

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

LEASE DESIGNATION AND SERIAL NO.

NM-012202

IF INDIAN, ALLOTTEE OR TRIBE NAME

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 ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR

Tenneco Oil Company

3. ADDRESS OF OPERATOR

P. O. Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

1000' FNL, 1450' FEL

14. PERMIT NO.

15. ELEVATIONS (If on whether 20, 25, 30, etc.)

5797' GR

7. UNIT AGREEMENT NAME

8. PARK OR LEASE NAME

BoJack B

9. WELL NO.

8E

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA

Sec. 23, T28N, R8W

12. COUNTY OR PARISH 13. STATE

San Juan

NM

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

FULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON\*

SHOOTING OR ACIDIZING

ABANDONMENT\*

REPAIR WELL

CHANGE PLANE

(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 deepen the intermediate casing point and use foam cement according to the attached detailed procedure.

RECEIVED  
OCT 03 1984  
OIL CON. DIV  
DIST. 3

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

SIGNED

TITLE Sr. Regulatory Analyst

DATE 9/24/84

(This space for Federal or State office use)

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED

OCT 01 1984

FILED Stan McKen

ASST. AREA MANAGER  
FARMINGTON RESOURCE AREA

\*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: September 24, 1984

LEASE: Bolack B

WELL NO: #8E

LOCATION: 1000' FNL, 1450' FEL  
Section 33, T28N, R8W  
San Juan County, NM

FIELD: Basin Dakota

ELEVATION 5797'

TOTAL DEPTH: 6680'

PROJECTED HORIZON: Dakota

SUBMITTED BY: Mark Kangas

DATE: September 24, 1984

APPROVED BY: *Mark Kangas*

DATE: 9-24-84

CC: Administration  
CRJ Well File  
Field File

ESTIMATED FORMATION TOPS

Ojo	1230'	Water
Kirtland	1300'	
Fruitland	1920'	Coal Gas
Pictured Cliffs	2090'	
Lewis	2210'	
Chacra	3010'	
Cliff House	3710'	Gas (600 psi)
Menefee	3760'	Gas (600 psi)
Point Lookout	4310'	Gas (600 psi)
Mancos	4510'	
Gallup	5520'	
Greenhorn	6320'	
Dakota	6400'	Gas (2200 psi)
TD	6680'	

### 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%  $\text{CaCl}_2$  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  $\pm$  3500' or 175' below base of Chacra. Mud up prior to reaching intermediate T.D. Circulate at casing point a sufficient time to clean the hole to run casing. 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: 195 sacks of Class B + 2%  $\text{CaCl}_2$  with a foamed slurry weight of 8.0 ppg (prefoamed of 15.7 ppg).
- Tail: 120 sacks of Class B + 2%  $\text{CaCl}_2$  with slurry weight of 15.7 ppg.
- Cap: 40 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 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 NMS 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. (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 C1 B plus .6% fluid loss additive. 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
0-3500	3500	7	23. #	K-55	STC 3090 LTC 3410
3350-6680	3300	4-1/2	10.5#	K-55	STC 1460
		4-1/2	11.6#	K-55	STC 1700 LTC 1800

### MUD PROGRAM

0-300'	Spud mud.
300-3500'	Low solid, fresh water mud. (Water and Rapid Mud.) Mud up prior to running casing.
3500'-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		

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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. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER	7. UNIT AGREEMENT NAME
2. NAME OF OPERATOR Tenneco Oil Company	8. FARM OR LEASE NAME Bolack B
3. ADDRESS OF OPERATOR P. O. Box 3249, Englewood, CO 80155	9. WELL NO. 8E
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1000 FNL, 1450 FEL	10. FIELD AND POOL, OR WILDCAT Basin Dakota
11. SEC., T., R., N., OR S.W. 1/4, AND SURVEY OR AREA Sec. 33, T28N, R8W	12. COUNTY OR PARISH San Juan
13. STATE NM	
14. PERMIT NO. 30-045-25996	15. ELEVATIONS (Show whether at top of hole, etc.) 5797' GR

RECEIVED

OCT 26 1984

BUREAU OF LAND MANAGEMENT  
FARMINGTON RESOURCE AREA

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	MULTIPLE COMPLETS	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	ABANDON*	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>
(Other)	<input type="checkbox"/>		<input type="checkbox"/>

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) <u>progress report</u>	<input type="checkbox"/>		<input type="checkbox"/>

(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.)

10/10/84: MIRURT. Spud well @11:15 AM 10/10/84 w/Four Corners rig #7. Drill to 287'. Circ. RU & ran 7 jts (274) 9-5/8 36# K-55 STC csg, set @278'. Cmt w/200 sx (236CF) CL-B + 2% CaCl<sub>2</sub> + 1/4#/sx celloflake. PD @4 PM 10/10/84. Circ 5 bbls cmt to surf. WOC. NUBOPE, test to 1000 psi, 30 min., OK. Drill out & ahead.

10/14/84: RU & ran 8 jts 7" 23# K-55 LTC & 69 jts 7" 23# K-55 STC csg, (3409) set @3440, FC @3339, DV @1463. Cmt w/125 sx (230CF) 65:35:6 + 2% CaCl<sub>2</sub> + 1/4#/sx celloflake. Tail w/100 sx (118CF) CL-B + 2% CaCl<sub>2</sub> + 1/4#/sx celloflake. PD @ 12:15 PM 10/13/84. Open DV, circ, no cmt. Cmt 2nd stage w/175 sx (322CF) 65:35:6 + 2% CaCl<sub>2</sub> + 1/4#/sx celloflake. Tail w/50 sx (59CF) CL-B + 2% CaCl<sub>2</sub> + 1/4#/sx celloflake. PD @ 4:45 PM 10/13. No cmt to surf. WOC. Ran temp survey TOC @558. NUBOPE, TP, OK.

10/18/84: RU & run 4-1/2" liner. Run 80 jts 4-1/2" 10.5 K-55 ST&C csg. Total 3363-35. Float @6657'. Cmt w/20 bbl chem flush, 278 sx (517CF) B-J Lite 35/65/6 w/.06% D-19. Plg dn 2:15 PM 10/18/84. Reverse out 7" csg, no cmt. Rec 7 bbl chem flush. LDDP. NUBOP. Rig released 4:00 PM 10/18/84.

NOV 26 1984

OIL CON. DIV.  
DIST. 3

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

SIGNED

*Scott M. King*

TITLE Sr. Regulatory Analyst

DATE

10/22/84

(This space for Federal or State office use)

ACCEPTED FOR RECORD

APPROVED BY

TITLE

DATE

NOV 15 1984

CONDITIONS OF APPROVAL, IF ANY:

FARMINGTON RESOURCE AREA

RV

\*See Instructions on Reverse Side  
NMOCC

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