Doc. 1426M

TENNECO OIL COMPANY
ROCKY MOUNTAIN DIVISION
6162 SOUTH WILLOW DRIVE
ENGLEWOOD, COLORADO 80155

DRILLING PROCEDURE

DATE: October 3, 1983

LEASE: Reames Com WELL NO: #3

LOCATION: 2120' FSL, 2060' FWL
Sec. 19, T26N, R6W
Rio Arriba County, NM
FIELD: Otero/Blanco

ELEVATION 6,176' G.L.

TOTAL DEPTH: 5,000'

PROJECTED HORIZON: Chacra - Mesaverde Dual

SUBMITTED BY: Mark Kangas DATE: October 3, 1983

APPROVED BY: Mark Kangas DATE: 10-3-83

CC: Administration ✓
CRJ Well File
Field File

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 AM Monday thru Friday.

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

OFFICE DIRECTORY

Charles R. Jenkins	740-2575
Ted McAdam	740-2576
Tom Dunning	740-4813
Mark Kangas	740-4810

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

(1)	Mark Kangas	740-4810	Office
	Senior Drilling Engineer	973-8846	Home
(2)	Ted McAdam	740-2576	Office
	Senior Drilling Engineer Specialist	978-0724	Home
(3)	Charles R. Jenkins	740-2575	Office
	Division Drilling Engineer	987-2290	Home
(4)	Harry Hufft	771-5257	Home
	Division Production Manager		

ESTIMATED FORMATION TOPS

Ojo	1590'	Water
Kirkland Shale	1798'	
Fruitland	2078'	Gas, Water, Shale, Coal
Pictured Cliffs	2358'	Gas
Lewis	2428'	
Chacra	2848'	Gas
Cliff House	4048'	Water
Menefee	4073'	Shale & Coal
Point Lookout	4648'	Gas & Condensate
TD	5000'	

DRILLING, CASING AND CEMENT PROGRAM

1. MIRURT

2. Drill a 12-1/4" hole to ± 300 ft. with a gel water mud.

3. Rig up and run 9-5/8" 36# K-55 ST&C casing to bottom. Cement with Class B + 2% $CaCl_2$ in sufficient quantity to circulate cement to surface. If conditions warrant the use of loss circulation agents, 1/4 #/sx celloflake may be added. Wait on cement a minimum of 12 hours prior to drilling out.

4. While waiting on cement, screw on a 9-5/8" -8rd X 11 3M casinghead. NU BOP's. Pressure test casing, blinds, manifold and lines to 1000 psi for 30 minutes. GIH and drill pipe and test the pipe rams in the same manner. Record all tests on the IADC report sheet.

5. Drill an 8 3/4" hole to T.D. Treat mud system for possible lost circulation in the Mesaverde. Mud up prior to reaching casing point.

6. Circulate at casing point a sufficient time to clean the hole to run logs.

7. Log open hole as directed by G.E. Department.

8. If productive, install casing rams and run the 7" longstring as designed. Equip casing with guide shoe, float collar one joint up and a stage tool at ± 2475'. Centralize and use baskets as necessary.

9. Cement production string as follows:

PRODUCTION CEMENTING PROGRAM

FIRST STAGE	LEAD	TAIL
Type	HOWCO Lite + 1/4#/sx flocele	Cl B + .6% Halad 9
Sacks	Calculated annular volume + 50% excess	150 sx
Slurry yield	1.84 ft3/sx	1.18 cuft3/sx
Mix weight	12.7 ppg	15.6 ppg
Water req's.	9.9 gal/sx	5.2 gal/sx

SECOND STAGE	LEAD	TAIL
Type	Howco Lite + 1/4 #/sx flocele	Cl B + 2% $CaCl_2$ 1/4#/sx flocele
Sacks	Calculated annular volume + 70% excess	50-75 sx
Slurry yield	1.84 cuft3/sx	1.18 cuft3/sx
Mix weight	12.0 ppg	15.2 ppg
Water req's.	10.2 gal/sx	5.2 gal/sx

Precede cement in both stages by a mud flush agent or by "flow-check" or equivalent. If cement is not circulated to surface, run a temperature survey after 6 to 12 hours to determine actual TOC as MMS requires.

10. Set slips with casing in full tension and cut off.

11. MORT, fence remainder of reserve pit, install tree.

12. If non-productive, P & A as required by MMS.

CASING PROGRAM

INTERVAL	LENGTH	SIZE	WEIGHT	GRADE	OPTIMUM MAKE-UP TORQUE
0-300	300	9-5/8	36. #	K-55	STC 4230
0-5000	5000	7	23. #	K-55	STC 3090 LTC 3410

MUD PROGRAM

0-300' Spud mud.

300-TD' Low solid, fresh water mud. (Water and Benex.) Mud up prior to running casing.

EVALUATION

Cores and DST's:

NONE.

Deviation Surveys

1. Survey surface hole at 100' intervals. Maximum allowable deviation at 500' is 1-1/2o

2. From surface to the Mancos formation, deviation surveys must be taken every 500'. Record all surveys in IADC Report book. Maximum allowable change in deviation is 1o per 100'. Maximum deviation allowable is 5o.

Samples: As requested by Wellsite Geological Engineer

Logs:
1. GR/INDUCTION T D - Intermediate shoe
2. GR/FDC/Cal T.D. - minimum

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.