

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

(Other instructions on
reverse side)

30-045-23363

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
TENNECO OIL COMPANY

3. ADDRESS OF OPERATOR
720 SOUTH COLORADO BLVD, DENVER, CO 80222

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface 1540' FSL and 1680' FEL
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
See point 1B Surface Use Plan

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

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6254' G.L.

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8-5/8"	24#	+ 200'	Sufficient to circulate to surface.
7-7/8"	5-1/2"	15.5#	+ 3050'	Cement to yield column behind casin

1. The geological name of the surface formation is San Jose Eocene.

2&3. Formation Tops (Estimated)

Fruitland + 2525'
Pictured Cliffs + 2850' Possible oil/gas producer.

4. Run 8-5/8" OD, K-55 ST&C new casing to + 200' and circulate cement to surface. Run 5 1/2" OD, K-55 casing to 3050'. Equip with guide shoe, float collar and centralizers across zones of interest. Cement through the shoe with sufficient volume to yield a + 1000' column of cement behind the casing.

5. Blowout Preventors: Hydraulic, double ram 10". One set of rams will be provided for each size drill pipe in the hole. One set of blind rams at all times. Fill line will be 2", kill line will be 2", choke relief line will be 2" with variable choke. BOPs will be installed, tested and in working order before drilling below surface casing and shall be maintained ready for use until drilling operations are completed. BOPs, drills and tests will be recorded in the IADC Drilling Report. They shall be checked every 24 hours. All rig equipment will be tested to above BOE ratings.

6. Use of spud mud 0-200'; and low solids 200' - T.D.

7. Auxiliary Equipment

- Kelly cock will be in use at all times.
- Stabbing valve to fit drill pipe will be present on floor at all times.
- Mud monitoring will be visual, no abnormal pressures are anticipated in this area.
- Floats at bits.
- Drill string safety valve(s) to fit all pipe in the drill string will be maintained on the rig floor while drilling operations are in progress.
- Rotating head will be used while drilling with gas.

8. No coring is planned. GR/FDC/CNL/Caliper Surveys will be taken from 2000' above T.D. to T.D. SP/Induction/SN/GR taken from T.D. to surface.

9. No abnormal pressures or temperatures are anticipated. See point #5 for blowout prevention equipment.

10. The drilling of this well will take approximately five days. The gas is not yet contracted.

JAN 18 1979

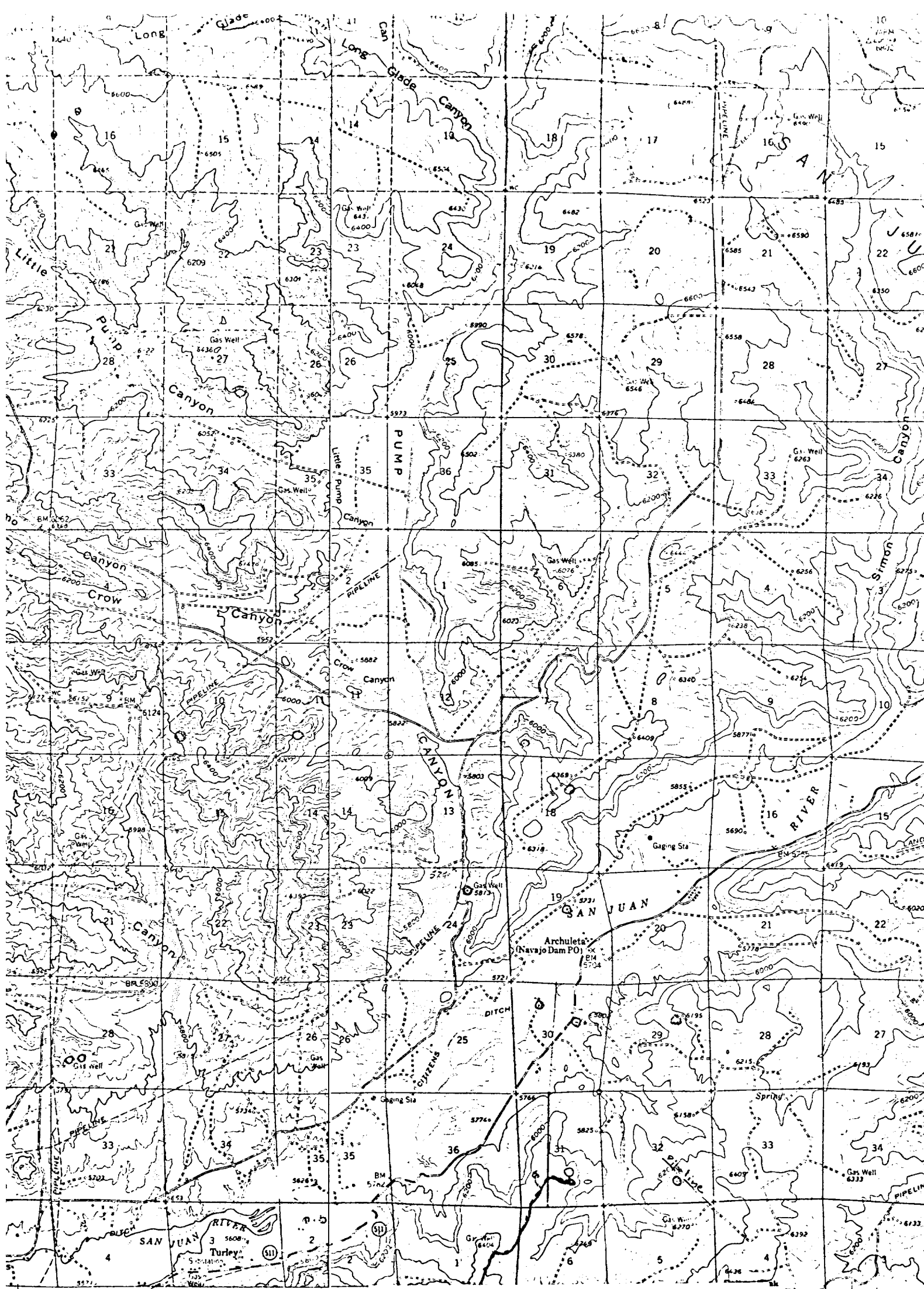


IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED D.D. Myers TITLE Division Prod. Manager DATE 1/8/79

(This space for Federal or State office use)

APPROVAL DATE JAN 19 1979



INTERIOR-GEOLOGICAL SURVEY WASHINGTON D.C. - 1972
 1/4 MI. TO N. MEX. 17 253000m E 10745

ROAD CLASSIFICATION
 Medium-duty ——— Light-duty ———
 Unimproved dirt ———
 U.S. Route ○ State Route

AZTEC, N. MEX.
 N3645-W10745/15
 1959

Vicinity Map for *Exhibit II*
TENNECO OIL CO. #109 FLORANCE
1540'FSL 1680'FEL Sec 31-T30N-R8W
SAN JUAN COUNTY, NEW MEXICO

polyconic projection 1927 North American datum
 3,000 foot grid based on New Mexico coordinate system,
 east and central zones
 300 meter Universal Transverse Mercator grid ticks,
 one 13, shown in blue
 The hatching indicates area to be submerged by Navajo
 water project. 5000 feet
 area covered by dashed light blue pattern is subject
 to future water project.

UTM GRID AND 1959 MAGNETIC NORTH
 DECLINATION AT CENTER OF SHEET

3000 0
 1
 1000

FOR SALE BY
 A FL

TENNECO OIL COMPANY

CALCULATION SHEET

COMPANY

SUBJECT *Drilling Well Site Layout - Florence 109*

Exhibit IV

LOCATION *NW/SE Sec 31, T 30N, R 8W San Juan Co*

DATE *1/79*

