7orm 3160-5 November 1983)	UNITED STATES SUBMIT IN TRIPLICATES (Other instructions on re	Expires vagast 31, 1	985
Pormerly 9-331) DEPARTI	MENT OF THE INTERIOR VETER (1440) AU OF LAND MANAGEMENT	SF-078390	MRIAL NO.
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Tenneco Oil Company		Price	٠
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P. O. Box 3249, Englew	dearly and in accordance with any fitate regularments.	16. FIELD AND POOL, OR WILL	SCAT
See also space 17 below.) At surface	clearly and in accordance with any fitate requirements.	Basin Dakota	
980' FNL, 1080' FWL	AUG 2 0 1984	11. MC., T., R., M., OR M.K. A. SURVEY OR ARMA	J D
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4. PREMIT PO.	18. BLEVATIONS (Show whether to, in, et a.)	12. COCPTY OR PARISE 18.	
	6406' GR	San Juan	NM
6. Check A.	ppropriate Box To Indicate Nature of Notice, Report, or	Other Data	
NOTICE OF INTE	•	CORNI BERGES OF:	
TREE WATER REDS-007	PULL OR ALTER CARING WATER SECT-OFF	REPAIRING WELL	
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REPAIR WELL	CHANGE PLANS X (Other) (Note: Report result	n of multiple completion on W	
(Other)	Completion or Recom	pletion Report and Log form.)	
proposed work. If well is directinent to this work.)	SEATIONS (Clearly state all pertinent details, and give pertinent date ionally drilled, give subsurface locations and measured and true verti-	cal depths for all markers and	nones perti-
Frank Chavez, District on the foam cement job	ing procedure. On August 14, 1984, a mee t Supervisor for the State of New Mexico (b for intermediate casing. Mr. Chavez has our request to do the foam cement job.	Dil Conservation Di	ivision,
		AUG 2 4 198 OIL CON. DIST. 3	
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	in the and observed	APPROVED	-
81GHED STATES	Sr. Regulatory Analyst	8/16/84	4
(This space for Federal or State of	Box use)	AUG 2 2 1984	
APPROVED BY	TITLE	DATE MOVOS	
CONDITIONS OF APPROVAL, IF	NMOCC .	AREA MANAGER FARMINGTON RESOURCE ARE	A A

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instructions on Reverse Side

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

DRILLING PROCEDURE

DATE:

August 16, 1984

LEASE:

Price

WELL NO: #TE

FIELD: Basin Dakota

LOCATION:

980' FNL, 1,080' FWL Section 13, T28N, R8W

San Juan County, NM

ELEVATION

6,406'

TOTAL DEPTH:

7,500'

PROJECTED HORIZON: Dakota

SUBMITTED BY:_	Mark Kangas	DATE:	<u>August 16, 1984</u>
	Mark Kangas	DATE:	8-16-84

CC: Administration CRJ Well File

Field File

ESTIMATED FORMATION TOPS

Ojo	2080'	Water
Kirtland	2160'	
Fruitland	2740'	
Pictured Cliffs	2990'	
Lewis	3090'	
Chacra	3930'	
Cliff House	4610'	Gas (800 psi)
Menefee	4760'	Gas (800 psi)
Point Lookout	52101	Gas (800 psi)
Mancos	5440'	•
Gallup	6430'	Possible Oil
Greenhorn	7160'	
Dakota	7250'	Gas (2100 psi)
TD	7500'	

DRILLING, CASING AND CEMENT PROGRAM

)

- 1. MIRURT. Notify MMS of spud.
- 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% CaCl₂ in sufficient quantity (200-250sx) 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 with drill pipe and test the pipe rams in the same manner. Record all tests on the IADC report sheet.
- 5. Drill out with an 8-3/4" bit and clear water. Drill to \pm 3590' or 500' into the Lewis Shale. Mud up prior to reaching intermediate T.D. Circulate at casing point a sufficient time to clean the hole to run casing.
- 6. Install casing rams, run 7" 23# K-55 casing equipped with a guide shoe on bottom and a float collar one joint up. Bakerlock from the shoe to the top of the float collar and run casing to bottom. Centralize casing with one centralizer in the middle of shoe joint and then on every other collar for total of 6 centralizers. Cementing baskets may be used if lost circulation has been encountered.

INTERMEDIATE FOAM CEMENTING PROGRAM

Lead: 192 sacks of Class B with a <u>foamed</u> slurry weight of 6.0 ppg (prefoamed of 15.7 ppg).

Tail: 119 sacks of Clas B with slurry weight of 15.7 ppg.

Cap: 37 sacks of 10-2 RFC with slurry weight of 14.5 ppg will be pumped down braden head at end of regular cement job to provide a "cap" of cement at the surface.

Density control is accomplished win nuclear densimeters. Foam quality is constantly checked with two liquid flow meters. Dispersion of nitrogen in the cement is done with a "foaming tee". To provide for a controlled rate of rise of the cement on the backside, a 2" choke and 2" flow meter is used.

If cement is not circulated to surface run a temperature survey after 8 hours to determine actual TOC as MMS requires. Wait on cement a total of 18 hours before drilling is resumed.

- 7. Set slips with casing in full tension and cut-off. NU BOE and test as in procedure 4 above. Record tests on IADC report.
- 8. Drill out, dry up hole and drill a 6-1/4" hole to T.D. (see Mud Program) surveying as required. Lay down square drill collar before cutting the Dakota.
- 9. Log open hole as directed by GE department.
- 10. If productive, run 4-1/2" 11.6# and 10.5# K-55 casing as a liner. Equip the casing with a float shoe, float collar and latch down collar on the top of the first joint. No threadlock or centralizers are to be used on this arrangement. Hang liner with a 150' lap in the intermediate casing and 3' off bottom.
- 11. Cement with a filler slurry as used for the intermediate string. Start with a 20 barrel mud flush, followed by the lead slurry with a fluid loss control additive and tail with 100 sx Cl B. Use sufficient quantity (70-75% excess) to circulate cement to the liner top.
- 12. Circulate out the excess cement, LDDP and MORT.
- 13. In non-productive, P & A as required by USGS.
- 14. Install tree and fence remainder of reserve pit.

CASING PROGRAM

INTERVAL	<u>LENGTH</u>	SIZE	WEIGHT	GRADE	OPTIMUM MAKE-UP <u>Torque</u>
0-300	300	9-5/8	36. #	K-55	STC 4230
0-3590	3590	7	23.#	K-55	STC 3090 LTC 3410
3440-7000	3560	4-1/2	10.5#	K-55	STC 1460
7000-7500	500	4-1/2	11.6#	K-55	STC 1700 LTC 1800

MUD PROGRAM

0-300'	Spud mud.
300-3590'	Low solid, fresh water mud. (Water and Rapid Mud.) Mud up prior to running casing.
3590'-T D	Gas — If mud up is required, 3% KCL must be added to the system.

EVALUATION

Cores and DST's:

NONE.

Deviation Surveys

- 1. Survey surface hole at 100' intervals. Maximum allowable deviation at 500' is $1-1/2^\circ$
- 2. From surface to the Mancos formation, deviation surveys must be taken every 500'. In the Mancos/Gallup zones, surveys to be each 250'. Record all surveys in IADC Report book. Maximum allowable change in deviation is 10 per 100'. Maximum deviation allowable is 50.

Samples:

As requested by Wellsite Geological Engineer

Logs:

- 1. GR/INDUCTION
- T D to Intermediate
- 2. CDL/GR/CALIPER
- T.D. 2000' 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.

REPORTS

Drilling Reports for the past 24 hours will include depth, footage, time distribution, activity breakdown, mud properties, bit record, bottom hole assembly, types of logs and depths ran, 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
(-,	Drilling Engineering Supervisor	, 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		