Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-039-21646

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: 09-000108

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Jicarilla, Dulce, N.M.

7. UNIT AGREEMENT NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME: Jicarilla "C"

2. NAME OF OPERATOR: Tenneco Oil Company

9. WELL NO.: 8A

3. ADDRESS OF OPERATOR: 720 So. Colorado Blvd., Denver, Colorado 80222

10. FIELD AND POOL, OR WILDCAT: Blanco Mesa Verde

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 800' FNL and 1,485' FEL
At proposed prod. zone: Unit B

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 13, T26N, R5W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: See Point 1:b of Surface Use Plan

12. COUNTY OR PARISH: Rio Arriba

13. STATE: New Mexico

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

16. NO. OF ACRES IN LEASE: 320

17. NO. OF ACRES ASSIGNED TO THIS WELL: N/320

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

19. PROPOSED DEPTH: ±5,910'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6,842' GL

22. APPROX. DATE WORK WILL START*: May 31, 1978

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"	24 lb.	± 250'	Suff. to circ. back to surface
7-7/8"	4-1/2"	10.5 lb.	±5,910'	Suff. to cement to surface csg.

See attached sheet for drilling program.

RECEIVED
FEB 8 1978
OIL CON. COM.
DIST. 3

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: [signature] TITLE: Division Production Manager DATE: 2-2-78

(This space for Federal or State office use)

PERMIT NO. ______ APPROVAL DATE ______

APPROVED BY ______ TITLE ______ DATE ______

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED
FEB 6 1978
U.S. GEOLOGICAL SURVEY

*See Instructions On Reverse Side

NSL-R-3202

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

Operator	Lease	Well No.
Tenneco Oil Company	Jicarilla "C"	8A

Unit Letter	Section	Township	Range	County
B	13	26N	5W	Rio Arriba

Actual Footage Location of Well: 800 feet from the North line and 1485 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6842	Mesa Verde	Mesa Verde	320.00 N/2 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

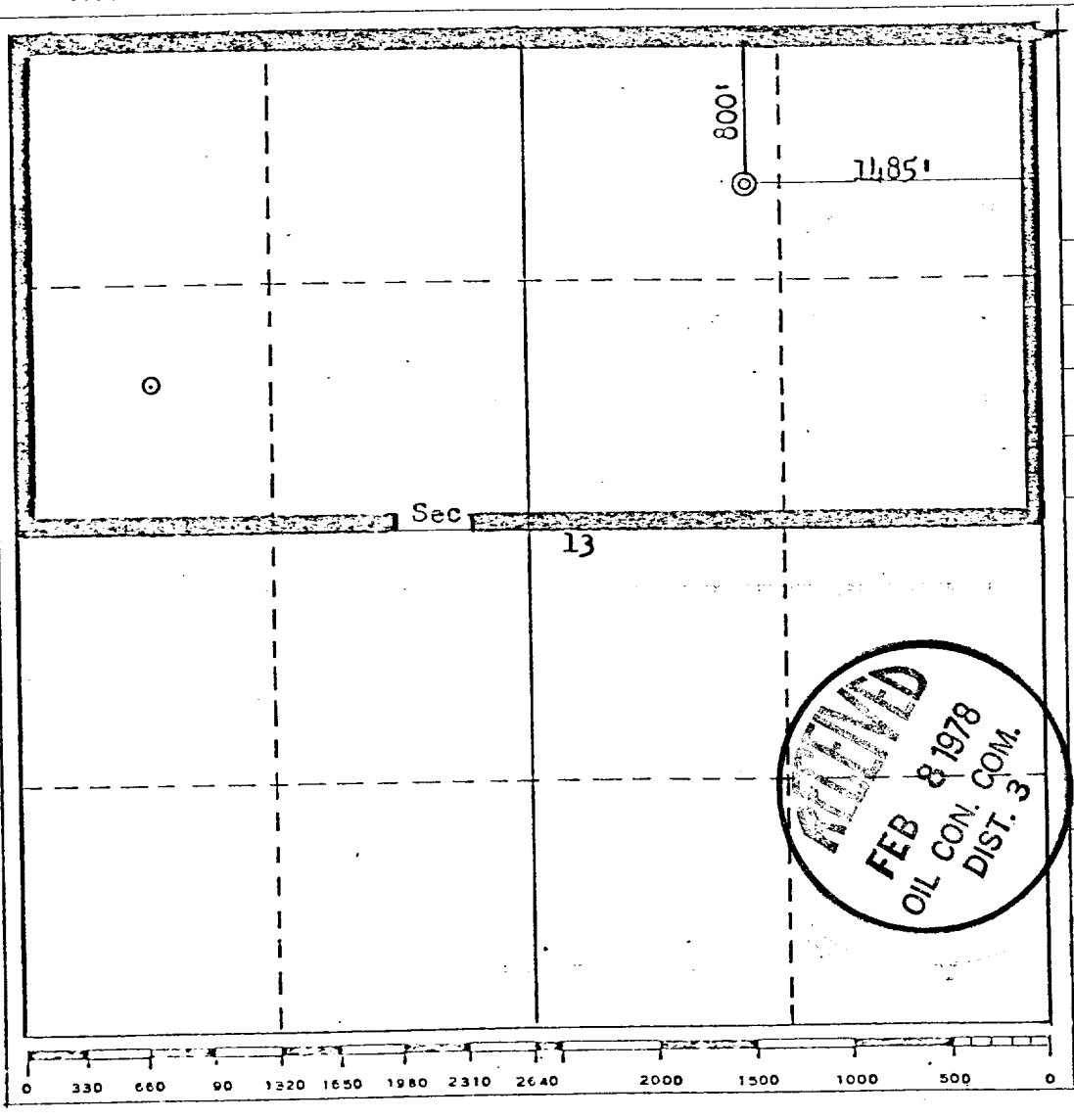
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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?

[XX] Yes [ ] No If answer is "yes," type of consolidation Joint Operating Agreement

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.



RECEIVED
FEB 8 1978
OIL CON. COM.
DIST. 3

CERTIFICATION

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

Name: T. L. Drake

Position: Production Analyst

Company: Tenneco Oil Company

Date: 1/26/78

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: December 30, 1977

Registered Professional Engineer and/or Land Surveyor: Fred B. Kerr Jr.

Certificate No: 3950

Jicarilla "C" No. 8A

1. The geologic name of this surface formation is San Jose Eocene..

2. Formation Tops (estimated):

3. Water, Oil, Gas or Minerals:

Fruitland	± 2735'	Possible Oil or Gas Producer
Pictured Cliffs	± 3465'	Possible Oil or Gas Producer
Lewis Shale	± 3565'	
Chacra	± 4230'	
Cliffhouse	± 5100'	Possible Oil or Gas Producer
Menefee	± 5225'	Possible Oil or Gas Producer
Point Lookout	± 5565'	Possible Oil or Gas Producer
Mancos Shale	±TD=5910'	
Gallup	± Not Applicable	Possible Oil or Gas Producer
Sunostee	± Not Applicable	

4. Run 8-5/8" OD, K-55 new casing to ±250' and circulate cement to surface. Run 4-1/2" OD, 10.5#, K-55 new casing to TD and cement in two stages with 65/35 pos. mix with 12-1/2 lb/sack gilsonite, tailing in with Class B cement with 2% $CaCl_2$. Circulate 4 hours between stages. Casinghead will be a 10" 900 series w/a 3000 psi. rating.

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. BOP's 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. BOE will be checked every 24 hours and recorded in drillers logs.

6. We will use: spud mud from 0 - ±250'; Gel chemical w/low solids as needed to maintain good hole conditions from 250' - TD. Quantities of mud will vary with conditions encountered.

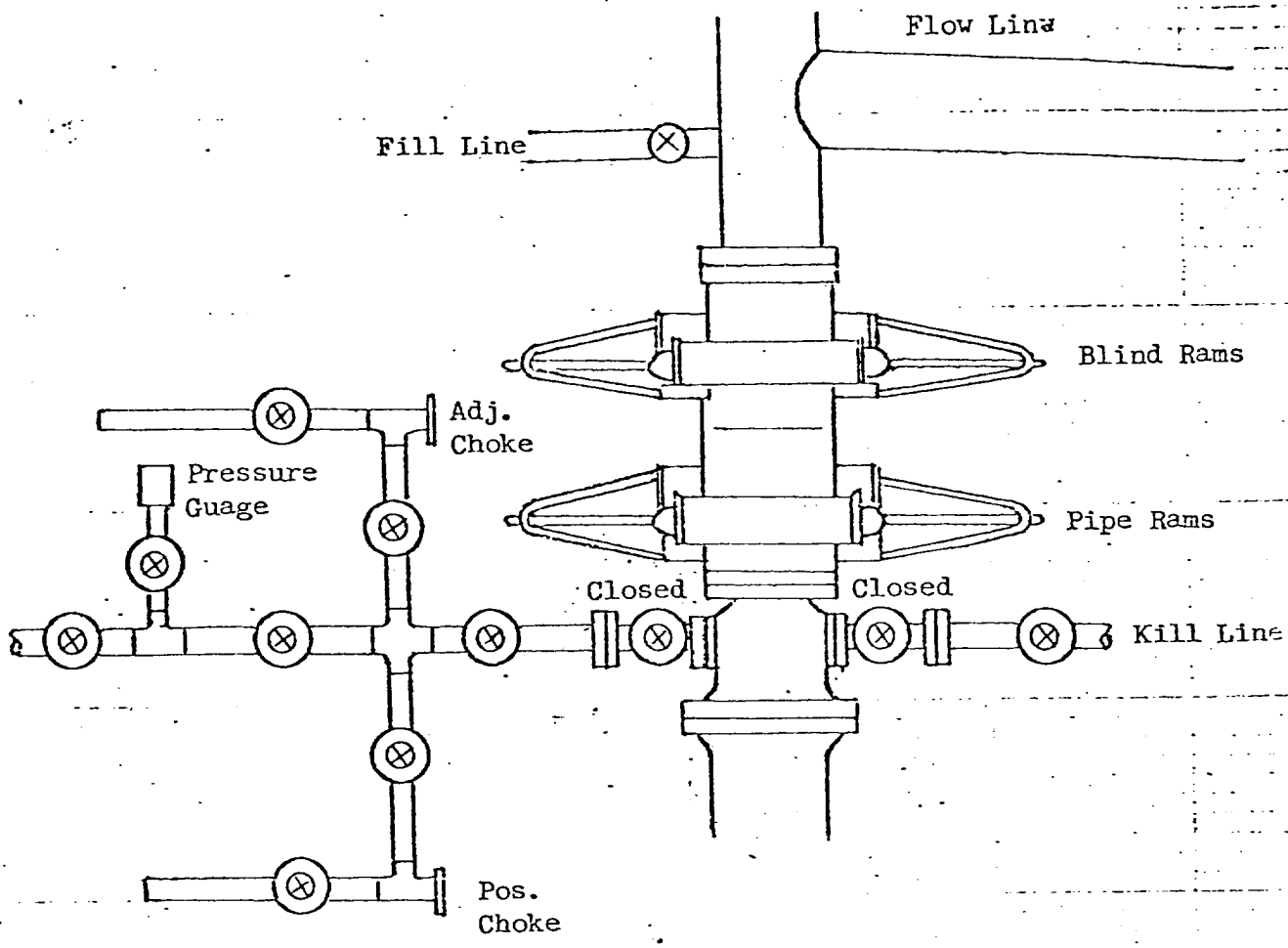
7. Auxiliary Equipment
   a. Kelly cock will be in use at all times.
   b. Stabbing valve to fit drill pipe will be present on floor at all times.
   c. Mud monitoring will be visual, no abnormal pressures are anticipated in this area.

8. An AOF test will be taken at the completion of this well. No cores will be taken. Gamma Ray Density and Compensated Neutron logs will be run. Any other evaluation that may be necessary during the drilling of this well will be conducted as needed. Deviation surveys will be taken.

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

10. The drilling of this well will take approximately fifteen days. The gas is contracted to Northwest Pipeline Company. See item 22 on 9-331-C for anticipated starting date.

11. Your office (Telephone 303/247-5144) will be notified of spudding in sufficient time to witness cementing operations. Immediate notice will be given on blowouts, fires, spills, and accidents involving life-threatening injuries or loss of life. Prior approval will be obtained before appreciably changing drilling program or commencing plugging operations, plug back work, casing repair work or corrective cementing operations.



All valves 2"

All BOPs, flanges, spools, valves, & lines must be series 900 or 3000 psi working press.

Choke manifold must be at ground level and extended out from under substructure.

TENNECO OIL COMPANY

REQUIRED MINIMUM BLOWOUT PREVENTOR

HOOKUP

Denver, Colorado

SURFACE USE PLAN
Jicarilla C Well No. 8A

1. Existing Roads:
   a. See surveyors plat for actual staking.
   b. The well site is located approximately 12 miles S of Dulce, N.M. on highway 17. Continue 25 miles S on highway 537. Turn West at Counting Pens for 4-1/2 miles. Turn NW just before Las Norias windmill. Take righthand fork 2-1/4 miles to wellsite.
   c. See Exhibit "B" for access roads.
   d. Not applicable. This is not an exploratory well.
   e. See Exhibit "B" for one mile radius road map.
   f. Existing roads maintenance or improvement (~~will~~, will not) be necessary.

2. Planned Access Roads:
   a. See Exhibit "B".
   b. Width = 14'; maximum grade = 5°; Length = 1000'.
   c. No turnouts.
   d. Drainage = Water bars on any slopes and on road to prevent erosion.
   e. Road will be cut into any arroyos and sloped across the bottom to maintain normal drainage. No major cuts or fills are necessitated. No culverts.
   f. Road (~~will~~, will not) be surfaced.
   g. No gates or cattle guards are needed.
   h. Road is center line flagged.

3. Location of Existing Wells.
   a. See Exhibits "B" and "C" for well locations.
   b. No water wells could be located within one mile of this well.

4. Location of Existing and/or Proposed Facilities.
   a. See Exhibit "A". Lines are buried.
   b. This is expected to be a dry gas well. If condensate is encountered, a 300 bbl steel tank painted per BIA to match the surrounding area, will be set on a gravel base near the well as shown on Exhibit "A". A dirt bank will be erected around the tank to contain any spills. The possible spill area will be fenced.
   c. If well is productive, pits will be backfilled, leveled and reseeded to BIA specifications as soon as practical to original condition.

5. Location and type of Water Supply
   a. Water will be hauled from the waterwells in this area
   b. Trucks will be used to haul water. No new roads will be necessary.
   c. No water well will be drilled.

6. Source of Construction Materials.
   a. No construction materials will be used. Surface soil will be stockpiled.
   b. We will not be getting any construction materials from Federal or Indian lands.
   c. No construction materials will be used.
   d. No access roads for construction materials will be needed.

7. Methods for Handling Waste Disposal.
   a. Cuttings will be disposed of in the reserve pit.
   b&c. Drilling fluids and produced water will be collected in the reserve pit and hauled away to an approved disposal system or a separate disposal application will be submitted. Any produced oil will be run to the tank (see 4:8)
   d&e. All detrimental waste will be hauled away, burned or buried with a minimum cover of 24" of dirt. Trash pit will be fenced with small mesh wire.
   f. After the rig moves out, See 4:C. If unproductive, a dry hole marker will be installed and all pits will be filled, leveled and entire location reseeded to BLM specifications. Roads will be leveled and reseeded.

8. Ancillary Facilities.
   a. No camps or airstrips will be needed in the drilling of this well.

9. Well Site Layout.
   a. See Exhibit "A".
   b. Pits will be unlined.

10. Plans for Restoration of Surface.
   a. See 4:C and 7:A-F.
   b. See 7:A-F or per BIA specifications for that area.
   c. Prior to rig release, pits will be fenced and so maintained until clean up.
   d. If any oil is on the pit, it will be removed or overhead flagged.
   e. Rehabilitation operations will be done during the best weather conditions to promote regrowth in area. All seeding will take place between July 1 and Sept. 15.

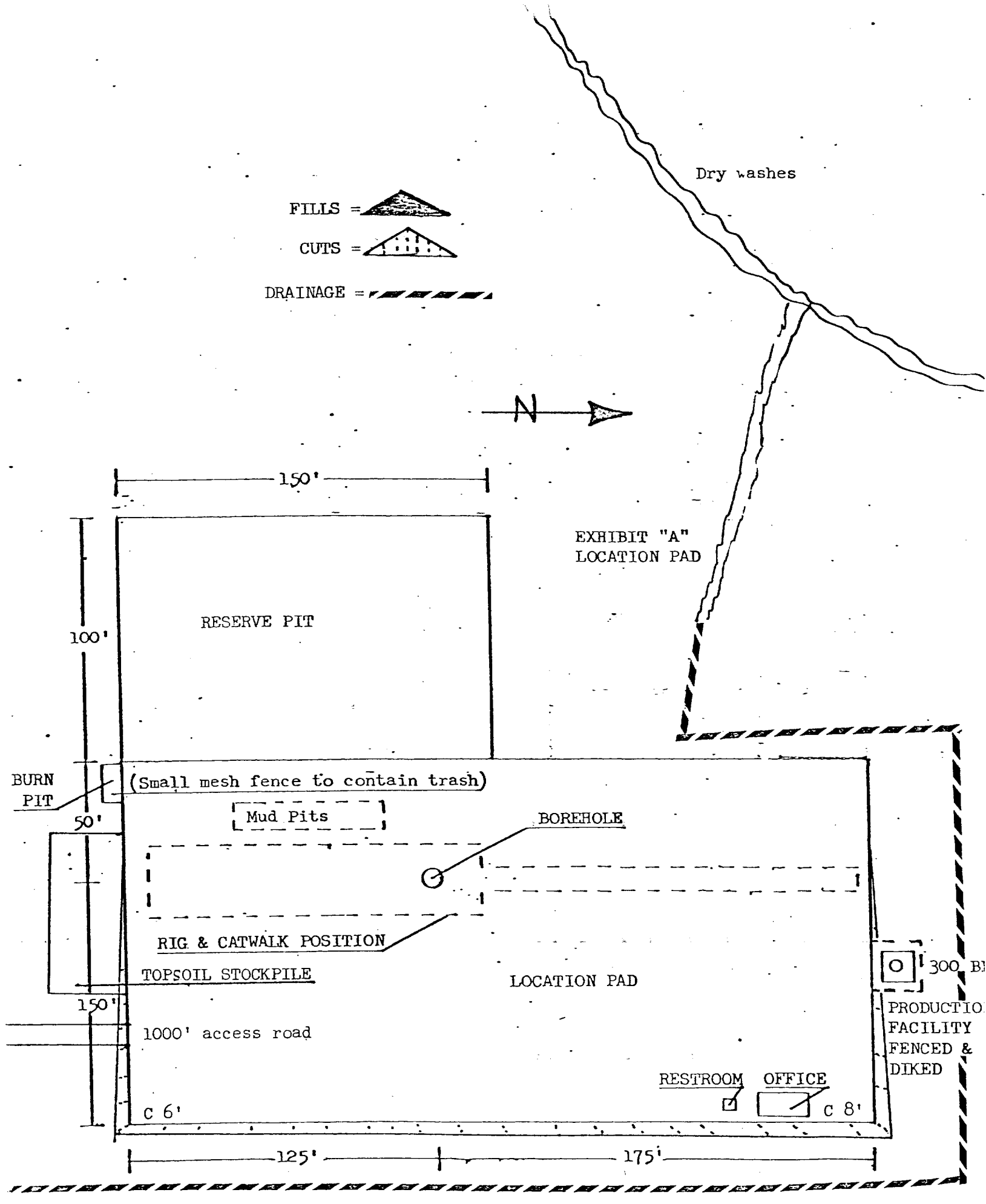
11. Other information.
   a. Site is located in rolling terrain broken by shallow gullies. Vegetation consists of scattered juniper, pinion, rabbitbrush, sagebrush, narrow leaf yucca, snakeweed eriogonum and grama grass.
   b. The surface is used for grazing.
   c. No open water, occupied dwellings, archeological, historical, or cultural sites are located within ½ mile of this site.

12. Operator's Representative.
   a. Field personnel who can be contacted concerning compliance of this Surface Use Plan are as follows: Donald Barnes, 720 South Colorado Boulevard, Denver, Colorado 8022
   Office = 303/758-7130 ext. 212.

13. Certification.
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions as they actually exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the proposed work performed by Tenneco Oil Company and its contractors and sub-contractors will conform to this plan.

2/3/78
Date

Donald S. Barnes
Division Drilling Engineer


Dry washes
FILLS =
CUTS =
DRAINAGE =
N
150'
EXHIBIT "A"
LOCATION PAD
RESERVE PIT
100'
BURN
PIT
(Small mesh fence to contain trash)
50'
Mud Pits
BOREHOLE
RIG & CATWALK POSITION
TOPSOIL STOCKPILE
LOCATION PAD
150'
1000' access road
300' B
PRODUCTIO
FACILITY
FENCED &
DIKED
RESTROOM
OFFICE
C 6'
C 8'
125'
175'

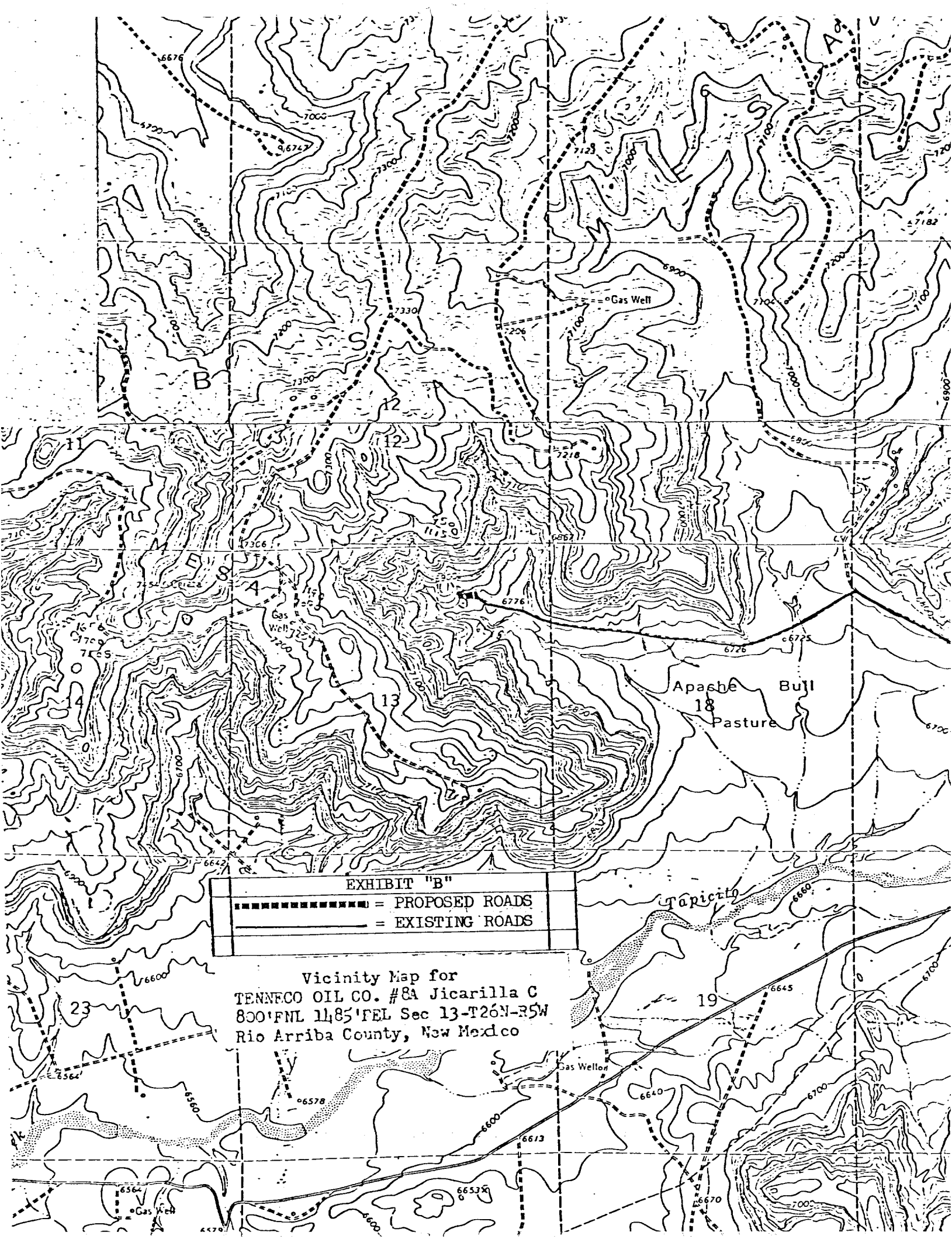
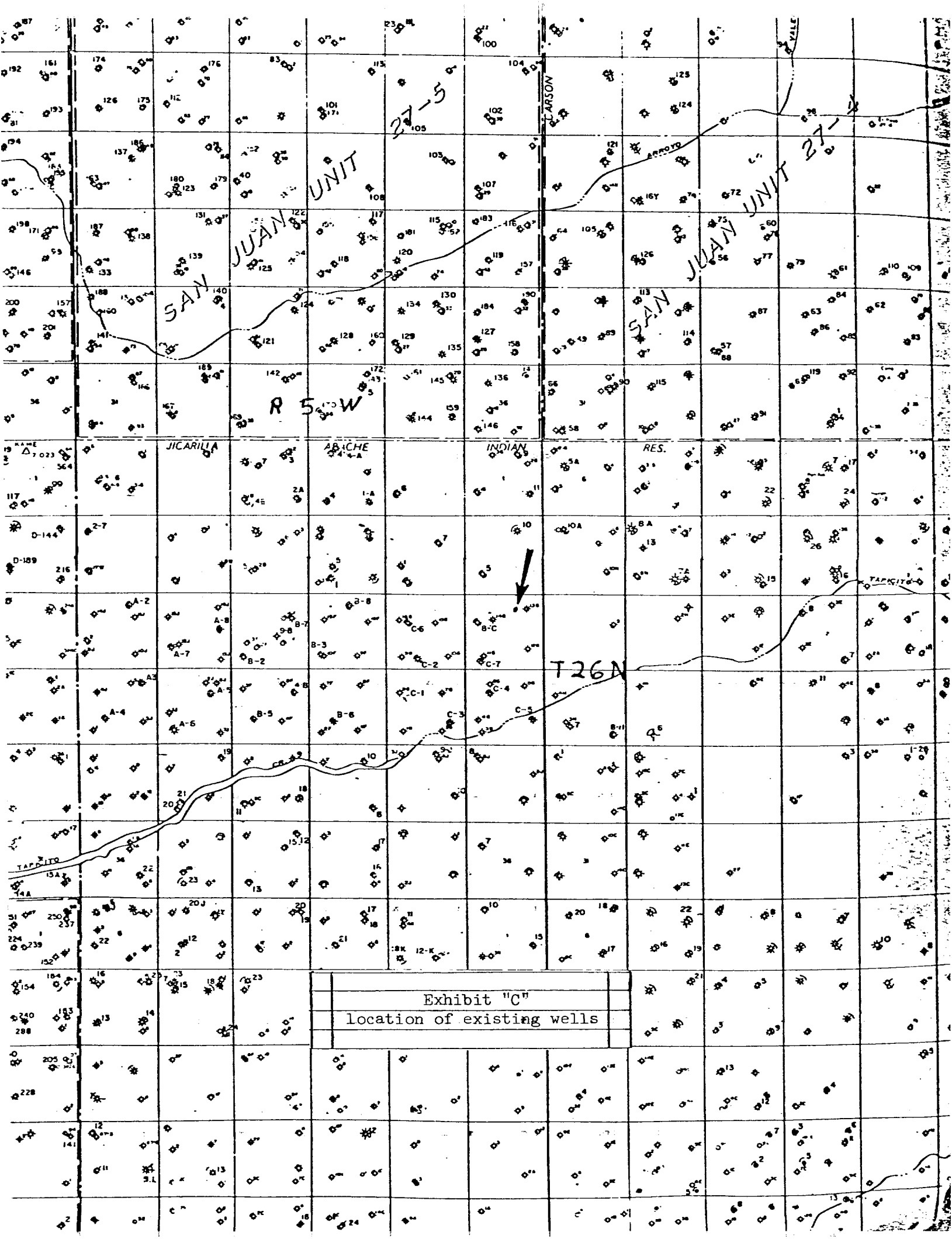


EXHIBIT "B"
= PROPOSED ROADS
= EXISTING ROADS
Vicinity Map for
TENNECO OIL CO. #8A Jicarilla C
800'FNL 1485'FEL Sec 13-T26N-R5W
Rio Arriba County, New Mexico
Gas Well
Apache Bull Pasture
Tapicito
13
18
19
23


SAN JUAN UNIT
SAN JUAN UNIT
JICARILLA
APACHE
INDIAN
RES.
R 5 W
T 26 N
R 6
CARSON
ARROYO
TAPACITO
TAPACITO
Exhibit "C"
location of existing wells