	UNITED STATES PARTMENT OF THE INGRESS BUREAU OF LAND MANAGE	TERIOR (Other instructions on /	
SUNDRY (Do not use this form for Use ")	NOTICES AND REPOR	RTS ON WELLS	NM-8005 6. IF INDIAN, ALLOTTEE OR TRIBE NAM
OIL X GAS OF O	THER		7. UNIT AGREEMENT NAME
2. NAME OF OPERATOR			8. FARM OR LEASE NAME
BCO, Inc. 3. ADDRESS OF OPERATOR			Federal D .
135 Grant, Santa 4. LOCATION OF WELL (Report lo See also space 17 below.) At surface	Fe. New Mexico 8750 cation clearly and in accordance with	1 . h any State requirements.*	2 10. FIELD AND POOL, OR WILDCAT
1980 FSL - 1650 F	EL Sec 1 T23N	R9W NMPM .	Nageezi Gallup 11. sac., t., s., m., or alk. and survey or area
14. PERMIT NO.	15. ELEVATIONS (Show whether	ther DF, RT, GR, etc.)	Sec 1, T23N, R9W NMPM 12. COUNTY OR PARISH   13. STATE
	GR 6892 ·		San Juan NM
16. Che	ck Appropriate Box To Indica	ate Nature of Notice, Report, or	Other Data
NOTICE O	F INTENTION TO:	•	QUENT REPORT OF:
FRACTURE TREAT SHOOT OR ACIDIZE	MULTIPLE COMPLETE ABANDON®	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING	ALTERING CASING ABANDONMENT®
REPAIR WELL (Other)	CHANGE PLANS	(Other)	is of multiple completion on Well
Will be 8.4 lb/gal	or greater. Minimum re at mid-pay of 2259	the attached procedure. mud density of 8.4 lb/ga psig, which is 559 psi g	1 will result in
VERBAL APPROVAL OF RECEIVED FROM IN PLAN TO BEGIN OF NUT 10/16	E PROCEDURE (AS AMENDEO, NAYNE TOWNSEND 10/16) PERATIONS 0800 HRS 10	) /92. /21/92. <b>DEGE</b> 1992 OCT 2 9 1992 OIL CON. D DIST. 3	•
18. I hereby certify that the foreg	oing is true and correct	Petroleum Engineer	10/16/92
(This space for Federal or Sta			
APPROVED BYCONDITIONS OF APPROVAL	IF ANY:		APPROVED
		· ~	AREA MANAGER
	*C1.4	ions on Reverse Side	" "MGFD

\*See Instructions on Reverse Side

# PLUG AND ABANDON PROCEDURE Federal "D" No. 2

1980' FSL x 1650' FEL "J" Sec 1 T23N R9W San Juan County, New Mexico

#### General

Well is uneconomical to operate at current oil prices. Holding in temporary abandonment status cannot be justified due to cost of casing integrity tests mandated by regulations. Well will be plugged and abandonded.

Required Plugs: Gallup 5286'- 4918'

Mesa Verde 3013'- 2913'
PC/Fruit 1573'- 1343'
Ojo Alamo 1053'- 756'
Surface 180'- surf

1. Frac tank should be set and full of water. Rig up pulling unit, pump and pit. Small working pit should also be prepared.

Start preparing 100 bbl of 40 viscosity mud.

- 2. Nipple up BOP. Open bradenhead valve. Tag bottom, pull and tally tubing.
- 3. Rig up Petro Wireline and perforate with two (2) 0.38" holes at the following locations: 3013', 1573', 1053', and 180'.

### Gallup Plug

- 4. Run in hole with RTTS packer and set at 4500'. Squeeze Gallup perfs 5110'- 5236' with 43 sx (46 ft<sup>3</sup>) Class "G" w/ 2% CaCl<sub>2</sub>. Mix cement at 16.4 lb/gal to yield 1.06 cubic feet per sx. Wash pumps and lines then displace cement to 4918' using 24 bbl water.
- 5. Hold squeeze for 2 hours then check for flowback. Move packer to 4900', reverse 19 bbl into tubing. Continue in hole and tag plug. If soft tag, withdrawal immediately without delay. It is preferable to squeeze Gallup on day 1 and tag plug on day 2 if timing works out.
- 6 Spot 30 bbl of 40 viscosity mud from 4900' to 3013'. (Balanced plug displacement = 10.9 bbl) Mud density will be 8.4 lb/gal or greater. Withdrawal tubing through mud at a rate of 1 minute per joint.

### Mesa Verde Plug

- 7. Set packer at 2650'. Squeeze Mesa Verde via hole at 3013' with 34 sx (59 ft<sup>3</sup>) Class "B" with 6% gel and 3% CaCl<sub>2</sub>. Mix at 13.5 lb/gal to yield 1.73 ft<sup>3</sup>/sx. Wash pumps & lines then displace cement to 2913' with 14.5 bbl water.
- 8. Hold squeeze for 1 hr and check for flowback.

9. Spot 21 bbl 40 viscosity mud from 2900' to 1573'. Balanced plug displacement will be 5.5 bbl. Withdrawal from plug at 1 minute per joint.

## PC/Fruitland Plug

- 10. Set packer at 1100'. Establish rate and squeeze PC/Fruitland through hole at 1573' with 78 sx (135 ft<sup>3</sup>) Class "B" cement with 6% gel and 3% CaCl<sub>2</sub>. Mix cement at 13.5 lb/gal to yield 1.73 ft<sup>3</sup>/sx. Wash pumps & lines then displace cement to 1343' with 8.1 bbl.
- 11. Hold squeeze for 1.5 hrs and check for flowback.
- 12. Spot 4-1/4 bbl bbl mud from 1320' to 1053'. Balanced plug displacement is 4 bbl. Withdrawal from mud at 1 minute per joint.

#### Ojo Alamo Plug

- 13. Set packer at 400'. Establish injection into perf at 1053' then cement with 75 sx (130 ft<sup>3</sup>) Class "B" w/ 6% gel and 3% CaCl<sub>2</sub> at 13.5 lb/gal. Tail in with 38 sx (45 ft<sup>3</sup>) Class "B" with 3% CaCl<sub>2</sub> at 15.6 lb/gal to yield 1.18 ft<sup>3</sup>/sx. Wash pumps & lines then displace cement to 756' with 7.2 bbl water.
- 14. Hold squeeze for 1.5 hrs. Check for flowback. Pull out of hole with packer. Run in hole open ended and spot 9 bbl mud from 730'- 180'. Balanced plug displacement is 1/2 bbl.
- 15. Tag Ojo Alamo plug with open ended tubing. Withdrawal from mud at 1 minute per joint.

## Surface Plug

- 16. Close blind rams on BOP. Establish injection down casing via casing valve into perf at 180'. Cement with 84 sx (99 ft $^3$ ) Class "B" with 3% CaCl $_2$  at 15.6 lb/gal to yield 1.18 ft $^3$ /sx.
- 17. Release pressure (if any) immediately and remove BOP (remove cement from inside). Remove tubing head and cut off casing head just below ground level. Weld toombstone onto casing.
- 18. Perform required surface rehabilitation.

### Cementing Materials Summary

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43 sx Class "G" w/ 2% CaCl<sub>2</sub>
187 sx Class "B" w/ 6% gel and 3% CaCl<sub>2</sub>
122 sx Class "B" w/ 3% CaCl<sub>2</sub>
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