC for 12 hours and test to 1000 psi before drilling out.
- 4 1/2" liner Precede cement with 40 bbls. gelled water. Cement with 450 sacks 50/50 poz with 6 % gel, .6% fluid loss additive and .3% retarder (666 cu. ft. - 50% excess to circulate liner).

6-29-78