

TENNECO OIL COMPANY
ROCKY MOUNTAIN DIVISION
PENTHOUSE, 720 SOUTH COLORADO BOULEVARD
DENVER, COLORADO 80222

DRILLING PROGRAM

DATE: January 30, 1980

LEASE: Neal

WELL NO.: 20

LOCATION: 1570 FSL, 790 FWL
Sec. 33, T 32N, R 11W
San Juan County, New Mexico

FIELD: Basin Dakota

ELEVATION: 6210' Est. G.R.

TOTAL DEPTH: 7590'

PROJECTED HORIZON: Dakota

SUBMITTED BY: _____ DATE: _____

APPROVED BY: *B. J. [Signature]* DATE: 1 30 80

DSB/ms

CC: Administration
DSB Well File
Field File

ESTIMATED FORMATION TOPS

Ojo (Water)	1980'
Pictured Cliffs (Gas)	2930'
Lewis	3020'
Cliffhouse (Gas)	4580'
Menefee (Gas)	4640'
Point Lookout (Gas)	5090'
Mancos	5290'
Gallup (Oil/Gas)	5790'
Greenhorn	7220'
Dakota (Gas)	7340'
T.D.	7590'

SURFACE FORMATION: Nacimiento, Shale and sandstone.

DRILLING, CASING, AND CEMENT PROGRAM

1. MIRURT.
2. Drill 12 1/4" hole to \pm 250'.
3. Run 9 5/8", 36#, K-55, ST&C casing to \pm 250'. Cement with sufficient volume to circulate cement to surface.
4. WOC a minimum of 12 hours. Nipple up BOE and test to 1000 psi for thirty minutes.
5. Reduce hole to 8 3/4". Drill to \pm 3600'. Run 7", 23#, K-55, ST&C casing to \pm 3600'. Cement with sufficient volume to circulate cement to surface.
6. NU BOE to gas drill.
7. Drill a 6 1/4" hole with gas to 7500' \pm .
8. Log as directed by the Wellsite Geological Engineer.
9. If productive, run 4 1/2" (3590') 10.5#/(600') 11.6#, K-55, ST&C liner. Cement with sufficient volume to circulate cement to top of liner.
10. If non-productive, plug and abandon as per U.S.G.S. requirements.
11. MORT.

CASING PROGRAM

Surface:	250', 9 5/8", 36#, K-55, ST&C casing.
Intermediate:	3600', 7", 23#, K-55, ST&C casing.
Liner:	3590', 4 1/2", 10.5#, K-55, ST&C casing. 600', 4 1/2", 11.6#, K-55, ST&C casing.

MUD PROGRAM

0-250'	Native solids. Have sufficient viscosity to clean hole and run casing.
250'-3600'	Benex and water. Have sufficient viscosity to run casing.
3600'-T.D.	Gas.

EVALUATION

Cores and DST's:

No cores or DST's are anticipated.

Deviation Surveys:

1. Survey surface ever 100'. Maximum allowable deviation at surface is 1°.
2. From surface to T.D., surveys must be taken every 500' or each trip, whichever is first. This may entail running the TOTCO on wireline. Record surveys on IADC Drilling Report. Maximum allowable change is 1° per 100'.

Samples: None.

Logs:

GR/IND: T.D. to Intermediate.

GR/FDC/CAL: T.D. to base Mesaverde

BLOWOUT EQUIPMENT

10" series-900 double ram hydraulic operated with closing unit and 40 gallon accumulator.

10" series-900 rotating head with 150 psi working pressure minimum, and 7" blooie line.

REPORTS

Drilling reports for the past 24 hours will include depth, footage, time distribution, activity breakdown, mud properties, bit record, bottom hole assembly, daily and cumulative mud costs, plus any other pertinent information, will be called into Tenneco Oil Company, Denver, Colorado, between 7:30 a.m. and 8:00 a.m.

1. 303-758-7130 (Office) Don Barnes
303-758-7287 (Office) Don Barnes' private line, Monday-Friday (before 7:45 a.m.)
303-936-0704 (Home) Don Barnes, weekends and holidays.
2. George Ramsey (Home) 303-771-5154.
3. John Owen (Home) 303-795-0221.

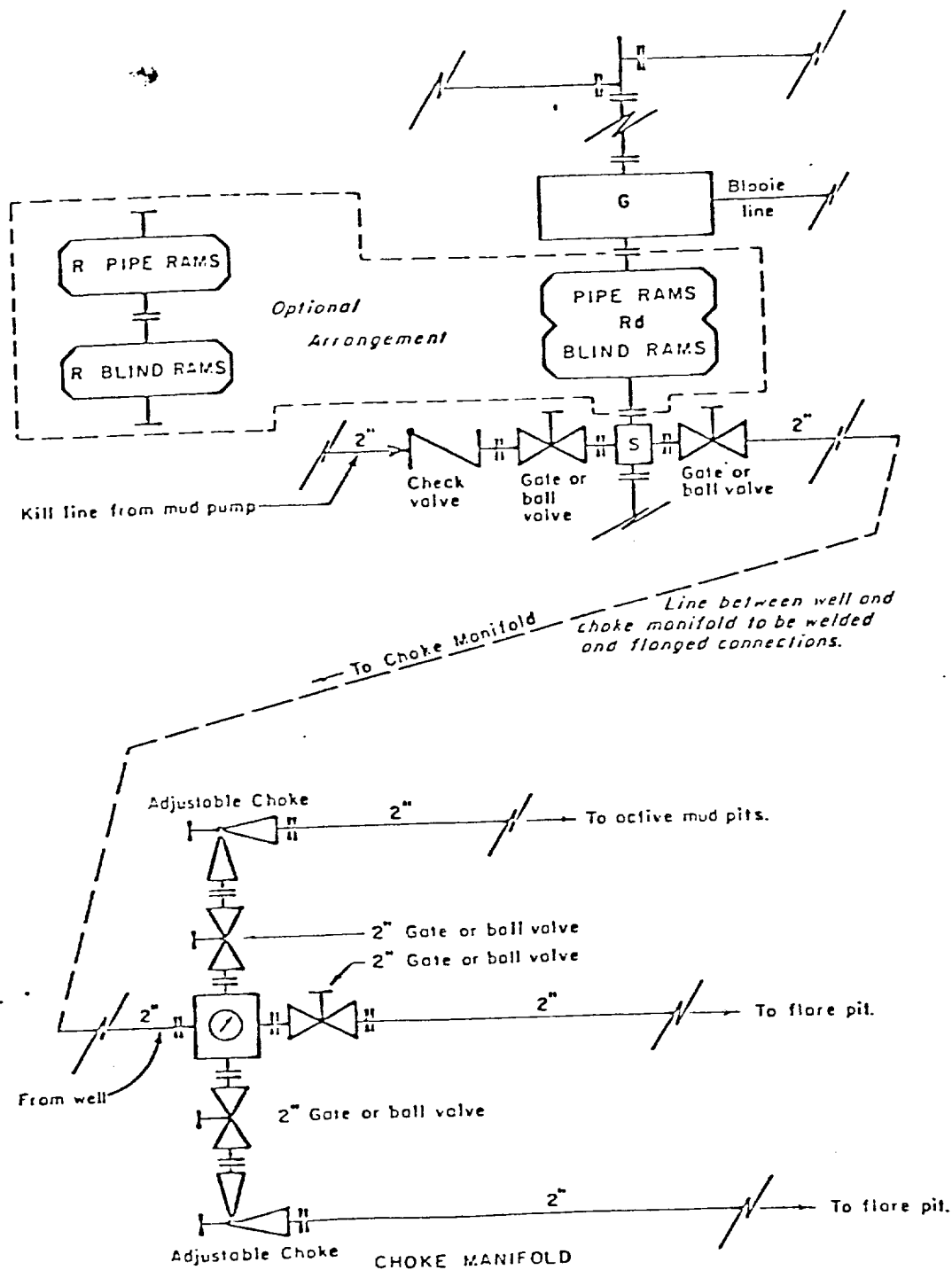
The yellow sheet of the IADC Report is to be filled out completely. The original copy of the drilling time recorder, and copies of any invoices from this well, signed and received for Tenneco Oil Company, will be mailed daily to:

TENNECO OIL COMPANY
ROCKY MOUNTAIN DIVISION
PENTHOUSE, 720 SOUTH COLORADO BOULEVARD
DENVER, COLORADO 80222

ATTENTION: Drilling Department

IN CASE OF EMERGENCY, NOTIFY THE FOLLOWING:

1. Mr. Don Barnes, Division Drilling Engineer.
2. Mr. George E. Ramsey, Jr., Drilling Engineers Supervisor
3. Mr. John W. Owen, Project Drilling Engineer.
4. Mr. Mike Lacey, Division Production Manager (Home 303-979-0509).



All equipment to be 3,000 psi working pressure except as noted.

- Rd Double ram type preventer with two sets of rams.
- R Single ram type preventer with one set of rams.
- S Drilling spool with side outlet connections for choke and kill lines.
- G Rotating head 150 psi working pressure minimum


ARRANGEMENT C

TENNECO OIL COMPANY
ROCKY MOUNTAIN DIVISION
REQUIRED MINIMUM
BLOWOUT PREVENTER AND
CHOKE MANIFOLD

J. MAGILL 10-26-70 EVI

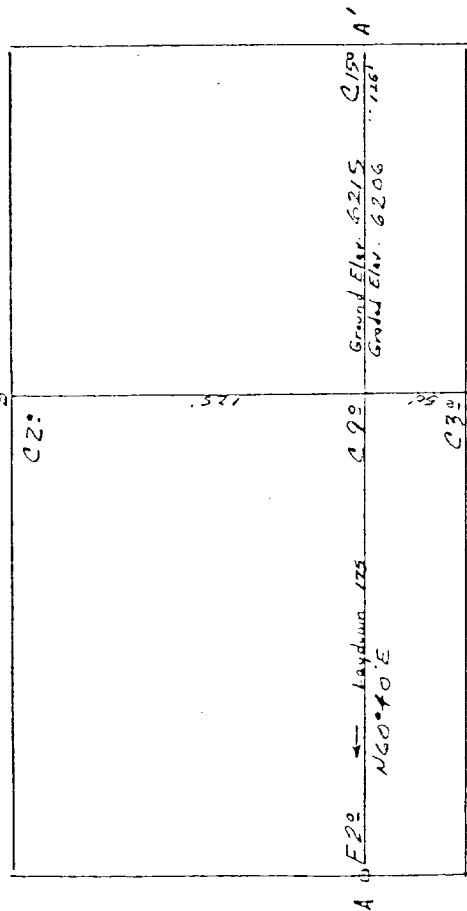
1. Existing Road - Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map. All existing and new roads will be properly maintained during the duration of this project.
2. Planned Access Roads - Please refer to Map No. 1. The grade of the access roads will be consistent with that of the local terrain. The road surface will not exceed twenty feet (20') in width. Upon completion of the project, the access road will be adequately drained to control soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary by trained Company personnel to insure proper drainage. Gates and/or cattleguards will be installed if necessary.
3. Location of Existing Wells - Please refer to Map No. 2.
4. Location of Tank Batteries, Production Facilities, and Production Gathering and Service Lines - Please refer to Maps No. 1 and No. 2. Map No. 2 shows the existing roads and new proposed access roads. All known production facilities are shown on these two maps.
5. Location and Type of Water Supply - Water for the proposed project will be obtained from a private source.
6. Source of Construction Materials - No additional materials will be required to build either the access road or the proposed location.
7. Methods of Handling Waste Materials - All garbage and trash materials will be put into a burn pit shown on the attached Location Plat No. 1. When clean-up operations are begun on the proposed project, the burn pit with its refuse will be buried to a depth of at least three feet (3'). A latrine, the location of which is also shown on Plat No. 1. will be provided for human waste. If large amounts of liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying any of these materials into the watershed. No earthen pit will be located on natural drainage; all earthen pits will be so constructed as to prevent leakage from occurring.

8. Ancillary Facilities - No camps or airstrips will be associated with this project.
9. Wellsite Layout - Please refer to the attached Plat No. 1.
10. Plans for Restoration of the Surface - After completion of the proposed project the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeding operation will be performed during the time period set forth by the regulatory body. The location production equipment will be painted as designated by the responsible government agency.
11. Other Information - The proposed site is located in the South West fork of Kiffen Canyon. The area is surrounded by eroding Clay hills. The site is sandy clay supporting pinon, juniper, brittle brush, cactus, and native grasses
12. Operator's Representative -
SEE DRILLING PROGNOSIS
13. Certification - 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 will be performed by Tenneco Oil Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.


L. Freeman
Staff Production Analyst

TENNECO OIL COMPANY #20 NEAL
 1570' FSL 790' FWL Sec 33-T32N-R11W San Juan County, New Mexico

Scale: 1" = 50'



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

6220			
6210			
6200			

B-B'

6220			
6210			
6200			

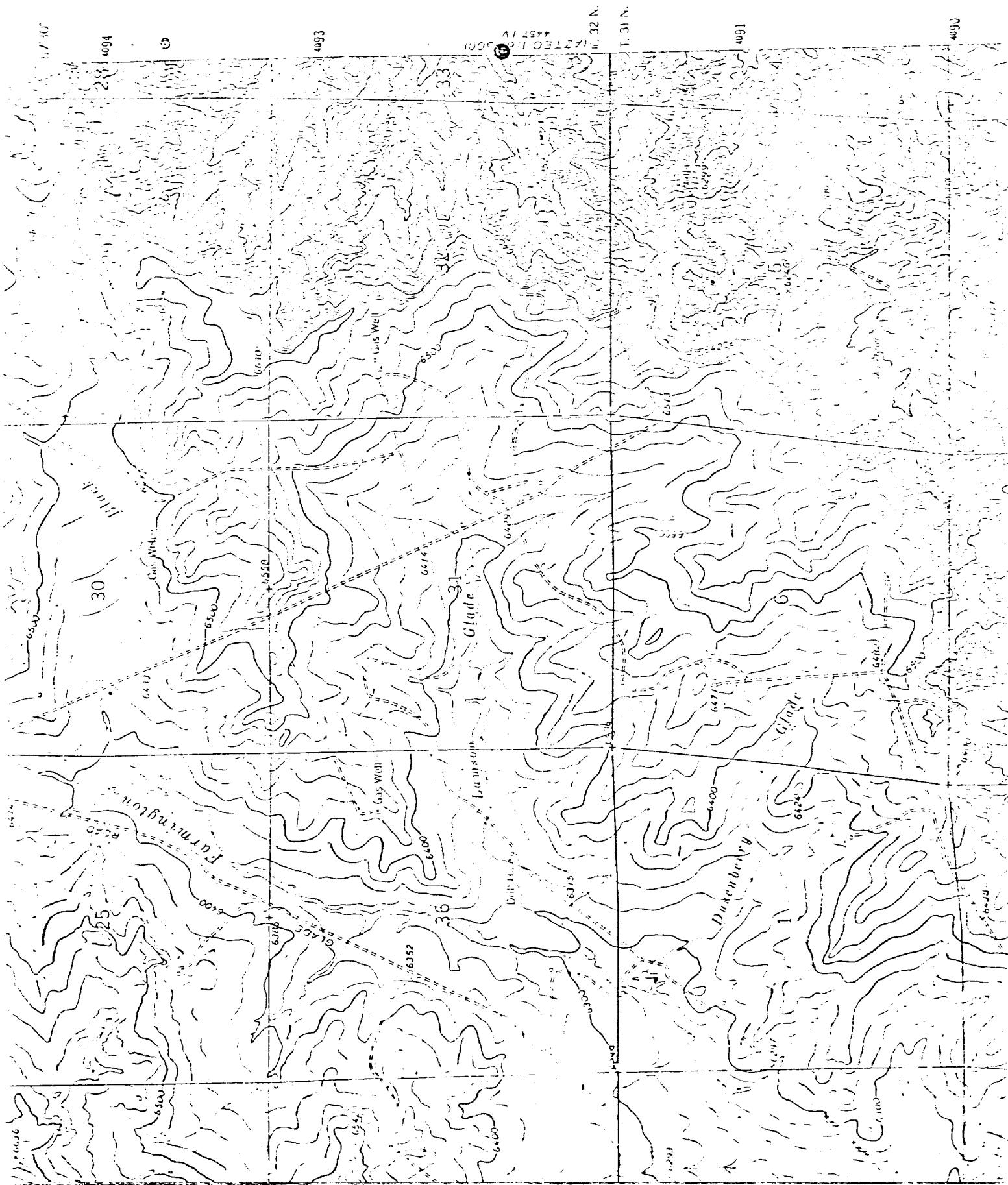
Vert. 1"=40' C-C' Horiz. 1"=100'

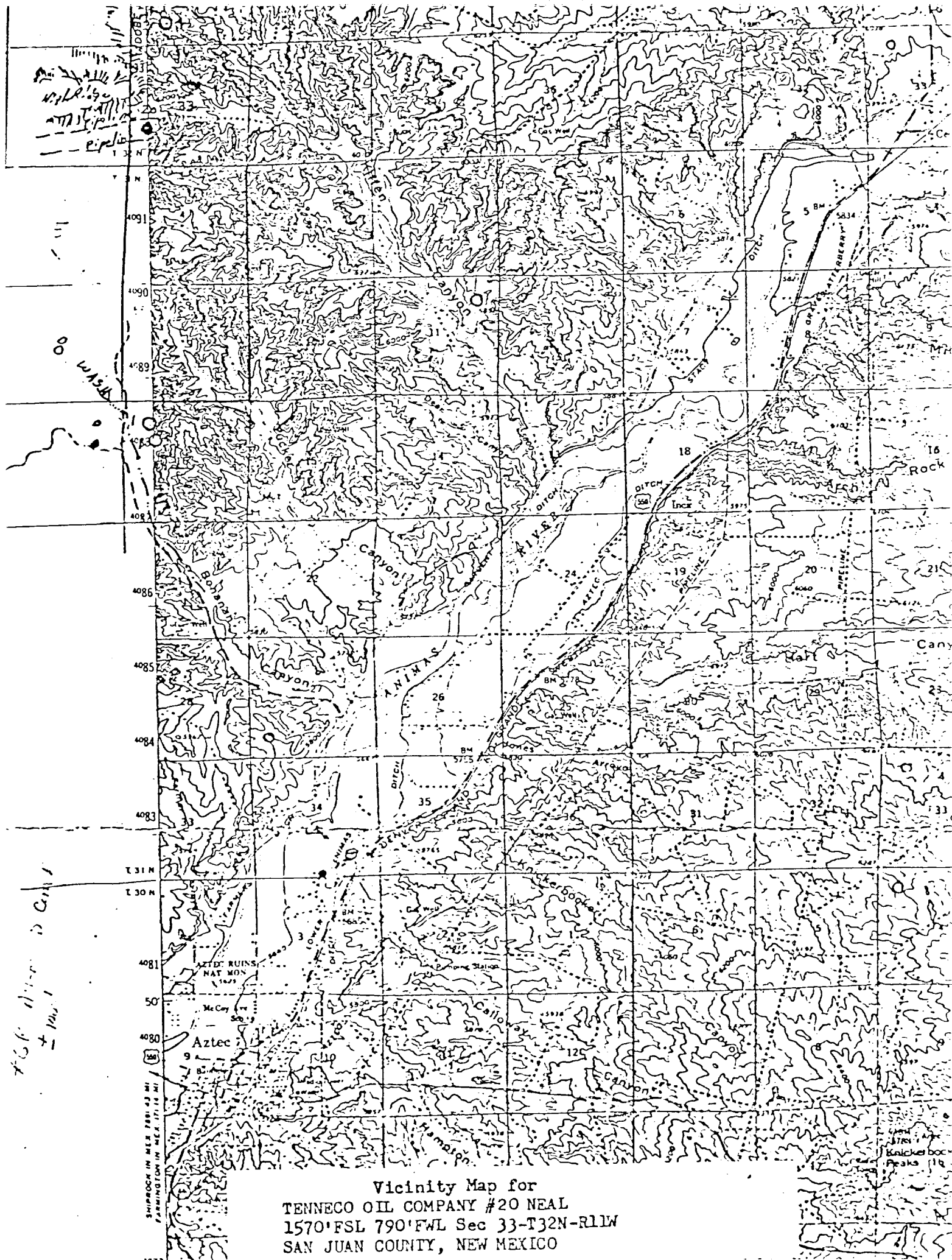
D-D'

KERR LAND SURVEYING

Date: 2/7/30

Red line





Vicinity Map for
TENNECO OIL COMPANY #20 NEAL
1570' FSL 790' FWL Sec 33-T32N-R11W
SAN JUAN COUNTY, NEW MEXICO

