

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

SF 078872A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

BOLACK

9. WELL NO.

4

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

11. SEC., T., R., M., OR BLK. AND

Sec. 28, T 27N, R 11W  
N. M. P. M.12. COUNTY OR PARISH 13. STATE  
San Juan New MexicoSUNDRY NOTICES AND REPORTS ON WELLS  
(Do not use this form for proposals to drill or to deepen or plug back to a different formation.  
Use "APPLICATION FOR PERMIT—" for such proposals.)1. OIL WELL ☐ GAS WELL ☒ OTHER

DEC 6 1965

2. NAME OF OPERATOR

THE FRONTIER REFINING COMPANY

U. S. GEOLOGICAL SURVEY  
FARMINGTON, N. M.

3. ADDRESS OF OPERATOR

4040 East Louisiana Avenue, Denver, Colorado 80222

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*

See also space 17 below.)  
At surface790 ft. from N line, 790 ft. from E line, Section 28,  
T 27N, R 11W, San Juan County, New Mexico

14. PERMIT NO.

15. ELEVATIONS (Show whether DT, RT, GR, etc.)

6329 Grd. 6341 KB

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.)\*

Work as described below confirms conversation and discussion between Mr. Phil McGrath and Mr. J. L. Corkill, 11-19-65. Prior to starting repair operations well was dead. Swab with wireline recovered water and drilling mud, indicating probable casing leak. Repaired 4½" casing as follows: (11-17-65 thru 11-24-65)

1. Rigged up Stone Drilling Co. rig #2, installed B.O.P., pulled 206 joints 2-3/8" tubing.
2. Rigged up McCullough logging equipment, ran gauge ring and junk basket to 6450' KB. Ran McCullough Casing Inspection log 182' - 6450' KB. Possible casing leaks indicated throughout Mesa Verde Section, 2800' - 4685' KB. Set Baker (N.C.) Magnesium bridge plug in 4½" casing at 6350' KB with wireline.
3. Picked up HOWCO RTTS Packer on 2-3/8" tubing, ran tubing and set packer at 4695' KB., pressure tested B.P. to 1500 psi, would not hold. Reset packer at 4873' KB, would not hold 1500 psi. Reset packer at 6318' KB, still would not hold pressure, indicating either bridge plug leaking or tubing leak.

(See attached sheet)

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

SIGNED

John L. Corkill

TITLE Petroleum Engineer

DATE December 3, 196

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

DEC 7 1965

OIL CON. COM.  
DIST. 3

TITLE

\*See Instructions on Reverse Side

OIL CON. COM.  
DIST. 3

THE FRONTIER REFINING COMPANY  
4040 E. Louisiana Avenue  
Denver, Colorado 80222

Lease Designation and Serial  
Number: SF 078872A  
BOLACK 4 ~~42~~  
Sec. 28, T27N, R11W, San  
Juan, New Mexico

4. Released RTTS packer, pulled tubing and packer. Ran HOWCO Magnesium bridge plug on bottom of RTTS packer, set B.P. at 6260' KB, tested tubing to 2600 psi, held OK, tested B.P. to 1500 psi, held OK.
5. Pulled 2-3/8" tubing to set RTTS packer at 4695' KB, held 1300 psi OK below packer. Reset packer at 4321' KB, held 1500 psi, OK below packer.  
Reset packer at 4196' KB, would not hold 1500 psi, below packer, pump in casing leak or leaks at 5 B/M, 1100 psi, pressure increase on annulus, indicating communication between leaks below and above packer at 4196' KB. Reset packer at 3630' KB, inject below packer at 6 B/M at 1200 psi. Annulus hold 1500 psi with slight bleed-off, B.O.P. leaking. Reset packer at 3440' KB, inject below packer at 6 B/M at 1200 psi, annulus hold 1500 psi with slight bleed-off, B.O.P. leaking.
6. RTTS packer set at 3440' KB. Cement squeeze 4 1/2" casing with 250 sx. Class C Cement, with 6/10 of 1% HALAD 9, 2% CaCl. Maximum squeeze pressure 2200 psi, displaced cement to calculated depth of 3697' KB. End squeeze at 6:00 A.M., Shut in at surface to 8:15 A.M. 11-19-65.
7. Released pressure at surface, no flow back, released packer, pulled tubing and packer. W.O.C. to 5:00 A.M. 11-20-65. Rigged up gas lines.
8. Picked up 3-7/8" bit and Baker casing scraper on 2-3/8" tubing. Tagged top of cement at 3389' KB. Drilled cement as follows:

Firm cement:	3389' - 3680'
Bridges and stringers:	3680' - 3800'
Very hard cement:	3800' - 4244'

(trip for new bit at 3951')  
Ran bit to 4363', casing clear.  
Pressure tested casing to 1150 psi, held OK, pulled tubing, bit, and casing scraper. Installed new bit, ran 2-3/8" tubing, jetting and blowing casing with gas.
9. Jetting and blowing casing clear of water down to 4464', hit cement again at 4464'. Drilled hard cement 4464'-4474', stringers 4474'-4489'. Filled casing with water again and tested 1,000 psi, 20 minutes, held OK.
10. Jetting and blowing water and mud out of casing to first B.P. at 6260'. Drilled B.P., cleaned casing to 6300'. Trip for new bit. Drilled bridge plug at 6350', cleaned casing to 6595' KB. Well now making Dakota gas.
11. Pulled tubing and bit, ran 206 joints 2-3/8" tubing with pin collar and pump out plug. Landed tubing, blew out plug, hooked up wellhead.