



Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains.

71 70 64 8 39

Well Number	Disposition
San Juan 32-8 #3	Mesaverde PA owners concurred in the P& A of well; drill block owners have been balloted Carried over to 1994 POD
San Juan 32-8 #4	Mesaverde PA owners concurred in the P& A of well; drill block owners have been balloted Carried over to 1994 POD
San Juan 32-8 #246	Carried over to 1994 POD
San Juan 32-8 #247	Carried over to 1994 POD
San Juan 32-8 #251	Carried over to 1994 POD
San Juan 32-8 #252	Carried over to 1994 POD
San Juan 32-8 #302 SWD	Cancelled; San Juan 32-8 Operator entered into SWD Agreement for water disposal

San Juan 32-8 Unit
 #14-08-001-446
 1994 Plan of Development
 March 21, 1994
 Page 2

As part of 1993 operations Phillips initiated closure of earthen pits serving all Unit owned production equipment, replacing with double bottom steel tanks with leak detection. This work will continue in 1994. Phillips also initiated and completed its plans to equip certain wells with telemetry equipment for remote readings and/or well control. Additional wells will be considered for such equipment in 1994.

As of this date, the number of wells drilled and operated by Phillips Petroleum Company on acreage committed to the San Juan 32-8 Unit are as follows:

Fruitland (Coal), commercial	2
Fruitland (Coal), commercial, pending PA	9
Fruitland (Coal), undetermined	27
Fruitland (Sand), commercial	3
Fruitland (Sand), plugged and abandoned	1
Fruitland (Sand)/Pictured Cliffs (Fruitland commercial, Pictured Cliffs non-commercial)	1
Entrada, Water Disposal Facility	2
Pictured Cliffs/Mesaverde, commercial	2
Pictured Cliffs/Mesaverde, (Pictured Cliffs commercial/Mesaverde non-commercial)	1
Mesaverde, non-commercial	3
Mesaverde, commercial	37
Mesaverde, plugged and abandoned	3
Mesaverde/Dakota, plugged and abandoned	1
Dakota, commercial	1
Dakota, non-commercial	1
TOTAL	93

The Participating Areas which have been established in the San Juan 32-8 Unit are as follows:

FORMATION	REVISION	EFFECTIVE
Fruitland	Fourth	April 1, 1990
Pictured Cliffs	First	January 1, 1983
Mesaverde	Nineteenth	July 1, 1983
Dakota	Initial	February 10, 1982

Pursuant to Section 10 of the San Juan 32-8 Unit Agreement, Phillips Petroleum Company, as Unit Operator, has solicited and received majority approval from the San Juan 32-8 Unit Working Interest Owners to include the following Fruitland Coal Wells in the 1994 Plan of Development:

WELL NUMBER	FORMATION	DRILLING BLOCK
San Juan 32-8 #3	Recompletion from Mesaverde to Fruitland Coal	W/2 Section 17-32N-8W
San Juan 32-8 #4	Recompletion from Mesaverde to Fruitland Coal	W/2 Section 15-32N-8W
San Juan 32-8 #246	Fruitland Coal	S/2 Section 18-32N-8W
San Juan 32-8 #247	Fruitland Coal	W/2 Section 19-32N-8W
San Juan 32-8 #251	Fruitland Coal	W/2 Section 17-32N-8W
San Juan 32-8 #252	Fruitland Coal	E/2 Section 19-32N-8W

San Juan 32-8 Unit
#14-08-001-446
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March 21, 1994
Page 3

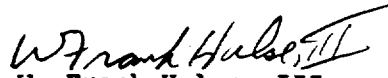
Phillips Petroleum Company, as Unit Operator, will drill any wells that may be required to prevent drainage and any other wells deemed necessary or requested by the Unit Working Interest Owners under the terms and provisions of the Unit Operating Agreement.

Please signify your approval as required under Section 10 of the Unit Agreement by signing in the space provided for on the attached sheet and returning an approved copy to the undersigned.

Copies of this 1994 Plan of Development are being sent to the Working Interest Owners as shown on the attached sheet.

Respectfully,

PHILLIPS PETROLEUM COMPANY


W. Frank Hulse, III
Land Specialist, CPL
San Juan Basin
(505) 599-3458

cc: SJ 32-8 Unit WIO's
R. G. Flesher (r) Supervisors, Unit File
L. E. Hasely
D. B. Evans, J. L. Mathis (r) GF-5465

San Juan 32-8 Unit
#14-08-001-446
1994 Plan of Development
March 21, 1994
Page 4

APPROVED

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


DATE

APPROVED

Commissioner of Public Lands
Subject to like approval by the
Area Oil and Gas Supervisor and the
Oil Conservation Division

DATE

APPROVED


Oil Conservation Division
Subject to like approval by the
Area Oil and Gas Supervisor and the
Commissioner of Public Land

DATE

3/24/94

The foregoing approvals are for the 1994 Plan of Development for the San Juan 32-8 Unit #14-08-001-446.

**SAN JUAN 32-8 UNIT
WORKING INTEREST OWNERS**

Cinco General Partnership

Suzanna P. Kelly

Meridian Oil Production Inc.

P&P Producing, Inc.

Texaco Exploration & Production Inc.

William G .Webb and Jane Webb

Williams Production Company

Wintergreen Energy Corporation



PHILLIPS PETROLEUM COMPANY

FARMINGTON, NEW MEXICO 87401
5525 HWY. 64 NBU 3004

Oil Conservation Division
JAN 8 35

February 7, 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 32-8 Unit
#14-08-001-446
Commerciality Determination
Fruitland Formation
San Juan County, NM
GF-5465

Gentlemen:

Pursuant to the provisions of Section 11(a) of the San Juan 32-8 Unit Agreement, #14-08-001-446, approved January 13, 1953, 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 at this time. 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 ("PA") 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. Based on previous commerciality determinations received from the regulatory agencies and approval of the formal PA applications, this Unit is expanded through the Fourth Expansion of the Fruitland PA.

San Juan 32-8 Unit
#14-08-001-446
Commerciality Determination
February 7, 1994
Page 2

(1)	(2)	(3)	(4)	(5)	(6)*
<u>Test Date</u>	<u>Well Number</u>	<u>T32N-R8W Drill Block</u>	<u>Acres</u>	<u>Date Submitted for Paying Well Determination</u>	<u>Disposition</u>
11-30-76	36	E/2 Section 25	320.00	10-11-77	Initial PA
10-14-77	37	E/2 Section 23	320.00	10-04-78	1st Expansion
06-19-81	41	W/2 Section 23	320.00	01-15-82	2nd Expansion
12-08-89	207	W/2 Section 22	320.00	08-23-93	3rd Expansion
03-25-90	208	W/2 Section 29	320.00	08-23-93	4th Expansion
08-02-90	223	W/2 Sec. 10-31N-8W	320.00	02-07-93	Paying Well
08-03-90	224	E/2 Sec. 10-31N-8W	320.00	02-07-93	Paying Well
08-24-90	221	W/2 Sec. 9-31N-8W	320.00	02-07-93	Paying Well
09-01-90	202	W/2 Section 27	320.00	02-07-93	Paying Well
09-09-90	222	E/2 Sec. 9-31N-8W	320.00	NS	
09-24-90	226	E/2 Sec. 15-31N-8W	320.00	02-07-93	Paying Well
10-15-90	237	E/2 Sec. 23-31N-8W	320.00	08-23-93	Paying-Appr'd.
10-29-90	238	W/2 Sec. 23-31N-8W	320.00	08-23-93	Paying-Appr'd.
11-18-90	220	W/2 Sec. 24-31N-8W	320.00	08-23-93	Paying-Appr'd.
03-15-91	206	E/2 Sec. 24-31N-8W	320.00	02-07-93	Paying Well
04-11-91	229	W/2 Section 20	320.00	NS	
04-28-91	230	E/2 Section 28	320.00	02-07-93	Paying Well
05-26-91	231	W/2 Section 28	320.00	NS	
05-11-91	232	E/2 Section 29	320.00	NS	
06-13-91	241	E/2 Sec. 4-31N-8W	320.00	NS	
06-22-91	239	Lots 1-4; E/2 W/2 Section 30	221.20	NS	
07-09-91	233	E/2 Section 30	320.00	NS	
07-23-91	240	Lots 3,4,S/2 NW/4, SW/4 Sec. 3-31N-8W	320.47	08-23-93	Paying-Appr'd.
08-04-91	249	Lots 1,2,S/2 NE/4, SE/4 Sec. 3-31N-8W	320.57	NS	
08-20-91	250	W/2 Section 33	320.00	NS	
09-02-91	242	Lots 3,4,S/2 NW/4, SW/4 Sec. 4-31N-8W	320.57	NS	
09-28-91	228	E/2 Sec. 16-31N-8W	320.00	NS	

San Juan 32-8 Unit
 #14-08-001-446
 Commerciality Determination
 February 7, 1994
 Page 3

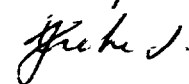
(1)	(2)	(3)	(4)	(5)	(6)*
<u>Test Date</u>	<u>Well Number</u>	<u>T32N-R8W Drill Block</u>	<u>Acres</u>	<u>Date Submitted for Paying Well Determination</u>	<u>Disposition</u>
10-11-91	245	W/2 Sec. 14-31N-8W	320.00	08-23-93	Paying-Appr'd
10-23-91	225	W/2 Sec. 15-31N-8W	320.00	08-23-93	Paying-Appr'd
10-25-91	243	W/2 Sec. 11-31N-8W	320.00	NS	
11-10-91	236	E/2 Sec. 22-31N-8W	320.00	08-23-93	Paying-Appr'd
11-07-91	227	W/2 Sec. 16-31N-8W	320.00	NS	
11-23-91	244	E/2 Sec. 14-31N-8W	320.00	08-23-93	Paying-Appr'd
11-28-91	248	E/2 Sec. 11-31N-8W	320.00	NS	
12-07-91	235	E/2 Sec. 21-31N-8W	320.00	NS	
12-18-91	234	W/2 Section 21	320.00	08-23-93	Paying-Appr'd
09-24-92	203	E/2 Section 33	320.00	NS	
09-17-92	204	W/2 Section 34	320.00	NS	
09-10-92	205	E/2 Section 34	320.00	NS	
09-03-92	219	W/2 Section 35	320.00	NS	
10-03-92	218	E/2 Section 35	320.00	NS	

*Those wells submitted herewith that have been determined to be capable of producing in paying quantities are listed as "Paying Well". Those wells previously approved for inclusion in a PA are listed by PA expansion number. Those wells previously evaluated by the regulatory agencies are indicated either as "Paying-Approved" or "Non-PA Approved".

Copies of this submittal with enclosures are being sent to the 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 32-7 Unit Owners

San Juan 32-8 Working Interest Owners
11/29/93

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

Cinco General Partnership
P. O. Box 451
Albuquerque, NM 87103-0451

Prudential-Bache Energy, et al
c/o Graham Royalty, LTD.
1675 Larimer Street, Ste. 400
Denver, CO 80202

William G .Webb and Jane Webb
c/o Cinco General Partnership
Agent for William G. Webb & Jane Webb
P. O. Box 451
Albuquerque, NM 87103-0451

Suzanna P. Kelly
P.O. Box 585
Careron, MT 59720

Texaco Expl. & Prod. Inc.
Joint Int. Operations
Attn: Mr. J. E. King
P. O. Box 46555
Denver, CO 80201-6555

Wintergreen Energy Corp.
Attn: Gene N. Garnett
Dorchester Pl, St 125
5735 Pineland Drive
Dallas, TX 57231

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

SWD AND GATHERING SYSTEM COST

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

MEP81-01

PARPI - WELLZONE PRODUCTION BROWSE
YEARLY TOTALS

Date: 2/05/94

User: #2YJ

Wellzone F8987 01 Yr: 1990 Mth: 01 Property: 650155 SAN JUAN 32-8 UNIT #
Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000202
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	14,254	69,920	203.00	263			
1992	0.00	13,800	53,240	242.00	242			
1993	0.00	130,076	63,888	346.00	346			

San Juan 32-8 Unit #202
Commerciality Determination

The forecast on this well is higher than current production might indicate based on an initial pitot rate of 2.2 MMCFD. Also of note is the higher than average well costs.

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 32-8 Unit #202
Fruitland Coal
W/2 Section 27-T32N-R8W
San Juan County, New Mexico

Date of First Delivery: 03/11/91

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:

355,000

Production Taxes & Royalty:

20.72%

BLM 12.50

Severance 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 Expenses (\$)</u>
1991	14	116,000
1992	14	75,000
1993	125	61,000
1994	300	45,000
1995	290	45,000
1996	250	45,000
1997	220	45,000
1998	200	45,000
1999	190	45,000
2000	180	45,000
2001	170	45,000
2002	160	45,000
2003	150	45,000
2004	140	45,000
2005	130	45,000

SE NAME: S3328202COM
 DESCRIPTION: COMMERCIALITY DETERMINATION

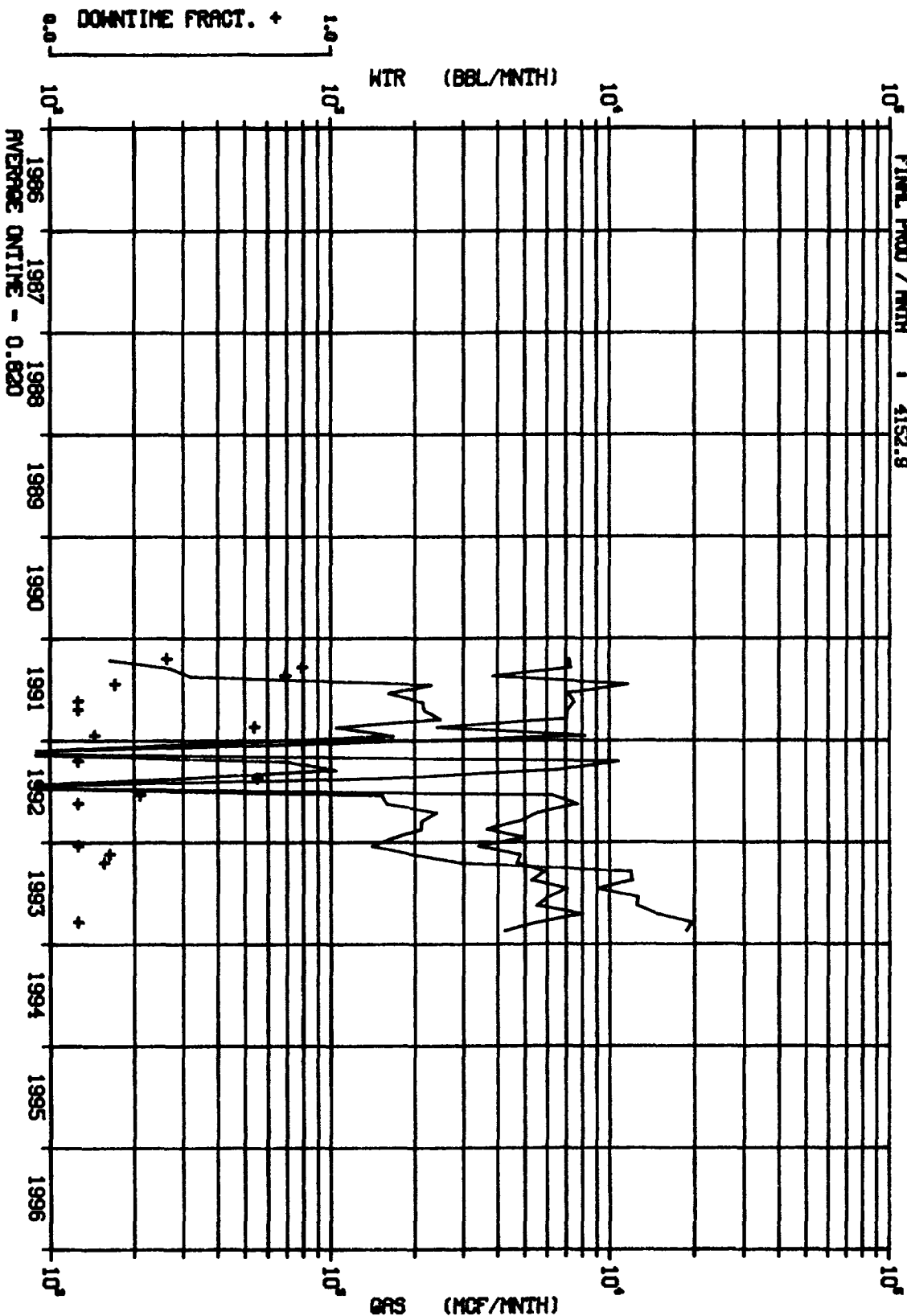
CASE LIFE - FIRST MO-YR: 9-1990 PROD MO-YR: 3-1991 LAST YEAR: 2005 WORKING INT: 100.000%
 CASE REVENUE INT: 79.280% OIL REV INT: 0.000% GAS REV INT: 0.000% ROYALTY: 0.000%

MEASURES OF MERIT			
ARR (%)	12.9	NET CASH FLOW SUMMARY(M\$)	355.0
BREAKEVEN POINT (YRS.)	5.9	CAPITAL OUTLAY	2188.9
PAYOUT (YRS.)	5.4	TOTAL REVENUE	846.8
ENTER	2.8	TOTAL EXPENSE	1342.1
ECONOMIC LIFE (YRS.)	14.8	ISRT	365.2
RESERVES SUMMARY	0.0	CURRENT INCOME TAX	0.0
OIL - GROSS MBBLs	0.0	SALVAGE	976.8
NET MBBLs	0.0	CASH RETURNED	621.8
NET REVENUE(M\$)	0.0	CASH FLOW	P.1.1
MBL/DAY TO PAYOUT	0.0	NET PRESENT VALUE (M\$)	0.99
GGS - GROSS MMCF	2533.0		1.34
NET MMCF	2008.9		2.75
NET REVENUE(M\$)	2188.9		
MCF/DAY TO PAYOUT	450.7		

ILLEGIBLE

3/91-11/93
 INITIAL PROD / MONTH : 12429.4
 REMAINING LIFE : 2.75
 CUM PRODUCTION : 183402.
 FINAL PROD / MONTH : 4152.9

CUMS - 11/93
 183402. BBL WTR
 145399. MCF GAS
 0. BBL H2O



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
MEP81-01 PARPI - WELLZONE PRODUCTION BROWSE Date: 2/05/94
YEARLY TOTALS User: #2YJ

Wellzone F8B27 01 Yr: 1990 Mth: 01 Property: 650362 SAN JUAN 32-8 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
1992 0.00 67,926 16,717 113.00 113
1993 0.00 35,974 7,159 175.00 234

San Juan 32-8 Unit #206
Commerciality Determination

This well is currently curtailed for gathering system contracts, but produced over 1 MMCFD to pipeline initially.

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 32-8 Unit #206
Fruitland Coal
E/2 Section 24-T31N-R8W
San Juan County, New Mexico

Date of First Delivery: 09/09/92

Date of Commerciality Submittal:

Well Cost Data

Total Well Costs:

240,000

Production Taxes & Royalty:

20.72%

BLM 12.50

Severance 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 Expenses (\$)</u>
1992	68	19,000
1993	70	46,000
1994	250	46,000
1995	240	46,000
1996	220	46,000
1997	200	46,000
1998	180	46,000
1999	170	46,000
2000	160	46,000
2001	150	46,000
2002	145	46,000
2003	140	46,000
2004	135	46,000
2005	130	46,000
2006	125	46,000

** OIL & GAS WELL **
 ** ECONOMIC EVALUATION **

WELL NAME: SJJ328206COM
 DESCRIPTION: COMMERCIALITY DETERMINATION

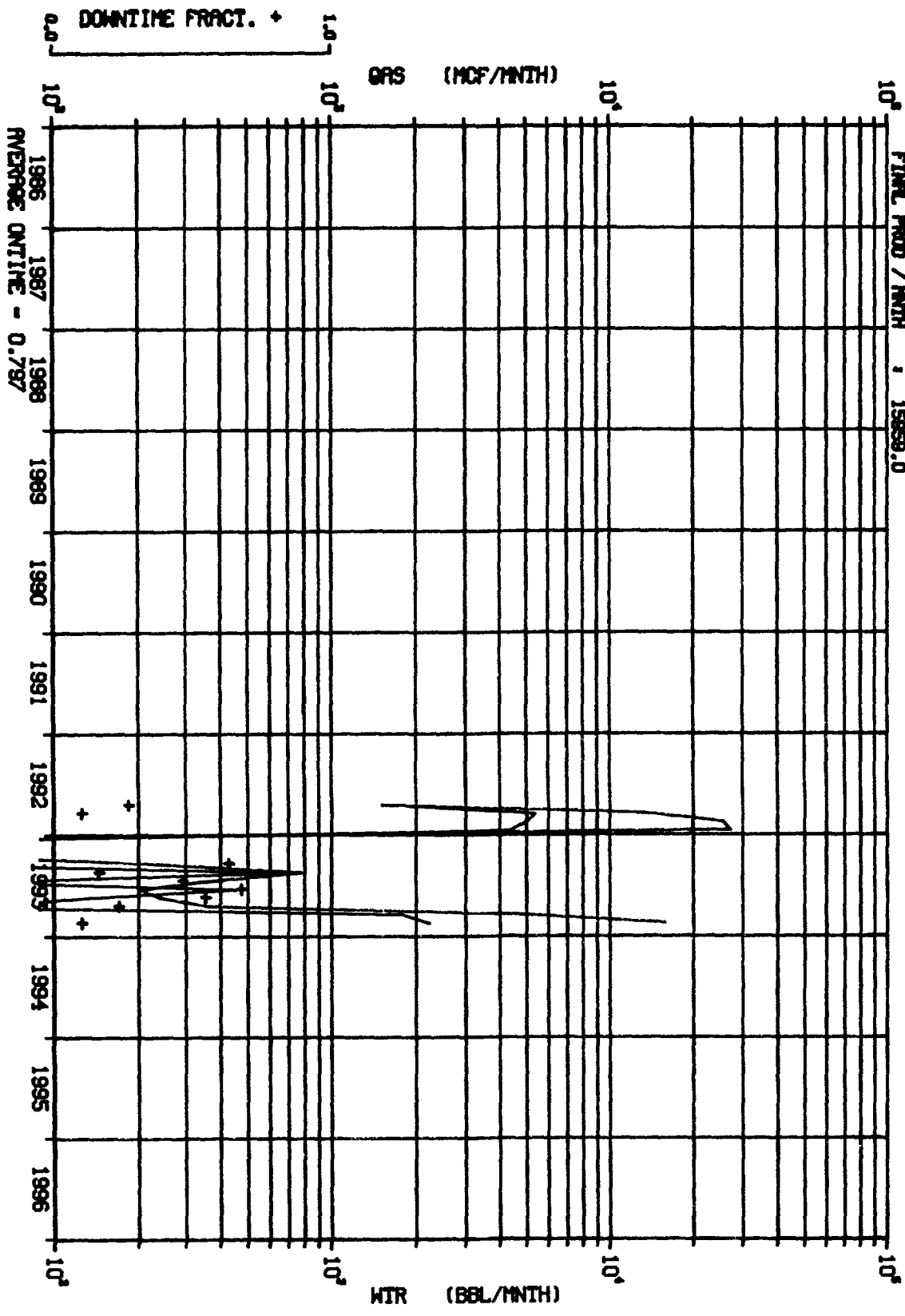
CASE SUMMARY - ALL CASH AMOUNTS IN M\$
 CASE LIFE - FIRST MO-YR: 3-1991 PROD MO-YR: 9-1992 LAST YEAR: 2006 WORKING INT: 100.000%
 CASE REVENUE INT: 79.280% OIL REV INT: 0.000% GAS REV INT: 0.000% ROYALTY: 0.000%

MEASURES OF MERIT				NET CASH FLOW SUMMARY(M\$)			
ARRR (%)	25.5	CAPITAL OUTLAY	240.0				
BREAKEVEN POINT (YRS.)	4.1	TOTAL REVENUE	2059.3				
PAYOUT (YRS.)	2.6	TOTAL EXPENSE	707.6				
NIER	3.9	IBRT	1351.7				
ECONOMIC LIFE (YRS.)	14.3	CURRENT INCOME TAX	411.3				
RESERVES SUMMARY		SALVAGE	0.0				
OIL - GROSS MBBLs	0.0	CASH RETURNED	940.4				
NET MBBLs	0.0	CASH FLOW	700.4				
NET REVENUE(M\$)	0.0	NET PRESENT VALUE (M\$)	130.4				
MBL/Day TO PAYOUT	0.0	@ 13.0 %	301.2				
GAS - GROSS MCF	2383.0	@ 8.4 %	200.4				
NET MCF	1389.2	@ 0.0 %	3.92				
NET REVENUE(M\$)	2059.3	@ 0.0 %	700.4				
MO/Day TO PAYOUT	475.7						

ILLEGIBLE

9/92-11/93
 INITIAL PROD / MONTH : 2039.9
 REMAINING LIFE : 1.25
 CUM PRODUCTION : 90186.0
 FINE PROD / MONTH : 15859.0

CUMS - 11/93
 90186. MCF GRS
 22039. BBL WTR
 0. BBL H2O



PA1=ICE PA2=Exit PF1=Help PF3=End PF11=GRAPH
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 MEP81-01 PARPI - WELLZONE PRODUCTION BROWSE Date: 2/05/94
 YEARLY TOTALS User: #2YJ

Wellzone F8998 01 Yr: 1992 Mth: 01 Property: 650151 SAN JUAN 32-8 UNIT #
 Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000221
 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	0	0	0.00	0			
	1993	0.00	188,356	53,241	180.00	207			

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 32-8 Unit #221
Fruitland Coal
W/2 Section 9-T31N-R8W
San Juan County, New Mexico

Date of First Delivery: 06/04/93

Date of Commerciality Submittal:

Well Cost Data

Total Well Costs:

287,000

Production Taxes & Royalty:

20.72%

BLM 12.50

Severance 4.60

Ad Valorem 3.62

Average Product Pricing

1993

1.09/ MCF

Estimated Gross Annual Production and Operating Expenses

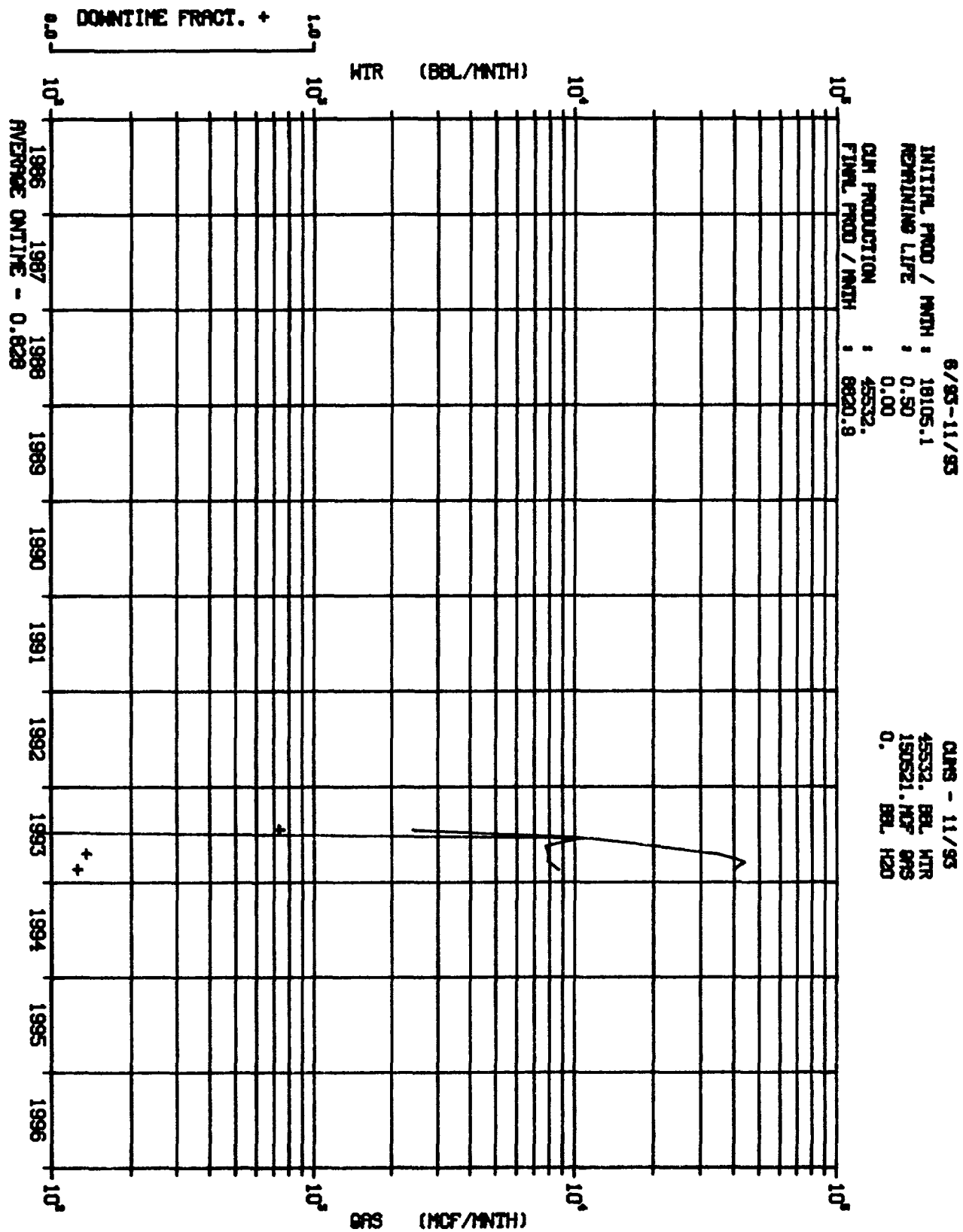
<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expenses (\$)</u>
1993	200	30,000
1994	400	49,000
1995	390	49,000
1996	350	49,000
1997	300	49,000
1998	275	49,000
1999	250	49,000
2000	230	49,000
2001	210	49,000
2002	200	49,000
2003	180	49,000
2004	170	49,000
2005	160	49,000
2006	150	49,000
2007	140	49,000

FILE NAME: C:\J323221.COM
 DESCRIPTION: COMMERCIALITY DETERMINATION

CASE SUMMARY - ALL CASH AMOUNTS IN M\$
 CASE LIFE - FIRST MO-YR: 8-1990 PROD MO-YR: 5-1993 LAST YEAR: 2007 WORKING INT: 100.000%
 CASE REVENUE INT: 79.280% OIL REV INT: 0.000% GAS REV INT: 0.000% ROYALTY: 0.000%

MEASURES OF MERIT				NET CASH FLOW SUMMARY(M\$)			
DEPR (X)	30.7	CAPITAL OUTLAY	287.4				
BREAKEVEN POINT (YRS.)	4.1	TOTAL REVENUE	3115.3				
PAYOUT (YRS.)	1.2	TOTAL EXPENSE	744.8				
NET	5.5	IBRT	2350.5				
ECONOMIC LIFE (YRS.)	14.6	CURRENT INCOME TAX	763.5				
RECOVERED SUMMARY		SALVAGE	0.0				
OIL - GROSS MBBL\$	0.0	CASH RETURNED	1597.0				
NET MBBL\$	0.0	CASH FLOW	1300.0				
NET REVENUE(M\$)	0.0	NET PRESENT VALUE (M\$)	377.6				
IBRT/PAY TO PAYOUT	0.0	@ 13.0 %	875.4				
IBRT/IBRT	0.0	@ 0.0 %	1300.0				
NET REVENUE(M\$)	3115.3	@ 0.0 %	1300.0				
IBRT/DAY TO PAYOUT	1021.3						

ILLEGIBLE



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
MEP81-01 PARPI - WELLZONE PRODUCTION BROWSE Date: 2/05/94

YEARLY TOTALS

User: #2YJ

Wellzone F8A02 01 Yr: 1992 Mth: 01 Property: 650175 SAN JUAN 32-8 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-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 0 0 0.00 0
1993 0.00 138,003 38,986 310.00 310

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 32-8 Unit #223
Fruitland Coal
W/2 Section 10-T31N-R8W
San Juan County, New Mexico

Date of First Delivery: 02/23/93

Date of Commerciality Submittal:

Well Cost Data

Total Well Costs:

306,000

Production Taxes & Royalty:

20.72%

BLM 12.50

Severance 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 Expenses (\$)</u>
1993	140	48,000
1994	300	48,000
1995	270	48,000
1996	250	48,000
1997	225	48,000
1998	210	48,000
1999	200	48,000
2000	190	48,000
2001	180	48,000
2002	170	48,000
2003	160	48,000
2004	150	48,000
2005	140	48,000
2006	130	48,000
2007	120	48,000

WELL NAME: S3328223C0H
 DESCRIPTION: COMMERCIALITY DETERMINATION

CASE LIFE - FIRST MO-YR: 8-1990 PROD MO-YR: 2-1993 LAST YEAR: 2007 WORKING INT: 100.000%
 CASE REVENUE INT: 79.280% OIL REV INT: 0.000% GAS REV INT: 0.000% ROYALTY: 0.000%

MEASURES OF MERIT			
ARR (%)	21.4	CAPITAL OUTLAY	306.0
BREAK-EVEN POINT (YRS.)	4.7	TOTAL REVENUE	2449.9
PAYOUT (YRS.)	2.2	TOTAL EXPENSE	2769.5
NET	3.8	IBRT	1680.4
ECONOMIC LIFE (YRS.)	14.9	CURRENT INCOME TAX	509.5
RESERVES SUMMARY		SALVAGE	0.0
OIL - GROSS MBBLs	0.0	CASH RETURNED	1171.9
NET MBBLs	0.0	CASH FLOW	865.9
NET REVENUE (M\$)	0.0	NET PRESENT VALUE (M\$)	P.1.
BBL/DAY TO PAYOUT	0.0	@ 13.0 %	1.56
GAS - GROSS MMCF	2835.0	@ 9.0 %	1.99
NET MMCF	2247.6	@ 0.0 %	3.83
NET REVENUE (M\$)	2449.9	@ 0.0 %	
MMCF/DAY TO PAYOUT	642.7		

ILLEGIBLE

INITIAL PROD / MONTH : 1878.2
REMAINING LIFE : 0.83

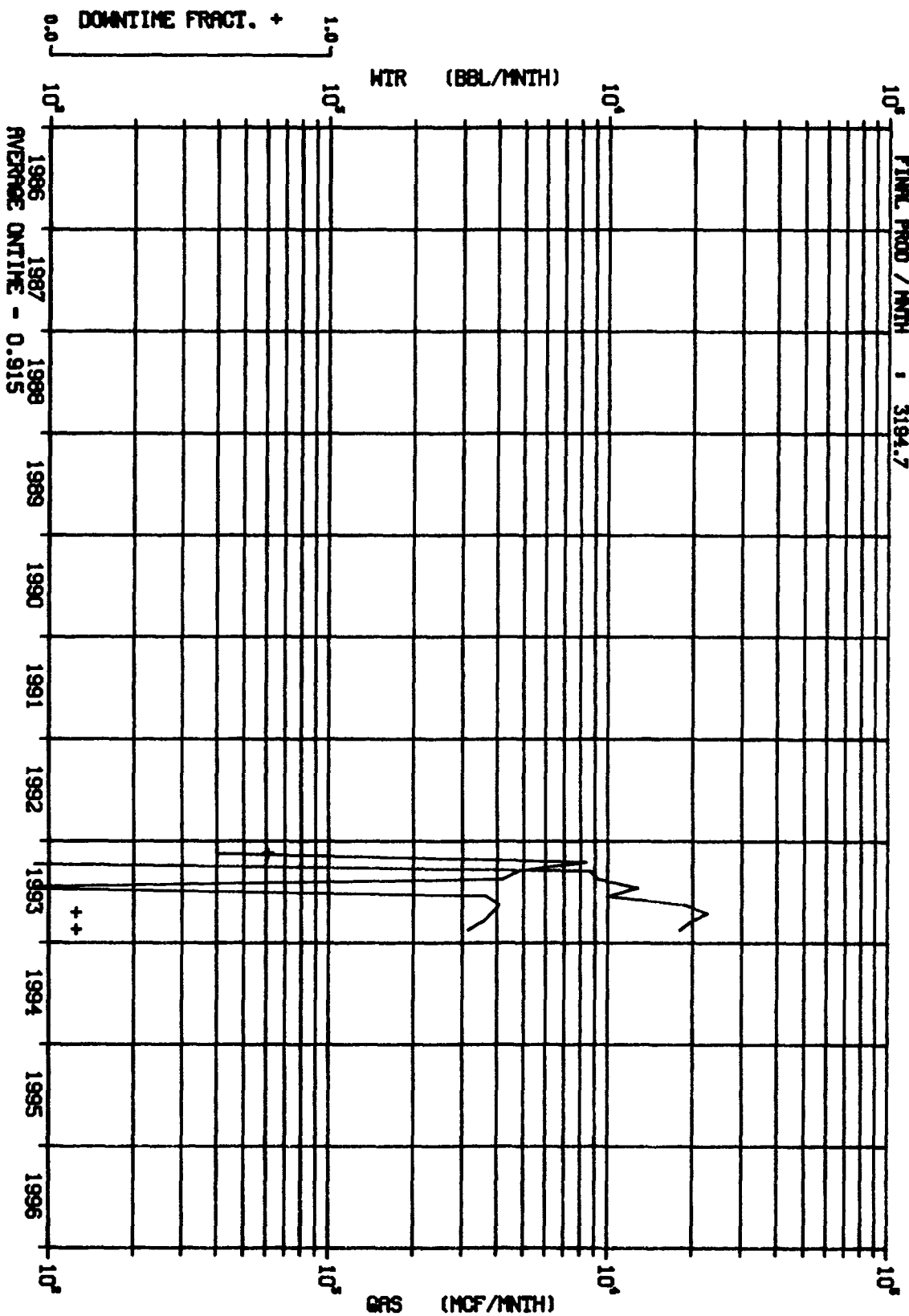
CUM PRODUCTION :	36364.
FINAL PROD / MONTH :	3194.7

CUMS - 11/93
36384. BEL WTR
118546. MCF OPS

36364.	BAL	WTR
118546.	MOF	OPS
0.	BAL	H20

0. BGL H2O

0. BGL H2O



WTR (BBL/MNTH)

GAS (MCF/MNTH)

1986 1987 1988
AVERAGE ONTIME - 0.915

AVERAGE ONTIME - 0.915

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
MEP81-01 PARPI - WELLZONE PRODUCTION BROWSE Date: 2/05/94
User: #2YJ

YEARLY TOTALS

Wellzone F8A03 01 Yr: 1990 Mth: 01 Property: 650176 SAN JUAN 32-8 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	-----	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	4,169	31,620	244.00	244			
1992	0.00	13,768	22,250	142.00	171			
1993	0.00	125,908	61,871	277.00	277			

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 32-8 Unit #224
Fruitland Coal
E/2 Section 10-T31N-R8W
San Juan County, New Mexico

Date of First Delivery: 03/14/91

Date of Commerciality Submittal:

Well Cost Data

Total Well Costs:	282,000		
<u>Production Taxes & Royalty:</u>	20.72%	BLM	12.50
		Severance	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 Expenses (\$)</u>
1991	4	74,000
1992	14	66,000
1993	125	58,000
1994	300	48,000
1995	280	48,000
1996	270	48,000
1997	250	48,000
1998	220	48,000
1999	210	48,000
2000	200	48,000
2001	190	48,000
2002	180	48,000
2003	170	48,000
2004	160	48,000
2005	150	48,000

CASE NAME: SJJ28224CON
DESCRIPTION: COMMERCIALITY DETERMINATION

CASE LIFE - FIRST MO-YR: 8-1990 PROD MO-YR: 3-1991 LAST YEAR: 2005 WORKING INT: 100.000%
CASE REVENUE INT: 79.280% OIL REV INT: 0.000% GAS REV INT: 0.000% ROYALTY: 0.000%

MEASURES OF MERIT

ANER (X) 17.8
BREAK-EVEN POINT (YRS.) 5.3
PAYOUT (YRS.) 4.7

NET ECONOMIC LIFE (YRS.) 14.8

RESERVES SUMMARY 0.0
OIL - GROSS MBBLs 0.0

NET MBBLs 0.0
NET REVENUE(M\$) 0.0

BBL/DAY TO PAYOUT 0.0
GROSS MOCF 2723.0

NET MOCF 2158.8
NET REVENUE(M\$) 2353.1

MCF/DAY TO PAYOUT 403.3

NET CASH FLOW SUMMARY(M\$)

CAPITAL OUTLAY 282.0
TOTAL REVENUE 2353.1

TOTAL EXPENSE 1527.0

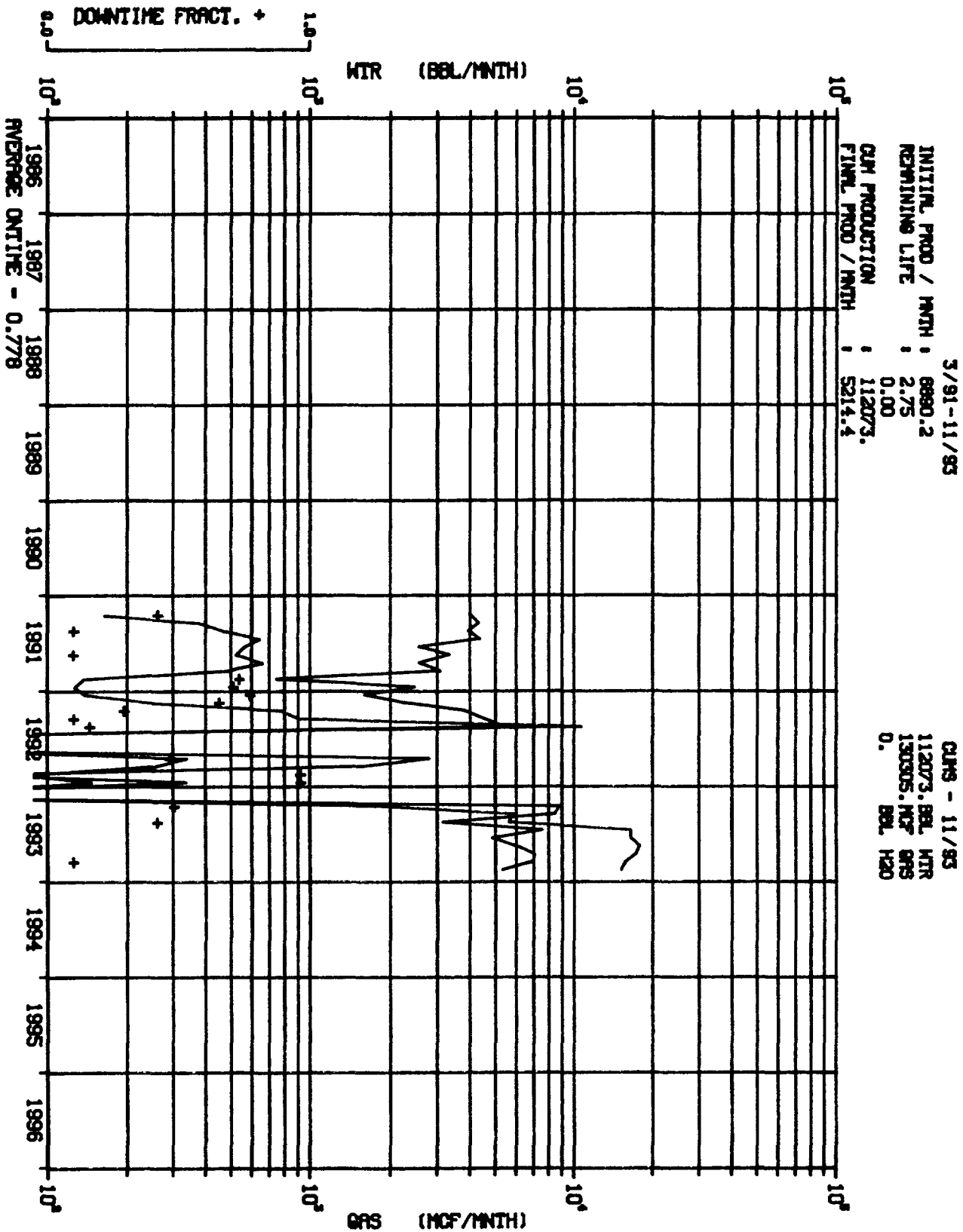
CURRENT INCOME TAX 460.7

CASH FLOW 1066.4

NET PRESENT VALUE (M\$) 107.6

0 13.0 % 1.32
0 9.0 % 1.85
0 0.0 % 3.78
0 0.0 % 3.78

ILLEGIBLE



MEP81-01

PARPI - WELLZONE PRODUCTION BROWSE

Date: 2/05/94

YEARLY TOTALS

User: #2YJ

Wellzone F8989 01 Yr: 1992 Mth: 01 Property: 650157 SAN JUAN 32-8 UNIT #
 Screen: 1 (1-Prod, 2-Inj, 3-Both) Well No: 000226
 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	0	0	0.00	0			
1993	0.00	262,768	75,375	306.00	306			

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 32-8 Unit #226
Fruitland Coal
E/2 Section 15-T31N-R8W
San Juan County, New Mexico

Date of First Delivery: 02/10/93

Date of Commerciality Submittal: _____

Well Cost Data

Total Well Costs:

301,000

Production Taxes & Royalty:

20.72%

BLM 12.50

Severance 4.60

Ad Valorem 3.62

Average Product Pricing

1993

1.09/ MCF

Estimated Gross Annual Production and Operating Expenses

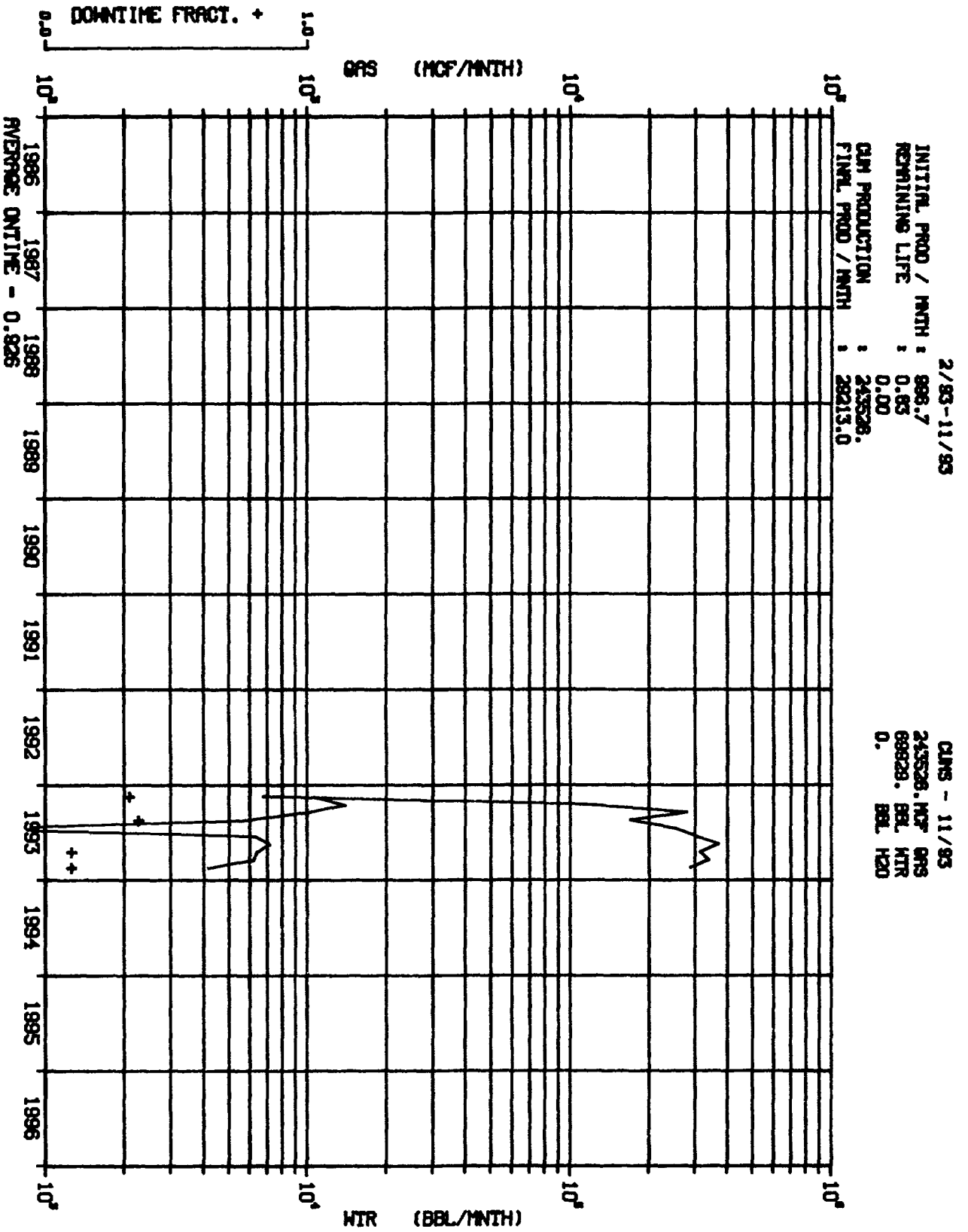
<u>Year</u>	<u>Gas (MMCF)</u>	<u>* Operating Expenses (\$)</u>
1993	242	48,000
1994	500	48,000
1995	450	48,000
1996	400	48,000
1997	375	48,000
1998	340	48,000
1999	300	48,000
2000	275	48,000
2001	250	48,000
2002	230	48,000
2003	210	48,000
2004	190	48,000
2005	180	48,000
2006	170	48,000
2007	160	48,000

CASE NAME: S127822600N
 DESCRIPTION: COMMERCIALITY DETERMINATION

CASE LIFE - FIRST MO-YR: 9-1990 PROD MO-YR: 12-1993 LAST YEAR: 2007 WORKING INT: 100.000%
 CASE REVENUE INT: 79.280% OIL REV INT: 0.000% GAS REV INT: 0.000% ROYALTY: 0.000%

MEASURES OF MERIT			
AGGR (%)	34.9	CAPITAL OUTLAY	301.0
BREAKEVEN POINT (YRS.)	3.8	TOTAL REVENUE	3691.7
PAYOUT (YRS.)	1.4	TOTAL EXPENSE	769.3
NET	6.5	IRR	292.3
ECONOMIC LIFE (YRS.)	14.9	CURRENT INCOME TAX	969.9
RESERVES SUMMARY		SALVAGE	0.0
OIL - GROSS MSBLS	0.0	CASH RETURNED	1952.4
NET MSBLS	0.0	CASH FLOW	1651.4
NET REVENUE(M\$)	0.0	NET PRESENT VALUE (M\$)	317.2
BBL/DAY TO PAYOUT	0.0		P.I.
GAS - GROSS MMCF	4272.0		3.45
NET MMCF	3386.8		6.49
NET REVENUE(M\$)	3691.7		
MCF/DAY TO PAYOUT	955.1		

ILLEGIBLE



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
MEP81-01 PARPI - WELLZONE PRODUCTION BROWSE Date: 2/05/94
YEARLY TOTALS User: #2YJ

Wellzone F8A55 01 Yr: 1991 Mth: 01 Property: 650231 SAN JUAN 32-8 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
1991 0.00 0 2,800 59.00 59
1992 0.00 7,434 68,840 229.00 229
1993 0.00 90,919 100,337 365.00 365

San Juan 32-8 Unit #230
Commerciality Determination

The forecast on this well is higher than current production might indicate based on an initial pitot rate of 2.3 MMCFD. Also of note is the higher than average well costs and the higher operating expenses due to water production.

PHILLIPS PETROLEUM COMPANY
Commerciality Determination

San Juan 32-8 Unit #230
Fruitland Coal
E/2 Section 28-T32N-R8W
San Juan County, New Mexico

Date of First Delivery: 01/16/92

Date of Commerciality Submittal:

Well Cost Data

Total Well Costs:

412,000

Production Taxes & Royalty:

20.72%

BLM 12.50

Severance 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 Expenses (\$)</u>
1992	7	46,000
1993	93	46,000
1994	275	46,000
1995	350	46,000
1996	320	46,000
1997	300	46,000
1998	270	46,000
1999	250	46,000
2000	220	46,000
2001	200	46,000
2002	190	46,000
2003	170	46,000
2004	160	46,000
2005	150	46,000
2006	140	46,000

CASE NAME: SJS29230000N
DESCRIPTION: COMMERCIALITY DETERMINATION

CASE LIFE - FIRST MD-YR: 4-1991 CASE SUMMARY - ALL CASH AMOUNTS IN M\$
CASE REVENUE INT: 79.280% OIL REV INT: 0.000% GAS REV INT: 0.000% LAST YEAR: 2006 WORKING INT: 100.000%

REVENUES OF HERIT				NET CASH FLOW SUMMARY(M\$)			
ARR (X)	19.7	CAPITAL OUTLAY	412.0				
BREAK-EVEN POINT (YRS.)	4.7	TOTAL REVENUE	2674.2				
PAYOUT (YRS.)	4.0	TOTAL EXPENSE	240.2				
INTER	3.3	IBRT	1934.4				
LONG-TERM LIFE (YRS.)	15.0	CURRENT INCOME TAX	563.3				
RESEVES SUMMARY	0.0	CAL'AGE	0.0				
OIL - GROSS MBL'S	0.0	CASH RETURNED	1371.1				
NET MBL'S	0.0	CASH FLOW	959.1				
NET REVENUE(M\$)	0.0	NET PRESENT VALUE (M\$)	P.1.				
BBL/DAY TO PAYOUT	0.0	@ 13.0 %	175.9				
GAS - GROSS MBL'S	3095.0	@ 8.4 %	359.9				
NET MBL'S	2453.7	@ 0.0 %	959.1				
NET REVENUE(M\$)	2474.5	@ 0.0 %	959.1				
NET DAY TO PAYOUT	495.8						

ILLEGIBLE

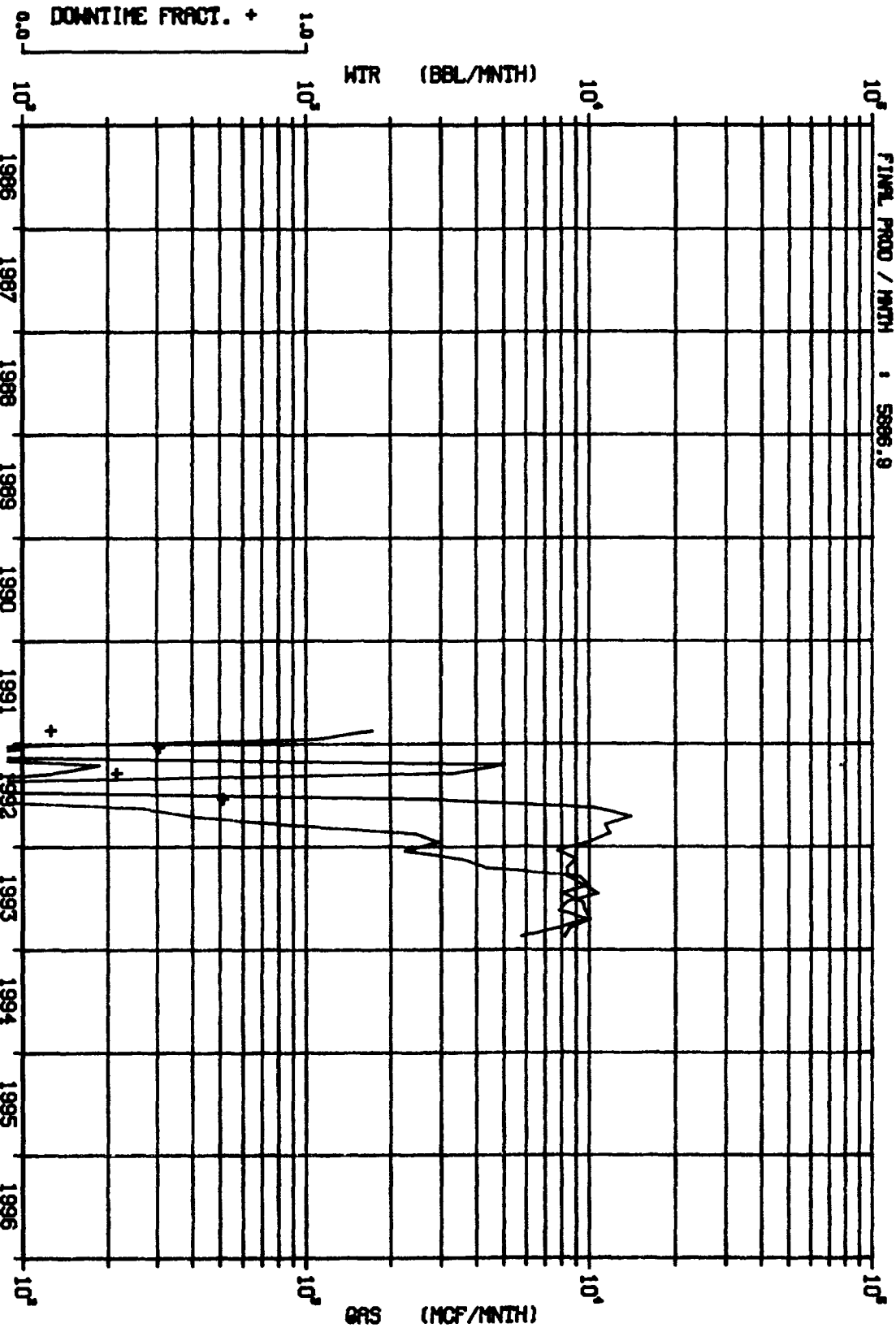
11/91-11/93

INITIAL PROD / MONTH : 1825.7
REMAINING LIFE : 2.08

CUM PRODUCTION : 184901.
FINAL PROD / MONTH : 5898.9

CLMS - 11/93

184901. BBL MTR
90712. MCF GRS
0. BBL H2O



AVERAGE DOWNTIME - 0.936

LEASE- 650231 : SAN JUAN 32-8 UNIT #230
RESVR- 001 : BASIN FRUITLAND COAL
WELL - 000230 PHS WELL PRODUCTION

F8A5501
ZONE-650231001000230 F8A5501
API-30045279/00000



State of New Mexico
Commissioner of Public Lands

RAY POWELL, M.S., D.V.M.
COMMISSIONER

310 OLD SANTA FE TRAIL P.O. BOX 1148

(505) 827-5760
FAX (505) 827-5766

December 22, 1993

SANTA FE, NEW MEXICO 87504-1148

Phillips Petroleum Company
5525 Highway 64 NBU 3004
Farmington, New Mexico 87401

Attention: Mr. A. J. Kieke, CPL

Re: San Juan 32-8 Unit
San Juan County, New Mexico
Application for Approval of 3rd and 4th Expanded
Participating Area
Fruitland Formation

Dear Kieke:

The Bureau of Land Management by their letter of December 10, 1993, has notified this office that the Third and Fourth revisions to the Fruitland Participating Area for the San Juan 32-8 Unit, San Juan County, New Mexico, have been approved. Please be advised that the Commissioner of Public Lands concurs with the Bureau of Land Management and has this date also approved your application for the above-mentioned Participating Areas.

The 3rd revision adds 320 acres to the Fruitland Participating Area effective 01-01-90 and is described as:

W $\frac{1}{2}$ of Section 22-31N-08W, Well 207


The 4th revision adds 320 acres to the Fruitland Participating Area effective 04-01-90 and is described as:

W $\frac{1}{2}$ of Section 29-32N-08W, Well 208

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY B. POWELL, M.S., D.V.M.
COMMISSIONER OF PUBLIC LANDS

BY: 
FLOYD O. PRANDO, Director
Oil/Gas and Minerals Division
(505) 827-5744
RBP/FOP/pm
cc: Reader File

DEC. 10 1993

San Juan 32-8 Unit (FRPA)
3180 (07327)

CERTIFIED MAIL-RETURN RECEIPT REQUESTED
P 863 186 844

Mr. A. J. Kieke, CPL
Phillips Petroleum Company
5525 Hwy 64 NEBU 3004
Farmington, NM 87401

Dear Mr. Kieke:

Your application for the 3rd and 4th Revisions to the Fruitland Participating Area in the San Juan 32-8 Unit is hereby approved. The wells involved and effective dates are as follows.

Revision	Well	Acreage	Effective Date
3rd	207	W $\frac{1}{2}$ 22-31N-8W	01/01/90
4th	208	W $\frac{1}{2}$ 29-32N-8W	04/01/90

Please notify all affected parties of this approval.

Under provisions of 43 CFR 3165.3, you may request an Administrative Review of the order 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 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 approval, please call Janice Easley at (505) 599-6355.

Sincerely,

/s/ Duane Spencer

Duane W. Spencer
Chief, Branch of Reservoir Management

Enclosures

- 1 - Exhibit A, 3rd and 4th Rev.
- 1 - Exhibit B, 3rd and 4th Rev.

bcc:
see attached

Minerals Management Service
Royalty Management Program
Reference Data Branch
P.O. Box 5760-(MS3240)
Denver, CO 80217 w/enclosure

New Mexico Oil Conservation Division
310 Old Santa Fe Trail, Room 206
Santa Fe, NM w/o enclosure

Commissioner of Public Lands
State of New Mexico
P.O. Box 1148
Santa Fe, NM 87504 w/o enclosure

bcc:
Unit (San Juan 32-8 FR PA w/encl)
AIRS w/o enclosure
3180 w/o enclosure
DOMR Reader
070:JEasley:je:12/10/93



State of New Mexico
Commissioner of Public Lands

RAY POWELL, M.S., D.V.M.
COMMISSIONER

310 OLD SANTA FE TRAIL P.O. BOX 1148

SANTA FE, NEW MEXICO 87504-1148

(505) 827-5760
FAX (505) 827-5766

December 8, 1993

Phillips Petroleum Company
5525 Highway 64, NBU 3004
Farmington, New Mexico 87401

Attention: Mr. A. J. Kieke

Re: Commercial Determinations
San Juan 32-8 Unit
Fruitland Formation
San Juan County, New Mexico

Dear Mr. Kieke:

This office is in receipt of your letter of August 23, 1993, together with data that supports your commercial determinations regarding the San Juan 32-8 Unit Well Nos. 207, 208, 237, 238, 220, 240, 245, 225, 236, 244, and 234.

The Bureau of Land Management, by their letter of October 29, 1993, has advised this office that they have concurred with your determination that the above-mentioned wells are capable of producing unitized substances in paying quantities from the Fruitland Formation.

Please be advised that the Commissioner of Public Lands concurs with Phillips Petroleum Company and the Bureau of Land Management's determinations that the above-mentioned wells are commercial in the Fruitland Formation. Please submit an application for the appropriate expansion of the Fruitland Participating Area to this office for approval.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY B. POWELL, M.S., D.V.M.
COMMISSIONER OF PUBLIC LANDS

BY:

Floyd O. Prando
FLOYD O. PRANDO, Director
Oil/Gas and Minerals Division
(505) 827-5744

RBP/FOP/pm

cc: Reader File

BLM

TRD

OCB



PHILLIPS PETROLEUM COMPANY

FARMINGTON, NEW MEXICO 87401
5525 HWY. 64 NBU 3004

LAND DIVISION

11 8 49

November 30, 1993

United States Department of Interior
Bureau of Land Management
Farmington Resource Area
1235 LaPlata Highway
Farmington, New Mexico 87401
(4 Copies Enclosed)

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

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
(2 Copies Enclosed)

Re: San Juan 32-8 Unit
#14-08-001-446
Application for Expansion
Fruitland Participating Area
3rd Expansion - Eff. 01-01-90
4th Expansion - Eff. 04-01-90
San Juan County, New Mexico
GF-5465; LCN 650251

Gentlemen:

Pursuant to Section 11(a) of the San Juan 32-8 Unit Agreement, #14-08-001-446, approved January 13, 1953, Phillips Petroleum Company, as Unit Operator, determined on the dates indicated below that the wells listed below are capable of producing unitized substances in paying quantities from the Fruitland Formation. Therefore, application for the Third and Fourth expansions of the Participating Area established for the Fruitland Formation are submitted for your review as follows:

THIRD EXPANDED PARTICIPATING AREA - EFFECTIVE JANUARY 1, 1990

<u>Drilling Block</u>	<u>New Acres</u>	<u>Well Number</u>
W/2 Section 22-31N-8W	320	207

The San Juan 32-8 Unit #207 was completed December 8, 1989. The Fruitland Coal member of the Fruitland Formation was tested on December 8, 1989, with cumulative gas production of 2,066,706 mcf through September 30, 1993. The spacing unit for this well is described as the W/2 Section 22-31N-8W, containing 320 acres.

November 30, 1993
San Juan 32-8 Unit
#14-08-001-446
Application for Expansion
Fruitland Participating Area

FOURTH EXPANDED PARTICIPATING AREA - EFFECTIVE APRIL 1, 1990

<u>Drilling Block</u>	<u>New Acres</u>	<u>Well Number</u>
W/2 Section 29-32N-8W	320	208

The San Juan 32-8 Unit #208 was completed March 25, 1990. The Fruitland Coal member of the Fruitland Formation was tested on March 25, 1990, with cumulative gas production of 359,725 mcf through September 30, 1993. The spacing unit for this well is described as the W/2 Section 29-32N-8W, containing 320 acres.

Enclosed herewith are Schedules IV, and V for the Third and Fourth expanded Participating Areas for the Fruitland Formation of the San Juan 32-8 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.

Unless this application is disapproved or contested in whole or in part the Third and Fourth Expanded Participating Areas are effective January 1, 1990 and April 1, 1990, respectively. Copies of this application with enclosures are being sent to the Unit working interest owners on the attached sheet. This application completes operator filings submitted under our August 23, 1993 letter and is consistent with those findings set forth in letter dated October 29, 1993 from the Bureau of Land Management to the undersigned.

Very truly yours,

PHILLIPS PETROLEUM COMPANY



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

cc: R.G. Flesher (r) supervisors
San Juan 32-8 Unit Owners

DATE 12/01/93

PHILLIPS PETROLEUM COMPANY

SCHEDULE IV

THE 003 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION

SAN JUAN 32-8 UNIT AREA

PAGE 1

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
SF-079380	T32N R8W SEC. 23 ALL	640.00		TRACT: 015			50.000000
	ORRI:				5.000000	5.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				55.000688	55.000688	
	EL PASO PRODUCTION COMPANY				13.749656	13.749656	
	PRUDENTIAL BACHE ENERGY PROD.				12.033698	12.033698	
	CINCO GENERAL PARTNERSHIP				1.715958	1.715958	
	WILLIAM G. WEBB						
	TOTAL				100.000000	100.000000	
	REMARKS: SAN JUAN 32-8 UNIT #37 SAN JUAN 32-8 UNIT #41						
SF-079381	T32N R8W SEC. 25 E/2	320.00		TRACT: 016			25.000000
	ORRI:				5.000000	5.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				55.000688	55.000688	
	EL PASO PRODUCTION COMPANY				13.749656	13.749656	
	PRUDENTIAL BACHE ENERGY PROD.				12.033698	12.033698	
	CINCO GENERAL PARTNERSHIP				1.715958	1.715958	
	WILLIAM G. WEBB						
	TOTAL				100.000000	100.000000	
	REMARKS: SAN JUAN 32-8 UNIT #36						
NM-03402	T31N R8W SEC. 22 W/2	320.00		TRACT: 021			25.000000
	ORRI:				5.000000	5.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:				14.850000	14.850000	
	WILLIAMS PRODUCTION COMPANY				67.650000	67.650000	
	PHILLIPS-SAN JUAN PARTNERS, L.P.						
	TOTAL				100.000000	100.000000	
	REMARKS: SAN JUAN 32-8 UNIT #207						
	TOTAL				1280.00		100.000000

EFFECTIVE 90/01/01

DATE 12/01/93

PHILLIPS PETROLEUM COMPANY
SCHEDULE IV
THE 003 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
SAN JUAN 32--8 UNIT AREA

PAGE 1

DESCRIPTION OF COMMITTED LANDS IN PARTICIPATING AREA:

RECAPITULATION

DESCRIPTION OF NON-COMMITTED LANDS IN PARTICIPATING AREA:

SAN JUAN COUNTY, NEW MEXICO
TOWNSHIP 32N, RANGE 8W
SECTION 23 : ALL
SECTION 25 : E/2

TOWNSHIP 31N, RANGE 8W
SECTION 22 : W/2

TOTAL COMMITTED :

1280.00

TOTAL ACRES NON-COMMITTED:

0.00

TOTAL NUMBER OF ACRES IN PARTICIPATING AREA:

1280.00

DATE 12/01/93

PHILLIPS PETROLEUM COMPANY

SCHEDULE V

THE 004 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION

SAN JUAN 32-8 UNIT AREA

PAGE 1

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
SF-079013	T32N R8W SEC. 29 W/2	320.00		TRACT: 005			20.000000
	ORRI:				5.000000	5.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:						
	WILLIAMS PRODUCTION COMPANY				14.850000	14.850000	
	PHILLIPS-SAN JUAN PARTNERS, L.P.				67.650000	67.650000	
	TOTAL				100.000000	100.000000	
REMARKS: SAN JUAN 32-8 UNIT #208							
SF-079380	T32N R8W SEC. 23 ALL	640.00		TRACT: 015			40.000000
	ORRI:				5.000000	5.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:						
	EL PASO PRODUCTION COMPANY				55.000688	55.000688	
	PRUDENTIAL BACHE ENERGY PROD.				13.749656	13.749656	
	CINCO GENERAL PARTNERSHIP				12.033698	12.033698	
	WILLIAM G. WEBB				1.715958	1.715958	
	TOTAL				100.000000	100.000000	
REMARKS: SAN JUAN 32-8 UNIT #37 SAN JUAN 32-8 UNIT #41							
SF-079381	T32N R8W SEC. 25 E/2	320.00		TRACT: 016			20.000000
	ORRI:				5.000000	5.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:						
	EL PASO PRODUCTION COMPANY				55.000688	55.000688	
	PRUDENTIAL BACHE ENERGY PROD.				13.749656	13.749656	
	CINCO GENERAL PARTNERSHIP				12.033698	12.033698	
	WILLIAM G. WEBB				1.715958	1.715958	
	TOTAL				100.000000	100.000000	
REMARKS: SAN JUAN 32-8 UNIT #36							

EFFECTIVE 90/04/01

DATE 12/01/93

PHILLIPS PETROLEUM COMPANY

SCHEDULE V

THE 004 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
SAN JUAN 32-8 UNIT AREA

SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	OWNERSHIP	DRILLING BLOCK	PERCENTAGE	PERCENTAGE COMMITTED	PERCENT ACTUAL PARTICIPATION
NM-03402	T31N R8W SEC. 22 W/2	320.00		TRACT: 021			20.000000
	ORRI:				5.000000	5.000000	
	ROYALTY:				12.500000	12.500000	
	WORKING INTEREST:						
	WILLIAMS PRODUCTION COMPANY				14.850000	14.850000	
	PHILLIPS-SAN JUAN PARTNERS, L.P.				67.650000	67.650000	
	TOTAL				100.000000	100.000000	

REMARKS: SAN JUAN 32-8 UNIT #207

TOTAL 1600.00

100.000000

EFFECTIVE 90/04/01

DATE 12/01/93

PHILLIPS PETROLEUM COMPANY
SCHEDULE V

THE 004 EXPANDED PARTICIPATING AREA FOR FRUITLAND COAL FORMATION
SAN JUAN 32-8 UNIT AREA

PAGE 1

DESCRIPTION OF COMMITTED LANDS IN PARTICIPATING AREA:

RECAPITULATION

DESCRIPTION OF NON-COMMITTED LANDS IN PARTICIPATING AREA:

SAN JUAN COUNTY, NEW MEXICO
TOWNSHIP 32N, RANGE 8W
SECTION 23 : ALL
SECTION 25 : E/2
SECTION 29 : W/2

TOWNSHIP 31N, RANGE 8W
SECTION 22 : W/2

TOTAL COMMITTED :

1600.00

TOTAL ACRES NON-COMMITTED:

0.00

TOTAL NUMBER OF ACRES IN PARTICIPATING AREA:

1600.00

San Juan 32-8 Working Interest Owners
11/29/93

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

Cinco General Partnership
P. O. Box 451
Albuquerque, NM 87103-0451

Prudential-Bache Energy, et al
c/o Graham Royalty, LTD.
1675 Larimer Street, Ste. 400
Denver, CO 80202

William G .Webb and Jane Webb
c/o Cinco General Partnership
Agent for William G. Webb & Jane Webb
P. O. Box 451
Albuquerque, NM 87103-0451

Suzanna P. Kelly
P.O. Box 585
Careron, MT 59720

Texaco Expl. & Prod. Inc.
Joint Int. Operations
Attn: Mr. J. E. King
P. O. Box 46555
Denver, CO 80201-6555

Wintergreen Energy Corp.
Attn: Gene N. Garnett
Dorchester Pl, St 125
5735 Pineland Drive
Dallas, TX 57231

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