



Southern

Rockies

Business

Unit

San Juan Operations Center

October 16, 1996

Frank Chavez
New Mexico Oil Conservation Division
1000 Rio Brazos Drive
Aztec, New Mexico 87410

RECEIVED
OCT 17 1996

OIL CONSERVATION
BOARD

Dear Mr. Chavez,

Subject: Downhole Commingled Zone Allocation Proposal - Ludwick A #1E
Unit D, Section 19, Township 30 North, Range 10 West, NMPM
San Juan County, New Mexico
Blanco-Mesaverde and Basin-Dakota

In accordance with Administrative Order **DHC-1248** approved by William Lemay on **June 7, 1996**, we are to work with your offices in establishing a suitable allocation method to be used to allocate production on a monthly basis among the commingled zones. This letter is a proposal to allocate production from the **Ludwick A #1E** based on the "subtraction method", whereby a rate of decline has been established for the **Dakota** which will be the basis for future allocation to the **Dakota**, and the balance of production will be allocated to the combined **Mesaverde**.

Attachment No. 1 is the historical production used to establish the decline of the **Dakota**, and is illustrated as a decline curve in Attachment No. 2. Based on these calculations, production from the **Dakota** will decline as illustrated on Attachment No. 3. Attachment No. 4 is an example of the subtraction method and the numbers used are for illustrating how threshold production is calculated for the **Dakota**, and used as the denominator in the "subtraction" equation ($\text{Actual Combined Flow} - \text{Dakota Threshold Volume} = \text{Mesaverde Allocated Volume}$).

We would like to begin using this method beginning with September 1996 production month, and continue this method of allocation until such time that the allocation percentages stabilize, at which time we would request to establish a fixed rate allocation method.

Please advise me if this method meets with your approval.

Very Truly Yours,

Jim P. Shaheen
Sr. Business Analyst - Farmington

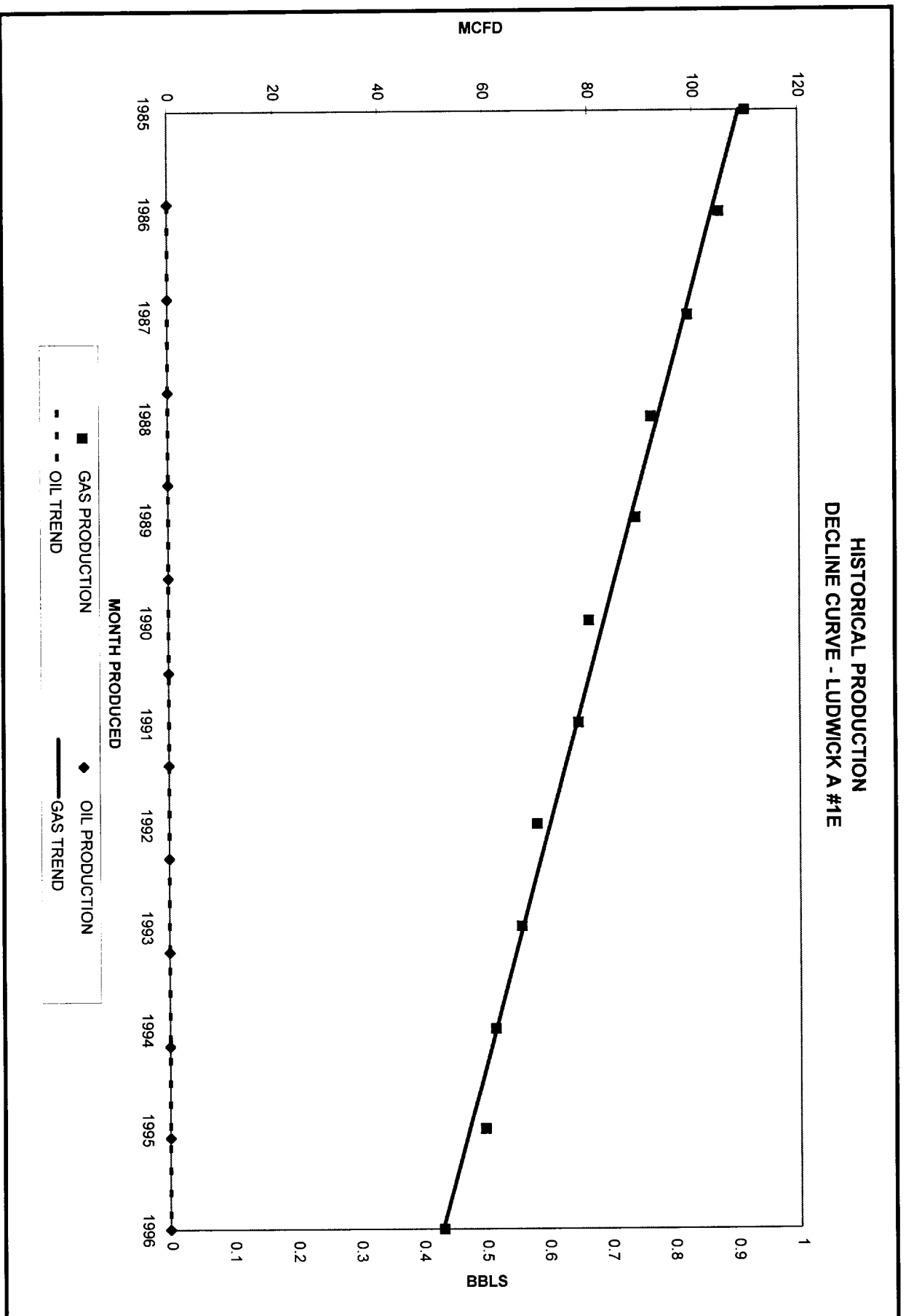
Attachments

cc w/attach: Pam Staley - Amoco Denver
Mike Kutas - Amoco Denver
Well File - Denver

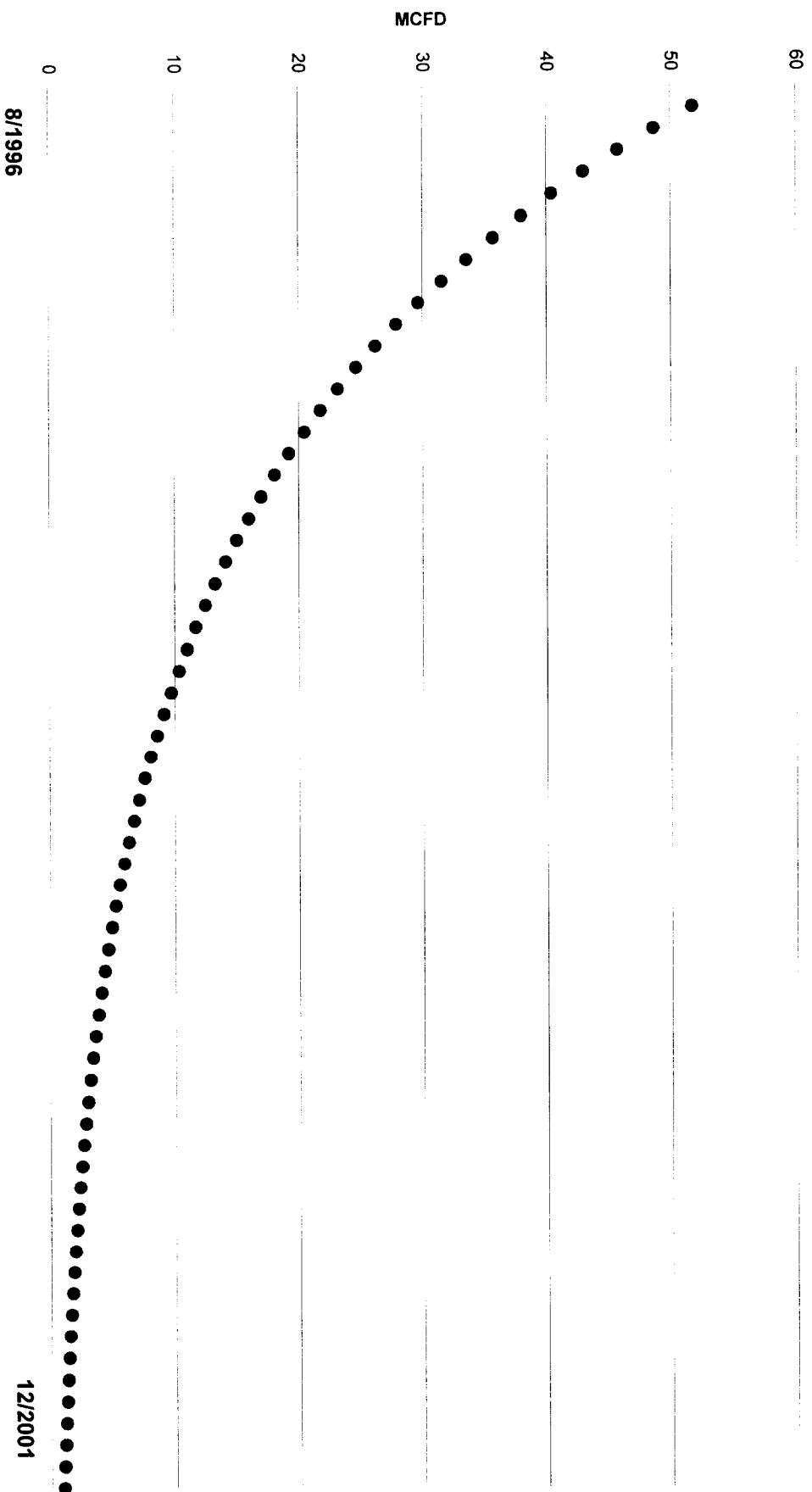
LUDWICK A #1E DAKOTA DECLINE

ATTACHMENT NO. 1

DATE	PERIOD	PRODUCTION DECLINE BASIS		DECLINE CALCULATIONS	
		MCFD		GAS	OIL
1985	1		110.0 M	-5.1958042	0
1986	2		105.0 Qi	108.9102564	0
1987	3		99.0 Qf	51.75641026	0
1988	4		92.0 Decline	0.061997993	#DIV/0!
1989	5		89.0 Yint	114.1060606	0
1990	6		80.0		
1991	7		78.0		
1992	8		70.0		
1993	9		67.0		
1994	10		62.0		
1995	11		60.0		
1996	12		52.0		



FUTURE PRODUCTION DECLINE CURVE
LUDWICK A #1E
(8/1996-12/2001)



LUDWICK A #1E DAKOTA/MESAVERDE MONTHLY PRODUCTION ALLOCATION

ATTACHMENT NO.4

Production Months	Production Period	GAS Est. Prod. MCFD	Flow Hrs.	Flow Days	DK Threshold Volume	Actual Combined Monthly Flow - Meter 94787	DK Allocation HZ 01	%DK HZ 01	MV Allocation HZ 02	%MV HZ 02
08/1996	1	51.8	423	17.63	912.21	11928	912.21	7.65%	11015.79	92.35%
09/1996	2	48.6	588	24.50	1191.80	11881	1191.80	10.05%	10669.20	89.95%
10/1996	3	45.7	588	24.50	1120.16	9000	1120.16	12.45%	7879.84	87.55%
11/1996	4	43.0	588	24.50	1052.82	8000	1052.82	13.16%	6947.18	86.84%
12/1996	5	40.4	588	24.50	989.53	7000	989.53	14.14%	6010.47	85.86%
01/1997	6	38.0	588	24.50	930.04	6000	930.04	15.50%	5069.96	84.50%
02/1997	7	35.7	588	24.50	874.13	5000	874.13	17.48%	4125.87	82.52%
03/1997	8	33.5	588	24.50	821.59	4000	821.59	20.54%	3178.41	79.46%
04/1997	9	31.5	588	24.50	772.20	3000	772.20	25.74%	2227.80	74.26%
05/1997	10	29.6	588	24.50	725.77	2000	725.77	36.29%	1274.23	63.71%
06/1997	11	27.8	588	24.50	682.14	1000	682.14	68.21%	317.86	31.79%
07/1997	12	26.2	588	24.50	641.14	500	500.00	100.00%	0.00	0.00%
12/2001	65	1.0		0.00	0.00		0.00	#DIV/0!	0.00	#DIV/0!