

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, New Mexico

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

At surface

1520' FNL & 950' FEL

At proposed prod. zone

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

8 miles northwest of Aztec, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

950'

16. NO. OF ACRES IN LEASE

2400

17. NO. OF ACRES ASSIGNED

TO THIS WELL

309.55

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

622'

19. PROPOSED DEPTH

7410'

20. ROTARY OR CABLE TOOLS

Rotary

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

6230' GR

22. APPROX. DATE WORK WILL START*

Sept. 30, 1979

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#	200'	106 sxs (125 cu. ft.)
8-3/4"	7"	20#	4943'	92 sxs (138 cu. ft.) 1st stg
				160 sxs (321 cu. ft.) 2nd stg
6-1/4"	4-1/2"	10.5#	4793'-7000'	306 sxs (456 cu. ft.)
	4-1/2"	11.6#	7000'-7410'	
	2-3/8"	4.7#	7410'	

Surface formation is Nacimiento.

Top of Ojo Alamo sand is at 1477'.

Top of Pictured Cliffs sand is at 2702'.

Top of Cliff House sand is at 4332'

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

An air system will be used to drill from intermediate depth to total depth.

It is anticipated that an IES and a GR-Density log will be run at intermediate ID.

It is anticipated that a GR-Density and a GR-Induction log will be run at ID. COM.

It is expected that this well will be drilled before September 31, 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.

SIGNED

TITLE

District Production Manager

DATE

August 8, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

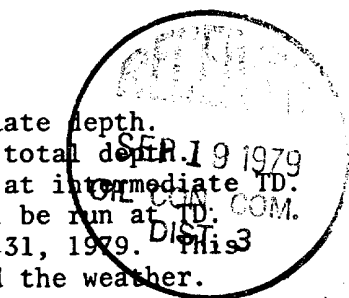
TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Additional well needed pursuant
to New Mexico Ind. R. 270-4.
U.S. Ind. R. 270-4.
Ind. R. 270-4.
Ind. R. 270-4.

*See Instructions On Reverse Side



OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-107
Revised 10-1-78

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

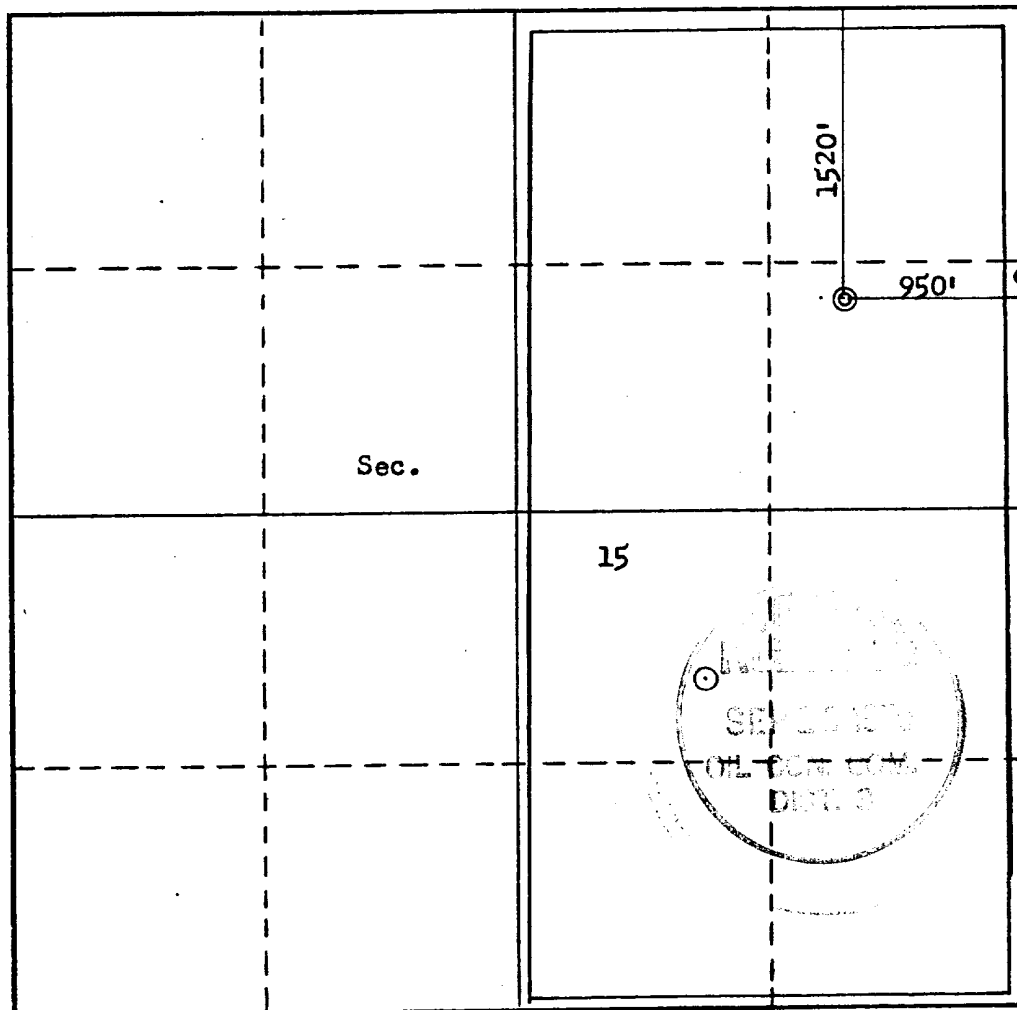
Operator SOUTHLAND ROYALTY COMPANY		Lease RICHARDSON		Well No. 7E	
Unit Letter H	Section 15	Township 31N	Range 12W	County San Juan	
Actual Footage Location of Well: 1520 feet from the North line and 950 feet from the East line					
Ground Level Elev. 6230	Producing Formation Dakota		Pool Basin Dakota		Dedicated Acreage: 309.55 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 _____
August 8, 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 _____
July 31, 1979
Registered Professional Engineer
and/or Land Surveyor
Fred B. Kerr Jr.
Certificate No. _____
3950 FRED B. KERR, JR.

0 330 660 990 1320 1650 1980 2310 2640 2000 1800 1000 500 0

DRILLING SCHEDULE - RICHARDSON #7E

Location: 1520' FNL & 950' FEL, Section 15, T31N, R12W, San Juan County, New Mexico

Field: Basin Dakota

Elevation: 6230' GR

Geology: INTERMEDIATE AND TD DEPTHS ARE CRITICAL. ACCURATE PIPE STRAPS ON LAST BIT RUNS ARE NECESSARY.

Formation Tops:

Ojo Alamo	1477'	Intermediate	4943'	Graneros	7163'
Fruitland	2412'	Point Lookout	4993'	Dakota	7254'
Pictured Cliffs	2702'	Gallup	7085'	Total Depth	7410'
Cliff House	4332'	Greenhorn	7163'		

Logging Program: IES & GR-Density at Intermediate TD to 1450'
GR-Density and GR-Induction at total depth

Coring Program: None

Natural Gauges: Gauge at lost connection above Point Lookout, Dakota and at TD
Gauge any increase in gas flow.

Drilling:

Contractor:

Tool Pusher:

SRC Ans. Service: 325-1841

SRC Representative:

Dispatch Number: 325-7391

Mud Program:

Materials:

<u>Casing Program:</u>	<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>Wt. & Grade</u>	
	12-1/4"	200'	9-5/8"	36#	K-55
	8-3/4"	4943'	7"	20#	K-55
	6-1/4"	4793'-7000'	4-1/2"	10.5#	K-55
	6-1/4"	7000'-7410'	4-1/2"	11.6#	K-55

Float Equipment:

9-5/8" Surface Casing: Pathfinder Guide Shoe, type "A".

7" Intermediate Casing: Pathfinder, Type "A" guide shoe and self-fill insert float valve. Five Pathfinder rigid centralizers. Run float 2 jts above shoe. Run centralizers every other jt above shoe. Dowell stage tool at 2900'. Run cement basket one joint below and five rigid centralizers above tool.

4-1/2" Liner: Liner hanger with neoprene pack-off.
Pathfinder type "AP" guide shoe and type "A" float collar.

Tubing:

Wellhead Equipment: 9-5/8" X 10", 2000#, casing head.
10" X 6", 2000#, tubing head.

DRILLING SCHEDULE - RICHARDSON #7-E

Cementing Program

9-5/8" Surface Casing: 106 sxs or (125 cu.ft.) of Class "B" with 1/4# gel flake/sx and 3% CaCl. WOC 12 hours. Test to 600# prior to drilling out. (Volume is 100% excess.)

7" Intermediate Casing: Stage 1: 92 sxs or (138 cu.ft.) of 50/50 Class "B" Poz with 6% gel (mixed with 7.2 gals water per sx 50% excess to cover Cliff House.)

Stage 2: 160 sxs or (321 cu.ft.) of 50/50 Poz with 6% gel followed by 70 sxs of Class "B" with 2% CaCl. (50% excess to cover Ojo Alamo.)

WOC and circulate between stages as required by well conditions. WOC 12 hours. Test to 1000 psi before drilling out. Run temperature survey after 8 hours.

4-1/2" liner: 306 sxs or (456 cu.ft.) or 50/50 Poz with 6% gel, 1/4# gel flake per sx and 6% Halad 9 or equivalent. (70% excess.) If hole gets wet and mist drilling is required, use 360 sxs or (537 cu.ft.) for 100% excess to circulate liner.

Precede cement with 20 barrels gel water.

L. O. Van Ryan

8-22-79



Southland Royalty Company

August 8, 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 Richardson #7E 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 Farmer's 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,

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:

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: August 8, 1979

Name: 

Title: District Production Manager



Southland Royalty Company

August 8, 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.

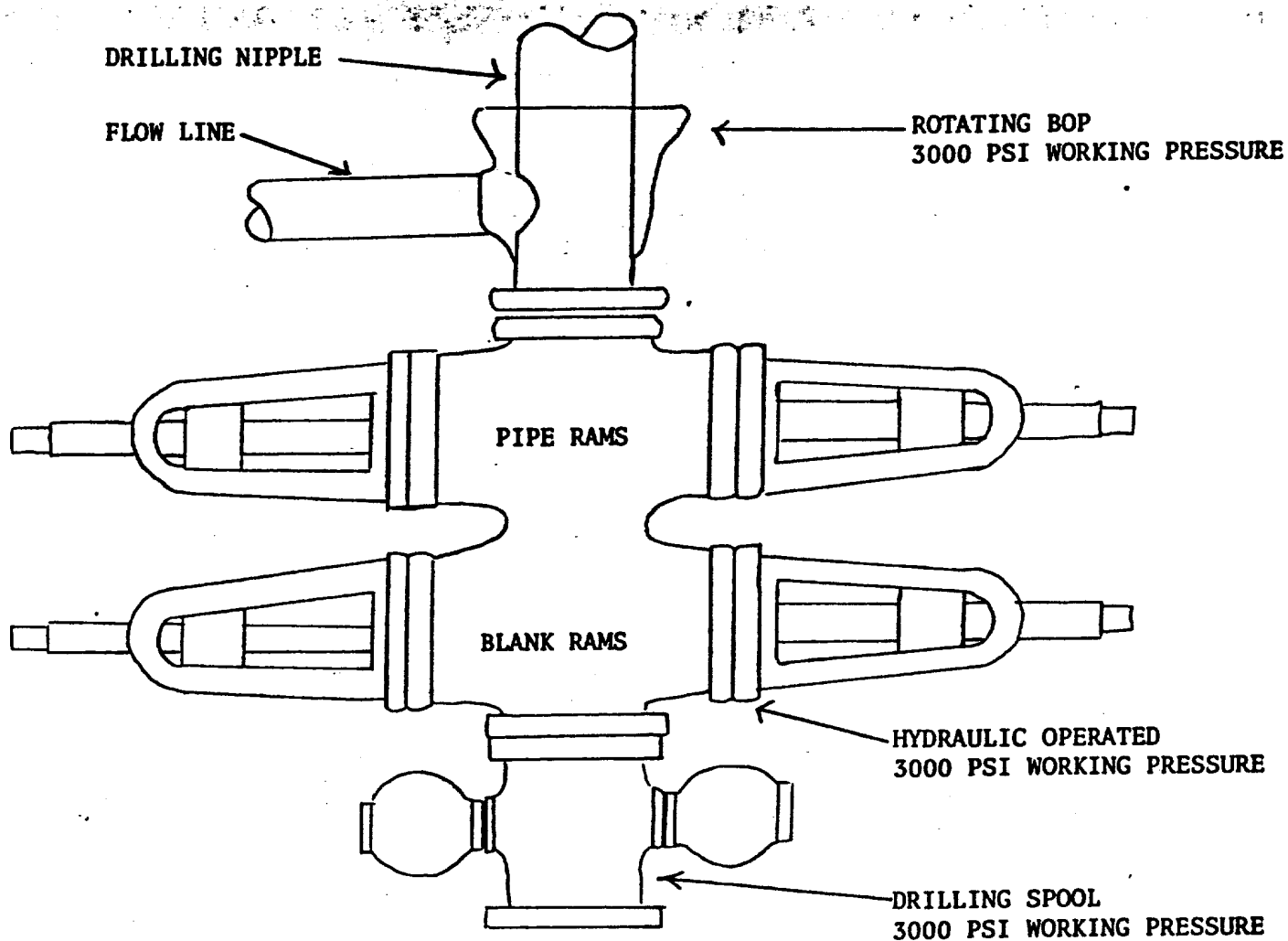
The preventer is 3000# working pressure and 6000# test.

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

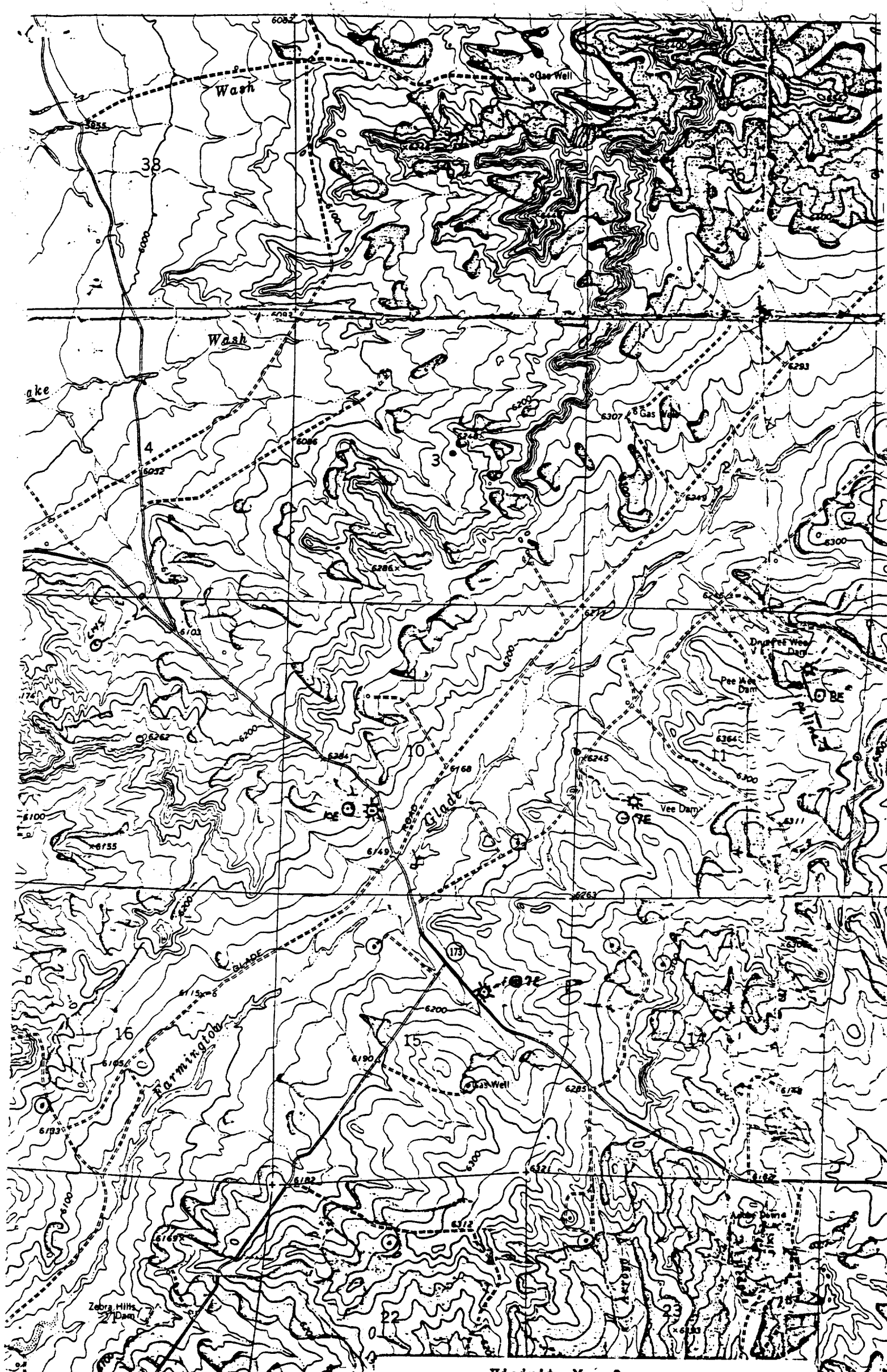
Yours truly,

L. O. Van Ryan
District Production Manager

LOVR/dg



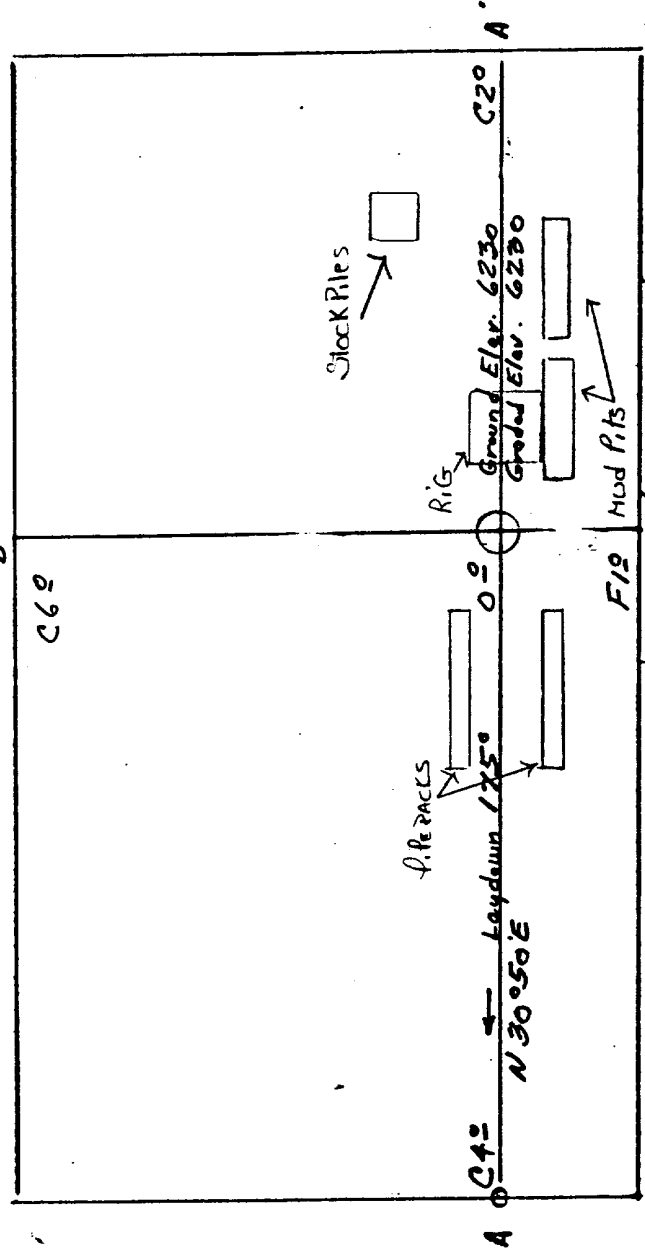
PREVENTERS AND SPOOLS ARE TO HAVE
THROUGH BORE OF 6" - 3000 PSI OR LARGER



- PROPOSED LOCATION ●
- EXISTING LOCATIONS ○
- PROPOSED ROADS - - -
- EXISTING ROADS —

Vicinity Map for
SOUTHLAND ROYALTY CO. #7E RICHARDSON
1520'FNL 950'FEL Sec 15-T31N-R12W
SAN JUAN COUNTY, NEW MEXICO

SOUTHLAND ROYALTY COMPANY #7E RICHARDSON
 -1520'FNL 950'FEL Sec 15-T31N-R12W---San Juan County, New Mexico



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

6240				
6230				
6220				

B-B'

6240				
6230				
6220				

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

D-D'

KERR LAND SURVEYING
 Date: 7-31-79