

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF-078039	
2. NAME OF OPERATOR Tenneco Oil Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS OF OPERATOR P. O. Box 3249, Englewood, CO 80155		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1520' FNL, 1490' FWL		8. FARM OR LEASE NAME Barnes	
14. PERMIT NO.		9. WELL NO. 1E	
15. ELEVATIONS (Show whether SF, FT, GR, etc.) 6988' GR		10. FIELD AND POOL, OR WILDCAT Basin Dakota	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 26, T32N, R11W	
		12. COUNTY OR PARISH San Juan	13. STATE NM

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☐
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
(Other) ☐

PULL OR ALTER CASING ☐
MULTIPLE COMPLETE ☐
ABANDON* ☐
CHANGE PLANS ☒

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐
FRACTURE TREATMENT ☐
SHOOTING OR ACIDIZING ☐
(Other) ☐

REPAIRING WELL ☐
ALTERING CASING ☐
ABANDONMENT* ☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Tenneco requests permission to change the intermediate cementing job to a foam cement according to the attached detailed procedure.

RECEIVED
DEC 04 1984
OIL CON. DIV.]
DIST. 3

18. I hereby certify that the foregoing is true and correct

SIGNED

Stan McKee

TITLE Sr. Regulatory Analyst

(This space for Federal or State office use)

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

DATE

APPROVED 11/19/84

NOV 29 1984
Stan McKee

*See Instructions on Reverse Side

NMOCC

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.

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

DRILLING PROCEDURE

DATE: November 13, 1984

LEASE: Barnes

WELL NO: # 1E

LOCATION: 1520' FNL, 1490' FWL
Section 26, T32N, R11W
San Juan County, NM

FIELD: Basin Dakota

ELEVATION 6488'

TOTAL DEPTH: 7880'

PROJECTED HORIZON: Dakota

SUBMITTED BY: Mark Kangas

DATE: 11-13-84

APPROVED BY: Charles R. Jenkins

DATE: 11/13/84

CC: Administration
CRJ Well File
Field File

ESTIMATED FORMATION TOPS

Ojo	1500'	Water
Kirtland	1650'	
Fruitland	2790'	Coal Gas
Pictured Cliffs	3225'	
Lewis	3300'	
Cliff House	5036'	Potential Lost Circulation Zone
Menefee	5145'	
Point Lookout	5505'	Potential Lost Circulation Zone
Mancos	5830'	
Gallup	6850'	
Greenhorn	7540'	
Dakota	7650'	Gas
TD	7880'	

DRILLING, CASING AND CEMENT PROGRAM

1. MIRURT. Notify MMS of spud.
2. Drill a 12-1/4" hole to \pm 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 (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 3800' 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. GE's may decide to log intermediate hole.
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: 320 sacks of Class B + 2% CaCl_2 with a foamed slurry weight of 8.0 ppg (prefoamed of 15.7 ppg).
- Tail: 120 sacks of Class B + 2% CaCl_2 with slurry weight of 15.7 ppg.
- Cap: 75 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.

A 20 barrel preflush of Hydrolite will be pumped ahead of the cement to reduce the hydrostatic and condition the hole for improved bonding.

Density control is accomplished with 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 24 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. 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 and both 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.
11. Cement with a 65/35/6 Poz mix lead slurry. Start with a 20 barrel mud flush, followed by the lead slurry with a fluid loss control additive and tail with 100 sx C1 B plus. Use sufficient quantity (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

<u>INTERVAL</u>	<u>LENGTH</u>	<u>SIZE</u>	<u>WEIGHT</u>	<u>GRADE</u>	<u>OPTIMUM MAKE-UP TORQUE</u>
0-300	300	9-5/8	36. #	K-55	STC 4230
0-3800	3800	7	23. #	K-55	STC 3090 LTC 3410
3650-7000	3350	4-1/2	10.5#	K-55	STC 1460
7000-7880	880	4-1/2	11.6#	K-55	STC 1700 LTC 1800

MUD PROGRAM

0-300'	Spud mud.
300-3800'	Low solid, fresh water mud. (Water and Rapid Mud.) Mud up prior to running casing.
3800'-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°
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 1° per 100'. Maximum deviation allowable is 5°.

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
Project 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		