FORM C-115- OPERATORS MONTHLY REPORT (CONTINUATION)

OPERATOR: LOUIS DREYFUS NATURAL GAS CORP	OGR	OCRID: 025773	3						MONTH/YEAR 08/95	R 08/95	PAGE	¥ 22 QF 26
	-	INJECTION	—	-32	PRODUCTION	_		DISPOSIT	DISPOSITION OF OIL, GAS, AND WATER	GAS, AND W	TER	
POOL NO. AND NAME	<u>80</u>	10	11 C BBLS OF	13	14	<b>5</b>	16 17 C	18	01.9 Q1	88	21	23
PROPERTY NO. AND NAME WELL NO. AND U-L-S-T-R API NUMBER	JE VOLUME	VOLUME PRESSURE	O OIL/COND- D ENSATE E PRODUCED	BBLS OF WATER PRODUCED	GAS PRODUCED (MCF)	DAYS PRODUCED	O POINT OF D DISPOSI- E TION	GAS BTU OR OIL API GRAV	HAND AT BEGINNING OF MONTH	VOLUME (BBLS/MCF)	TRANS- PORTER OGRID	D OIL ON HAND B AT END OF E HONNH
005965 MLDGE A							W 1194950			2		0
001 K-07-27N-11W 30-045-06653	<u>т</u>		0	0	1241	31						
002 C-18-27N-11W 30-045-06571	П		0	0	25	<u>ح</u>						
003 1-07-27N-11N 30-045-06650	7		0	0	0	<u> </u>						
004 A-18-27N-11W 30-045-06580	4		0	0	0	0						
005 I-06-27N-11W 30-045-06831	TI.		0	0	4570	31						
006 1-07-27N-11W 30-045-06741	TI		0	0	1072	31						
30-045-06828	'n		0	88	2051	31						
008 4-06-27N-11W 30-045-06929	'n		0	0	3121	31		·				
011 P-18-27N-11W 30-045-24268	п		0	0	1392	3		<u> </u>				
					-		G 1195330	1017		3121	025244	
							G 1195430	1020		4362	025773	-
							G 1195530	1013		1963	025244	
							G 1195630	1133	<u>-</u>	1042	025244	
							G 1195830	1138		1241	025244	
					_	_	G 1196030	1151		252	025244	
							G 1196130	1165		1392	025244	

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							G 1195830	1138		1241	025244	
					_	_	G 1196030	1151		252	025244	
							G 1196130	1165		1392	025244	



Southern

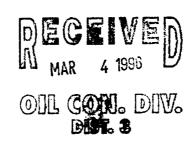
Rockies

Business

Unit ...

February 20, 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
Heaton LS #1 Well
990' FNL & 900' FEL, Unit A Section 28-T31N-R11W
Basin Dakota (Pool IDN 72319) and Blanco Mesaverde (Pool IDN 72319) Pools
San Juan County, New Mexico

Amoco Production Company hereby requests administrative approval to downhole commingle production from the Basin Dakota and Blanco Mesaverde Pools in the Heaton LS #1 well referenced above. The Heaton LS #1 is currently a dual completion in the Dakota and Mesaverde formations. We plan to complete the well with both the Dakota and Mesaverde formations being downhole commingled in the wellbore. This well will benefit from downhole commingling because both zones produce liquids which are not as efficiently lifted in the dual completion as they will be once commingled. The two zones are expected to produce at a total commingled rate of about 175 MCFD with less than 1 BCPD. 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. Both formations have been producing at stabilized rates for some time. We recommend that the Mesaverde and Dakota formations gas and condensate be allocated based on current rates. The Mesaverde is currently producing at 95 MCFD with 0.03 BCPD while the Dakota is currently producing 80 MCFD with 0.03 BCPD. The recommended allocation percentages after downhole commingling would be set as a percentage of the total rate with the Mesaverde attributing 54% of gas production and 50% of condensate production. The Dakota would be allocated at 46% 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 and recent production plot and a C-102 for each formation. This spacing unit is located on a federal lease (SF-078097) and we will send a copy of the application to the BLM as

Amoco 1670 Broadway Post Office Box 800 Denver, Colorado 80201

their notice. Should you have questions concerning this matter, please contact me at (303) 830-5344.

Sincerely

Pamela W. Staley

**Enclosures** 

cc: Khanh Vu

Gail Jefferson

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: Heaton LS

Well Number:

Well Location: 990' FNL & 900' FEL

Unit A Section 28-T31N-R11W 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 produced an average stabilized rate of 95 MCFD and 0.03 BCPD. The Basin Dakota zone produced at an average rate of about 80 MCFD and 0.03 BCPD.

(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.

Blanco Mesaverde Completion:

Basin Dakota Completion:

Historical production curve attached.

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 during a packer leakage test for the well. Estimated bottomhole pressure in the Dakota formation is 934 PSI while the estimated bottomhole pressure in the Mesaverde is 908 PSI. See attached calculations.

(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 measurable amount of fluids and therefore are not expected to any effect that would 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:

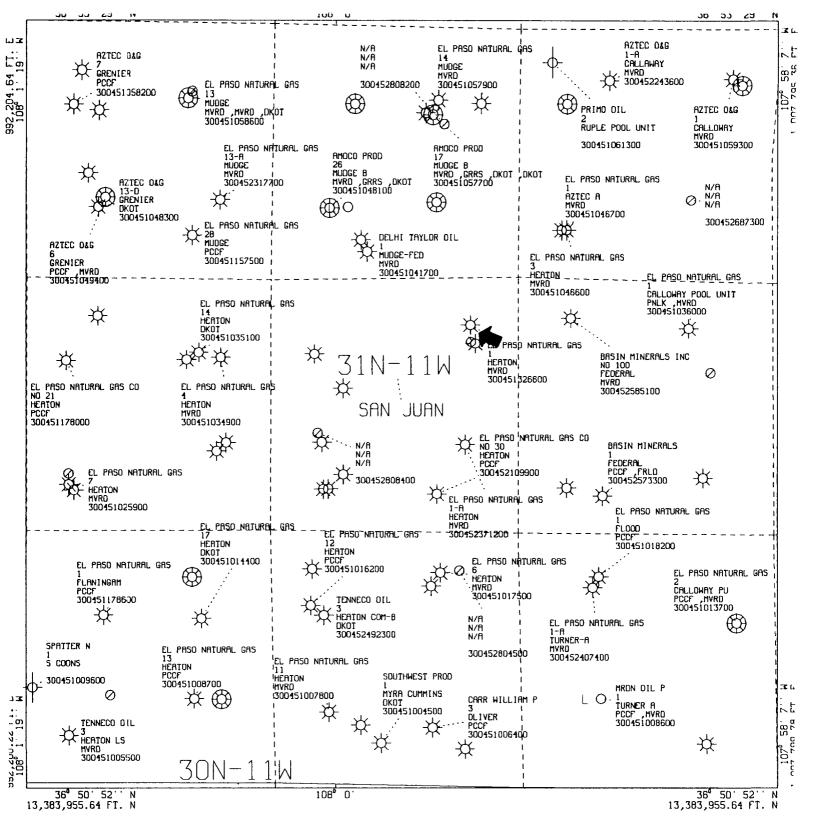
Since the BTU content of the produced gasses are very similar, we would expect the commingled production to have a similar value as the sum of the individual streams.

(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. Both formations have been producing at stabilized rates for some time. We recommend that the Mesaverde and Dakota formations gas and condensate be allocated based on current rates. The Mesaverde is currently producing at 95 MCFD with 0.03 BCPD while the Dakota is currently producing 80 MCFD with 0.03 BCPD. The recommended allocation percentages after downhole commingling would be set as a percentage of the total rate with the Mesaverde attributing 54% of gas production and 50% of condensate production. The Dakota would be allocated at 46% 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.



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

POLYCONIC CENTRAL MERIDIAN - 107° 59' 43'' W LON SPHEROID - 6

AMOCO PRODUCTION COMPANY
PLAT MAP
Heaton LS 1
Offset Wells

SCALE 1 IN = 2 NON FT MAY 1 1005

Note that the part of the second of the seco

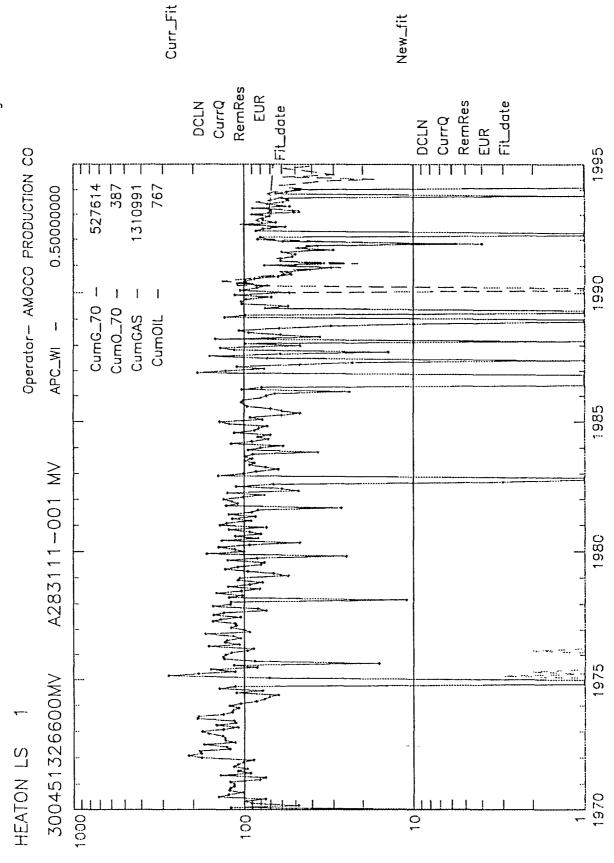
			<b>-</b>	_
Section A.			Date MAY 214	, 1960
Injuries EL PASO NATURAL GAS COMPANY  Mel. N. 1(MD)   Flat Letter   A   Sec. Sec. Sec. Sec. Sec. Sec. Sec. Sec.	ction 28. TH Line, ion 5798 E AND DAKOTA ated acreage outlinated the interests	Pool Briefly for all the owner of all the owner.	a 31-N- all anger from 320 LANCO MY AND WII adaw?  ers been consolidate	EAST Come  D & 320 Vertex  LDCAT DAKOTA  1 by deministration
<ol> <li>If the answer to question two is "no", lis</li> </ol>	it all the owners :	and their respect	ive interests below:	
Owner		La	nd Description	
			360	
		OIL CON	_	
Section B.	Note: All dis	talces DIST.	XXXXXX	
This is to certify that the information in Section A above is true and complete to the test of my knowledge and belief.  El Paso Natural Gas Company			066	900
Operator			<b>1</b>	<b>X</b>
ORIGINAL SIGNED A.M. SMITH			SF 07809	,
Farmington, New Perico			***	<b>XX</b>
		SECT	28	
THIS PLAT IS RE-ISSUED TO SHOW				
DAKOTA DEDICATION. 5 24 60	:	· <del></del>	<b>X</b>	
	,		**	XN .
		John Janes	VIIII III	77777
	0 330 660 990	1320 1650 1980 2373 Scale 4 inch	2640 - 2000 - 1500 - 10 es equal I mile	30 503 :
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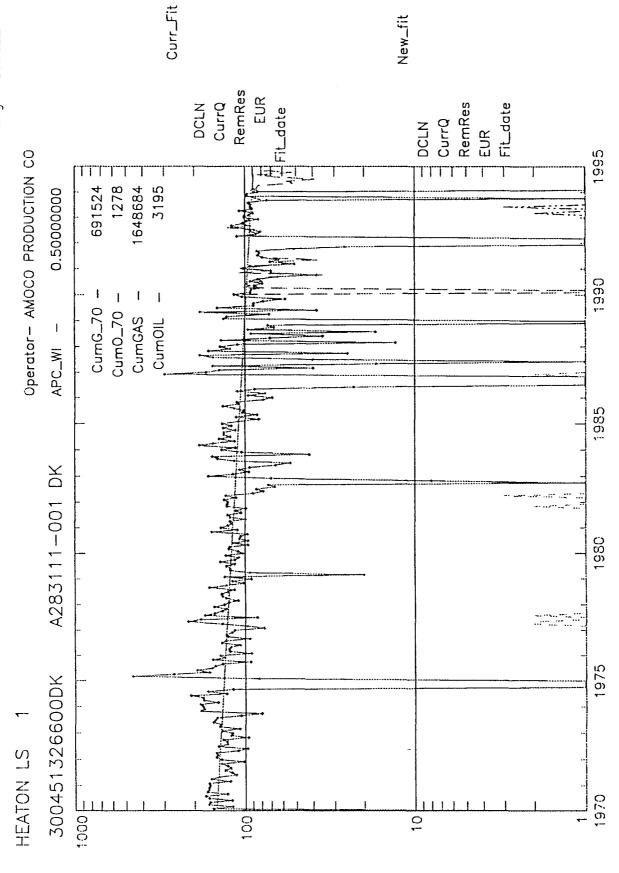
This is to certify that the above plat was prepared from field notes of a total surveys made by me or under my supervision and that the same are true units are to the best of my knowledge and belief.

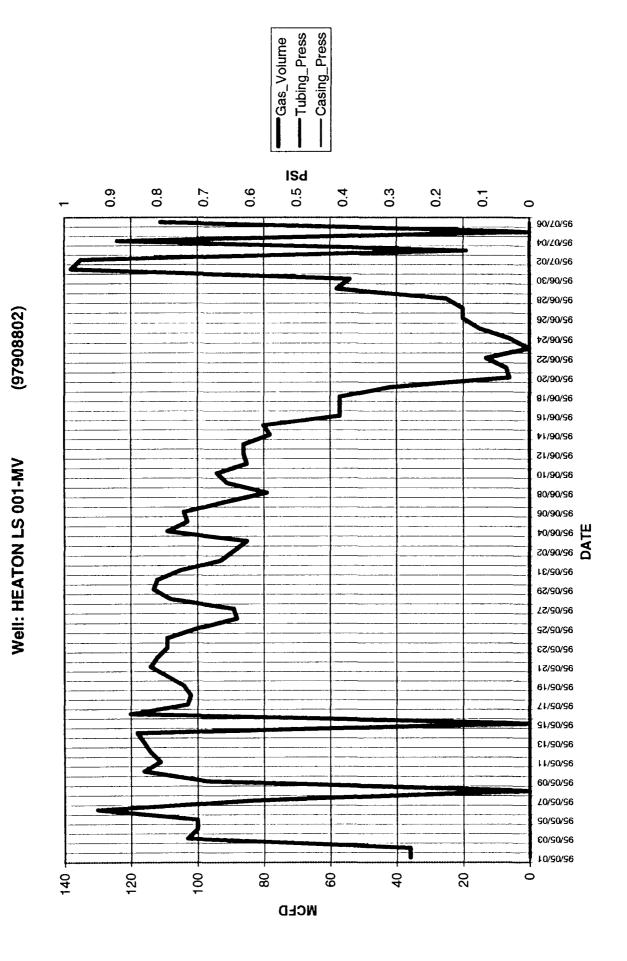
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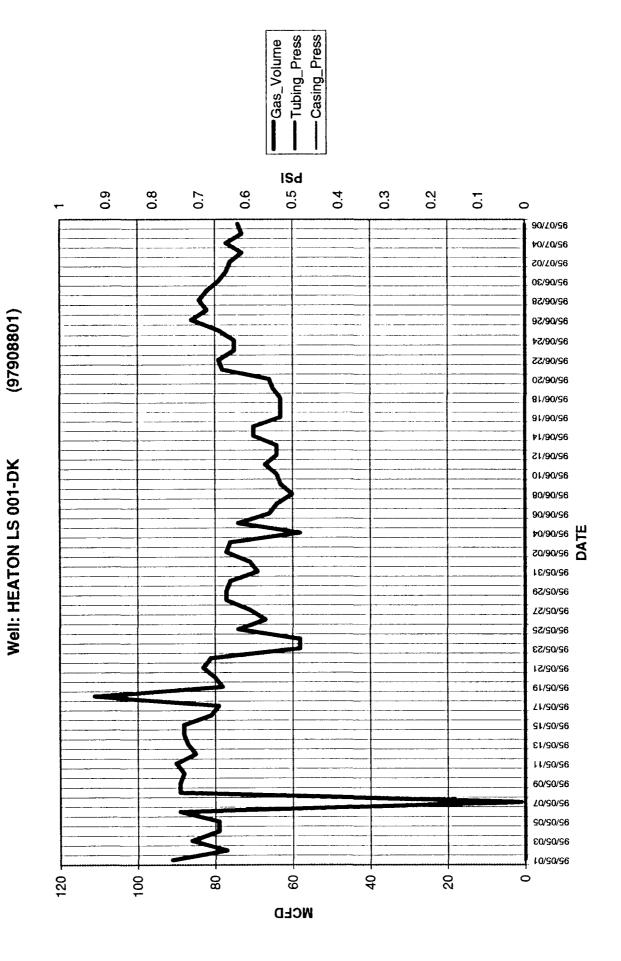
NOTE:

Date Surveyor JUNE 7,/1952 6. O. Vracker









## **Amoco Production Company**

Offset Operator Plat Heaton Com LS 1 T31N-R11W Sec. 28 Basin Dakota Formation

#### **R11W**

		<del></del>
20	21	22
29	0 HEATON LS 1  1 28 1	27 3
32	33	34

**R11W** 

1 Amoco Production Company

## **Amoco Production Company**

Offset Operator Plat Heaton Com LS 1 T31N-R11W Sec. 28

## Blanco Mesaverde Formation

#### D11W

	R11W		_
20	21 ①	②	
29	1 28	③ 27	T 31 N
32	<u>4</u> 33	② 34	

**R11W** 

- Amoco Production Company
   Meridian Oil Production Inc.
   Basin Minerals Inc.

- (4) Conoco Inc.

## LIST OF ADDRESSES FOR OFFSET OPERATORS

Heaton LS #1

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

2 Conoco, Inc.10 Desta Drive WestMidland, Texas 79705

3 Basin Minerals, Inc.C/O Walsh Eng. and Prod. Corp.204 N. AuburnFarmington, NM 87401

# ESTIMATED BOTTOMHOLE PRESSURES BY FORMATION Heaton LS #1

MV Perforations at 4928-4968' midperf at 4948' DK Perforations at 6814-7040' midperf at 6927'

6/94 shut in pressures --- MV =512 PSIG DK =380 PSIG

GRADIENT = 0.08 PSI/FT

MV BHP = 512 PSIG + 4948' X 0.08 PSIG = 908 PSIG

DK BHP = 380 PSIG +6927' X 0.08 PSIG = 934 PSIG