SUBMIT IN TRIPLICATE.

(Other instructions on

Ferm	approved		
Budget	Bureau	No.	42-R1425.

•	1111	ITED STATES	(Other in	nstructions on	Budget Bure	au No. 42-R1425.	
•				rse side)	30.0	20 2220	
DEPARTMENT OF THE INTERIOR			5. LEASE DESIGNATION	39-2221			
•	GEOL	OGICAL SURVEY					
APPLICATIO	N FOR PERMIT	TO DOLL DEE	DENL OD DLU	C D 4 614	Contract # 10	18	
1a. TYPE OF WORK	N TOK FERIVIII	TO DRILL, DEC	PEN, OR PLUC	2 RACK	6. IF INDIAN, ALLOTTI	EE OR THIRE NAME	
	RILL 🔀	מרנטראו [
b. Type of well	KILL [X	DEEPEN 🗌	PLUG	BACK 🗌	7. UNIT AGREEMENT	NAME	
oir	CAS (SINGLE [7] MI				
2. NAME OF OPERATOR	WELL XX OTHER		ZONE ZOI	NE	8. FARM OR LEASE NA	ME	
	•			-	Jicarilla "C	111	
Tenneco 0il	Company				9. WELL NO.	<u></u>	
3. ADDRESS OF OPERATOR	it .				15-2-		
720 South Colorado Blvd., Denver, Co. 80222			10. FIELD AND POOL, OR WILDCAT				
4. LOCATION OF WELL (Report location clearly an	d in accordance with any	State requirements *)		10. FIELD AND POOL,	OR WILDCAT	
(1690' FSL, 16			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		<u>Basin Dakota</u>		
					11. SEC., T., R., M., OR AND SURVEY OR AL	BLK.	
At proposed prod. zo	he	•					
14. DISTANCE IN WILES					Sec. 23, T2	6N, R5W	
	AND DIRECTION FROM NE.		ICE*		12. COUNTY OR PARISH		
19.2 miles No	ortheast of Cour	selor, NM			Rio Arriba	N.M.	
15. DISTANCE FROM PROP LOCATION TO NEARES	T	16.	NO. OF ACRES IN LEASE	17. NO. O	F ACRES ASSIGNED	1 14.14.	
(Also to nearest dr)	LINE, FT.		2560.00	TO TH	IS WELL		
18. DISTANCE FROM PROJ	POSED LOCATION*	19.	PROPOSED DEPTH	<u>2 320 کے ا</u>	.00		
OR APPLIED FOR, ON TH	ORILLING, COMPLETED,			20. ROTAR	Y OR CABLE TOOLS		
21. ELEVATIONS (Show wh	·		7650	<u> </u>	У		
	.cuici DI, III, GIL, EXL.)				22. APPROX. DATE WO	RE WILL START	
6566 GR			A.S.A.P.				
.u.	1	PROPOSED CASING AN	D CEMENTING PROC	CRAW	1 71.3.71.1		
SIZE OF HOLE	T		The Proc				
	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH		QUANTITY OF CEMEN	T	
12 ½ "	8 5/8" New	24# K-55	5 + 350' Circu		late to Surface		

+ -7650**'**

See Attached

No abnormal temperatures, pressures, or geologic hazards are expected

The gas is dedicated

DRILLING U. . SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"



Circulate to surface in two stages

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 H. Freeman		December 28, 1979
(This space for Federal or State office use)	Stail Froduction Al	id 1 y 3 C
APPROVED BY AS AMENDED	APPROVAL DATE	
CONDITIONS OF APPROVAL IF ANY:		DATE
CONDITIONS OF APPROVAL IFANT: JAMES F. SIMS PLOT CICT ENGINEER	who Fresh	DEC 31 1979
DISTRICT ENGINEER	*See Instructions On Reverse Side	U. S. GEOLOGICAL SURVEY

U. S. GEOLOGICAL SURVEY - DURANGO, COLO.

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO HERGY AND MINERALS DEPARTMENT

660

1320 1650

1860

2310

2000

1500

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-102

All distances must be from the cuter boundaries of the Section Well No. Operator 1-E 3E JICARILLA "C" TENNEOO OIL COMPANY County Range Unit Letter Section Township 26N 5W Rio Arriba Actual Footage Location of Well: 1690 West 1690 South line feet from the feet from the line and Dedicated Acreage: Pool Ground Level Elev. Producing Formation Basin Dakota 320.00 6566 Dako ta 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? If answer is "yes," type of consolidation Yes 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. L. Freeman Position 0 Staff Production Analyst Company Tenneco Oil Company December 28, 1979 Sec. 23 July CONTRACT # 108 16901 320.00 Acres DIST. 3 TENNICO 3 CONOCO Registe and/or ARCO 3950 50Q

1000

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

DRILLING PROGRAM

DATE: November 19, 1979

LEASE: Jicarilla C

WELL NO .: 35

LOCATION:

1690' FSL, 1690' FWL

Sec. 23, T 26N, R 5W

Rio Arriba County, New Mexico

FIELD: Jicarilla Dakota

ELEVATION: 6560' Est. G.L.

TOTAL DEPTH: 7650'

PROJECTED HORIZON: Dakota

APPROVED BY: John 7. Com

DK/ms

1st Rev.

ESTIMATED FORMATION TOPS

0J0	2680	(Water)
Pictured Cliffs	3030	(Gas)
Cliffhouse	4800	(Gas)
Menefee	4890	(Gas)
Point Lookout	5380	(Gas)
Gallup	620 0	(Gas/0il)
Greenhorn	7221	
Dakota	7310	(Gas)

Surface Formation: San Jose

No abnormal temperatures or pressures are expected.

DRILLING, CASING, AND CEMENT PROGRAM

- 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% CaCl2. 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, plug and abandon 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.

<u>Deviation Surveys:</u>

- Survey surface hole every 100'. Maximum allowable deviation at surface T.D. is 1°.
- 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 50.

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.

- 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.

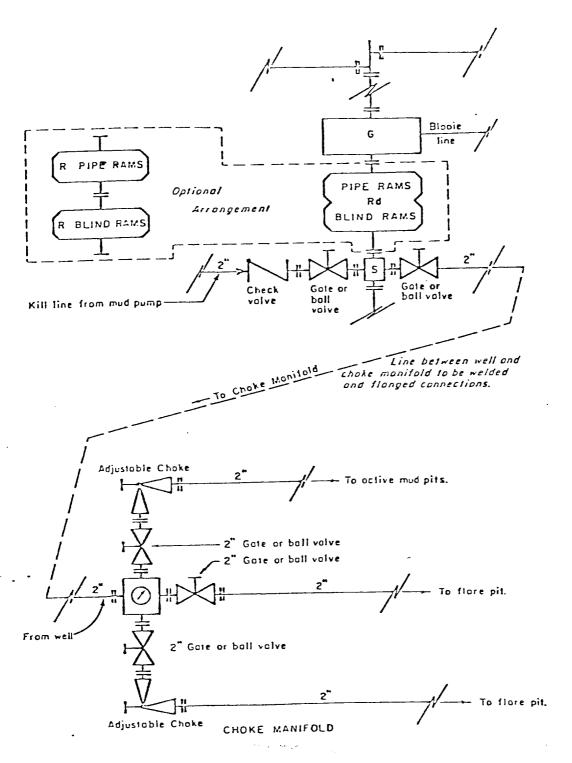
The yellow sheet of the IADC Report to be filled out completely, the original copy of the drilling time recorder, and copies of any invoices from this well, signed and received for Tenneco Oil Company will be mailed daily to:

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 os noted.

- Rd Double ram type preventer with two sets of rams.
- R Single rom type preventer with one set of roms.
- 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 10-25-79 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.
- 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 I 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 on the Jicarilla Indian Reservation with the surface and minerals belonging to the same. The topography is broken with sandy loam soil. The principal vegetation is sage and native grasses.
- 12. Operator's Representative -

SEE DRILLING PROGNOSIS

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 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 JICARILLA "(" J-F3F

1690FSL 1690FWL SEC 23 T26N R5W OATE 12/27/79

1. STOCK PITE TOPSOIL, PLACE TREES AND brush in pit And COVER, Fence All pits.

2. SO' of New Road

Power Line

Power Line

