

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

SOUTHERN UNION EXPLORATION COMPANY

3. ADDRESS OF OPERATOR

P. O. BOX 2179 FARMINGTON, NEW MEXICO 87499

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

At surface

990' FSL & 1650 FWL

At proposed prod. zone

1760 Same

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

40 miles SSW of Dulce, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

990'

18. DISTANCE FROM PROPOSED LOCATION*

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

280'

19. PROPOSED DEPTH

6200'

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

7252' GR

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"	32.0	350	260 cu ft (Circ to surface)
7 7/8"	4 1/2"	105. c 11.6	6200	2 stages: 290 cu ft & 290 suft

1. Drill 12 1/4" hole to 350'. Run 8 5/8", 32.0#/ft, K-55 casing and cement @ 350'.
2. Pressure test casing and BOP to 800 psi.
3. Drill 7 7/8" hole to 6200' w/water base mud.
4. Run Induction & Gamma Ray logs, compensated Neutron density logs.
5. Run 4 1/2" 11.6 & 10.5# casing to 6200' & cement in two stage w/Multiple Stage Tool @ 3950' (Lewis Shale).
6. Drill out stage tool and cement bond log.
7. Perforate & Stimulate Mesa Verde (Point Lookout)

EXHIBITS: A. C 102-Survey & location plat.
B. Ten point compliance
C. Surface use & operations plan
D. Topographic map

E. Cut/fill cross section
F. Drill pad layout
G. Production Facilities layout
H. Blow out preventer schematic

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

Jeffrey Schweitzer

Drilling Supervisor

Dec 1, 1983

(This space for Federal or State office use only)

PERMIT NO.

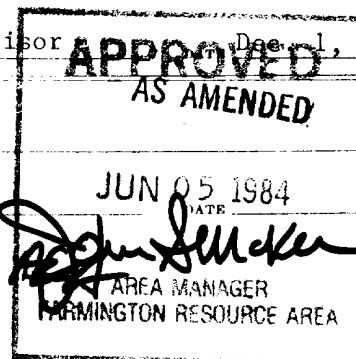
APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED
JUN 07 1984
OIL CON. DIV.
DIST. 3

NMOCC



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

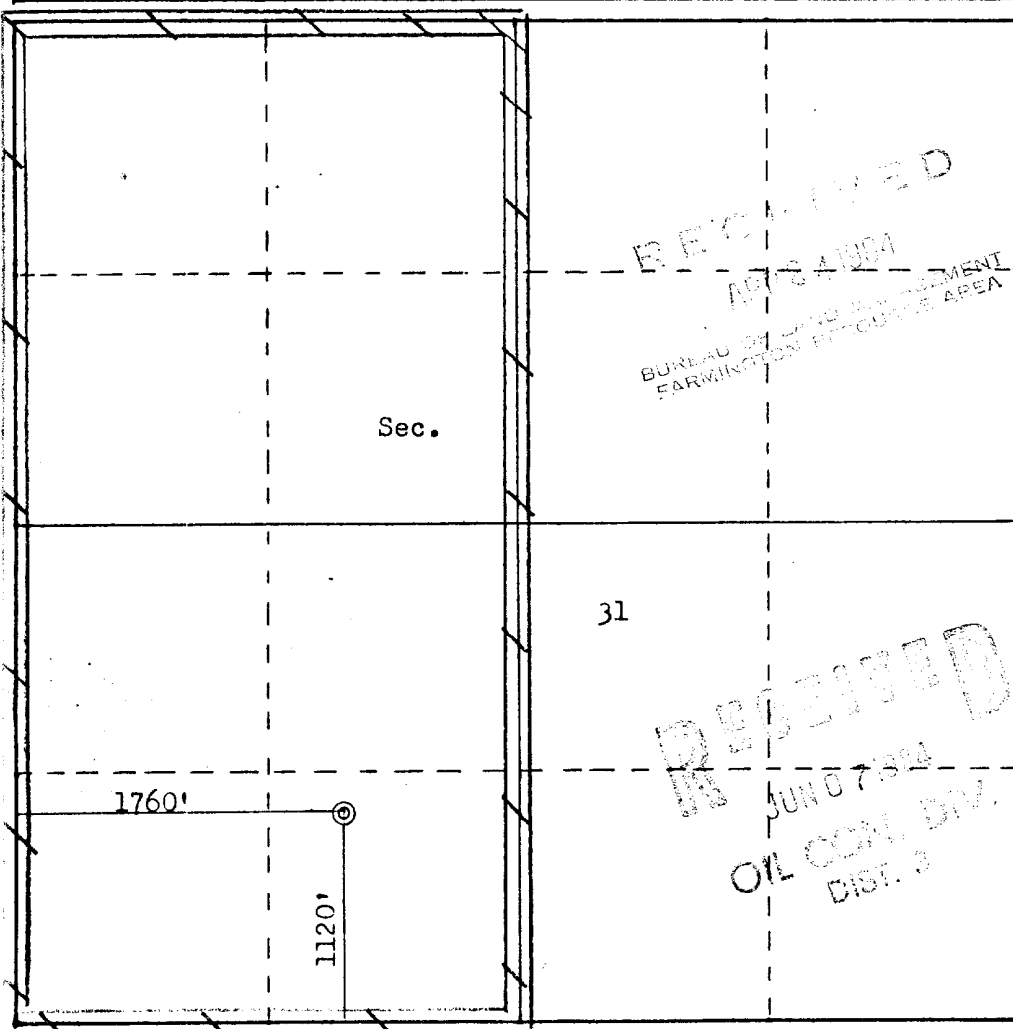
Operator SOUTHERN UNION EXPLORATION CO.			Lease JICARILLA "D"		Well No. 20
Unit Letter N	Section 31	Township 26N	Range 3W	County Rio Arriba	
Actual Footage Location of Well: 1120 feet from the South line and 1760 feet from the West line					
Ground Level Elev. 7239	Producing Formation Point Lookout	Pool Blanco Mesa Verde		Dedicated Acreage: 320 160 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.



Scale: 1"=1000'

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

[Signature]
 Name _____

Drilling Engineer

Position

Southern Union Exploration

Company

April 12, 1984

Date

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

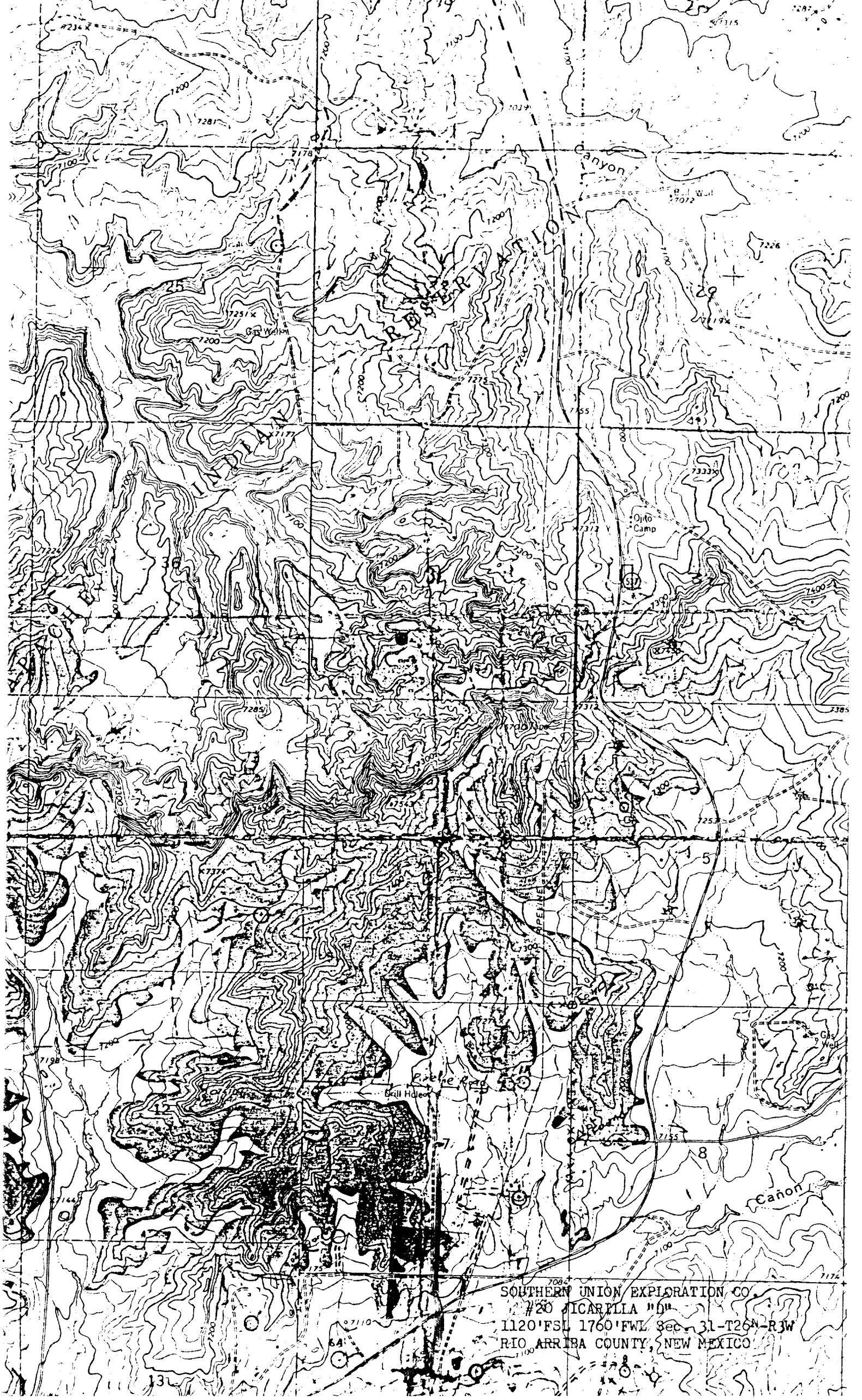
April 19, 1984

Registered Professional Engineer and Land Surveyor

[Signature]
Fred B. Kerr Jr.

Certificate No.

3950



SOUTHERN UNION EXPLORATION CO.
#20 MICARELLA "0"
1120' FSL 1760' FWL Sec 31-T26N-R3W
RIO ARRIBA COUNTY, NEW MEXICO