

June 12, 1996

Southern
Rockies
Business
Unit

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
2040 S. Pacheco Street
P. O. Box 6429
Santa Fe, NM 87505

Application for Exception to Rule 303-C - Downhole Commingling
Florance #2A Well
Unit O Section 20-T30N-R9W
Basin Fruitland Coal and Blanco Mesaverde Pools
San Juan County, New Mexico

Enclosed please find an administrative application form (C-107-A) and attachments for downhole commingling for the captioned well. By copy of this application by certified mail, return receipt requested, Amoco is notifying all offset operators in the formations captioned above as well as all affected interest owners if the ownership of those formations is not common. The Division Director may approve the proposed downhole commingling in the absence of a valid objection from any offset operator or any interest owner in those instances where ownership is not common in the zones to be commingled within 20 days after the receipt of the application if, in his opinion, waste will not result thereby, and correlative rights will not be violated.

Should there be questions concerning this matter, please contact me at (303) 830-5344.

Sincerely,

Pamela W. Staley

Enclosures

cc: Hiep Vu
Patty Haefele
Wellfile
Proration File
Frank Chavez, Supervisor
NMOCD District III
1000 Rio Brazos Road
Aztec, NM 87410

Duane Spencer
Bureau of Land Management
1235 La Plata Hwy.
Farmington, NM 87401

DISTRICT I
P.O. Box 1980, Hobbs NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107-A
New 3-12-96

OIL CONSERVATION DIVISION

APPROVAL PROCESS:

DISTRICT II
811 South First St., Artesia, NM 88210-2835

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

☒ Administrative ☐ Hearing

DISTRICT III
1000 Rio Brazos Rd. Aztec, NM 87410-1693

EXISTING WELLBORE
☒ YES ☐ NO

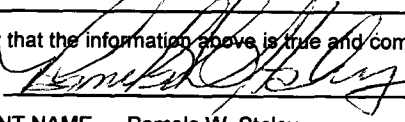
APPLICATION FOR DOWNHOLE COMMINGLING

Amoco Production Company		P.O. Box 800	Denver, CO 80201
Operator		Address	
Florance	#2A	O-20-30N-9W	San Juan
Lease	Well No.	Unit Ltr. - Sec Twp - Rge	County
OGRID NO.	Property Code	API NO.	Spacing Unit Lease Types: (check 1 or more)
000778	000518	30-045-22150	Federal ☒ State ☐ (and/or) Fee ☐

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Basin Fruitland Coal 71629		Blanco Mesaverde 72319
2. Top and Bottom of Pay Section (Perforations)	2440'-2610'		4307'-5049'
3. Type of production (Oil or Gas)	gas		gas
4. Method of Production (Flowing or Artificial Lift)	flowing		flowing
5. Bottomhole Pressure	a. (Current) 143 PSI	a.	a. 112 PSI
Oil Zones - Artificial Lift: Estimated Current			
Gas & Oil - Flowing: Measured Current	b. (Original) 1088 PSI	b.	b. 1083 PSI
All Gas Zones: Estimated or Measured Original			
6. Oil Gravity (° API) or Gas BTU Content	1140 BTU/mmcft		1216 BTU/mmcft 53.6 API
7. Producing or Shut-In?	producing		producing
Production Marginal? (yes or no)	yes		no
• If Shut-In, give data and oil/gas/water rates of last production	Date: Rates:	Date: Rates:	Date: Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data			
• If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 04/96 Rates: 80 mcf/d 0 bopd 0.55 bwpd	Date: Rates:	Date: 04/96 Rates: 430 mcf/d 0.21 bopd 0.22 bwpd
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0 % Gas 15 %	Oil: % Gas %	Oil: 100 % Gas 85 %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.
10. Are all working, overriding, and royalty interests identical in all commingled zones? ☐ Yes ☐ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☐ Yes ☐ No
Have all offset operators been given written notice of the proposed downhole commingling? ☐ Yes ☐ No
11. Will cross-flow occur? ☐ Yes ☒ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☐ Yes ☐ No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No
13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)
14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No SF-078116 SF-077833
15. NMOC Reference Cases for Rule 303(D) Exceptions: ORDER NO(S):
16. ATTACHMENTS:
- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
 - * Production curve for each zone for at least one year. (If not available, attach explanation.)
 - * For zones with no production history, estimated production rates and supporting data.
 - * Data to support allocation method or formula.
 - * Notification list of all offset operators.
 - * Notification list of working, overriding, and royalty interests for uncommon interest cases.
 - * Any additional statements, data, or documents required to support commingling.

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

SIGNATURE		TITLE	Regulatory Affairs Engineer	DATE	6/10/96
TYPE OR PRINT NAME	Pamela W. Staley	TELEPHONE NO. (	303	)	830-5344

All distances must be from the outer boundaries of the Section

Operator Amoco Production			Lease Florange		Well No. 2A
Unit Letter 0	Section 20	Township 30N	Range 9W	County San Juan	
Actual Footage Location of Well: 790 feet from the South line and 1475 feet from the E line					
Ground Level Elev. 5985'	Producing Formation Fruitland		Feet Basin/Fruitland Coal Gas		Dedicated Acreage 320 E/2 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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.

RECEIVED
BLM MAIL ROOM
EC NR-2 PH 4-11
FARMINGTON RESOURCE AREA
FARMINGTON, NEW MEXICO

790'

1475'

CERTIFICATION

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

B.D. Shaw

Name

B.D. Shaw

Position

Adm. Supv

Company

Amoco

Date

2-25-89

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.

On file

Date Surveyed

Registered Professional Engineer
and/or Land Surveyor

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACERAGE DEDICATION PLAT**

All distances must be from the outer boundaries of the Section

Operator TENNECO OIL COMPANY			Lease FLORANCE		Well No. 2-A
Unit Letter P-0	Section 20	Township 10 NORTH	Range 9 WEST	County SAN JUAN	
Actual Footage Location of Well: 790 feet from the SOUTH line and 1475 feet from the EAST line Ground Level Elev. 5985 Blanco Mesa Verde Blanco Mesa Verde Blanco Mesa Verde Blanco Mesa Verde Blanco Mesa Verde					
					Acres

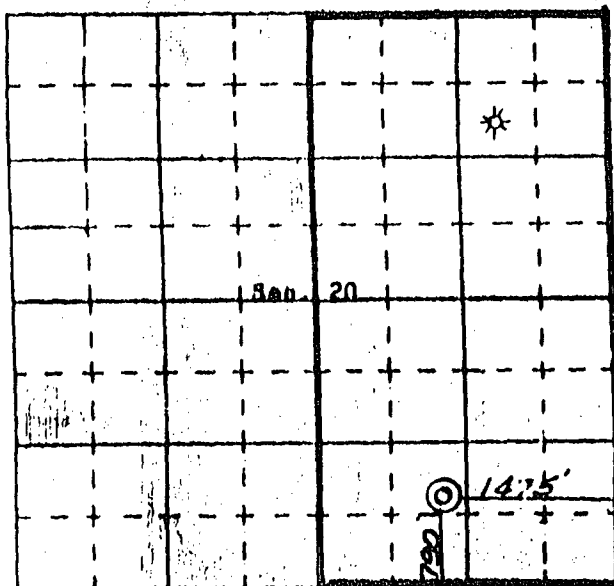
- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated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

Communitization

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

If answer is "no," list the owners and tract descriptions which have actually 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 Commission.



CERTIFICATION

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

Name John P. Drake
 Position Production Clerk
 Company Tenneco Oil Company
 Date July 29, 1976

I hereby certify that the well location shown on this plat was plotted from (500' x 500') or (1000' x 1000') surveys made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief.

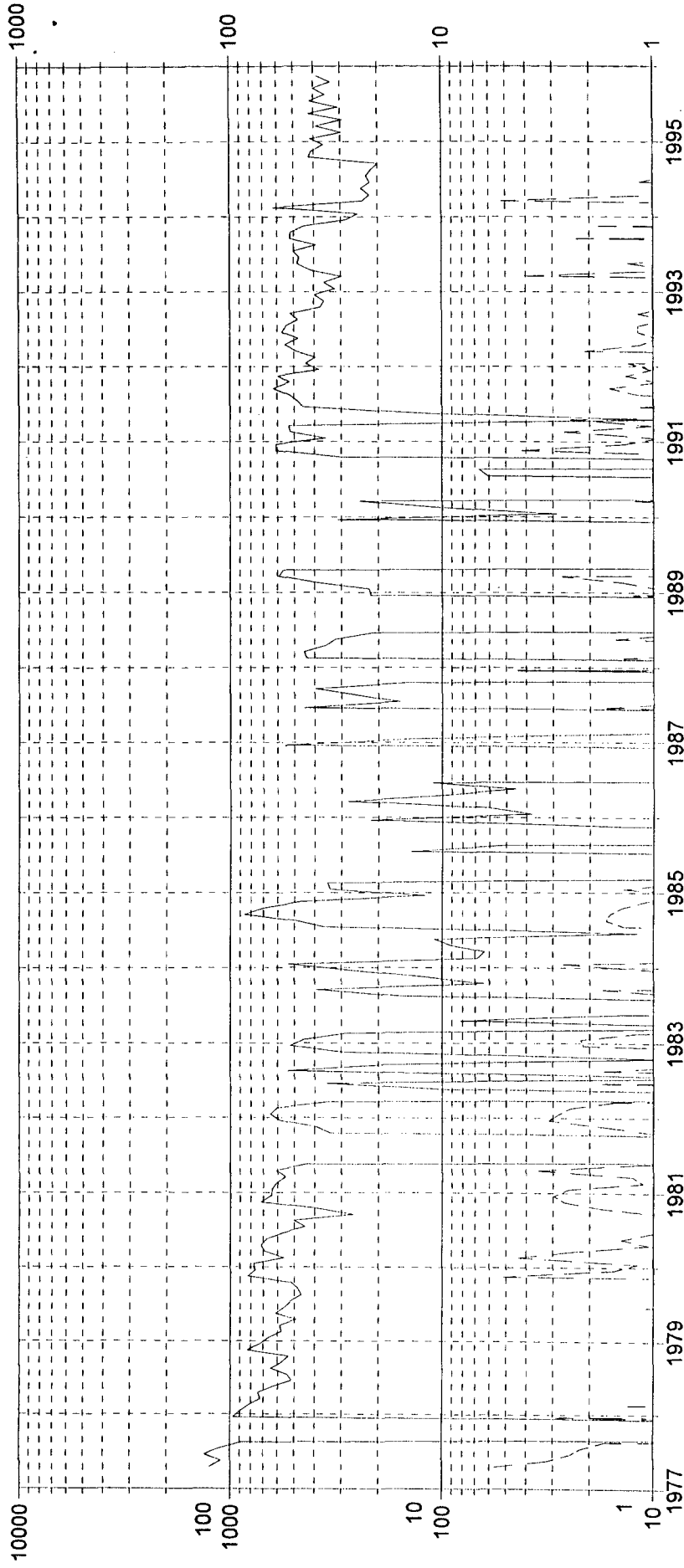
25 June, 1976
 Date Surveyed
James P. Loese
 Registered Professional Engineer
 and/or Land Surveyor
 James P. Loese

1463
 Certificate No.

Dwights

1000 Lease: FLORANCE 00002A

Retrieval Code: 251,045,30N09W20O00M



County: SAN JUAN

State: NM

F.P. Date: 04/77

Date: 03/27/96

Field: BLANCO (MESAVERDE) MV

Oil Cum: 5291 bbl

Reservoir: MESAVERDE

Gas Cum: 2295 mmcf

Water (bbl/day)

Operator: AMOCO PRODUCTION CO

Location: 200 30N 9W

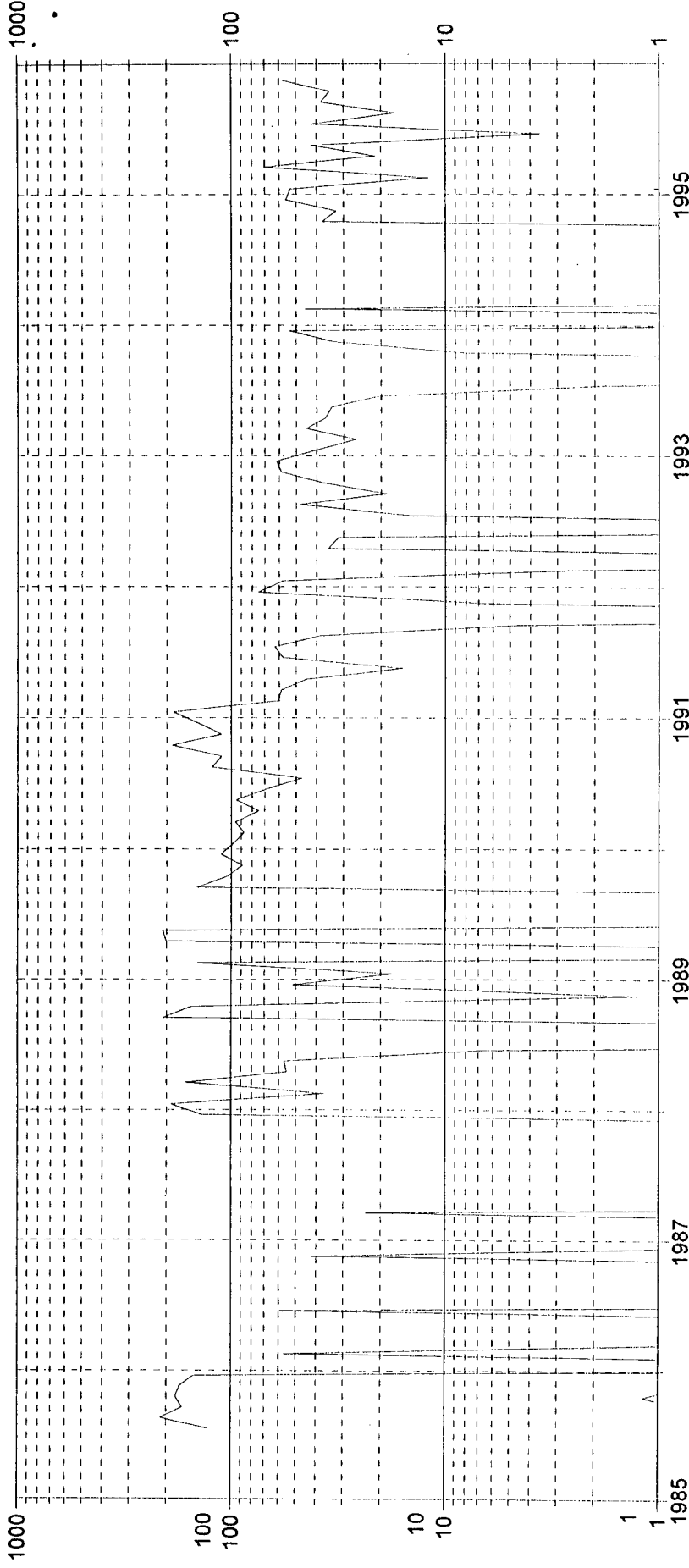
Gas (mcf/day)

Oil (bbl/day)

Dwights

1000 Lease: FLORANCE 00002A

Retrieval Code: 251,045,30N09W20O00F



County: SAN JUAN

State: NM

F.P. Date: 07/85

Date: 03/27/96

Field: BASIN (FRUITLAND COAL) FT

Oil Cum: 410 bbl

Reservoir: FRUITLAND COAL

Gas Cum: 193176 mcf

Water (bbl/day)

Operator: AMOCO PRODUCTION CO

Location: 20O 30N 9W

Gas (mcf/day)

Oil (bbl/day)

(C) Copyright 1992,1993 Douglas M Boone All Rights Reserved Version 3.0M 09-Apr-96									
-- FLOWBHP --									
-- Pwf with correction for liquids --									
Well Name:		Florance #2A MV							
Gas Gravity:		0.8							
Condensate (yes=1):		1							
Reservoir Temp:		126.1	F	% N2	0.00	%			
Surface Temp:		70	F	% CO2	0.00	%			
Depth of Zone:		4678	Feet	% H2S	0.00	%			
TVD:		4678	Feet						
Tubing ID:		1.995	inches						
Oil Production		0.21	Bopd						
Oil Gravity		53.6	API						
Water Production		0.22	Bwpd						
Water SG		1							
FTP		Rate	Pwf	Z	Pwf/Z				
Psia		Mcf/d	psia						
		75	430	112	0.978	114			

- FLOWBHP --		Douglas M Boone	GAS Ghc =	0.01	A =	0.0642	GOR - oil	10	cf/Bbl liquid
- Pwf with correction for liquids --		All Rights Reserved	Tchc =	170.29	B =	1.0998	GOR total	10	cf/Bbl liquid
Well Name:		Version 3.0M	Pchc =	677.10	C =	-0.0954	Mo	-1031	
Gas Gravity:		04-Apr-96	CWA =	0.00	D =	3.1984	Oil Grav	0.000	
Condensate (yes=1):		0	Tavg =	544.67	E =	0.0666	SG wg	0.007	
Reservoir Temp:		100 F	Tc =	170.29	F =	0.6845	Mix Grav	1.000	
Surface Temp:		70 F	Pc =	677.10	Tr =	3.198	SG mix	4.059	
Depth of Zone:		2500 Feet	Pc =	677.10	Tavg	546	G	0	
TVD:		2500 Feet	Tc =	170.29	F	0.01618	Rate corr	80	
Tubing ID:		1.38 inches					Gas Grav cor	4.059	

Water Production	0.55 Bwpd	Pr	G	pro	f(pr)	f(pr)'	pro'	Z	Pwf	Zavg	A
Water SG	1	0.133	0.036	0.012	0.000	3.108	0.012	1.000	96		
FTP	Rate	0.141	0.038	0.012	0.000	3.197	0.012	1.000	143	1.000	0.697
Psia	Mcf	0.211	0.057	0.018	0.000	3.196	0.018	1.000	143	1.000	0.697
	80	0.211	0.057	0.018	0.000	3.196	0.018	1.000	143	1.000	0.697
	143	0.211	0.057	0.018	0.000	3.196	0.018	1.000	143	1.000	0.697

INSTRUCTIONS:

- 1) Enter the shut-in tubing or flowing pressure.
- 2) Press [F9] to calculate the BHP and Z factor
- 3) Press [Ctrl][Home] to return to information screen.

Calculations based on Cullender-Smith with corrections for condensate and water production. The is also a correction for the gas equivalent of the condensate.

OFFSET OPERATORS

Meridian Oil, Inc.
P.O. Box 4289
Farmington, NM 87499