

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

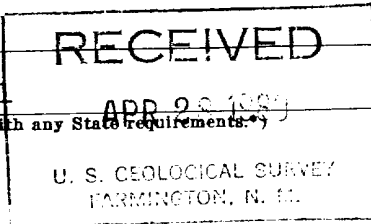
1a. TYPE OF WORK  
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

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  
1080' FSL & 860' FEL  
At proposed prod. zone



14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
Approximately 4 1/2 miles northeast of Bloomfield, NM

15. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any) 860'

16. NO. OF ACRES IN LEASE  
2336.05

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT. 300'

19. PROPOSED DEPTH  
6800'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5725' GR

22. APPROX. DATE WORK WILL START\*  
September 15, 1980

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#	200'	140 sacks
7 7/8"	5 1/2"	15.5#	6800'	177 sacks (stage one)
				160 sacks (stage two)
				253 sacks (stage three)

Surface formation is Nacimiento.

The top of the Ojo Alamo sand is at 828'.

The top of the Pictured Cliffs sand is at 2135'.

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

It is anticipated that an IES and GR-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 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 Curtis C. Parsons TITLE District Engineer DATE 4-18-80

(This space for Federal or State office use)

PERMIT NO. for APPROVAL DATE for

APPROVED BY for TITLE for DATE for

CONDITIONS OF APPROVAL, IF ANY:

NR0000

This action is subject to administrative  
approval.

All distances must be from the outer boundaries of the Section

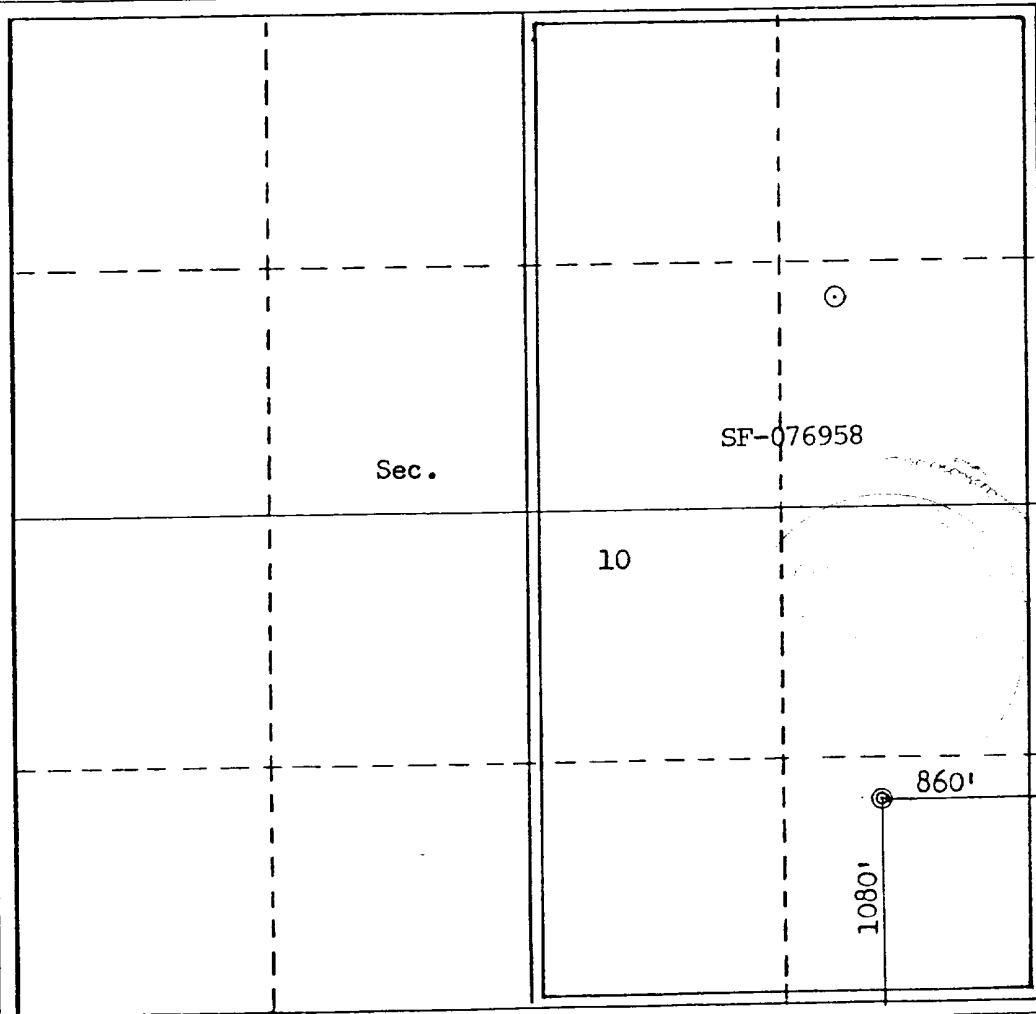
Operator <b>SOUTHLAND ROYALTY COMPANY</b>			Lease <b>HARE</b>		Well No. <b>18 <del>4</del> M</b>
Unit Letter <b>P</b>	Section <b>10</b>	Township <b>29N</b>	Range <b>10W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1080</b> feet from the <b>South</b> line and <b>860</b> feet from the <b>East</b> line					
Ground Level Elev. <b>5725</b>	Producing Formation <b>Dakota - Mesa Verde</b>		Pool <b>Basin Dakota - Blanco</b>		Dedicated Acreage: <b>320-318.74 Acres</b>

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.

*Curtis C. Parsons*

Name

Curtis C. Parsons

Position

District Engineer

Company

Southland Royalty Company

Date

April 18, 1980

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

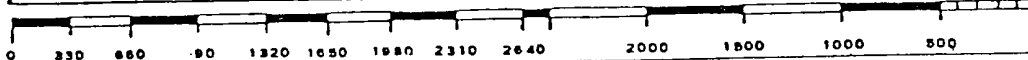
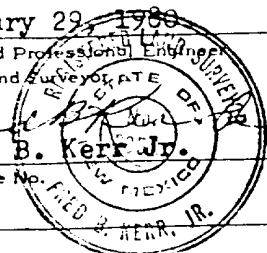
February 29, 1980

Registered Professional Engineer and/or Land Surveyor

*Fred B. Kerr Jr.*

Certificate No.

3950



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ gas ☒ other ☐  
well well

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. See space 17 below.)

AT SURFACE: 1080' FSL & 860' FEL

AT TOP PROD. INTERVAL:

AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
CHANGE ZONES ☐  
ABANDON\* ☐  
(other) Change Name ☒

SUBSEQUENT REPORT OF:

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(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Southland Royalty Company hereby requests permission to change the name of this well from the Hare #18E as named on the Intent to Drill to the Hare #18M as the well will be infilled in both the Mesa Verde and the Dakota zones.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_

18. I hereby certify that the foregoing is true and correct

SIGNED R. E. Fields TITLE District Engineer DATE 8-8-80

(This space for Federal or State office use)

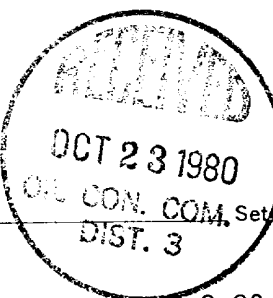
APPROVED FOR RECORD  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_ DATE \_\_\_\_\_

AUG 13 1980

BY FW FARMINGTON DISTRICT

\*See Instructions on Reverse Side



SOUTHLAND ROYALTY COMPANY - DRILLING SCHEDULE

Hare #18E  
1080' FSL & 860' FEL  
Section 10, T29N, R10W  
San Juan County, New Mexico

Field: Blanco Mesa Verde/Basin Dakota    Elevation: 5725' GR

Geology:

Formation Tops:	Ojo Alamo	828'	Gallup	5656'
	Fruitland	1867'	Greenhorn	6405'
	Pictured Cliffs	1235'	Graneros	6497'
	Cliff House	3801'	Dakota	6585'
	Point Lookout	4385'	Total Depth	6800'

Logging Program: IES and GR-Density at Total Depth.

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"	200'	8 5/8"	24# K-55
	7 7/8"	6800'	5 1/2"	15.5# K-55

Float Equipment:

8 5/8" Surface Casing: Pathfinder type "A" guide shoe.

5 1/2" Production Casing: Pathfinder type "A" guide shoe. Self-fill flapper type float collar run one joint above shoe. Five Pathfinder bow-type centralizers (run every other joint above shoe). Run Dowell stage tools at 2270' and 4710' with one cement basket below and five centralizers above each tool.

Wellhead Equipment: 8 5/8" X 10" 2000 psi casing head with 5 1/2" slips  
10" 2000 X 6" 2000 tubing head with 1 1/2" IJ X 1 1/2"  
EUE hanger

Cementing:

8 5/8" Surface Casing: 140 sacks (165 cu. ft.) of Class "B" with 1/4# gel flake per sack and 3%  $\text{CaCl}_2$ . WOC for 12 hours. Test to 600 # prior to drilling out. (Volume is 100% excess.)

5 1/2" Production Casing: Stage one - 127 sacks (189 cu. ft.) of 50/50 Poz with 6% gel and 1/4# gel flake per sack, followed by 50 sacks of Neat with 2%  $\text{CaCl}_2$ . (Volume is 25% excess to cover top of Gallup.)

Stage two - 160 sacks (236 cu. ft.) of 50/50 Poz with 6% gel. (Volume is 50% excess to cover top of Cliff House.)

Stage three - 253 sacks (375 cu. ft.) of 50/50 Poz with 6% gel. (Volume is 50% excess to cover top of Ojo Alamo.)

WOC and circulate between stages as required by well conditions.

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L. O. Van Ryan  
District Production Manager



**Southland Royalty Company**

April 18, 1980

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

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 pressure.

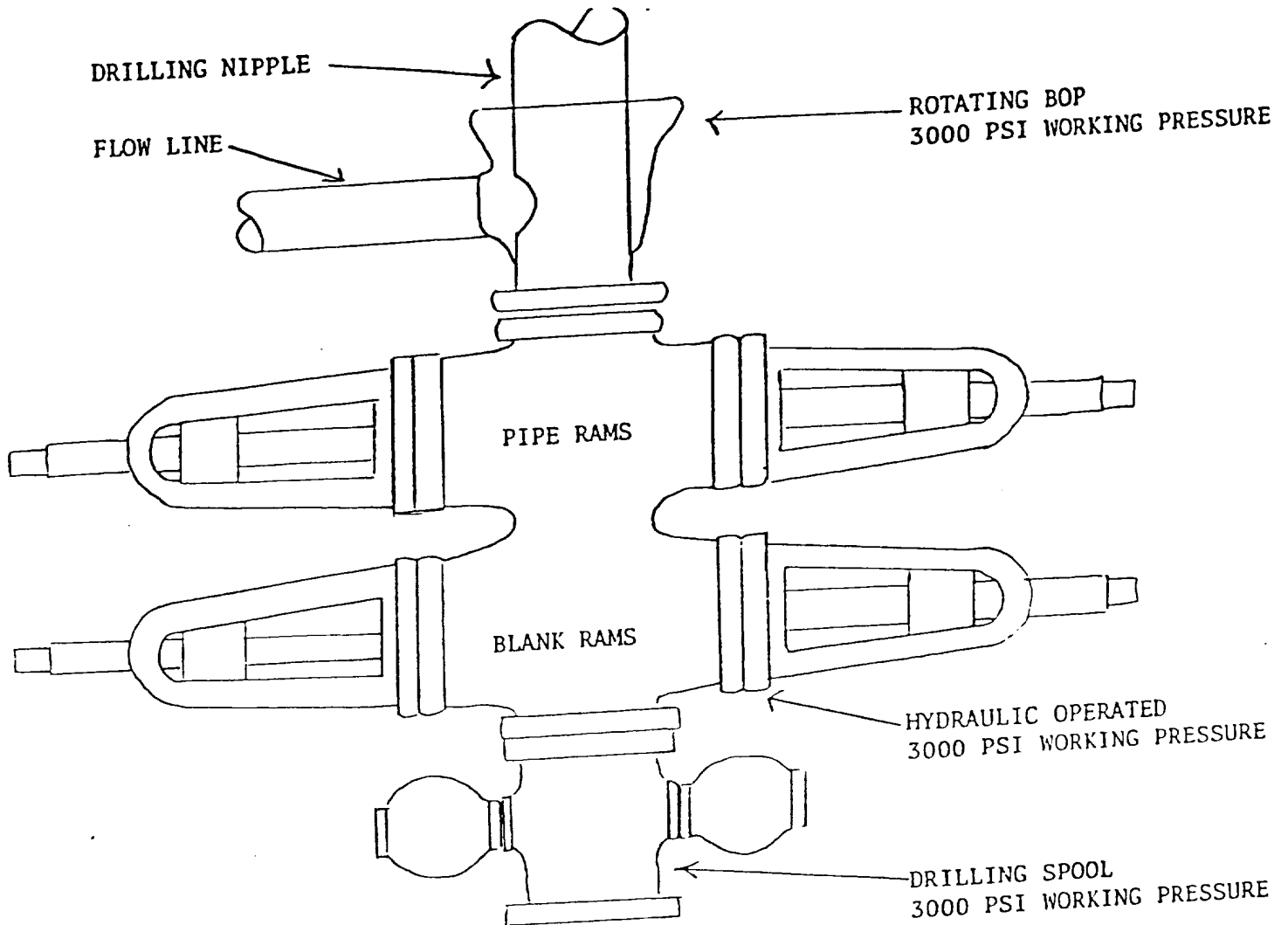
All crews will be thoroughly trained in the operation of this preventer. The preventer will be tested frequently enough to insure proper operation.

Yours truly,

*Curtis C. Parsons*  
Curtis C. Parsons  
District Engineer

CCP/ke

Hare #18E  
1080' FSL & 860' FEL  
Section 10, T29N, R10W  
San Juan County, New Mexico



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



**Southland Royalty Company**

April 18, 1980

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

Dear Sir:

Enclosed please find a map showing existing roads and planned access roads to Southland Royalty Company's Hare #18E 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.

There will be no camps or airstrips.

Also, enclosed is a location layout showing approximate location of rig, pits and pipe racks.

Water supply will be the San Juan River or Blanco Ditch .

The location will be restored to the land owner's satisfaction. If this is not satisfactory, please have the Bureau of Land Management contact the land owner. 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,

*Curtis C. Parsons*  
Curtis C. Parsons  
District Engineer

CCP/ke





**Southland Royalty Company**

April 18, 1980

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

Dear Sir:

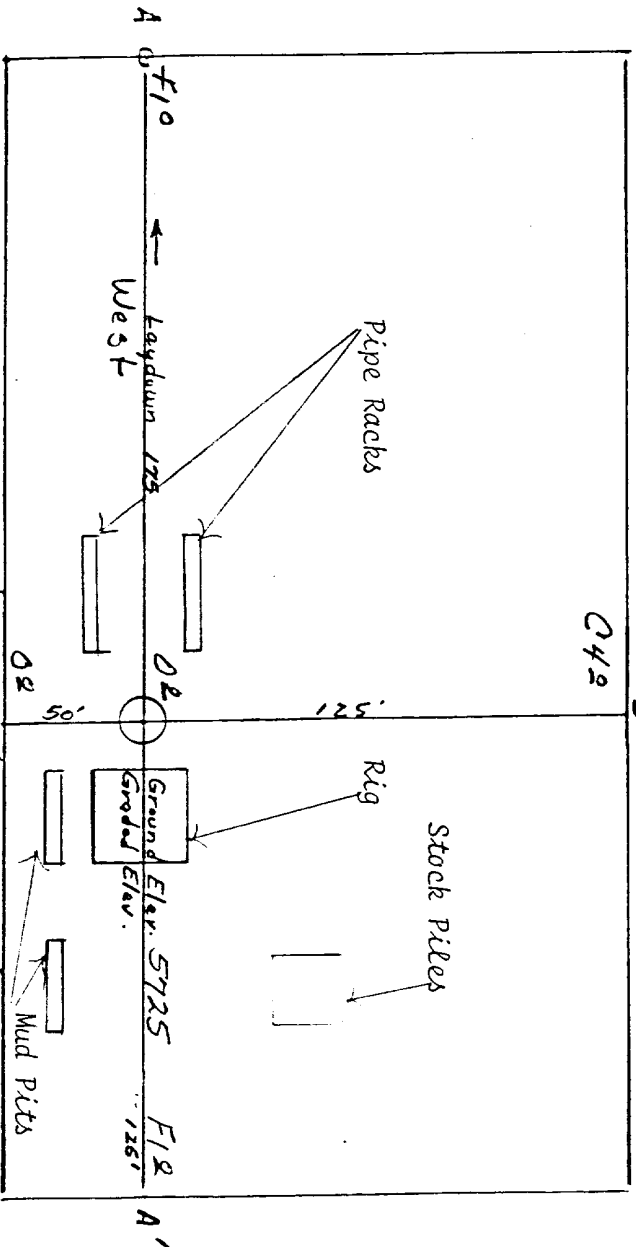
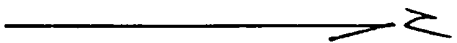
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated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

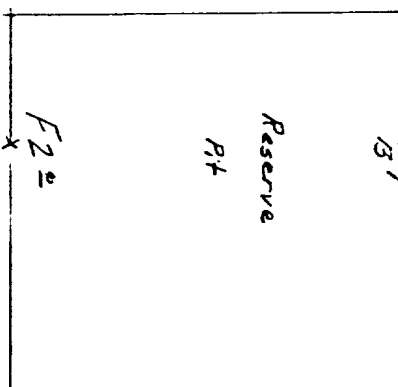
LOVR/ke

Location Profile for  
SOUTHLAND ROYALTY COMPANY #18-E HARE  
1080 FSL 860 FSL Sec. 10-T29N-R10W SAN JUAN COUNTY, NEW MEXICO



Scale: 1" = 50'

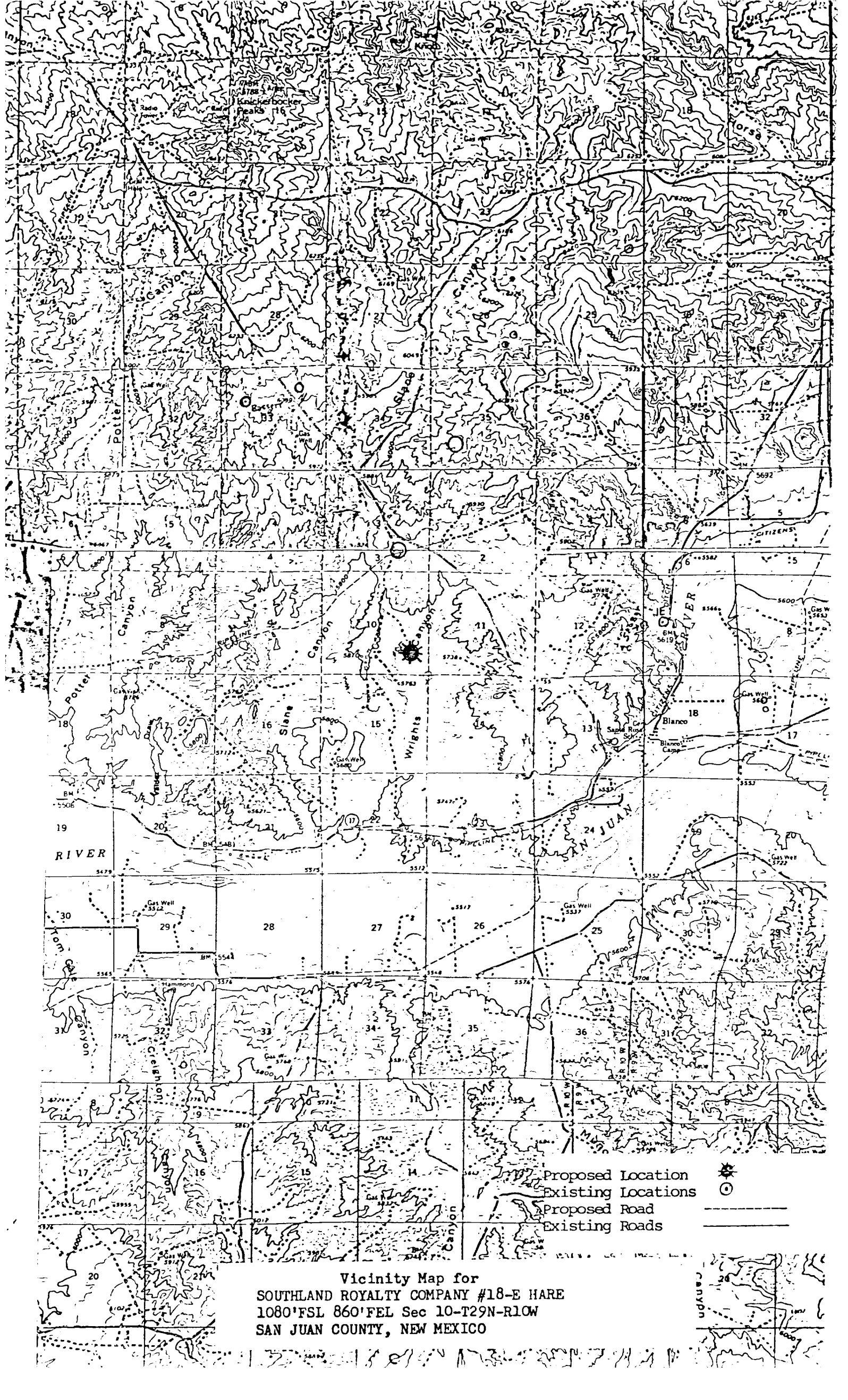
Vert. 1"=40'	A-A'	Horiz. 1"=100'
5730		
5720		



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

Vert. 1"=40'	B-B'	Horiz. 1"=100'
5730		
5720		

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



Vicinity Map for  
SOUTHLAND ROYALTY COMPANY #18-E HARE  
1080'FSL 860'FEL Sec 10-T29N-R10W  
SAN JUAN COUNTY, NEW MEXICO