

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

Form approved.
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.)

RECEIVED

JAN 02 1986

| | |
|---|--|
| 1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> | 5. LEASE DESIGNATION AND SERIAL NO. SF-077106 |
| 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 1850' FNL, 1460' FWL | 8. FARM OR LEASE NAME Lackey B LS |
| 14. PERMIT NO. | 9. WELL NO. 12E |
| 15. ELEVATIONS (Show whether DP, ST, GR, etc.) 7190' GL | 10. FIELD AND POOL, OR WILDCAT Blanco MV/Basin DK |
| | 11. SEC., T., R., E., OR BLE. AND SURVEY OR AREA Sec. 21, T28N R9W |
| | 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 | <input type="checkbox"/> | PULL OR ALTER CASING | <input type="checkbox"/> |
| FRACTURE TREAT | <input type="checkbox"/> | MULTIPLE COMPLETE | <input type="checkbox"/> |
| SHOOT OR ACIDIZE | <input type="checkbox"/> | ABANDON* | <input checked="" type="checkbox"/> |
| REPAIR WELL | <input type="checkbox"/> | CHANGE PLANS | <input type="checkbox"/> |
| (Other) | | | |

SUBSEQUENT REPORT OF:

| | | | |
|-----------------------|--------------------------|-----------------|--------------------------|
| WATER SHUT-OFF | <input type="checkbox"/> | REPAIRING WELL | <input type="checkbox"/> |
| FRACTURE TREATMENT | <input type="checkbox"/> | ALTERING CASING | <input type="checkbox"/> |
| SHOOTING OR ACIDIZING | <input type="checkbox"/> | ABANDONMENT* | <input type="checkbox"/> |
| (Other) | | | |

(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 casing design on the referenced well according to the attached detailed procedure.

RECEIVED
JAN 08 1986
OIL CON. DIV.
DIST. 3

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

SIGNED

John M. Luning

TITLE Senior Regulatory Analyst

DATE

12/11/85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Free Keller
For

*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.

#2550M

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

DATE: December 11, 1985

LEASE: Lackey B LS

WELL NO: 12E

LOCATION: 1850' FNL, 1460' FWL
Section 21, T28N, R9W
San Juan County, New Mexico

FIELD: Basin Dakota

ELEVATION 6347 (GL)

TOTAL DEPTH: 7190'

PROJECTED HORIZON: Mesaverde/Dakota Dual

SUBMITTED BY:

Mark Kangas

DATE:

Dec 12, 1985

APPROVED BY:

Charles R. Jensen

DATE:

12/12/85

CC: Administration
CRJ Well File
Field File

ESTIMATED FORMATION TOPS

| | | |
|-----------------|-------|----------------------|
| Ojo | 1400' | Fresh Water Aquifer |
| Kirtland | 1650' | |
| Fruitland | 2310' | Coal, Gas |
| Pictured Cliffs | 2550' | Gas |
| Lewis | 2650' | |
| Chacra | 3510' | Gas (800 psi) |
| Cliff House | 4190' | Gas (700 psi) |
| Menefee | 4250' | Gas, Water (700 psi) |
| Point Lookout | 4850' | Gas (700 psi) |
| Mancos | 5090' | |
| Gallup | 6030' | Potential Oil Flow |
| Greenhorn | 6830' | |
| Graneros | 6890' | |
| Dakota | 6940' | Gas |
| TD | 7190' | |

DRILLING, CASING AND CEMENT PROGRAM

1. MIRURT. Notify BLM of spud.
2. Drill a 17-1/2" hole to ± 280 ft. with a gel-water mud.
3. Rig up and run 13 3/8", 48#, H-40, ST&C casing to bottom. Equip casing with a Texas Pattern guide shoe.
4. Cement with Class B + 2% CaCl_2 + 1/4#/sx Celloflakes in sufficient quantity (350-400 sx) to circulate cement to surface. Wait on cement a minimum of 12 hours prior to drilling out.
5. Install a 13 5/8"-3M# x 13 3/8" screw on starting flange (will require a 13 3/8" landing joint). Install a 13 5/8"-3M# BOP equipped with blind rams, pipe rams and a Grant or Shaffer rotating head (optional).
6. Pressure test casing, blinds, manifold and lines to 1000 psi for 30 minutes. GIH with drill pipe and test pipe rams in the same manner. Record all tests on the IADC report sheet.
7. Drill out with a 12 1/4" bit and clear water with Rapid Mud. Drill to 3000' or 350' into the Lewis Shale. Mup up prior to reaching intermediate casing point or if hole becomes excessively tight. Circulate at ICP a sufficient time to clean hole to run casing. GE Department will NOT run logs in the 12 1/4" hole.
8. Install casing rams. Rig up and run 9 5/8", 40#, N-80, Special Drift casing. Equip casing with 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 the shoe joint and then on every other collar for a total of 6 centralizers.
9. Precede cement with 20 bbls chemical wash. Cement with theoretical volume plus $\pm 80\%$ excess to bring cement to surface. Cement with 65/35/6 + 2% CaCl_2 + 1/4 #/s Celloflakes. Tail with 100 sacks Class B + same additives. Wait on cement a total of 18 hours before drilling out beneath the 9 5/8" casing. If cement is not circulated to surface, a 1" top job will be necessary.
10. While WOC, raise BOP stack, cut off 9 5/8" casing. Release 13-5/8"-3M# BOP stack. Orangae peel 13 3/8" casing to 9 5/8" casing below ground level. Weld on 11"-3M# x 9 5/8" casinghead at ground level. NUBOPE.

11. Pressure test casing, blinds, manifold and lines to 1500 psi for 30 minutes. GIH with drill pipe and test pipe rams in same manner. Record all tests on the IADC report sheet.
12. Unload casing, drill out and dry up. Drill an 8 3/4" hole with gas to 5300' or $\pm 200'$ into the Mancos Shale. Short trip and blow hole clean for logs. Log 8 3/4" open hole as directed by the G.E. Department.
13. Install casing rams. Run 7", 26#, K-55 liner equipped with a float shoe on bottom, a float collar and latch down collar (piggybacked) on the top of the first joint. Hang liner with a 150' overlap into the 9 5/8" casing. Bakerlock to top of latchdown collar.
14. Precede cement with 20 bbls of Zonelock. Cement 7" liner with 65/35/6 + .6% fluid loss additive. Tail in with 150 sx Class B + 2% CaCl_2 . Use sufficient quantity ($\pm 75\%$ excess) to circulate cement to the liner top.
15. Set packoff and circulate excess cement to surface. LDDPDC.
16. Wait on cement a total of 18 hours before drilling out beneath the 7" liner. Pressure test casing, liner hanger and all BOPE to 1500 psi for 30 minutes. GIH with 3 1/2" drill pipe and test pipe rams in the same manner. Record all tests on the IADC report sheet.
17. Unload casing, drill out and dry up. Drill a 6 1/8" hole with gas to T.D. - surveying as required. Lay down square drill collar before cutting the Dakota. Should the hole become oil wet in the Gallup, switch over to foam mist to drill to T.D. Short trip. Blow hole clean.
18. Log open hole as directed by GE Department.
19. If productive, run 4 1/2", 11.6# and 10.5# K-55 casing as a liner. Equip the casing with a float shoe on bottom, a float collar and latch down collar (piggyback) 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 at least 3' off bottom.
20. Precede cement slurry with 20 barrels of chemical flush. Cement with a lead slurry of 65/35 Poz + 6% gel + .6% fluid loss additive. Tail in with 100 sx Class B + .6% fluid loss additive. Use sufficient quantity ($\pm 75\%$ excess) to circulate cement to the liner top.
21. Circulate out the excess cement, LDDP and MORT.
22. If non-productive, P & A as required by BLM.
23. 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> |
|-----------------|---------------|-------------|---------------|--------------|---------------------------------------|
| 0-280 | 280 | 13-3/8 | 48. # | H-40 | STC 3220 |
| 0-3000 | 3000 | 9-5/8 | 40. # | N-80 | LTC 7370 -- |
| 2850-5300 | 2450 | 7 | 26. # | K-55 | STC 3640 |
| 5150-7000 | 1850 | 4-1/2 | 10.5# | K-55 | STC 1460 |
| 7000-7190 | 190 | 4-1/2 | 11.6# | K-55 | STC 1700 LTC 1800 |

MUD PROGRAM

| | |
|-------------|---|
| 0-280' | Spud mud. |
| 280'-3000' | Low solid, fresh water mud. (Water and Rapid Mud.) Mud up prior to running casing. |
| 3000'-5300' | Air or gas. If mist up or mud up is required, 3% KCl and shale inhibitors must be added to the system. |
| 5300'-T.D. | Air or gas. If mist up or mud up is required, 3% KCl and shale inhibitors 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 8°.

Samples:

As requested by Wellsite Geological Engineer

Logs:

8-3/4" hole: GR-DIL: ICP to 9-5/8" casing shoe
GR-CDL-CAL: Same as above

6-1/8" hole: GR-DIL: TD to 7" liner shoe
GR-CDL-CAL: Same as above

BLOWOUT EQUIPMENT

13-5/8"-3000# WP BOP, 11"-3000# WP BOP with rotating head to comply with TOC requirements as shown in BOPE arrangement, Figure C. Preventors 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 | | |