

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF-078487
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Southland Royalty Company		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR P. O. Drawer 570, Farmington, New Mexico		8. FARM OR LEASE NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 850' FNL & 1510' FEL At proposed prod. zone		9. WELL NO. #5
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 10 miles east of Blanco, New Mexico		10. FIELD AND POOL, OR WILDCAT Blanco Pictured Cliffs <i>GL</i>
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 10, T29N, R8W
16. NO. OF ACRES IN LEASE		12. COUNTY OR PARISH San Juan
17. NO. OF ACRES ASSIGNED TO THIS WELL 160		13. STATE New Mexico
18. DISTANCE FROM PROPOSED* LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		20. ROTARY OR CABLE TOOLS Rotary
19. PROPOSED DEPTH 3159'		22. APPROX. DATE WORK WILL START* January 15, 1979
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6287'		

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#	120'	99 cu. ft.
6-3/4"	2-7/8"	6.5#	3159'	333 cu. ft.

Surface formation is San Jose.

Top of Ojo Alamo sand is at 2069'.

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

It is anticipated that an IES and a Gamma Ray 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 April 15, 1979. This depends on time required for approvals, 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. *[Signature]* District Production Manager December 12, 1978
SIGNED _____ TITLE _____ DATE _____
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:*ok Frank*

*See Instructions On Reverse Side

*NMOCC*RECEIVED
DEC 14 1978
U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

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

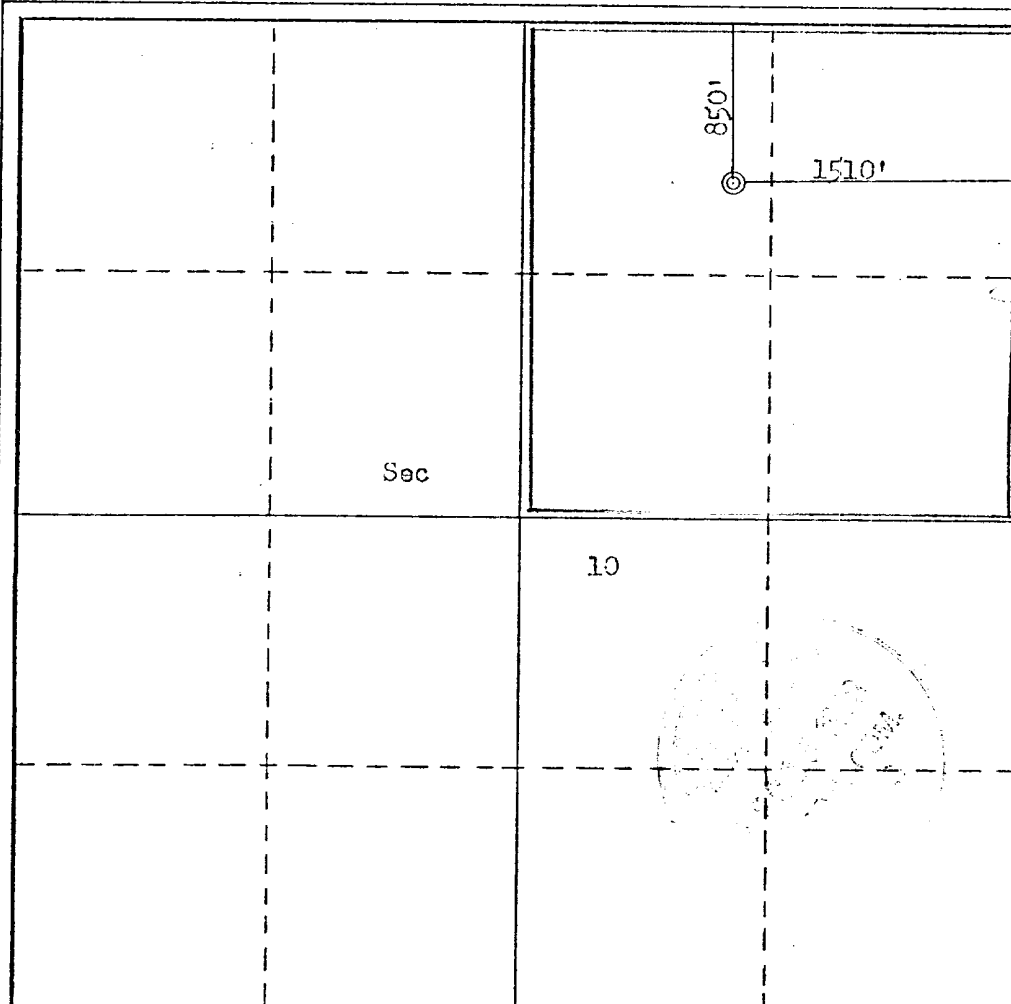
Operator SOUTHLAND ROYALTY COMPANY			Lease HILL		Well No. 5
Unit Letter B	Section 10	Township 29N	Range 8W	County San Juan	
Actual Portage Location of Well: 850 feet from the North line and 1510 feet from the East line					
Ground Level Elev. 6287	Producing Formation Pictured Cliffs		Pool Blanco apt		Dedicated Acreage: 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.

Name _____

Position
District Production Manager

Company
Southland Royalty Company

Date
December 12, 1978

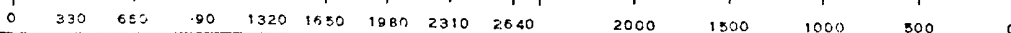
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
November 14, 1978

Registered Professional Engineer and/or Land Surveyor

Fred B. Kohn, Jr.
Fred B. Kohn, Jr.

Certificate No.
3950



DRILLING SCHEDULE - HILL #5

Location: 850' FNL & 1510' FEL, Section 10, T29N, R8W
San Juan County, New Mexico

Field Blanco Pictured Cliffs

Elevation: 6287' GR

Geology:

Formation Tops:	Ojo Alamo	2069'
	Fruitland	2659'
	Pictured Cliffs	2979'
	Total depth	3159'

Logging Program: IES and GR-Density at total depth.

Coring Program : None

Natural Gauges : None

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"	120'	8-5/8"	24#	K-55
	6-3/4"	3159'	2-7/8"	6.5#	K-55

Cementing

8-5/8" Surface Casing: 99 cu. ft. (85 sxs) Class "B" with 1/4# gel
flake per sx and 3% CaCl₂. (100% excess)

2-7/8" Production Casing: 333 cu. ft. (185 sxs) of 50/50 Class "B" Poz
with 6% gel mixed with 7.2 gals water per sx to
weigh 12.85 ppg. Tail in with 50 sxs Class "B"
with 2% CaCl₂. If lost circulation occurs add
1/4 cu. ft. fine gilsonite per sack. (50% excess
to cover Ojo Alamo)



Southland Royalty Company

December 12, 1978

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

Attention: Mr. P. T. McGrath

Dear Sir:

Enclosed please find map showing existing roads and planned access roads to Southland Royalty Company's Hill #5 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 the Blanco Ditch. 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



Southland Royalty Company

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

Attention: Mr. P. T. McGrath

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: December 12, 1978

Name: CC Paine

Title: District Engineer



Southland Royalty Company

December 12, 1978

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

Attention: Mr. P. T. McGrath

Re: Blowout Preventer Plan

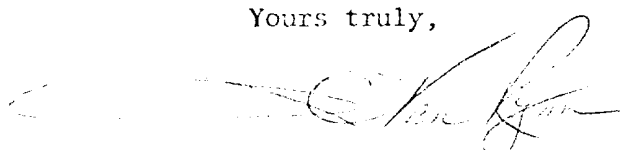
Dear Sir:

All drilling and completion rigs will be equipped with 8" 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.

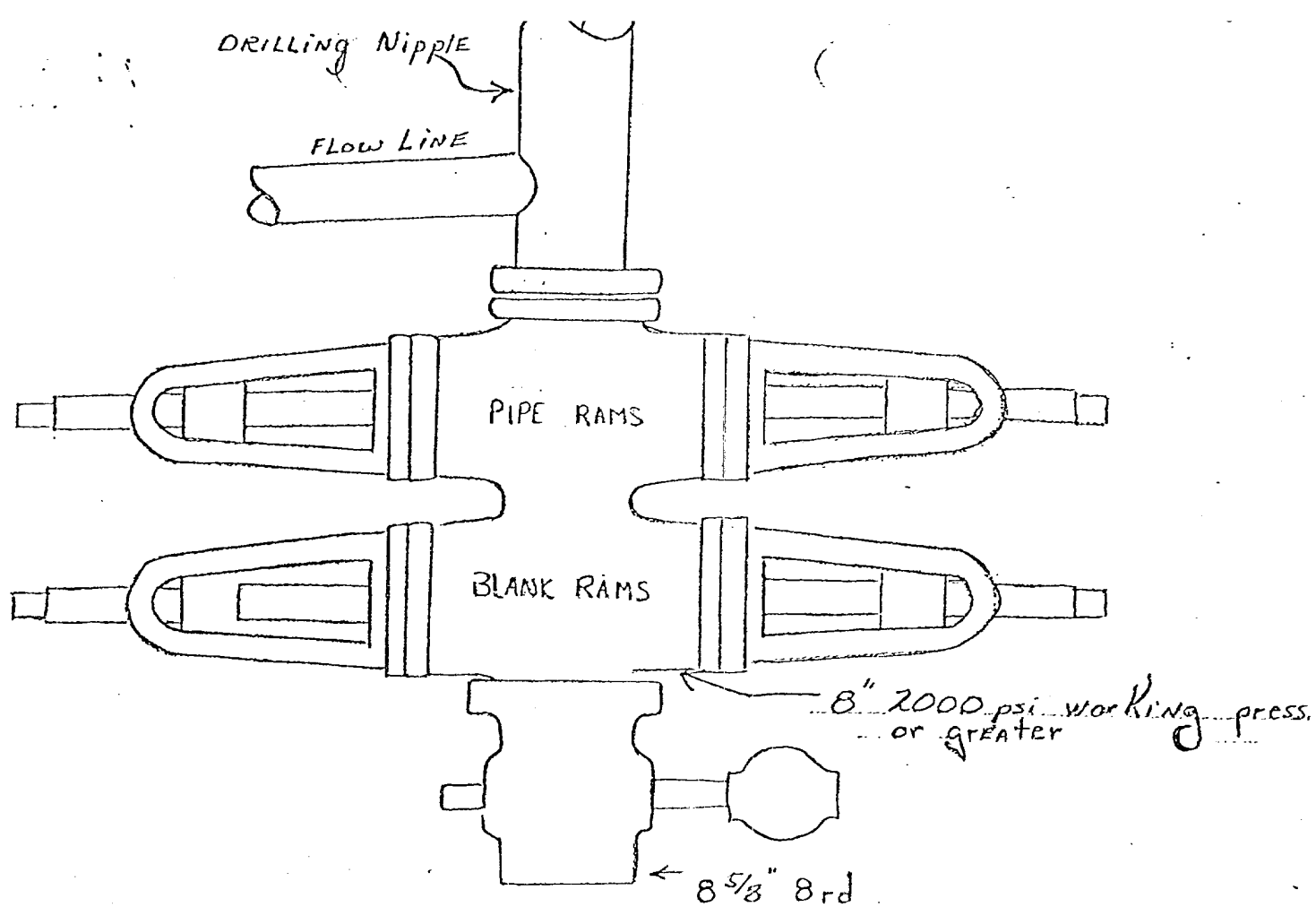
All crews will be thoroughly trained in the operation of this preventer. The preventer will be tested frequently enough to insure proper operation.

Yours truly,



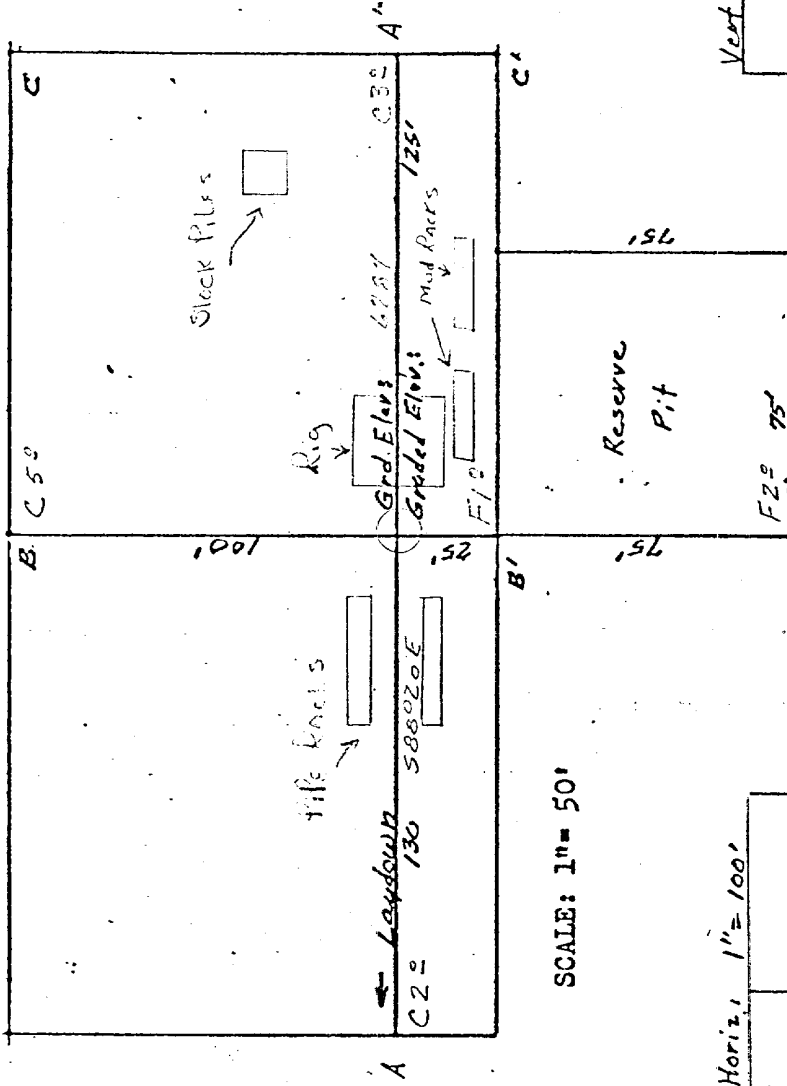
L. O. Van Ryan
District Production Manager

LOVR/dg



Preventers and spools are to have
 through bore of 8" - 2000# or larger.

Location Profile for
 SOUTHLAND ROYALTY CO. #5 HILL
 850' FNL 1510' FEL Sec 10-T29N-R8W San Juan County, New Mexico



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

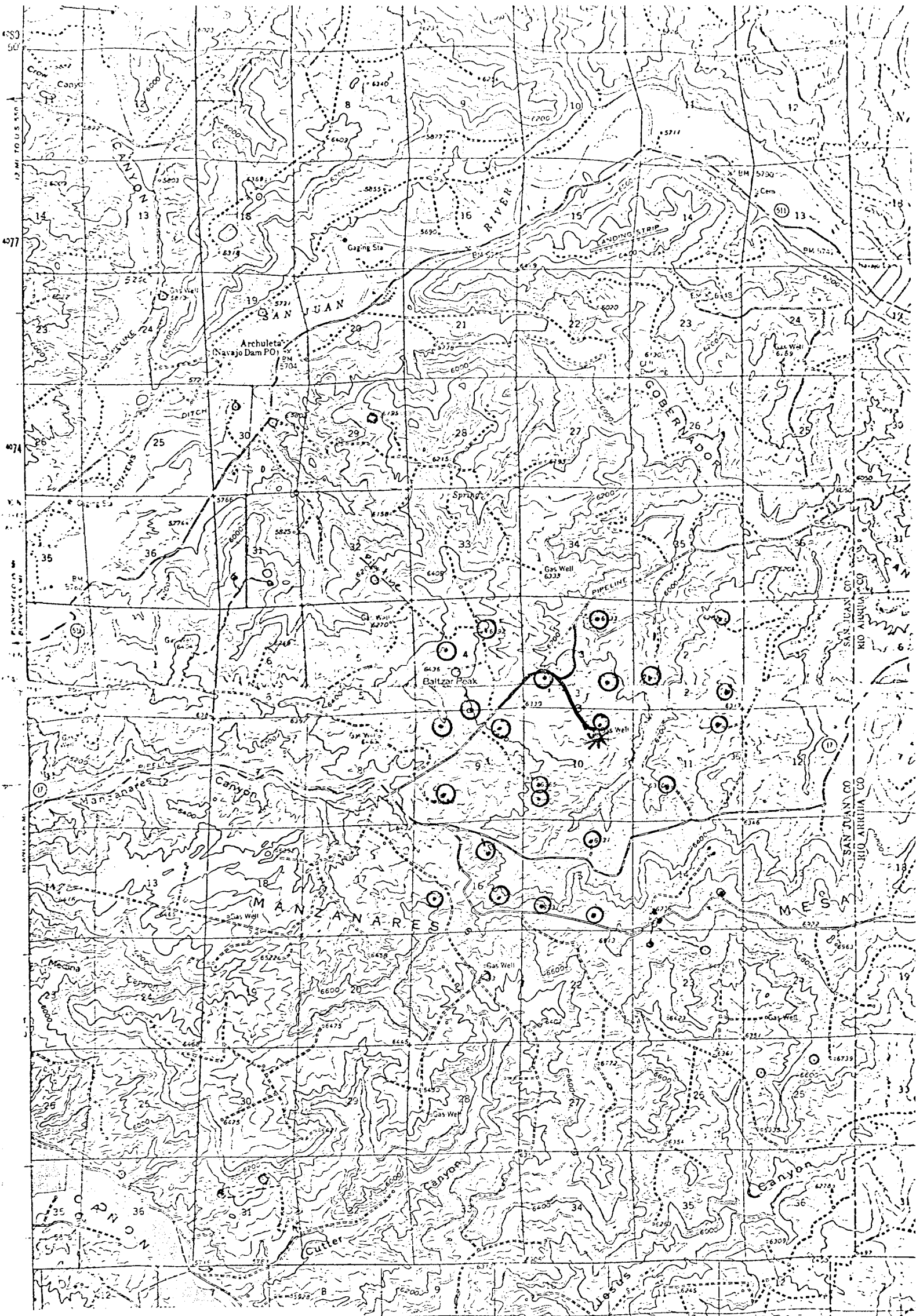
6290				
6280				
6270				





B-B' &

6290				
6280				
6270				

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

D-D' &



PROPOSED LOCATION 
EXISTING LOCATIONS 
PROPOSED ROAD 
EXISTING ROADS 

Vicinity Map for
SOUTHLAND ROYALTY CO. #5 HILL
850'FNL 1510'FEL Sec 10-T29N-R&W
SAN JUAN COUNTY, NEW MEXICO