

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 surfacem 1100' FSL & 1030' FWL
At proposed prod. zone

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

Approximately 5 miles northeast of Bloomfield, NM

15. DISTANCE FROM PROPOSED*

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

1100'

16. NO. OF ACRES IN LEASE

475.60

18. DISTANCE FROM PROPOSED LOCATION*

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

2300'

19. PROPOSED DEPTH

7192'

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

6089' GR

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'	136 sacks	
9 7/8"	7 5/8"	26.40#	4566'	112 sacks (1)	401 sacks (2)
6 3/4"	5 1/2"	15.5#	4466'-7192'	265 sacks	

Surface formation is San Jose.

The top of the Ojo Alamo sand is at 911'.

The top of the Pictured Cliffs sand is at 2577'.

Fresh water mud will be used to drill from surface to Intermediate TD. An air

system will be used to drill from Intermediate TD to Total Depth.

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

and a GR-Induction and a 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.

This action is subject to administrative
appeal pursuant to 30 CFR 290.

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

TITLE District Engineer

DATE 4-18-80

(This space for use of State office use)

APPROVED
AS AMENDED

PERMIT NO.

APPROVAL DATE

APPROVED

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY

AUG 6 1980
JAMES F. SING
DISTRICT ENGINEER

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 7088
SANTA FE, NEW MEXICO 87501Form C-107
Revised 10-1-78

All distances must be from the outer boundaries of the Section

Operator SOUTHLAND ROYALTY COMPANY			Lease GRENIER "A"		Well No. 8-M
Unit Letter M	Section 35	Township 30N	Range 10W	County San Juan	
Actual Footage Location of Well: 1100 feet from the South line and 1030 feet from the West line					
Ground Level Elev. 6089	Producing Formation Dakota - Mesa Verde		Pool Basin - Blanco		Dedicated Acreage: 320 - 160 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

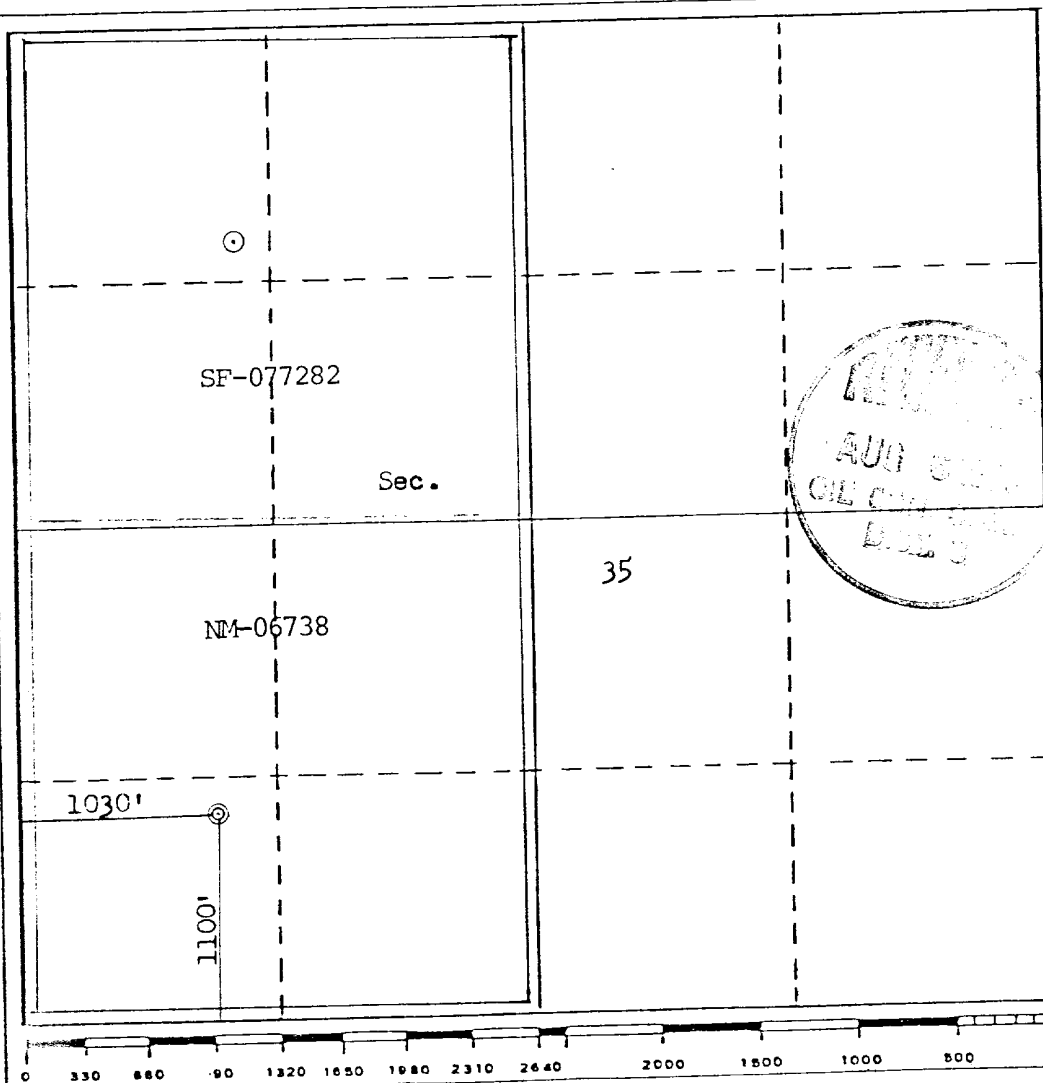
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 Communitized

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

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

FRED B. KERR, JR.

SOUTHLAND ROYALTY COMPANY - DRILLING SCHEDULE

Grenier "A" #8M
1100' FSL & 1030' FWL
Section 35, T30N, R10W
San Juan County, New Mexico

Field: Basin Dakota/Blanco Mesa Verde Elevation: 6089' GR

Geology:

Formation Tops:	Ojo Alamo	911'	Gallup	6095'
	Fruitland	2282'	Greenhorn	6829'
	Pictured Cliffs	2577'	Graneros	6941'
	Cliff House	4136'	Dakota	7018'
	Intermediate	4566'	Total Depth	7192'
	Point Lookout	4825'		

Logging Program: IES and GR-Density at Intermediate TD.
GR-Induction and GR-Density at TD.

Drilling:

Contractor: Tool Pusher:

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

Mud Program: Drill with fresh water mud from surface to Intermediate TD.
Drill with air from Intermediate TD to Total Depth.

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 7/8"	4566'	7 5/8"	26.40# K-55
	6 3/4"	4466'-7192'	5 1/2"	15.5# K-55

Float Equipment:

10 3/4" Surface Casing: Pathfinder type "A" guide shoe.

7 5/8" Production Casing: Pathfinder type "A" guide shoe. Self-fill insert float valve. 5 bow-type centralizers. Run float valve 2 jts. above shoe. Run centralizers every other jt. above shoe. Dowell stage tool at 2699'. Run cement basket below and 5 centralizers above tool.

5 1/2" Liner: TIW Liner hanger with neoprene pack-off. Pathfinder type "AP" guide shoe and type "A" float collar.

Wellhead Equipment 10 3/4" X 10", 2000# casing head.
10", 2000# X 6", 2000# tubing head.

Cementing:

10 3/4" Surface Casing: 136 sacks (160 cu. ft.) of Class "B" with 1/4# gel flake per sack and 3% CaCl_2 . WOC for 12 hours. Test to 600# prior to drilling out. (Volume is 100% excess.)

7 5/8" Intermediate Casing: STAGE ONE
62 sacks (93 cu. ft.) of 50/50 Class "B" Poz with 6% gel (mixed w/7.2 gals wtr/sx) tail in with 50 sacks of Class "B" neat. (Volume is 50% excess to cover top of Cliff House.)

STAGE TWO
331 sacks (576 cu. ft.) of 50/50 Poz with 6% gel, followed by 70 sacks of Class "B" with 2% CaCl_2 . (Volume is 50% excess to cover top of Ojo Alamo.)

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

5 1/2" Liner: 265 sacks (394 cu. ft.) of 50/50 Poz with 6% gel, 1/4# gel flake per sack and 0.6% Halad 9 or equivalent. (Volume is 70% excess.)

Precede cement with 20 barrels of gel water.

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.

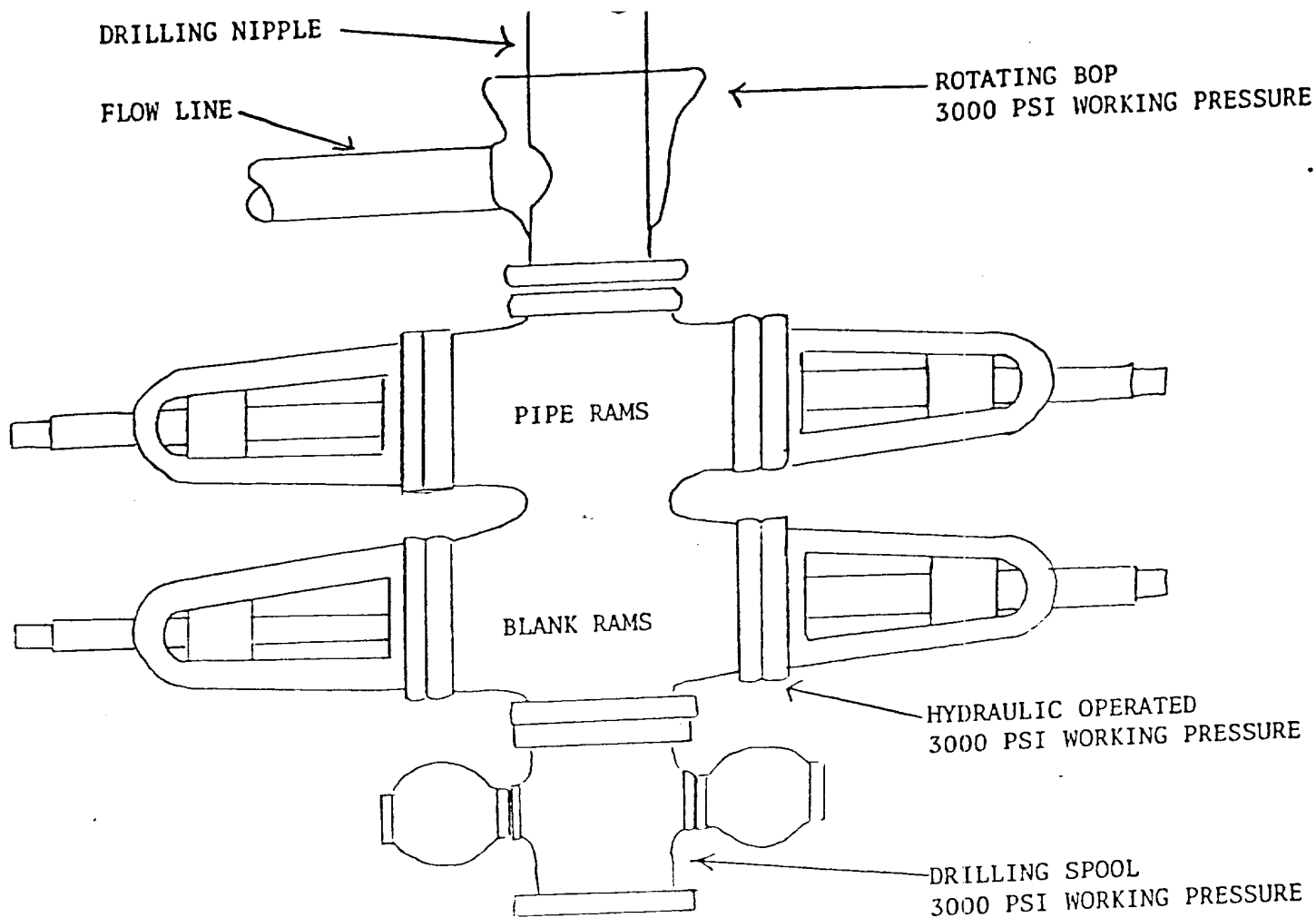
The preventer is 3000# working pressure and 6000# test pressure.

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
District Engineer

CCP/ke



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

Southland Royalty Company
Grenier "A" #8M
1100' FSL & 1030' FWL
Section 35, T30N, R10W
San Juan County, New Mexico



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 Grenier "A" #8M 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 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,

Curtis C. Parsons
District Engineer

CCP/ke



Southland Royalty Company

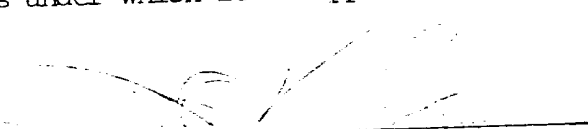
April 18, 1980

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.

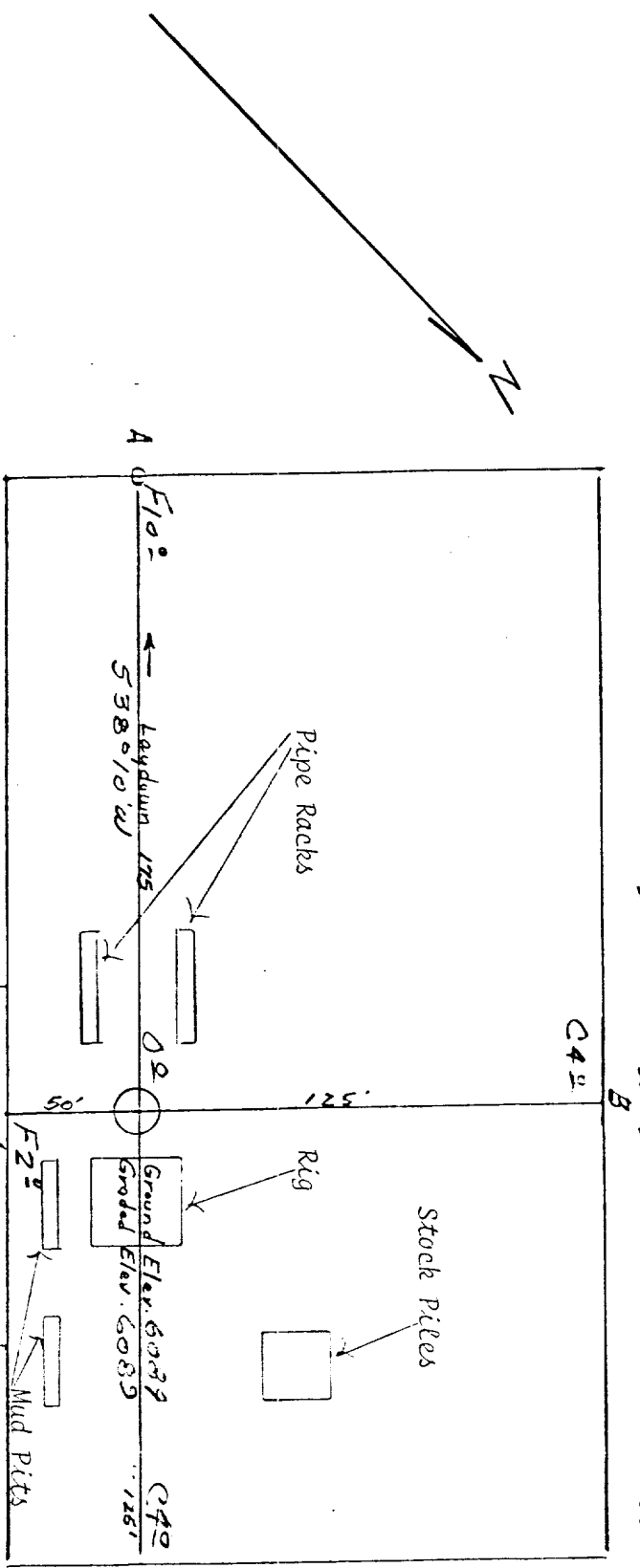
Date:



L. O. Van Ryan
District Production Manager

LOVR/ke

Location Profile for
 SOUTHLAND ROYALTY COMPANY #8-M GRENIER "A"
 1100' FSL 1030' FWL Sec. 35-T30N-R10W San Juan County, New Mexico



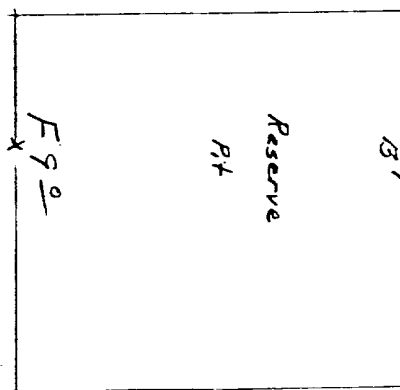
Scale: 1" = 50'

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

6090				
6080				
6070				

B-B' §

6090				
6080				
6070				

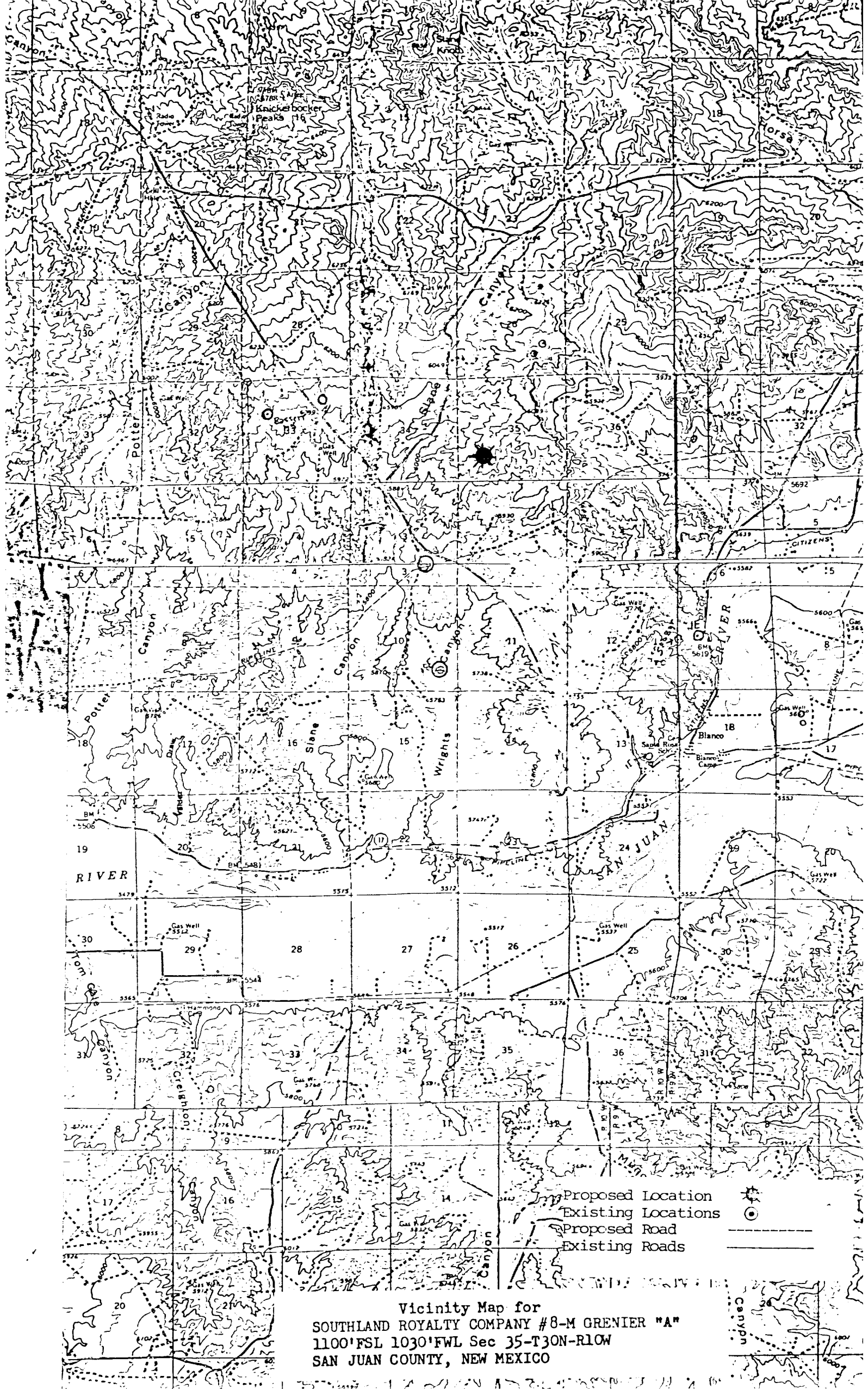


Vert. 1"=40' C-C' Horiz. 1"=100'

D-D' §

KERR LAND SURVEYING
 Date: 2/29/80

[Handwritten signature]



Vicinity Map for
SOUTHLAND ROYALTY COMPANY #8-M GRENIER "A"
1100' FSL 1030' FWL Sec 35-T30N-R10W
SAN JUAN COUNTY, NEW MEXICO