Amoco Production Company

Petroleum Center Building
501 Airport Drive
Farmington, New Mexico 87401
505-325-8841

S. D. Blossom
District Superintendent

January 26, 1984

New Mexico Oil Conservation Division
1000 Rio Brazo Road
Aztec, NM 87410

New Mexico Oil Conservation Division ✓
Box 2088
Santa Fe, NM 87501

File: DHS-38-986.510

C. A. McAdams "B" No. 1
1850' FSL x 1650' FEL, Section 28, T27N, R10W
San Juan County, New Mexico
Commingling Application

Amoco Production Company requests approval to downhole commingle production from the Angels Peak Gallup and Basin Dakota pools in the subject well. The commingling will utilize a producton packer set between the two zones at 6287' and a sliding sleeve at 6256' to produce up the 2-3/8" tubing (see Attachment No. 1).

The commingling of the Gallup and Dakota pools is necessary to produce the remaining recoverable oil and gas reserves from the Gallup formation in the subject well. The Gallup was produced from November 1959 through August 1967 before reaching its economic limit. High operating costs due to numerous rod related problems made continued operations uneconomical. The zone was temporarily abandoned in January 1968 pending higher oil prices. Working-over and producing the zone as a stand-up Gallup is not economically feasible due to the low recoverable reserves and high operating costs. Since the Gallup cannot flow and does not have sufficient pressure to cycle a plunger, the only way to recover the Gallup reserves is to produce the Gallup using the Dakota pressure. The proposed commingling will not adversely affect either zone for the following reasons:

1. Neither zone will be damaged by water production from the other zone. The Dakota averages 1 BWPM and the offsetting Gallup wells average 1 BWPM.

2. Neither zone has a history of liquid hydrocarbon sensitivity and should not be damaged by either zone's production.

3. Several offsets have had good success in downhole commingling Gallup and Dakota production. The most recent commingles are Amoco Production Company's Jack Frost B No. 1E, Order No. MC-2913, one-half mile to the southeast, and Dugan Production Company's McAdams No. 3, Order No. R-5313, one mile to the southeast.

4. Both zones produce gas of a similar composition and heating value, so there will be no loss of value due to the commingling.

5. Both zones have common ownership, so there will be no problem with allocating royalty or working interest payments.

6. The bottom hole pressure of the Gallup is 52.3 percent of the Dakota bottom hole pressure.

In compliance with NMOCD Rule 303C, we have attached two copies of the following:

1. Name and address of the operator.

2. Lease name, well number, well location, and names of pools to be commingled.

3. A plat showing acreage dedications and ownership of offsetting leases (Attachments 2, 3, and 4).

4. A current Dakota productivity test (Attachment 5). A Gallup test is not available since the well has been shut-in since January 1968. We request that an exception be granted to the 30 day test requirement since the well has not produced for 16 years. We have a Dakota deliverability test scheduled for February 16, 1984, to meet the 30 day requirement for the Dakota formation.

5. Production decline curves for both formations (Attachments 6 and 7).

6. Estimated bottom hole pressure data (Attachment 8).

7. A description of fluid characteristics for each zone to show fluid compatability (Attachments 9 and 10). Oil gravities are different, but oil prices are the same. Neither zone produces more than 1 BW per month.

8. Gas analysis showing that the value of commingled production will not be less than any one of the individual streams (Attachments 11 and 12). A gas analysis for the Gallup in the subject well is not available. We have attached a copy of a Gallup analysis from the offsetting Jack Frost "B" No. 1E.

9. A formula for allocating production to each of the commingled zones (Attachment 13).

10. A statement that all offset operators have been notified in writing of the proposed commingling (Attachment 14).

To allocate production to the individual Dakota and Gallup horizons, we recommend the following:

1. Allocate 59.8 percent of the gas production to the Dakota formation and 92.8 percent of the oil production to the Gallup formation.

2. After 30 days, we will conduct a commingled deliverability test and submit a Form C-116. Allocation for the two formations will be according to the difference between commingled deliverability and the Dakota deliverability test scheduled to start on February 16, 1984.

We would appreciate prompt handling of this matter so we can initiate Gallup production before potential summer sales restrictions.

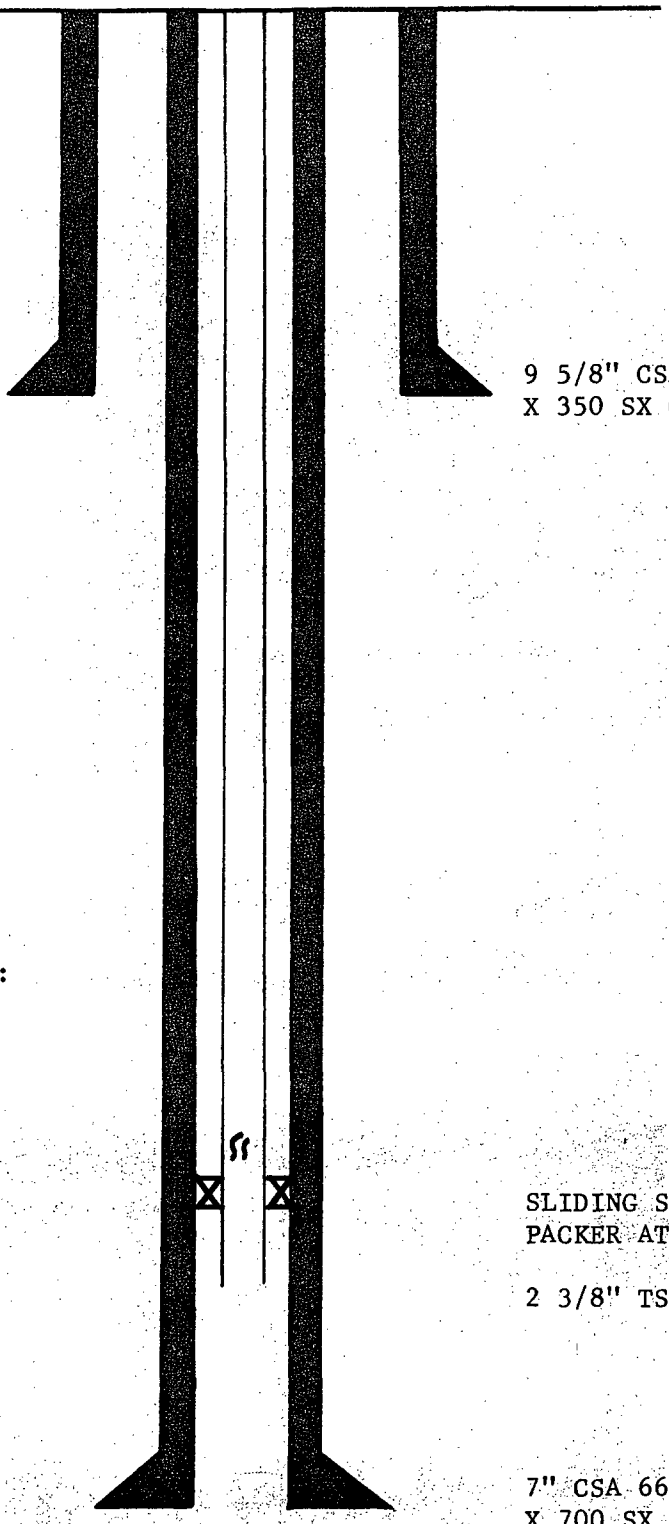
Very truly yours,

TDC/tk
Attachments

AM6

1850' FSL X 1650' FEL SEC. 28 T27N R10W
SAN JUAN COUNTY, NEW MEXICO

GL 6109'



9 5/8" CSA 495' (32.3#)
X 350 SX CMT

ANGEL PEAK GALLUP PERFS:
5438'-5458' 5538'-5558'
5613'-5657' 5704'-5738'
5704'-5738'

BASIN DAKOTA PERFS:
6362'-6402' 6419'-6459'

SLIDING SLEEVE AT 6256'
PACKER AT 6287'

2 3/8" TSA 6357'

7" CSA 6601' (20#)
X 700 SX CMT

PBD 6554'
TD 6602'

Amoco Production Company	SCALE:
C. A. MCADAMS B NO. 1	DRG. NO.

Well file

Form C-128
Revised 5/1/57

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Section A. Attachment No. 2 Date October 28, 1959

Operator PAN AMERICAN PETROLEUM CORPORATION Lease C. A. McADAMS "B"

Well No. 1 Unit Letter J Section 29 Township 27 North Range 10 West NMPM

Located 1850 Feet From South Line, 1650 Feet From East Line

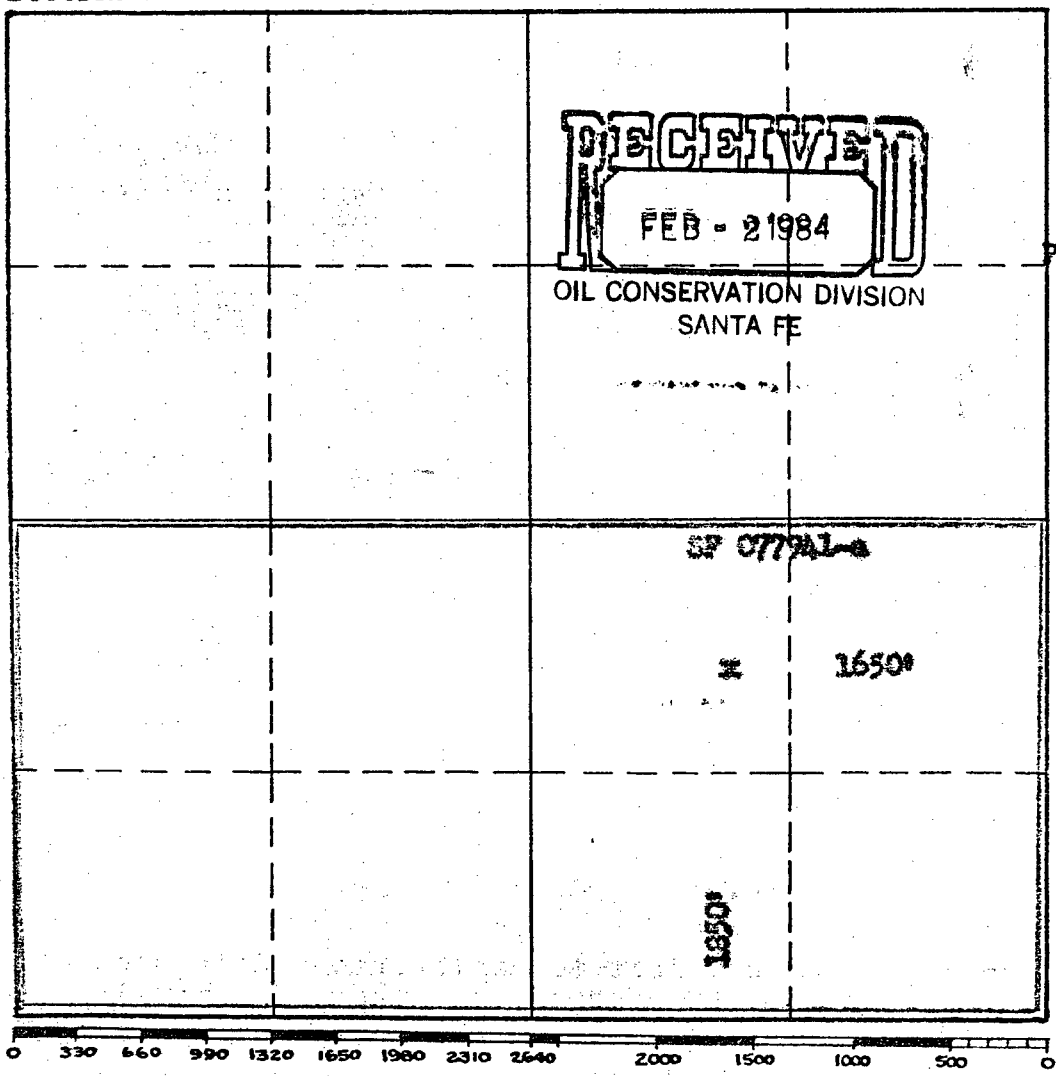
County San Juan G. L. Elevation 6100 Dedicated Acreage 320 Acres

Name of Producing Formation Dakota Pool Angels Peak Dakota

1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below? Yes ____ No X .
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes X No ____. If answer is "yes," Type of Consolidation Joint acreage holdings
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description
Note: Form C-128 filed to show revised acreage dedication for Dakota zone in accordance with the provisions of Order No. R-1287 dated November 21, 1958.	

Section B



(See instructions for completing this f...

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

PAN AMERICAN PETROLEUM CORPORATION
(Operator)

ORIGINAL SIGNED BY
R. M. Bauer, Jr. R. M. Bauer, Jr.
(Representative)

Box 487, Farmington, New Mexico
Address

This is to certify that the well location shown on the plat in Section B 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 Aug. 15, 1958

Original
/s/ James P. Leese
Registered Professional Engineer and/or Land Surveyor.

Certificate No. 1463

Revised 5/1/57

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Section A. Attachment No. 3 Date October 23, 1959

Operator PAN AMERICAN PETROLEUM CORPORATION Lease C. A. MOADAMS "B"

Well No. 1 Unit Letter J Section 28 Township 27 North Range 10 West NMPM

Located 1650 Feet From South Line, 1650 Feet From East Line

County San Juan G. L. Elevation 6100 Dedicated Acreage 80 Acres

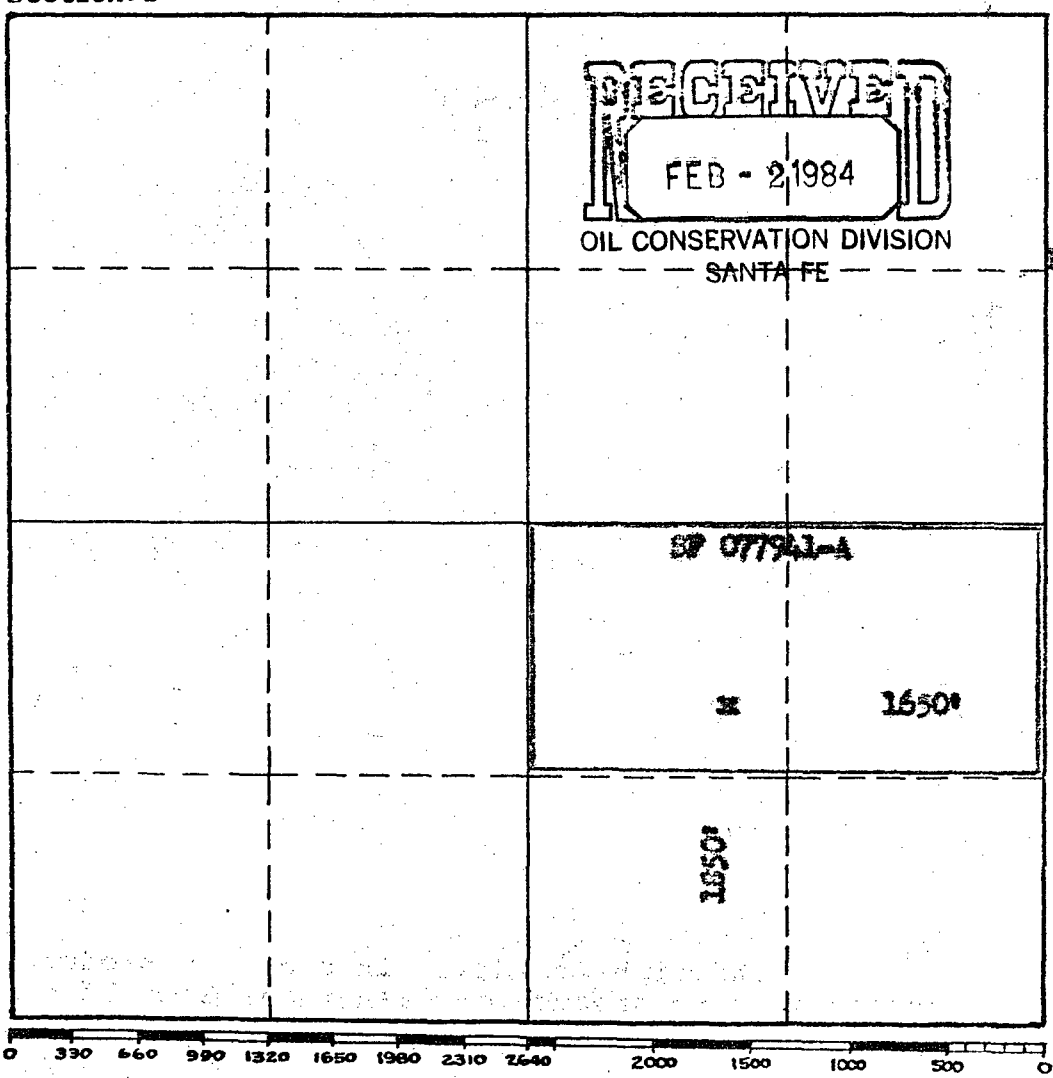
Name of Producing Formation Gallup Pool Angels Peak Gallup

1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below? Yes _____ No X .
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes X No _____. If answer is "yes," Type of Consolidation Joint acreage holdings
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description

Note: Form C-128 filed to show revised acreage dedication for Gallup zone in accordance with spacing provisions for the Angels Peak Gallup Field.

Section B



RECEIVED
FEB - 2 1984
OIL CONSERVATION DIVISION
SANTA FE

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

PAN AMERICAN PETROLEUM CORPORATION
(Operator)

ORIGINAL SIGNED BY R. M. Bauer, Jr.
R. M. Bauer, Jr.
(Representative)

Box 487, Farmington, New Mexico
Address

This is to certify that the well location shown on the plat in Section B 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.

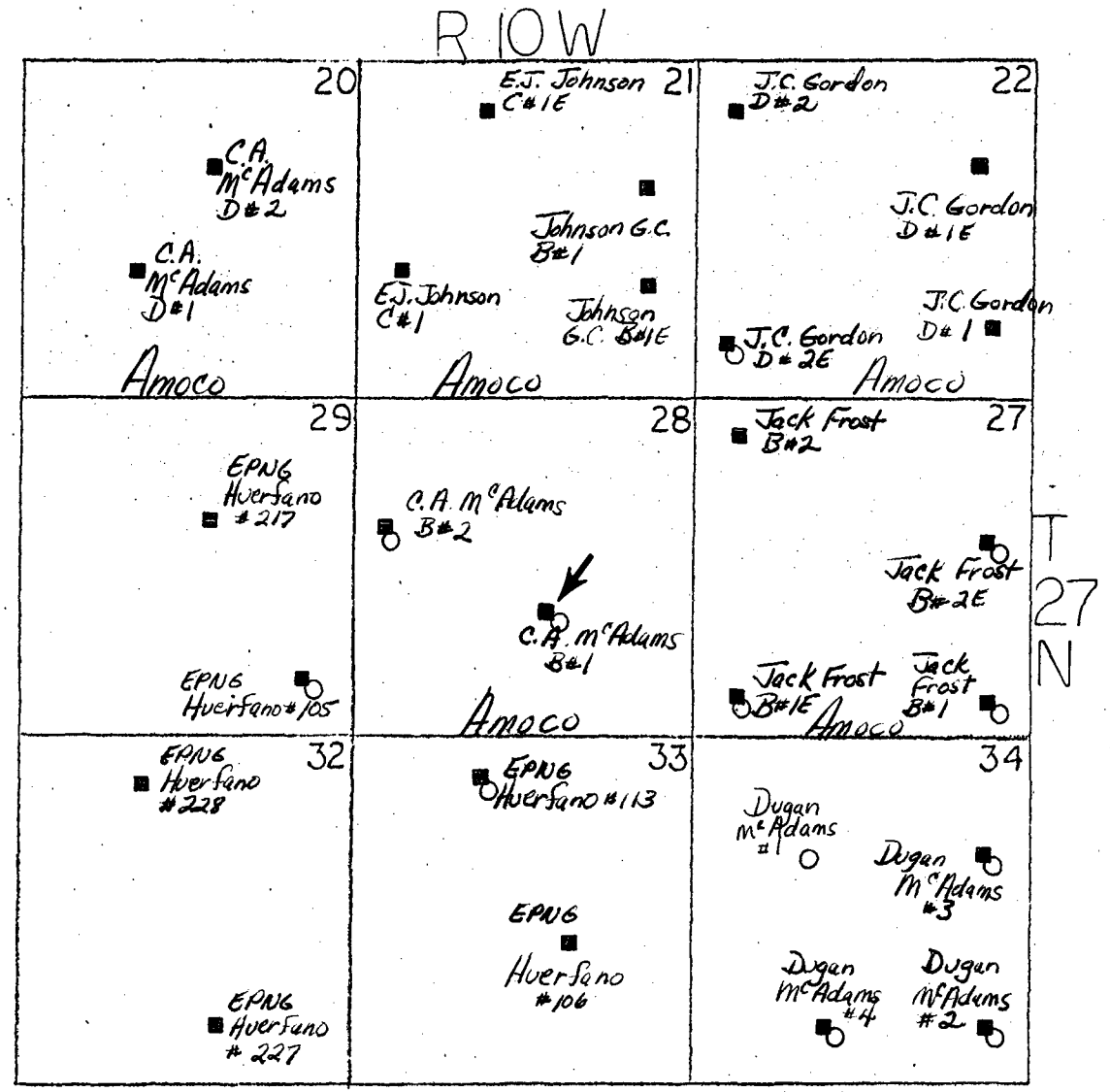
Date Surveyed Aug. 15, 1958

Original
/s/ James P. Leese
Registered Professional Engineer and/or Land Surveyor.

Certificate No. 1463

(See instructions for completing this form on the reverse side)

C. A. MCADAMS B #1



■ BASIN DAKOTA WELLS

O ANGEL PEAK GALLUP WELLS

Attachment No. 4

RPT, #AOI
PAGE 35

DELIVERABILITY TEST REPORT FOR 19 83

Attachment No. 5

Form C122-A
Revised 8-77

POOL NAME	POOL SLOPE	FORMATION	COUNTY
BASIN	n=.75	DAKOTA	SJ

73-750

COMPANY			WELL NAME AND NUMBER		
AMOCO PRODUCTION CO			CA MCADAMS B #1 DK		
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
J	23	27	10	EL PASO NATURAL GAS CO	
CASING O.D. - INCHES	CASING I.D. - INCHES	SET AT DEPTH - FEET	TUBING O.D. - INCHES	TUBING I.D. - INCHES	TOP - TUBING PERF. - FEET
7.000	6.456	6601	2.375	1.995	6357
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 5704 TO 6459		CASING	TUBING X	0.730	4641
DATE OF FLOW TEST			DATE SHUT-IN PRESSURE MEASURED		
FROM 05/18/83 TO 05/26/83			06/02/83		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt)	(b) Flowing Tubing Pressure (DWt)	(c) Flowing Meter Pressure (DWt)	(d) Flow Chart Static Reading	(e) Meter Error (Item c - Item d)	(f) Friction Loss (a-c) or (b-c)	(g) Average Meter Pressure (Integr.)
0	290	289	284	5	1	288
(h) Corrected Meter Pressure (g+e)	**(i) Avg. Wellhead Press. P_t = (h+f)**	**(j) Shut-in Casing Pressure (DWt)**	**(k) Shut-in Tubing Pressure (DWt)**	**(l) P_c = higher value of (j) or (k)**	**(m) Del. Pressure P_d = 50 %P_c**	**(n) Separator or Dehydrator Pr. (DWt) for critical flow only**
293	294	0	734	734	367	

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D	Quotient of $\frac{\text{Item c}}{\text{Item d}}$	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$	Corrected Volume
82	1.0176	1.0088	Q = 83 MCF/D

WORKING PRESSURE CALCULATION

$(1-e^{-s})$	$(F_c Q_m)^2 (1000)$	$R^2 = (1-e^{-s})(F_c Q_m)^2 (1000)$	P_t^2	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.286	603	174	86436	USE PT2	294

DELIVERABILITY CALCULATION

$$D = Q\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n = 83 \left(\frac{404067}{452320}\right)^n = (0.8933)^n = 0.9189 = 76 \text{ MCF/D}$$

REMARKS:

SUMMARY

Item h	293	Psia
P_c	734	Psia
Q	83	MCF/D
P_w	294	Psia
P_d	367	Psia
D	76	MCF/D

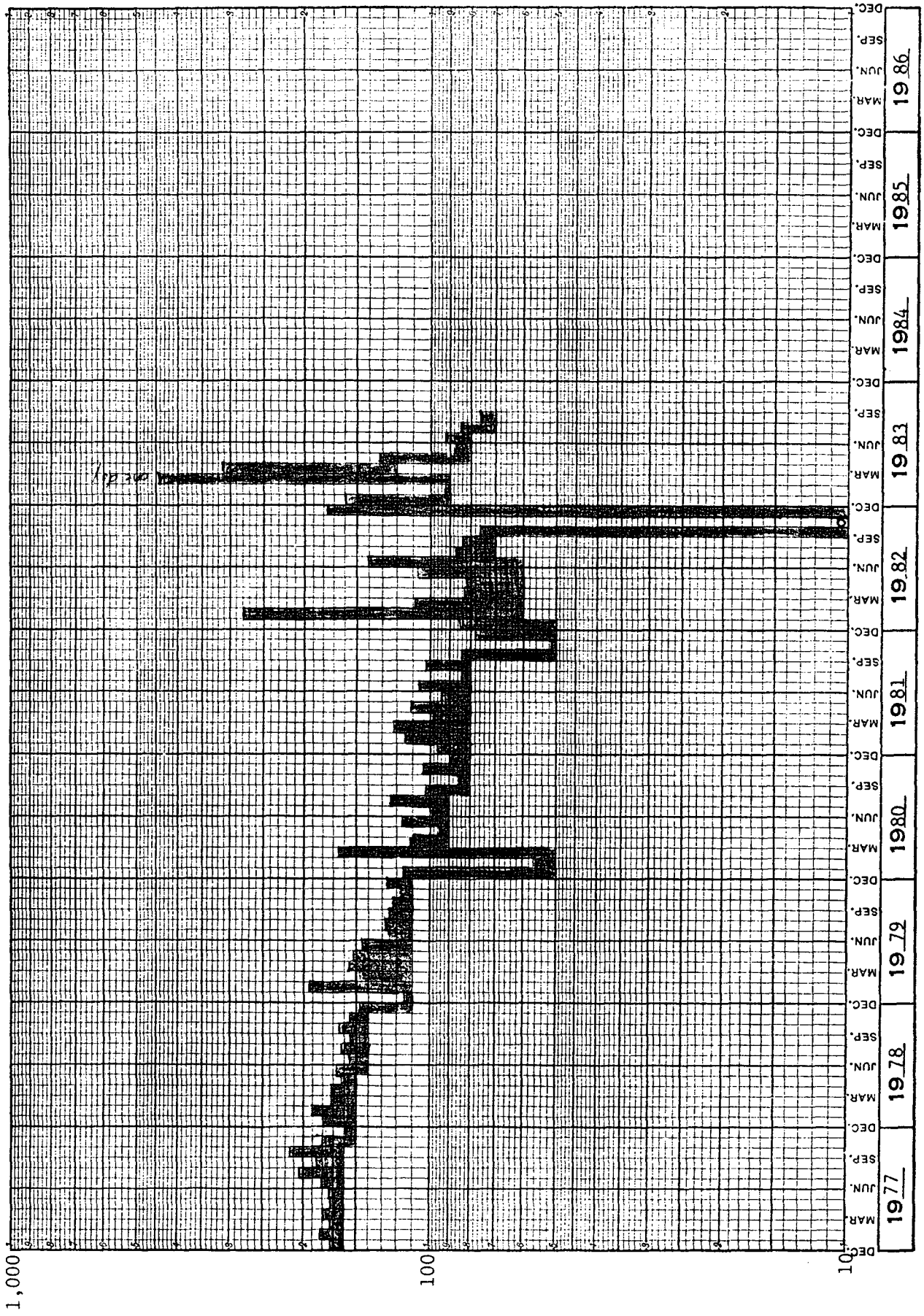
Company AMOCO PRODUCTION CO
By D. W. SHOEMAKER
Title DISTRICT ENGINEER
Witnessed by
Company

RECEIVED
JUL 28 1983
OIL CON. DIV.
DIST. 3

06/27/83

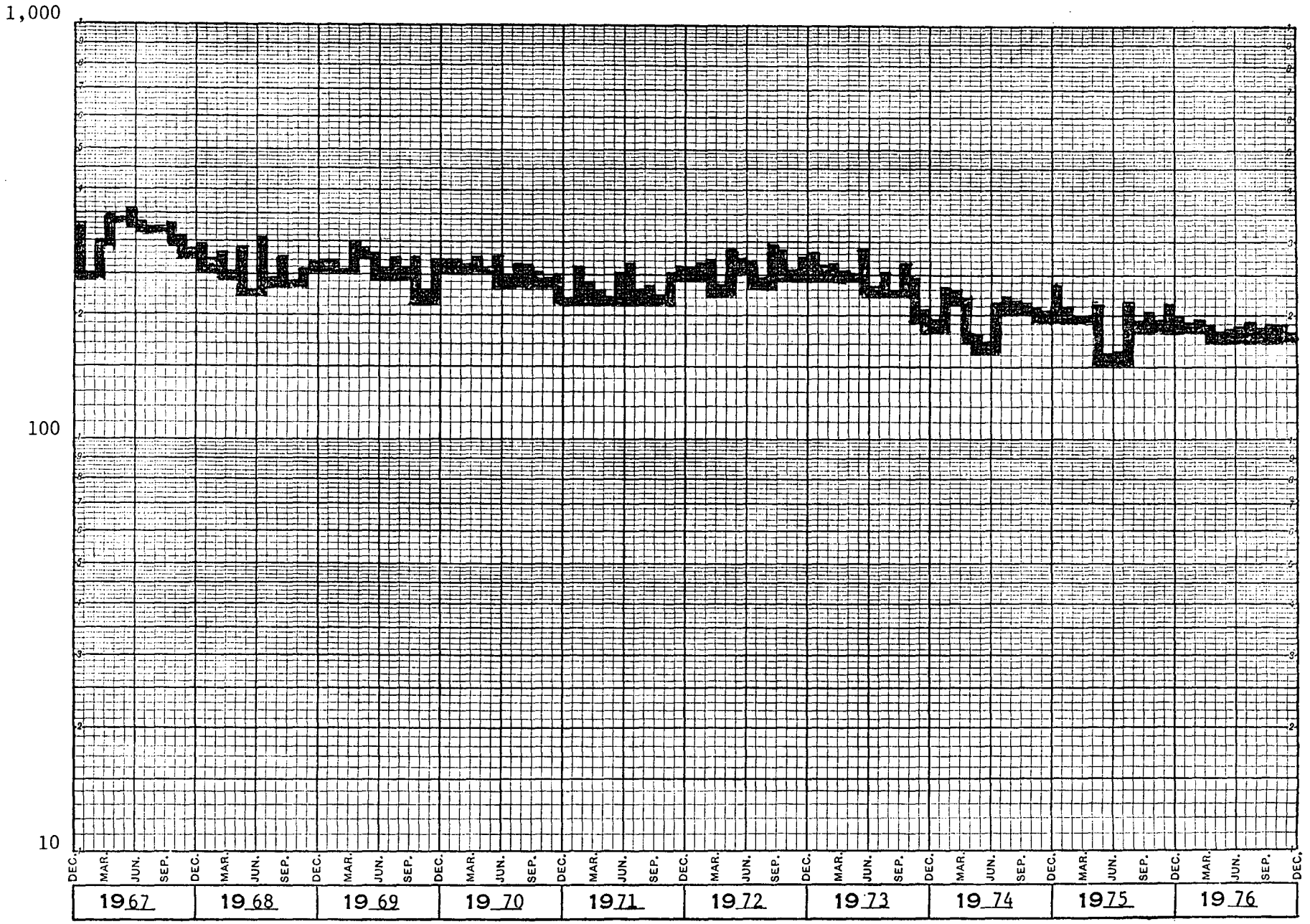
10030 73-750

Attachment No. 6

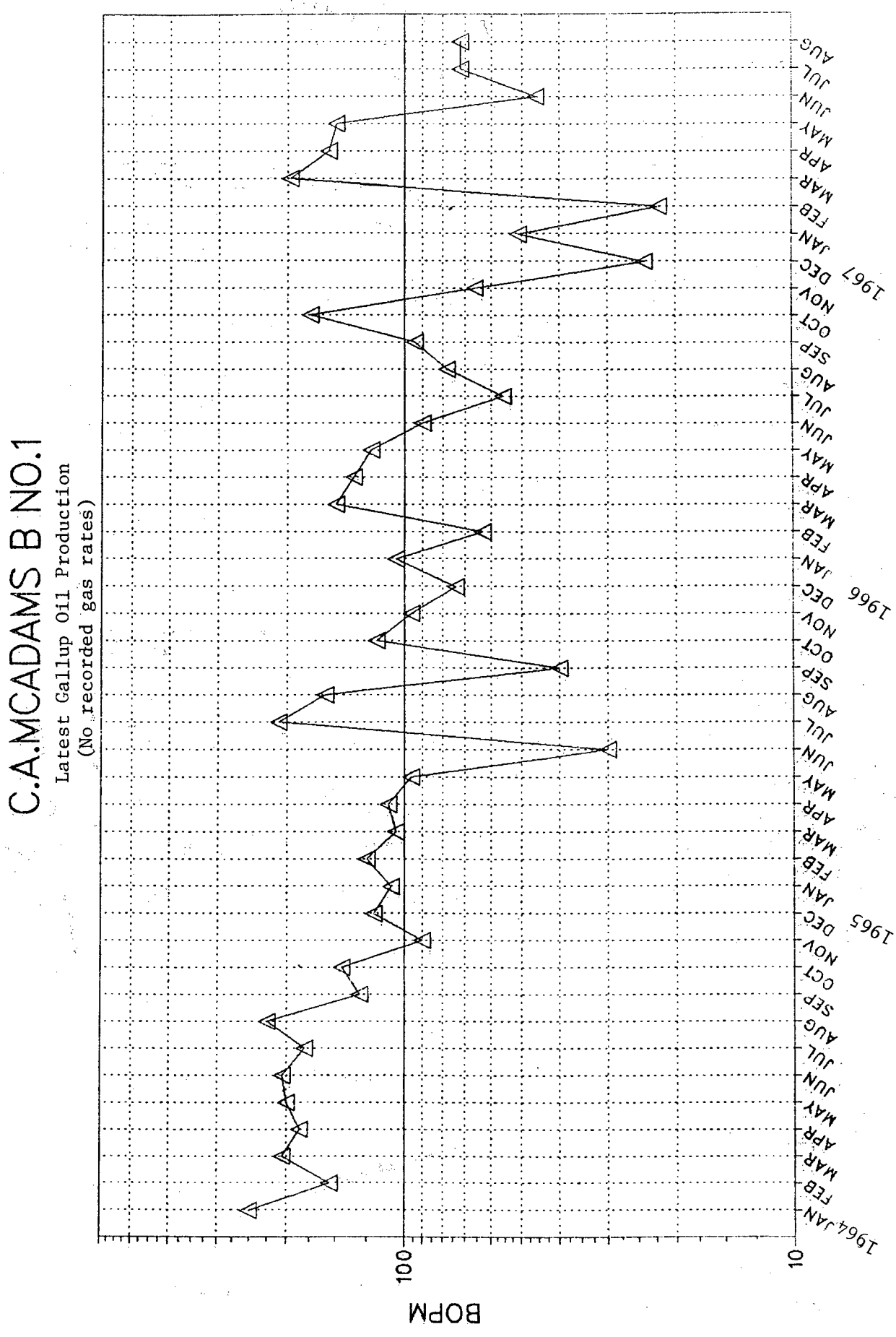


Basin Dakota
C. A. McAdams "B" No. 1

Basin Dakota
C. A. McAdams "B" No. 1



Attachment No. 7



Attachment No. 8

C.A. McAdams "B" No. 1

BHP Data

Dakota

Amerada Bomb Extension =0.595 Pressure = 904 psig

Gallup

Amerada Bomb Extension =0.313 Pressure = 473 psig

Ratio Gallup to Dakota BHP = $\frac{473}{904}$ = 52.3%

Attach No. 9

CRUDE OIL RUN TICKET LEDGER - AMOCO PRODUCTION COMPANY (USA)

SEC 20 / LAC SF D	C TICKET NUMBER	PROD. DATE	TANK NUMBER	UNCORRECTED BBLS (1)	CORRECTED BBLS (2)	TRUE GTY	PRICE CODE	PRICE/ BBL.	OIL VALUE (8)	RTE GROUP	OUTPUT	TAX
ARILLA GAS COM #035-C (CONTINUED)				205.06	202.51				5,994.30			
290526 00 3				1,879.70 (26 WPT)								
				1,746.20 (27 WPT)								
				58.73 (31 BBL TAX)								
												484.46 (38 TOT TAX)
												5,509.84 (39 TOT VAT)
									37.30 (32 ADV TAX)			
									224.79 (33 PRD TAX)			
									163.64 (34 MSC TAX)			
5,994.30 (23 VAL-T,C)												
				205.06	202.51				5,994.30			
CARILLA GAS COM #035-C				205.06	202.51	50.2	613332 001	29.600	5,994.30	519 0	06 160 00	
290526 02 9	018301	06/09	000813									
290526 02 9												
												425.73 (38 TOT TAX)
												5,568.57 (39 TOT VAT)
									37.30 (32 ADV TAX)			
									224.79 (33 PRD TAX)			
									163.64 (34 MSC TAX)			
5,994.30 (23 VAL-T,C)												
				213.29	210.77	43.8	613332 001	29.600	6,238.79	519 0	06 160 00	
MARCOTTE GAS COM	013558	06/17	000710	149.69	148.15	44.0	613332 001	29.600	4,385.24	519 0	06 160 00	
290544 00 6	005921	06/18	000426	55.56	55.11	43.8	613332 001	29.600	1,631.26	519 0	06 160 00	
290544 00 6	005922	06/18	000425	418.54	414.03				12,255.29			
290544 00 6				3,843.03 (26 WPT)								
290544 00 6				3,541.94 (27 WPT)								
												960.17 (38 TOT TAX)
												11,295.12 (39 TOT VAT)
									166.03 (32 ADV TAX)			
									459.57 (33 PRD TAX)			
									334.57 (34 MSC TAX)			
12,255.29 (23 VAL-T,C)												
				149.69	148.15	44.0	613332 001	29.600	4,385.24	519 0	06 160 00	
MARCOTTE GAS COM				55.56	55.11	43.8	613332 001	29.600	1,631.26	519 0	06 160 00	
290544 01 4	005921	06/18	000426	205.25	203.26				6,016.50			
290544 01 4	005922	06/18	000425									
290544 01 4												
												471.38 (38 TOT TAX)
												5,545.12 (39 TOT VAT)
									81.51 (32 ADV TAX)			
									225.62 (33 PRD TAX)			
									164.25 (34 MSC TAX)			
6,016.50 (23 VAL-T,C)												
				213.29	210.77	43.8	613332 001	29.600	6,238.79	519 0	06 160 00	
MARCOTTE GAS COM				213.29	210.77				6,238.79			
290544 02 2	013558	06/17	000710									
290544 02 2												
												488.79 (38 TOT TAX)
												5,750.00 (39 TOT VAT)
									84.52 (32 ADV TAX)			
									233.95 (33 PRD TAX)			
									170.32 (34 MSC TAX)			
6,238.79 (23 VAL-T,C)												
				202.77	201.05	55.0	616767 001	29.600	5,951.08	519 0	06 160 0	
MCADAMS, C A, /B/ #2 Dakota	031560	06/01	000293	202.77	201.05				5,951.08			
290574 01 1				1,866.14 (26 WPT)								
290574 01 1				1,727.56 (27 WPT)								
												441.94 (38 TOT TA
												5,509.14 (39 TOT VA
									56.31 (32 ADV TAX)			
									223.17 (33 PRD TAX)			
									162.46 (34 MSC TAX)			
5,951.08 (23 VAL-T,C)												
				202.77	201.05	55.0	616767 001	29.600	5,951.08	519 0	06 160	
C A MCADAMS /B/ WELL #1	031560	06/01	000293	202.77	201.05				5,951.08			
290574 03 7												
290574 03 7												
												441.94 (38 TOT T
												5,509.14 (39 TOT V
									56.31 (32 ADV TAX)			
									223.17 (33 PRD TAX)			
									162.46 (34 MSC TAX)			
5,951.08 (23 VAL-T,C)												
				23.33	23.12	54.5	616767 001	29.600	684.35	519 0	06 16	
MCADAMS, C A, /C/	031700	06/07	000440									
290575 00 0												

Attachment No. 10

T	FLAC	SF	C D	TICKET NUMBER	PROD. DATE	TANK NUMBER	UNCORRECTED BBLS (1)	CORRECTED BBLS (2)	TRUE GTY	PRICE CODE	PRICE/ BBL.	OIL VALUE (8)	RTE GROUP	SUMM OUTPUT	TAX
ELLIOTT GAS COM /G/ (CONTINUED)															
	290251	02	4				81.64	81.14				2,401.74			
											22.73 (32 ADV TAX)				
											90.07 (33 PRD TAX)			178.37	(38 TOT TAX)
											65.57 (34 MSC TAX)			2,223.37	(39 TOT VAT)
							2,401.74 (23 VAL-T,C)								
FEDERAL GAS COM /D/															
30	290288	00	0	031984	06/21	000906	232.97	229.97	54.5	616767 001	29.600	6,807.11	519	0 06 160	00
	290288	00	0				232.97	229.97				6,807.11			
							2,134.58 (26 WPT)				64.30 (32 ADV TAX)				
							1,976.09 (27 WPT)				255.27 (33 PRD TAX)			505.40	(38 TOT TAX)
											185.83 (34 MSC TAX)			6,301.71	(39 TOT VAT)
							6,807.11 (23 VAL-T,C)								
FEDERAL GAS COM /D/															
30	290288	02	6	031984	06/21	000906	232.97	229.97	54.5	616767 001	29.600	6,807.11	519	0 06 160	00
	290288	02	6				232.97	229.97				6,807.11			
											64.30 (32 ADV TAX)				
											255.27 (33 PRD TAX)			505.40	(38 TOT TAX)
											185.83 (34 MSC TAX)			6,301.71	(39 TOT VAT)
							6,807.11 (23 VAL-T,C)								
FROST, JACK, /B/															
30	290302	00	9	031657	06/05	000959	37.61	37.37	51.8	616767 001	29.600	1,106.22	519	0 06 160	00
30	290302	00	9	031660	06/05	001069	38.23	37.88	54.8	616767 001	29.600	1,121.18	519	0 06 160	00
30	290302	00	9	A31985	06/21	000961	224.58	220.85	44.3	616767 001	29.600	6,537.16	519	0 06 160	00
	290302	00	9				300.42	296.10				8,764.56			
							378.27 (26 WPT)				82.93 (32 ADV TAX)				
							350.18 (27 WPT)				328.67 (33 PRD TAX)			650.87	(38 TOT TAX)
											239.27 (34 MSC TAX)			8,113.69	(39 TOT VAT)
							8,764.56 (23 VAL-T,C)								
FROST, JACK, /B/															
30	290302	01	7	031657	06/05	000959	186.48	185.32	51.8	616767 001	29.600	5,485.40	519	0 06 160	00
30	290302	01	7	031660	06/05	001069	189.59	187.82	54.8	616767 001	29.600	5,559.54	519	0 06 160	00
	290302	01	7				376.07	373.14				11,044.94			
							3,463.48 (26 WPT)				104.51 (32 ADV TAX)				
							3,206.27 (27 WPT)				414.19 (33 PRD TAX)			820.23	(38 TOT TAX)
											301.53 (34 MSC TAX)			10,224.71	(39 TOT VAT)
							11,044.94 (23 VAL-T,C)								
FROST, JACK, /B/ 1E Dakota															
30	290302	04	1	051657	06/05	000959	186.48	185.32	51.8	616767 001	29.600	5,485.40	519	0 06 160	00
30	290302	04	1	031660	06/05	001069	189.59	187.82	54.8	616767 001	29.600	5,559.54	519	0 06 160	00
	290302	04	1				376.07	373.14				11,044.94			
											104.51 (32 ADV TAX)				
											414.19 (33 PRD TAX)			820.23	(38 TOT TAX)
											301.53 (34 MSC TAX)			10,224.71	(39 TOT VAT)
							11,044.94 (23 VAL-T,C)								
FROST, JACK, /B/ 1E Gallup Offset															
30	290302	05	8	A31985	06/21	000961	224.58	220.85	44.3	616767 001	29.600	6,537.16	519	0 06 160	00
	290302	05	8				224.58	220.85				6,537.16			
											61.86 (32 ADV TAX)				
											245.14 (33 PRD TAX)			485.46	(38 TOT TAX)
											178.46 (34 MSC TAX)			6,051.70	(39 TOT VAT)
							6,537.16 (23 VAL-T,C)								
FROST, JACK, /B/															
30	290302	07	4	031657	06/05	000959	37.61	37.37	51.8	616767 001	29.600	1,106.22	519	0 06 160	00
							38.23	37.88	54.8	616767 001	29.600	1,121.18	519	0 06 160	00

Attachment No. 11

04/17/82

EL PASO NATURAL GAS COMPANY
MEASUREMENT DEPARTMENT
POST OFFICE BOX 1492
EL PASO, TEXAS 79999

CHROMATOGRAPHIC GAS ANALYSIS REPORTS

AMOCO PRODUCTION CO.
ATTN: R. A. CONNER
501 AIRPORT DRIVE
FARMINGTON, N. M. 87401

METER STA 73751

ANAL DATE 04 08 82 METER STATION NAME C A MC ADAMS B #2 OPER 0203

TYPE CODE	SAMPLE DATE	EFF. DATE	USE MOS.	SCALE	H2S GRAINS	LOCATION
00	04 07 82	04 13 82	06	1		4 F 03

	NORMAL MOL%	GPM
C O 2	1.05	.000
H 2 S	.00	.000
N2	.84	.000
METHANE	79.42	.000
ETHANE	10.96	2.930
PROPANE	4.96	1.364
ISO-BUTANE	.64	.209
NORM-BUTANE	1.23	.388
ISO-PENTANE	.31	.113
NORM-PENTANE	.28	.101
HEXANE PLUS	.31	.135
TOTALS	100.00	5.240

SPECIFIC GRAVITY .718

MIXTURE HEATING VALUE
(BTU/CF AT 14.73 PSIA,60 DEGREES,DRY) 1,227

RATIO OF SPECIFIC HEATS 1.281

Attachment No. 12

CHEMICAL & GEOLOGICAL LABORATORIES

P.O. Box 2794
Casper, Wyoming 82602

GAS ANALYSIS REPORT

Company AMOCO Production Co. Date 5-4-82 Lab. No. 40525-1
Well No. Jack Frost Gas Com. B-1E Location M 27-27N-10W
Field Angel Peak Gallup Formation Gallup
County San Juan Depth
State New Mexico Sampling point
Line pressure 480 psig; Sample pressure 470 psig; Temperature ° F; Container number RC1167
Remarks
Flowing pressure ---------- 480 psig
(4-26-82)

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Component	Mole % or Volume %	Gallons per MCF
Oxygen	0	
Nitrogen	1.71	
Carbon dioxide	0.54	
Hydrogen sulfide	Nil	
Methane	79.90	
Ethane	10.28	
Propane	5.22	1.432
Iso-butane	0.48	0.157
N-butane	1.36	0.428
Iso-pentane	0.23	0.084
N-pentane	0.22	0.080
Hexanes & higher	0.06	0.028
Total	100.00	2.209

GPM of pentanes & higher fraction 0.192

Gross btu/cu. ft. @60° F. & 14.7 psia (dry basis) 1203
Specific gravity (calculated from analysis) 0.704
Specific gravity (measured) 0.705

Remarks:

Attachment No. 13

Allocation Formula For Gallup and Dakota Production

C.A. McAdams "B" No. 1

Gas Production

10/82 to 9/83 (Inclusive) Dakota averaged 111 MCFD
Gallup estimated to be 75 MCFD (based upon average offset Gallup production)

$$\text{Percent of total gas production to Dakota} = \frac{\text{Dakota}}{\text{Gallup + Dakota}}$$

$$\% = \frac{111}{111 + 75} = 59.7\%$$

Oil Production

10/82 to 9/83 (Inclusive) Dakota averaged 5.4 BOPM
9/66 to 8/67 (Inclusive - last production) Gallup averaged 93.8 BOPM

$$\text{Percent of total oil production to Gallup} = \frac{\text{Gallup}}{\text{Gallup + Dakota}}$$

$$\% = \frac{93.8}{93.8 + 5.4} = 94.5\%$$

Attachment No. 14

Amoco Production Company
Petroleum Center Building
501 Airport Drive
Farmington, New Mexico 87401
505-325-8841

S. D. Blossom
District Superintendent

January 26, 1984

Dugan Production Company
P. O. Box 208
Farmington, NM 87499

El Paso Natural Gas Company
P. O. Box 990
Farmington, NM 87499

File: DHS-23-400.1

C. A. McAdams B No. 1
1850' FSL x 1650' FEL, Section 28, T27N, R10W
San Juan County, New Mexico
Proposed Downhole Commingling

Amoco Production Company is requesting approval from the New Mexico Oil Conservation Division to downhole commingle production from the Angels Peak Gallup and Basin Dakota formations in the subject well. Attached are an eight section plat showing the well to be commingled along with offsetting producing wells and a wellbore diagram showing the proposed commingling technique (see Attachments No. 1 and 2).

If you have any questions regarding the commingling operations, please contact Tim Clawson at our Farmington District Office (325-8841). If you have any objectives to commingled production from the subject well, address them to:

New Mexico Oil Conservation Division
Attn: Mr. Joe Ramey
Box 2088
Santa Fe, NM 87501

If you have objections, please forward a copy of your objectives to this office. No response to this letter will be taken as your approval to the commingling application.

Very truly yours,

TDC/tk
Attachments

AM6

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

OIL CONSERVATION DIVISION
BOX 2088
SANTA FE, NEW MEXICO 87501

DATE 2-1-84

RE: Proposed MC_____
Proposed DHC a
Proposed NSL_____
Proposed SWD_____
Proposed WFX_____
Proposed PMX_____

Gentlemen:

I have examined the application dated 2-1-84

for the Amoco C.A. McAdams #1 J-28-27N-10W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve

Yours truly,

Ernest V. Chavez