#### **Ernie Busch**

From:

To: Subject: Date: Priority:

Ernie Busch Ben Stone AMOCO FLORANCE#63E(DHC) Thursday, March 21, 1996 1:46PM High

B-17-27N-08W RECOMMEND: APPROVAL

OPERATOR: LOUIS DREYFUS NATURAL GAS CORP	_	93.50	02RID: 025773									MONTH/YEAR 08/95	R 08/95	PAGE	i	24 OF 26
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March 7, 1996

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

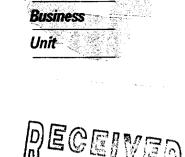
Downhole Commingling

Florance #63E & Florance D #10R Well

980 FNL & 1770' FEL, Unit B Section 17-T27N-R8W

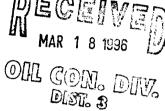
Blanco Mesaverde (Pool IDN 72319) and Basin Dakota (Pool IDN 71599) Pools

San Juan County, New Mexico



Southern

Rockies



Amoco Production Company hereby requests administrative approval to downhole commingle production from the Blanco Mesaverde and Basin Dakota Pools in the Florance #63E/ Florance D #10R well referenced above. The Florance #63E is currently completed in the Dakota formation. We plan to recomplete the well in the Mesaverde with both the Mesaverde and Dakota formations being downhole commingled in the wellbore. The two zones are expected to produce at a total commingled rate of about 120 MCFD with less than 1BCPD. The ownership (WI, RI,ORI) of these pools is common in this wellbore. Downhole commingling will offer an economical method of production while protecting against reservoir damage, waste of reserves and violation of correlative rights. Offset operators to this well will receive a copy of this application by certified mail.

The allocation method that we plan to use for this commingled well is as follows. The Dakota formation has been on production for some time while the Mesaverde is a newer formation in this area. We recommend that the Dakota formation gas and condensate be allocated based on current rates while production for the Mesaverde be allocated from offset information. The Dakota is currently producing 49 MCFD with 0.20 BCPD while the Mesaverde offsets are averaging 70 MCFD with 0.25 BCPD. The recommended allocation percentages after downhole commingling would be set as a percentage of the total rate with the Mesaverde attributing 58% of gas production and 50% of condensate production. The Dakota would be allocated at 42% of gas production and 50% of condensate production. The actual commercial value of the commingled production will not be less than the sum of the values of the production from each of the common sources of supply.

Attached to aid in your review are plats showing the location of the well and offset wells in the same formation, a historical production plot and a C-102 for each formation. This spacing unit is located on a federal lease (NM-03380) and we will send a copy of the application to the BLM as their notice.

Shoul	d you have questions concerning the	his matter, please contact me at (303) 830-5344.
Since	rety) Mily	
Pame	la W. Staley	
Enclo	sures	
cc:	Mark Rothenberg 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
		•

#### Application for Exception to Rule 303: SEGREGATION OF PRODUCTION FROM POOLS

#### Requirements

(1) Name and address of the operator:

Amoco Production Company P.O. Box 800 Denver, CO 80201

(2) Lease name, well number, well location, name of the pools to be commingled:

Lease Name and Well

Number:

Florance #63E/ Florance D #10R

Well Location:

980' FNL & 1770' FEL

Unit B Section 17-T27N-R8W San Juan County, New Mexico

Pools Commingled:

Blanco Mesaverde Pool

Basin Dakota Pool

(3) A plat of the area showing the acreage dedicated to the well and the ownership of all offsetting leases.

Attached

(4) A current (within 30 days) 24-hour productivity test on Division Form C-116 showing the amount of oil, gas and water produced from each zone.

The Blanco Mesaverde offsets produced an average stabilized rate of 70 MCFD and 0.25 BCPD over the past 4 months. The Basin Dakota zone produced at an average rate of about 50 MCFD and 0.2 BCPD over the same period.

(5) A production decline curve for both zones showing that for a period of at least one year a steady rate of decline has been established for each zone which will permit a reasonable allocation of the commingled production to each zone for statistical purposes.

Basin Dakota Completion:

Historical production curve attached.

Blanco Mesaverde Completion:

Historical production curve attached.

(6) Estimated bottomhole pressure for each zone. A current (within 30 days) measured bottom hole pressure for each zone capable of flowing.

Bottomhole pressures were estimated from 72 hour shut-in pressures for the Dakota and from similar tests on offset Mesaverde wells for the Mesaverde. Estimated bottomhole pressure in the Dakota formation is 709 PSI while the estimated bottomhole pressure in the Mesaverde is 550 PSI.

(7) A description of the fluid characteristics of each zone showing that the fluids will not be incompatible in the wellbore.

The two formations do not produce any fluids that are expected to prohibit commingling, or promote the creation of emulsions or scale.

(8) A computation showing that the value of the commingled production will not be less than the sum of the values of the individual streams:

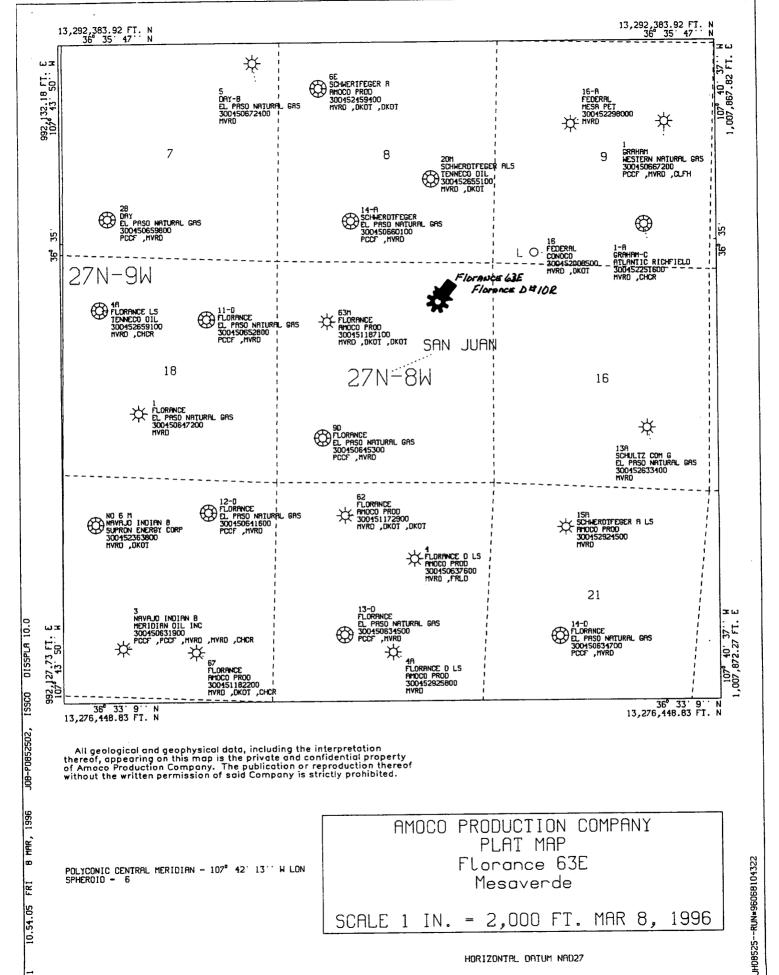
Since the BTU content of the produced gasses are very similar, we would expect the commingled production to have a similar value as the sum of the individual streams.

(9) A formula for the allocation of production to each of the commingled zones and a description of the factors or data used in determining such formula:

The allocation method that we plan to use for this commingled well is as follows. The Dakota formation has been on production for some time while the Mesaverde is a newer formation in this area. We recommend that the Dakota formation gas and condensate be allocated based on current rates while production for the Mesaverde be allocated from offset information. The Dakota is currently producing 49 MCFD with 0.20 BCPD while the Mesaverde offsets are averaging 70 MCFD with 0.25 BCPD. The recommended allocation percentages after downhole commingling would be set as a percentage of the total rate with the Mesaverde attributing 58% of gas production and 50 % of condensate production. The Dakota would be allocated at 42% of gas production and 50 % of condensate production. The actual commercial value of the commingled production will not be less than the sum of the values of the production from each of the common sources of supply.

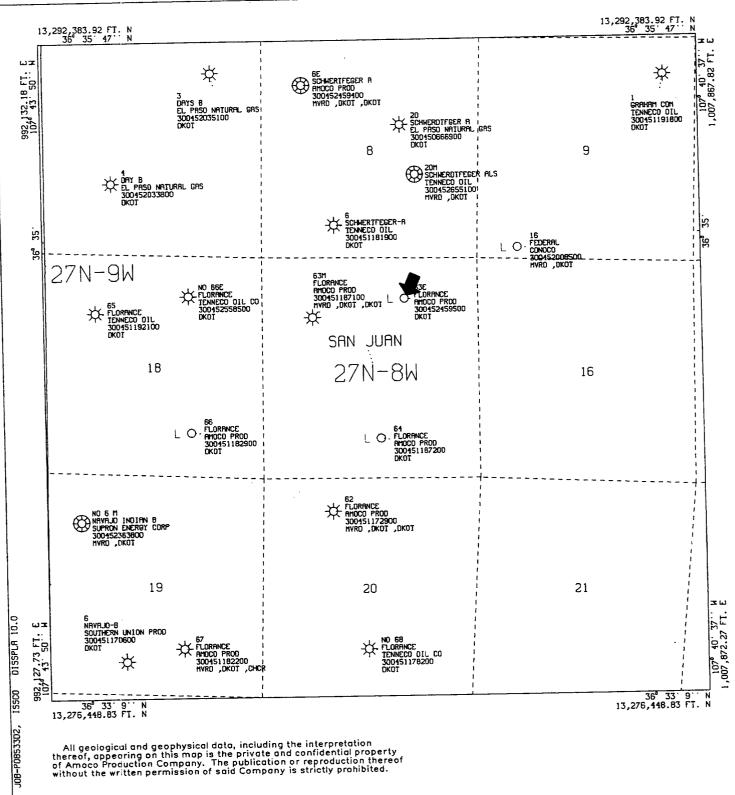
(10) A statement that all offset operators and, in the case of a well on federal land, the United States Bureau of Land Management, have been notified in writing of the proposed commingling.

BLM will receive a copy of this application by certified mail. The offsetting operators listed on the attached sheet will receive a copy of this application by certified mail.



HORIZONTEL DATUM NAD27





All geological and geophysical data, including the interpretation thereof, appearing on this map is the private and confidential property of Amaco Production Company. The publication or reproduction thereof without the written permission of said Company is strictly prohibited.

POLYCONIC CENTRAL MERIDIAN - 107° 42' 13'' W LON SPHEROID - 6

10.54.11 FRI 8 MAR, 1996

AMOCO PRODUCTION COMPANY PLAT MAP Florance 63E Dakota

SCALE 1 IN. = 2,000 FT. MAR 8, 1996

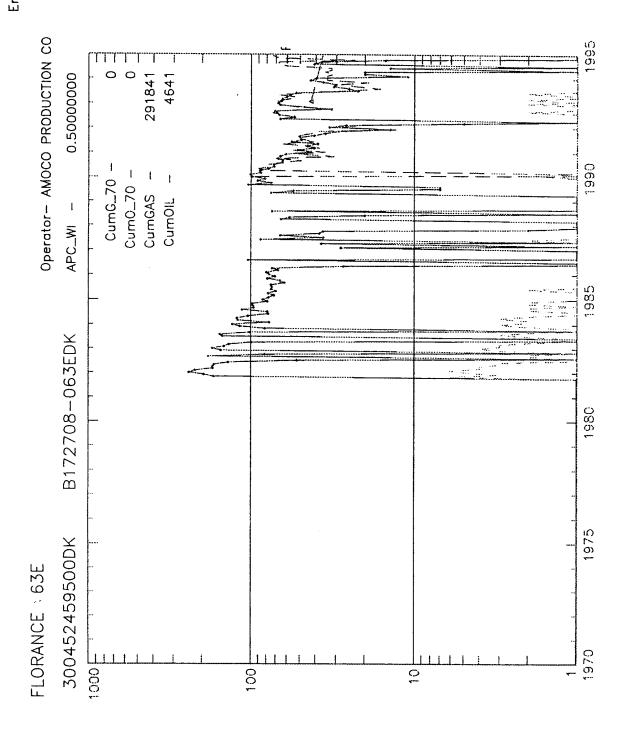
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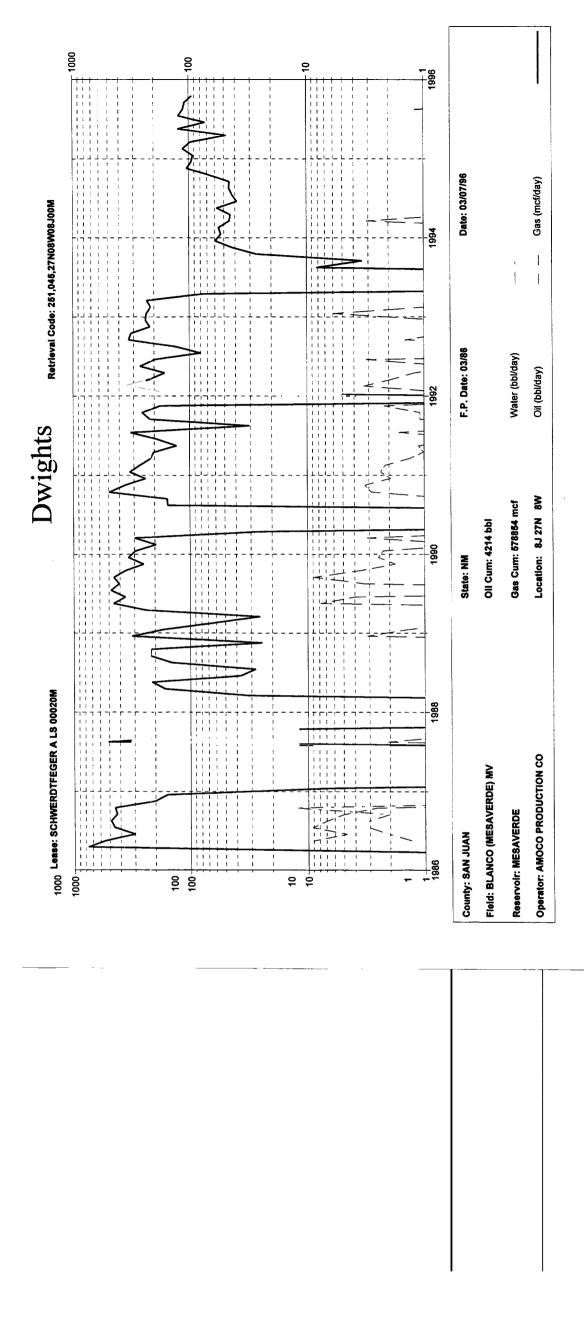
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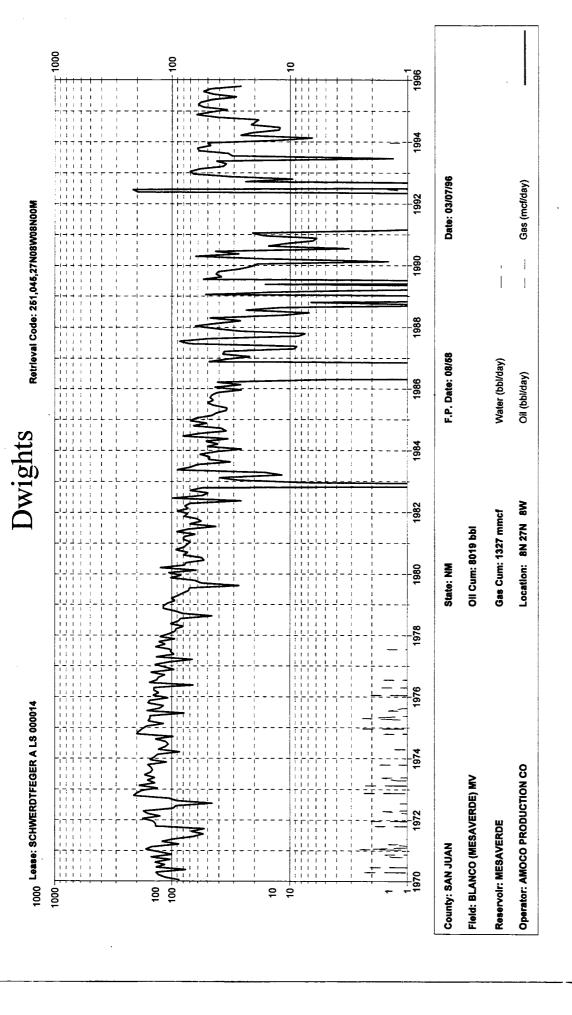
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## Current Production and Estimated Production Based on Offsets

WELLNAME	LOCATION	CURRENT MCFD	LAST 4MO AVE MCFD	CURRENT BOPD
<u>DAKOTA</u>				
FLORANCE 63	B17-27-08	49	50	0.20
OFFSETS IN MESAVER	<u>EDE</u>			
SCHWERDTFEGER ALS20M	J08-27-08	79	95	0.00
SCHWERDTFEGER ALS14	N08-27-08	30	44	0.25
AVERAGE		55	70	0.12







## **Amoco Production Company**

Offset Operator Plat Florance 63E T27N-R8W Sec. 17 Dakota Formation

R8W

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R8W

(1)	Amoco	Production	Cor	npa	ny

Meridian Oil Production Inc.

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## **Amoco Production Company**

Offset Operator Plat Florance D LS 10R T27N-R8W Sec. 17

### Mesaverde Formation

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19	① 20	21

1 Amoco Production Company

② Conoco Inc.

3 Meridian Oil Production Inc.

# LIST OF ADDRESSES FOR OFFSET OPERATORS Florance #63E/ Florance D #10R

- 1 Meridian Oil, Inc.P.O. Box 4289Farmington, NM 87499
- 2 Conoco, Inc.10 Desta Drive West Midland, Texas 79705