

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

(Other instructions on  
reverse side)

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☐

DEEPEN ☐

~~RECOMPLETE~~  
~~PLUG BACK~~ ☒

b. TYPE OF WELL

OIL  
WELL ☒

GAS  
WELL ☐

OTHER

DHC

SINGLE  
ZONE ☐

MULTIPLE  
ZONE ☒

2. NAME OF OPERATOR

ARCO Oil and Gas Company, Division of Atlantic Richfield Company.

3. ADDRESS OF OPERATOR

P.O. Box 5540, Denver, Colorado 80217

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

At surface

1825' FNL & 1850' FEL SW NE Unit G

At proposed prod. zone

API #30-039-21846

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

11-1/2 miles from Lindrith, New Mexico

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any)

1320'

16. NO. OF ACRES IN LEASE

1465.76

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40 Gallup

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

2600'

19. PROPOSED DEPTH

7570'

20. ROTARY OR CABLE TOOLS

Completion Unit

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6907' GL

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED

22. APPROX. DATE WORK WILL START\*

When approved

23.

PROPOSED CASING AND CEMENTING PROGRAM

This action is subject to administrative  
appeal pursuant to 30 CFR 290,  
QUANTITY OF CEMENT

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT             | SETTING DEPTH |
|--------------|----------------|-----------------------------|---------------|
|              | CASING SET ON  | ORIGINAL COMPLETION IN 1978 |               |

Propose to recomplate this well to the Gallup and commingle with existing  
Dakota production as per the attached procedure.

Commingling Order from the State of New Mexico attached.

New dedication plat attached.

No additional surface disturbance will be required.

RECEIVED  
FEB 21 1984  
OIL CON. DIV.  
DIST. 3

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

W.A. Walther, Jr.

TITLE

Operations Manager

DATE

February 13, 1984

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

NMOC

APPROVED  
FEB 17 1984  
M. MILLENBACH  
AREA MANAGER

## OIL CONSERVATION DIVISION

P. O. BOX 2088

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

Form C-102  
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

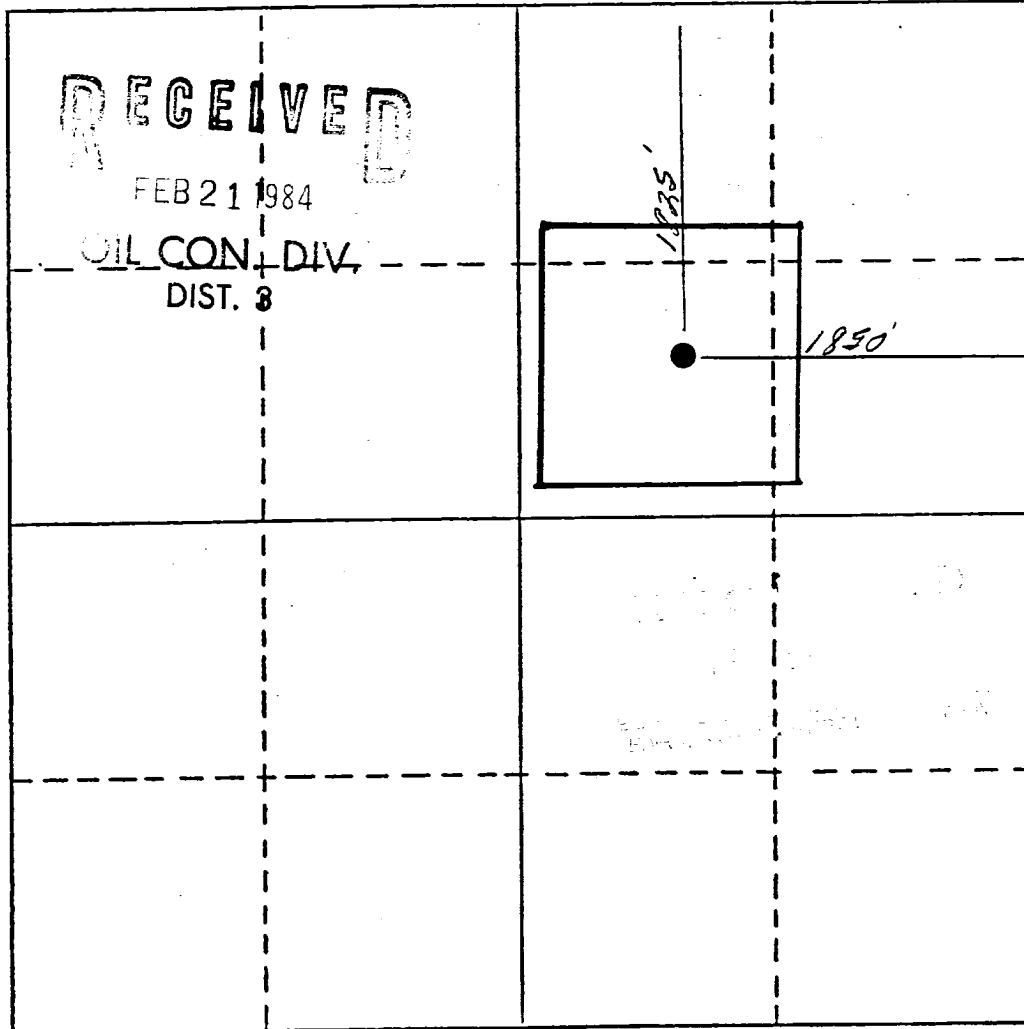
|                                                                                |                               |                              |                                |                      |
|--------------------------------------------------------------------------------|-------------------------------|------------------------------|--------------------------------|----------------------|
| Operator<br>ARCO Oil and Gas Company<br>Division of Atlantic Richfield Company |                               | Lease<br>Chacon Federal      |                                | Well No.<br>8        |
| Unit Letter<br>G                                                               | Section<br>19                 | Township<br>24N              | Range<br>3W                    | County<br>Rio Arriba |
| Actual Footage Location of Well:                                               |                               |                              |                                |                      |
| 1825 feet from the North line and                                              |                               | 1850 feet from the East line |                                |                      |
| Ground Level Elev.<br>6907'                                                    | Producing Formation<br>Gallup | Pool<br>Undesignated Gallup  | Dedicated Acreage:<br>40 Acres |                      |

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



## CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

W.A. Walther, Jr.

Position

Operations Manager

Company ARCO Oil & Gas Company  
Div of Atlantic Richfield Comp.

Date

February 13, 1984

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Registered Professional Engineer  
and/or Land Surveyor

Certificate No.

PROCEDURE TO RECOMPLETE

- 1) MIRU, kill well w/2% KCl water
- 2) ND Christmas Tree, NU 5000 psi WP BOPs using a 5000 psi WP top flange, 3000 psi WP bottom flange, double studed adapter. (Note: If plunger lift in hole, remove w/wireline before pulling tubing.) Pull 2-3/8", 4.7#, J-55 tubing, NU lubricator & run 5-1/2" EZ-Drill Bridge Plug to 6500' on wireline. Set bridge plug @ 6500' & POOH w/wireline.
- 3) ND lubricator, BOP's and double studed adapter. Change out the 3000 psi WP tubinghead for a 5000 psi WP tubinghead\*. NU 5000 psi WP BOP's & test BOP's to 3500 psi for 15 minutes.  
\*Note: Tubinghead dimensions: 11", 3000 psi WP - bottom flange  
9", 5000 psi WP - top flange
- 4) TIH w/4" "Hollow Steel Carrier" perforating gun and perforate the Gallup (6212'-6476') w/l SP6F. A total of 44 shots. Note: Charges should be placed so not to perforate casing collars. TOOH w/gun & ND lubricator.
- 5) NU frac head & frac service company. Frac Gallup down 5-1/2" casing as specified by AOGC Engineering, surface pressures should not exceed 4000 spi.
- 6) TIH w/2-3/8" tubing, clean out frac sand, swab and unload well, test for rate.
- 7) Kill well w/2% KCl water. TOOH w/2-3/8" tubing & RIH w/EZ-Drill Bridge Plug on wireline & set plug approximately 50' above perforated Gallup interval. ND BOPs & 5000 psi WP tubinghead, NU 3000 psi WP tubinghead, double studed adapter and 5000 psi WP BOPs.
- 8) RIH w/2-3/8" tubing & 4-3/4" MT bit, drill out both bridge plugs @ 6100' & 6500'. Clean & kill well w/2% KCl water.
- 9) Pull tubing & 4-3/4" MT bit, RIH w/2-3/8" tubing open-ended.
- 10) Set 2-3/8" tubing open-ended @ 7140'. ND BOPs, land tubing in tubinghead, NU Christmas Tree and swab both zones to kick of well flowing.
- 11) Clean wellsite & move out.

CJR 10/26/83

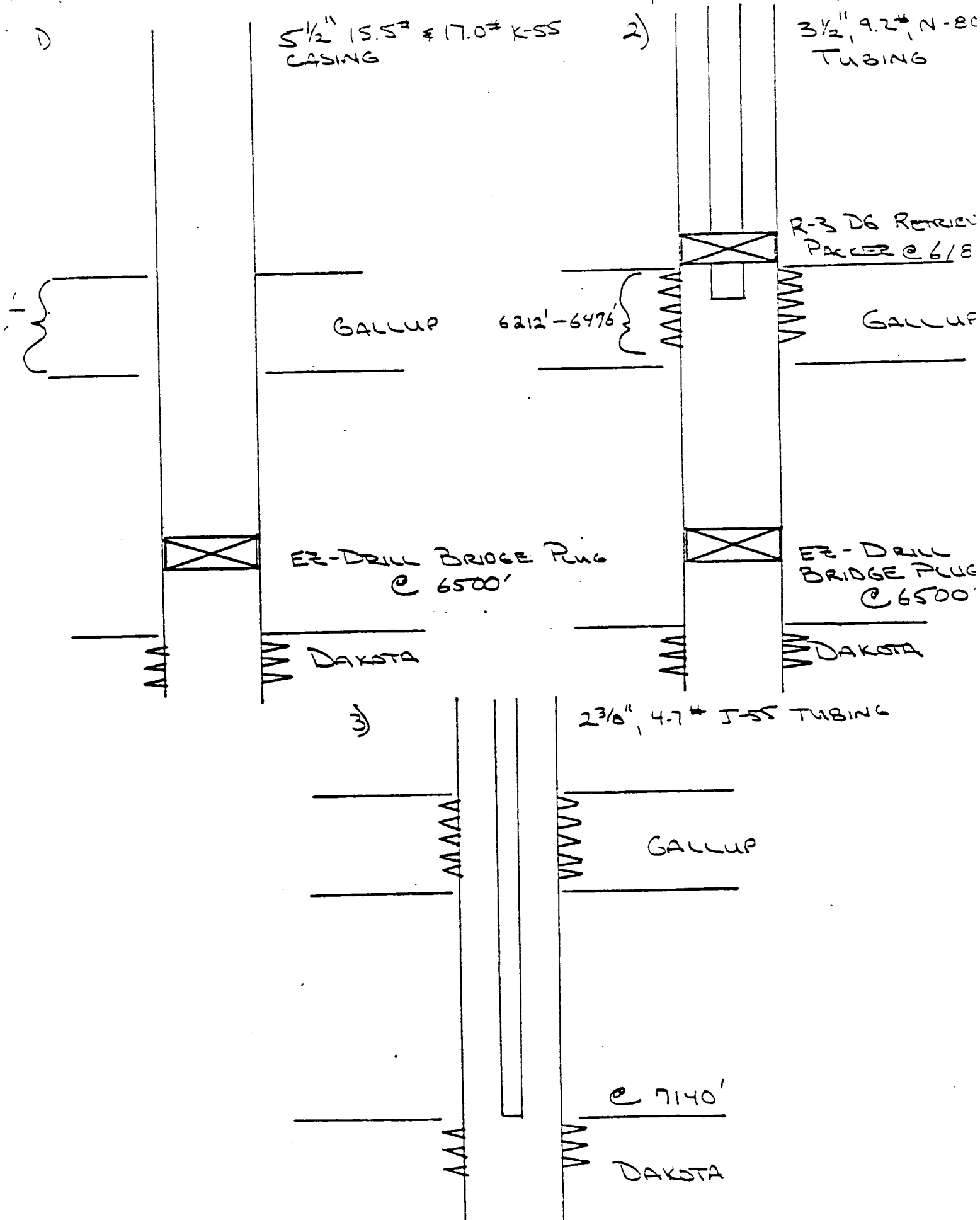
KLP  
10-26-83

JMM  
10/27/83

# CHASCO FEDERAL # 8

By

Date



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 2019  
Order No. R-7442

APPLICATION OF ARCO OIL & GAS  
COMPANY FOR DOWNHOLE COMINGLING,  
RIO ARRIBA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8 a.m. on December 15, 1983, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 7th day of February, 1984, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, ARCO Oil & Gas Company, is the owner and operator of certain wells, located in the following described lands in Rio Arriba, New Mexico:

TOWNSHIP 23 NORTH, RANGE 3 WEST, NMPM

Section 5: All

TOWNSHIP 24 NORTH, RANGE 3 WEST, NMPM

Section 17: W/2

Sections 18 and 19: All

Section 20: E/2, NW/4

Section 29: SE/4, W/2 NE/4

Section 30: All

Section 32: SW/4

Section 33: NW/4

(3) That the applicant seeks authority to comingle Chacon-Dakota Associated and undesignated Gallup oil production

within the wellbores of all existing wells and all wells subsequently drilled in the above-described lands.

(4) That at the hearing, the applicant requested that the following described lands be deleted from the application:

TOWNSHIP 24 NORTH, RANGE 3 WEST, NMPM

Section 17: W/2  
Section 18: All  
Section 32: SW/4

(5) That the SPECIAL RULES AND REGULATIONS for the Chacon-Dakota Associated Pool, Division Order No. R-8353-B, as amended, provides for 160-acre spacing and proration units for oil wells.

(6) That the W/2 NE/4 of Section 29, Township 24 North, Range 3 West, NMPM, Rio Arriba County, New Mexico, should be deleted for consideration in this application since it only consists of 80 acres.

(7) That from the Chacon-Dakota Associated zone, the subject wells are capable of marginal production only.

(8) That from the Gallup zone, the subject wells are capable of marginal production only.

(9) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(10) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that any well therein is not shut-in for an extended period.

(11) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Artec district office of the Division any time any commingled well in the subject area is shut-in for 7 consecutive days.

(12) That in order to allocate the commingled production to each of the commingled zones in any well in the subject area, applicant should consult with the supervisor of the Artec district office of the Division and determine an allocation formula for each of the production zones.

IT IS THEREFORE ORDERED:

(1) That the applicant, ARCO Oil & Gas Company, is hereby authorized to commingle Chaco-Dakota Associated and Undesignated Gallup production within the wellbores of all existing wells and all wells subsequently drilled in the following described lands in Rio Arriba County, New Mexico:

TOWNSHIP 23 NORTH, RANGE 3 WEST, NMPM

Section 5: All

TOWNSHIP 24 NORTH, RANGE 3 WEST, NMPM

Section 19: All

Section 20: E/2, NW/4

Section 29: SE/4

Section 30: All

Section 33: NW/4

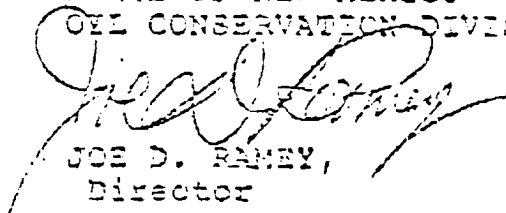
(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in any well downhole commingled under terms of this order.

(3) That the operator of the subject well shall immediately notify the Division's Aztec district office any time any well downhole commingled under terms of this order has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
JOE D. RAMEY,  
Director

S E A L