

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

Tenneco Oil Company

3. ADDRESS OF OPERATOR

720 So. Colorado Blvd., Denver, Colorado 80222

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

At surface

1,150' FNL and 790' FEL —

At proposed prod. zone

Unit A

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

See Point 1:b of 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.

16. NO. OF ACRES IN LEASE

320

19. PROPOSED DEPTH

+6,165'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

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

7,208' GL

22. APPROX. DATE WORK WILL START*

June 15, 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.	+6165'	Suff. to cement to surface csg.

See attached sheet for drilling program.

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. L. Myers

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:

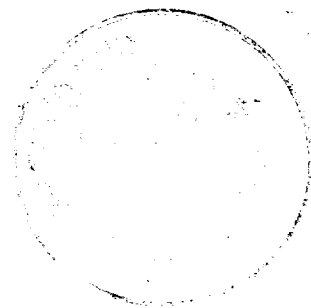
OK

*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY
DENVER, COLO.

NSC - R - 3248

27



RECEIVED

FEB 6 1978

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.

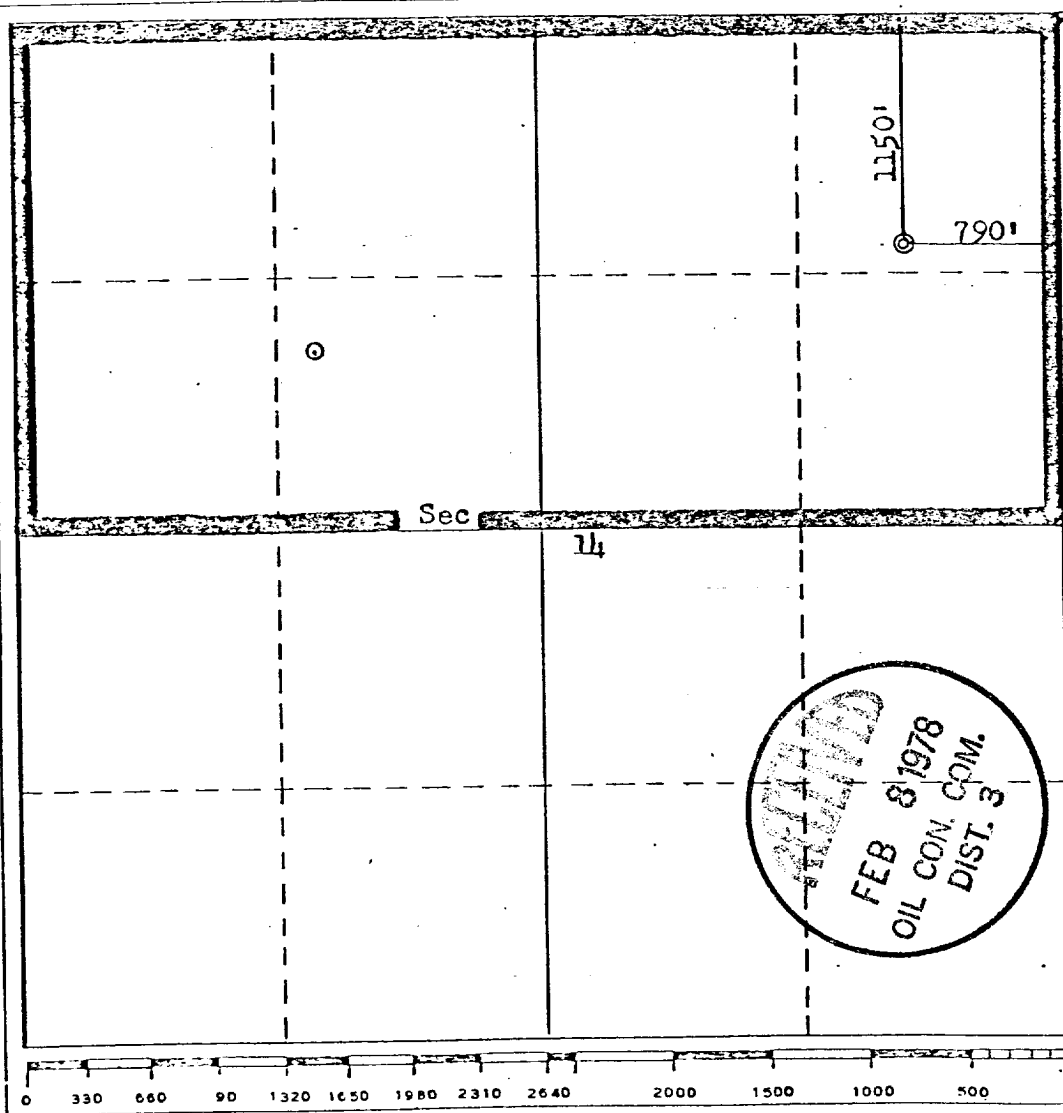
Operator Tenneco Oil Company			Lease Jicarilla "C"		Well No. 6A
Unit Letter A	Section 14	Township 26N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 1150 feet from the North line and 790 feet from the East line					
Ground Level Elev. 7208	Producing Formation Mesa Verde		Pool Mesa Verde		Dedicated Acreage: 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?

☒ 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.



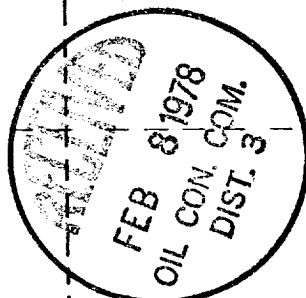
CERTIFICATION

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

Name
John F. 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 31, 1977
Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr Jr.
Certificate No.
3950



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

2. Formation Tops (estimated):

Fruitland	+ 3420'
Pictured Cliffs	+ 3820'
Lewis Shale	+ 3920'
Chacra	+ 4700'
Cliffhouse	+ 5430'
Menefee	+ 5565'
Point Lookout	+ 5925'
Mancos Shale	+TD=6165'
Gallup	+ Not applicable
Sunostee	+ Not applicable

3. Water, Oil, Gas or Minerals:

Possible Oil or Gas Producer

Possible Oil or Gas Producer

Possible Oil or Gas Producer

Possible Oil or Gas Producer

Possible Oil or Gas Producer

Possible Oil or Gas Producer

+ 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% CaCl₂. 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.

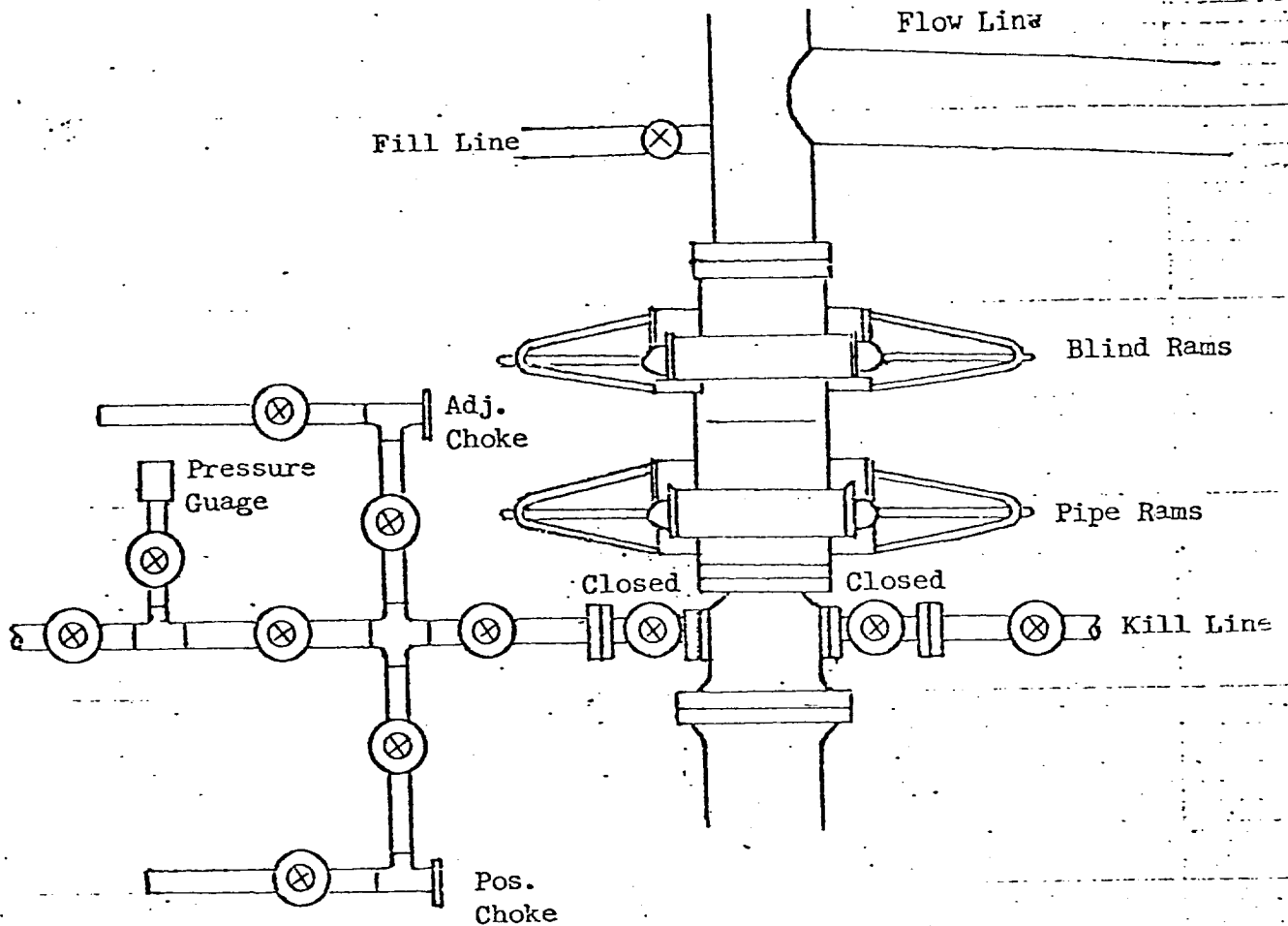
c. Mud monitoring will be visual, no abnormal pressures are anticipated in this area.

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

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 S on highway 537 for 25 miles. Turn west at Counting Pens for 2-1/2 miles. Turn right up Cottonwood Canyon. Take two left hand turns to top of BS Mesa. Follow Exhibit B from there.
- 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 = 4°, Length = 200'
- 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 nearly level terrain with small hillocks. Vegetation consists of juniper, pinion, antelope bitterbrush, gambel oak, sagebrush, Utah serviceberry, mountain mahogany, blond and narrow leaf yucca and rabbitbrush.
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.

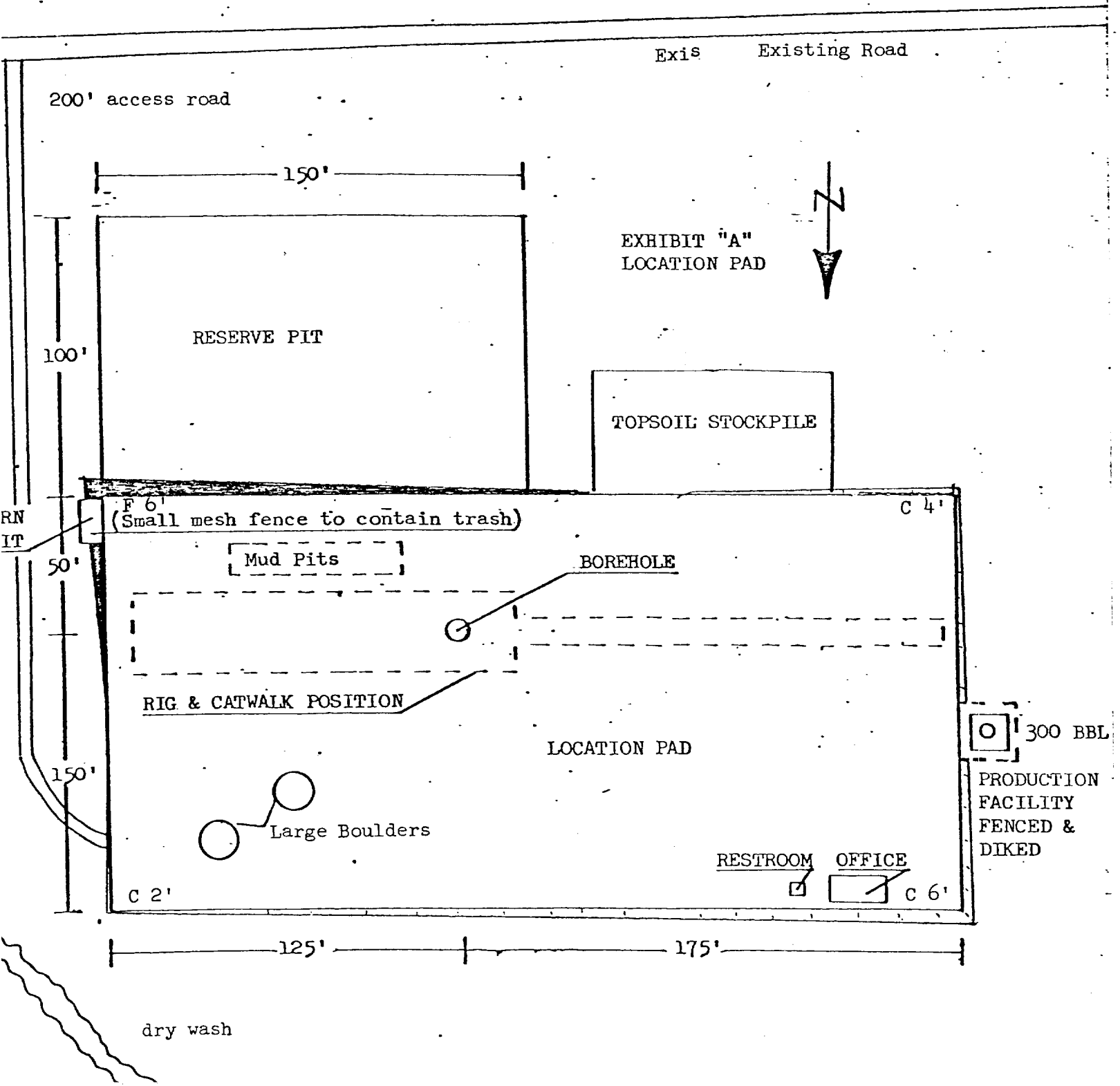
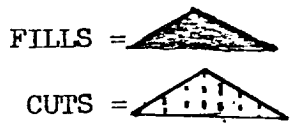
- a. Field personnel who can be contacted concerning compliance of this Surface Use Plan are as follows: Donald Barnes, 720 South Colorado Boulevard, Denver, Colorado 80222
Office = 303/758-7130 ext. 212.

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
Donald S. Barnes
Division Drilling Engineer



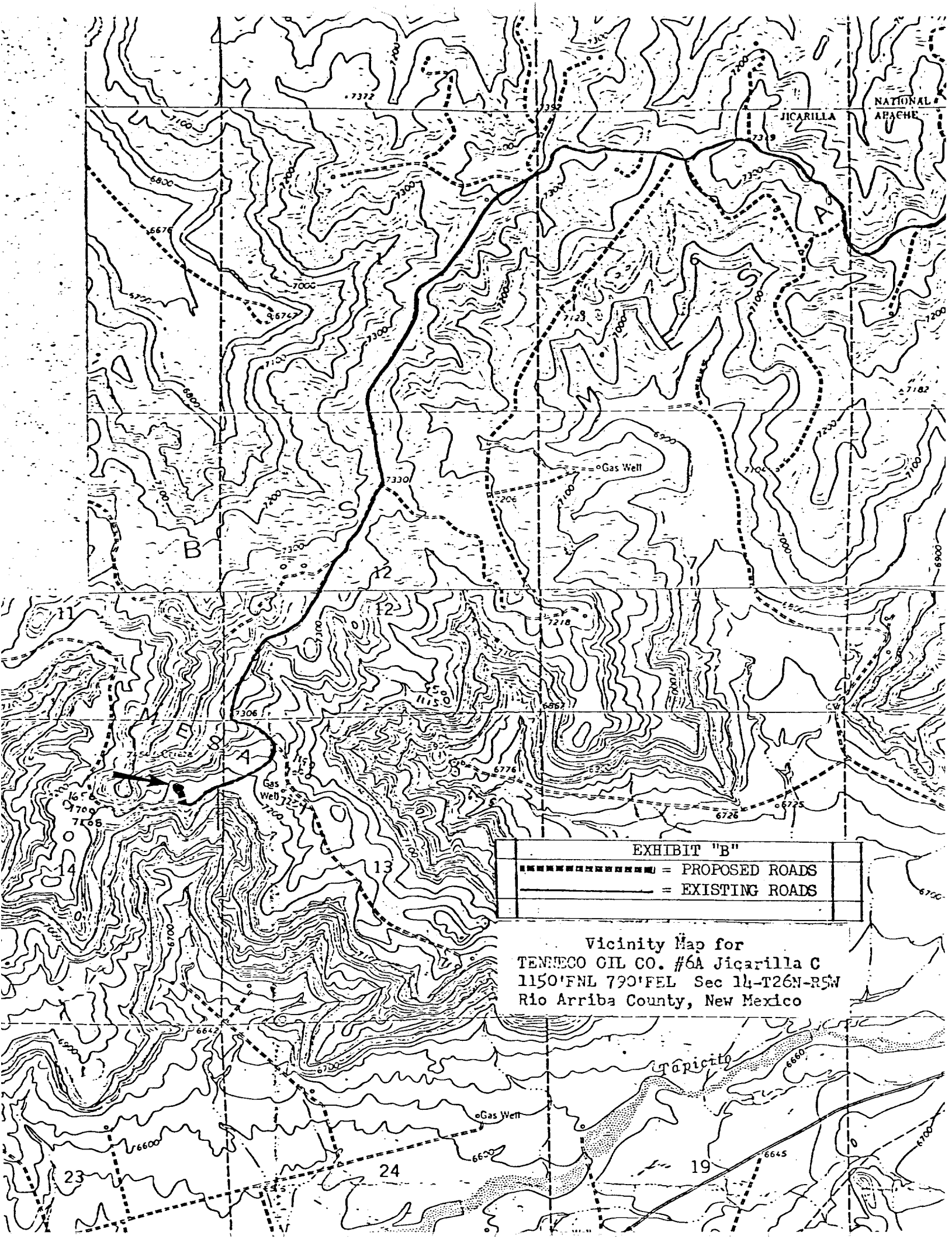
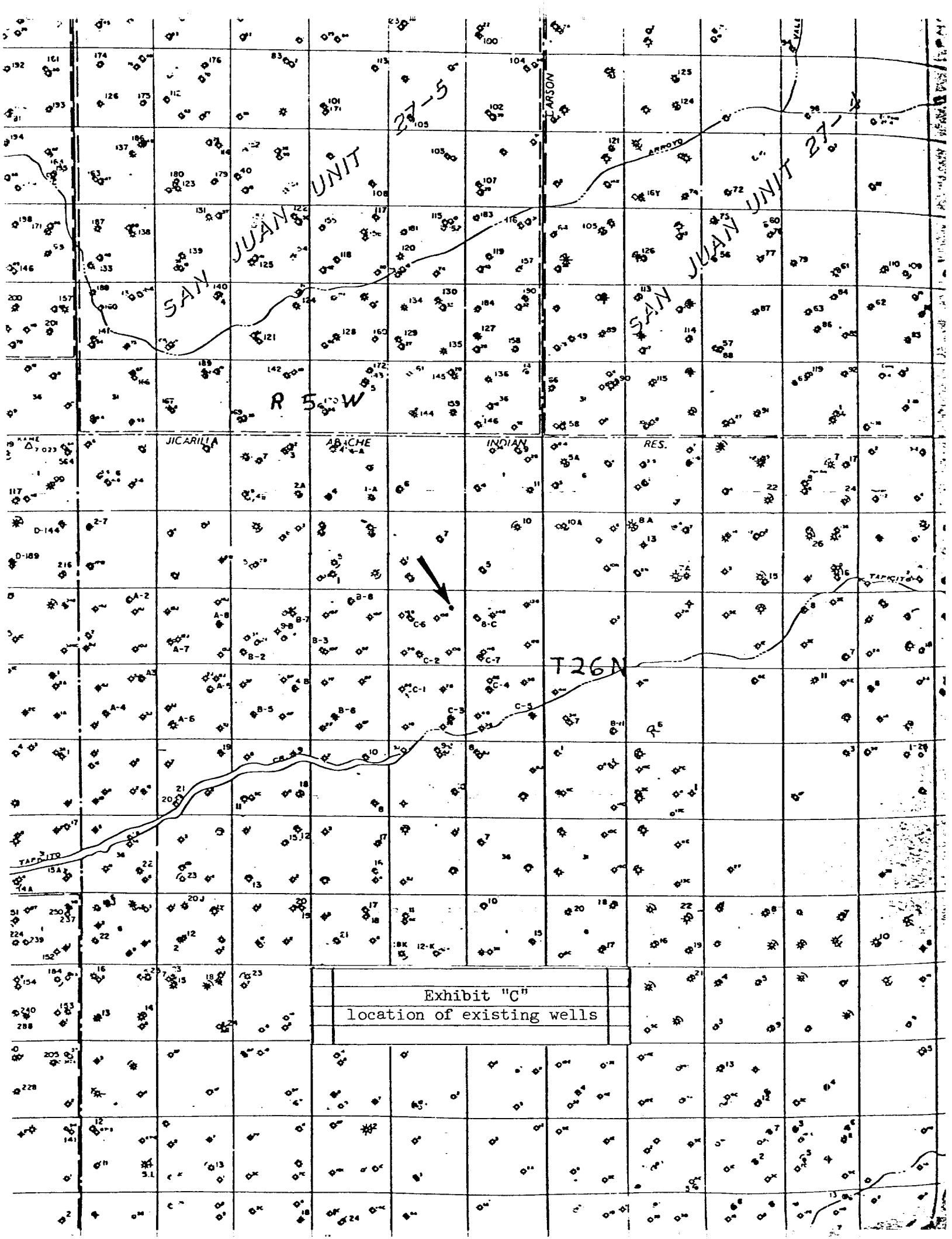


EXHIBIT "B"	
	= PROPOSED ROADS
	= EXISTING ROADS

Vicinity Map for
TENNECO OIL CO. #6A Jicarilla C
1150'FNL 790'FEL Sec 14-T26N-R5W
Rio Arriba County, New Mexico



SAN JUAN UNIT

SAN JUAN UNIT

SAN

SAN

R 5 W

T 26 N

JICARILLA

ABACHE

INDIAN

RES.

NAME

7-023

117

D-144

D-189

CA-2

A-8

A-7

CA-4

CA-5

CA-6

CA-7

CA-8

CA-9

CA-10

CA-11

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I-2

Exhibit "C"
location of existing wells