

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-045-24022

5. LEASE DESIGNATION AND SERIAL NO.

SF-079960

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Lawson ~~Federal~~

9. WELL NO.

#2E

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA

Section 31, T32N, R11W

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

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 48701

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

At surface

1000' FSL & 1790' FEL

At proposed prod. zone

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

Approximately 8 miles north of Aztec, NM

15. DISTANCE FROM PROPOSED*

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

1000'

16. NO. OF ACRES IN LEASE

120

17. NO. OF ACRES ASSIGNED
TO THIS WELL

E/320

18. DISTANCE FROM PROPOSED LOCATION*

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

950'

19. PROPOSED DEPTH

7657'

20. ROTARY OR CABLE TOOLS

Rotary

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

6420' GR

22. APPROX. DATE WORK WILL START*

January 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"	9 5/8"	32.3#	200'	110 Sacks
8 3/4"	7"	23.0#	5290'	110 Sacks (Stage One)
				260 Sacks (Stage Two)
				300 Sacks
6 1/4"	4 1/2"	10.5#	5140'-7000'	
6 1/4"	4 1/2"	11.6#	7000'-7657'	

Surface formation is Nacimiento.

Top of Fruitland sand is at 2582'.

Top of Pictured Cliffs sand is at 3042'.

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

Gas will be used to drill from intermediate TD to Total Depth.

It is anticipated that an IES and GR-Density log will be run from intermediate TD to surface casing.

No abnormal pressures or poisonous gases are anticipated in this well.

It is expected that this well will be drilled before June 30, 1980. This depends on time required for approval, rig availability and the weather.

Gas is dedicated.

RECEIVED

NOV 14 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 11-6-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

NMOCC

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

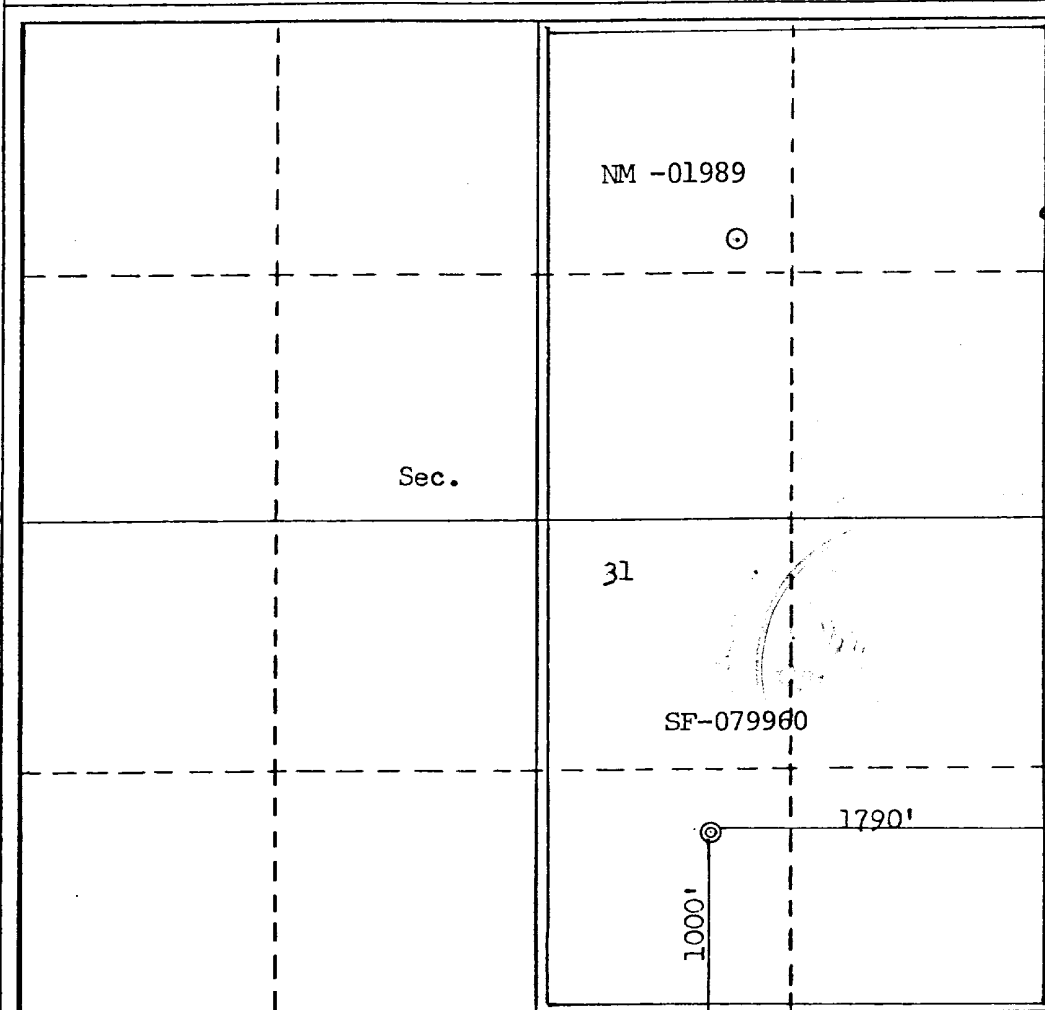
Operator SOUTHLAND ROYALTY COMPANY			Lease LAWSON FEDERAL		Well No. 2-E
Unit Letter 0	Section 31	Township 32N	Range 11W	County San Juan	
Actual Footage Location of Well: 1000 feet from the South line and 1790 feet from the East line					
Ground Level Elev. 6420	Producing Formation Dakota	Pool Basin	Dedicated Acreage: 320 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
L. O. Van Ryan
Position
District Production Manager
Company
Southland Royalty Company
Date
November 6, 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
October 10, 1979
Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr, Jr.
Certificate No.
3950



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

DRILLING SCHEDULE - LAWSON FEDERAL #2E

Location: 1000' FSL & 1790' FEL, Section 31, T32N, R11W, San Juan County, New Mexico

Field: Basin Dakota

Elevation: 6420'

Geology:

Formation Tops:	Ojo Alamo	1632'	Point Lookout	5342'
	Fruitland	2582'	Gallup	6682'
	Pictured Cliffs	3042'	Graneros	7482'
	Cliff House	4562'	Dakota	7557'
	Intermediate TD	5290'*	Total Depth	7657'

INTERMEDIATE TD IS CRITICAL. DO NOT DRILL PAST 5290'. ACCURATE STRAP WILL BE NECESSARY.

Logging Program: IES & GR-Density from Intermediate TD to surface casing.
GR-Induction and GR-Density from TD to Intermediate casing.

Coring Program: None

Natural Gauges: Gauge well at TD. Also gauge any noticeable increases in gas.
Record all gauges in tour book and turn in on morning report.

Drilling:

Contractor:

Tool Pusher:

SRC Ans. Service: 325-1841

SRC Representative:

Dispatch Number: 325-7391

Mud Program: Fresh water mud from surface to Intermediate TD.
Gas from Intermediate TD to TD.

Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
	12 1/4"	200'	9 5/8"	32.3# H-40
	8 3/4"	5290'	7"	23.0# K-55
	6 1/4"	5140'-7000'	4 1/2"	10.5# K-55
	6 1/4"	7000'-7657'	4 1/2"	11.6# K-55

Float Equipment:

9-5/8" Surface Casing: Pathfinder type "A" guide shoe.

7" Intermediate Casing: Pathfinder type "A" guide shoe. Self-fill insert float valve run 2 joints above shoe. 5 Pathfinder rigid stabilizers run every other joint above shoe. Run Dowell stage tool at 3250'. Run cement basket below and 5 Pathfinder rigid stabilizers above tool.

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

Wellhead Equipment: 9 5/8" X 10", 2000# casing head with 7" casing hanger.

10", 2000# X 6", 2000# tubing head and tree.

Cementing Program

9-5/8" surface casing: 110 sacks (125 cu. ft.) of Class "B" with 1/4# gel flake per sack and 3% CaCl_2 . WOC 12 hours. Test to 600# prior to drilling out. (Volume is 100% excess.)

7" Intermediate casing: STAGE ONE - 110 sacks (164 cu. ft.) of 50/50 Class "B" Poz with 6% gel (mixed w/7.2 gals wtr/sx). (Volume is 50% excess to cover top of Cliff House.)

STAGE TWO - 190 sacks (365 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 prior to drilling out.

4-1/2" Liner: 300 sacks (439 cu. ft.) of 50/50 Poz with 6% gel, 1/4# gel flake per sack, 0.6% Halad 9 or equivalent. (Volume is 70% excess.)

If hole gets wet and mist drilling is required, use 350 sacks (517 cu. ft.) for 100% excess.

Precede cement with 20 barrels of gelled water.

L. O. Van Ryan

Date



Southland Royalty Company

November 6, 1979

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

Attention: James Sims

Dear Sir:

Enclosed please find a map showing existing roads and planned access roads to Southland Royalty Company's Lawson Federal #2E 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 Farmers 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

November 6, 1979

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

Attention: James Sims

Re: Blowout Preventer Plan

Dear Sir:

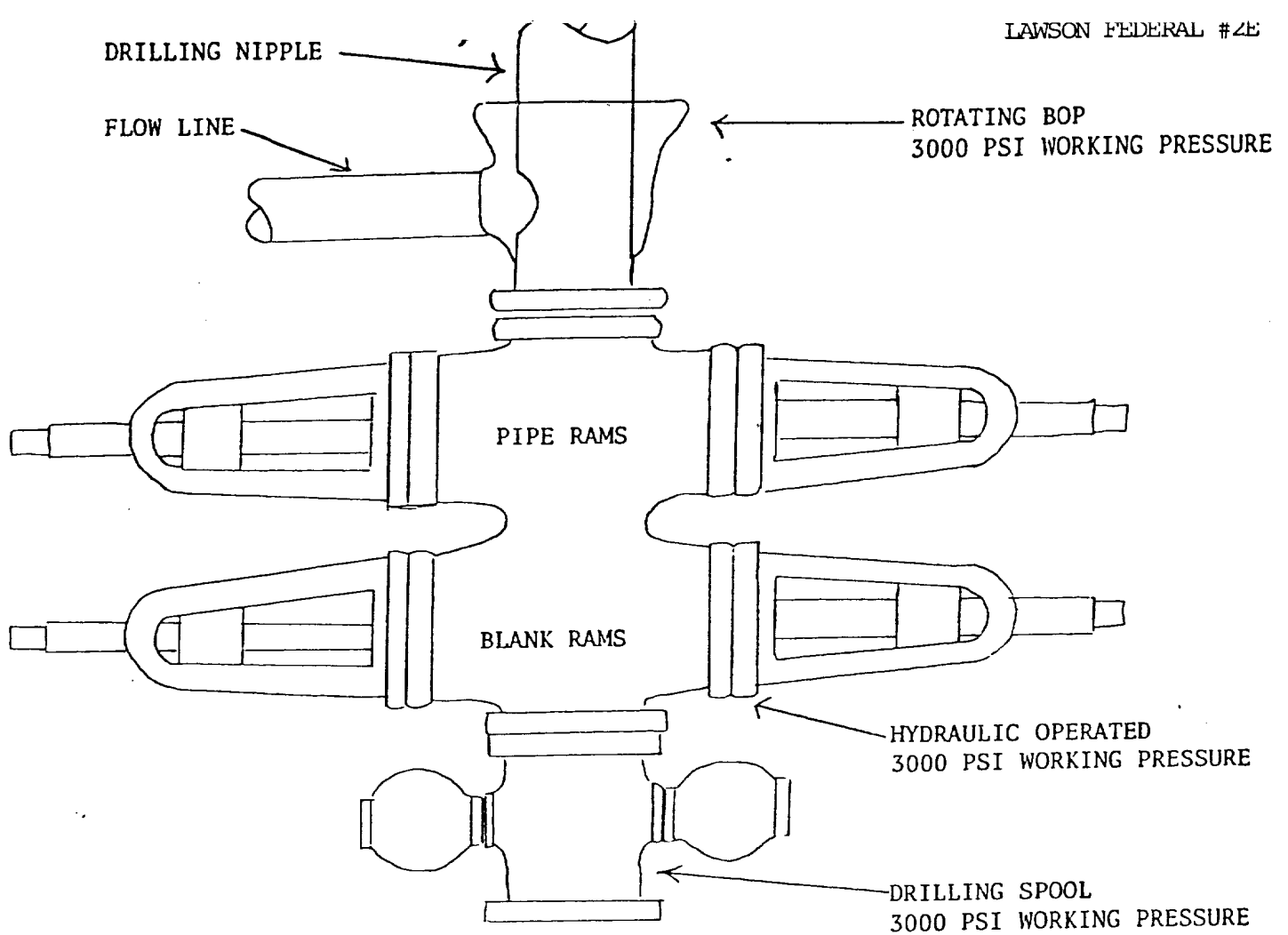
All drilling and completion rigs will be equipped with 6" or larger double hydraulic blowout preventers and a hydraulic closing unit with steel lines.

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



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



Southland Royalty Company

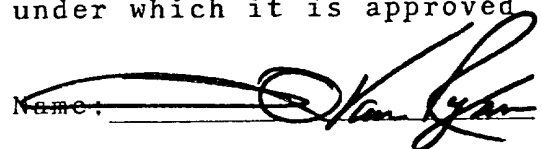
United States Geological Survey
P. O. Box 959
Farmington, New Mexico 87401

Attention: James Sims

Dear Sir:

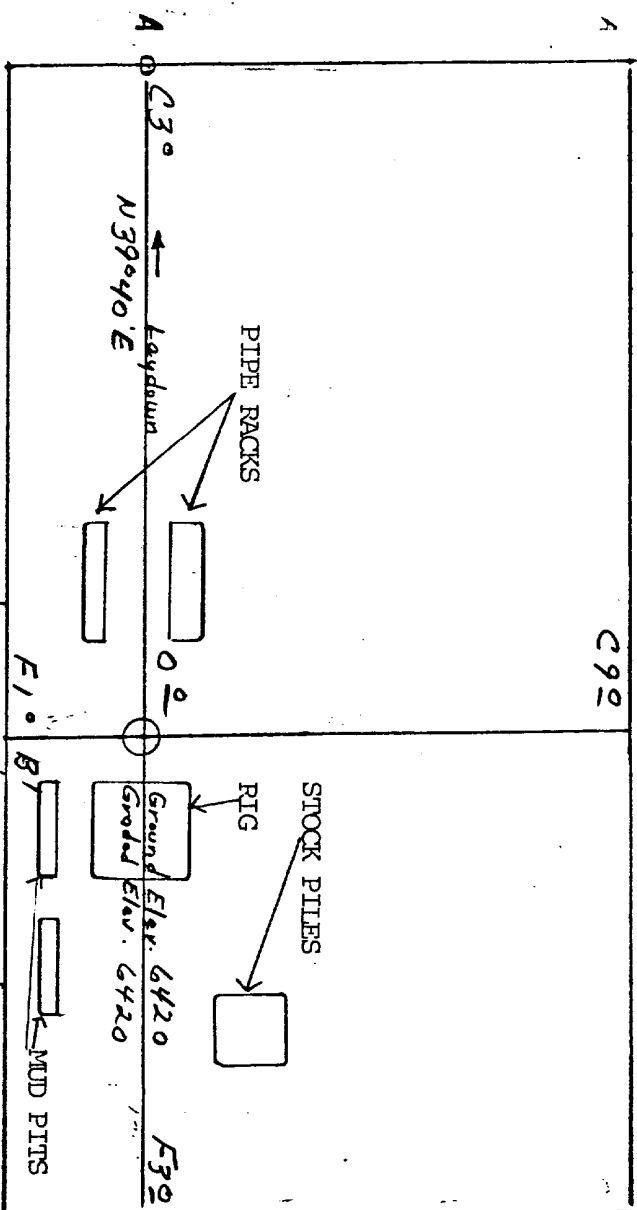
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated 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: November 6, 1979

Name: 

Title: District Production Manager

6



vert. $1'' = 90'$

B-B

Reserve

Year: 1990

$$D \sim D'$$

KERR LAND SURVEYING
Date: 10-10-79



Proposed Location 
 Existing Locations 
 Proposed Road 
 Existing Roads 

Vicinity Map for
 SOUTHLAND ROYALTY CO. #2E LAWSON-FEDERAL
 1000'FSL 1790'FEL Sec 31-T32N-R11W
 SAN JUAN COUNTY, NEW MEXICO