| Form 3160-5<br>(November 1983)   | UNIT   | ED STATES  | SUBMIT IN TRIPLICATE   | Form approved.  Budget Bureau No. 1004-0139 Expires August 31, 1985 |   |  |
|--|--|--|--|---|---|--|
| (Formerly 9-331)   |  | OF THE INTERIO   | (Other instructions on reverse side)   | 5. LEASE DESIGNATION  | T 31, 1985<br>AND SERIAL NO.                  |  |
| CLIA   |  |  | <del> </del>   | NM-8005 ·   |   |  |
| (Do not use this   | form for proposals to d Use "APPLICATION F   | AND REPORTS OF THE PROPERTY OF | WELLS k to a different reservoir.  | 6. IF INDIAN, ALLOTTE   | E OR TRIBE NAMI                               |  |
| OIL X GAS WELL X . WELL 2. NAME OF OPERATOR  | OTHER  |  |  | 7. UNIT AGREEMENT NAME  |   |  |
| BCO, Inc.  |  |  |  | 8. FARM OR LEASE NAME   |   |  |
| 3. ADDRESS OF OPERATOR   | R  |  |  | Federal D   |   |  |
| 135 Grant, Santa Fe, NM 87501  4. LOCATION OF WELL (Report location clearly and in accordance with See also space 17 below.) |  |  |  | 2 .   |   |  |
| See also space 17 bel. At surface  | seport location clearly an<br>ow.)   | d in accordance with any Sta   |  |   | 10. FIELD AND POOL, OR WILDCAT Nageezi Gallup |  |
| **   | 100 Eq. 0  | moon non   |  |   |   |  |
| 1000 FEL 19  | 980 FSL Sec 1  | T23N R9W NMPM  |  | 11. SEC., T., R., M., OR  <br>SURVEY OR AREA                        | LE. AND                                       |  |
| 14   |  |  |  | Sec 1 T23N 1  | R9W NMPM                                      |  |
| 14. PERMIT NO.   | 15. EL   | EVATIONS (Show whether DF, RT  | , GR, etc.)  | 12. COUNTY OR PARISH  |   |  |
|  |  | R_6892 ·   | •  | San Juan  | NM  |  |
| 16.  | Check Appropria  | te Box To Indicate Nati  | ure of Notice, Report, or C  | Other Data  |   |  |
| 2  | OTICE OF INTENTION TO:   | 1  |  | JENT REPORT OF:   |   |  |
| TEST WATER SHUT-01   | PULL OR A  | ALTER CASING   | WATER SHUT-OFF   | BEPAIRING V   |   |  |
| FRACTURE TREAT   | MULTIPLE   | COMPLETE   | FRACTURE TREATMENT   | ALTERING CA   | <del></del>                                   |  |
| SHOOT OR ACIDIZE REPAIR WELL   | ABANDON*   |  | SHOOTING OR ACIDIZING  | ABANDONME   | 1   |  |
| (Other)  | CHANGE P   | LANS -   | (Other)  | of multiple completion<br>etion Report and Log for                  |   |  |
| entire opera  Equipment has has recommend  | tion.  s been removed a  | from location. Date of Lance   | . 1992 as per the at<br>d Management - Farmi<br>ale Worth of Bureau<br>en and fenced until | ngton witnessed   | nent  |  |
| management til   | dustry Pit Closi<br>second quarter o   | ire Guidelines are   | e in final form. Cl  | osure is antici   | pated   |  |
| Attachments:   | Report of (  | Operations   |  |   | -)  |  |
|  | Cementer's   |  |  |   |   |  |
| 1 distante.  | green who are the second   | ."   |  | ~~~   | <b>)</b><br>H 270                             |  |
|  |  |  |  | ු   |   |  |
|  | The second of th | Approved as to   | plugging of the well bora.   | - <del>-</del> -  |   |  |
| المقط المقا  | NOV 6 1992   | Surface restorati  | cond is retained until   |   | m   |  |
| ^  |  |  | en to completed.   | •   | ζ,  |  |
| O  |  |  |  | 7   |   |  |
|  | Dist. C  |  |  | •   |   |  |
| 3. I hereby certify that t   | he foregoing is true and   |  |  |   | <del></del> -                                 |  |
| SIGNED   |  | TITLE Petrol   | eum Engineer   | DATE Octobe   | r 28, 1992                                    |  |
| (This space for Federa   | d or State office use)   |  |  | APPRO   | / E D   |  |
| APPROVED BYCONDITIONS OF APPROVAL, IF ANY:   |  | TITLE  |  | DATE TO S   | v E U   |  |
| CONDITIONS OF APP  | KOVAL, IF ANY:   |  |  | 7 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                             | 992   |  |
|  |  |  | ı  | AREA MANA   | GER   |  |

# REPORT OF OPERATIONS PLUG AND ABANDONMENT

Federal "D" No. 2 1980' FSL x 1650' FEL Sec 1 T23N R9W San Juan County, New Mexico

- 10/21/92 MIRU Petro Well Service. Notified Leonard Bixler of BLM that operations would begin on 10/22/92 at 8:00 am. Called Leonard at home at 7:00 pm and changed start date to 10/23/92 at 8:00 am.
- 10/22/92 No Activity.
- 10/23/92 Leonard Bixler (BLM-FRA I&E) on location. Cementers, Inc. began mixing 75 bbl mud with 16 sx HYG-200. Rig crew attempted to fish piston. Fishing tool would not go below 2200' because of paraffin. Blew down annulus from 190 psig to 0 psig. Installed BOP. Pulled 6 stands and found tubing plugged and full of fluid. Installed perforated sub on top of tubing string and swabbed fluid from tubing to casing. (Fell through paraffin while swabbing.) Ran fishing tool and fished piston and paraffin knife but could not fish spring stop. Tubing still plugged. Attempted to remove perforated sub and pump out plug in tubing but rig engine broke down. Shut down at 11:40 am.

  Note: Rig crew repaired engine at 5:00 pm and round tripped tubing to remove piston stop and trash from seating nipple.
- 10/24/92 10/25/92 No activity: down for weekend.
- 10/26/92 L. Bixler on location. Mud properties (witnessed by Bixler):
  Density 8.9 lb/gal, viscosity 50 sec/qt. Ran in hole with
  tubing to 5268' and tagged bottom. Received permission from
  Bixler to spot cement from 5268'.

#### Gallup Plug:

Spotted 60 sx (71 ft<sup>3</sup>) class "B" neat cement mixed at 15.6 lb/gal from 5268' to 4475'. Reversed out from 4468' w/ 25 bbl. Watied 15 minutes, checked plug with fluid and found hole standing full. Spotted 24 bbl mud from 4468' to 3013'. Layed down 74 jts tubing (found scale on bevels of top 20 stands).

Rigged up Great Guns logging and perforated at 3013', 1580' (7' lower than required because of collar at 1573'), 1053', and 180' with two (2) 0.38" holes per interval. Ran in hole with sinker bar on sand line and tagged Gallup plug at 4700'. (Tagging method approved by Ken Townsend, BLM.)

### Plug 3013'-2913' inside & outside casing:

Ran in hole with packer and set at 2644'. Established injection into Mesa Verde perfs at 3013' and cemented with 34 sx (59 ft<sup>3</sup>) class "B" with 6% gel and 3% CaCl<sub>2</sub> at 13.5 lb/gal. Cemented at 2.5 BPM at 900 psig. Displaced with 13.5 bbl then walked squeeze to 900 psi static pressure with 1.0 bbl. Displacement complete at 3:30 pm. Released packer, pulled 10 stands and reversed with 25 bbl. Pulled packer to 600' and left swinging overnight.

10/27/92 - L. Bixler on location. Tagged cement plug at 2780' with packer. Spotted 20 bbl mud from 2780' to 1573'.

## Plug 1580'- 1343' inside & outside casing:

Set packer at 1104'. Established injection into PC/Fruitland perfs at 1580' w/ 2 BPM at 1500#. Cemented with 78 sx (135 ft<sup>3</sup>) class "B" with 6% gel and 3% CaCl<sub>2</sub> at 2 BPM with 700 psig. Displaced with 6.5 bbl then walked squeeze up to 1100 psig static with 1.5 bbl. Displacement complete 8:50 am. Held squeeze for 25 minutes. Plug held.

Moved packer to 1320' and reversed w/ 10 bbl water. Spotted 5 bbl mud from 1320' to 1053'. Layed down 18 jts.

#### Plug 1053'- 756' inside & outside casing:

Set packer at 206'. Established injection into perf at 1053' with 1000 psig at 1.5 BPM. Squeezed Ojo Alamo with 75 sx (130  $\rm ft^3$ ) class "B" w. 6% gel and 3% CaCl<sub>2</sub> at 13.5 lb/gal and 38 sx (45  $\rm ft^3$ ) class "B" with 3% CaCl<sub>2</sub> at 15.6 lb/gal. Displaced plug to 600' with 8 bbl. Final squeeze pressure 200 psig.

Pulled packer and ran in hole with bull plug and perforated sub. Attempted to tag plug after 1:45 but cement too soft. Tubing drug 1000 lb pulling out of plug but would not hold string weight. Pulled tubing and found perforated sub full of cement.

Reversed from 751' and circulated up 1 bbl good cement. (Sample later observed to be set up 1 hr later [3 hr total set time]). Spotted an additional 34 sx (40 ft<sup>3</sup>) plug from 751' to 300' with class "B" containing 3% CaCl<sub>2</sub> mixed at 15.6 lb/gal. With approval of the BLM representative this additional cement plug was spotted in lieu of tagging the 1053'-753' plug.

5 bbl mud was spotted from 300' to 180'.

#### Surface Plug 180' to surface:

Pulled out of hole laying down all tubing. Bullheaded down casing into holes at 180' and established injection of 1 BPM at 100 psig. Cemented surface plug and obtained circulation with 70 sx  $(83 \text{ ft}^3)$  cement. Left hole full of cement.

Cut off 8.625" and 4.50" casing 1' below ground level. Had 4 inches of cement back-fall in 1 hr. Tack welded abandonment marker to 8.625" and 4.5" casing. Grouted in marker with 5 sx cement and leveled ground with topsoil. Well abandonment complete.



# CEMENTERS, INC.

P. O. BOX 302 • FARMINGTON, NEW MEXICO 87499 • (505) 632-3683

| ll ,                                   |  |
|--|--|
| WELL # Federal 'D' # 2                 | DATE 10/23+26827/92  |
| CEMENT USED: 1875×69060/ 390000        | DISPLACEMENT BARRELS:  |
| CEMENT CIRCULATED: 142 5 X 3 90 Coc/2  | DISPLACEMENT RATE:   |
| CEMENT RATE: 605 X N = 4 7             | DISPLACEMENT PRESSURE:   |
| PRESSURE: 389 5X Total                 | DISPLACEMENT TIME:   |
| CEMENT TIME:                           |  |
| OTHER: 5/20 + 60 5 X 5 2 86 (9:30) 2 4 | Blown user to 3000 Tackly  |
| 7 2000 1000 1000 200 2                 | 644 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| - 4 verz t 7 85x6906c/ 27, Car         | 1. 1622' 1. 201  |
| 3pc + mud. 1320 755x6906               | 11 385x 370 Col 2 1053 +0101   |
| 7-11/18 606/2 751 / 11                 | 80' TOSUFFACE B. H. 705x370  |
|  | and the second s |