



PHILLIPS PETROLEUM COMPANY

FARMINGTON, NEW MEXICO 87401
5525 HWY. 64 NBU 3004

November 4, 1994

United States Department of Interior
Bureau of Land Management
Farmington Resource Area
1235 La Plata Highway
Farmington, New Mexico 87401

State of New Mexico
Commissioner of Public Lands
Attn: Mr. Floyd O. Prando
P. O. Box 1148
Santa Fe, New Mexico 87504-1148

State of New Mexico
Oil Conservation Division
Attn: Mr. William J. Lemay
State Land Office Building
P. O. Box 2088
Santa Fe, New Mexico 87504

Re: **SAN JUAN 29-5 UNIT**
#14-08-001-437
FRUITLAND PARTICIPATING AREA APPLICATION
INITIAL EXPANSION - EFFECTIVE 01/29/90
FIRST EXPANSION - EFFECTIVE 04/01/90
SECOND EXPANSION - EFFECTIVE 02/01/92
THIRD EXPANSION - EFFECTIVE 10/01/92
FOURTH EXPANSION - EFFECTIVE 11/01/92
FIFTH EXPANSION - EFFECTIVE 01/01/93
NON-COMMERCIAL WELL DETERMINATIONS
SAN JUAN 29-5 UNIT WELLS
201, 206, 214, 216, 217, 218, 224, 229 & 231
RIO ARRIBA COUNTY, NEW MEXICO
GF-5396

Gentlemen:

Pursuant to Section 11(a) of the San Juan 29-5 Unit Agreement, #14-08-001-437, approved November 21, 1952, Phillips Petroleum as Unit Operator, determined on the dates listed below that the wells listed below are capable of producing unitized substances in paying quantities from the Fruitland Formation. Therefore, application for the Initial Participating Area, First Expansion, Second

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Expansion, Third Expansion, Fourth Expansion and Fifth Expansion of the Fruitland Formation is submitted for your review as follows:

INITIAL PARTICIPATING AREA - EFFECTIVE JANUARY 29, 1990

<u>Drilling Block</u>	<u>New Acres</u>	<u>Well Number</u>
Lots 1(40.39), 2 (40.27), S/2 NE/4, SE/4 (E/2) Section 6-T29N-R5W	320.66	203

The San Juan 29-5 #203 Well was completed January 29, 1990. The Fruitland Coal formation was tested on that date, with cumulative gas production of 1.01 BCF through December 1993. The spacing unit for this well is described as Lots 1 (40.39), 2 (40.27), S/2 NE/4, SE/4 Section 6-T29N-R5W containing 320.66 acres

FIRST EXPANDED PARTICIPATING AREA - EFFECTIVE APRIL 1, 1990

<u>Drilling Block</u>	<u>New Acres</u>	<u>Well Number</u>
W/2 Section 22-T29N-R5W	320.00	213

The San Juan 29-5 #213 Well was completed March 14, 1990. The Fruitland Coal formation was tested on March 17, 1990, with cumulative gas production of 138,365 MCF through December 1993. The spacing unit for this well is described as W/2 Section 22-T29N-R5W, containing 320.00 acres.

SECOND EXPANDED PARTICIPATING AREA - EFFECTIVE FEBRUARY 1, 1992

<u>Drilling Block</u>	<u>New Acres</u>	<u>Well Number</u>
E/2 Section 33-T29N-R5W	320.00	223

The San Juan 29-5 #223 Well was completed on January 7, 1992. The Fruitland Coal formation was tested on January 8, 1992, with cumulative gas production of 112,058 MCF through December 1993. The spacing unit for this well is described as E/2 Section 33-T29N-R5W, containing 320.00 acres.

THIRD EXPANDED PARTICIPATING AREA - EFFECTIVE OCTOBER 1, 1992

<u>Drilling Block</u>	<u>New Acres</u>	<u>Well Number</u>
Lots 3(40.17), 4(40.05), S/2 NW/4, SW/4 W/2 Section 6-T29N-R5W	320.22	225

Lots 1(35.22), 2(34.32), 3(38.96), 4(18.22), N/2 NW/4, Tr. 37(113.28) (W/2) Section 7-T29N-R5W	320.00	226
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The San Juan 29-5 #225 Well was completed on September 16, 1992. The Fruitland Coal formation was tested on September 16, 1992, with cumulative gas production of 235,636 MCF through December 1993. The spacing unit for this well is described as W/2 Section 6-T29N-R5W, containing 320.22 acres.

The San Juan 29-5 #226 was completed on October 1, 1992. The Fruitland Coal formation was tested on September 30, 1992, with cumulative gas production of 447,955 MCF through December 1993. The spacing unit for this well is Lots 1, 2, 3, 4, N/2 NW/4, Tract 37 (W/2) Section 7-T29N-R5W, containing 320.00 acres.

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FOURTH EXPANDED PARTICIPATING AREA - EFFECTIVE NOVEMBER 1, 1992

<u>Drilling Block</u>	<u>New Acres</u>	<u>Well Number</u>
Lots 3 (40.86), 4 (40.74), S/2 NW/4, SW/4 (W/2) Section 4-T29N-R5W	321.60	219

The San Juan 29-5 #219 Well was completed on October 28, 1992. The Fruitland Coal formation was tested on October 27, 1992, with cumulative gas production of 29,784 MCF through December 1993. The spacing unit for this well is described as Lots 3, 4, S/2 NW/4, SW/4 (W/2) Section 4-T29N-R5W, containing 321.60 acres.

FIFTH EXPANDED PARTICIPATING AREA - EFFECTIVE JANUARY 1, 1993

<u>Drilling Block</u>	<u>New Acres</u>	<u>Well Number</u>
Lots 1 (40.65), 2 (40.59), S/2 NE/4, SE/4 (E/2) Section 5-T29N-R5W	321.24	230

The San Juan 29-5 #230 Well was completed December 21, 1992. The Fruitland Coal formation was tested on December 17, 1992, with cumulative gas production of 16,055 MCF through December 1994. The spacing unit for this well is Lots 1, 2, S/2 NE/4, SE/4 (E/2) Section 5-T29N-R5W, containing 321.24 acres.

NOTICE OF NON-COMMERCIAL WELLS

The wells listed below have been determined to be unable to produce in paying quantities and will be operated on a drill block basis:

<u>Drilling Block</u>	<u>Net Acres</u>	<u>Well Number</u>
W/2 Section 33-T29N-R5W	320.00	216
W/2 Section 20-T29N-R5W	320.00	206
W/2 Section 34-T29N-R5W	320.00	217
E/2 Section 34-T29N-R5W	320.00	218
W/2 Section 27-T29N-R5W	320.00	201
E/2 Section 27-T29N-R5W	320.00	214
W/2 Section 23-T29N-R5W	320.00	224
E/2 Section 7-T29N-R5W	320.00	229
Lots 3, 4, S/2 NW/4, SW/4 Section 5-T29N-R5W	321.00	231

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The San Juan 29-5 #216 Well was completed on June 24, 1990. The Fruitland Coal formation was tested on July 2, 1990 with cumulative gas production of 91,946 MCF through December 1993. The spacing unit for this well is described as W/2 Section 33-T29N-R5W, containing 320 acres.

The San Juan 29-5 #206 well was completed on June 11, 1990. After this well was cavitated, gas was TSTM. The well is currently shut-in and the Fruitland Coal interval has never produced. The spacing unit for this well is described as W/2 Section 20-T29N-R5W, containing 320.00 acres.

The San Juan 29-5 #217 well was completed on December 13, 1990. At the direction of the sole working interest owner in the drilling block, the well was not fracture treated and has never produced. The spacing unit for this well is described as W/2 Section 34-T29N-R5W, containing 320.00 acres.

The San Juan 29-5 #218 well was completed on November 27, 1990. At the direction of the sole working interest owner in the drilling block, the well was not fracture treated and has never produced. The spacing unit for this well is described as E/2 Section 34-T29N-R5W, containing 320.00 acres.

The San Juan 29-5 #201 well was completed on December 20, 1991. The Fruitland Coal formation was tested on January 8, 1992, with cumulative gas production of 58,776 MCF through December 1993. The spacing unit for this well is described as W/2 Section 27-T29N-R5W, containing 320.00 acres.

The San Juan 29-5 #214 well was completed on December 30, 1991. The Fruitland Coal formation was tested on January 8, 1992, with cumulative gas production of 68,939 MCF through December 1993. The spacing unit for the well is described as E/2 Section 27-T29N-R5W, containing 320.00 acres.

The San Juan 29-5 #224 well was completed on June 21, 1992. The Fruitland Coal formation was not initially tested but perforated and fracture treated twice due to the fact that the coal appeared not to be cleared and was extremely tight. The well was placed in a producing status on September 15, 1993, and has cumulative gas production of 3,479 MCF through December 1993. The spacing unit for this well is W/2 Section 23-T29N-R5W, containing 320.00 acres.

The San Juan 29-5 #229 well was completed on October 5, 1992. The Fruitland Coal formation was tested on October 5, 1992 with results TSTM. Following cavitation the well was produced for approximately one month producing less than 2 MCF. The well has been shut-in pending further evaluation. The spacing unit for this well is described as E/2 Section 7-T29N-R5W, containing 320.00 acres.

The San Juan 29-5 #231 well was completed on October 13, 1992. The Fruitland Coal formation was tested on October 12, 1992. The well produces less than 5 MCFD with a trace of water. The spacing unit for this well is Lots 3, 4, S/2 NW/4, SW/4 Section 5-T29N-R5W, containing 321.00 acres.

Enclosed herewith are Schedules I, II, III, IV, V and VI for the initial through Fifth Expanded Participating Areas for the Fruitland Coal formation of the San Juan 29-5 Unit Area. These schedules describe the Participating Areas and indicate the percentages of unitized substances allocated to the unit tracts according to the Fruitland ownership of such tracts.

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Unless this application is disapproved in whole or in part the Initial, First Expanded, Second Expanded, Third Expanded, Fourth Expanded and Fifth Expanded Participating Areas are effective January 29, 1990, April 1, 1990, February 1, 1992, October 1, 1992, November 1, 1992 and January 1, 1993, respectively. Copies of this application, with enclosures, are being sent to the working interest owners on the attached sheet.

Very truly yours,

PHILLIPS PETROLEUM COMPANY



Patrick H. Noah
Area Landman
San Juan Basin
(505) 599-3410

**SAN JUAN 29-5 UNIT
WORKING INTEREST OWNERS**

Amoco Production Company

Bolack Minerals Company

Benson-Montin-Greer Drilling Company

Grand Valley Gas Company

Koch Exploration Company

James E. McElvain, Executor
Estate of Carl McElvain

T.H. McElvain Oil & Gas

Meridian Oil Production Inc.

James M. Raymond
Maydell Miller Mast Trust
Corrine Miller Gay Trust

San Juan Basin Partnership

Vaughan-McElvain Energy

Williams Production Company

The Wiser Oil Company

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
 SCHEDULE I
 THE 000 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
SF - 078410	29N 5W SEC. 6 LOTS 1, 2, S/2 NE/4, SE/4	320.66		TRACT: 006			100.000000
			ORRI:		5.000000	5.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		87.850000	67.650000	
			PHILLIPS - SAN JUAN PARTNERS, L.P.		14.850000	14.850000	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29 - 5 UNIT # 203

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
SCHEDULE I
RECAPITULATION

DESCRIPTION OF COMMITTED LANDS IN PARTICIPATING AREA:
SECTION 6 : LOTS 1, 2, S/2 NE/4, SE/4

DESCRIPTION ON NON-COMMITTED LANDS IN PARTICIPATING AREA:

TOTAL COMMITTED: 320.66

TOTAL ACRES NON-COMMITTED:

0.00

TOTAL NUMBER OF ACRES IN PARTICIPATING AREA:

320.66

DATE 10/28/94

PHILLIPS PETROLEUM COMPANY
 SCHEDULE II
 THE 001 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
SF-078410	29N 5W	320.66		TRACT: 006			50.051509
	SEC. 6	LOTS 1, 2, S/2 NE/4, SE/4					
			ORRI:		5.000000	5.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		67.650000	67.650000	
			PHILLIPS-SAN JUAN PARTNERS, L.P.		14.850000	14.850000	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #203

FEE	29N 5W	79.00		TRACT: 027			12.331034
	SEC. 22	W/2 NW/4					
		LESS 1 ACRE					
			ORRI:		4.000000	4.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		68.470000	68.470000	
			PHILLIPS-SAN JUAN PARTNERS, L.P.		15.030000	15.030000	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

FEE	29N 5W	1.00		TRACT: 027A			0.156089
	SEC. 22	ONE ACRE OUT OF					
		SW CORNER OF W/2 NW/4					
			ORRI:		0.000000	0.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		71.750000	71.750000	
			PHILLIPS-SAN JUAN PARTNERS, L.P.		15.750000	15.750000	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

EFFECTIVE 90/04/01

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
 SCHEDULE II
 THE 001 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
29N 5W	SW/4 LESS TWO ACRES	238.00		TRACT: 038	0.000000	0.000000	37.149190
SEC. 22	OUT OF NE/4 SW/4, E/2 NW/4				12.500000	12.500000	
			ORRI:				
			ROYALTY:				
			WORKING INTEREST:				
			PHILLIPS - SAN JUAN PARTNERS, L.P.		71.750000	71.750000	
			WILLIAMS PRODUCTION COMPANY		15.750000	15.750000	
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

FEE	29N 5W	SEC. 22	DESCRIPTION	NUMBER OF ACRES	TRACT: 038B	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
			TWO ACRES OUT OF	2.00		0.000000	0.000000	0.312178
			NE/4 SW/4, E/2 NW/4			12.500000	12.500000	
			MORE FULLY DESCRIBED IN					
			SAN JUAN 29-5 UNIT EXHIBIT "B"					
						71.750000	71.750000	
						15.750000	15.750000	
			WILLIAMS PRODUCTION COMPANY					
			TOTAL			100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
SCHEDULE II
RECAPITULATION

DESCRIPTION OF COMMITTED LANDS IN PARTICIPATING AREA:
SECTION 6 : LOTS 1, 2, S/2 NE/4, SE/4
SECTION 22 : W/2

DESCRIPTION ON NON-COMMITTED LANDS IN PARTICIPATING AREA:

TOTAL COMMITTED:

640.66

TOTAL ACRES NON-COMMITTED:

0.00

TOTAL NUMBER OF ACRES IN PARTICIPATING AREA:

640.66

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
 SCHEDULE III
 THE 002 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
NM-011348	29N 5W	80.00		TRACT: 004A			
	SEC. 33						
			ORRI:		5.000000	5.000000	8.327608
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		41.250000	41.250000	
			EL PASO PRODUCTION COMPANY		41.250000	41.250000	
			BOLACK MINERALS COMPANY				
			TOTAL		100.000000	100.000000	
							33.379135
REMARKS: SAN JUAN 29-5 UNIT #223							
SF-078410	29N 5W	320.66		TRACT: 006			
	SEC. 6						
			ORRI:		5.000000	5.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		87.650000	87.650000	
			PHILLIPS - SAN JUAN PARTNERS, L.P.		14.850000	14.850000	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	
							24.982825
REMARKS: SAN JUAN 29-5 UNIT #203							
NM-011350	29N 5W	240.00		TRACT: 017A			
	SEC. 33						
			ORRI:		5.000000	5.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		41.250000	41.250000	
			EL PASO PRODUCTION COMPANY		41.250000	41.250000	
			BOLACK MINERALS COMPANY				
			TOTAL		100.000000	100.000000	
							24.982825
REMARKS: SAN JUAN 29-5 UNIT #223							

PHILLIPS PETROLEUM COMPANY
SCHEDULE III
THE 002 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
SAN JUAN 29-5 UNIT AREA

DATE 10/26/94

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
29N 5W	W/2 NW/4	79.00		TRACT: 027	4.000000	4.000000	8.223513
SEC. 22	LESS 1 ACRE				12.500000	12.500000	
	ORRI:				68.470000	68.470000	
	ROYALTY:				15.030000	15.030000	
	WORKING INTEREST:						
	PHILLIPS - SAN JUAN PARTNERS, L.P.						
	WILLIAMS PRODUCTION COMPANY						
	TOTAL				100.000000	100.000000	
REMARKS: SAN JUAN 29-5 UNIT #213							
29N 5W	ONE ACRE OUT OF SW CORNER OF W/2 NW/4	1.00		TRACT: 027A	0.000000	0.000000	0.104095
SEC. 22					12.500000	12.500000	
	ORRI:				71.750000	71.750000	
	ROYALTY:				15.750000	15.750000	
	WORKING INTEREST:						
	PHILLIPS - SAN JUAN PARTNERS, L.P.						
	WILLIAMS PRODUCTION COMPANY						
	TOTAL				100.000000	100.000000	
REMARKS: SAN JUAN 29-5 UNIT #213							
29N 5W	SW/4 LESS TWO ACRES OUT OF NE/4 SW/4, E/2 NW/4	238.00		TRACT: 038	0.000000	0.000000	24.774634
SEC. 22					12.500000	12.500000	
	ORRI:				71.750000	71.750000	
	ROYALTY:				15.750000	15.750000	
	WORKING INTEREST:						
	PHILLIPS - SAN JUAN PARTNERS, L.P.						
	WILLIAMS PRODUCTION COMPANY						
	TOTAL				100.000000	100.000000	
REMARKS: SAN JUAN 29-5 UNIT #213							

EFFECTIVE 92/02/01

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
 SCHEDULE III
 THE 002 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
29N SW SEC. 22	TWO ACRES OUT OF NE/4 SW/4, E/2 NW/4 MORE FULLY DESCRIBED IN SAN JUAN 29-5 UNIT EXHIBIT 'B'	2.00	ORRI: ROYALTY: WORKING INTEREST: PHILLIPS-SAN JUAN PARTNERS, L.P. WILLIAMS PRODUCTION COMPANY	TRACT: 038B	0.000000 12.500000 71.750000 15.750000	0.000000 12.500000 71.750000 15.750000	0.208190
TOTAL						100.000000	100.000000

REMARKS: SAN JUAN 29-5 UNIT #213

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
SCHEDULE III
RECAPITULATION

DESCRIPTION OF COMMITTED LANDS IN PARTICIPATING AREA:

DESCRIPTION ON NON-COMMITTED LANDS IN PARTICIPATING AREA:

SECTION 6 : LOTS 1, 2, S/2 NE/4, SE/4
SECTION 22 : W/2
SECTION 33 : E/2

TOTAL COMMITTED: 960.66

TOTAL ACRES NON-COMMITTED: 0.00

TOTAL NUMBER OF ACRES IN PARTICIPATING AREA: 960.66

PHILLIPS PETROLEUM COMPANY
SCHEDULE IV
THE 003 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
SAN JUAN 29-5 UNIT AREA

DATE 10/26/94

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
SF-078277	29N SW SEC. 7 LOT 3	38.96		TRACT: 001A			2.433661
	ORRI:				4.000000	4.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				68.470000	68.470000	*
	SAN JUAN BASIN PARTNERSHIP				15.030000	15.030000	*
	WILLIAMS PRODUCTION COMPANY						
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT # 226

SF-078277	29N SW SEC. 7 LOTS 1, 2, N/2 NW/4	149.54		TRACT: 001B			9.341112
	ORRI:				4.000000	4.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				68.470000	68.470000	*
	SAN JUAN BASIN PARTNERSHIP				15.030000	15.030000	*
	WILLIAMS PRODUCTION COMPANY						
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT # 226

SF-078305	29N SW SEC. 6 SW/4	160.00		TRACT: 004			9.994503
	ORRI:				5.000000	5.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				67.650000	67.650000	*
	SAN JUAN BASIN PARTNERSHIP				14.850000	14.850000	*
	WILLIAMS PRODUCTION COMPANY						
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT # 225

PHILLIPS PETROLEUM COMPANY
 SCHEDULE IV
 THE 003 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA
 DATE 10/26/94

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
NM-011348	29N 5W SEC. 33 W/2 NE/4	80.00		TRACT: 004A			4.997292
	ORRI:				5.000000	5.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				41.250000	41.250000	
	EL PASO PRODUCTION COMPANY				41.250000	41.250000	
	BOLACK MINERALS COMPANY						
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #223

SF-078410	29N 5W SEC. 6 LOTS 1, 2, S/2 NE/4, SE/4	320.66		TRACT: 006			20.030233
	ORRI:				5.000000	5.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				67.650000	67.650000	
	PHILLIPS-SAN JUAN PARTNERS, L.P.				14.850000	14.850000	
	WILLIAMS PRODUCTION COMPANY						
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #203

SF-078410	29N 5W SEC. 6 LOTS 3, 4, S/2 NW/4	160.22		TRACT: 006C			10.008246
	ORRI:				5.000000	5.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				67.650000	67.650000	
	SAN JUAN BASIN PARTNERSHIP				14.850000	14.850000	
	WILLIAMS PRODUCTION COMPANY						
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #225

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
 SCHEDULE IV
 THE 003 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
NM-011350	29N 5W E/2 E/2, W/2 SE/4	240.00	ORRI: ROYALTY: WORKING INTEREST: EL PASO PRODUCTION COMPANY BOLACK MINERALS COMPANY	TRACT: 017A	5.000000 12.500000 41.250000 41.250000	5.000000 12.500000 41.250000 41.250000	14.991754
TOTAL					100.000000		100.000000

REMARKS: SAN JUAN 29-5 UNIT #223

FEE	29N 5W	121.04	TRACT: 024A					7.560842
	SEC. 7	TRACT 37 LESS NORTH 10.46 ACRES: LOT 4	ORRI: ROYALTY: WORKING INTEREST: SAN JUAN BASIN PARTNERSHIP WILLIAMS PRODUCTION COMPANY		4.000000 12.500000 68.470000 15.030000	4.000000 12.500000 68.470000 15.030000		
TOTAL					100.000000			100.000000

REMARKS: SAN JUAN 29-5 UNIT #226

FEE	29N 5W	10.46	TRACT: 024B					0.653391
	SEC. 7	NORTH 10.46 ACRES TRACT 37	ORRI: ROYALTY: WORKING INTEREST: SAN JUAN BASIN PARTNERSHIP WILLIAMS PRODUCTION COMPANY		4.000000 12.500000 68.470000 15.030000	4.000000 12.500000 68.470000 15.030000		
TOTAL					100.000000			100.000000

REMARKS: SAN JUAN 29-5 UNIT #226

EFFECTIVE 92/10/01

PHILLIPS PETROLEUM COMPANY
 SCHEDULE IV
 THE 003 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

DATE 10/26/94

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
29N 5W	W/2 NW/4	79.00		TRACT: 027			4.934788
SEC. 22	LESS 1 ACRE						
			ORRI:		4.000000	4.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		68.470000	68.470000	
			PHILLIPS-SAN JUAN PARTNERS, L.P.		15.030000	15.030000	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

29N 5W	ONE ACRE OUT OF SW CORNER OF W/2 NW/4	1.00		TRACT: 027A			0.062466
SEC. 22			ORRI:		0.000000	0.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		71.750000	71.750000	
			PHILLIPS-SAN JUAN PARTNERS, L.P.		15.750000	15.750000	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

29N 5W	SW/4 LESS TWO ACRES OUT OF NE/4 SW/4, E/2 NW/4	238.00		TRACT: 038			14.866823
SEC. 22			ORRI:		0.000000	0.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		71.750000	71.750000	
			PHILLIPS-SAN JUAN PARTNERS, L.P.		15.750000	15.750000	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
 SCHEDULE IV
 THE 003 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
29N SW	TWO ACRES OUT OF NE/4 SW/4, E/2 NW/4 MORE FULLY DESCRIBED IN SAN JUAN 29-5 UNIT EXHIBIT 'B'	2.00	ORRI: ROYALTY: WORKING INTEREST: PHILLIPS - SAN JUAN PARTNERS, L.P. WILLIAMS PRODUCTION COMPANY	TRACT: 038B	0.000000 12.500000 71.750000 15.750000	0.000000 12.500000 71.750000 15.750000	0.124931
SEC. 22							
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

DATE 10/25/94

PHILLIPS PETROLEUM COMPANY
SCHEDULE IV
RECAPITULATION

DESCRIPTION OF COMMITTED LANDS IN PARTICIPATING AREA:
SECTION 6 : ALL
SECTION 7 : W/2
SECTION 22 : W/2
SECTION 33 : E/2

DESCRIPTION ON NON-COMMITTED LANDS IN PARTICIPATING AREA:

TOTAL COMMITTED: 1600.88

TOTAL ACRES NON-COMMITTED: 0.00

TOTAL NUMBER OF ACRES IN PARTICIPATING AREA: 1600.88

* SUBJECT TO REVERSIONARY INTEREST TO PHILLIPS PETROLEUM COMPANY

EFFECTIVE 92/10/01

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PHILLIPS PETROLEUM COMPANY
 SCHEDULE V
 THE 004 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA
 DATE 10/26/94

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
SF-078277	29N 5W	38.96		TRACT: 001A			2.026549
	SEC. 7	LOTS 3					
			ORRI:		4.000000	4.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:				
			SAN JUAN BASIN PARTNERSHIP		68.470000	68.470000	*
			WILLIAMS PRODUCTION COMPANY		15.030000	15.030000	*
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #226

SF-078277	29N 5W	149.54		TRACT: 001B			7.778494
	SEC. 7	LOTS 1, 2, N/2/NW/4					
			ORRI:		4.000000	4.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:				
			SAN JUAN BASIN PARTNERSHIP		68.470000	68.470000	*
			WILLIAMS PRODUCTION COMPANY		15.030000	15.030000	*
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #226

SF-078305	29N 5W	160.00		TRACT: 004			8.322583
	SEC. 6	SW/4					
			ORRI:		5.000000	5.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:				
			SAN JUAN BASIN PARTNERSHIP		67.650000	67.650000	*
			WILLIAMS PRODUCTION COMPANY		14.850000	14.850000	*
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #226

PHILLIPS PETROLEUM COMPANY
SCHEDULE V
THE 004 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
SAN JUAN 29-5 UNIT AREA

DATE 10/26/94

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
NM-011348	29N 5W W/2 NE/4	80.00		TRACT: 004A			4.161292
	SEC. 33		ORRI:		5.000000	5.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		41.250000	41.250000	
			EL PASO PRODUCTION COMPANY		41.250000	41.250000	
			BOLACK MINERALS COMPANY				
			TOTAL		100.000000	100.000000	
REMARKS: SAN JUAN 29-5 UNIT # 223							
SF-078410	29N 5W	320.66		TRACT: 006			18.679497
	SEC. 6		ORRI:		5.000000	5.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		67.650000	67.650000	
			PHILLIPS-SAN JUAN PARTNERS, L.P.		14.850000	14.850000	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	
REMARKS: SAN JUAN 29-5 UNIT # 203							
SF-078410	29N 5W	160.22		TRACT: 006C			8.334027
	SEC. 6		ORRI:		5.000000	5.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		67.650000	67.650000	
			SAN JUAN BASIN PARTNERSHIP		14.850000	14.850000	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	
REMARKS: SAN JUAN 29-5 UNIT # 225							

EFFECTIVE 92/1/01

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
 SCHEDULE V
 THE 004 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
NM-011350	SEC. 33 E/2 E/2, W/2 SE/4	240.00		TRACT: 017A			12.483875
	ORRI:				5.000000	5.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				41.250000	41.250000	
	EL PASO PRODUCTION COMPANY				41.250000	41.250000	
	BOLACK MINERALS COMPANY						
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #223

SF-081114	SEC. 4 LOTS 3, 4, S/2 NW/4, SW/4	321.60		TRACT: 020			16.728393
	ORRI:				4.000000	4.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				68.470000	68.470000	
	SAN JUAN BASIN PARTNERSHIP				15.030000	15.030000	
	WILLIAMS PRODUCTION COMPANY						
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #219

FEE	29N 5W TRACT 37 LESS NORTH SEC. 7 10.46 ACRES: LOT 4	121.04		TRACT: 024A			6.296034
	ORRI:				4.000000	4.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				68.470000	68.470000	
	SAN JUAN BASIN PARTNERSHIP				15.030000	15.030000	
	WILLIAMS PRODUCTION COMPANY						
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #226

EFFECTIVE 92/1/01

DATE 10/28/94

PHILLIPS PETROLEUM COMPANY
 SCHEDULE V
 THE 004 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
29N 5W	NORTH 10.46 ACRES TRACT 37	10.46		TRACT: 024B			0.544089
			ORRI:		4.000000	4.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		68.470000 *	68.470000 *	
			SAN JUAN BASIN PARTNERSHIP		15.030000 *	15.030000 *	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #228

29N 5W	W/2 NW/4	78.00		TRACT: 027			4.109276
SEC. 22	LESS 1 ACRE		ORRI:		4.000000	4.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		68.470000	68.470000	
			PHILLIPS-SAN JUAN PARTNERS, L.P.		15.030000	15.030000	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

29N 5W	ONE ACRE OUT OF SW CORNER OF W/2 NW/4	1.00		TRACT: 027A			0.052016
SEC. 22			ORRI:		0.000000	0.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		71.750000	71.750000	
			PHILLIPS-SAN JUAN PARTNERS, L.P.		15.750000	15.750000	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

EFFECTIVE 92/1/01

PHILLIPS PETROLEUM COMPANY
SCHEDULE V
THE 004 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
SAN JUAN 29-5 UNIT AREA

DATE 10/26/94

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
29N 5W SEC. 22	SW/4 LESS TWO ACRES OUT OF NE/4 SW/4, E/2 NW/4	238.00		TRACT: 038			12.379843
			ORRI:		0.000000	0.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		71.750000	71.750000	
			PHILLIPS - SAN JUAN PARTNERS, L.P.		15.750000	15.750000	
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

FEE	29N 5W SEC. 22	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
		TWO ACRES OUT OF NE/4 SW/4, E/2 NW/4	2.00		TRACT: 038B			0.104032
		MORE FULLY DESCRIBED IN SAN JUAN 29-5 UNIT EXHIBIT 'B'						
				ORRI:		0.000000	0.000000	
				ROYALTY:		12.500000	12.500000	
				WORKING INTEREST:		71.750000	71.750000	
				PHILLIPS - SAN JUAN PARTNERS, L.P.		15.750000	15.750000	
				WILLIAMS PRODUCTION COMPANY				
				TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

EFFECTIVE 92/1/01

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DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
SCHEDULE V
RECAPITULATION

DESCRIPTION OF COMMITTED LANDS IN PARTICIPATING AREA:
SECTION 4 : W/2
SECTION 6 : ALL
SECTION 7 : W/2
SECTION 22 : W/2
SECTION 33 : E/2

DESCRIPTION ON NON-COMMITTED LANDS IN PARTICIPATING AREA:

TOTAL COMMITTED: 1922.48

TOTAL ACRES NON-COMMITTED:

0.00

TOTAL NUMBER OF ACRES IN PARTICIPATING AREA:

1922.48

* SUBJECT TO REVERSIONARY INTEREST TO PHILLIPS PETROLEUM COMPANY

EFFECTIVE 92/11/01

PAGE 1

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
 SCHEDULE VI
 THE 005 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
SF-078277	29N 5W	38.96		TRACT: 001A			
	SEC. 7	LOT 3					
			ORRI:		4.000000	4.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		68.470000	68.470000	*
			SAN JUAN BASIN PARTNERSHIP		15.030000	15.030000	*
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT # 226

SF-078277	29N 5W	149.54		TRACT: 001B			
	SEC. 7	LOTS 1, 2, N/2 NW/4					
			ORRI:		4.000000	4.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		68.470000	68.470000	*
			SAN JUAN BASIN PARTNERSHIP		15.030000	15.030000	*
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT # 226

SF-078305	29N 5W	160.00		TRACT: 004			
	SEC. 6	SW/4					
			ORRI:		5.000000	5.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		67.650000	67.650000	*
			SAN JUAN BASIN PARTNERSHIP		14.850000	14.850000	*
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT # 225

7.131015

6.664824

PHILLIPS PETROLEUM COMPANY
 SCHEDULE VI
 THE 005 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA
 DATE 10/26/94

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
NM-011348	29N SW W/2 NE/4	80.00		TRACT: 004A			
	SEC. 33		ORRI: ROYALTY: WORKING INTEREST: EL PASO PRODUCTION COMPANY BOLACK MINERALS COMPANY		5.000000 12.500000 41.250000 41.250000	5.000000 12.500000 41.250000 41.250000	3.565507
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #223

SF-078343	29N SW	161.24		TRACT: 005			
	SEC. 5		ORRI: ROYALTY: WORKING INTEREST: SAN JUAN BASIN PARTNERSHIP WILLIAMS PRODUCTION COMPANY		4.500000 12.500000 68.060000 14.940000	4.500000 12.500000 68.060000 14.940000	7.186280
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #230

SF-078410	29N SW	320.66		TRACT: 006			
	SEC. 6		ORRI: ROYALTY: WORKING INTEREST: PHILLIPS-SAN JUAN PARTNERS, L.P. WILLIAMS PRODUCTION COMPANY		5.000000 12.500000 67.650000 14.850000	5.000000 12.500000 67.650000 14.850000	14.291444
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #203

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
 SCHEDULE VI
 THE 005 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
SF-078410	29N 5W LOTS 3, 4, S/2 NW/4	160.22		TRACT: 008C			7.140820
			ORRI:		5.000000	5.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		67.650000	67.650000	*
			SAN JUAN BASIN PARTNERSHIP		14.850000	14.850000	*
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #225

SF-078642	29N 5W SEC. 5 SE/4	160.00		TRACT: 008			7.131015
			ORRI:		5.000000	5.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		67.650000	67.650000	*
			SAN JUAN BASIN PARTNERSHIP		14.850000	14.850000	*
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #230

NM-011350	29N 5W SEC. 33 E/2 E/2, W/2 SE/4	240.00		TRACT: 017A			10.696522
			ORRI:		5.000000	5.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		41.250000	41.250000	
			EL PASO PRODUCTION COMPANY		41.250000	41.250000	
			BOLACK MINERALS COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #223

PHILLIPS PETROLEUM COMPANY
SCHEDULE VI
THE 005 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
SAN JUAN 29-5 UNIT AREA

DATE 10/26/94

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
SF-081114	29N 5W	321.80		TRACT: 020			14.333339
	SEC. 4	LOTS 3, 4, S/2 NW/4, SW/4					
			ORRI:		4.000000	4.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		68.470000	68.470000	*
			SAN JUAN BASIN PARTNERSHIP		15.030000	15.030000	*
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #219

	29N 5W	121.04		TRACT: 024A			5.384613
	SEC. 7	TRACT 37 LESS NORTH					
		10.46 ACRES:					
		LOT 4					
			ORRI:		4.000000	4.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		68.470000	68.470000	*
			SAN JUAN BASIN PARTNERSHIP		15.030000	15.030000	*
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #228

	29N 5W	10.46		TRACT: 024B			0.466190
	SEC. 7	NORTH 10.46 ACRES TRACT 37					
			ORRI:		4.000000	4.000000	
			ROYALTY:		12.500000	12.500000	
			WORKING INTEREST:		68.470000	68.470000	*
			SAN JUAN BASIN PARTNERSHIP		15.030000	15.030000	*
			WILLIAMS PRODUCTION COMPANY				
			TOTAL		100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #228

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
 SCHEDULE VI
 THE 005 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
29N 5W	W/2 NW/4	79.00		TRACT: 027			3.520938
SEC. 22	LESS 1 ACRE						
	ORRI:				4.000000	4.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				68.470000	68.470000	
	PHILLIPS - SAN JUAN PARTNERS, L.P.				15.030000	15.030000	
	WILLIAMS PRODUCTION COMPANY						
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

29N 5W	ONE ACRE OUT OF SW CORNER OF W/2 NW/4	1.00		TRACT: 027A			0.044569
SEC. 22							
	ORRI:				0.000000	0.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				71.750000	71.750000	
	PHILLIPS - SAN JUAN PARTNERS, L.P.				15.750000	15.750000	
	WILLIAMS PRODUCTION COMPANY						
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

29N 5W	SW/4 LESS TWO ACRES OUT OF NE/4 SW/4, E/2 NW/4	238.00		TRACT: 038			10.807384
SEC. 22							
	ORRI:				0.000000	0.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				71.750000	71.750000	
	PHILLIPS - SAN JUAN PARTNERS, L.P.				15.750000	15.750000	
	WILLIAMS PRODUCTION COMPANY						
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
 SCHEDULE VI
 THE 005 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
 SAN JUAN 29-5 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
29N 5W	TWO ACRES OUT OF NE/4 SW/4, E/2 NW/4 MORE FULLY DESCRIBED IN SAN JUAN 29-5 UNIT EXHIBIT 'B'	2.00	ORRI: ROYALTY: WORKING INTEREST: PHILLIPS-SAN JUAN PARTNERS, L.P. WILLIAMS PRODUCTION COMPANY	TRACT: 038B	0.000000 12.500000 71.750000 15.750000	0.000000 12.500000 71.750000 15.750000	0.089138
SEC. 22							
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 29-5 UNIT #213

EFFECTIVE 93/01/01

PAGE 6

DATE 10/26/94

PHILLIPS PETROLEUM COMPANY
SCHEDULE M
RECAPITULATION

DESCRIPTION OF COMMITTED LANDS IN PARTICIPATING AREA:

DESCRIPTION ON NON-COMMITTED LANDS IN PARTICIPATING AREA:

SECTION 4	: W/2
SECTION 5	: LOTS 1, 2, S/2 NE/4, SE/4
SECTION 6	: ALL
SECTION 7	: W/2
SECTION 22	: W/2
SECTION 33	: E/2

TOTAL COMMITTED: 2243.72

TOTAL ACRES NON-COMMITTED:

0.00

TOTAL NUMBER OF ACRES IN PARTICIPATING AREA:

2243.72

* SUBJECT TO REVERSIONARY INTEREST TO PHILLIPS PETROLEUM COMPANY

THE COMMISSIONER OF LAND MANAGEMENT
RECEIVED

35 MAR 15 10 8 52

San Juan 29-5 (FR PA)
3180 (07327)

FEB 27 1995

Mr. Pat Noah
Phillips Petroleum Company
5525 Highway 64, NBU 3004
Farmington, NM 87401

Dear Mr. Noah:

We have reviewed your application for establishment and revision of a Fruitland Participating Area in the San Juan 29-5 Unit. The following table summarizes the wells included in each revision.

Participating Area	Effective Date	Well Number	Dedication	Sec.	Twtn.	Rng.
Initial	Jan. 29, 1990	203	E½	6	29N	5W
First Rev.	Apr. 1, 1990	213	W½	22	29N	5W
Second Rev.	Feb. 1, 1992	223	E½	33	29N	5W
Third Rev.	Oct. 1, 1992	225	W½	6	29N	5W
		226	W½	7	29N	5W
Fourth Rev.	Nov. 1, 1992	219	W½	4	29N	5W
Fifth Rev.	Jan. 1, 1993	230	E½	5	29N	5W

Your application for the Initial through Fifth Revision of the San Juan 29-5 Unit Fruitland Participating area is hereby approved. The effective dates of each revision are included in the table above. We are including a copy of the approved Exhibit B's.

Under provisions of 43 CFR 3165.3, you may request an Administrative Review of the order(s) described above. Such request, including all supporting documents, must be filed in writing within 20 business days of receipt of this notice and must be filed with the State Director, Bureau of Land Management, P. O. Box 27115, Santa Fe, New Mexico 87502-0115. Such request shall not result in a suspension of the order(s) unless the reviewing official so determines. Procedures governing appeals from instructions, orders or decisions are contained in 43 CFR 3165.4 and 43 CFR 4.400 *et seq.*

If you have any questions concerning this matter, please call Duane Spencer at (505) 599-6350.

Sincerely,



Duane W. Spencer
Chief, Branch of Reservoir Management

6 Enclosures

- 1 - Initial Exhibit B
- 2 - 1st Revision Exhibit B
- 3 - 2nd Revision Exhibit B
- 4 - 3rd Revision Exhibit B
- 5 - 4th Revision Exhibit B
- 6 - 5th Revision Exhibit B

bcc:

MMS, RMP, MS-3240, Denver, CO w/enclosure

NMOCD, Santa Fe, NM w/o enclosure

Commissioner of Public Lands, Santa Fe, NM w/o enclosure



PHILLIPS PETROLEUM COMPANY

FARMINGTON, NEW MEXICO 87401
5525 HWY. 64 NBU 3004

27 11 50

#418

August 22, 1994

Assistant District Manager, Minerals
Bureau of Land Management
Farmington Resource Area
1235 La Plata Highway
Farmington, New Mexico 87401

State of New Mexico
Commissioner Of Public Lands
Attn: Mr. Floyd O. Prando
P. O. Box 1148
Santa Fe, New Mexico 87504-1148

State of New Mexico
Oil Conservation Division
Attn: Mr. William J. LeMay
310 Old Santa Fe Trail, Room 206
Santa Fe, New Mexico 87503

Re: San Juan 29-5 Unit
#14-08-001-437
Commerciality Determination
Fruitland Formation
Rio Arriba County, NM
GF-5395

Gentlemen:

Pursuant to the provisions of Section 11(a) of the San Juan 29-5 Unit Agreement, #14-08-001-437, approved November 21, 1952, Phillips Petroleum Company ("Phillips"), as Operator, determined whether or not the wells listed below are capable of producing unitized substances in paying quantities from the Fruitland coal member of the Fruitland formation.

Phillips is seeking confirmation of the enclosed paying well determinations as listed below. Paying well determinations for the San Juan 29-5 #203 and #226 were submitted by Phillips by letter dated August 23, 1993 and confirmation received by BLM letter of December 8, 1993. The paying well determinations submitted herewith represents all remaining Fruitland formation wells drilled within the San Juan 29-5 Unit.

This alternative approach has been acknowledged by the Branch of Reservoir Management at the Farmington District Office of the Bureau of Land Management as acceptable to facilitate individual well commerciality determinations that are ordinarily filed in order of "date of test" during completion operations.

Upon receipt of response from the BLM and concurring responses from the Commissioner of Public Lands and New Mexico Oil Conservation Division, the formal Participating Area application with accompanying Lease Schedules with unit tract descriptions and working interest ownerships for each well will be prepared for each expansion of the Participating Area based on those wells confirmed for inclusion therewith.

San Juan 29-5 Unit
 #14-08-001-437
 Commerciality Determination
 August 22, 1994

(1) <u>Test Date</u>	(2) <u>Well Number</u>	(3) <u>Drill Block</u>	(4) <u>Acres</u>	(5) <u>Date Submitted for Paying Well Determination</u>	(6)* <u>Disposition</u>
01-29-90	203	Lots 1, 2, S/2 NE/4, SE/4 Section 6-29N-5W	320.66	08-23-93	Paying Well-A
03-17-90	213	W/2 Sec. 22-29N-5W	320.00	08-19-94	Paying Well
07-02-90	216	W/2 Sec. 33-29N-5W	320.00	08-19-94	Non-PA
06-11-90	206	W/2 Sec. 20-29N-5W	320.00	08-19-94	Non-PA
12-13-90	217	W/2 Sec. 34-29N-5W	320.00	08-19-94	Non-PA
11-27-90	218	E/2 Sec. 34-29N-5W	320.00	08-19-94	Non-PA
01-08-92	201	W/2 Sec. 27-29N-5W	320.00	08-19-94	Non-PA
01-08-92	214	E/2 Sec. 27-29N-5W	320.00	08-19-94	Non-PA
01-14-92	223	E/2 Sec. 33-29N-5W	320.00	08-19-94	Paying Well
06-12-92	224	W/2 Sec. 23-29N-5W	320.00	08-19-94	Non-PA
09-15-92	225	W/2 Sec. 6-29N-5W	320.00	08-19-94	Paying Well
09-30-92	226	Lots 1, 2, 3, 4, N/2 NW/4, Tract 37 Section 7-29N-5W	320.00	08-23-93	Paying Well-A
10-05-92	229	E/2 Sec. 7-29N-5W	320.00	08-19-94	Non-PA
10-12-92	231	Lots 3,4, S/2 NW/4, SW/4 Sec. 5-29N-5W	321.00	08-19-94	Non-PA
10-27-92	219	Lots 3,4, S/2 NW/4, SW/4 Sec. 4-29N-5W	321.60	08-19-94	Paying Well
12-17-92	230	Lots 1,2, S/2 NE/4, SE/4 Sec. 5-29N-5W	321.24	08-19-94	Paying Well

*Wells previously confirmed by the regulatory agencies as wells capable of production in paying quantities are labeled "Paying Well-A". Wells submitted herewith that are determined to be capable of production in paying quantities are labeled Paying Well. Wells submitted herewith that are determined not to be capable of production in paying quantities are labeled "Non-PA".

Copies of this submittal with enclosures are being sent to the unit working interest owners on the attached sheet.

Very truly yours,

PHILLIPS PETROLEUM COMPANY



A. J. Kieke, CPL
 Area Landman
 San Juan Basin
 (505) 599-3410

w/o attachments

cc: J. W. Taylor

K. L. Czirr (r) Sean Helton

w/attachments

SJ 29-5 Unit Owners

**SAN JUAN 29-5 UNIT
WORKING INTEREST OWNERS**

Amoco Production Company

Bolack Minerals Company

Benson-Montin-Greer Drilling Company

Grand Valley Gas Company

Koch Exploration Company

James E. McElvain, Executor
Estate of Carl McElvain

T.H. McElvain Oil & Gas

Meridian Oil Production Inc.

James M. Raymond
Maydell Miller Mast Trust
Corrine Miller Gay Trust

Valero Coal Company

Vaughan-McElvain Energy

Williams Production Company

The Wiser Oil Company

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #206
Fruitland Coal
W/2 Section 20-T29N-R5W
Rio Arriba County, New Mexico

Date of First Delivery: NEVER DELIVERED

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	233,036		
<u>Production Taxes & Royalty:</u>	<u>20.442175%</u>	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expenses (\$)</u>
1990	0 (Actual)	416 (Actual)
1991	0 (Actual)	3,208 (Actual)
1992	0 (Actual)	2,047 (Actual)
1993	0 (Actual)	335 (Actual)
1994	20	
1995	20	
1996	20	
1997	20	
1998	20	
1999	20	
2000	20	
2001	20	
2002	20	
2003	20	
2004	20	

* Operating Expenses were not escalated for inflation.

SAN JUAN 29-5 UNIT #206

COMMERCIALITY DETERMINATION

The subject well was spudded on 05/28/90 in the west half of Section 20, T29N-R5W. After a total depth of 3648' was reached on 06/08/90, a completion rig was moved on the well for the dynamic openhole completion. During cavitation, the well did not respond as desired. In fact, both the gas and water were too small to measure.

Following cavitation, a bridge plug was set on wireline at 3390', and the well was shut-in pending further engineering evaluation. On 11/03/92, a well service rig drilled and pushed the bridge plug to 3463', and ran a 2-3/8" tubing string to 3425' (7" shoe at 3427'). However, the well is currently shut-in, and the openhole Fruitland Coal interval (3455' - 3641') has never produced.

The subject well was apparently drilled in extremely poor reservoir quality coal as the post-cavitation well test indicated. Currently, the well is shut-in, but even if it is put on line and delivered; the well is only forecasted to produce 20 MMCF per year. Therefore, this well will obviously not be deemed commercial in the 29-5 Unit Participating Area. As a result, the economic evaluation and operating expenses were not prepared for this commerciality determination report.

MEPB1-01

PARPI - WELLZONE PRODUCTION BROWSE

Date: 7/15/94

YEARLY TOTALS

User: #AM3

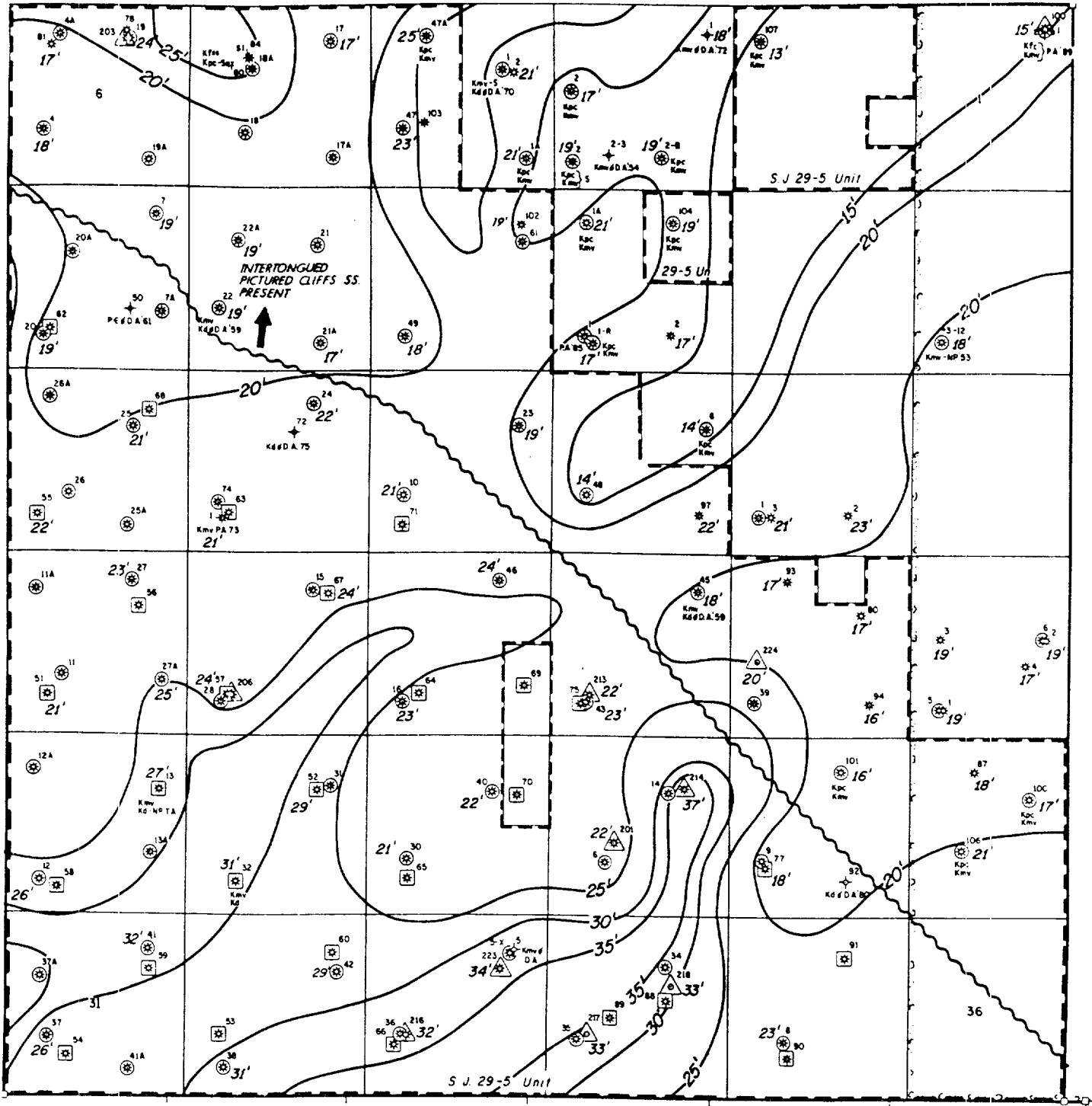
Wellzone F8903 01 Yr: 1990 Mth: 11 Property: 650057 SAN JUAN 29-5 UNIT #
 Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000206
 Type: T (T-Total, D-Daily Avg) Field: BASIN
 Period: Y (M-Monthly, Y-Yearly, C-Cumm) Reserv: 20001 FRUITLAND COAL

ADJ	PRODUCED			DAYS		WELL	
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL TY
1990	0.00	0	0	0.00	0		
1991	0.00	0	0	0.00	0		
1992	0.00	0	0	0.00	0		
1993	0.00	0	0	0.00	0		
1994	0.00	0	0	0.00	0		

PA1=ICE PA2=Exit PF1=Help PF3=End PF11=GRAPH
 Transfer-> PF7=Backward PF8=Forward PF10=GRAND MENU PF12=LOG GRAPH

SWD AND GATHERING SYSTEM COST

The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.



R-5-W

PRODUCING INTERVAL

⊗	FARMINGTON	Kfm	
⊗	KIRTLAND	Kk	
⊗	FRUITLAND	Kf	
⊗	PICTURED CLIFFS	Kpc	
⊗	CHACRA	Kc	
⊗	LA VENTANA	Klv	
⊗	MESAVERDE	Kmv	{ Kch CLIFFHOUSE Kmn MENEFEE Kpl POINT LOOKOUT
⊗	GALLUP	Kg	
⊗	DAKOTA	Kd	
⊗	ALL PRODUCTION BELOW CRETACEOUS		Ks - ENTRADA Kp - PARADOX Kbc - BARKER CREEK Kl - LEADVILLE



PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S.J. 29-5 UNIT
Rio Arriba Co. N.M.
AGGREGATE NET COAL ISOLITH
OF THE FRUITLAND COAL
C.I. 5'

5-1-92

T
2
1

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #216
Fruitland Coal
W/2 Section 33-T29N-R5W
Rio Arriba County, New Mexico

Date of First Delivery: _____ 10/15/90 _____

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	351,298		
Production Taxes & Royalty:	20.442175%	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expenses (\$)</u>
1990 (2.5 mo)	15 (Actual)	N/A
1991	33 (Actual)	3,651 (Actual)
1992 (10 mo)	25 (Actual)	7,618 (Actual)
1993	19 (Actual)	8,774 (Actual)
1994	20	
1995	20	
1996	20	
1997	20	
1998	20	
1999	20	
2000	20	
2001	20	
2002	20	
2003	20	
2004	20	

* Operating Expenses were not escalated for inflation.

SAN JUAN 29-5 UNIT #216

COMMERCIALITY DETERMINATION

The subject well was spudded on 06/01/90 in the west half of Section 33, T29N-R5W. After a total depth of 3468' was reached on 06/18/90, the well was initially completed openhole by means of cavitation. After cavitation, the well did not respond as desired. In fact, the gas was too small to test after cavitation was completed.

Since the coal appeared not to be cleated, a fracture stimulation was designed for the subject well. The Fruitland Coal openhole interval (3263' - 3468') was fracture stimulated on 06/21/90 with 42,210 gals gelled fluid with 2% KCl, 1,408,830 SCF nitrogen in 70% quality foam using 12,000 lbs 40/70 mesh sand and 192,300 lbs 12/20 mesh sand. The job consisted of starting with 425 bbls of prepad followed by 0.5 ppg 40/70 mesh sand increasing to 5 ppg of 12/70 mesh sand. The fracture treatment was completed by flushing with 125 bbls of gelled water. The fracture treatment produced very limited results on the extremely tight Fruitland Coal formation. In fact on 07/02/90, the subject well only tested/pitoted 480 MCF/D following the fracture treatment. A 5-1/2" liner was set at 3467' with the top at 3176' following the fracture stimulation. Then the subject well was perforated with 4 SPF from 3278' to 3460' for a total of 216 shots. Currently, the well is producing only 38 MCF/D with a trace of water from the perforated Fruitland Coal interval 3278' to 3460'.

Taking into account the subject well's past history and current rates, the well will obviously not be deemed commercial in the 29-5 Unit Participating Area. As a result, the economic evaluation and operating expenses were not prepared for this commerciality determination report.

MEP81-01

PARPI - WELLZONE PRODUCTION BROWSE
YEARLY TOTALS

Date: 7/13/94
User: #AM3

Wellzone F8A01 01 Yr: 1990 Mth: 01 Property: 650174 SAN JUAN 29-5 UNIT #
Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000216
Type: T (T-Total, D-Daily Avg) Field: BASIN
Period: Y (M-Monthly, Y-Yearly, C-Cumm) Reserv: 20001 FRUITLAND COAL

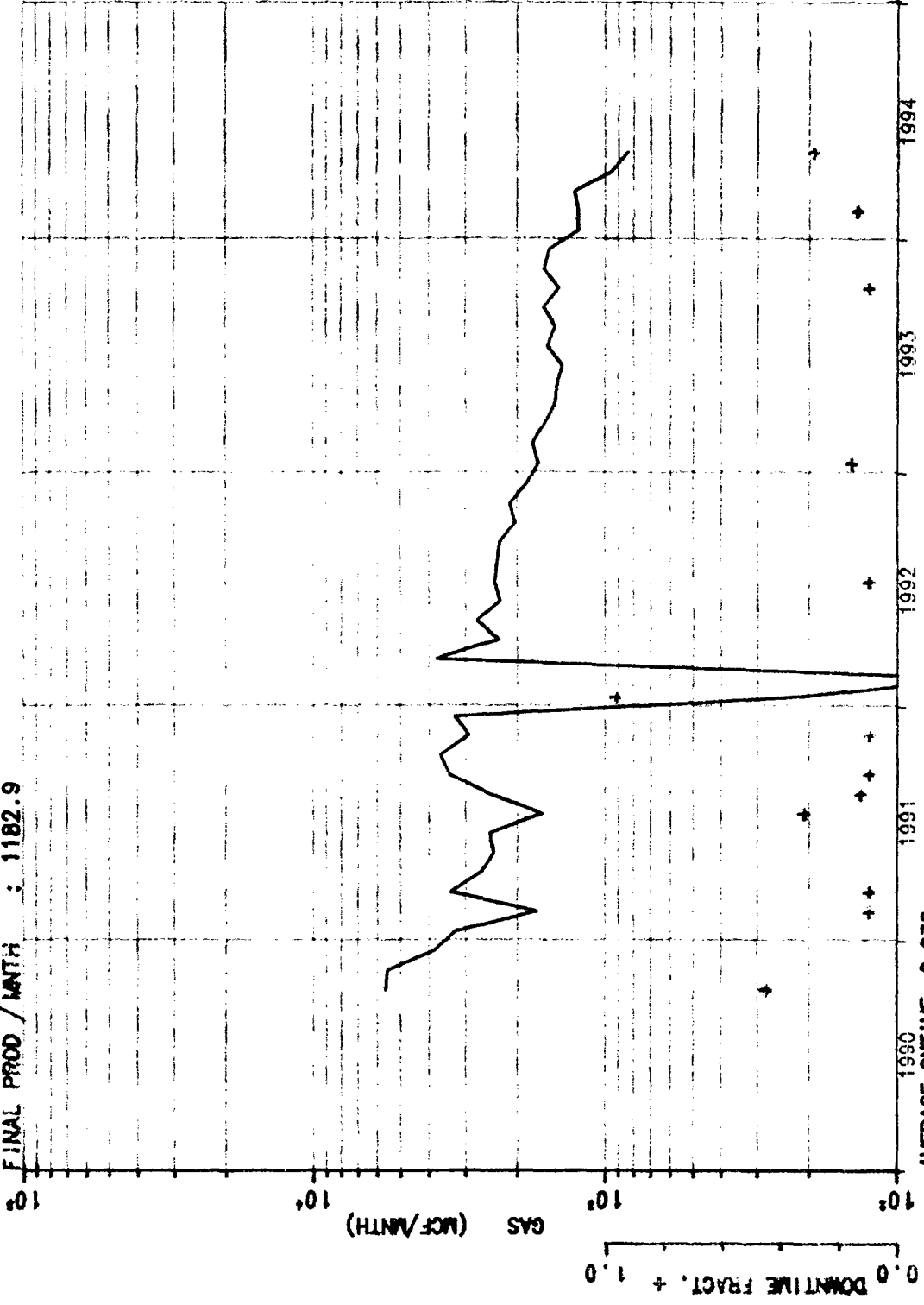
ADJ	PRODUCED			DAYS		WELL	
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL TY
1990	0.00	15,175	0	78.00	78		
1991	0.00	33,410	0	342.00	348		
1992	0.00	24,624	0	306.00	306		
1993	0.00	18,737	0	359.00	359		
1994	0.00	5,492	0	138.00	138		

NO MORE DATA AVAILABLE

PA1=ICE PA2=Exit PF1=Help PF3=End PF11=GRAPH
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10/90-5/94
 INITIAL PROD / MONTH : 10451.0
 REMAINING LIFE : 3.67
 0.00
 CUM PRODUCTION : 97437.
 FINAL PROD / MONTH : 1182.9

Current Cum
 97437. MCF GAS



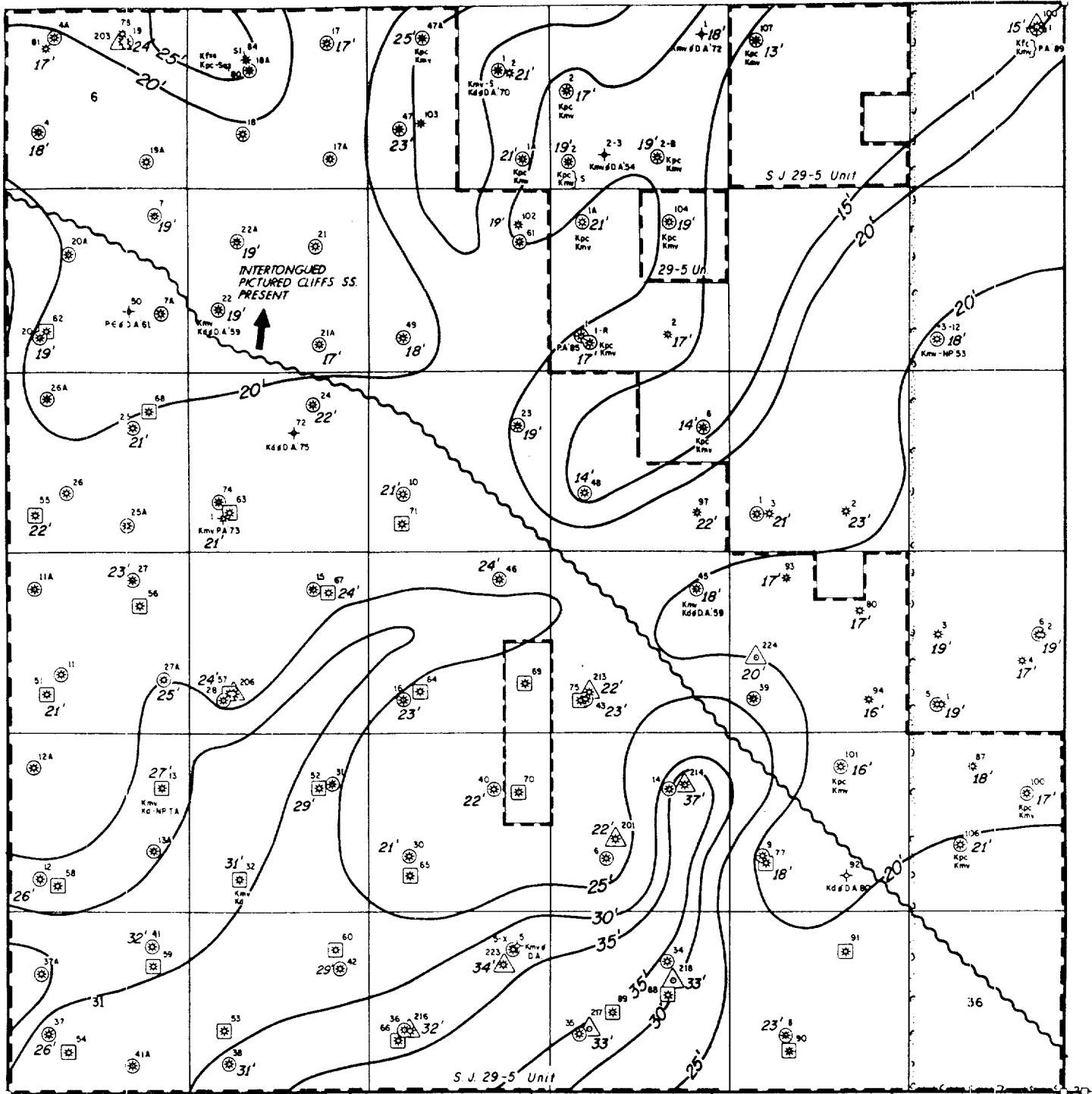
AVERAGE ONTIME = 0.936

LEASE- 650174 : SAN JUAN 20-5 UNIT #216
 RESVR- 001 : BASIN FRUITLAND COAL
 WELL - 000216 PHS WELL PRODUCTION

F8A0101
 ZONE-65017400:000216 F8A0101
 API-30039247310000

SWD AND GATHERING SYSTEM COST

The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.



R-5-W

T 29 N

PRODUCING INTERVAL

- ⊛ FARMINGTON Kfm
 - ⊛ KRYLAND Kk
 - ⊛ FRUITLAND Kf
 - ⊛ PICTURED CLIFFS Kpc
 - ⊛ CHACRA Kc
 - ⊛ LA VENTANA Kv
 - ⊛ MESAVERDE Km
 - ⊛ GALLUP Kgl
 - ⊛ DAKOTA Kd
 - ⊛ ALL PRODUCTION BELOW CRETACEOUS
- Kch CLIFFHOUSE
 Km MENEFEE
 Kp POINT LOOKOUT
 Kt TOCITO
 Kq GREENHORN
- JA - ENTRADA
 - IPp - PARADOX
 - IPc - BARKER CREEK
 - M - LEADVILLE



PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S. J. 29-5 UNIT
 Rio Arriba Co. N.M.
 AGGREGATE NET COAL ISOLITH
 OF THE FRUITLAND COAL
 C.I. 5'
 5-1-92

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #213
 Fruitland Coal
 W/2 Section 22-T29N-R5W
 Rio Arriba County, New Mexico

Date of First Delivery: _____ 08/11/92 _____

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	358,181		
Production Taxes & Royalty:	20.442175%	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expenses (\$)</u>
1992 (5 mo)	46 (Actual)	4,122 (Actual)
1993	93 (Actual)	9,792 (Actual)
1994	82	16,593
1995	82	16,593
1996	76	16,593
1997	71	16,593
1998	66	16,593
1999	61	16,593
2000	57	16,593
2001	54	16,593
2002	50	16,593
2003	47	16,593
2004	45	16,593
2005	42	16,593
2006	40	16,593

* Operating Expenses were not escalated for inflation.

MEP81-01

PARPI - WELLZONE PRODUCTION BROWSE
YEARLY TOTALS

Date: 7/08/94

User: #AM3

Wellzone F8910 01 Yr: 1992 Mth: 01 Property: 650064 SAN JUAN 29-5 UNIT #
Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000213
Type: T (T-Total, D-Daily Avg) Field: BASIN
Period: Y (M-Monthly, Y-Yearly, C-Cumm) Reserv: 20001 FRUITLAND COAL

ADJ	PRODUCED			DAYS		WELL		
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL	TY
1992	0.00	45,795	0	142.00	142			
1993	0.00	92,570	0	334.00	340			
1994	0.00	37,934	0	143.00	143			

NO MORE DATA AVAILABLE

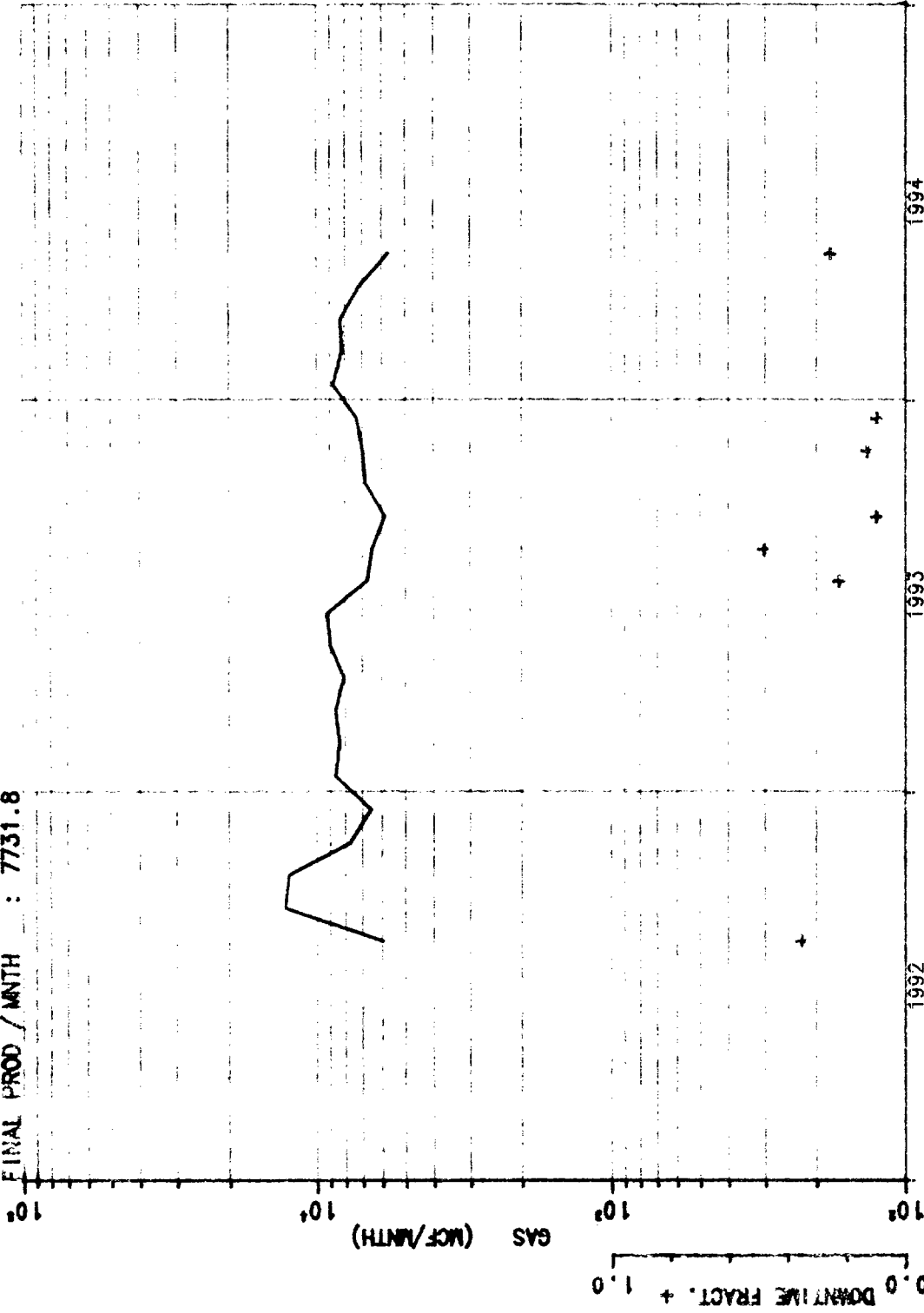
PA1=ICE PA2=Exit PF1=Help PF3=End PF11=GRAPH
Transfer-> PF7=Backward PF8=Forward PF10=GRAND MENU PF12=LOG GRAPH

Current Cums
176298. MCF GAS

8/92--5/94

INITIAL PROD / MNTH : 9169.8
REMAINING LIFE : 1.83

CUM PRODUCTION : 176298.
FINAL PROD / MNTH : 7731.8



AVERAGE CNTIME = 0.926

LEASE~ 650064 : SAN JUAN 28-5 UNIT #213
RESVR~ 001 : BASIN FRUITLAND COAL
WELL - 000213 PHS WELL PRODUCTION

F891001
ZONE-650064001000213 F891001
API-30039246040000

CASE : CD 29-5 #213 ** ECONOMICS CASE SUMMARY **
 DESCRIPTION: COMMERCIALITY DETERMINATIONS WORKING INT : 100.000%
 CASE REVENUE INT : 79.558% OIL REV INT : 79.558% GAS REV INT : 79.558%
 CASE LIFE -FIRST MO-YR : 2-1990 PROD MO-YR : 8-1992 LAST YEAR : 2006

MEASURES OF MERIT		NET CASH FLOW SUMMARY (M\$)	
AARR (%)	: 12.1	CAPITAL OUTLAY	: 358.2
BREAKEVEN POINT (YRS.)	: 6.7	TOTAL REVENUE	: 1059.3
PAYOUT (YRS.)	: 4.2	TOTAL EXPENSES	: 229.6
NTER	: 2.3	IBRT	: 829.7
ECONOMIC LIFE (YRS.)	: 14.4	CURRENT INCOME TAX	: 3.2
RESERVES SUMMARY		SALVAGE	
OIL-GROSS MBBLs	:	CASH RETURNED	: 826.5
NET MBBLs	:	CASH FLOW	: 468.4
NET REVENUE (M\$)	:	NET PRESENT VALUE (M\$) P.I.	
BBL/DAY TO PAYOUT:		@ 13.0 %:	-17.7 .95
GAS GROSS MCF	: 912.0	@ 10.0 %:	48.5 1.14
NET MCF	: 725.6	@ 8.0 %:	103.3 1.29
NET REVENUE (M\$)	: 1059.3	@ 6.0 %:	169.2 1.47
MCF/DAY TO PAYOUT:	236.5		
PRESS "ENTER" TO CONTINUE...		GOWEE_CASE_SUM	

↓
 PESSIMISTIC CASE

- CAPITAL INVESTMENT @ SPUD DATE (2/90)

CASE : CD 29-5 #213 ** ECONOMICS CASE SUMMARY **
 DESCRIPTION: COMMERCIALITY DETERMINATIONS WORKING INT : 100.000%
 CASE REVENUE INT : 79.558% OIL REV INT : 79.558% GAS REV INT : 79.558%
 CASE LIFE -FIRST MO-YR : 8-1992 PROD MO-YR : 8-1992 LAST YEAR : 2006

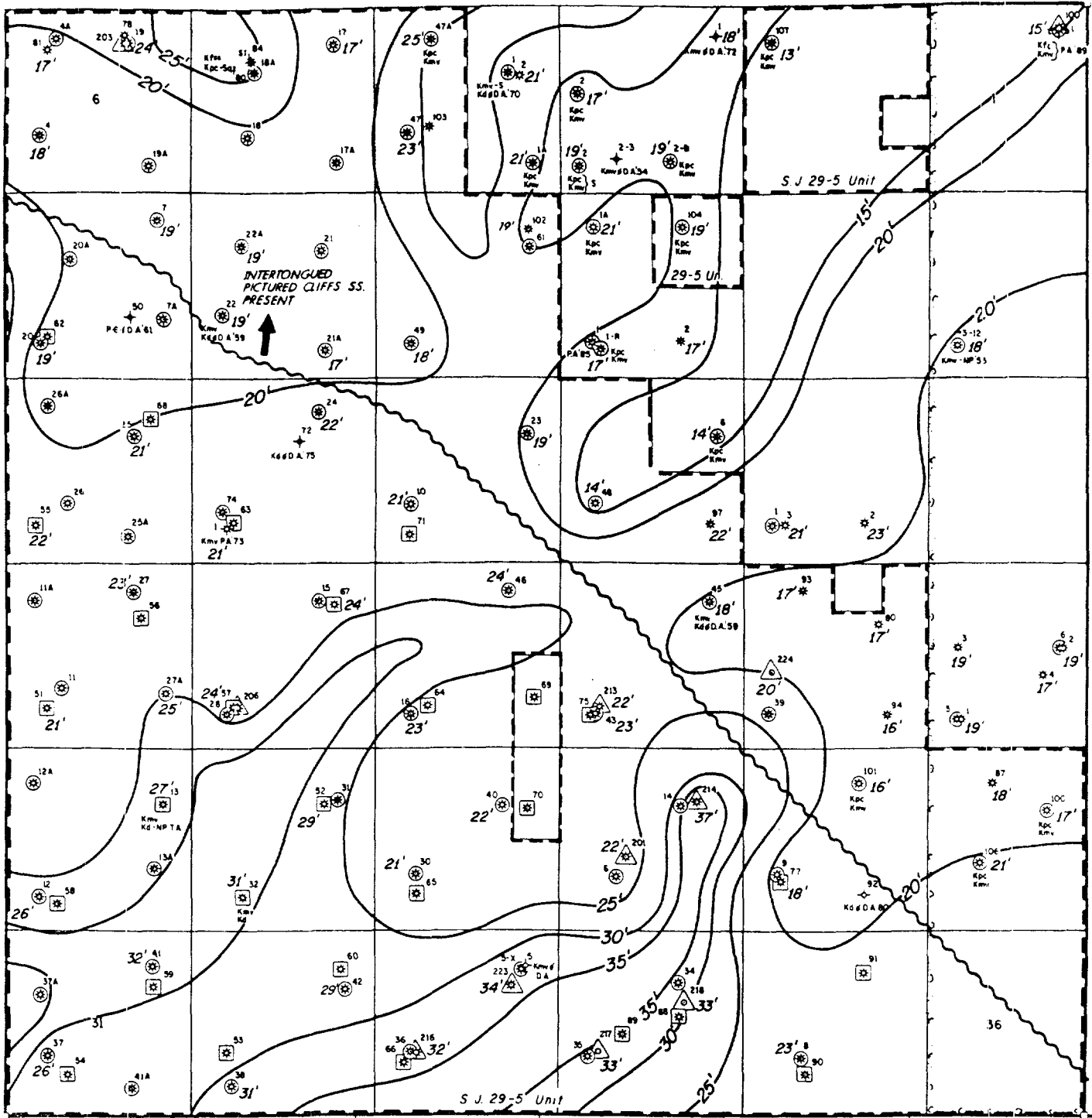
MEASURES OF MERIT		NET CASH FLOW SUMMARY (M\$)	
AARR (%) :	25.8	CAPITAL OUTLAY :	358.2
BREAKEVEN POINT (YRS.) :	3.7	TOTAL REVENUE :	1220.5
PAYOUT (YRS.) :	3.7	TOTAL EXPENSES :	216.2
NTER :	2.7	IBRT :	1004.3
ECONOMIC LIFE (YRS.) :	14.4	CURRENT INCOME TAX :	51.0
RESERVES SUMMARY		SALVAGE :	
OIL-GROSS MBBLS :		CASH RETURNED :	953.3
NET MBBLS :		CASH FLOW :	595.2
NET REVENUE (M\$) :		NET PRESENT VALUE (M\$) P.I.	
BBL/DAY TO PAYOUT:		@ 13.0 %:	165.4 1.46
GAS_GROSS MMCF :	1050.8	@ 10.0 %:	228.9 1.64
NET MMCF :	836.0	@ 8.0 %:	279.9 1.78
NET REVENUE (M\$) :	1220.5	@ 6.0 %:	339.6 1.95
MCF/DAY TO PAYOUT:	283.1		
PRESS "ENTER" TO CONTINUE...		GOWEE_CASE_SUM	

↓
 OPTIMISTIC CASE

- CAPITAL INVESTMENT @ 1st DELIVERY (8/92)

SWD AND GATHERING SYSTEM COST

The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.



R-5-W

PRODUCING INTERVAL

⊗	FARMINGTON	Kfm	
⊙	KIRTLAND	Kk	
⊖	FRUITLAND	Kf	
⊗	PICTURED CLIFFS	Kpc	
⊙	CHACRA	Kc	
⊙	LA VENTANA	Klv	
⊗	MESAVERDE	Kmv	{ Kch CLIFFHOUSE Kmf MENEFEE Kpl POINT LOOKOUT
⊗	GALLUP	Kg	
⊗	DAKOTA	Kd	
⊗	ALL PRODUCTION BELOW CRETACEOUS		- JE ENTRADA - Pp PARADOX - Pbc BARKER CREEK - MI LEADVILLE



PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S.J. 29-5 UNIT
Rio Arriba Co. N.M.

AGGREGATE NET COAL ISOLITH
OF THE FRUITLAND COAL

C.I. 5'

5-1-92

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #214
 Fruitland Coal
 E/2 Section 27-T29N-R5W
 Rio Arriba County, New Mexico

Date of First Delivery: 08/11/92

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	375,403		
<u>Production Taxes & Royalty:</u>	<u>20.442175%</u>	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expenses (\$)</u>
1992 (5 mo)	37 (Actual)	372 (Actual)
1993	31 (Actual)	6,781 (Actual)
1994	44	
1995	44	
1996	44	
1997	44	
1998	44	
1999	44	
2000	44	
2001	44	
2002	44	
2003	44	
2004	44	
2005	44	
2006	44	

* Operating Expenses were not escalated for inflation.

SAN JUAN 29-5 UNIT #214

COMMERCIALITY DETERMINATION

The subject well was spudded on 10/26/90 in the east half of Section 27, T29N-R5W. After a total depth of 3883' was reached on 10/30/90, 5-1/2", 15.5# casing was set at TD (3883'). The casing was cemented in two stages with 910 sacks of cement with 126 sacks circulated to surface.

After cementing the casing, the Fruitland Coal Formation was perforated with 2 SPF from 3758' to 3816' for a total of 88 holes. Since the coal appeared not to be cleated and extremely tight, two fracture stimulations were designed for the subject well. Initially, a pin-point isolation packer, PPIP, was run on 2-3/8" tubing to breakdown the perforations (3758'-3816') with 7.5% HCl. After breaking down the perfs in twelve intervals, the Fruitland Coal Interval (3758'-3816') was fracture stimulated on 12/30/91 with 24,251 gals of 30 lb cross-linked gel, 750,300 SCF of nitrogen for 68,350 gals of 70% quality foam, and 120,000 lbs of 16/30 Brady sand. Following the frac job a CIBP was set on wireline at 3725' in preparation for the second fracture treatment.

For the second fracture stimulation, the perfs, 3600' to 3692', were broken down with the PPIP tool on 2-3/8" tubing and 7.5% HCl. Then the Fruitland Coal Interval (3600'-3692') was fracture stimulated on 01/01/92 with 29,563 gals of 30 lb gelled water, 1,225,600 SCF of nitrogen for 83,773 gals of 70% quality foam, and 148,000 lbs of 16/30 Brady sand ramped to 5 ppg. Following the second frac job, the CIBP at 3725' was drilled out.

The fracture treatments produced very limited results on the extremely tight Fruitland Coal Formation. In fact on 01/08/92, the subject well tested/pitoted 1230 MCF/D following the fracture treatments. However, a sharp decline in the gas rate occurred shortly after the initial flow test. Currently, the well is producing only 100 MCF/D with a trace of water from the perforated Fruitland Coal Interval 3600' to 3816'.

Taking into account the subject well's past history and current rates, the well will obviously not be deemed commercial in the 29-5 Unit Participating Area. As a result, the economic evaluation and operating expenses were not prepared for this commerciality determination report.

MEF81-01

PARPI - WELLZONE PRODUCTION BROWSE

Date: 7/18/94

YEARLY TOTALS

User: #AM3

Wellzone F8A43 01 Yr: 1992 Mth: 01 Property: 650219 SAN JUAN 29-5 UNIT #
 Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000214
 Type: T (T-Total, D-Daily Avg) Field: BASIN
 Period: Y (M-Monthly, Y-Yearly, C-Cumm) Reserv: 20001 FRUITLAND COAL

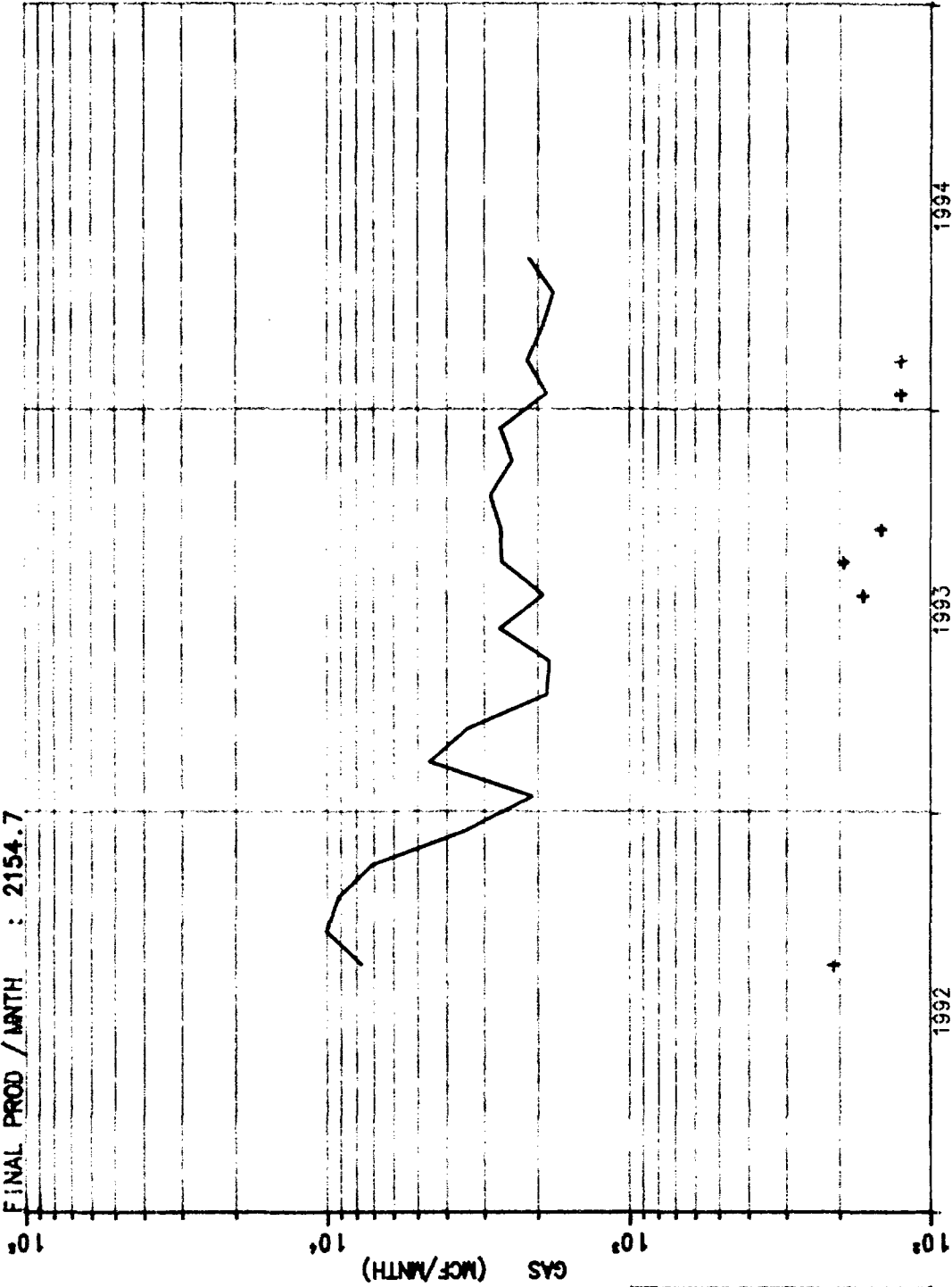
ADJ	PRODUCED				DAYS		WELL	
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL	TY
1992	0.00	37,481	0	143.00	143			
1993	0.00	31,458	0	344.00	344			
1994	0.00	9,805	0	147.00	147			

NO MORE DATA AVAILABLE

PA1=ICE PA2=Exit PF1=Help PF3=End PF11=GRAPH
 Transfer-> PF7=Backward PF8=Forward PF10=GRAND MENU PF12=LOG GRAPH

8/92-5/94
INITIAL PROD / MNTH : 11227.8
REMAINING LIFE : 1.83
CUM PRODUCTION : 78744.
FINAL PROD / MNTH : 2154.7

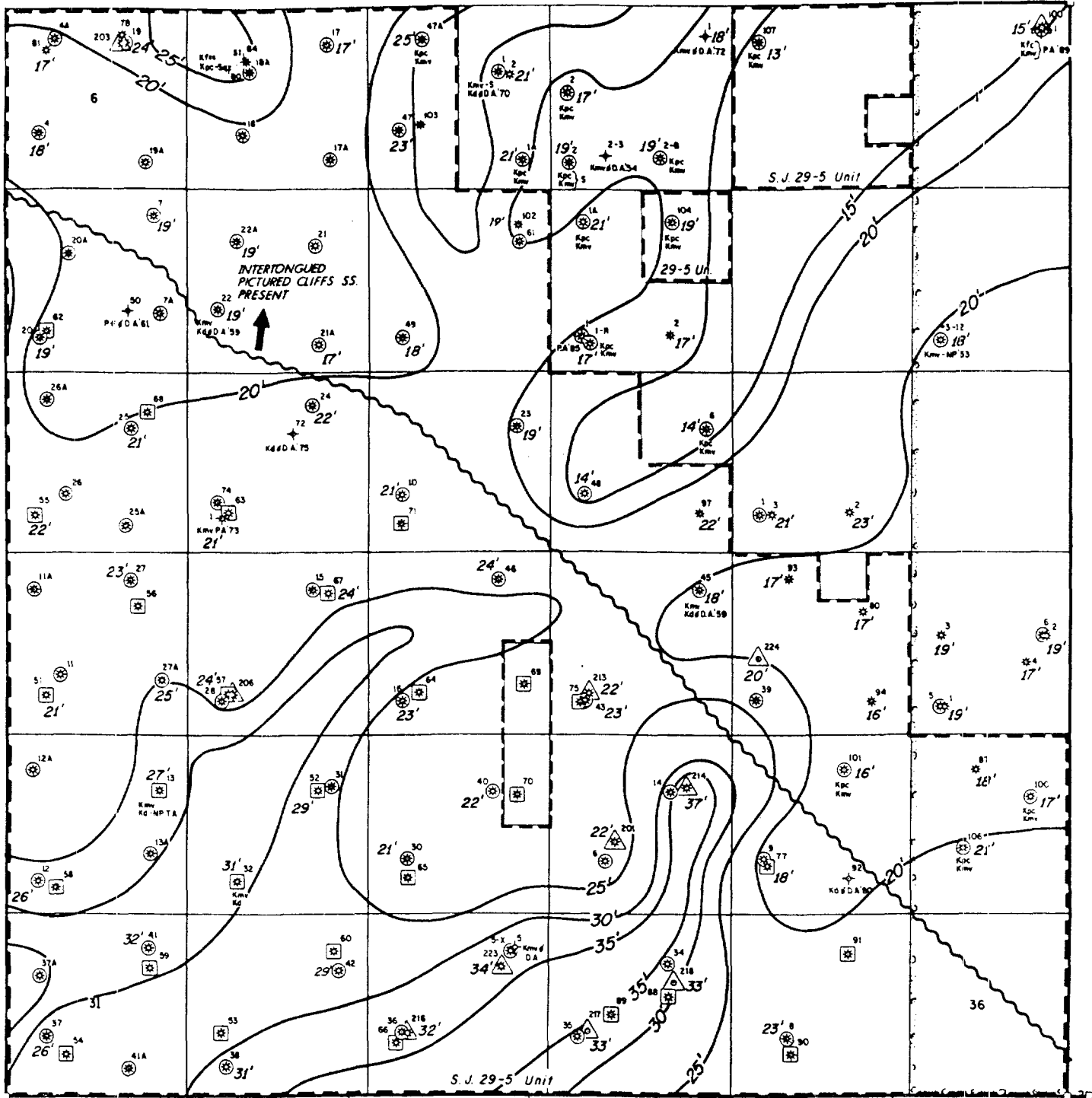
Current Cums
78744. MCF GAS



AVERAGE DOWNTIME = 0.948
LEASE- 650219 : SAN JUAN 29-5 UNIT #214
RESVR- 001 : BASIN FRUITLAND COAL
WELL - 000214 PHS WELL PRODUCTION
F8A4301
ZONE-650219001000214 F8A4301
API-30039249300000

SWD AND GATHERING SYSTEM COST


The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.



R-5-W

PRODUCING INTERVAL

K _{fm} *	FARMINGTON	K _{fm}	
K _l *	F. RTLAND	K _l	
K _f *	FRUITLAND	K _f	
K _{pc} *	PICTURED CLIFFS	K _{pc}	
K _c *	CHACRA	K _c	
K _{lv} *	LA VENTANA	K _{lv}	
K _{mv} *	MESAVERDE	K _{mv}	{ K _{cm} CLIFFHOUSE K _{mp} MENELEE K _{pl} POINT LOOKOUT
K _g *	GALLUP	K _g	
K _g *	DAKOTA	K _g	{ K _{tc} TOCITO K _{gn} GREENHORN
K _e *	ENTRADA	K _e	
K _p *	PARADOX	K _p	
K _{bc} *	BARKER CREEK	K _{bc}	
K _l *	LEADVILLE	K _l	
K _b *	ALL PRODUCTION BELOW CRETACEOUS		



PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S. J. 29-5 UNIT

Rio Arriba Co. N.M.

AGGREGATE NET COAL ISOLITH
OF THE FRUITLAND COAL

C.I. 5'

5-1-92

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #223
 Fruitland Coal
 E/2 Section 33-T29N-R5W
 Rio Arriba County, New Mexico

Date of First Delivery: _____ 08/19/92 _____

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	300,000		
<u>Production Taxes & Royalty:</u>	20.442175%	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expenses (\$)</u>
1992 (4.5 mo)	46 (Actual)	2,951 (Actual)
1993	66 (Actual)	6,945 (Actual)
1994	55	18,286
1995	55	18,286
1996	55	18,286
1997	55	18,286
1998	55	18,286
1999	55	18,286
2000	55	18,286
2001	55	18,286
2002	55	18,286
2003	55	18,286
2004	55	18,286
2005	55	18,286
2006	55	18,286

* Operating Expenses were not escalated for inflation.

MEP81-01

PARPI - WELLZONE PRODUCTION BROWSE
YEARLY TOTALS

Date: 7/19/94

User: #AM3

Wellzone F8A44 01 Yr: 1992 Mth: 01 Property: 650218 SAN JUAN 29-5 UNIT #
Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000223
Type: T (T-Total, D-Daily Avg) Field: BASIN
Period: Y (M-Monthly, Y-Yearly, C-Cumma) Reserv: 20001 FRUITLAND COAL

ADJ	PRODUCED			DAYS		WELL	
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL TY
1992	0.00	46,429	0	135.00	135		
1993	0.00	65,629	0	349.00	349		
1994	0.00	23,490	0	151.00	151		

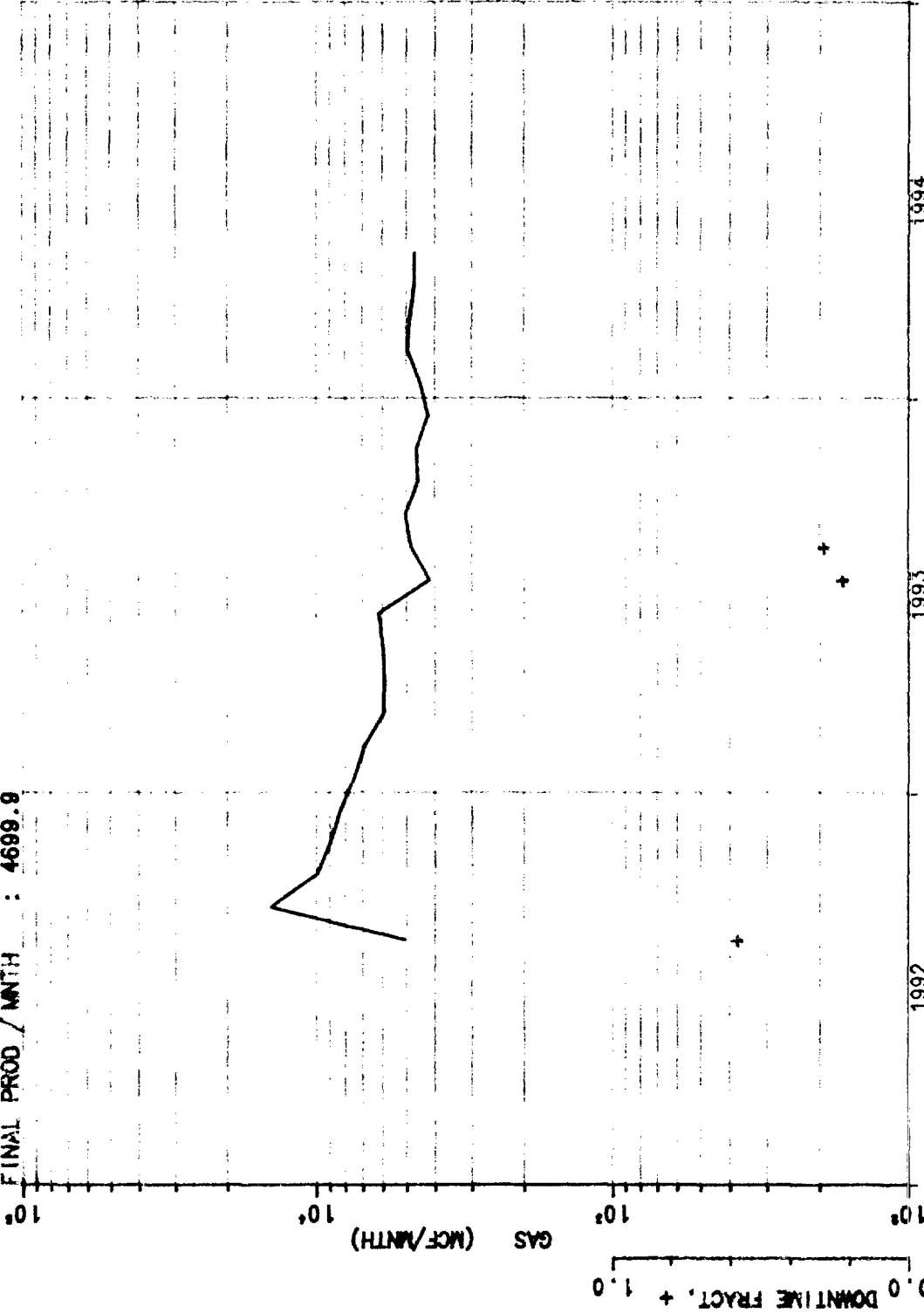
PA1=ICE PA2=Exit PF1=Help PF3=End PF11=GRAPH
Transfer-> PF7=Backward PF8=Forward PF10=GRAND MENU PF12=LOG GRAPH

Current Curve
135547. MCF GAS

8/92-5/94

INITIAL PROD / MNTH : 11935.8
REMAINING LIFE : 1.83

CUM PRODUCTION : 135547.
FINAL PROD / MNTH : 4699.9



AVERAGE DNTIME = 0.950

LEASE- 650218 : SAN JUAN 28-5 UNIT #223
RESVR- 001 : BASIN
WELL - 000223 PHS WELL PRODUCTION

F8A4401
ZONE-650218001000223 F8A4401
API-30036248090000

CASE : CD 29-5 #223 ** ECONOMICS CASE SUMMARY **
 DESCRIPTION: COMMERCIALITY DETERMINATIONS WORKING INT : 100.000%
 CASE REVENUE INT : 79.558% OIL REV INT : 79.558% GAS REV INT : 79.558%
 CASE LIFE -FIRST MO-YR : 10-1990 PROD MO-YR : 8-1992 LAST YEAR : 2006

MEASURES OF MERIT		NET CASH FLOW SUMMARY (M\$)			
AARR (%)	:	12.4	CAPITAL OUTLAY	:	300.0
BREAKEVEN POINT (YRS.)	:	7.2	TOTAL REVENUE	:	960.6
PAYOUT (YRS.)	:	5.4	TOTAL EXPENSES	:	247.6
NTER	:	2.4	IBRT	:	713.0
ECONOMIC LIFE (YRS.)	:	14.4	CURRENT INCOME TAX	:	.0
RESERVES SUMMARY			SALVAGE	:	
OIL-GROSS MBBLs	:		CASH RETURNED	:	713.0
NET MBBLs	:		CASH FLOW	:	413.0
NET REVENUE (M\$)	:		NET PRESENT VALUE (M\$)		P.I.
BBL/DAY TO PAYOUT:	:		@ 13.0 %:	-10.3	.97
GAS GROSS MCF	:	827.0	@ 10.0 %:	45.3	1.15
NET MCF	:	657.9	@ 8.0 %:	91.9	1.31
NET REVENUE (M\$)	:	960.6	@ 6.0 %:	148.7	1.50
MCF/DAY TO PAYOUT:	:	168.1			
PRESS "ENTER" TO CONTINUE...			GOWEE_CASE_SUM		

↓
 PESSIMISTIC CASE

- CAPITAL INVESTMENT @ SPUD DATE (10/90)

CASE : CD 29-5 #223 ** ECONOMICS CASE SUMMARY **
 DESCRIPTION: COMMERCIALITY DETERMINATIONS WORKING INT : 100.000%
 CASE REVENUE INT : 79.558% OIL REV INT : 79.558% GAS REV INT : 79.558%
 CASE LIFE -FIRST MO-YR : 8-1992 PROD MO-YR : 8-1992 LAST YEAR : 2006

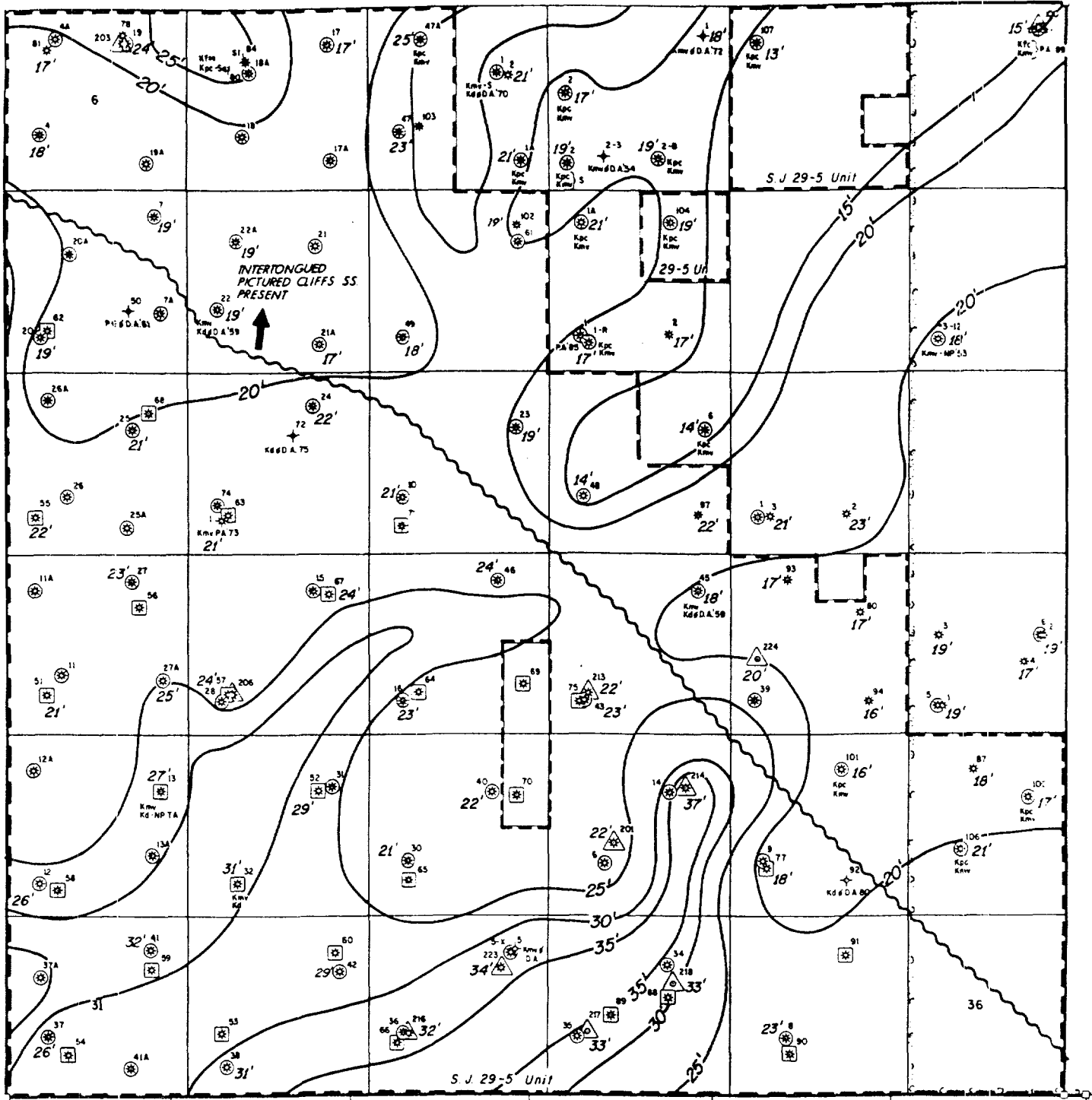
MEASURES OF MERIT		NET CASH FLOW SUMMARY (M\$)	
AARR (%)	: 26.4	CAPITAL OUTLAY	: 300.0
BREAKEVEN POINT (YRS.)	: 3.3	TOTAL REVENUE	: 1089.3
PAYOUT (YRS.)	: 3.3	TOTAL EXPENSES	: 225.2
NTER	: 2.7	IBRT	: 864.1
ECONOMIC LIFE (YRS.)	: 14.4	CURRENT INCOME TAX	: 57.8
RESERVES SUMMARY		SALVAGE	:
OIL-GROSS MBBLs	:	CASH RETURNED	: 806.3
NET MBBLs	:	CASH FLOW	: 506.3
NET REVENUE (M\$)	:	NET PRESENT VALUE (M\$)	P.I.
BBL/DAY TO PAYOUT:	:	@ 13.0 %:	136.8 1.46
GAS GROSS MCF	: 937.8	@ 10.0 %:	189.4 1.63
NET MCF	: 746.1	@ 8.0 %:	232.3 1.77
NET REVENUE (M\$)	: 1089.3	@ 6.0 %:	283.1 1.94
MCF/DAY TO PAYOUT:	269.0		
PRESS "ENTER" TO CONTINUE...			GOWEE_CASE_SUM

↓
 OPTIMISTIC CASE

- CAPITAL INVESTMENT @ 1ST DELIVERY (8/92)

SWD AND GATHERING SYSTEM COST

The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.



R-5-W

PRODUCING INTERVAL

	FARMINGTON	Kfm		
	KIRTLAND	Ks		
	FRUITLAND	Kf		
	PICTURED CLIFFS	Kbc		
	CHACRA	Kc		
	LA VENTANA	Klv		
	MESAVERDE	Kmv	CLIFFHOUSE MENESEE POINT LOOKOUT	
	GALLUP	Kgl		TOCITO GREENHORN
	DAKOTA	Kd		
	ALL PRODUCTION BELOW CRETACEOUS		Jn - ENTRADA Pp - PARADOX Pbc - BARKER CREEK Ml - LEADVILLE	



PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S. J. 29-5 UNIT
Rio Arriba Co. N.M.

AGGREGATE NET COAL ISOLITH
OF THE FRUITLAND COAL

C.I. 5'

5-1-92

7
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PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #224
Fruitland Coal
W/2 Section 23-T29N-R5W
Rio Arriba County, New Mexico

Date of First Delivery: 09/15/93

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	305,000		
<u>Production Taxes & Royalty:</u>	<u>20.442175%</u>	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expenses (\$)</u>
1993 (1 mo)	3 (Actual)	2,502 (Actual)
1994	28	
1995	28	
1996	28	
1997	28	
1998	28	
1999	28	
2000	28	
2001	28	
2002	28	
2003	28	
2004	28	
2005	28	
2006	28	
2007	28	

* Operating Expenses were not escalated for inflation.

SAN JUAN 29-5 UNIT #224

COMMERCIALITY DETERMINATION

The subject well was spudded on 10/31/90 in the west half of Section 23, T29N-R5W. After a total depth of 3925' was reached on 06/08/92, 5-1/2", 15.5# casing was set at TD (3922'). The casing was cemented in two stages with 908 sacks of cement with 168 sacks circulated to surface.

After cementing the casing, the Fruitland Coal Formation was perforated with 2 SPF from 3808' to 3847' for a total of 64 holes. Since the coal appeared not to be cleated and extremely tight, two fracture stimulations were designed for the subject well. Initially, a selective acidizing packer, SAP, was run on 2-3/8" tubing to breakdown the perforations (3808'-3847') with 10% acetic acid. After breaking down the perfs in nine intervals, the Fruitland Coal Interval (3808'-3847') was fracture stimulated down 5-1/2" casing on 06/12/92 with 566 bbls of gelled water, 725,100 SCF of nitrogen at 70% quality, and 87,000 lbs of 16/30 Brady sand ramped from 1 ppg to 5 ppg. Following the frac job a CIBP was set on wireline at 3775' and a RBP at 3760' in preparation for the second fracture treatment.

For the second fracture stimulation, the Fruitland Coal Formation was perforated with 2 SPF from 3646' to 3726' for a total of 92 holes. The perforations were broken down with the SAP tool on four foot intervals using 10% acetic acid. Then the Fruitland Coal Interval (3646'-3726') was fracture stimulated on 06/17/92 with 600 bbls of gelled water, 983,600 SCF of nitrogen at 70% quality, and 128,000 lbs of 16/30 Brady sand ramped 1 ppg to 5 ppg. Following the second frac job, the RBP at 3760' was removed and the CIBP at 3775' was milled to a PBDT of 3895'.

The fracture treatments produced very limited results on the extremely tight Fruitland Coal Formation. In fact on 09/23/93, the subject well produced only 169 MCF/D following the fracture treatments. In addition, a sharp decline in the gas rate occurred shortly after the start of gas production. Currently, the well is shut-in due to low production from severe paraffin problems.

Taking into account the subject well's past history and paraffin problems, the well will obviously not be deemed commercial in the 29-5 Unit Participating Area. As a result, the economic evaluation and operating expenses were not prepared for this commerciality determination report.

MEP81-01

PARPI - WELLZONE PRODUCTION BROWSE

Date: 7/20/94

YEARLY TOTALS

User: #AM3

Wellzone F8A45 01 Yr: 1993 Mth: 09 Property: 650217 SAN JUAN 29-5 UNIT #
 Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000224
 Type: T (T-Total, D-Daily Avg) Field: BASIN
 Period: Y (M-Monthly, Y-Yearly, C-Cumm) Reserv: 20001 FRUITLAND COAL

ADJ	FLAG	DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL	TY
		1993	0.00	3,479	0	37.00	37			
		1994	0.00	0	0	0.00	0			

NO MORE DATA AVAILABLE

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9/93-10/93

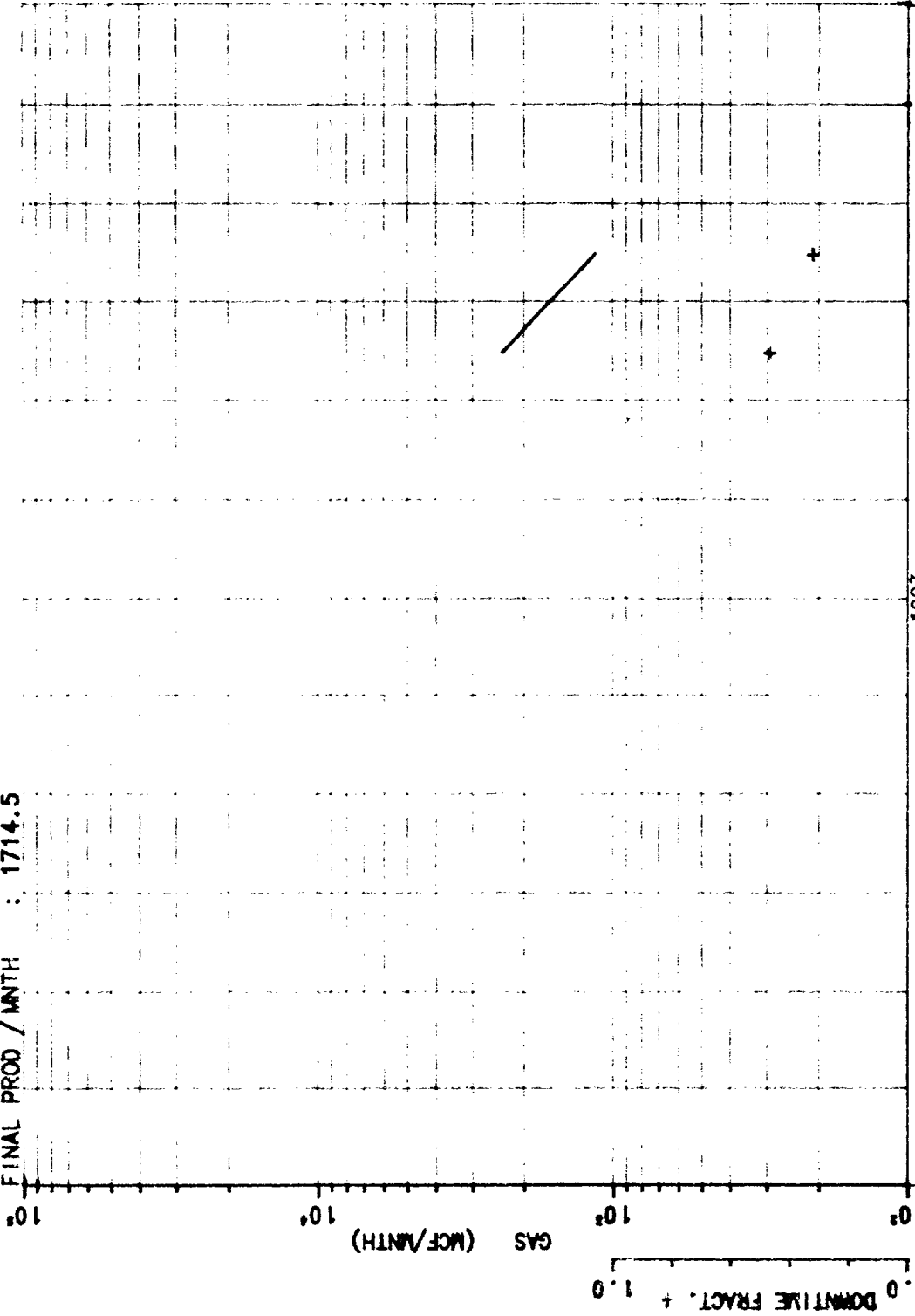
INITIAL PROD / MONTH : 4367.5

REMAINING LIFE : 0.17

CUM PRODUCTION : 3479.

FINAL PROD / MONTH : 1714.5

Current Cum
3479. MCF GAS



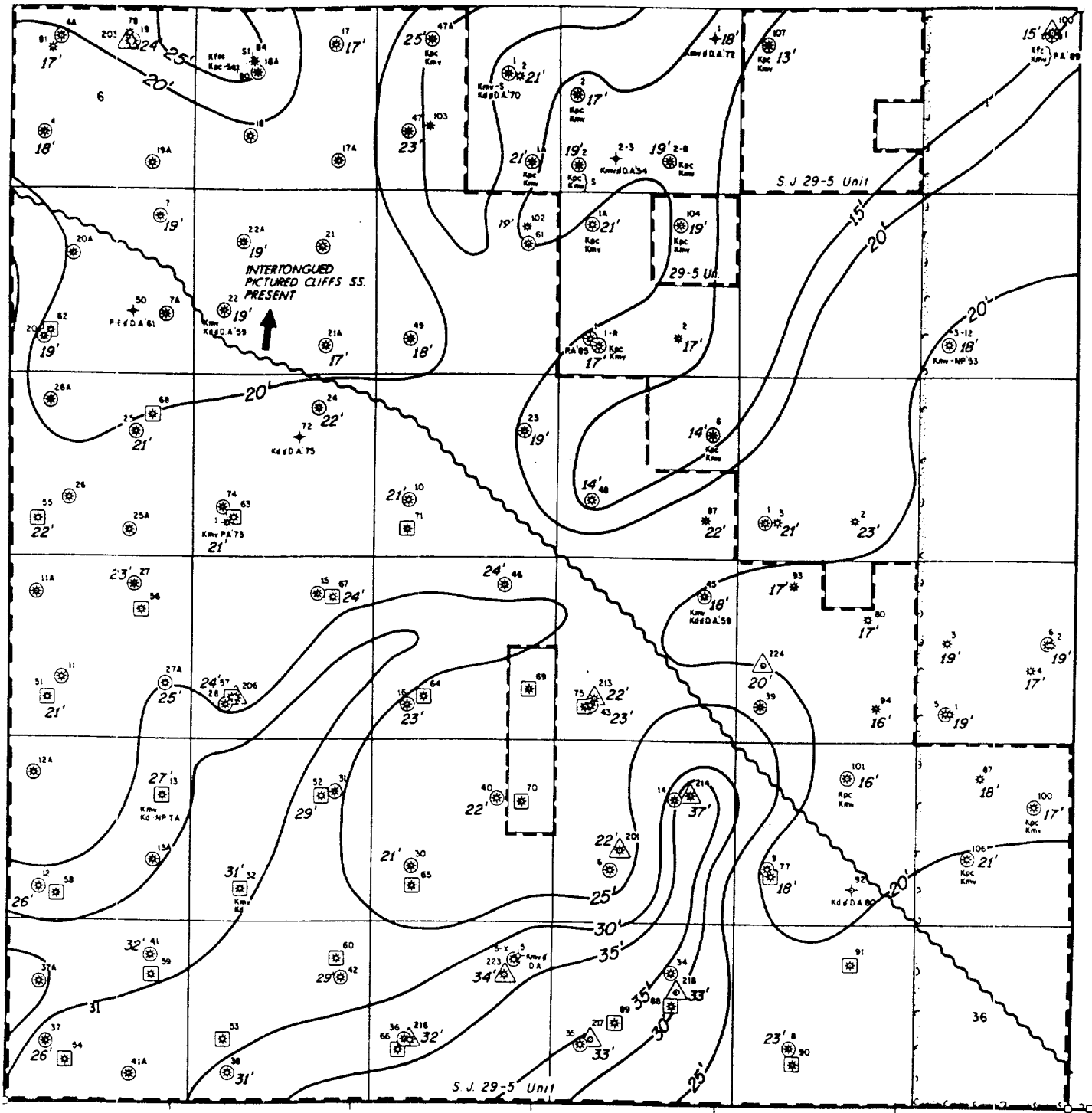
AVERAGE ONTIME = 0.605

LEASE- 650217 : SAN JUAN 29-5 UNIT #224
RESVR- 001 : BASIN FRUITLAND COAL
WELL - 000224 PHS WELL PRODUCTION

FBA1501
ZONE-650217001000224 FBA1501
API-30039249900000

SWD AND GATHERING SYSTEM COST

The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.



R-5-W

PRODUCING INTERVAL

	FARMINGTON	Kfm		
	KIRTLAND	Kk		
	FRUITLAND	Kf		
	PICTURED CLIFFS	Kpc		
	CHACRA	Kc		
	LA VENTANA	Klv		
	MESAVERDE	Kmv	{ Kch CLIFFHOUSE Kmp MENEFEE Kp POINT LOOKOUT }	
	GALLUP	Kgl		{ Kt TOCITO Kgn GREENHORN }
	DAKOTA	Kg		
	ALL PRODUCTION BELOW CRETACEOUS		Jc - ENTRADA Mp - PARADOX Bpc - BARKER CREEK M - LEADVILLE	

PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S. J. 29-5 UNIT
Rio Arriba Co. N.M.

AGGREGATE NET COAL ISOLITH
OF THE FRUITLAND COAL

C.I. 5'

5-1-92

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PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #229
 Fruitland Coal
 E/2 Section 7-T29N-R5W
 Rio Arriba County, New Mexico

Date of First Delivery: _____ 12/20/93 _____

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	184,240		
Production Taxes & Royalty:	20.442175%	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expenses (\$)</u>
1993 (0.5 mo)	0.001 (Actual)	154 (Actual)
1994	20	
1995	20	
1996	20	
1997	20	
1998	20	
1999	20	
2000	20	
2001	20	
2002	20	
2003	20	
2004	20	
2005	20	
2006	20	
2007	20	

* Operating Expenses were not escalated for inflation.

SAN JUAN 29-5 UNIT #229

COMMERCIALITY DETERMINATION

The subject well was spudded on 09/22/92 in the east half of Section 7, T29N-R5W. After a total depth of 3390' was reached on 10/02/92, a completion rig was moved on the well for the dynamic openhole completion. During cavitation, the well did not respond as desired. In fact, both the gas and water were too small to measure.

Following cavitation, the subject well was allowed to produce for approximately a one month period. However, San Juan 29-5 Unit #229 never produced more than 2 MCF total for the entire month. In addition, a swabbing unit unsuccessfully tried to kick the well off on 01/10/94. Since the well did not come around, it is currently shut-in pending further engineering evaluation.

The subject well was apparently drilled in extremely poor reservoir quality coal as the post-cavitation well test indicated. Currently, the well is shut-in, but even if it is put on line and delivered; the well is only forecasted to produce 20 MMCF per year. Therefore, this well will obviously not be deemed commercial in the 29-5 Unit Participating Area. As a result, the economic evaluation and operating expenses were not prepared for this commerciality determination report.

MEP81-01

PARPI - WELLZONE PRODUCTION BROWSE

Date: 7/25/94

YEARLY TOTALS

User: #AM3

Wellzone F8B36 01 Yr: 1993 Mth: 01 Property: 650372 SAM JUAN 29-5 UNIT #
 Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000229
 Type: T (T-Total, D-Daily Avg) Field: BASIN
 Period: Y (M-Monthly, Y-Yearly, C-Cumm) Reserv: 20001 FRUITLAND COAL

ADJ	PRODUCED			DAYS		WELL	
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL TY
1993	0.00	1	0	11.00	11		
1994	0.00	1	0	12.00	12		

NO MORE DATA AVAILABLE

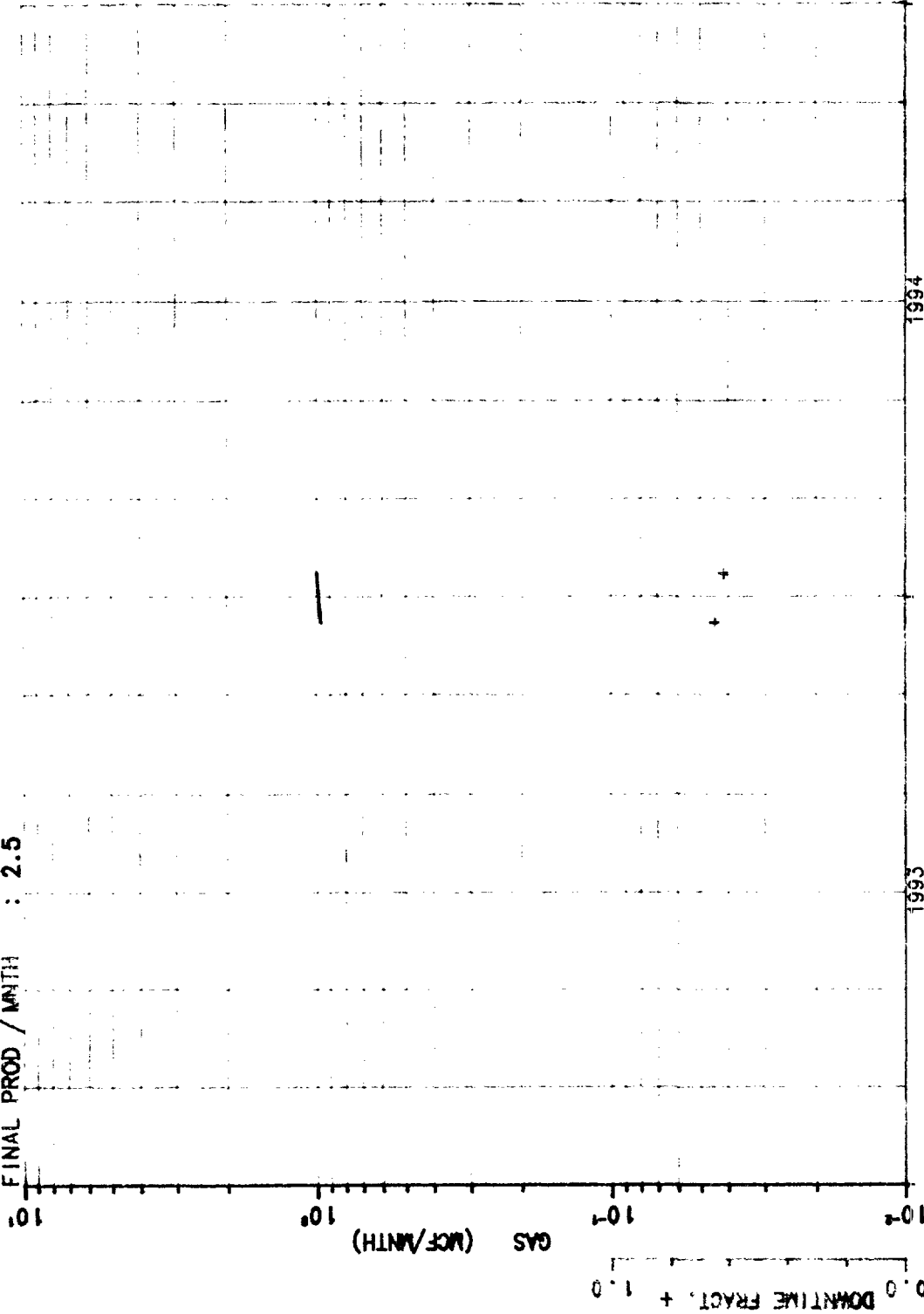
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 Transfer-> PF7=Backward PF8=Forward PF10=GRAND MENU PF12=LOG GRAPH

12/93-1/94

INITIAL PROD / MNTH : 2.8
REMAINING LIFE : 0.17
0.00

CUM PRODUCTION : 2.
FINAL PROD / MNTH : 2.5

Current Cums
2. MCF GAS



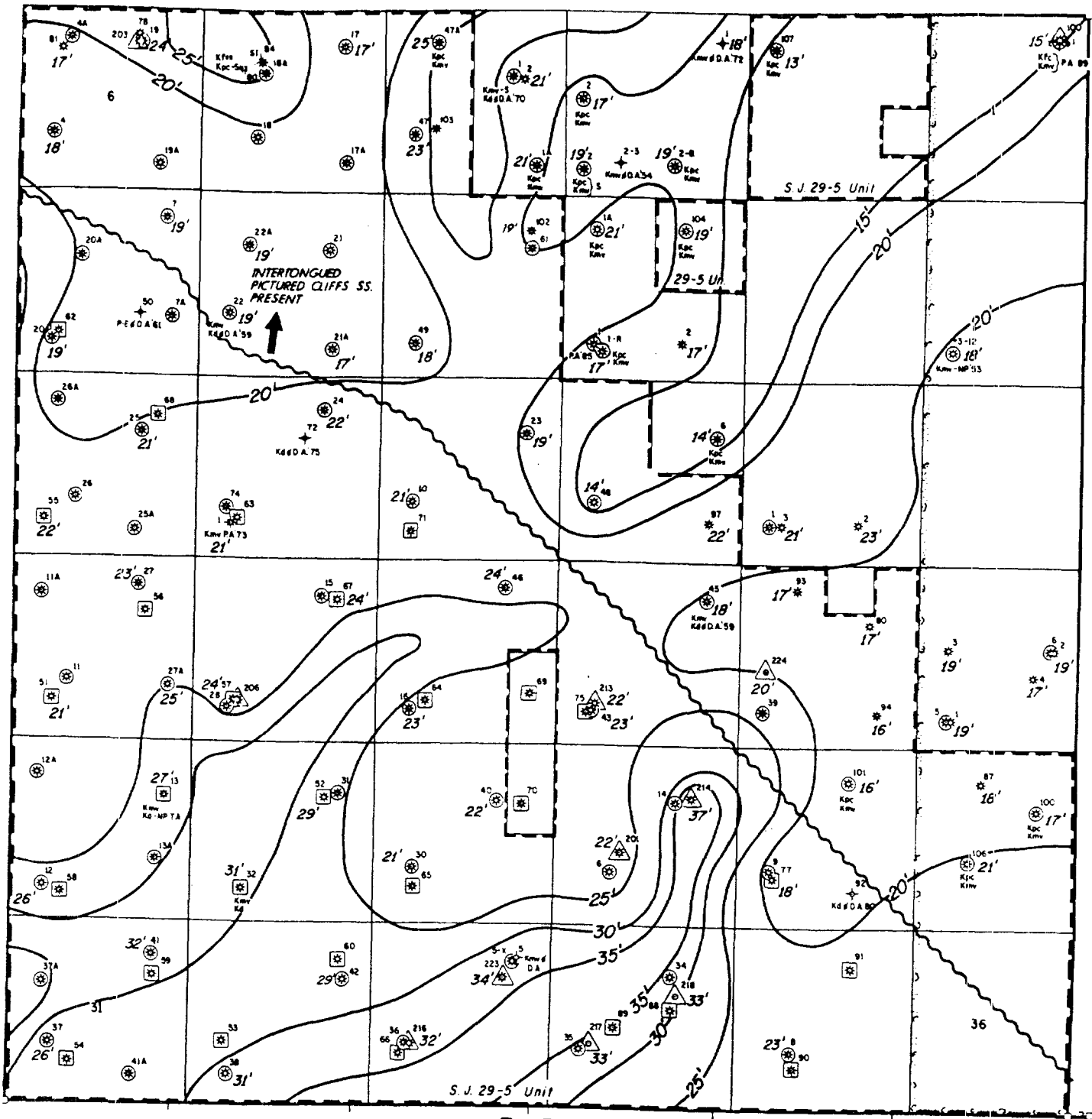
AVERAGE OBTIME = 0.371

LEASE- 650372 : SAN JUAN 20-S UNIT #229
RESVR- 001 : BASIN FRUITLAND COAL
WELL - 000229 PHS WELL PRODUCTION

F883601
ZONE-650372001000229 F883601
API-30039252270000

SWD AND GATHERING SYSTEM COST

The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.



R-5-W

PRODUCING INTERVAL

Kfm	FARMINGTON	Kfm		
Kf	FIRTLAND	Kf		
Kr	FRUITLAND	Kr		
Kpc	PICTURED CLIFFS	Kpc		
Kc	CHACRA	Kc		
Kv	LA VENTANA	Kv		
Km	MESAVERDE	Km	Cliffhouse Menefee Point Lookout	
Kp	GALLUP	Kp		
Kd	DAKOTA	Kd		
Kw	ALL PRODUCTION BELOW CRETACEOUS	Kw		
	ENTRADA			
	PARADOX			
	BARKER CREEK			
	LEADVILLE			



PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S.J. 29-5 UNIT
Rio Arriba Co. N.M.

AGGREGATE NET COAL ISOLITH
OF THE FRUITLAND COAL

C.I. 5'

5-1-92

**PHILLIPS PETROLEUM COMPANY
Commerciality Determination**

San Juan 29-5 Unit #231
Fruitland Coal
W/2 Section 5-T29N-R5W
Rio Arriba County, New Mexico

Date of First Delivery: _____ 12/20/93 _____

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	183,486		
<u>Production Taxes & Royalty:</u>	<u>20.442175%</u>	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expenses (\$)</u>
1993 (0.33 mo)	0.12 (Actual)	
1994	20	
1995	20	
1996	20	
1997	20	
1998	20	
1999	20	
2000	20	
2001	20	
2002	20	
2003	20	
2004	20	
2005	20	
2006	20	
2007	20	

* Operating Expenses were not escalated for inflation.

SAN JUAN 29-5 UNIT #231

COMMERCIALITY DETERMINATION

The subject well was spudded on 09/13/92 in the west half of Section 5, T29N-R5W. After a total depth of 3459' was reached on 10/07/92, a completion rig was moved on the well for the dynamic openhole completion (3340'-3459'). During cavitation, the well did not respond as desired. In fact on 10/12/92, the gas pitoted only at 54 MCF/D with a trace of water.

The subject well was apparently drilled in extremely poor reservoir quality coal as the post-cavitation well test indicated. Currently, the San Juan 29-5 Unit #231 is only producing 5 MCF/D with a trace of water. Therefore, this well will obviously not be deemed commercial in the 29-5 Unit Participating Area. As a result, the economic evaluation and operating expenses were not prepared for this commerciality determination report.

MEP81-01

PARPI - WELLZONE PRODUCTION BROWSE
YEARLY TOTALS

Date: 7/25/94
User: #AM3

Wellzone F8B06 01 Yr: 1993 Mth: 01 Property: 650329 SAN JUAN 29-5 UNIT #
Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000231
Type: T (T-Total, D-Daily Avg) Field: BASIN
Period: Y (M-Monthly, Y-Yearly, C-Cumm) Reserv: 20001 FRUITLAND COAL

ADJ	PRODUCED			DAYS		WELL	
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL TY
1993	0.00	12	0	10.00	10		
1994	0.00	2,936	0	140.00	140		

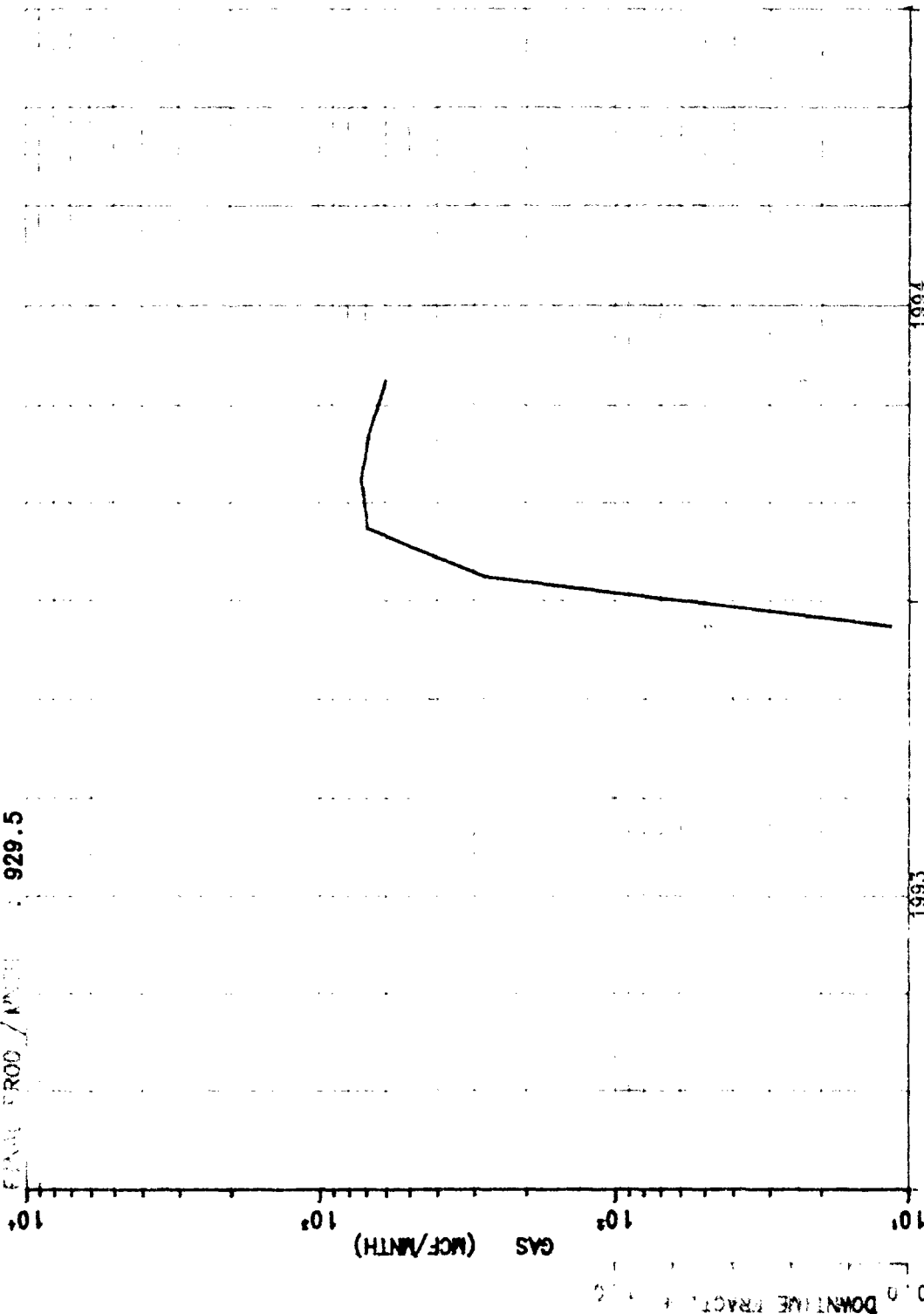
NO MORE DATA AVAILABLE

PA1=ICE PA2=Exit PF1=Help PF3=End PF11=GRAPH
Transfer-> PF7=Backward PF8=Forward PF10=GRAND MENU PF12=LOG GRAPH

Current Cum
2948. MCF GAS

12/95-01/96

INITIAL PROD / MONTH : 36.5
REMAINING LIFE : 0.50
CUM. PRODUCTION : 2948.
FINAL PROD / MONTH : 929.5



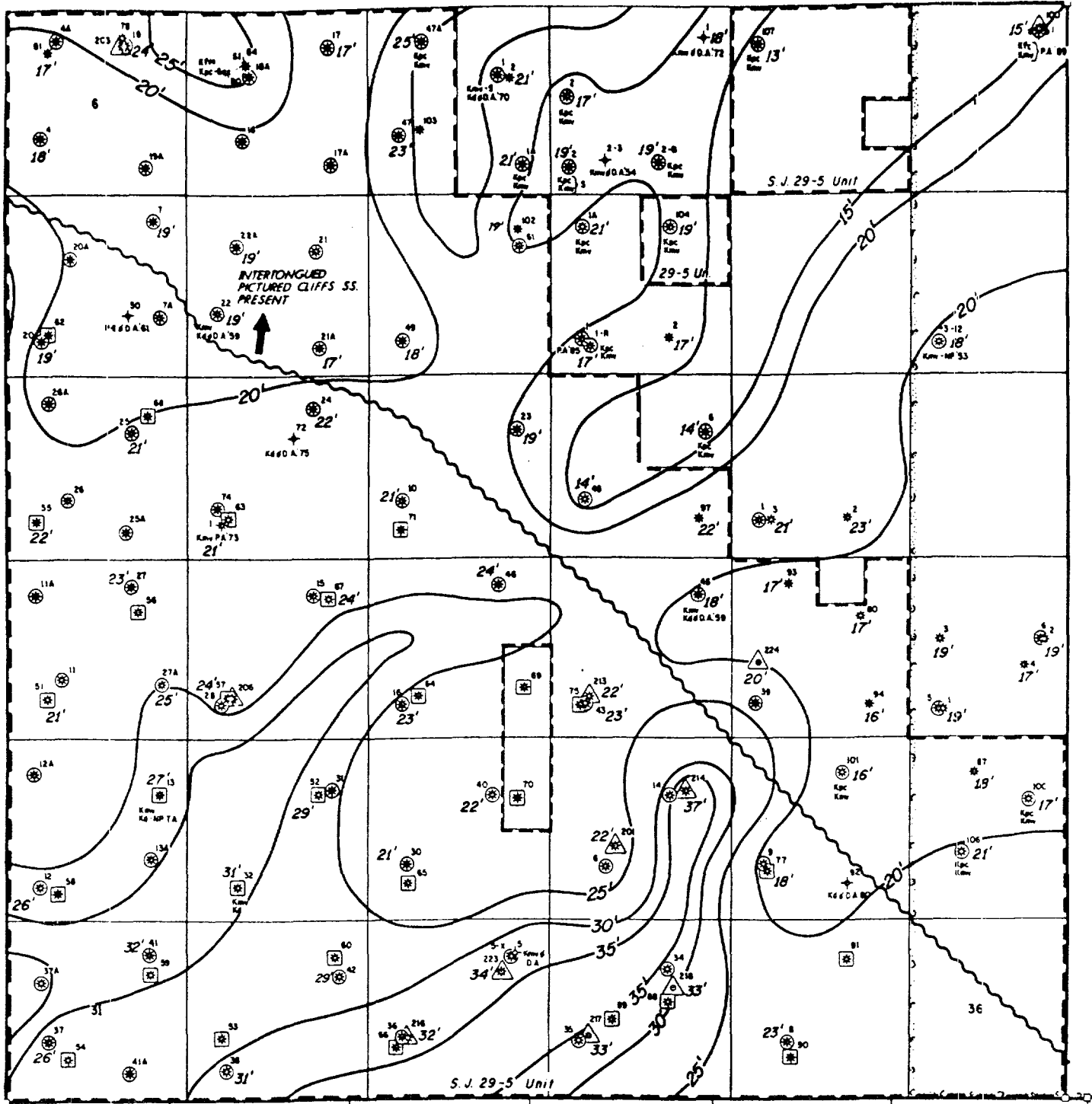
1993
1994

AVERAGE CNT/ME = 0.828
LEASE - 650379 : SAN JUAN 29-5 UNIT #2J1
RESVR - 001 : BASIN
WELL - 000231 : PHS WELL PRODUCTION

F880601
ZONE - 650379001000231 F880601
API 10039250750000

SWD AND GATHERING SYSTEM COST


The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.



R-5-W

PRODUCING INTERVAL

⊙	FARMINGTON	Kfm	
⊙	KIRTLAND	Kk	
⊙	FRUITLAND	Kf	
⊙	PICTURED CLIFFS	Kpc	
⊙	CHACRA	Kc	
⊙	LA VENTANA	Klv	
⊙	MESAVERDE	Kmv	
⊙	GALLUP	Kgl	{ Kc CLIFFHOUSE Kp MENESEE Kp POINT LOOKOUT
⊙	DAKOTA	Kd	{ Kt TOCITO Kp GREENHORN
⊙	ALL PRODUCTION BELOW CRETACEOUS		K - ENTRADA Pp - PARADOX Pbc - BARKER CREEK M - LEADVILLE



PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S. J. 29-5 UNIT
Rio Arriba Co. N.M.

AGGREGATE NET COAL ISOLITH
OF THE FRUITLAND COAL

C.I. 5'

5-1-92

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #230
 Fruitland Coal
 E/2 Section 5-T29N-R5W
 Rio Arriba County, New Mexico

Date of First Delivery: _____ 05/24/93 _____

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	384,503		
Production Taxes & Royalty:	20.442175%	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

Year	Gas (MMCF)	* Operating Expenses (\$)
1993 (6.5 mo)	16 (Actual)	19,244 (Actual)
1994	311	32,178
1995	296	32,178
1996	221	32,178
1997	171	32,178
1998	137	32,178
1999	112	32,178
2000	93	32,178
2001	78	32,178
2002	67	32,178
2003	58	32,178
2004	51	32,178
2005	45	32,178
2006	40	32,178
2007	35	32,178

* Operating Expenses were not escalated for inflation.

MEP81-01

PARPI - WELLZONE PRODUCTION BROWSE

Date: 7/26/94

YEARLY TOTALS

User: #AM3

Wellzone F8B37 01 Yr: 1993 Mth: 01 Property: 650373 SAN JUAN 29-5 UNIT #
 Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000230
 Type: T (T-Total, D-Daily Avg) Field: BASIN
 Period: Y (M-Monthly, Y-Yearly, C-Cumm) Reserv: 20001 FRUITLAND COAL

ADJ	PRODUCED			DAYS		WELL	
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL TY
1993	0.00	16,055	4,653	198.00	198		
1994	0.00	114,927	6,110	181.00	181		

NO MORE DATA AVAILABLE

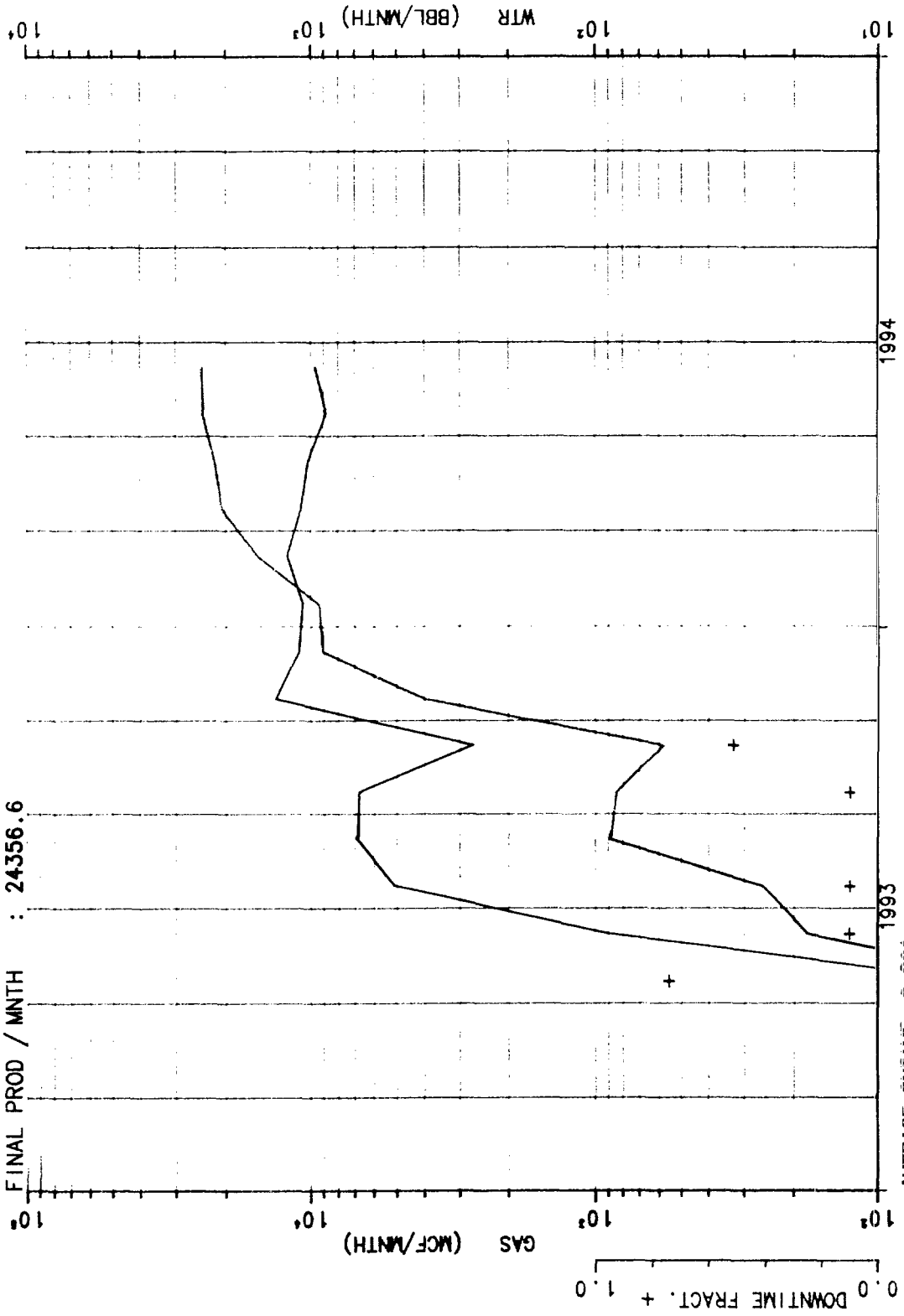
PA1=ICE PA2=Exit PF1=Help PF3=End PF11=GRAPH
 Transfer-> PF7=Backward PF8=Forward PF10=GRAND MENU PF12=LOG GRAPH

5/93-6/94

INITIAL PROD / MNTH : 114.1
REMAINING LIFE : 1.17

CUM PRODUCTION : 130982.
FINAL PROD / MNTH : 24356.6

Current Cums
130982. MCF GAS
107663. BBL WTR



AVERAGE ONTIME = 0.891

LEASE- 650373 : SAN JUAN 29-5 UNIT #230
RESVR- 001 : BASIN FRUITLAND COAL
WELL - 000230 PHS WELL PRODUCTION

F8B3701
ZONE-650373001000230 F8B3701
API-30039252260000

CASE : CD 29-5 #230 ** ECONOMICS CASE SUMMARY **

DESCRIPTION: COMMERCIALITY DETERMINATIONS

WORKING INT : 100.000%

CASE REVENUE INT : 79.558% OIL REV INT : 79.558%

GAS REV INT : 79.558%

CASE LIFE -FIRST MO-YR : 10-1992 PROD MO-YR : 5-1993

LAST YEAR : 2007

MEASURES OF MERIT

AARR (%) : 49.9
BREAKEVEN POINT (YRS.) : 2.4
PAYOUT (YRS.) : 1.8
NTER : 4.0
ECONOMIC LIFE (YRS.) : 14.7

RESERVES SUMMARY

OIL-GROSS MBBLs :
NET MBBLs :
NET REVENUE(M\$) :
BBL/DAY TO PAYOUT:
GAS GROSS MMCF : 1731.0
NET MMCF : 1377.1
NET REVENUE(M\$) : 2010.6
MCF/DAY TO PAYOUT: 564.2

NET CASH FLOW SUMMARY(M\$)

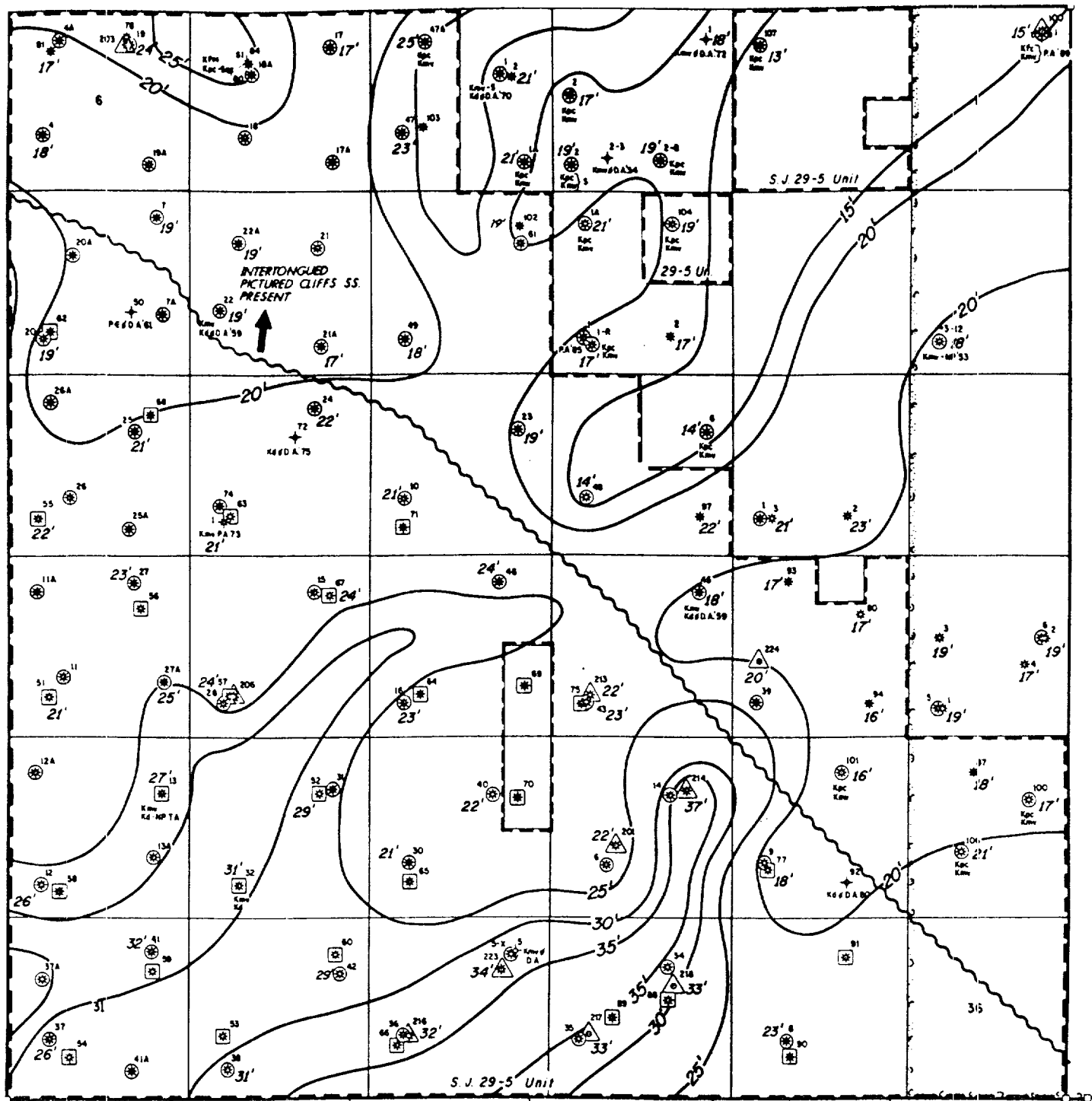
CAPITAL OUTLAY : 384.5
TOTAL REVENUE : 2010.6
TOTAL EXPENSES : 469.7
IBRT : 1540.9
CURRENT INCOME TAX :
SALVAGE :
CASH RETURNED : 1540.9
CASH FLOW : 1156.4
NET PRESENT VALUE (M\$) P.I.
@ 13.0 %: 538.9 2.43
@ 10.0 %: 639.6 2.69
@ 8.0 %: 717.5 2.89
@ 6.0 %: 805.8 3.12

PRESS "ENTER" TO CONTINUE...

GOWEE_CASE_SUM

SWD AND GATHERING SYSTEM COST

The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.



R-5-W

PRODUCING INTERVAL

- ⊙ FARMINGTON Kfm
 - ⊙ HIRTLAND Ks
 - ⊙ FRUITLAND Kf
 - ⊙ PICTURED CLIFFS Kpc
 - ⊙ CHACRA Kc
 - ⊙ LA VENTANA Klv
 - ⊙ MESAVENDE Km
 - ⊙ GALLUP Kgl
 - ⊙ DAKOTA Kd
 - ⊙ ALL PRODUCTION BELOW CRETACEOUS
- Kch — CLIFFHOUSE
 Km — MENEPEE
 Kpl — POINT LOOKOUT
 Kt — TOCITO
 Kgn — GREENHORN
- ⊙ ENTRADA
 - ⊙ PARADOX
 - ⊙ BARKER CREEK
 - ⊙ LEADVILLE



PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S. J. 29-5 UNIT
Rio Arriba Co. N.M.
AGGREGATE NET COAL ISOLITH
OF THE FRUITLAND COAL
C.I. 5'

5-1-92

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #218
 Fruitland Coal
 E/2 Section 34-T29N-R5W
 Rio Arriba County, New Mexico

Date of First Delivery: NEVER DELIVERED

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	228,703		
<u>Production Taxes & Royalty:</u>	<u>20.442175%</u>	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expenses (\$)</u>
1990	0 (Actual)	
1991	0 (Actual)	887 (Actual)
1992	0 (Actual)	
1993	0 (Actual)	
1994	20	
1995	20	
1996	20	
1997	20	
1998	20	
1999	20	
2000	20	
2001	20	
2002	20	
2003	20	
2004	20	

* Operating Expenses were not escalated for inflation.

SAN JUAN 29-5 UNIT #218

COMMERCIALITY DETERMINATION

The subject well was spudded on 11/22/90 in the east half of Section 34, T29N-R5W. After a total depth of 3750' was reached on 11/26/90, 5-1/2", 15.5# casing was set at TD (3749') and cemented to surface. However, the 5-1/2" casing was never perforated. As a result, the coal interval (3521' - 3701') has never been completed (i.e. frac'd). Partners did not want to fracture stimulate the subject well due to poor results from offset wells that were previously treated.

Currently, the well is shut-in, but even if it is frac'd and delivered; the well is only forecasted from offset wells with similar reservoir characteristics to produce 20 MMCF per year. Therefore, this well is predicted to be non-commercial in the 29-5 Unit Participating Area. As a result, the economic evaluation and operating expenses were not prepared for this commerciality determination report.

MEP81-01

PARPI - WELLZONE PRODUCTION BROWSE

Date: 7/18/94

YEARLY TOTALS

User: #AM3

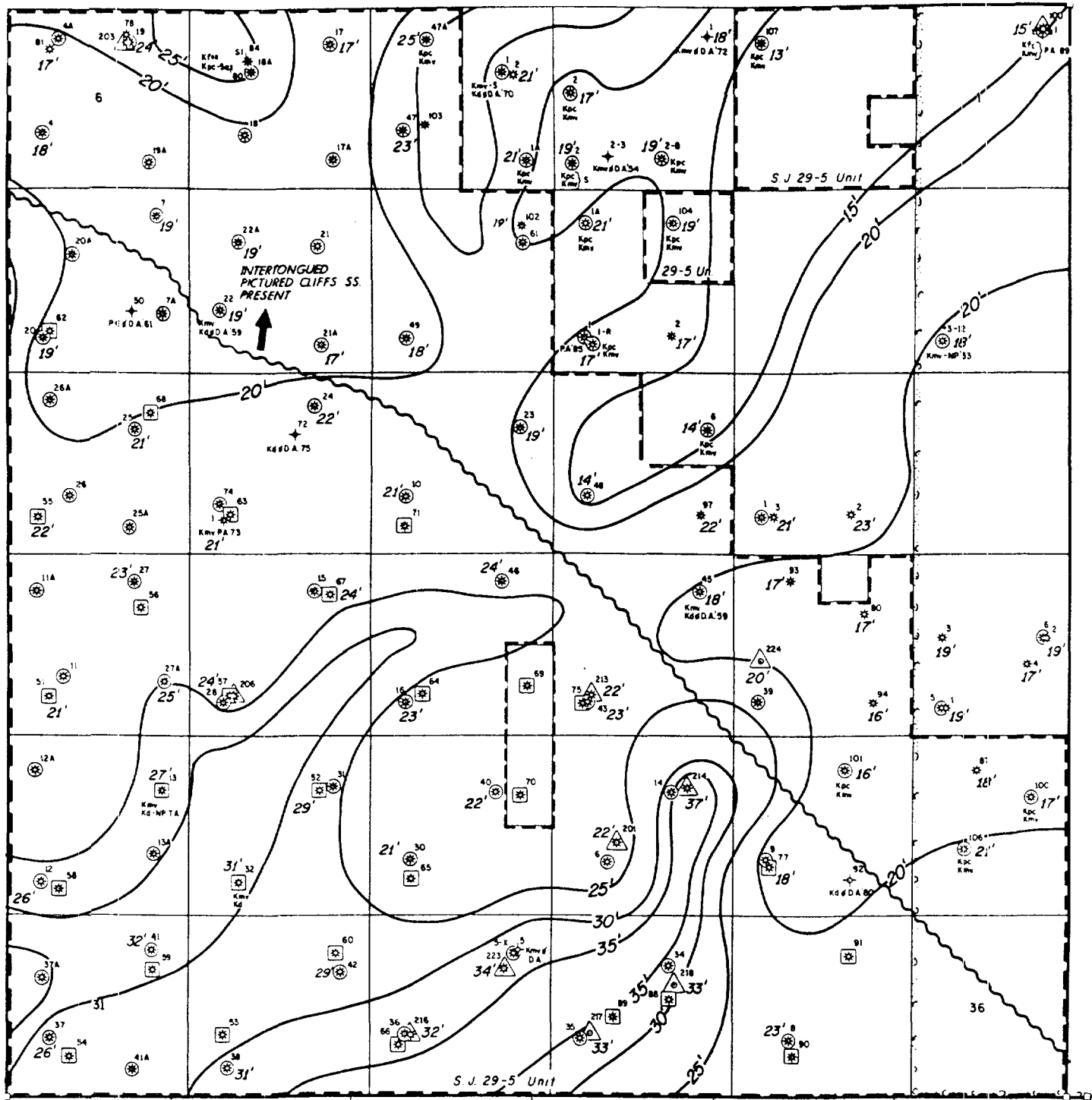
Wellzone F8A88 01 Yr: 1990 Mth: 01 Property: 650261 SAN JUAN 29-5 UNIT #
 Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000218
 Type: T (T-Total, D-Daily Avg) Field: BASIN
 Period: Y (M-Monthly, Y-Yearly, C-Cumm) Reserv: 20001 FRUITLAND COAL

ADJ	PRODUCED			DAYS		WELL	
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL TY
1991	0.00	0	0	0.00	0		
1992	0.00	0	0	0.00	0		
1993	0.00	0	0	0.00	0		
1994	0.00	0	0	0.00	0		

PA1=ICE PA2=Exit PF1=Help PF3=End PF11=GRAPH
 Transfer-> PF7=Backward PF8=Forward PF10=GRAND MENU PF12=LOG GRAPH

SWD AND GATHERING SYSTEM COST


The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.



R-5-W

PRODUCING INTERVAL

- * FARMINGTON Kfm
- * KIRTLAND Kk
- * FRUITLAND Kf
- * PICTURED CLIFFS Kpc
- * CHACRA Kc
- * LA VENTANA Klv
- * MESAVERDE Km
- * GALLUP Kgl - { K* TOCITO
Kp GREENHORN
- * DAKOTA Kd
- * ALL PRODUCTION BELOW CRETACEOUS
- JA - ENTRADA
- Pp - PARADOX
- Pbc - BARKER CREEK
- M - LEADY LLE



PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S.J. 29-5 UNIT
Rio Arriba Co. N.M.

AGGREGATE NET COAL ISOLITH
OF THE FRUITLAND COAL

C.I. 5'

5-1-92

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #225
 Fruitland Coal
 W/2 Section 6-T29N-R5W
 Rio Arriba County, New Mexico

Date of First Delivery: 05/15/93

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	235,109		
<u>Production Taxes & Royalty:</u>	<u>20.442175%</u>	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expenses (\$)</u>
1993 (7.5 mo)	236 (Actual)	15,924 (Actual)
1994	431	32,162
1995	431	32,162
1996	399	32,162
1997	370	32,162
1998	344	32,162
1999	321	32,162
2000	300	32,162
2001	281	32,162
2002	264	32,162
2003	248	32,162
2004	234	32,162
2005	221	32,162
2006	209	32,162
2007	198	32,162

* Operating Expenses were not escalated for inflation.

MEP81-01

PARPI - WELLZONE PRODUCTION BROWSE

Date: 7/21/94

YEARLY TOTALS

User: #AM3

Wellzone F8B04 01 Yr: 1993 Mth: 01 Property: 650327 SAN JUAN 29-5 UNIT #
 Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000225
 Type: T (T-Total, D-Daily Avg) Field: BASIN
 Period: Y (M-Monthly, Y-Yearly, C-Cumm) Reserv: 20001 FRUITLAND COAL

ADJ	PRODUCED			DAYS		WELL		
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL	TY
1993	0.00	235,636	874	231.00				231
1994	0.00	73,562	1,497	151.00				151

NO MORE DATA AVAILABLE

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5/93-5/94

INITIAL PROD / MNTH : 7421.5

REMAINING LIFE : 1.08

0.00

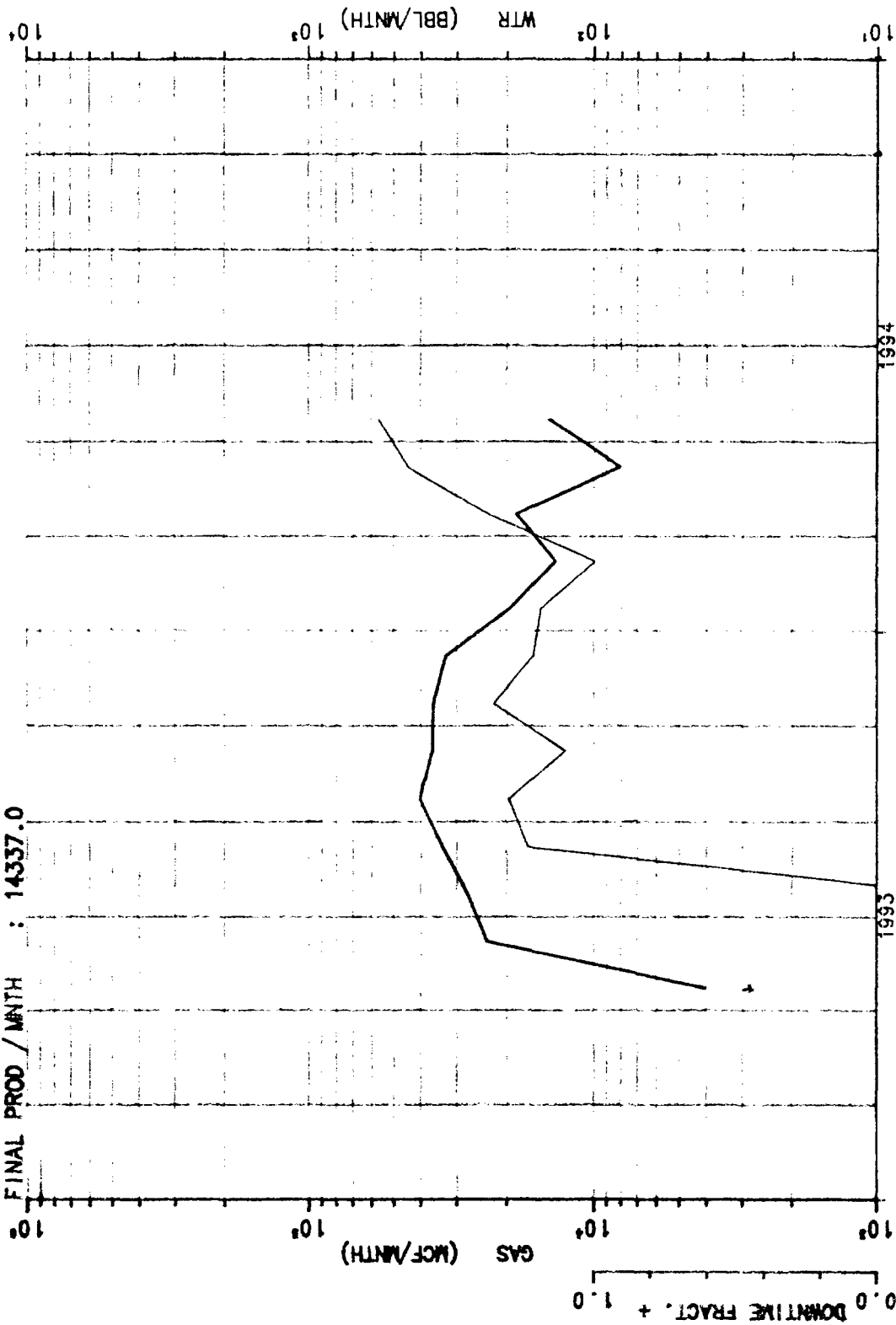
CUM PRODUCTION : 309197.

FINAL PROD / MNTH : 14337.0

Current Cums

309197. MCF GAS

2371. BBL WTR



AVERAGE CNTIME = 0.965

LEASE- 650327 : SAN JUAN 29-5 UNIT #225
RESVR- 001 : BASIN FRUITLAND COAL
WELL - 0002.5 PHS WELL PRODUCTION

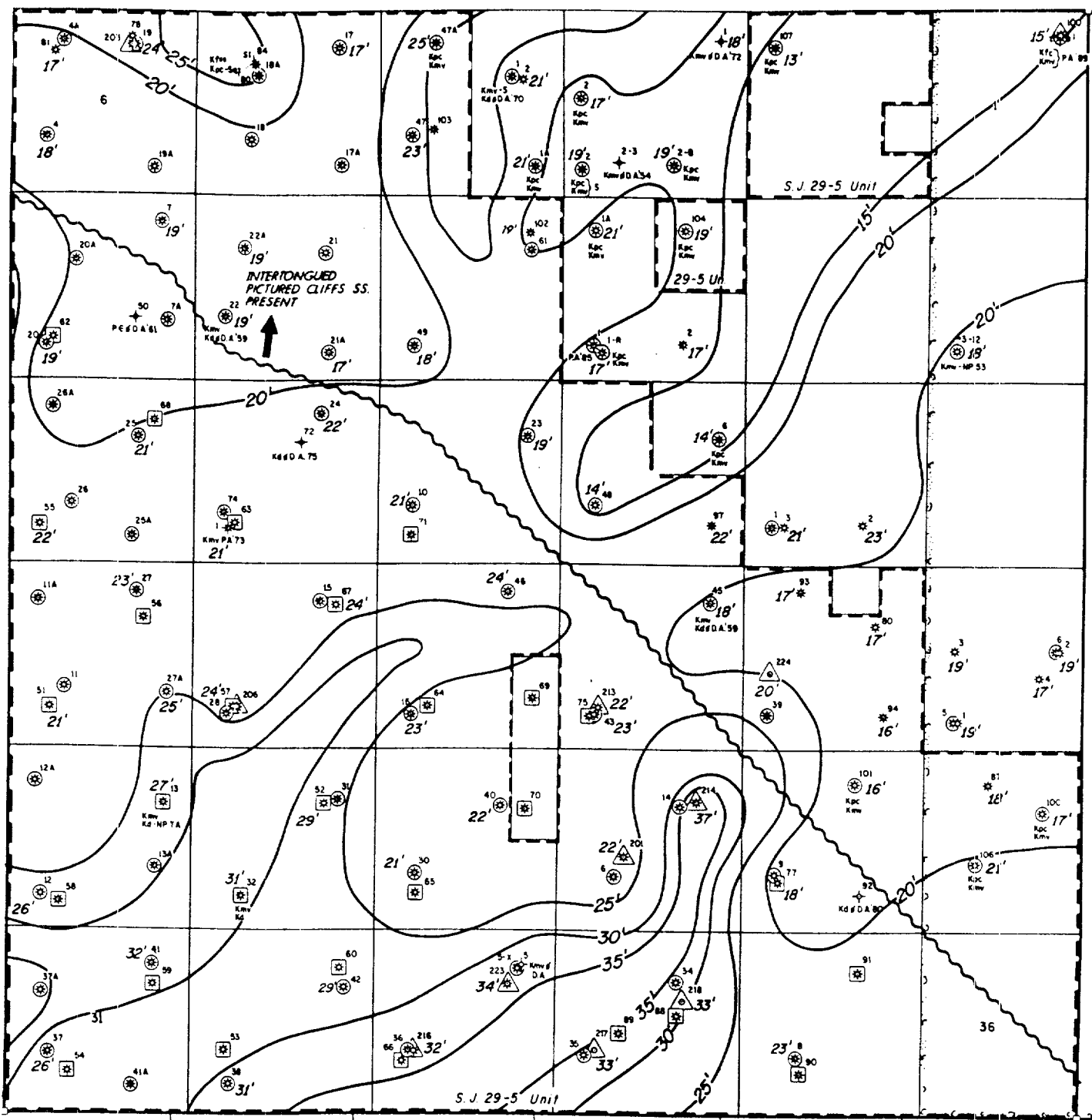
F890401
ZONE-650327001000225 F890401
API-30039250860000

CASE : CD 29-5 #225 ** ECONOMICS CASE SUMMARY **
 DESCRIPTION: COMMERCIALITY DETERMINATIONS WORKING INT : 100.000%
 CASE REVENUE INT : 79.558% OIL REV INT : 79.558% GAS REV INT : 79.558%
 CASE LIFE -FIRST MO-YR : 8-1992 PROD MO-YR : 5-1993 LAST YEAR : 2007

MEASURES OF MERIT		NET CASH FLOW SUMMARY(M\$)	
AARR (%)	: 134.9	CAPITAL OUTLAY	: 235.1
BREAKEVEN POINT (YRS.)	: 1.5	TOTAL REVENUE	: 5211.8
PAYOUT (YRS.)	: .8	TOTAL EXPENSES	: 466.2
NTER	: 19.8	IBRT	: 4745.6
ECONOMIC LIFE (YRS.)	: 14.7	CURRENT INCOME TAX	: 83.1
RESERVES SUMMARY		SALVAGE	:
OIL-GROSS MBBLS	:	CASH RETURNED	: 4662.5
NET MBBLS	:	CASH FLOW	: 4427.4
NET REVENUE(M\$)	:	NET PRESENT VALUE (M\$)	P.I.
BBL/DAY TO PAYOUT:		@ 13.0 %:	1970.7 9.38
GAS_GROSS MMCF	: 4487.0	@ 10.0 %:	2319.2 10.86
NET MMCF	: 3569.8	@ 8.0 %:	2603.4 12.07
NET REVENUE(M\$)	: 5211.8	@ 6.0 %:	2940.8 13.51
MCF/DAY TO PAYOUT:	1003.9		
PRESS "ENTER" TO CONTINUE...			GOWEE_CASE_SUM

SWD AND GATHERING SYSTEM COST

The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.



R-5-W

PRODUCING INTERVAL

K _f m	FARMINGTON	K _f m	
K ₁	FIRTLAND	K ₁	
	FRUITLAND	K _f	
	PICTURED CLIFFS	K _{pc}	
	CHACRA	K _c	
	LA VENTANA	K _{lv}	
	MESAVERDE	K _{mv}	
	GALLUP	K _g	{ K _{ch} CLIFFHOUSE K _m MENEFEE K _p POINT LOOKOUT
	DAKOTA	K _d	
	ALL PRODUCTION BELOW CRETACEOUS		



PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S. J. 29-5 UNIT
Rio Arriba Co. N.M.
AGGREGATE NET COAL ISOLITH
OF THE FRUITLAND COAL
C.I. 5'
5-1-92

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #201
Fruitland Coal
W/2 Section 27-T29N-R5W
Rio Arriba County, New Mexico

Date of First Delivery: 08/18/92

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	375,997		
Production Taxes & Royalty:	20.442175%	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

Year	Gas (MMCF)	* Operating Expenses (\$)
1992 (4.5 mo)	23 (Actual)	1,346 (Actual)
1993	36 (Actual)	6,849 (Actual)
1994	43	
1995	43	
1996	43	
1997	43	
1998	43	
1999	43	
2000	43	
2001	43	
2002	43	
2003	43	
2004	43	
2005	43	
2006	43	

* Operating Expenses were not escalated for inflation.

SAN JUAN 29-5 UNIT #201

COMMERCIALITY DETERMINATION

The subject well was spudded on 12/04/90 in the west half of Section 27, T29N-R5W. After a total depth of 3832' was reached on 12/08/90, 5-1/2", 15.5# casing was set at TD (3832'). The casing was cemented in two stages with 1,060 sacks of cement with 328 sacks circulated to surface.

After cementing the casing, the Fruitland Coal Formation was perforated with 2 SPF from 3696' to 3746' for a total of 52 shots. Since the coal appeared not to be cleated and extremely tight, two fracture stimulations were designed for the subject well. Initially, a pin-point isolation packer, PPIP, was run on 2-3/8" tubing to breakdown the perforations (3696'-3746') with 7.5% HCl. After breaking down the perfs in four intervals, the Fruitland Coal Interval (3696'-3746') was fracture stimulated on 12/20/91 with 18,565 gals cross-linked gel, 582,000 SCF nitrogen at 70% quality, and 80,000 lbs of 16/30 Brady sand ramped to 5.5 ppg. Following the frac job a CIBP was set on wireline at 3675' in preparation for the second fracture treatment.

For the second fracture stimulation, the perfs, 3529' to 3635' at 2 SPF (128 holes) were broken down with the PPIP tool on 2-3/8" tubing and 7.5% HCl. Then the Fruitland Coal Interval (3529'-3635') was fracture stimulated on 12/22/91 with 32,971 gals gelled water, 1,150,050 SCF nitrogen at 70% quality foam, and 204,892 lbs of 16/30 Brady sand ramped to 5 ppg. Following the second frac job, the CIBP at 3675' was drilled out.

The fracture treatments produced very limited results on the extremely tight Fruitland Coal Formation. In fact on 01/08/92, the subject well only tested/pitoted 263 MCF/D following the fracture treatments. Currently, the well is producing only 119 MCF/D with a trace of water from the perforated Fruitland Coal Interval 3529' to 3746'.

Taking into account the subject well's past history and current rates, the well will obviously not be deemed commercial in the 29-5 Unit Participating Area. As a result, the economic evaluation and operating expenses were not prepared for this commerciality determination report.

MEP81-01

PARPI - WELLZONE PRODUCTION BROWSE

Date: 7/18/94

YEARLY TOTALS

User: #AM3

Wellzone F8A86 01 Yr: 1992 Mth: 01 Property: 650259 SAN JUAN 29-5 UNIT #
 Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000201
 Type: T (T-Total, D-Daily Avg) Field: BASIN
 Period: Y (M-Monthly, Y-Yearly, C-Cumm) Reserv: 20001 FRUITLAND COAL

ADJ	PRODUCED			DAYS		WELL	
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL TY
1992	0.00	23,172	0	136.00	136		
1993	0.00	35,604	0	349.00	349		
1994	0.00	12,011	0	150.00	150		

NO MORE DATA AVAILABLE

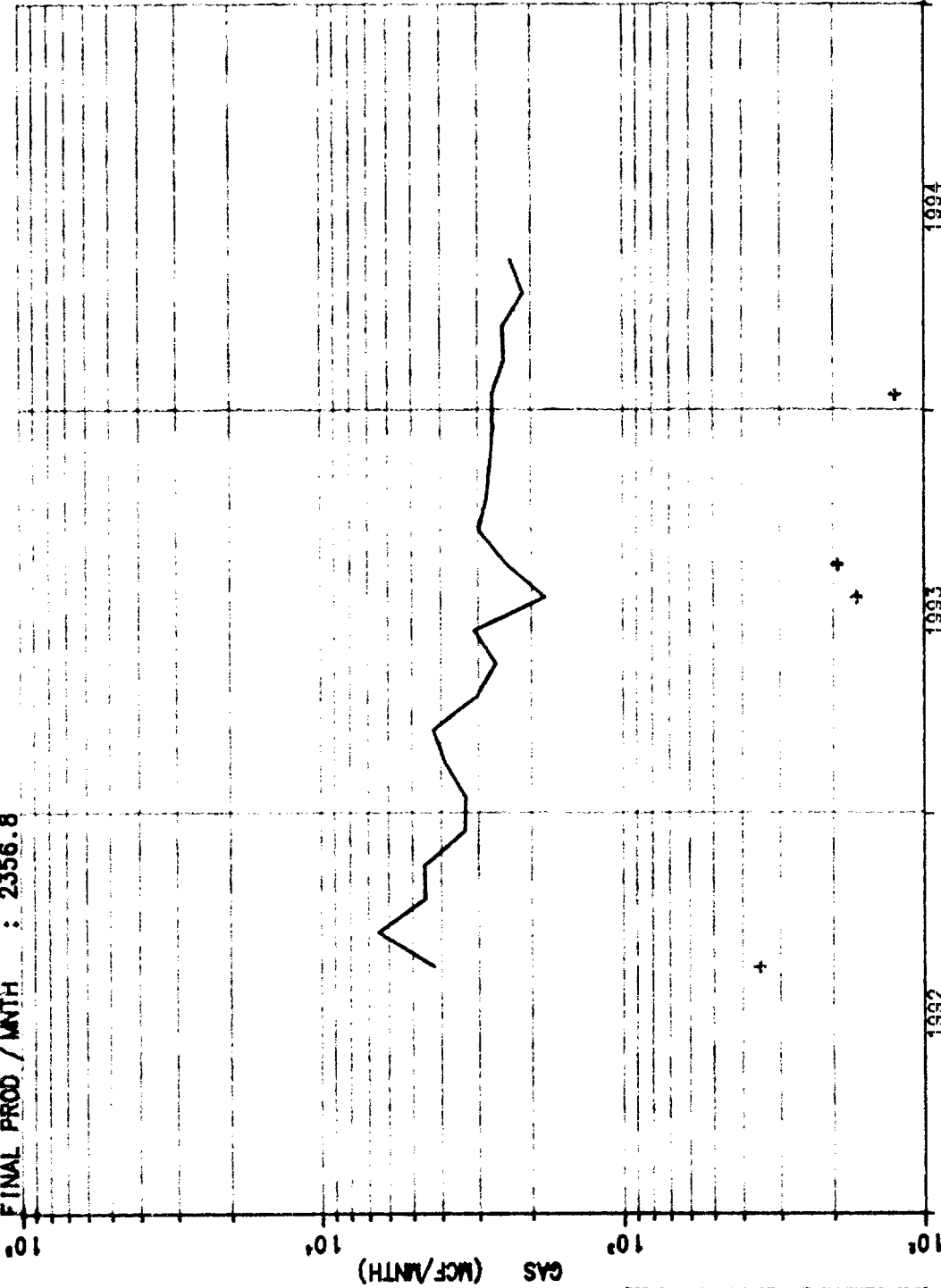
PA1=ICE PA2=Exit PF1=Help PF3=End PF11=GRAPH
 Transfer-> PF7=Backward PF8=Forward PF10=GRAND MENU PF12=LOG GRAPH

8/92-5/94

Current Cum
70787. MCF GAS

INITIAL PROD / MONTH : 9260.4
REMAINING LIFE : 1.83

CUM PRODUCTION : 70787.
FINAL PROD / MONTH : 2356.8



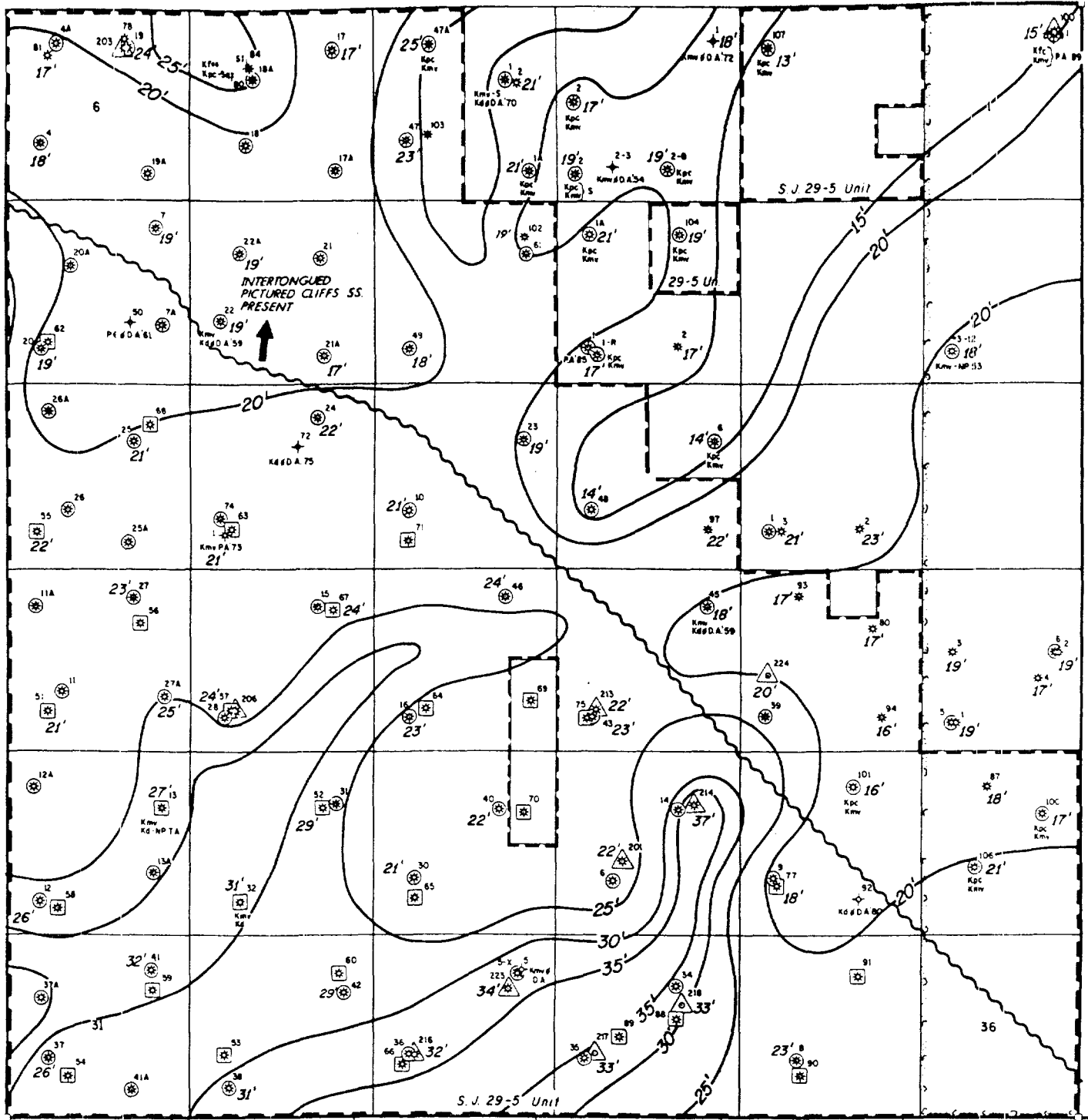
AVERAGE ONTIME = 0.950

LEASE- 650259 : SAN JUAN 20-5 UNIT #201
RESVIR- 001 : BASIN
WELL - 000201 : PHS WELL PRODUCTION

F8A8601
ZONE-650259001000201 F8A8601
API-30039249760000

SWD AND GATHERING SYSTEM COST

The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.




R-5-W

T
2
N

PRODUCING INTERVAL

K _{FM} *	FARMINGTON	K _{FM}	
K _L *	F. RTLAND	K _L	
K _F *	FRUITLAND	K _F	
K _{PC} *	PICTURED CLIFFS	K _{PC}	
K _C *	CHACRA	K _C	
K _{LV} *	LA VENTANA	K _{LV}	
K _{MS} *	MESAVERDE	K _{MS}	{ K _{CH} CLIFFHOUSE K _{ME} MENEFEE K _{PL} POINT LOOKOUT
K _{GI} *	GALLUP	K _{GI}	
K _D *	DAKOTA	K _D	{ K _T TOCITO K _{GH} GREENHORN
K _{BP} *	ALL PRODUCTION BELOW CRETACEOUS		{ J _E ENTRADA P _{PD} PARADOX P _{BC} BARKER CREEK M LEADVILLE



PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S.J. 29-5 UNIT
Rio Arriba Co. N.M.

AGGREGATE NET COAL ISOLITH
OF THE FRUITLAND COAL

C.I. * 5'

5-1-92

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #219
 Fruitland Coal
 W/2 Section 4-T29N-R5W
 Rio Arriba County, New Mexico

Date of First Delivery: _____ 05/25/93 _____

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	266,409		
Production Taxes & Royalty:	20.442175%	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

Year	Gas (MMCF)	* Operating Expenses (\$)
1993 (7 mo)	30 (Actual)	16,233 (Actual)
1994	64	28,763
1995	64	28,763
1996	64	28,763
1997	64	28,763
1998	64	28,763
1999	64	28,763
2000	64	28,763
2001	64	28,763
2002	64	28,763
2003	64	28,763
2004	64	28,763
2005	64	28,763
2006	64	28,763
2007	64	28,763

* Operating Expenses were not escalated for inflation.

MEPB1-01

PARP1 - WELLZONE PRODUCTION BROWSE
YEARLY TOTALS

Date: 7/25/94
User: #AM3

Wellzone FBB35 01 Yr: 1993 Mth: 01 Property: 650190 SAN JUAN 29-5 UNIT #
Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000219
Type: T (T-Total, D-Daily Avg) Field: BASIN
Period: Y (M-Monthly, Y-Yearly, C-Cumm) Reserv: 20001 FRUITLAND COAL

ADJ	PRODUCED			DAYS		WELL	
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL TY
1993	0.00	29,784	3,768	220.00	220		
1994	0.00	22,938	2,288	143.00	143		

NO MORE DATA AVAILABLE

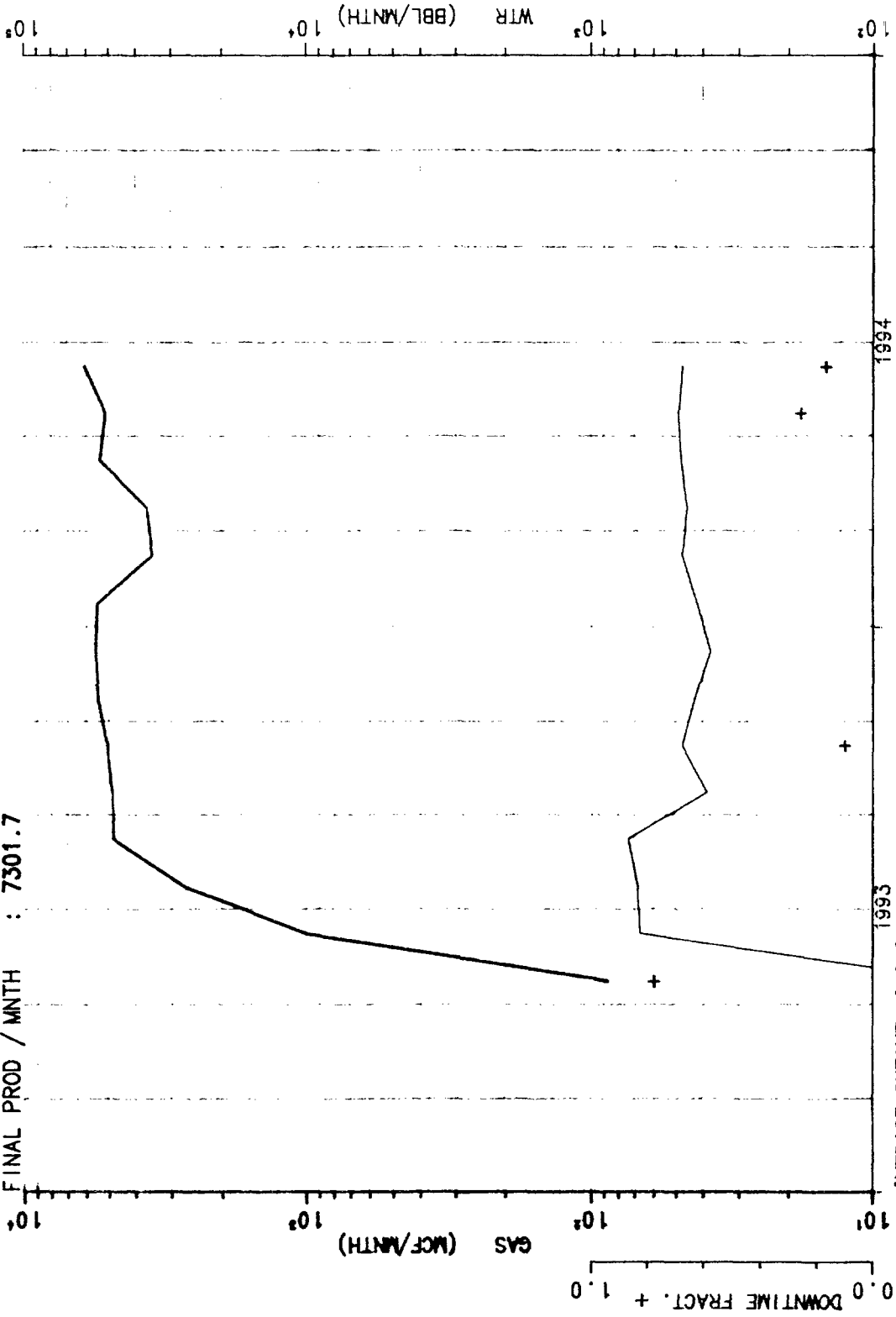
PA1=JCE PA2=Exit PF1=Help PF3=End PF11=GRAPH
Transfer--> PF7=Backward PF8=Forward PF10=GRAND MENU PF12=LOG GRAPH

5/93-6/94

INITIAL PROD / MNTH : 386.4
REMAINING LIFE : 1.17

CUM PRODUCTION : 58721.
FINAL PROD / MNTH : 7301.7

Current Cums
58721. MCF GAS
6521. BBL WTR



AVERAGE ONTIME = 0.912

LEASE- 650190 : SAN JUAN 29-5 UNIT #219
RESVR- 001 : BASIN FRUITLAND COAL
WELL - 000219 PHS WELL PRODUCTION

F8B3501
ZONE-650190001000219 F8B3501
API-30039250810000

CASE : CD 29-5 #219 ** ECONOMICS CASE SUMMARY **
 DESCRIPTION: COMMERCIALITY DETERMINATIONS WORKING INT : 100.000%
 CASE REVENUE INT : 79.558% OIL REV INT : 79.558% GAS REV INT : 79.558%
 CASE LIFE -FIRST MO-YR : 10-1992 PROD MO-YR : 5-1993 LAST YEAR : 2007

MEASURES OF MERIT		NET CASH FLOW SUMMARY (M\$)	
AARR (%)	: 13.9	CAPITAL OUTLAY	: 266.4
BREAKEVEN POINT (YRS.)	: 6.7	TOTAL REVENUE	: 1075.6
PAYOUT (YRS.)	: 6.1	TOTAL EXPENSES	: 418.9
NTER	: 2.5	IBRT	: 656.7
ECONOMIC LIFE (YRS.)	: 14.7	CURRENT INCOME TAX	:
RESERVES SUMMARY		SALVAGE	:
OIL-GROSS MBBLS	:	CASH RETURNED	: 656.7
NET MBBLS	:	CASH FLOW	: 390.3
NET REVENUE (M\$)	:	NET PRESENT VALUE (M\$)	P.I.
BBL/DAY TO PAYOUT:		@ 13.0 %:	12.7 1.05
GAS_GROSS MCF	: 926.0	@ 10.0 %:	63.5 1.24
NET MCF	: 736.7	@ 8.0 %:	105.8 1.40
NET REVENUE (M\$)	: 1075.6	@ 6.0 %:	156.9 1.59
MCF/DAY TO PAYOUT:	169.7		
PRESS "ENTER" TO CONTINUE...		GOWEE_CASE_SUM	

↓
 Pessimistic Case

- CAPITAL INVESTMENT @ Spud Date (10/92)

CASE : CD 29-5 #219 ** ECONOMICS CASE SUMMARY **
 DESCRIPTION: COMMERCIALITY DETERMINATIONS WORKING INT : 100.000%
 CASE REVENUE INT : 79.558% OIL REV INT : 79.558% GAS REV INT : 79.558%
 CASE LIFE -FIRST MO-YR : 5-1993 PROD MO-YR : 5-1993 LAST YEAR : 2007

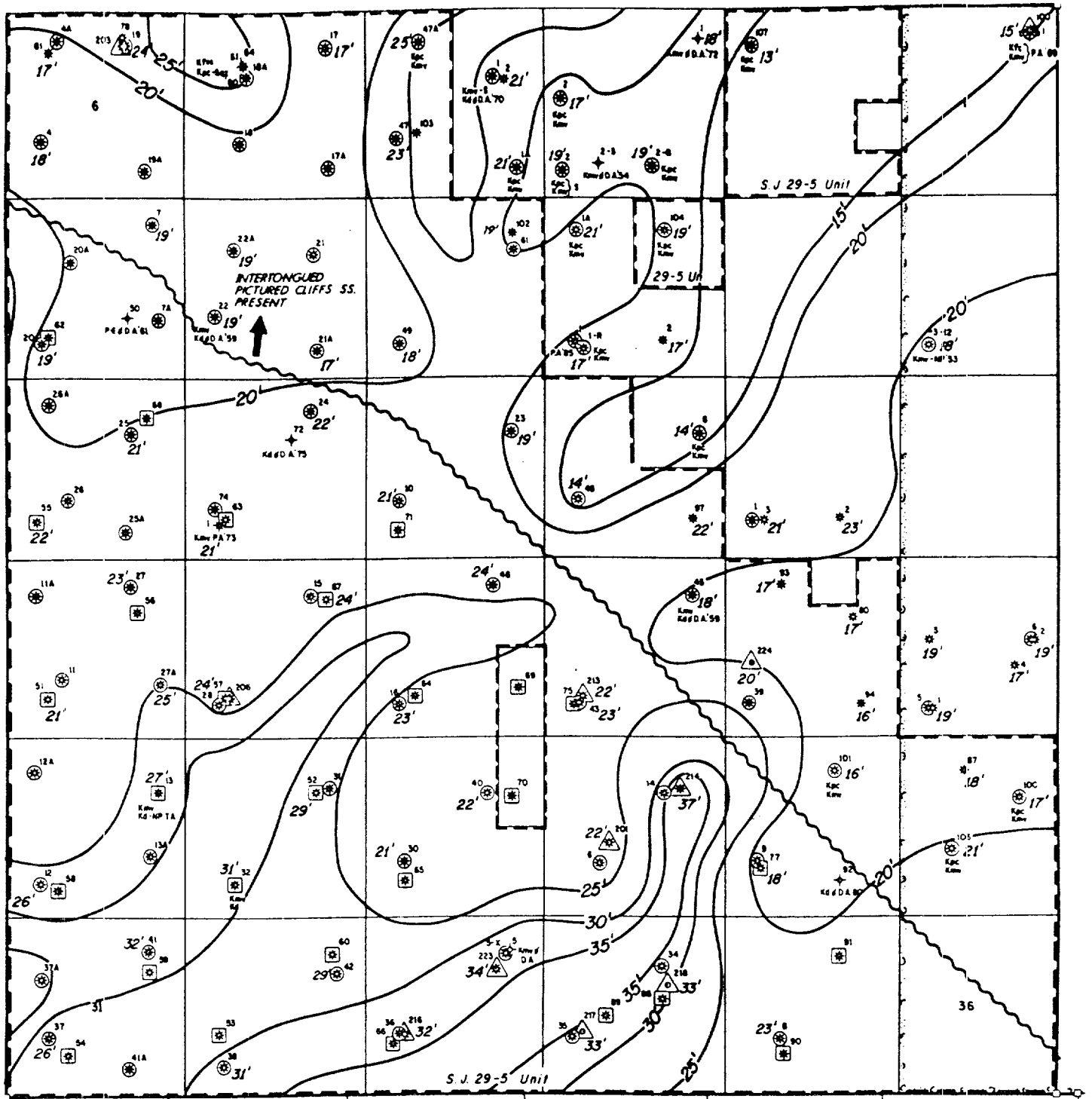
MEASURES OF MERIT		NET CASH FLOW SUMMARY (M\$)	
AARR (%) :	15.5	CAPITAL OUTLAY :	266.4
BREAKEVEN POINT (YRS.) :	6.1	TOTAL REVENUE :	1075.6
PAYOUT (YRS.) :	6.1	TOTAL EXPENSES :	418.9
NTER :	2.5	IBRT :	656.7
ECONOMIC LIFE (YRS.) :	14.7	CURRENT INCOME TAX :	
RESERVES SUMMARY		SALVAGE :	
OIL-GROSS MBBLs :		CASH RETURNED :	656.7
NET MBBLs :		CASH FLOW :	390.3
NET REVENUE (M\$) :		NET PRESENT VALUE (M\$)	P.I.
BBL/DAY TO PAYOUT:		@ 13.0 %:	32.9 1.12
GAS GROSS MMCF :	926.0	@ 10.0 %:	82.1 1.31
NET MMCF :	736.7	@ 8.0 %:	122.7 1.46
NET REVENUE (M\$) :	1075.6	@ 6.0 %:	171.4 1.64
MCF/DAY TO PAYOUT:	169.7		
PRESS "ENTER" TO CONTINUE...			GOWEE_CASE_SUM

↓
 OPTIMISTIC CASE

- CAPITAL INVESTMENT @ 1ST DELIVERY (5/93)

SWD AND GATHERING SYSTEM COST

The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.



R-5-W

PRODUCING INTERVAL

- | | | | |
|---|---------------------------------|-----|---|
| ⊙ | FARMINGTON | Kfm | |
| ⊙ | FIRTLAND | Kf | |
| ⊙ | FRUITLAND | Kf | |
| ⊙ | PICTURED CLIFFS | Kpc | |
| ⊙ | CHACRA | Kc | |
| ⊙ | LA VENTANA | Klv | |
| ⊙ | MESAVERDE | Kmv | { Kcn CLIFFHOUSE
Kpn MENEFEE
Kp POINT LOOKOUT |
| ⊙ | GALLUP | Kg | |
| ⊙ | DAKOTA | Kd | { Kt TOCITO
Kgn GREENHORN |
| ⊙ | ALL PRODUCTION BELOW CRETACEOUS | | |
-
- | | |
|-----|----------------|
| Jh | - ENTRADA |
| Pp | - PARADOX |
| Pbc | - BARKER CREEK |
| M | - LEADVILLE |



PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S.J. 29-5 UNIT
Rio Arriba Co. N.M.
AGGREGATE NET COAL ISOLITH
OF THE FRUITLAND COAL
C.I. 5'

5-1-92

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #217
 Fruitland Coal
 W/2 Section 34-T29N-R5W
 Rio Arriba County, New Mexico

Date of First Delivery: NEVER DELIVERED

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	161,360		
<u>Production Taxes & Royalty:</u>	<u>20.442175%</u>	BLM	12.50
		Severance	3.750000
		School	4.000000
		Conservation	0.180000
		Ad Valorem	0.012175

Average Product Pricing

1994 1.46/ MCF

Estimated Gross Annual Production and Operating Expenses

<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expenses (\$)</u>
1990	0 (Actual)	
1991	0 (Actual)	1,720 (Actual)
1992	0 (Actual)	
1993	0 (Actual)	
1994	20	
1995	20	
1996	20	
1997	20	
1998	20	
1999	20	
2000	20	
2001	20	
2002	20	
2003	20	
2004	20	

* Operating Expenses were not escalated for inflation.

SAN JUAN 29-5 UNIT #217

COMMERCIALITY DETERMINATION

The subject well was spudded on 11/27/90 in the west half of Section 34, T29N-R5W. After a total depth of 3642' was reached on 12/13/90, 5-1/2", 15.5# casing was set at TD (3642') and cemented to surface. However, the 5-1/2" casing was never perforated. As a result, this well has never been completed (i.e. frac'd). Partners did not want to fracture stimulate the subject well due to poor results from offset wells that were previously treated.

Currently, the well is shut-in, but even if it is frac'd and delivered; the well is only forecasted from offset wells with similar reservoir characteristics to produce 20 MMCF per year. Therefore, this well is predicted to be non-commercial in the 29-5 Unit Participating Area. As a result, the economic evaluation and operating expenses were not prepared for this commerciality determination report.

MEP81-01

PARPI - WELLZONE PRODUCTION BROWSE

Date: 7/15/94

YEARLY TOTALS

User: #AM3

Wellzone F8A87 01 Yr: 1991 Mth: — Property: 650260 SAN JUAN 29-5 UNIT #
 Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000217
 Type: T (T-Total, D-Daily Avg) Field: BASIN
 Period: Y (M-Monthly, Y-Yearly, C-Cum) Reserv: 20001 FRUITLAND COAL

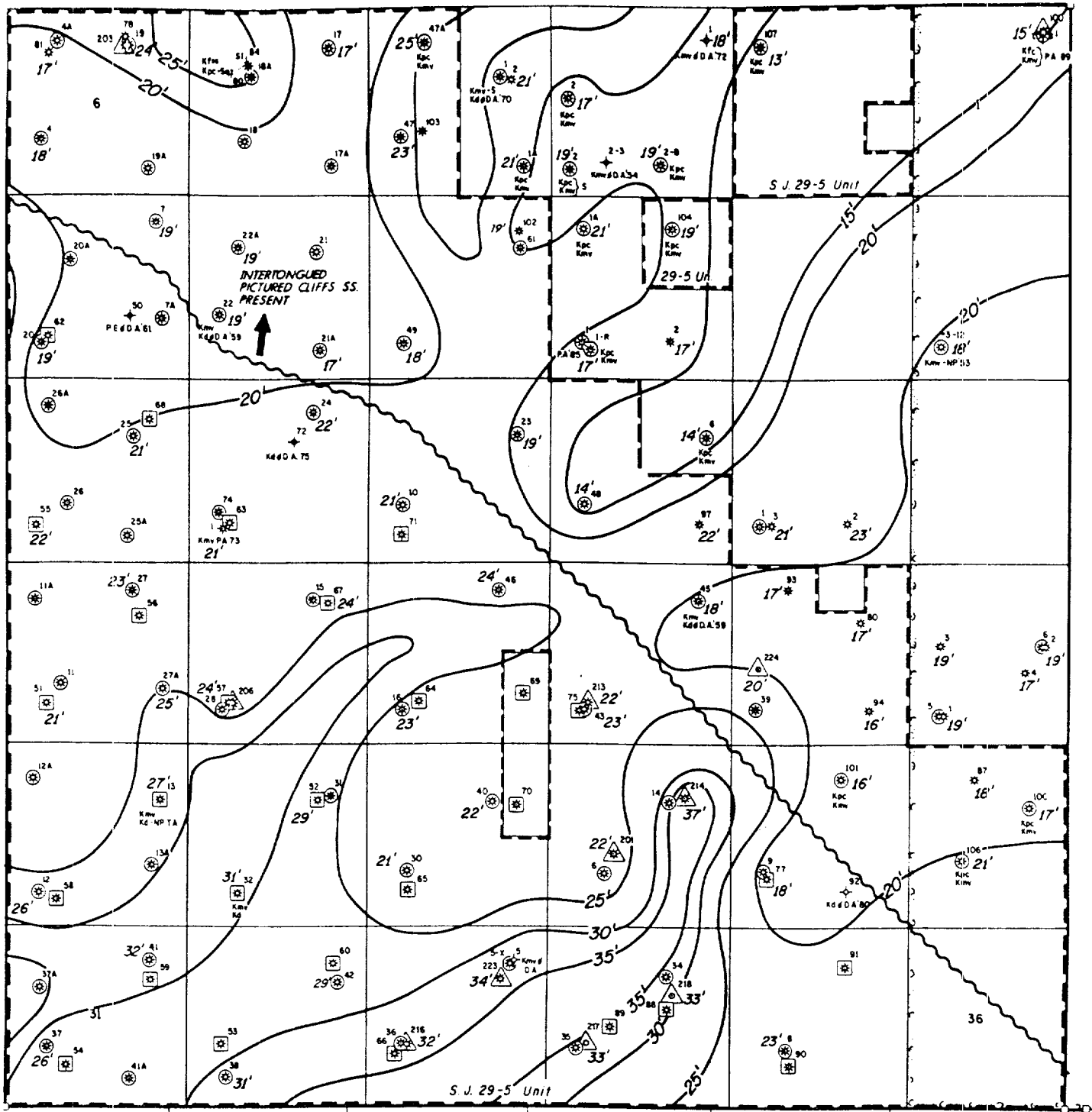
ADJ	PRODUCED			DAYS		WELL	
FLG DATE	OIL (BBL)	GAS (MCF)	WATER (BBL)	PROD	OP	ST	CL TY
1991	0.00	0	0	0.00	0		
1992	0.00	0	0	0.00	0		
1993	0.00	0	0	0.00	0		
1994	0.00	0	0	0.00	0		

NO MORE DATA AVAILABLE

PA1=ICE PA2=Exit PF1=Help PF3=End PF11=GRAPH
 Transfer-> PF7=Backward PF8=Forward PF10=GRAND MENU PF12=LOG GRAPH

SWD AND GATHERING SYSTEM COST

The SWD facility and gathering system costs were allocated equally back to each well in the unit. The allocated costs were then charged against the well by including them in the operating cost in the fifteen year forecast.



R-5-W

PRODUCING INTERVAL

Kfm	FARMINGTON	Kfm	
Kk	KIRTLAND	Kk	
Kf	FRUITLAND	Kf	
Kpc	PICTURED CLIFFS	Kpc	
Kc	CHACRA	Kc	
Klv	LA VENTANA	Klv	
Kmv	MESAVERDE	Kmv	Cliffhouse MENEFFEE POINT LOOKOUT
Kg	GALLUP	Kg	
Kp	DAKOTA	Kp	
			K* TOCITO Kp GREENHORN
	ALL PRODUCTION BELOW CRETACEOUS		
			JH - ENTRADA PP - PARADOX BDC - BARKER CREEK M - LEADVILLE



PHILLIPS PETROLEUM COMPANY
FARMINGTON AREA

S. J. 29-5 UNIT
Rio Arriba Co. N.M.

AGGREGATE NET COAL ISOLITH
OF THE FRUITLAND COAL

C.I. 9'

5-1-92



PHILLIPS PETROLEUM COMPANY

FARMINGTON, NEW MEXICO 87401
5525 HWY 64 NBU 3004

NEW MEXICO OIL CONSERVATION DIVISION
FARMINGTON

1993 AUG 23 AM 9 03

August 23, 1993

418

Assistant District Manager, Minerals
Bureau of Land Management
Farmington Resource Area
1235 La Plata Highway
Farmington, New Mexico 87401

State of New Mexico
Commissioner Of Public Lands
Attn: Mr. Floyd O. Prando
P. O. Box 1148
Santa Fe, New Mexico 87504-1148

State of New Mexico
Oil Conservation Division
Attn: Mr. William J. LeMay
310 Old Santa Fe Trail, Room 206
Santa Fe, New Mexico 87503

Re: San Juan 29-5 Unit
#14-08-001-437
Commerciality Determination
Fruitland Formation
Rio Arriba County, NM
GF-5395

Gentlemen:

Pursuant to the provisions of Section 11(a) of the San Juan 29-5 Unit Agreement, #14-08-001-437, approved November 21, 1952, Phillips Petroleum Company ("Phillips"), as Operator, determined whether or not the wells listed below are capable of producing unitized substances in paying quantities from the Fruitland coal member of the Fruitland formation.

Phillips is seeking confirmation of the enclosed paying well determinations as listed hereinbelow. The remaining wells [listed below as "NS" {not submitted} under column (5) below] are mentioned for reference only and Phillips is neither confirming nor denying the paying well status of such wells under this application. As adequate production history from these wells is received, additional submittals will be provided using this format.

This alternative approach has been acknowledged by the Branch of Reservoir Management at the Farmington District Office of the Bureau of Land Management as acceptable to facilitate individual well commerciality determinations that are ordinarily filed in order of "date of test" during completion operations.

Upon receipt of response from the BLM and concurring responses from the Commissioner of Public Lands and New Mexico Oil Conservation Division, the formal Participating Area application with accompanying Lease Schedules with unit tract descriptions and working interest ownerships for each well will be prepared for each expansion of the Participating Area based on those wells confirmed for inclusion therewith.

San Juan 29-5 Unit
 #14-08-001-437
 Commerciality Determination
 August 23, 1993

(1)	(2)	(3)	(4)	(5)	(6)*
<u>Test Date</u>	<u>Well Number</u>	<u>Drill Block</u>	<u>Acres</u>	<u>Date Submitted for Paying Well Determination</u>	<u>Disposition</u>
01-29-90	203	Lots 1, 2, S/2 NE/4, SE/4 Section 6-29N-5W	320.66	08-23-93	Paying Well
03-17-90	213	W/2 Sec. 22-29N-5W	320.00	NS	
07-02-90	216	W/2 Sec. 33-29N-5W	320.00	NS	
06-11-90	206	W/2 Sec. 20-29N-5W	320.00	NS	
12-13-90	217	W/2 Sec. 34-29N-5W	320.00	NS	
11-27-90	218	E/2 Sec. 34-29N-5W	320.00	NS	
01-08-92	201	W/2 Sec. 27-29N-5W	320.00	NS	
01-08-92	214	E/2 Sec. 27-29N-5W	320.00	NS	
01-14-92	223	E/2 Sec. 33-29N-5W	320.00	NS	
06-12-92	224	W/2 Sec. 23-29N-5W	320.00	NS	
09-15-92	225	W/2 Sec. 6-29N-5W	320.00	NS	
09-30-92	226	Lots 1, 2, 3, 4, N/2 NW/4, Tract 37 Section 7-29N-5W	320.00	08-23-93	Paying Well
10-05-92	229	E/2 Sec. 7-29N-5W	320.00	NS	
10-12-92	231	Lots 3,4, S/2 NW/4, SW/4 Sec. 5-29N-5W	321.00	NS	
10-27-92	219	Lots 3,4, S/2 NW/4, SW/4 Sec. 4-29N-5W	321.60	NS	
12-17-92	230	Lots 1,2, S/2 NE/4, SE/4 Sec. 5-29N-5W	321.24	NS	

*All wells submitted herewith that are determined to be capable of production in paying quantities are labeled "paying well".

Copies of this submittal with enclosures are being sent to the unit working interest owners on the attached sheet.

Very truly yours,

PHILLIPS PETROLEUM COMPANY



A. J. Kieke, CPL
 Area Landman
 San Juan Basin
 (505) 599-3410

w/o attachments

cc: R. G. Flesher
 K. L. Czirr
 D. B. Evans (r) J. L. Mathis

w/attachments

SJ 29-5 Unit Owners

San Juan 29-5 Unit Working Interest Owners
7/29/93

Amoco Production Company
Outside Operated Group
Attn: David Simpson
P. O. Box 800
Denver, CO 80201

T.H. McElvain Oil & Gas
Attn: T.H. McElvain, Jr.
P. O. Box 2148
Santa Fe, NM 87504-2148

Bolack Minerals Co.
3901 Bloomfield Hwy.
Farmington, NM 87401

The Wiser Oil Company
8115 Preston Rd, St.400
Dallas, TX 75225

Fina Oil & Chemical Co.
P. O. Box 2990
Midland, TX 79702

Vaughan-McElvain Energy
215 Old Kennett Road
Kennett Square, PA 19348

James E. McElvain, Exec.
Estate of Carl McElvain
P. O. Box 63
Morris, IL 60450

Williams Production Co.
Attn: Manager, Leashold Oprs.
P. O. Box 58900
Salt Lake City, UT 84158-0900

James M. Raymond
Maydell Miller Mast Trust
Corrine Miller Gay Trust
P. O. Box 1445
Kerrville, TX 78029-1445

Valero Coal Company
P. O. Box 500
San Antonio, TX 78292-0500
Attn: Travis Crow

Koch Exploration Co.
Attn: Ronald J. Miller
P. O. Box 2256
Wichita, KS 67201

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

Oryx Energy Company
Northern Region Joint Operations
P. O. Box 2880
Dallas, TX 75221-2880

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 29-5 Unit #203
Fruitland Coal
E/2 Sec. 6- T29N - R5W
San Juan County, NM

Date of First Delivery: 04/05/90

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:	\$363,000		
<u>Production Taxes & Royalty:</u>	20.72%	BLM	12.50
		Serverence	4.60
		Ad Valorem	3.62

Average Product Pricing

1993 1.09/ MCF

Estimated Gross Annual Production and Operating Expenses

<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expense (\$)</u>
1990	83.9	58,400 Actual
1991	182.7	78,500 Actual
1992	230.5	32,400 Actual
1993	366	25,200
1994	355	25,200
1995	340	25,200
1996	367	25,200
1997	344	25,200
1998	319	25,200
1999	296	25,200
2000	276	25,200
2001	266	25,200
2002	249	25,200
2003	232	25,200
2004	215	25,200

* Operating Expenses were not escalated for inflation.

NORTHWEST PIPELINE CORPORATION
ONE OF THE WILLIAMS COMPANIES

48-89

LAND DEPARTMENT

P.O. BOX 8900
SALT LAKE CITY, UTAH 84108-0899
801-584-7215

January 25, 1989

Assistant District Manager, Minerals
Bureau of Land Management
425 Montano, N.E.
Albuquerque, NM 87107

State of New Mexico
Commissioner of Public Lands
Attn: Mr. Floyd O. Prando
P.O. Box 1148
Santa Fe, NM 87501

State of New Mexico
Oil Conservation Commission
Attn: Mr. William J. LeMay
310 Old Santa Fe Trail, Room 206
Santa Fe, NM 87503

Re: San Juan 29-5 Unit #14-08-001-437
Rio Arriba County, New Mexico

APPROVAL OF THE SEVENTH PARTICIPATING AREA

Pictured Cliffs Formation
Effective October 1, 1985

Gentlemen:

The referenced approval of the Seventh Participating Area in the San Juan 29-5 Pictured Cliffs Unit has been approved by the regulatory agencies as follows:

Bureau of Land Management	January 11, 1989
Commissioner of Public Lands	December 29, 1988
Oil Conservation Commission	December 6, 1988

Copies of this letter are being sent to the Working Interest Owners shown on the attached sheet.

Sincerely,

NORTHWEST PIPELINE CORPORATION



Darrell L. Gillen
Supervisor, Land Department



Bureau of Land Management
Commissioner of Public Lands
Oil Conservation Commission
January 25, 1989
Page 2

DLG/cg
Attachment

cc: Working Interest Owners
K. J. Stracke
W. S. West
L. G. Loving
C. N. Potter
R. L. Glenn
M. H. Johnson
R. P. Gregory
L. K. Leaver

AMOCO PRODUCTION COMPANY
SOUTHERN DIVISION, PRODUCTION MGR.
1670 BROADWAY
P.O. BOX 800
DENVER, CO 80201

BOLACK MINERALS CO.
ROUTE 3 SOUTH, BOX 47
3901 BLOOMFIELD HIGHWAY
FARMINGTON, NM 87401

CATHERINE B. MCELVAIN
EXECUTRIX OF THE ESTATE OF
T.H. MCELVAIN, DECEASED
P.O. BOX 214B
SANTA FE, NM 87504-2148

CORRINE MILLER GAY TRUST
P.O. BOX 1445
KERRVILLE, TX 78028

FINA OIL AND CHEMICAL COMPANY
P.O. BOX 2990
MIDLAND, TX 79702

JAMES E. MCELVAIN, EXECUTOR
ESTATE OF CARL R. MCELVAIN
P.O. BOX 63
MORRIS, IL 60450

JAMES M. RAYMOND
P.O. BOX 1445
KERRVILLE, TX 78029-1445

KOCH INDUSTRIES, INC.
P.O. BOX 2256
WICHITA, KS 67201

MABELLE MCELVAIN MILLER
P.O. BOX 1445
KERRVILLE, TX 78028

MAYDELL MILLER MAST TRUST
P.O. BOX 1445
KERRVILLE, TX 78028

MERIDIAN OIL PRODUCTION INC.
LAND DEPARTMENT
P.O. BOX 4289
FARMINGTON, NM 87401

PHILLIPS PETROLEUM COMPANY
ATTN: PARTNERSHIP OPERATIONS
P.O. BOX 1967
HOUSTON, TX 77251-1967

SUN EXPLORATION & PRODUCTION COMPANY
ATTN: OBO ACCOUNTING
P.O. BOX 2880
DALLAS, TX 75201

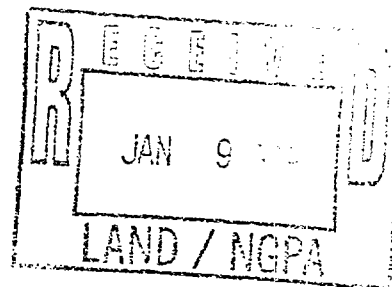
T H MCELVAIN OIL & GAS PROPERTIES
ATTN: T.H. MCELVAIN JR., MANAGER
P.O. BOX 2148
SANTA FE, NM 87504-2148

THE WISER OIL COMPANY
700 PETROLEUM BUILDING
WICHITA FALLS, TX 76301

VAUGHAN-MCELVAIN ENERGY INC.
RUTH M. VAUGHAN, TREASURER
1400 WAVERLY ROAD #B-115
GLADWYNE, PA 19035

SLO REF NO OG-981

State of New Mexico



W.R. HUMPHRIES
COMMISSIONER

Commissioner of Public Lands

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

December 29, 1988

Northwest Pipeline Corp.
Attn: Mr. Darrell L. Gillen
P. O. Box 8900
Salt Lake City Utah 84108-0899

Re: San Juan 29-5 Unit
7th Participating Area Eff: 10-1-85
Pictured Cliffs Formation
Rio Arriba County, New Mexico

Gentlemen:

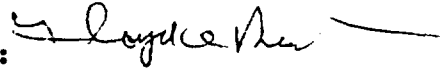
This office is in receipt of your letter of November 3, 1988, requesting approval of the San Juan 29-5, Seventh Participating Area for the Pictured Cliffs Formation Effective October 1, 1985.

The Commissioner of Public Lands has this date approved your application. The Seventh Revision to the Pictured Cliffs Participating Area is effective as of October 1, 1985 and is described as Lots 3, 4, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ (W $\frac{1}{2}$) of Section 2, Township 29 North, Range 5 West containing 324.17 acres. This revision is based upon the commercial completion of the Unit Well No. 107.

If we may be of further help please do not hesitate to call on us.

Very truly yours,

W. R. HUMPHRIES
COMMISSIONER OF PUBLIC LANDS

BY: 
FLOYD O. PRANDO, Director
Oil and Gas Division
(505) 827-5744

WRH/FOP/pm
encls.
cc: OCD
BLM
OGAD



United States Department of the Interior

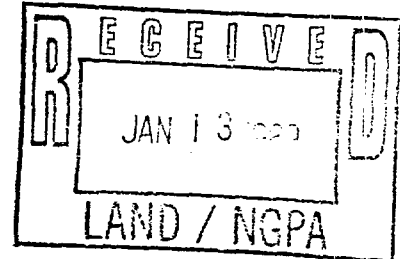


BUREAU OF LAND MANAGEMENT
ALBUQUERQUE DISTRICT OFFICE
435 MONTANO N.E.
ALBUQUERQUE, NEW MEXICO 87107

San Juan 29-5 (PA)
3160 (015)

JAN 11 1989

Northwest Pipeline Corp.
Attn: Darrell L. Gillen
P.O. Box 8900
Salt Lake City, UT 84108



Gentlemen:

We have received your letter of November 3, 1988, wherein you requested the approval of the 7th expanded Participating Area, Pictured Cliffs Formation, San Juan 29-5 Unit, Rio Arriba County, New Mexico. The application for approval of the 7th revision seeks to add 324.17 acres described as Lots 3, 4, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, Section 2, T. 29 N., R. 5 W., NMPM, as to the Pictured Cliffs Formation. Contributing to this area is the completion of the San Juan 29-5 Unit Well No. 107 (located 1040 feet from the north line and 790 feet from the west line, Section 2, T. 29 N., R. 5 W.). The 7th revision is approved on this date and is effective October 1, 1985.

If you have any questions, please contact Gail Keller at the above address or telephone (505) 761-4503.

Sincerely,


Assistant District Manager
Mineral Resources

Enclosure

Assistant District Manager, Minerals
Commissioner of Public Lands
Oil Conservation Commission
November 3, 1988
Page 4

APPROVED _____ DATE _____
Assistant District Manager, Minerals
Bureau of Land Management
Subject to like approval by the
Commissioner of Public Lands
and the Oil Conservation Commission

APPROVED _____ DATE _____
Commissioner of Public Lands
Subject to like approval by the
Area Oil and Gas Supervisor
and the Oil Conservation Commission

APPROVED  _____ DATE 12-6-88
Oil Conservation Commission
Subject to like approval by the
Area Oil and Gas Supervisor
and the Commissioner of Public Lands

The foregoing are approvals for the SEVENTH PARTICIPATING AREA in the Pictured Cliffs formation of the San Juan 29-5 Unit.



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
ALBUQUERQUE DISTRICT OFFICE
435 MONTANO N.E.
ALBUQUERQUE, NEW MEXICO 87107

San Juan 29-5 (PA)
3160 (015)

JAN 11 1999

Northwest Pipeline Corp.
Attn: Darrell L. Gillen
P.O. Box 8900
Salt Lake City, UT 84108

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If you have any questions, please contact Gail Keller at the above address or telephone (505) 761-4503.

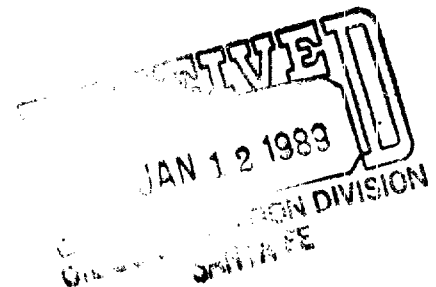
Sincerely,

(Orig. Signed) - Sid Vogelpohl

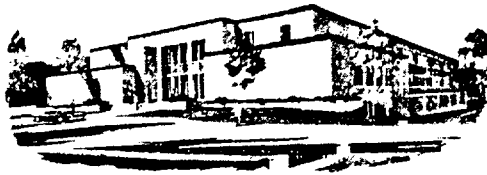
Assistant District Manager
Mineral Resources

Enclosure

NMOCD (w/o encl.)



State of New Mexico



W.R. HUMPHRIES
COMMISSIONER

Commissioner of Public Lands

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

December 29, 1988

Northwest Pipeline Corp.
Attn: Mr. Darrell L. Gillen
P. O. Box 8900
Salt Lake City Utah 84108-0899

Re: San Juan 29-5 Unit
7th Participating Area Eff: 10-1-85
Pictured Cliffs Formation
Rio Arriba County, New Mexico

Gentlemen:

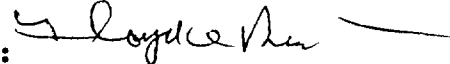
This office is in receipt of your letter of November 3, 1988, requesting approval of the San Juan 29-5, Seventh Participating Area for the Pictured Cliffs Formation Effective October 1, 1985.

The Commissioner of Public Lands has this date approved your application. The Seventh Revision to the Pictured Cliffs Participating Area is effective as of October 1, 1985 and is described as Lots 3, 4, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ (W $\frac{1}{2}$) of Section 2, Township 29 North, Range 5 West containing 324.17 acres. This revision is based upon the commercial completion of the Unit Well No. 107.

If we may be of further help please do not hesitate to call on us.

Very truly yours,

W. R. HUMPHRIES
COMMISSIONER OF PUBLIC LANDS

BY: 
FLOYD O. PRANDO, Director
Oil and Gas Division
(505) 827-5744

WRH/FOP/pm
encls.
cc: OCD
BLM
OGAD

LAND DEPARTMENT

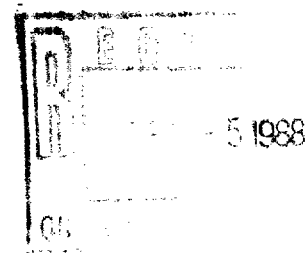
P.O. BOX 8900
SALT LAKE CITY, UTAH 84108-0899
801-584-7215

November 3, 1988

Assistant District Manager, Minerals
Bureau of Land Management
425 Montano, N.E.
Albuquerque, NM 87107

State of New Mexico
Commissioner of Public Lands
Attn: Mr. Floyd O. Prando
P.O. Box 1148
Santa Fe, NM 87501

State of New Mexico
Oil Conservation Commission
Attn: Mr. William J. LeMay
310 Old Santa Fe Trail, Room 206
Santa Fe, NM 87503



Re: San Juan 29-5 Unit #14-08-001-437
Rio Arriba County, New Mexico

APPLICATION FOR APPROVAL OF THE SEVENTH PARTICIPATING AREA
Pictured Cliffs Formation
Effective October 1, 1985

Gentlemen:

Pursuant to the provisions of Section 11(a) of the San Juan 29-5 Unit Agreement #14-08-001-437, approved November 21, 1952, Northwest Pipeline Corporation, as Unit Operator, hereby respectfully requests approval of the Seventh Participating Area for the Pictured Cliffs formation.

This proposed revision of the participating area for the Pictured Cliffs formation is predicated upon the determination by Northwest Pipeline Corporation, as Unit Operator, that the following San Juan 29-5 Unit Pictured Cliffs well, which was completed outside the limits of the existing Pictured Cliffs Participating Area, is capable of producing unitized substances in paying quantities from the Pictured Cliffs formation.

SEVENTH PARTICIPATING AREA - Effective October 1, 1985

<u>Description of Land</u>	<u>No. of Acres</u>
Township 29 North, Range 5 West, N.M.P.M. Section 2: Lots 3, 4, S/2NW/4, SW/4 (W/2)	324.17

Bureau of Land Management
Commissioner of Public Lands
Oil Conservation Commission
November 3, 1988
Page 2

The well data is as follows:

The San Juan 29-5 Pictured Cliffs Unit #107 well is located 1040 feet from the north line and 790 feet from the west line of Section 2, Township 29 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on June 10, 1985 and completed in the Pictured Cliffs formation on August 24, 1985. The plug back depth is 6300'. The Pictured Cliffs formation was perforated with 23 holes at the following depths:

3712', 3717', 3722', 3727', 3732', 3737', 3762', 3767',
3772', 3777', 3782', 3787', 3792', 3850', 3855', 3860',
3865', 3870', 3902', 3916', 3938', 3948', 3953'

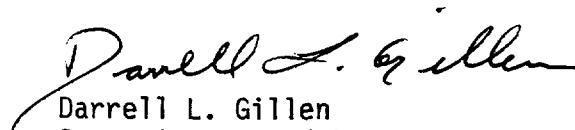
The Pictured Cliffs formation was hydraulically fractured with 2467 barrels of treated fluid carrying 75,000 pounds of 20/40 mesh sand. On September 13, 1985 the Pictured Cliffs formation was tested using a positive choke. During the 3-hour test the well produced 93 Mcf of gas, flowing at a rate of 746 Mcfd with a calculated AOF of 981 Mcfd. The shut-in pressure prior to the test was 1139 psig.

Attached is Schedule VIII along with the ownership map showing the Seventh Participating Area for the Pictured Cliffs formation of the San Juan 29-5 Unit area. The schedule describes the Revised Participating Area and shows the percentage of unitized substances allocated to each unitized tract. Inasmuch as this application needs no official approval, in the absence of disapproval within 30 days, the Seventh Participating Area will become effective October 1, 1985.

Copies of this letter and schedule are being sent to the Working Interest Owners shown on the attached sheet.

Sincerely,

NORTHWEST PIPELINE CORPORATION


Darrell L. Gillen
Supervisor, Land Department

DLG/cg

Attachments


Bureau of Land Management
Commissioner of Public Lands
Oil Conservation Commission
November 3, 1988
Page 3

cc: Working Interest Owners
K. J. Stracke
W. S. West
L. G. Loving
C. N. Potter
R. L. Glenn
M. H. Johnson
R. P. Gregory
L. K. Leaver

Assistant District Manager, Minerals
Commissioner of Public Lands
Oil Conservation Commission
November 3, 1988
Page 4

APPROVED _____ DATE _____
Assistant District Manager, Minerals
Bureau of Land Management
Subject to like approval by the
Commissioner of Public Lands
and the Oil Conservation Commission

APPROVED _____ DATE _____
Commissioner of Public Lands
Subject to like approval by the
Area Oil and Gas Supervisor
and the Oil Conservation Commission

APPROVED  _____ DATE 12-6-88
Oil Conservation Commission
Subject to like approval by the
Area Oil and Gas Supervisor
and the Commissioner of Public Lands

The foregoing are approvals for the SEVENTH PARTICIPATING AREA in the Pictured Cliffs formation of the San Juan 29-5 Unit.

U56N2650
11/02/88

WORKING INTEREST OWNERS
SAN JUAN 29-5 UNIT

AMOCO PRODUCTION COMPANY
SOUTHERN DIVISION, PRODUCTION MGR.
1670 BROADWAY
P.O. BOX 800
DENVER, CO 80201

MABELLE MCELVAIN MILLER
P.O. BOX 1445
KERRVILLE, TX 78028

BOLACK MINERALS CO.
ROUTE 3 SOUTH, BOX 47
3901 BLOOMFIELD HIGHWAY
FARMINGTON, NM 87401

MAYDELL MILLER MAST TRUST
P.O. BOX 1445
KERRVILLE, TX 78028

CATHERINE B. MCELVAIN
EXECUTRIX OF THE ESTATE OF
T.H. MCELVAIN, DECEASED
P.O. BOX 2148
SANTA FE, NM 87501

MERIDIAN OIL PRODUCTION INC.
LAND DEPARTMENT
P.O. BOX 4289
FARMINGTON, NM 87401

CORRINE MILLER GAY TRUST
P.O. BOX 1445
KERRVILLE, TX 78028

PHILLIPS PETROLEUM COMPANY
ATTN: GARY KUSE
8055 E. TUFTS AVE. PKWY.
DENVER, CO 80237

FINA OIL AND CHEMICAL COMPANY
P.O. BOX 2990
MIDLAND, TX 79702

SUN EXPLORATION & PRODUCTION COMPANY
ATTN: OBO ACCOUNTING
P.O. BOX 2880
DALLAS, TX 75201

JAMES E. MCELVAIN, EXECUTOR
ESTATE OF CARL R. MCELVAIN
P.O. BOX 63
MORRIS, IL 60450

T H MCELVAIN OIL & GAS PROPERTIES
ATTN: T.H. MCELVAIN JR., MANAGER
P.O. BOX 2148
SANTA FE, NM 87501

JAMES M. RAYMOND
P.O. BOX 1445
KERRVILLE, TX 78028

THE WISER OIL COMPANY
700 PETROLEUM BUILDING
WICHITA FALLS, TX 76301

KOCH INDUSTRIES, INC.
P.O. BOX 2256
WICHITA, KS 67201

VAUGHAN-MCELVAIN ENERGY INC.
RUTH M. VAUGHAN, TREASURER
1400 WAVERLY ROAD #B-115
GLADWYNE, PA 19035

SCHEDULE VIII
SEVENTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION
SAN JUAN 29-5 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 4</u>						
SF-078305	T-29-N, R-5-W Sec. 6: SW/4	160.00	Royalty	12.500000%	12.500000%	5.270422%
			Working Interest			
			Northwest Pipeline Corp.	82.500000%	82.500000%	
			ORRI	5.000000%	5.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 6</u>						
SF-078410	T-29-N, R-5-W Sec. 6: Lots 1, 2, 3, 4, S/2N/2, SE/4	480.88	Royalty	12.500000%	12.500000%	15.840254%
			Working Interest			
			Northwest Pipeline Corp.	82.500000%	82.500000%	
			ORRI	5.000000%	5.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 8</u>						
SF-078642	T-29-N, R-5-W Sec. 9: SE/4 Sec. 10: NE/4	320.00	Royalty	12.500000%	12.500000%	10.540844%
			Working Interest			
			Northwest Pipeline Corp.	82.500000%	82.500000%	
			ORRI	5.000000%	5.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 12</u>						
SF-078917	T-29-N, R-5-W Sec. 25: Lots 1, 2, 3, 4, W/2E/2, W/2 (All)	549.16	Royalty	12.500000%	12.500000%	18.089406%
			Working Interest			
			Northwest Pipeline Corp.	82.500000%	82.500000%	
			ORRI	5.000000%	5.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 13</u>						
SF-079033	T-29-N, R-5-W Sec. 23: W/2	320.00	Royalty	12.500000%	12.500000%	10.540844%
			Working Interest			
			El Paso Natural Gas	84.500000%	84.500000%	
			ORRI	3.000000%	3.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE VIII
SEVENTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION
SAN JUAN 29-5 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13-A</u>						
SF-079033	T-29-N, R-5-W Sec. 23: SE/4, E/2NE/4, SW/4NE/4	280.00	Royalty Working Interest Sun Oil Company ORRI Total	12.500000% 84.500000% 3.000000% <u>100.000000%</u>	12.500000% 84.500000% 3.000000% <u>100.000000%</u>	9.223239%
<u>TRACT 17</u>						
SF-080069	T-29-N, R-5-W Sec. 15: SE/4	160.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	5.270422%
<u>TRACT 18</u>						
SF-080179	T-29-N, R-5-W Sec. 9: NE/4	160.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	5.270422%
<u>TRACT 20</u>						
SF-081114	T-29-N, R-5-W Sec. 4: Lots 3, 4, S/2NW/4, W/2SW/4, SE/4SW/4	281.60	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 83.500000% 4.000000% <u>100.000000%</u>	12.500000% 83.500000% 4.000000% <u>100.000000%</u>	9.275943%
<u>TRACT 22-B</u>						
E-289-42	T-29-N, R-5-W Sec. 2: S/2NW/4, SW/4	240.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	7.905633%

UNIT AREA EXPANSION SCHEDULE

SCHEDULE VIII
SEVENTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION
SAN JUAN 29-5 UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 22-E</u>						
E-289-39	T-29-N, R-5-W Sec. 2: Lots 3, 4	84.17	Royalty	12.500000%	12.500000%	2.772571%
			Working Interest			
			Northwest Pipeline Corp.	82.500000%	82.500000%	
			ORRI	5.000000%	5.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE VIII
SEVENTH EXPANDED PARTICIPATING AREA FOR THE PICTURED CLIFFS FORMATION
SAN JUAN 29-5 UNIT AREA

R E C A P I T U L A T I O N

Description of Lands in Participating Area:

Township 29 North, Range 5 West, N.M.P.M.

Section 6: All
Section 25: All
Section 2: W/2
Section 9: E/2
Section 10: NE/4
Section 15: SE/4
Section 4: Lots 3, 4, S/2NW/4, W/2SW/4, SE/4SW/4
Section 23: W/2, SE/4, S/2NE/4, NE/4NE/4

Total Number of Acres in Participating Area: 3035.81
Total Number of Acres Committed to Participating Area: 3035.81

NORTHWEST PIPELINE CORPORATION
 GAS RESERVES DEPARTMENT ECONOMIC STUDY
 SAN JUAN 29-5 UNIT #107 (85952) (PC)

TUE OCTOBER 18, 1988
 9:08:53 AM

WORKING INT. B/PAYOUT.....%	100.0	ANNUAL COST INFLATION.....%	0.0
WORKING INT. A/PAYOUT.....%	100.0	ANNUAL PRICE INFLATION.....%	0.0
INCOME TAX.....%	36.0	NEG INC TAX USED AS FUTURE CREDIT	
UNIT OF PRODUCTION DEPRECIATION			

GAS PRODUCTION FROM SAN JUAN 29-5 UNIT #107 (PC)

LAND OWNER ROYALTY.....%	12.5	OVERRIDING ROYALTY.....	0.0
AD VALOREM AND SEV TAXES...%	10.4	OPERATING COSTS (\$/MO).....	468.0
MONTH OF CAPITAL EXPENSE....	1	OPERATING COSTS (% OF PROD).	0.0
DRILLING COSTS (\$1000).....	166.1	TANGIBLE \$ (% OF DRILLING \$)	33.0
SALVAGE VALUE (\$1000).....	0.0		

INITIAL MONTH	MCF/D	% DECLINE	TO MCF/D	ENDING MONTH
6	321.0	99.8	189.0	7
7	189.0	90.7	155.0	8
8	155.0	79.2	136.0	9
9	136.0	67.0	124.0	10
10	124.0	63.5	114.0	11
11	114.0	53.3	107.0	12
12	107.0	43.7	102.0	13
13	102.0	45.3	97.0	14
14	97.0	39.7	93.0	15
15	93.0	41.0	89.0	16
16	89.0	33.7	86.0	17
17	86.0	24.6	84.0	18
18	84.0	14.0	46.0	66
66	46.0	5.3	35.0	126
126	35.0	3.0	30.0	186
186	30.0	2.1	27.0	246
246	27.0	100.0	0.0	247

YEAR	BEG. YR \$/ MCF	AVG MCF/D	ANNUAL MCF	ROYALTY MCF	REVENUE AFTER ROYALTY \$1000
1987	3.49	96	34881.	4360.	88.
1988	2.29	86	31456.	3932.	69.
1989	1.30	72	26253.	3282.	30.
1990	1.30	62	22583.	2823.	26.
1991	1.30	53	19427.	2428.	22.
1992	1.30	46	16938.	2117.	19.
1993	1.30	43	15874.	1984.	18.
1994	1.30	41	15029.	1879.	17.
1995	1.30	39	14230.	1779.	16.
1996	1.30	37	13473.	1684.	15.
1997	1.30	35	12800.	1600.	15.
1998	1.30	34	12380.	1548.	14.
1999	1.30	33	12004.	1501.	14.
2000	1.30	32	11640.	1455.	13.
2001	1.30	31	11286.	1411.	13.
2002	1.30	30	10959.	1370.	12.

NORTHWEST PIPELINE CORPORATION
 GAS RESERVES DEPARTMENT ECONOMIC STUDY
 SAN JUAN 29-5 UNIT #107 (85952) (PC)

TUE OCTOBER 18, 1988
 9:08:53 AM

YEAR	BEG. YR \$/ MCF	AVG MCF/D	ANNUAL MCF	ROYALTY MCF	REVENUE AFTER ROYALTY \$1000
2003	1.30	29	10720.	1340.	12.
2004	1.30	29	10496.	1312.	12.
2005	1.30	28	10277.	1285.	12.
2006	1.30	28	10063.	1258.	11.
2007	1.30	14	4953.	619.	6.
TOTAL.....			327717.	40965.	455.

DISCOUNT **RATE** *** % **	****PRESENT VALUE***** ***** \$1000 *****		DISCOUNTED PROFIT TO** ***INVESTMENT RATIO***		
	BEFORE TAX	AFTER TAX	BEFORE TAX	AFTER TAX	
17.9	0.		0.00		RATE OF RETURN B.T.
12.4		0.			0.0 RATE OF RETURN A.T.
15.0	11.	-9.	0.06	-0.05	

YEAR	INCOME *\$1000 **NET*	**PROJECT EXPENSES IN \$1000*				****CASH FLOW ANALYSIS IN \$1000****				
	*****	***** CAPI- *TAL*	***** DEPR.	***** AD.V. SEV. TAXES	***** PROD. COSTS	***** BEFORE *TAXES	***** BEFORE TAXES	***** TAXED INCOME	***** INCOME TAXES	***** AFTER TAXES
1987	88	166	6	9	3	-90	-90	-41	0	-90
1988	69	0	5	7	6	57	-34	51	4	53
1989	30	0	4	3	6	21	-13	17	6	15
1990	26	0	4	3	6	17	5	14	5	12
1991	22	0	3	2	6	14	19	11	4	10
1992	19	0	3	2	6	12	31	9	3	8
1993	18	0	3	2	6	11	41	8	3	8
1994	17	0	3	2	6	10	51	7	3	7
1995	16	0	2	2	6	9	60	6	2	7
1996	15	0	2	2	6	8	68	6	2	6
1997	15	0	2	2	6	7	75	5	2	6
1998	14	0	2	1	6	7	82	5	2	5
1999	14	0	2	1	6	7	89	5	2	5
2000	13	0	2	1	6	6	95	4	2	5
2001	13	0	2	1	6	6	101	4	1	4
2002	12	0	2	1	6	6	106	4	1	4
2003	12	0	2	1	6	5	112	3	1	4
2004	12	0	2	1	6	5	117	3	1	4
2005	12	0	2	1	6	5	122	3	1	4
2006	11	0	2	1	6	5	126	3	1	4
2007	6	0	1	1	3	2	128	1	1	2
TOTAL	455	166	55	48	113	128	0	128	46	82

NORTHWEST PIPELINE RESERVOIR ENGINEERING SUMMARY @ 14.73 PSIA
 S. J. 29-5 #107 PC- COMMERCIALITY REVIEW

APR: 30-039-23659-0000 SJ 29-5 UNIT #107			METER/UT: 85952/00000			INITIAL MMCF:			BTU/GRAV: 1013/0.000		
NEW MEXICO GOVERNADOR PICTURED CLIFFS			N.M.P.M.: T 29N R 5W 2D			CUMULATIVE...			%CO2/%N2: 2.74/ 0.92		
NORTHWEST PIPELINE CORPORATION OPERATOR			FOOTAGE.: OF L OF L			REMAINING...			LSHD INSTRST: 1.000000		
NWP SAN JUAN GATHERING SYSTEM			S DATE-RL/WS: 2/03/88-1/5			R-L-RATIO....			CNTR INSTRST: 0.000000		
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