SUBMIT IN TRIPLICATE*

(Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

UNITED STATES

20	2-6	45	-84	47	86	
5.	LEASE	DESI	GNATION	AND	BERIAL	No
	MOO	7_7	4-20-	-260	1	

APPLICATION F 1a. TIPE OF WORK DRILL b. TIPE OF WELL	OR PERMIT 1			N, OR PLUG	DACK	NOOC-14-20-	
DRILL			DEEPE	N, OR PLUG	DACV	6. IF INDIAN ALLOTTE	
DRILL b. TIPE OF WELL	X	S. P. P. P. L			BACK	Rena Etsitt	
		DEEPEN		PLUG B	ack 🗆	7. UNIT AGREEMENT N	-
OIL GAS	OTHER			NGLE X MUI	TIPLE	8. PARM OR LEASE NAI	Œ
2. NAME OF OPERATOR						Canyon	
Tenneco Oil C	ompany					9. WELL NO.	
3. ADDRESS OF OPERATOR						#4E	
P.O. Box 3249	, Englewood,	Colorado	8015	5		10. FIELD AND POOL, O	
4. LOCATION OF WELL (Report	location clearly and	in accordance wi	th any S	tate requirements.*)		Basin Dakot	a
	, 1660 FWL					11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA	
At proposed prod. some						Sec. 5, T25	N, RllW
14. DISTANCE IN MILES AND PAPPROXIMATELY					· -	12. COUNTY OR PARISE San Juan	N.M.
10. DISTANCE FROM PROPUSED		<u> </u>		OF ACRES IN LEASE	17. NO.	OF ACRES ASSIGNED	
LOCATION TO MEAREST PROPERTY OR LEASE LINE, (Also to nearest drig. un:	it line, if any)	870 '		160.48		TO THIS WELL 320, 48	
18. DISTANCE FROM PROPOSED TO NEAREST WELL, DRILLI OR APPLIED FOR, ON THIS LE	NG, COMPLETED,		19. PR	о рове р вертн ±5915		20. ROTARY OR CABLE TOOLS ROTARY	
21. ELEVATIONS (Show whether	DF, RT, GR, etc.)					22. APPROX. DATE WO	BE WILL START
		6320 GR				January 1	981
23.	F	PROPOSED CASI	NG AND	CEMENTING PRO	GRAM		·
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	тоот	SETTING DEPTH		QUANTITY OF CEME:	ΥT.
12 1/4"	9 5/8" new	36#		±250	Cir	Circulate to surface	
7 7/8" 4 1/2" new 11.6#, 10.5#			0.5#	±5915	Cem	Cement in two stages	
	THE BUTED ARE		İ		The Comment		A. Singer
	HOATIS	En			¥" "		
See attached.							
				-			
			7				

The gas is dedicated.



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive one and proposed new productive sone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout 24.

eventer program, if any.			
BIONED R. A. Mishler R. A. Mishler	Sr. Production	Analyst	December 10, 1980
(This space for Federal Profession Control			
AS AMENDED	APPROVAL DATE		
CONDITIONS OF AFFECT AND	TITLE		DATE

*See Instructions On Reverse Side

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION P. O. DOX 2011

SANTA FE, NEW MEXICO 87501

Form C-107 Revised 10-1-78

All distances must be from the cuter houndaries of the Section.

TENNESO OIL COMPANY CANTON Propose Section of Wells Solo Test from the North Total floring Least to the floring than 1660 Jest from the North Total floring Least 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, eatline 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 Community after in force this form if accessary. No siloweble will be assigned to the well until all interests have been consolidated (the reverse side of this form if accessary). No siloweble will be assigned to the well until all interests have been consolidated (the reverse side of this form if accessary). No siloweble will be assigned to the well until all interests have been consolidated (the reverse side of this form if accessary). No siloweble will be assigned to the well until all interests have been consolidated (the communitization, unitization, force-pooling, or otherwise) or until a non-standard unit, climinating such interests, has been approved by the Commission. CERTIFICATION I harshy carrify that the information containing the pooling of the communitization of the plate of the first own plates of the well because on this plate on the black of my knowledge and boiled. Sec. SF 078062 SHELL 1003 I harshy carrify that the well because of the first own plates of the black of my knowledge and boiled. Determine of accessary made by a second plate of my knowledge and boiled. Determine the second plates of my knowledge and boiled. Determine the second plates of my knowledge and boiled. Determine the second plates of my knowledge and boiled. Determine the second plates of my knowledge and boiled. Determine the second plates of my knowledge and boiled. Determine the second plates of my		A11 51.1.					
Township	Operator	T COMPANY	ļ ī				
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			2000:			39502	

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

DRILLING PROCEDURE

DATE:	september	8,	1980

LEASE: Canyon WELL NO.: 4E

LOCATION: 870 FNL, 1660 FWL FIELD: Gallegos Canyon Area Sec. 5, T25N, R11W

San Juan County, New Mexico

ELEVATION:6320 Est. G.L.

TOTAL DEPTH: 5915

PROJECTED HORIZON: Dakota B

SUBMITTED BY: Dale Kardash

DATE: September 8, 1980

APPROVED BY: DATE: 10-21-80

CC: Administration
DSB Well File

Field File

ESTIMATED FORMATION TOPS

Ojo		
Fruitland	1320	(Water)
Pictured Cliffs	1385	(Gas)
Lewis		
Cliff House	2175	(Gas)
Menefee		
Point Lookout		
Mancos	4010	
Gallup	4880	
Greenhorn	5695	
Dakota A	5815	(Gas)
Dakota B	5830	(Gas)

5915

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TD

DRILLING, CASING AND CEMENTING PROGRAM

- 1. MIRURT
- 2. Drill a $12\frac{1}{4}$ " Hole to ± 250 with Gel-Water Mud.
- 3. RU and run 9 5/8", 36#, K-55, ST&C casing to TD. Cement with Class B + 2% CaCl $_2$ in sufficient quantity to circulate cement to surface. WOC 12 hours.
- 4. Screw on 9 5/8 8rd x 11-3000 casing head, NU BOPS. Pressure test casing, lines and blinds to 1000 PSI for 30 minutes. GIH with drill pipe and test pipe rams to 1000 PSI for 30 minutes. Record all tests on IADC Report.
- 5. Drill out using a 7 7/8" Bit to T.D. Log open hole as directed by G.E. Department.
- 6. Run $4\frac{1}{2}$ " 11.6 and 10.50# K-55 ST&C as designed.
- 7. Cement in two stages with sufficient volume to circulate cement to surface. Locate DV tool ± 250' 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.
- 8. MORT
- 9. Install tree and fence reserve pit.
- 10. If non-productive, P & A as required by the USGS.

Casing Program

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Interval 0-250	Length 250	<u>Size</u> 9 5/8	Weight 36#	Grade K-55	Coupling STC
					•
0-5915	5915	4 1/2	10.5#	K-55	STC

MUD PROGRAM

- O-250 Native solids. Have sufficient viscosity to gel chemical to clean hole and run casing.
- 250-TD 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: None.

Deviation Surveys:

- 1. Survey surface hole at 100' intervals. Maximum allowable deviation at 500' is 1-1/2°.
- 2. From surface to toal depth, deviation surveys must be taken every 500' or each trip, whichever is first. The may entail running the TOTCO on wireline. Record each survey on the IADC Drilling Report Sheet. Maximum allowable change in deviation is 1° per 100'. Maximum deviation allowable is 5°.

<u>Samples</u>: As requested by Wellsite Geological Engineer.

Logs: 1. GR/IND FDC-GR-Cal TD to MV

BLOWOUT EQUIPMENT

11" - 3000 BOP with rotating head to comply with TOC requirements as shown in BOE arrangement, Figure C. Preventers must be checked for operation every 24 hours with each check recorded on the IADC Drilling Report Sheet.

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 cost, deviation surveys, and other pertinent information to be called into Division Office by 7:30 A.M. Monday thru Friday.

TENNECO OIL COMPANY
P.O. BOX 3249
ENGLEWOOD, COLORADO 80155
PHONE: 303-740-4800

Office Directory

Don S. Barnes	740-4814
John W. Owen	740-4810
Tom Dunning	740-4813
Jack Magill	740-4802
Dale Kardash	740-4809

In case of emergency or after hours call the following in the preferred order.

(1)	Don S. Barnes Division Drilling Engineer	740-4814 936-0704	
(2)	John W. Owen Project Drilling Engineer	740-4810 795-0221	
(3)	Mike Lacey Division Production Manager	797-2651	Home

TENNECO OIL COMPANY - 10 POINT PLAN

1. The geological name of the surface formation: Maciemento

2 & 3. Estimated Formation Tops:

(See Attached Drilling Procedure)

4. Proposed Casing Program:

(See Attached Drilling Procedure)

- 5. Blowout Preventors:
 - Hydraulic double ram. One set of rams will be provided 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". BOP's, drills and tests will be recorded in the driller's log. BOP will be tested every 24 hours and recorded in IADC Log.
- 6. Mud Program: (Sufficient quantity of mud and weight material will be available on location).

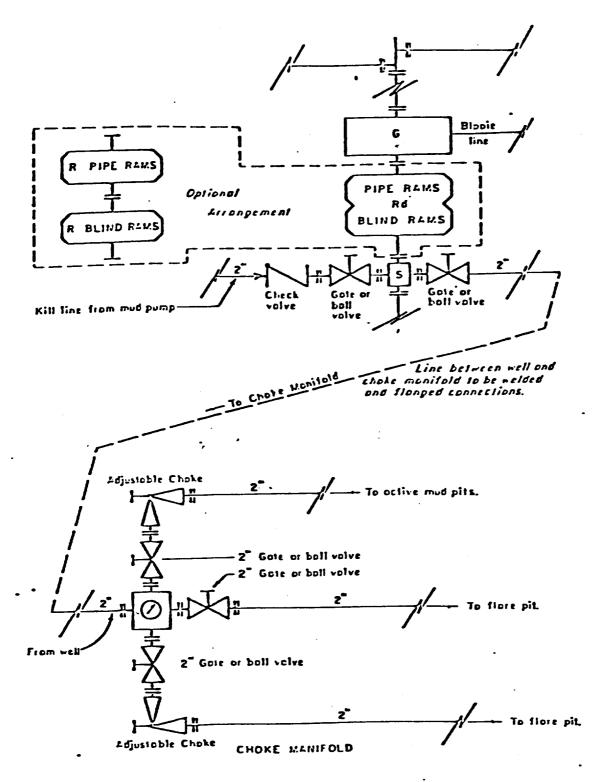
(See Attached Drilling Procedure.

- 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.
 - d. Floats at bits.
 - e. Drill string safety valve(s) to fit all pipe in drill string will be maintained on the rig floor while drilling operations are in progress.
- 8. Coring, Logging, and Testing Program:

(See Attached Drilling Procedure)

- 9. No abnormal pressures, temperatures or potential hazards such as H₂S are expected to be encountered.
- 10. The drilling of this well will start approximately (and continue for 10 to 12 days.

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

- Rd Double som type preventer with two sets of roms.
- 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

- 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 J 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 Location is on gently rolling sage hills. Soil is sandy.

 Drainage is northwesterly. Vegetation includes sage, snakeweed,

 Indian ricegrass, alkalai socotone, and other 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.

R. A. Mishler

Sr. Production Analyst

