

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

1650' FNL & 850' FEL SE NE Unit H

At proposed prod. zone

API #30-039-21839

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

12-1/2 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)

850'

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

2500'

16. NO. OF ACRES IN LEASE

1465.76

19. PROPOSED DEPTH

7663'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40 Gallup

20. ROTARY OR CABLE TOOLS

Completion Unit

21. ELEVATIONS (Show whether DF, RT, GR, etc.) DRILLING OPERATIONS AUTHORIZED ARE

7098' GL

SUBJECT TO COMPLIANCE WITH ATTACHED

23.

"GENERAL REQUIREMENTS"
PROPOSED CASING AND CEMENTING PROGRAM

22. APPROX. DATE WORK WILL START*

When approved

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

Commingle 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.
W.A. Walther, Jr.

(This space for Federal or State office use)

TITLE

Operations Manager

DATE

February 13, 1984

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

NMOCC

APPROVED

FEB 17 1984
M. Millembach
M. MILLEMBACH
AREA MANAGER

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-102
Revised 10-1-78

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

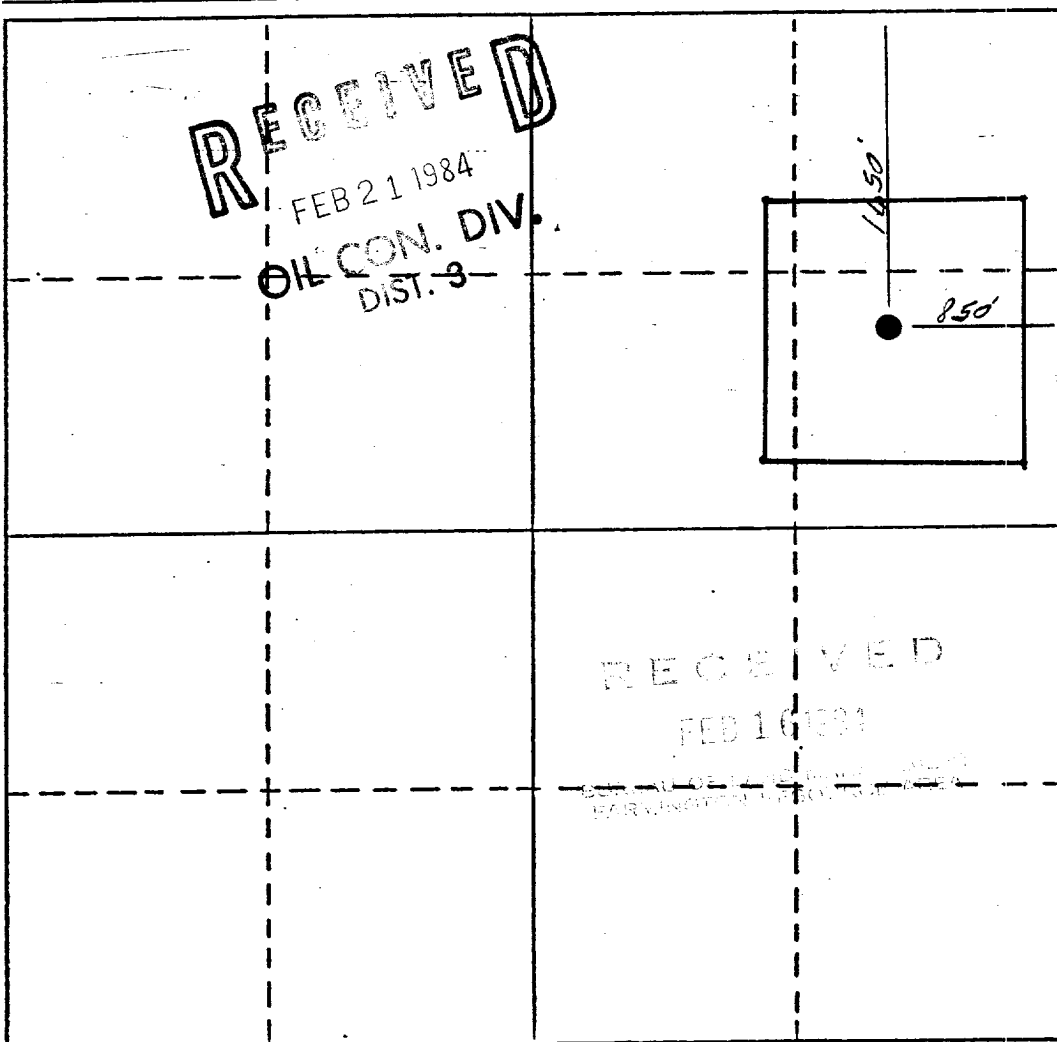
Operator ARCO Oil and Gas Company		Lease Chacon Federal		Well No. 7
Division of Atlantic Richfield Company				
Unit Letter H	Section 30	Township 24N	Range 3W	County Rio Arriba
Actual Footage Location of Well: 1650 feet from the North line and 850 feet from the East line				
Ground Level Elev. 7098'	Producing Formation Gallup	Pool Undesignated Gallup	Dedicated Acreage: 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 Company

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

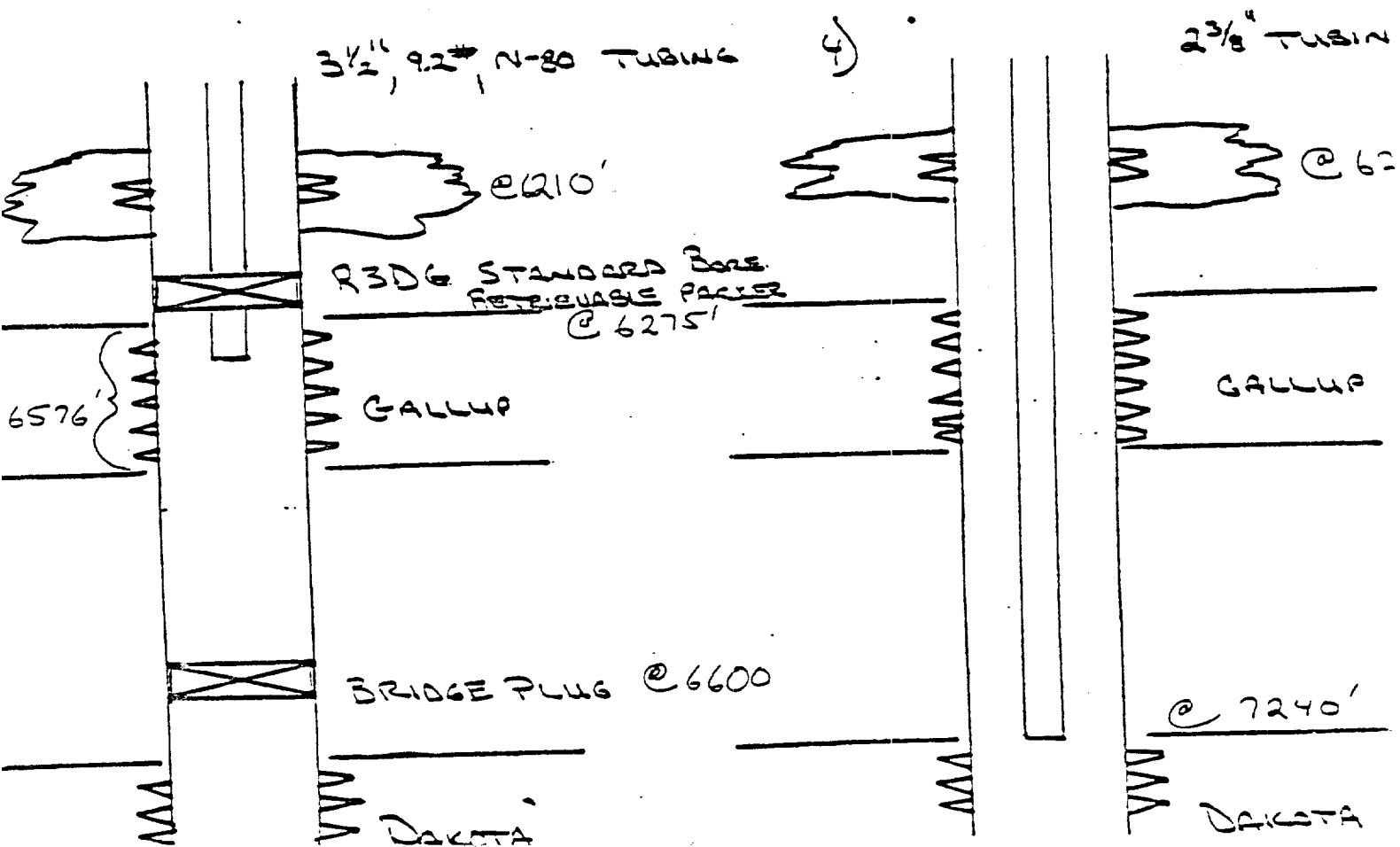
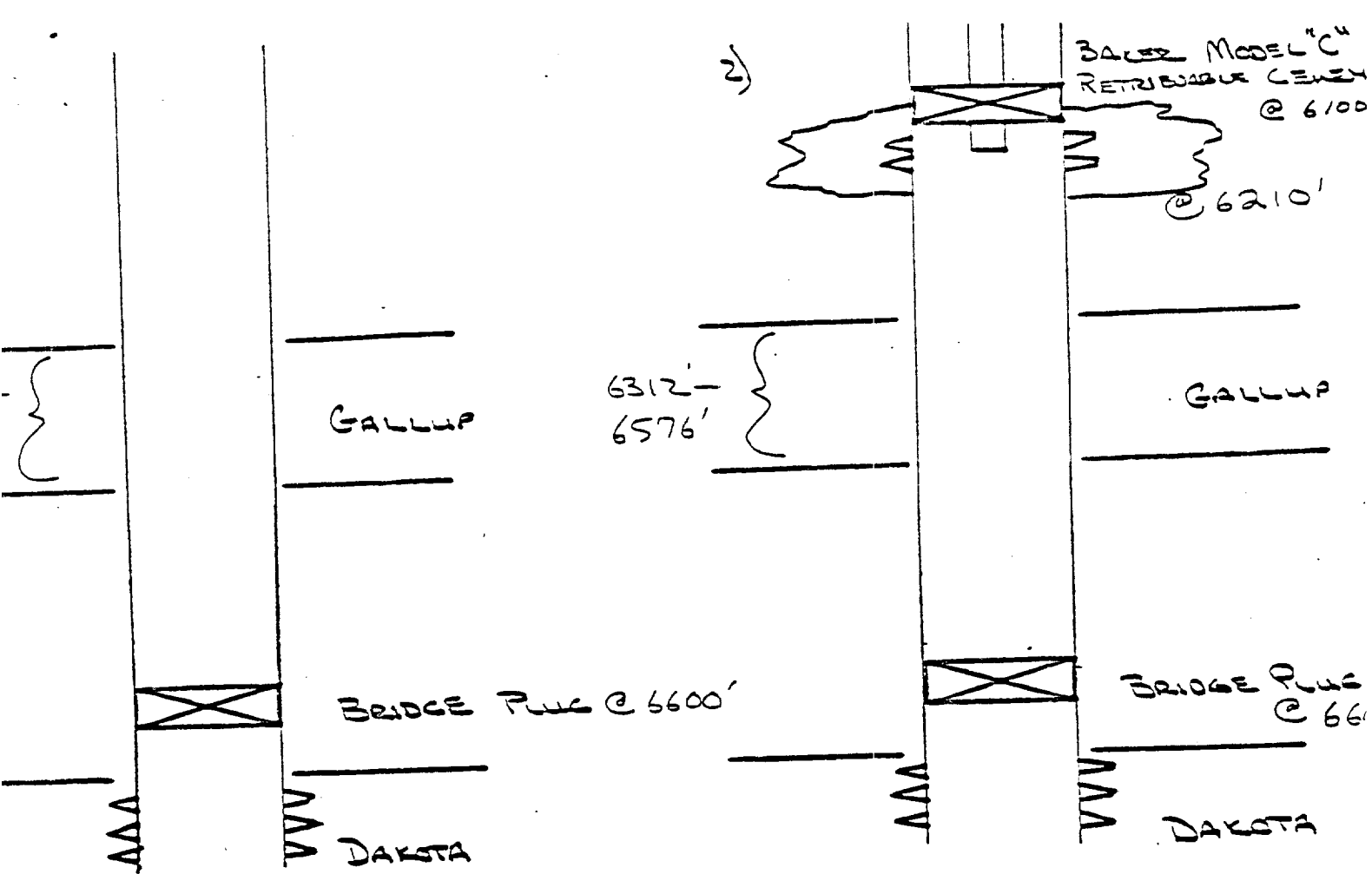
- 1) MIRU, kill well w/2% KCl water
- 2) ND Christmas Tree, NU 3000 psi WP BOPs. Test BOPs to 2500 psi for 15 minutes. Pull 2-3/8", 4.7#, J-55, EUE tubing, NU lubricator & run 5-1/2" EZ Drill Bridge Plug to 6600' on wireline. Set bridge plug @ 6600' & POOH w/wireline.
- 3) Pressure test casing to 3000 psi for 15 minutes.
- 4) Run 4" "Hollow Steel Carrier" perforating gun to 6210', perforating an interval 2 ft in length w/4 shots @ 90° phasing. (Each shot 6 inches lower than the previous shot above it). Trip out perforating gun & ND lubricator.
- 5) Run in hole w/2-3/8" tubing and set 5-1/2" Baker Model "C" Full-Bore Retrievable cement packer approximately 100' above perforations. Block squeeze interval w/low water loss cement. (Dowell - Class "B", 1% D-60 or comparable).
- 6) Release packer & reverse circulate excess cement out of hole. Trip three (3) stands out of the hole and set packer*. Note: if needed, hold pressure on squeeze to prevent back flow of cement. WOC overnight.
*May need to reverse circulate again before setting packer to assure no cement behind Baker packer.
- 7) Trip Baker Model "C" packer & 2-3/8" tubing out of the hole. Run in hole w/2-3/8" tubing and 4-3/4" MT bit, drill out cement plug, close pipe rams and test squeeze w/2000 psi for 15 minutes. If squeeze holds, proceed to Step 8; if not, repeat Steps 5 & 6.
- 8) Trip 2-3/8" tubing & 4-3/4" MT bit out of the hole. NU lubricator and run CBL/CCL log. If cement-pipe bond acceptable, proceed to Step 9; if not, repeat Steps 5 & 6.
- 9) TIH w/4" "Hollow Steel Carrier" perforating gun and perforate the Gallup (6312'-6576') w/1 SP6F. A total of 44 shots. Note: Charges should be placed so not to perforate casing collars. TOOH w/gun & ND lubricator.
- 10) Run in hole w/3-1/2", 9.2#, N-80 frac tubing & 5-1/2" R-3DG Standard Bore Retrievable Packer, pressure testing frac tubing to 6000 psi while TIH. Do not exceed burst rating of 10,160 psi. Set packer @ 6250'.
- 11) NU frac service company and pressure up on back side to 2000 psi. Frac Gallup as specified by AOGC Engineering.

- 12) Clean out frac sand, swab and unload well, test for rate.
- 13) TOOH w/3-1/2" tubing & packer, RIH w/2-3/8" tubing & 4-3/4" MT bit and drill out bridge plug @ 6600'
- 14) Pull tubing & 4-3/4" MT bit, RIH w/2-3/8" tubing open-ended to clean & kill well w/2% KCl water.
- 15) Set 2-3/8" tubing open-ended @ 7240'. ND BOPs, land tubing in tubinghead, NU Christmas Tree and swab both zones.
- 16) Clean wellsite & move out.

CJR
10/26/83

Kell Park
10-26-83

JMMcl
10/27/83



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 COMMINGLING,
RIO ARRISA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 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 commingle 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

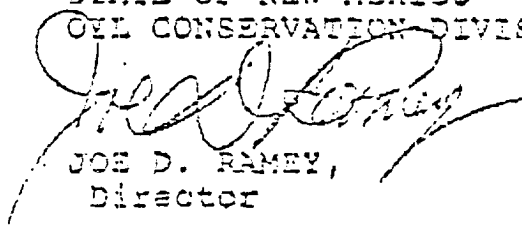
(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in any well downhole commingled under terms of this order.

(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