

(November 1983)
(Formerly 9-331)

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 checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF 078562	
2. NAME OF OPERATOR BCO, Inc.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS OF OPERATOR 135 Grant, Santa Fe, New Mexico 87501		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 790' FNL - 790' FEL Sec 27 T24N R7W NMPM		8. FARM OR LEASE NAME Lybrook 7-27	
14. PERMIT NO.		9. WELL NO. 1	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6939 DF		10. FIELD AND POOL, OR WILDCAT Escrito Gallup	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 27, T24N, R7W NMPM	
		12. COUNTY OR PARISH Rio Arriba	
		13. STATE NM	

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 COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) Procedure Revision	X

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) <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.)*

Attached is a revised version of the workover procedure previously submitted by fax to Wayne Townsend. Revisions are as follows:

1. Per Wayne Townsend's request, a few sacks of cement have been added to each plug to account for cement left in the pipe.
2. PC/Fruitland plug excess has been reduced from 100% to 20% to reduce risk of putting cement past Ojo Alamo perf at 1740'. This was mutually agreed to by Mr. Townsend and Mr. Duncan.
3. Detail has been added to procedure for running and cementing 3 1/2" casing inside existing 4 1/2" casing

RECEIVED
BLM

92 AUG 14 AM 11:09
DISTRICT OFFICE, N.M.

RECEIVED
AUG 20 1992

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

SIGNED [Signature]

TITLE Petroleum Engineer

DATE August 13, 1992

(This space for Federal or State office use)

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

TITLE

APPROVED
DATE

AUG 17 1992

AREA MANAGER

*See Instructions on Reverse Side

NMOCD

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 reports.

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WORKOVER PROCEDURE
Lybrook 7-27

General

This procedure provides guidance for work to be completed after fish has been recovered.

We will set plugs for abandonment outside of 4-1/2" casing then run 3-1/2" casing through Gallup and cement to surface. Bradenhead will be open for all operations.

Procedure

Day 1

GALLUP PLUG

1. Rig up wireline unit and run cement bond log across Gallup. Perforate for abandonment as follows with 0.39" jet shots phased 120 or 180 degrees.

2996'	2 shots
2400'	2 shots
1740'	2 shots

2. Run in hole with packer and 25 joints (790') of tailpipe.
3. Spot 39 sx (46 ft³, yield 1.18 ft³/sx @ 15.6 ppg) class "B" from 5744' to 5240'. Top of cement before pulling out tubing will be 5184' and displacement will be 20 bbl. Packer will be at 4954' while spotting.
4. Pull packer up to 4298' (tailpipe at 5088') and reverse 25 bbl water up tubing to make sure no cement is at end of tailpipe. Set packer at 4298' and squeeze 33.3 sx into Gallup by pumping 7 bbl water down tubing. This will leave cement at 5680' which is 30' above top Mayre perf. (Provided Skelly does not take much fluid.)

Note that cement is displaced past Skelly perfs. This is to maximize the amount of cement we can put in Mayre I (without spotting cement above packer) and minimize the amount of cement we must drill out. Skelly will not give us trouble with lost circulation when we cement 3-1/2" casing and we can close valve at surface when cement circulates on 3-1/2" casing to get a good squeeze on Skelly.

TEMPORARY PLUG

5. Spot 5 sx plug in casing from 3165'-3100' using Class "B" with 2% calcium chloride. Top of cement will be at 3093' before pulling tubing and displacement will be 12 bbl. Pull out of hole with packer and remove tailpipe. If time allows go back in hole with packer.

MESA VERDE PLUG (2996'- 2896')

6. Set packer at 2592'. Establish injection via tubing into perfs at 2996' and cement Mesa Verde with 40 sx (47 ft^3 , yield $1.18 \text{ ft}^3/\text{sx}$ @ 15.6 ppg) class "B" w/ 2% calcium chloride. Wash pumps and lines then displace with 16 bbl water. Top of cement will be left at 2970'.
7. Hold squeeze for 30 minutes then release packer.

PC/FRUITLAND PLUG (2225'-1980' required, 2400'-1980' actual)

8. Set packer at 2213'. Establish injection into perf at 2400' and squeeze PC/Fruitland Coal with 97 sx (115 ft^3 , yield $1.18 \text{ ft}^3/\text{sx}$ @ 15.6 ppg) class "B" with 2% calcium chloride. Wash pumps and lines then displace cement to 2380' with 11.3 bbl water. Monitor annulus carefully for communication.
9. Hold pressure for 15 minutes then release packer and reverse circulate 25 bbl to insure cement did not come around 4-1/2" casing and get above packer. Reset packer and apply squeeze pressure for additional 15 minutes.

OJO ALAMO PLUG (1740'- 1460')

10. Pull packer to 663' and set. Establish injection into Ojo Alamo perfs at 1740'. Cement Ojo Alamo with 110 sx (130 ft^3) class "B" with 2% calcium chloride. Displace cement to 1700' with 19.4 bbl water. Hold squeeze for 1 hour.

SURFACE PLUG (600' to surface)

11. Pull packer out of hole. Pump down casing and establish circulation with bradenhead through hole at 600-632'. Cement from 600' to surface with 175 sx (207 ft^3) class "B" w/ 2% calcium chloride and 1/2 lb/sx flocele. Wash pumps and lines and displace with 9.5 bbl water.
12. While holding pressure on well make preparations to pick up drill collars. Check for flowback in 30 minutes. Check in 30 minute intervals if cement still flowing back.

DRILLING OUT AND RUNNING CASING

13. Run in hole with bit, scraper, and 7 drill collars. Drill out cement plugs to PBTD. Carefully record all cement intervals.
14. Lay down 2-3/8" tubing and prepare to run 3-1/2" casing.

15. Install slip-grip elevators. Rig up for running 3-1/2" casing with appropriate rams for BOP and 3-1/2" slips.
16. Weld 3-1/2"-2-3/8" swage onto end of a joint of 3-1/2" pipe. Install expendible check valve.
18. Pick up 3-1/2" .188" wall X-42 line pipe using slip-grip drill collar clamps. Weld joints together while going in hole. Use care not to create excessively large welding beads inside or outside of pipe.

Note: Using expendible check will result in pipe weighing 2.48 lb/ft while running versus the normal bouyed weight of 5.74 lb/ft. (Weight in air is 6.65 lb/ft.)

19. Establish circulation with pipe on bottom. Cement in one stage as follows:

Lead - 175 sx 65/35 poz w/ 6% gel, 1/2 lb/sx flocele and 0.4% Halad-322 mixed at 12.7 lb/gal. (Yield 1.6 ft³/sx)

Tail - 20 sx class "G" neat cement at 15.8 lb/gal (Yield 1.15 ft³/sx)

Displacement - Drop plug and displace with 54.5 bbl water. Do not overdisplace plug if it does not bump at prescribed displacement volume. Calculated end of pumping pressure is 1461 psig.

Note: Cement job is designed with 100 sx of excess lead cement.

20. Check to see if expendible check is holding. If not, will have to maintain pressure on 3-1/2" until cement gels.
21. Procedure for perforating, breakdown and stimulation to follow.