

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

I 1765' FSL & 860' FEL

At proposed prod. zone

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

4 miles NW of Flora Vista, NM

15. DISTANCE FROM PROPOSED*

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

860'

18. DISTANCE FROM PROPOSED LOCATION*

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

19. PROPOSED DEPTH

7063'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

E/ 320

20. ROTARY OR CABLE TOOLS

Rotary

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

5976' GR

22. APPROX. DATE WORK WILL START*

January 31, 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'	140 sacks
9 5/8"	7 5/8"	26.4#	4580'	130 sacks (Stage One)
				245 sacks (Stage Two)
6 3/4"	5 1/2"	15.5#	4580' - 7063'	250 sacks

Surface formation is Nacimiento.

Top of Ojo Alamo sand is at 1288'.

Top of Pictured Cliffs sand is at 2298'.

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

Gas will be used to drill from intermediate total depth to total depth.

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

It is expected that this well will be drilled before June 30, 1980. This depends
on time required for approvals, rig availability and the weather.Gas is dedicated.

RECEIVED

NOV 19 1979

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

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.

BY

TITLE District Production Manager DATE 10-31-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

oh 3rd

NMOCC

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

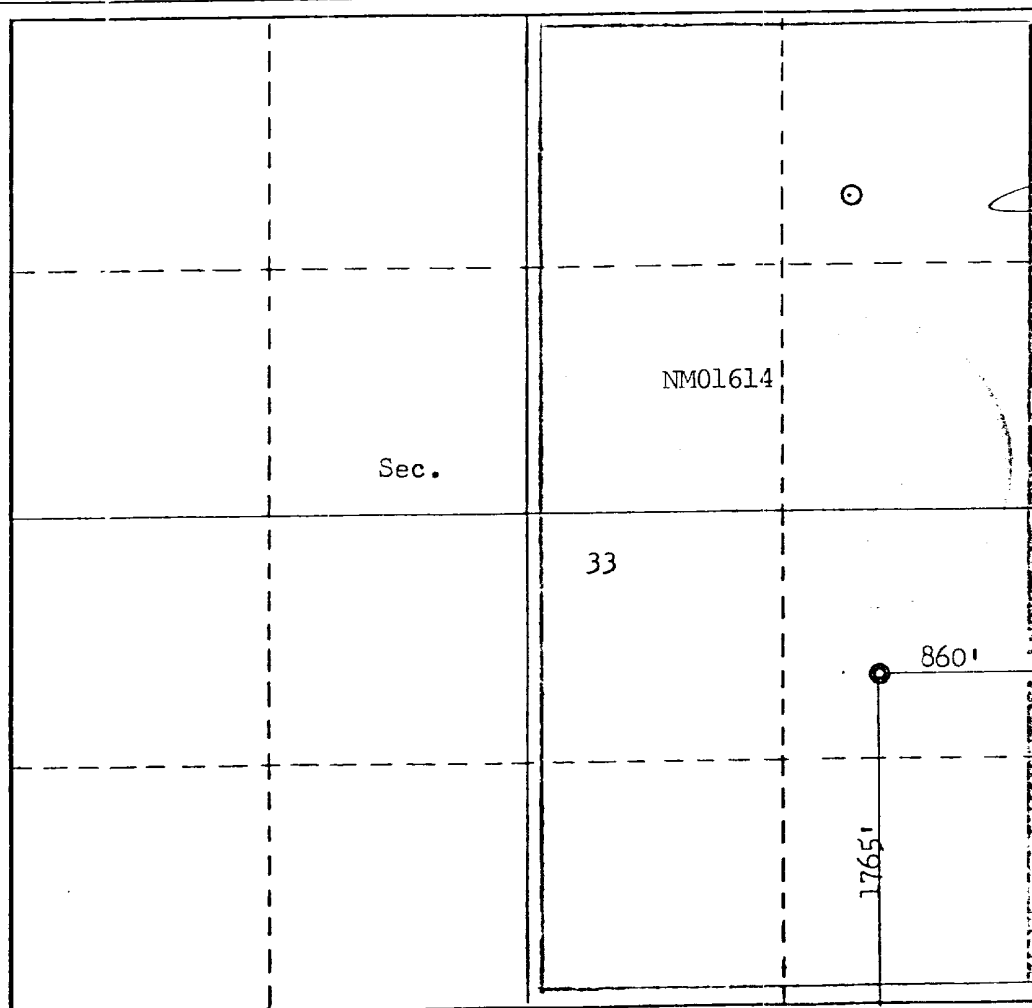
Operator SOUTHLAND ROYALTY COMPANY			Lease THOMPSON		Well No. 5M
Unit Letter I	Section 33	Township 31N	Range 12W	County San Juan	
Actual Forfeiture Location of Well: 1765 feet from the South line and 860 feet from the East line					
Ground Level Elev. 5976	Producing Formation Mesa Verde / Dakota		Pool Blanco / Basin	Dedicated Acreage: 320 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.



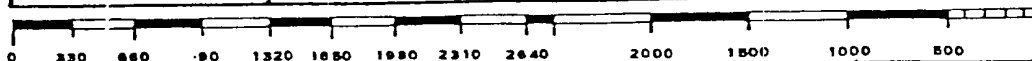
CERTIFICATION

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

Name
L. O. Van Ryan
Position
District Production Manager
Company
Southland Royalty Company
Date
October 31, 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 Signed
October 26, 1979
Registered Professional Engineer and/or Land Surveyor
Fred B. BAKER, Jr.
Certificate No.
3950



SOUTHLAND ROYALTY COMPANY - DRILLING SCHEDULE

T H O M P S O N # 5 - A

1765' FSL & 860' FEL
Section 33, T31N, R12W
San Juan County, New Mexico

Field: Basin Dakota/Blanco Mesa Verde

Elevation: 5976' GR

Geology:

Formation Tops:	Ojo Alamo	1288'	Point Lookout	4633'
	Fruitland	2033'	Gallup	5908'
	Pictured Cliffs	2298'	Graneros	6718'
	Cliff House	3888'	Dakota	6863'
	Intermediate TD	4580'*	Total Depth	7063'

*INTERMEDIATE TD IS CRITICAL. DO NOT DRILL PAST 4580'. 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. Svc: 325-1841

SRC Rep:

SRC Dispatch: 325-7391

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

Materials:

Casing Program:	<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>Wt. & Grade</u>
	13 3/4"	200'	10 3/4"	32.75# H-40
	9 5/8"	4580'	7 5/8"	26.4# K-55
	6 3/4"	4580'-7063'	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 2500'. 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.



Southland Royalty Company

October 31, 1979

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

Attention: James Sims

Re: Blowout Preventer Plan

Dear Sir:

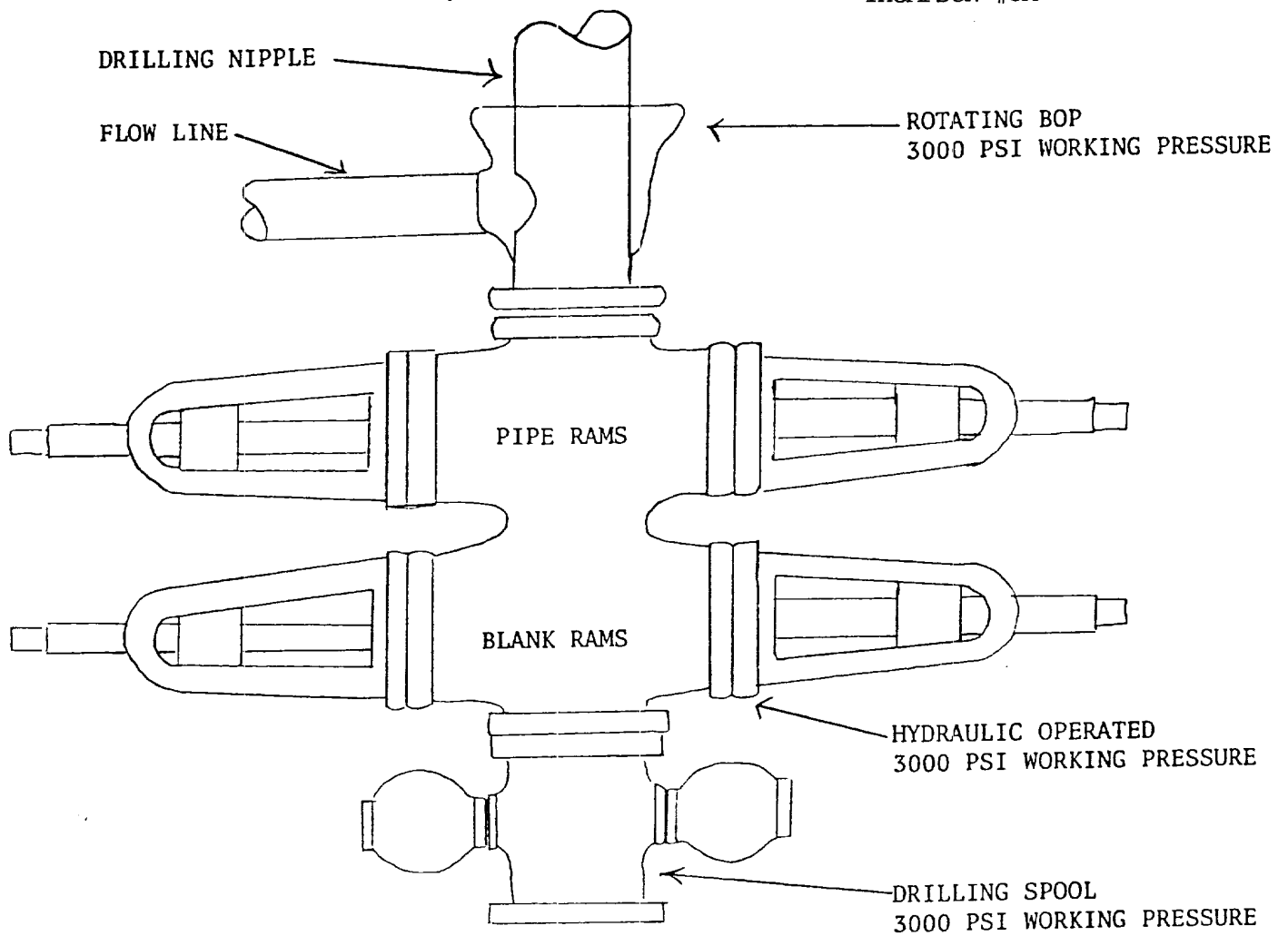
All drilling and completion rigs will be equipped with 6" or larger double hydraulic blowout preventers and a hydraulic closing unit with steel lines.

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: October 31, 1979

Name: 

Title: District Production Manager



Southland Royalty Company

October 31, 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 Thompson #5A 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 Animas 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,

L. O. Van Ryan
District Production Manager

LOVR/dg

Wellhead Equipment:

9 5/8" 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: 140 sacks (160 cu. ft.) of Class "B" with 1/4# gel flake per sack and 3% CaCl₂. WOC 12 hours. Test to 600# prior to drilling out. (Volume is 100% excess.)

7 5/8" Intermediate Casing: Stage One - 130 sacks (195 cu. ft.) of 50/50 Poz with 6% gel (mixed with 7.2 gals water per sack). (Volume is 50% excess to cover top of Cliff House.)

Stage Two - 175 sacks (342 cu. ft.) of 50/50 Poz with 6% gel, followed by 70 sacks of Class "B" with 2% CaCl₂. (Volume is 50% excess to cover top of Ojo²Alamo.)

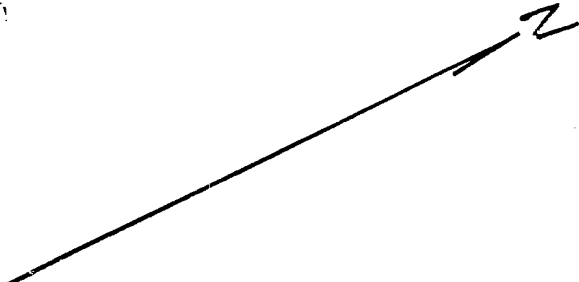
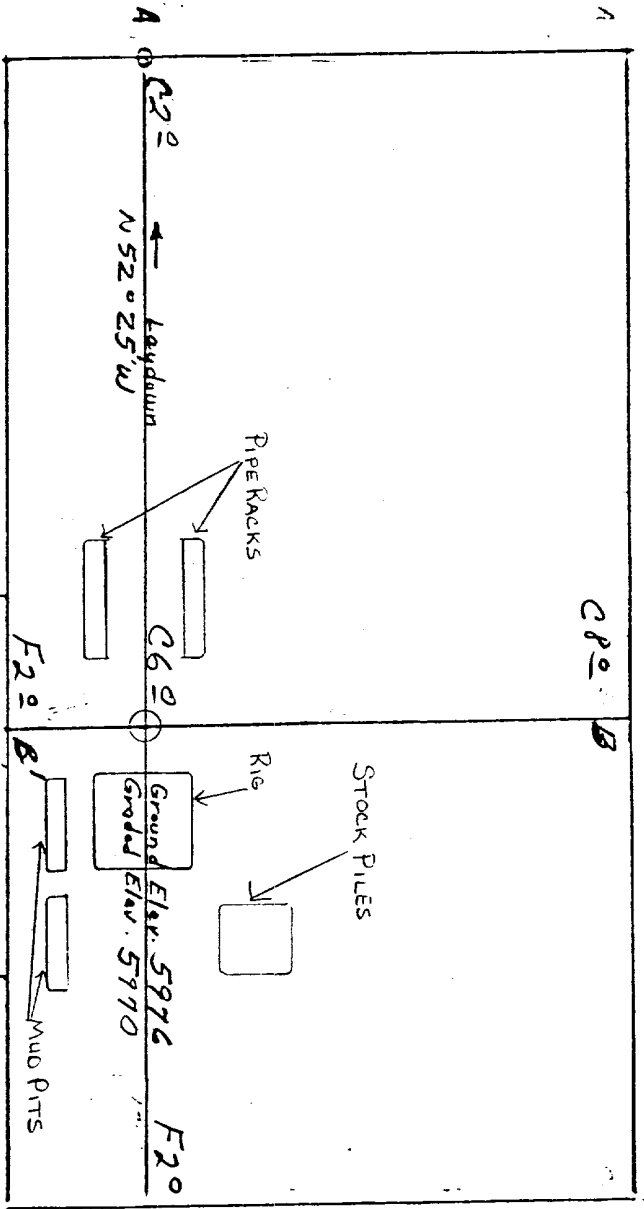
WOC and circulate between stages as required by well conditions. WOC 12 hours. Test to 1000 psi before drilling out.

5 1/2" Liner: 250 sacks (374 cu. ft.) of 50/50 Poz with 6% gel, 1/4# gel flake per sack, 0.6% Halad 9 or equivalent. (Volume is 70% excess.)

If hole gets wet and mist drilling is required, use 295 sacks (440 cu. ft.) for 100% excess.

Precede cement with 20 barrels of gel water.

L. O. Van Ryan
District Production Manager

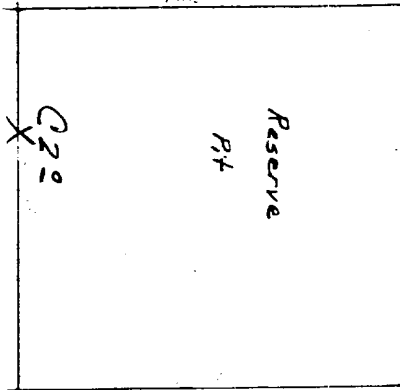


Vert. 1"=40' A-A' Horiz. 1"=100'

5980			
5970			
5960			

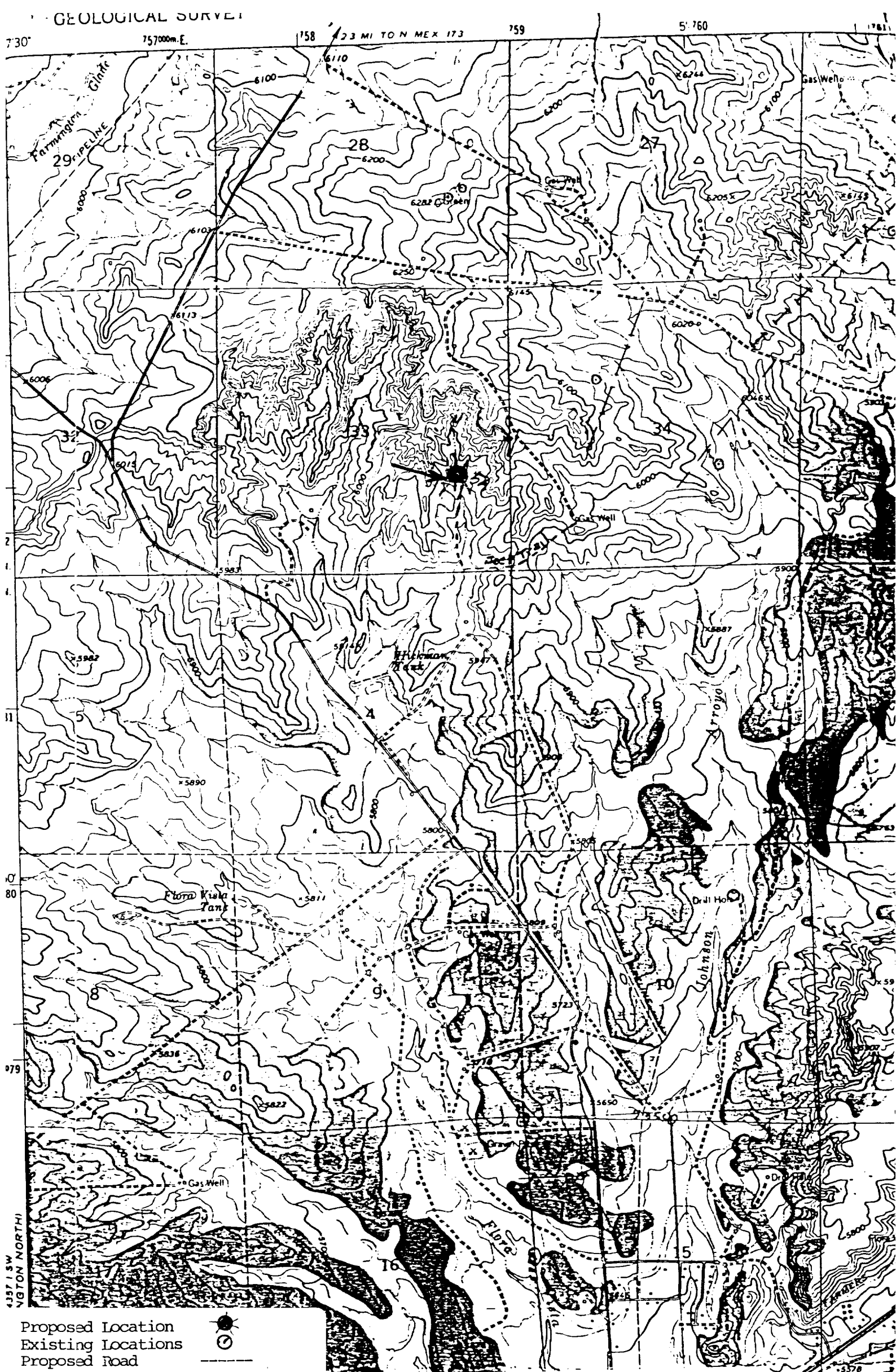
B-B' E

5980			
5970			
5960			



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

D-D' E



Vicinity Map for
SOUTHLAND ROYALTY CO.#5A THOMPSON
1765'FSL 860'FEL Sec 33-T31N-R12W
SAN JUAN COUNTY, NEW MEXICO