

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

BCO, INC.

3. Address and Telephone No.

135 GRANT, SANTA FE, NM 87501 (505) 983-1228

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

660' FSL & 2145' FWL, NMPM
SE/4 OF THE SW/4 (N)
S22-T23N-R7W

5. Lease Designation and Serial No.

NM-6682

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

FEDERAL B #21

9. API Well No.

30-043-20916

10. Field and Pool, or Exploratory Area

LYBROOK GALLUP

11. County or Parish, State

SANDOVAL, NM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other TEMPERATURE SURVEY
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. 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.)*

TEFTELLER, INC. RAN A TEMPERATURE SURVEY TO DETERMINE THE TOP OF THE CEMENT ON FEBRUARY 15, 1994. THE TOP OF THE CEMENT WAS DETERMINED TO BE AT 499'.

SURFACE CASING WAS SET AT 371', 8 5/8", 24#, ST&C, J55. A 4 1/2", LT&C, 11.6# CSG. STRING WAS RUN FROM SURFACE AND SET AT 6027'.
THE ESTIMATED TOP OF THE OJO ALAMO FORMATION IS 1745'.

(SEE ATTACHED TEFTELLER, INC. TEMPERATURE SURVEY, 2 PAGES)

CERTIFIED RETURN RECEIPT REQUESTED: P626 361 846

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

Signed [Signature] Title SENIOR FIELD ENGINEER Date 03/09/94

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any: **ACCEPTED FOR RECORD**

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.

*See Instruction on Reverse Side

FARMINGTON DISTRICT OFFICE

BY [Signature]

RECEIVED
BLM

070 MAR 14 PM 2:04

RECEIVED

MAR 17 1994

OIL CON. DIV
DIST. 3

TEFTELLER, INC.

reservoir engineering data

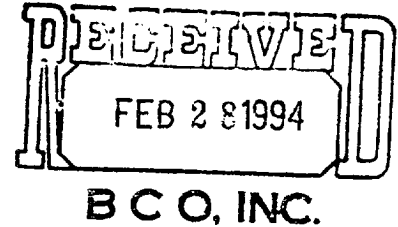
MIDLAND, TEXAS / FARMINGTON, NEW MEXICO
GRAND JUNCTION, COLORADO

P. O. Box 5278
Midland, Texas 79704-5278
(915) 694-0477

Midland Fax (915) 694-7602
Farmington Fax (505) 325-1148
Grand Junction Fax (303) 241-7634

February 23, 1994

BCO, Inc.
135 Grant Ave.
Santa Fe, New Mexico 87501



Attention: Ms. Elizabeth Keeshan

Subject: Temperature Survey
Federal "B" No. 21
Gallup (Lybrook) Field
Sandoval County, New Mexico
File No. 2-25442-TS

Dear Ms. Keeshan:

Attached hereto are the results of a temperature survey which was conducted on the above captioned well February 15, 1994.

The data presented are in graphical form.

It has been our pleasure to have conducted this service for you. If we may be of further assistance, please call us at any time.

Respectfully submitted,

TEFTELLER, INC.

Neil Tefteller

NT/lw

TEMPERATURE SURVEY LOG

DEPTH

COMPANY BCO, Inc.
 LEASE Federal "B" WELL NO. 21
 FIELD Gallup Lybrook
 COUNTY Sandoval STATE New Mexico

CASING SIZE _____ SET @ _____
 HOLE SIZE _____ TO _____
 CEMENT 12%

PLUG DOWN 2-14-94 TIME 14:30

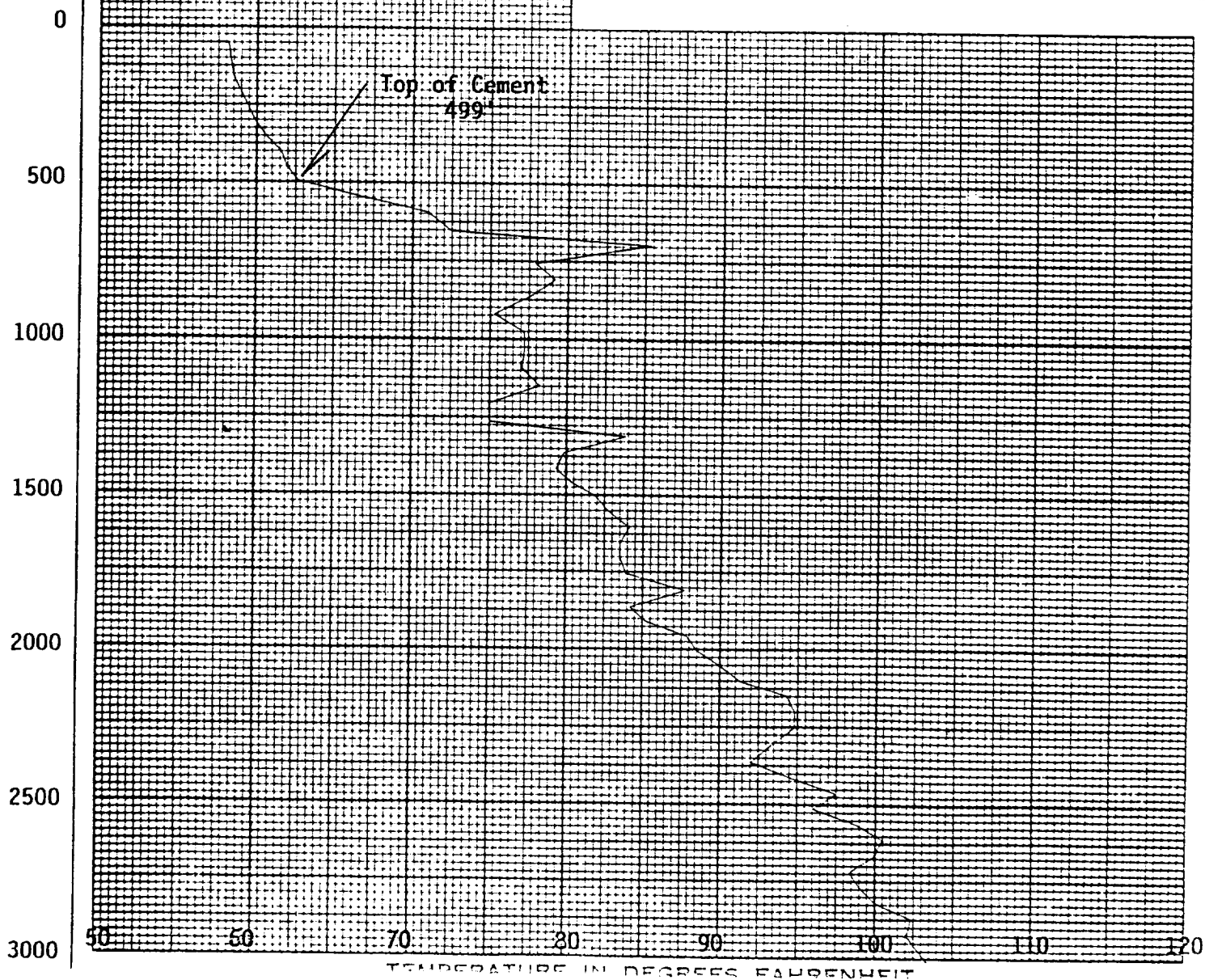
SURVEY RUN 2-15-94 TIME 09:00

TOP OF CEMENT 499'

TOTAL DEPTH RECORDED 5992'

RECORDED BY _____

REMARKS PBD 5992' (KB)



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other	5. Lease Designation and Serial No. NM-6682 -
2. Name of Operator BCO, INC. -	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. 135 GRANT, SANTA FE, NM 87501 505 983-1228 -	7. If Unit or CA, Agreement Designation
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 660' FSL & 2145' FWL, NMPM - SE/4 SW/4 (N) - S22-T23N-R7W -	8. Well Name and No. FEDERAL B #21 -
	9. API Well No. 30-043-20916 -
	10. Field and Pool, or Exploratory Area LYBROOK GALLUP -
	11. County or Parish, State SANDOVAL, NM -

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
☐ Notice of Intent	☐ Abandonment
☐ Subsequent Report	☐ Recompletion
☐ Final Abandonment Notice	☐ Plugging Back
	☐ Casing Repair
	☐ Altering Casing
	☒ Other <u>Correct prior submission</u>
	☐ Change of Plans
	☐ New Construction
	☐ Non-Routine Fracturing
	☐ Water Shut-Off
	☐ Conversion to Injection
	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. 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.)*

5/10/94

I enclose a corrected 3160-4. I discovered I put the formation tops from the wrong log on the 3160-4 submitted May 9, 1994. .

RECEIVED
MAY 16 1994
OIL CON. DIV.
DIST. 3

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

Signed Elizabeth B. Keeshan Title President Date May 10, 1994

(This space for Federal or State office use)

Approved by _____ Title _____
Conditions of approval, if any: _____

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.

*See instruction on Reverse Side

NMOOD

FARMINGTON DISTRICT OFFICE

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

SUBMIT IN DUPLICATE*

(See instructions on reverse side)

FOR APPROVED
OMB NO. 1004-0137
Expires: December 31, 1991

5. LEASE DESIGNATION AND SERIAL NO.

NM-6682 *

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

FEDERAL B #21 *

9. API WELL NO.

30-043-20916 *

10. FIELD AND POOL, OR WILDCAT

LYBROOK GALLUP *

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

SEC22 T23N R7W, NMPM *

12. COUNTY OR PARISH
SANDOVAL *13. STATE
NM ***WELL COMPLETION OR RECOMPLETION REPORT AND LOG ***

1a. TYPE OF WELL:

OIL WELL ☒ * GAS WELL ☐ DRY ☐ Other

b. TYPE OF COMPLETION:

NEW WELL ☒ * WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. REVR. ☐ Other

2. NAME OF OPERATOR

BCO, INC. *

3. ADDRESS AND TELEPHONE NO.

135 GRANT, SANTA FE, NM 87501 505 983-12228 *

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

At surface 660' FSL & 2145' FWL

At top prod. interval reported below

SAME *

At total depth

SAME *

14. PERMIT NO.

DATE ISSUED

30-043-20916 *

15. DATE SPUDDED

2/7/94 *

16. DATE T.D. REACHED

2/14/94 *

17. DATE COMPL. (Ready to prod.)

5/04/94 *

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*

GR: 7501 KB: 7513 *

19. ELEV. CASINGHEAD

7504 *

20. TOTAL DEPTH, MD & TVD

6030 *

21. PLUG, BACK T.D., MD & TVD

5937 *

22. IF MULTIPLE COMPL., HOW MANY*

NA *

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

XX *

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

5660 - 5874 Gallup *

25. WAS DIRECTIONAL SURVEY MADE

Yes - filed with
OCD 2/18/94

26. TYPE ELECTRIC AND OTHER LOGS RUN

Compensated Neutron Log with GR & CCL Cement Bond *

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8 5/8" J-55	24#	371	12 1/4"	Surface	275 Sacks
4 1/2" J-55	11.6#	6027	7 7/8"	499'	886 Sacks

RECEIVED
MAY 16 1994

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 3/8"	5862	Dist. 3

31. PERFORATION RECORD (Interval, size and number)

One 0.39" select fire shot at 5660;
5666; 5774; 5784; 5790; 5794; 5864
and 5874.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5660-5874 *	362,500# 16/30 Brady sand in 182,699 gallons 70 quality foam. 3,265,971. scf N ₂

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
5/4/94 *		Gas Lift				Producing *	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
5/8/94 *	24	24/64 *	→	80	300	9	3750 *
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
315	610	→	80	300	9	40 *	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Vented *

TEST WITNESSED BY

Robert Ramirez *

35. LIST OF ATTACHMENTS

Cement Job Summary

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Elizabeth B. Keeshan

TITLE

President

DATE

5/9/94

*(See Instructions and Spaces for Additional Data on Reverse Side)

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.

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):						
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	38. GEOLOGIC MARKERS		
				NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
				Ojo Alamo .	1740 .	1740 .
				Kirtland .	1802 .	1802 .
				Fruitland .	2000 .	2000 .
				Pictured Cliffs	2262 .	2262 .
				Chacra .	2696 .	2696 .
				Cliff House .	3804 .	3804 .
				Menefee .	3830 .	3830 .
				Point Lookout .	4612 .	4612 .
				Mancos .	4760 .	4760 .
				Gallup .	5492 .	5492 .

ATTACHMENT TO FORM 3160-4

RECEIVED
SLM

SEARCHED INDEXED

Federal B #21.

Sec 22 T23N R7W NMPM.

NM-6682 .

The following summarizes the cement jobs on the above well.

8-5/8" surface casing 371' to surface. 275 sacks Class B, 2% CaCl_2 , 1/4# flocele per sack mixed at 15.6 lbs with a yield of 1.18 or 325 cubic feet. Cement circulated to surface.

4-1/2" casing: TD to surface. Ran 10 barrels H_2O , 10 barrels H_2O with 2% CaCl_2 , 10 barrels H_2O , 10 barrels superflush, 20 barrels H_2O . 736 sacks 65/35 standard poz with 12% Bentonite, 6.25 lb per sack Gilsonite, 1/4 lb per sack Flocele and 0.6% Halad - 322. Mixed at 11.3 pounds per gallon with a yield of 2.64 cubic feet per sack or 1943 cubic feet. Tailed in with 150 sacks Class "G" mixed with 8 lbs per sack salt, 1/2 lb per sack Flocele, 6.25 lb per sack Gilsonite, 2% Calcium Chloride. Mixed at 15.2 pounds per gallon with a yield of 1.38 cubic feet per sack or 207 cubic feet. Did not circulate to surface. Tefteller ran temperature survey. The survey determined the top of the cement was 499':