Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-039-22328

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: SF 080658

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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 [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME: Reames Com

9. WELL NO.: 1E

2. NAME OF OPERATOR: Tenneco Oil Company

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

10. FIELD AND POOL, OR WILDCAT: Basin Dakota

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

I

At proposed prod. zone: 1750' FSL, 1000 FEL
Unit letter I

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 25, T26N, R6W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 6 miles SouthEast of Lowery Camp

12. COUNTY OR PARISH: Rio Arriba

13. STATE: New Mexic

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	17. NO. OF ACRES ASSIGNED TO THIS WELL
	160'	E 320.00
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
	7500'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6614 GR

22. APPROX. DATE WORK WILL START*: ASAP

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 ¼"	8 5/8"	24# K-55	± 350'	Circulate to surface
7 7/8"	4½"	10.5#11.6#	± 7500'	Two stages - Cirulate to surfa

SEE ATTACHED

No abnormal temperatures, pressures, or geologic hazards expected

THE GAS IS DEDICATED

APPROVED
APR 4 1980
DISTRICT ENGINEER

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 M. Lee Freeman TITLE Staff Production Analyst DATE March 7, 1980

APR 9 1980
OIL CON. COM.
DIST. 3

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED
MAR 17 1980
U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

*See Instructions On Reverse Side

State

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
TENNECO OIL COMPANY	REAMES COM	1-E

Unit Letter	Section	Township	Range	County
I	25	26N	6W	Rio Arriba

Actual Footage Location of Well:
1750 feet from the South line and 1000 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6611	Dakota	Basin Dakota	320.00 Acres

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

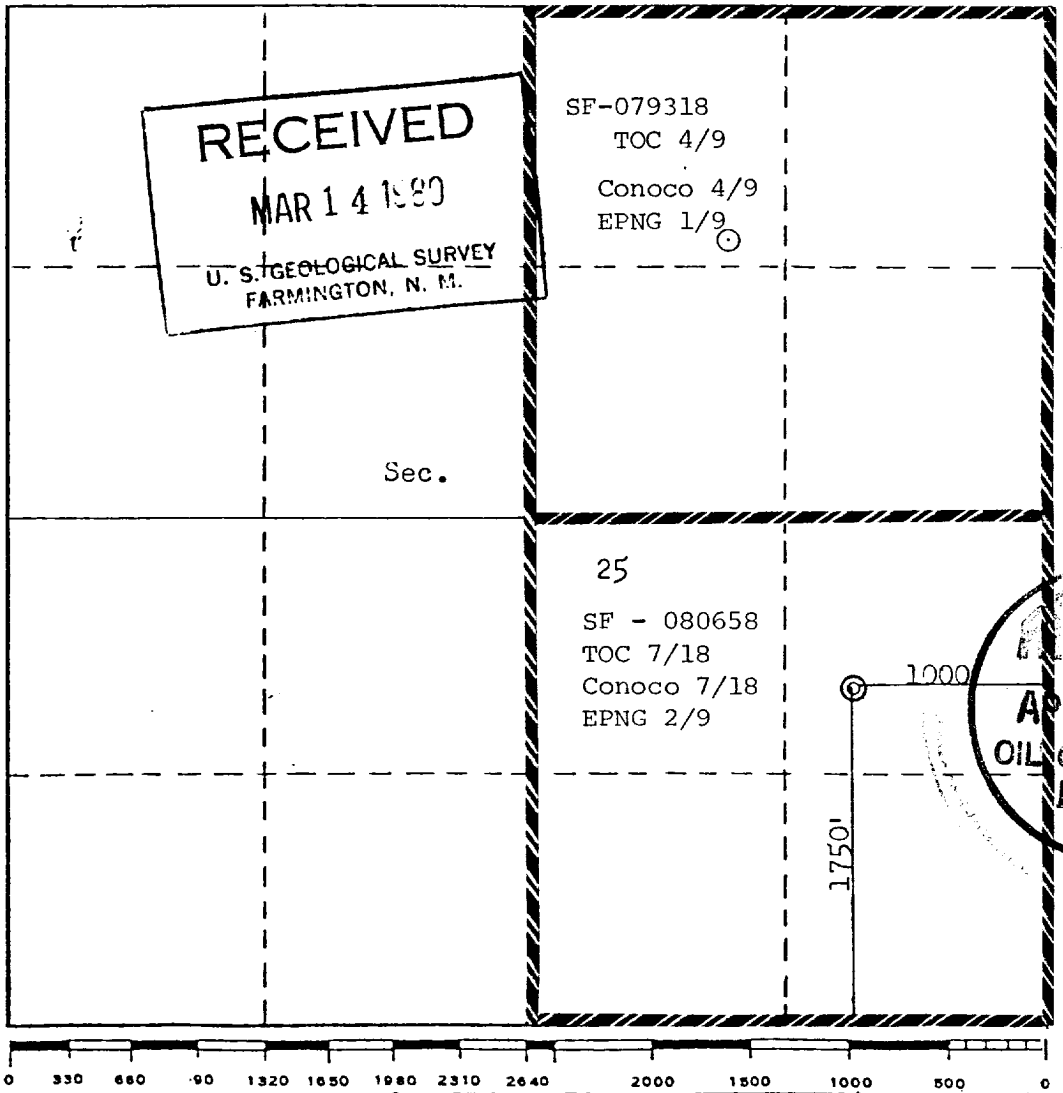
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 Communitization

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: M. Lee Freeman

Position: Staff Production Analyst

Company: Tenneco Oil Company

Date: March 7, 1980

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.

APR
OIL CON. COM.
DIST. 3

Date Surveyed: October 23, 1979

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

REGISTERED LAND SURVEYOR
FRED B. KERR, JR.

Certificate No. 3950

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

DRILLING PROGRAM

DATE: November 19, 1979

LEASE: Reames Com

WELL NO.: 1-E

LOCATION: 1750' FSL, 1000' FEL
Sec. 25, T 26N, R 6W
Rio Arriba County, New Mexico

FIELD: Jicarilla Dakota

ELEVATION: 6630' Est. G.L.

TOTAL DEPTH: 7500

PROJECTED HORIZON: Dakota

SUBMITTED BY: Doug Keathley

APPROVED BY: J. L. W. Ames

DK/ms

1st Rev.

ESTIMATED FORMATION TOPS

OJO	2440	(Water)
Pictured Cliffs	2870	(Gas)
Cliffhouse	4550	(Gas)
Menefee	4600	(Gas)
Point Lookout	5220	(Gas)
Gallup	6180	(Gas/Oil)
Greenhorn	7040	
Dakota	7130	(Gas)

Surface Formation: San Jose

No abnormal temperatures or pressures are expected.

1. Move in, rig up rotary tools.

2. Drill a 12 1/4" hole to ± 350'.

3. Run 8 5/8", 24#/ft, K-55, ST&C casing to T.D.

4. Cement with Class "B" cement with 2% $CaCl_2$. Circulate cement to surface.

5. Wait on cement a minimum of twelve hours. Nipple up blowout preventer and manifold with relief lines. Pressure test to 600 psi for 30 minutes. Test pipe and blind rams.

6. Drill a 7 7/8" hole to T.D.

7. Run open hole logs.

8. Run 4 1/2" casing to T.D. as per casing design.

9. Cement in two stages with sufficient volume to circulate cement to surface. Locate DV tool above Cliffhouse to prevent lost returns in Mesa Verde. Lead in first stage with light cement (pozmix, Halliburton lite, etc.). Tail in with sufficient volume of Class "B" cement to cover the Dakota. Circulate a minimum of four hours between stages. Lead in second stage with light cement Tail in with 50 sacks Class "B" neat.

10. Set slips, cut casing, and install well head.

11. MORT.

12. If well is non-productive P & A as per regulatory agency specifications.

CASING PROGRAM

Surface: 350' of 8 5/8", 24#, K-55, ST&C casing.

Production: 4 1/2", 10.5#, K-55, ST&C casing to 7,000'.
4 1/2", 11.6#, K-55, ST&C casing below 7,000'.

MUD PROGRAM

0-350	Native solids. Have sufficient viscosity to gel chemical to clean hole and run casing.
350-T.D.	Low solids. Gel chemical. 32 viscosity and 10-15 water loss down through the Mancos. Before reaching Gallup, add 6% LCM and run viscosity at 38-40 seconds. After penetrating Gallup, let LCM drop.

EVALUATION

Cores and DST's: No cores or DST's are anticipated.

Deviation Surveys:

1. Survey surface hole every 100'. Maximum allowable deviation at surface T.D. is 1^{o}.

2. From surface to total depth, Deviation surveys must be taken every 500' or each trip, whichever is first. This may entail running the TOTCO on wireline. Record each survey on the IADC Drilling Report Sheet. Maximum allowable total deviation change is 5^{o}.

Samples:

No samples required.

Logs:

GR/Induction
Densilog
Repeat formation tester possible in Gallup.

BLOWOUT EQUIPMENT

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

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.)

2. 303-936-0704 (home) Don Barnes, weekends and holidays.

3. 303-795-0221 (home) John Owen, if Don Barnes is not available.

The yellow sheet of the IADC Report 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

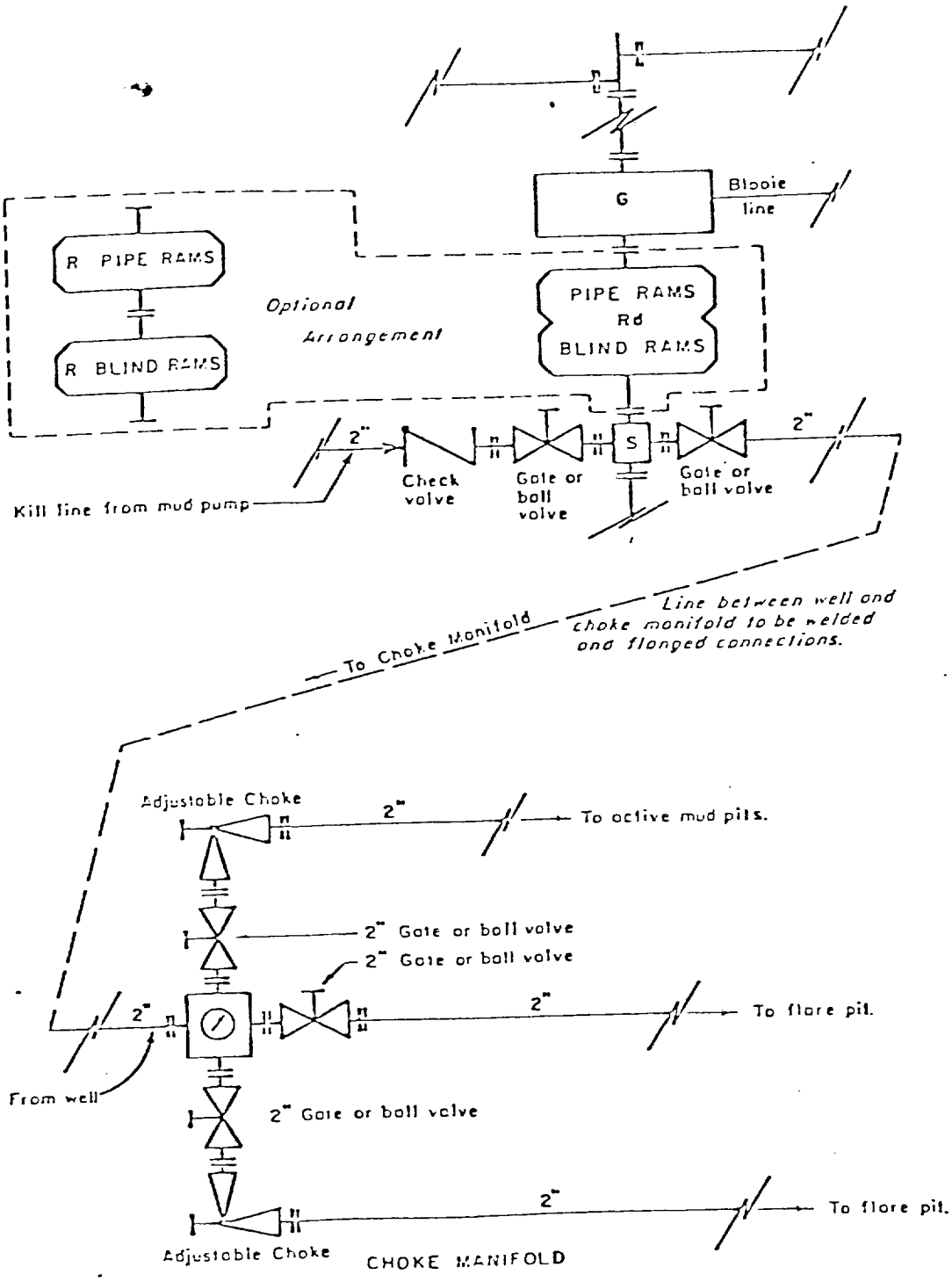
ATTENTION: Drilling Department

In case of emergency, notify the following:

1. Mr. Don Barnes, Division Drilling Engineer - 303-936-0704

2. Mr. John Owen, Project Drilling Engineer - 303-795-0221

3. Mr. Mike Lacey, Division Production Manager - 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 AN
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 lease 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 b 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 on Carter Mesa above Tapicito Creek The topography is level to lightly rolling. The soil is sandy loom supporting sage 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 mad 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

LF/gh

TENNECO OIL COMPANY

CALCULATION SHEET

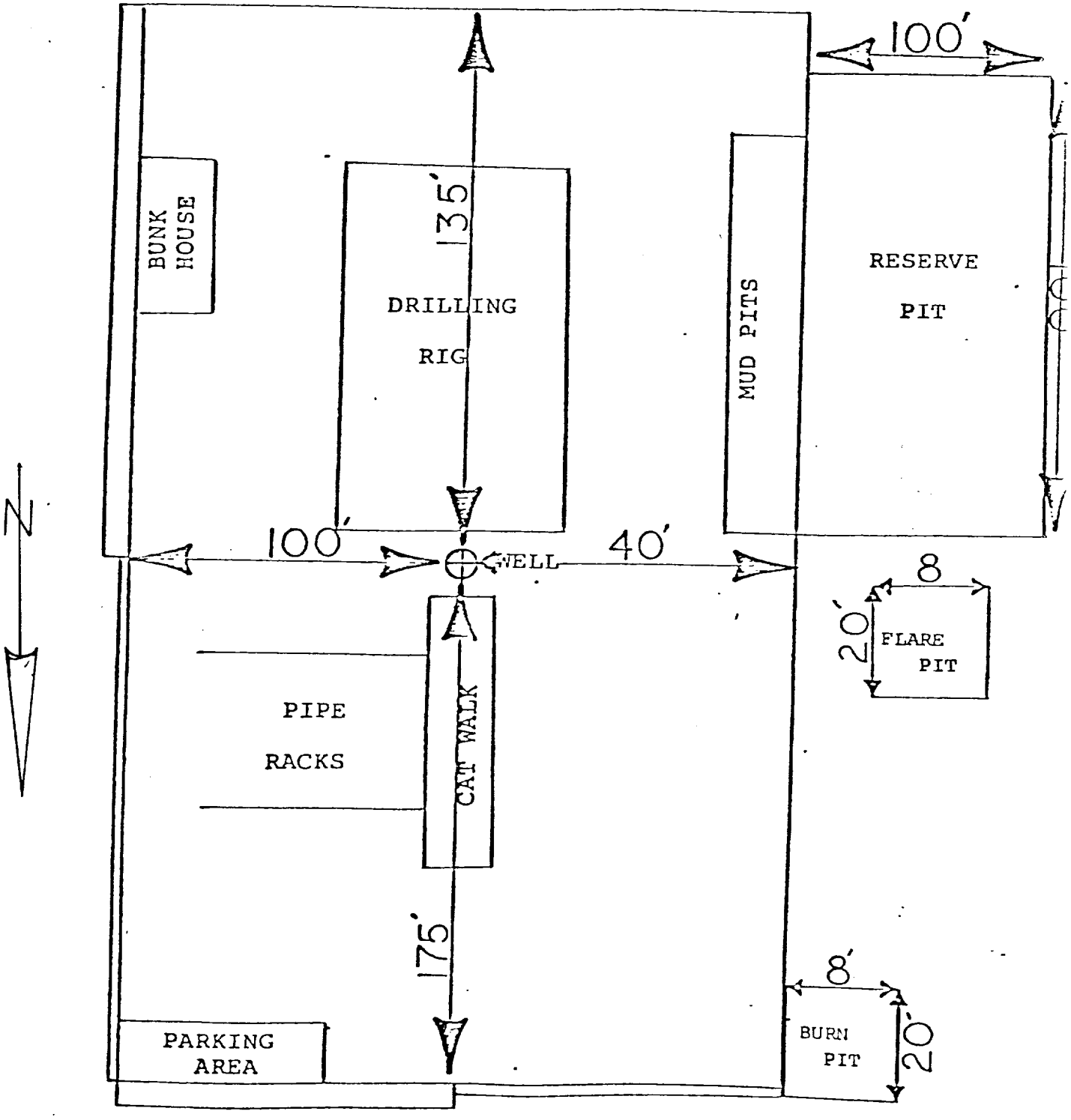
EXHIBIT

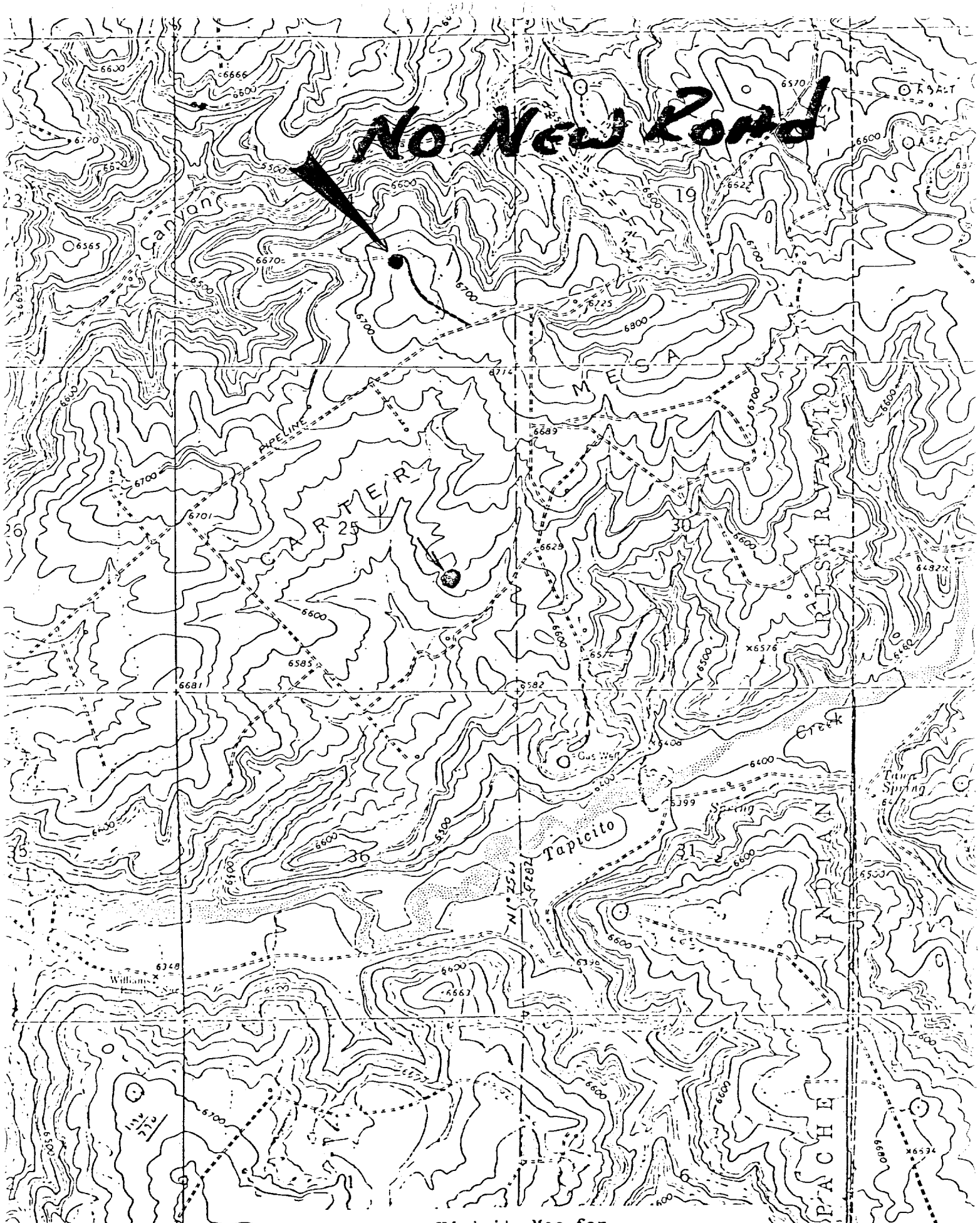
RILLING WELL SITE LAYOUT Reames Com 1E

SEC 25, T26N, R6W Rio Arriba, N.M. DATE 3/7/80

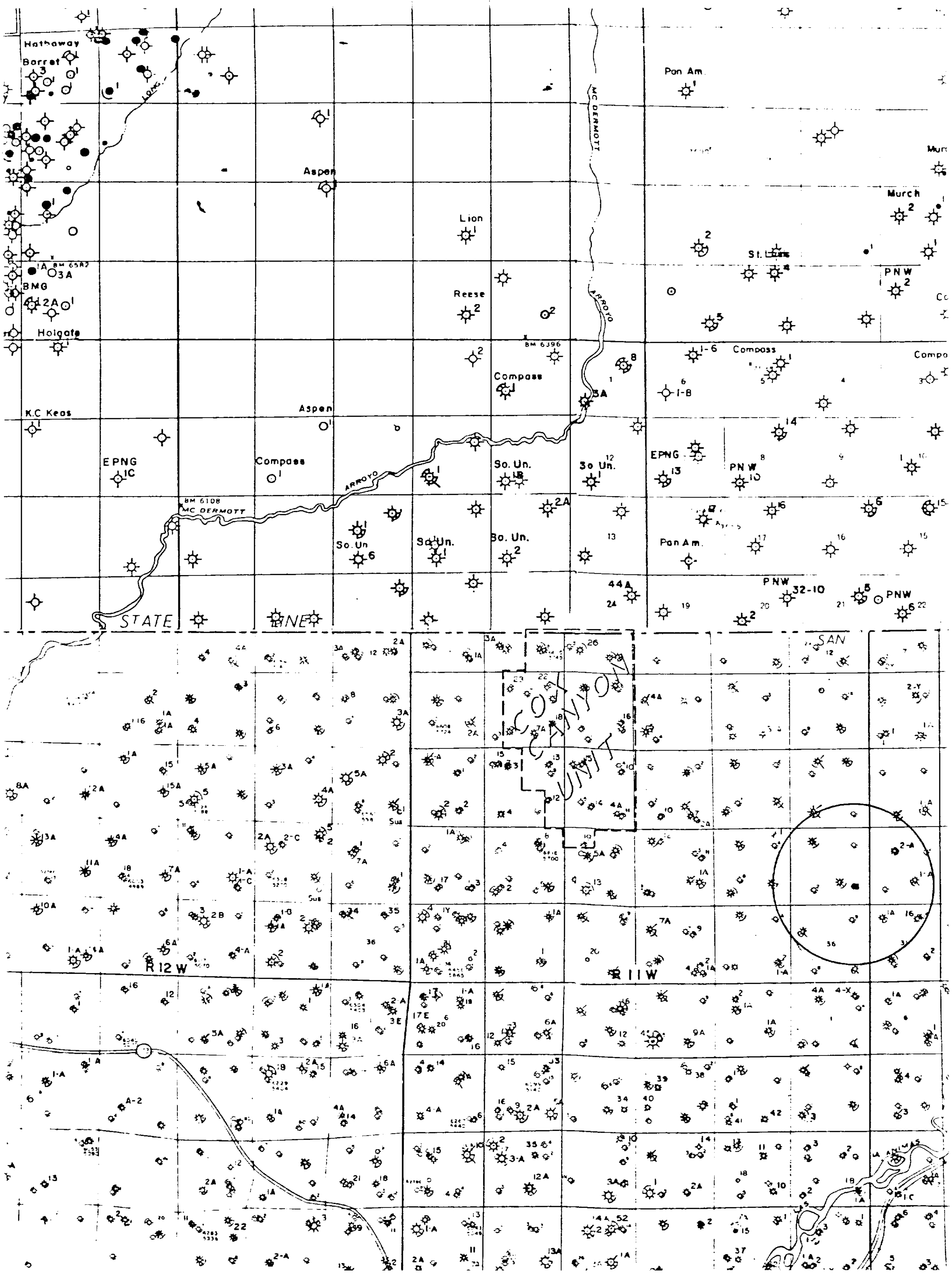
NO New Road Adjacent to An Existing Location

Minimal Dirt Work





Vicinity Map for
TENNECO OIL COMPANY #1-E REAMES "A"
1665'FSL 1830'FEL Sec 24-T26N-R6W
RIO ARRIBA COUNTY, NEW MEXICO


Hathaway
Barret
Pan Am.
MC DERMOTT
Aspen
Murch
Lion
St. Louis
PNW
BM 6582
BMG
Reese
Holgate
BM 6396
Compass
K.C Keas
EPNG
So. Un.
ARROYO
BM 6108
MC DERMOTT
STATE LINE
SAN
COX CANYON UNIT
R 12 W
R 11 W