

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

Drawer 570, Farmington, New Mexico

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

1120' FNL & 1070' FWL

At proposed prod. zone

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

2 miles northwest of Bloomfield, New Mexico

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any) 1070'

16. NO. OF ACRES IN LEASE

689.93

17. NO. OF ACRES ASSIGNED
TO THIS WELL

317.05

18. DISTANCE FROM PROPOSED LOCATION*

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

280'

19. PROPOSED DEPTH

6441'

20. ROTARY OR CABLE TOOLS

Rotary

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

5629' GR

22. APPROX. DATE WORK WILL START*

November 16, 1979

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 sxs
7-7/8"	4-1/2"	10.5#	6441'	277 sxs - Stage 1
				879 sxs - Stage 2

Surface formation is Nacimiento.

Top of Ojo Alamo sand is at 926'.

Top of Pictured Cliffs sand is at 1771'.

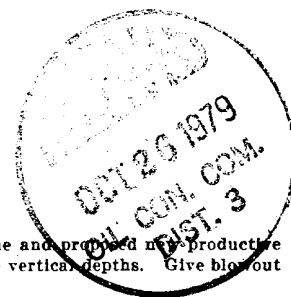
Fresh water mud will be used to drill from surface to total depth.

It is anticipated that an IES 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 January 1, 1980. This depends
on time required for approvals, rig availability and the weather.

Gas is dedicated.

RECEIVED
OCT 23 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.

SIGNED

TITLE

District Production Manager

DATE

October 16, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

NMOCC

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

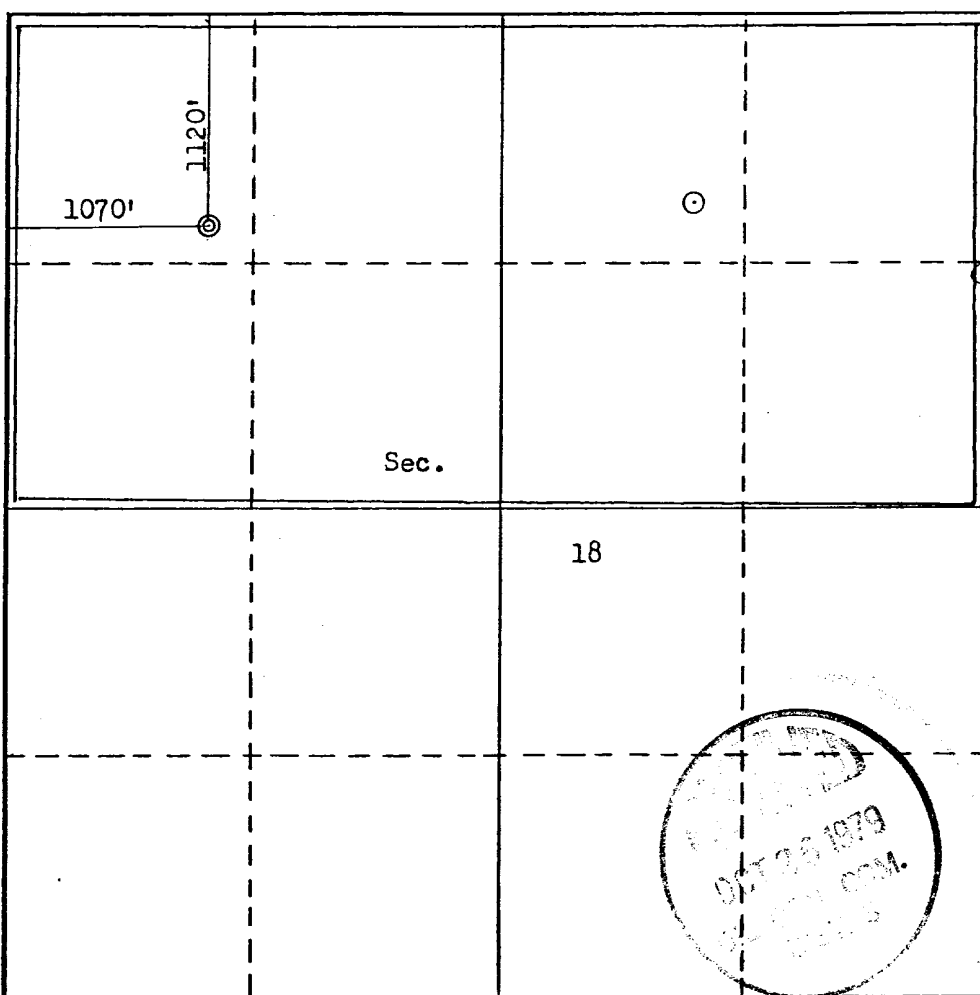
P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-78

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

Operator SOUTHLAND ROYALTY COMPANY			Lease COOPER		Well No. 4-E
Unit Letter D	Section 18	Township 29N	Range 11W	County San Juan	
Actual Footage Location of Well: 1120 feet from the North line and 1070 feet from the West line					
Ground Level Elev. 5629	Producing Formation Dakota		Pool Basin Dakota		Dedicated Acreage: 317.05 Acres
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>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).</p> <p>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?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes," type of consolidation _____</p> <p>If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>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.</p>					



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

October 16, 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 Surveyed

September 26, 1979

Registered Professional Engineer
and/or Land Surveyor

Fred E. Kerr, Jr.

Certificate No. MEXICO

39508

KERR, JR.

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

DRILLING SCHEDULE - COOPER #4E

Location: 1120' FNL & 1070' FWL, Section 18, T29N, R11W, San Juan County, New Mexico

Field: Basin Dakota

Elevation: 5629' GR

Geology:

Formation Tops:	Ojo Alamo	926'	Gallup	5376'
	Fruitland	1481'	Graneros	6181'
	Pictured Cliffs	1771'	Dakota	6291'
	Cliff House	3361'	Total Depth	6441'
	Pt. Lookout	4111'		

Logging Program: IES & GR-Density from TD to surface casing

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 to 5150'. Fresh water base mud from 5150' to TD.
Maintain mud weight of 9.3 and water loss of between 10-12 cc.
Viscosity 35-40 sec.

Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
	12-1/4"	200'	8-5/8"	24# H-40
	7-7/8"	6441'	4-1/2"	10.5# K-55

Float Equipment:

8-5/8" surface casing - Pathfinder type "A" guide shoe.

4-1/2" Production Casing - Pathfinder type "A" guide shoe. Pathfinder self-fill flapper type float collar. Run 1 jt off bottom. Five Pathfinder bow-type stabilizers (Run every other jt above shoe.) Dowell stage tool at 4310+ with 1 cement basket below and five Pathfinder bow-type centralizers above tool.

Wellhead Equipment - 8-5/8" X 10", 2000# bradenhead with 4-1/2" casing hanger. 10", 2000# X 6", 2000 psi tubing head and tree.

DRILLING SCHEDULE - COOPER #4E

Page two

CEMENTING PROGRAM:

8-5/8" surface casing: 140 sxs or 165 cu. ft. of Class B with 1/4# gel-flake per sx and 3% CaCl. WOC 12 hrs. Test to 600# prior to drilling out.
(Volume is 100% excess)

4-1/5" production casing: Stage 1: 800 sxs or 1193 cu. ft. of 50/50 poz with 6% gel, 1/4# gel flake/sx and 0.6% Halad 9 or equivalent.
(70% Excess)

Stage 2: 253 sxs or 377 cu. ft. of the same cement as above.
(70% Excess)

WOC and circulate between stages as required by well conditions.

L. O. Van Ryan

(Date)



Southland Royalty Company

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

Attention:

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 16, 1979

Name: 

Title: District Production Manager



Southland Royalty Company

October 16, 1979

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

Attention:

Dear Sir:

Enclosed please find a map showing existing roads and planned access roads to Southland Royalty Company's Cooper #4E 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 San Juan 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



Southland Royalty Company

October 16, 1979

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

Attention:

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.

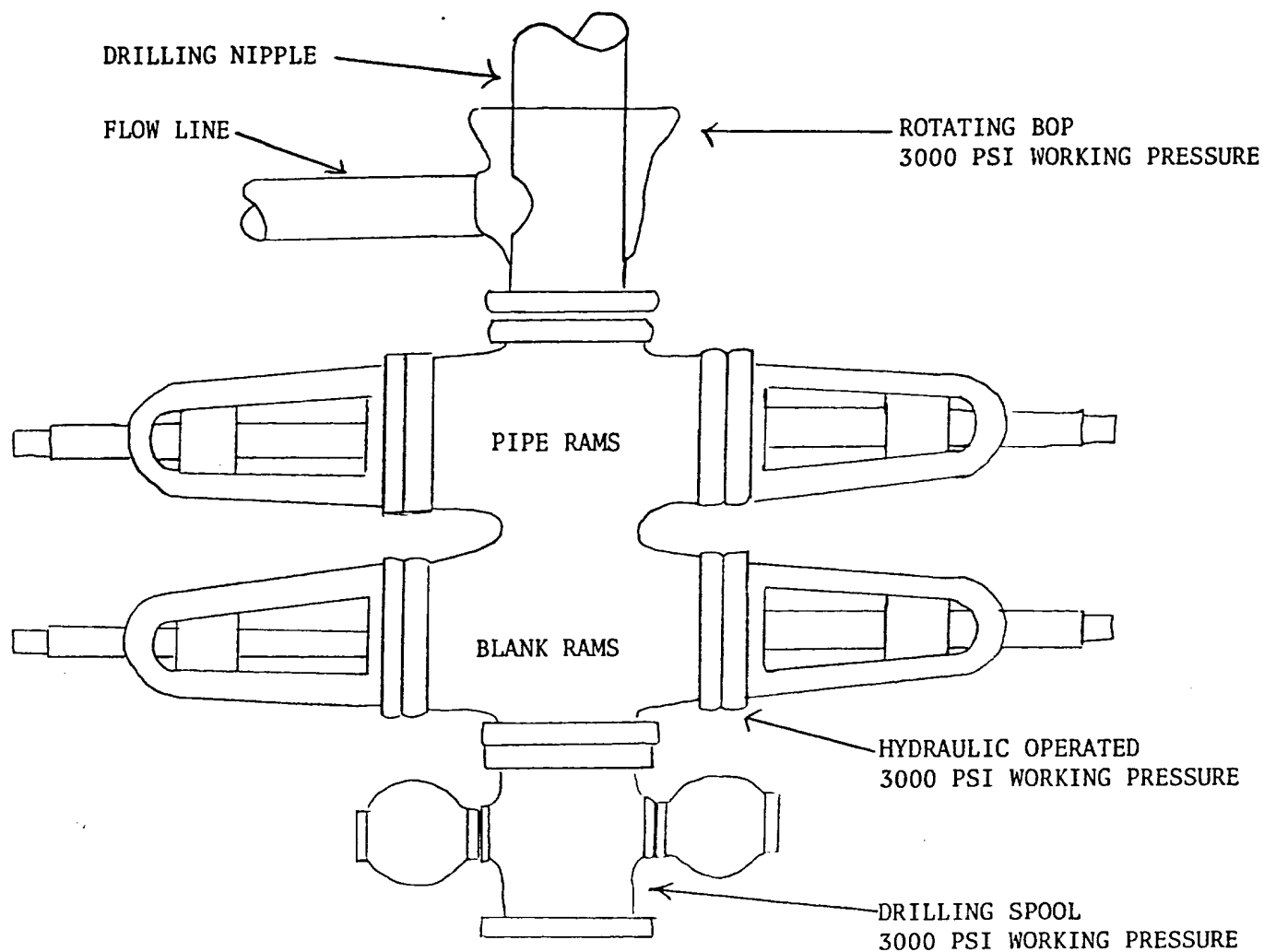
The preventer is 3000# working pressure and 6000# test.

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

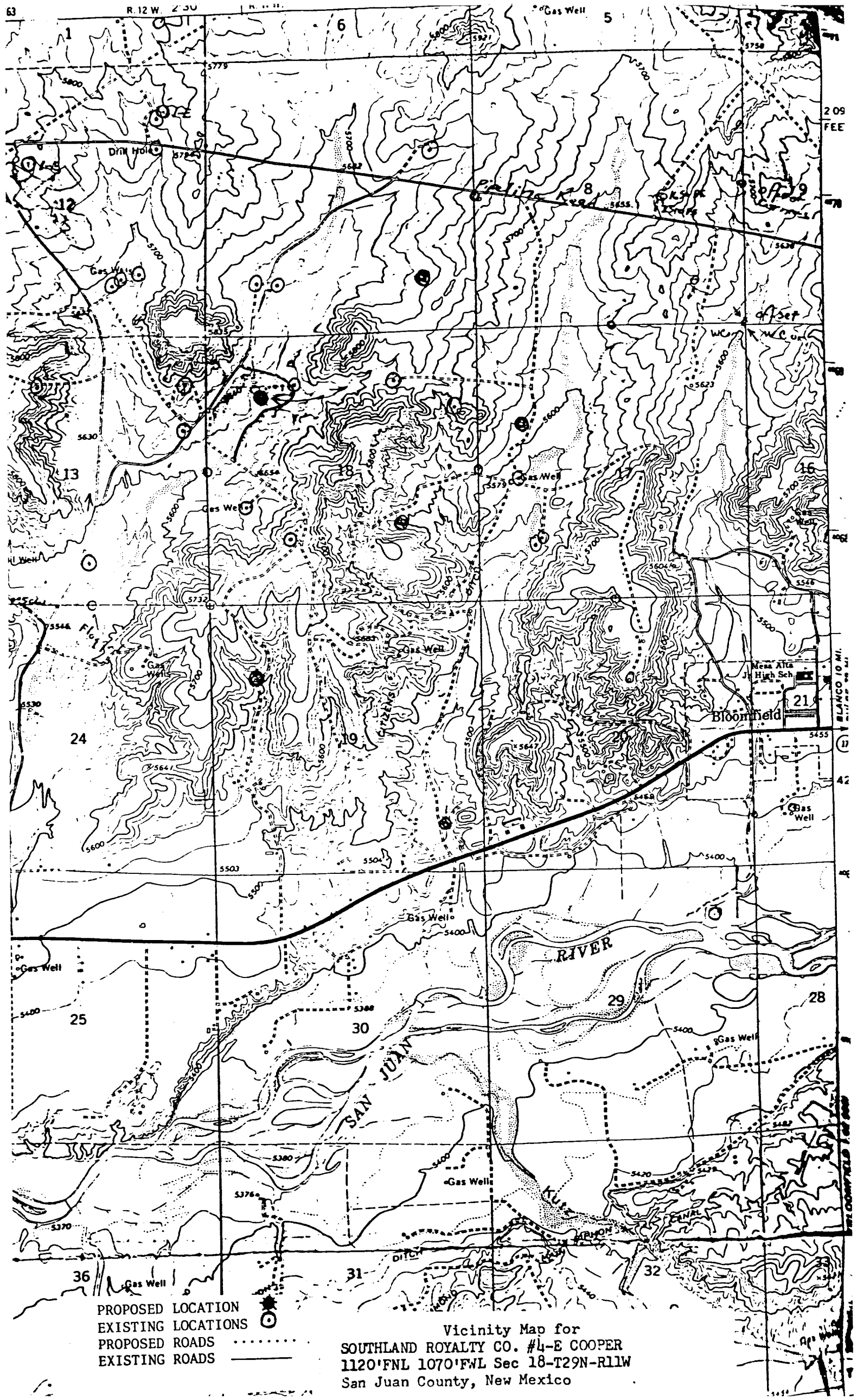
Yours truly,

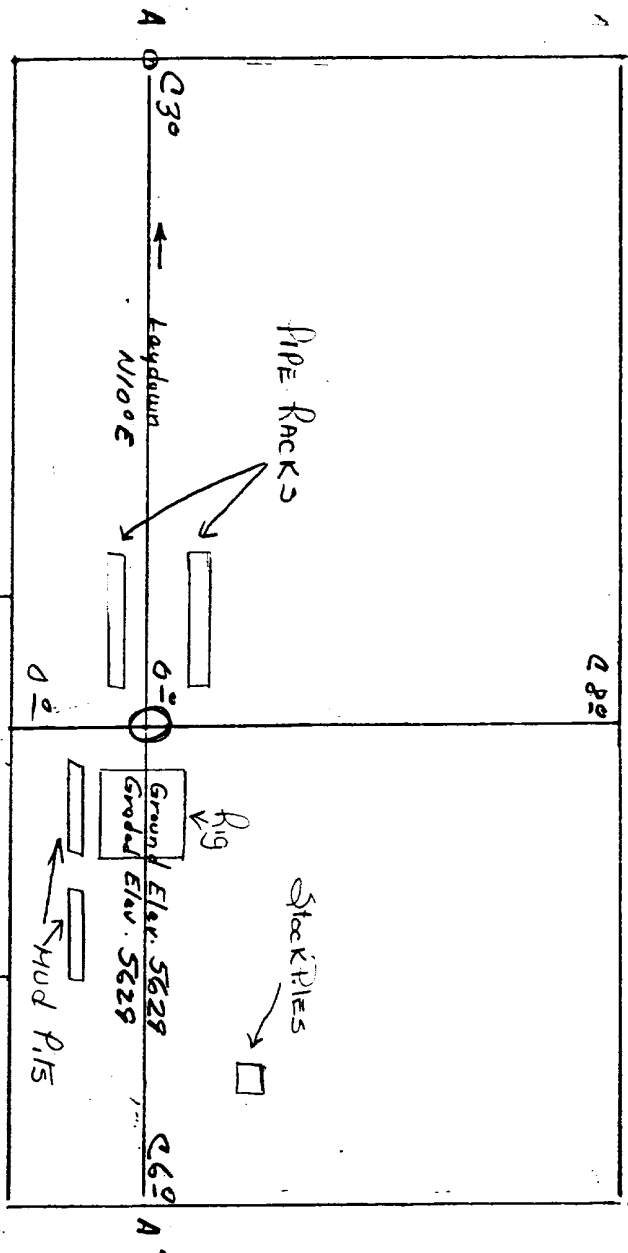
L. O. Van Ryan
District Production Manager

LOVR/dg



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



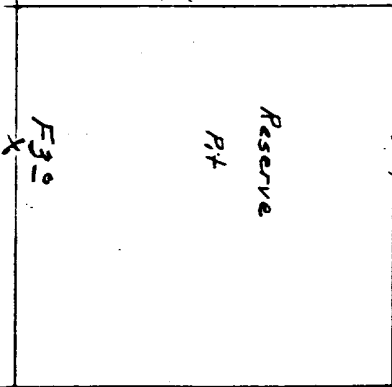


Vert. 1"=40' A-A' Horiz: 1"=100'

5640					
5630					
5620					

B-B' E

5640					
5630					
5620					



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

D-D' E
