

District I  
1625 N. French Drive, Hobbs, NM 88240

District II  
811 South First Street, Artesia, NM 88210

District III  
1000 Rio Brazos Road, Aztec, NM 87410

District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised May 15, 2000

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

APPLICATION TYPE  
☒ Single Well  
☐ Establish Pre-Approved Pools  
EXISTING WELLBORE  
☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

PHILLIPS PETROLEUM COMPANY  
Operator

5525 Hwy. 64, Farmington, NM 87401  
Address

San Juan 29-5 Unit #61 Unit H, Section 9, T29N, R5W Rio Arriba  
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 17654 Property Code 0009256 API No. 30-039-21028 Lease Type: X Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Basin Fruitland Coal		Blanco Mesaverde
Pool Code	71629		72319
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	Est. Apprx. 3524' - 3702'		4542' - 6180'
Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	1100 psi (est.)		500 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	950 BTU		1150 BTU
Producing, Shut-In or New Zone	New Zone		Producing
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: New Zone Rates:	Date: Rates:	Date: 5/23/02 Rates: 80 mcf/d & 1 bwpd, 0 bopd
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas ** / **	Oil Gas % %	Oil Gas ** / **

NOTE: We will be utilizing the subtraction method on this well until we can establish a good fixed allocation percentage. See attached letter of explanation within application.

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☐ No ☒  
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes ☒ No ☐

Are all produced fluids from all commingled zones compatible with each other? Yes ☒ No ☐

Will commingling decrease the value of production? Yes ☐ No ☒

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes ☒ No ☐

NMOCD Reference Case No. applicable to this well: R-10770

Attachments:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Brad Peterson TITLE Reservoir Engineer DATE June 6, 2002

TYPE OR PRINT NAME Brad Peterson TELEPHONE NO. (505) 599-3486 e-mail: btpeter@ppco.com



**PHILLIPS PETROLEUM COMPANY**

FARMINGTON, NEW MEXICO 87401  
5525 HWY. 64 NBU 3004

June 11, 2002

New Mexico Oil & Gas Conservation Div.  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87504

Application for Downhole Commingling  
On the San Juan 29-5 # 61

Dear Sirs,

Phillips Petroleum is proposing to commingle the Fruitland Coal and Mesaverde formations on the San Juan 29-5 # 61 (Reference Case No. R-10770). Currently the Mesaverde is producing independently 80 MCFD. Pending commingle approval, the Fruitland Coal will be completed. The Fruitland Coal will be tested for 4-6 months before commingling it with the Mesaverde.

A production forecast has been determined from stabilized Mesaverde production. After the zones are commingled, Phillips Petroleum is proposing to utilize the subtraction method for 36 months or until Fruitland Coal production stabilizes before a ratio between the Fruitland Coal and Mesaverde is established.

Future Fruitland Coal water and gas production were estimated by examining offset low rate Fruitland Coal wells. An initial gas rate of 200 mcf/d and an initial water rate of 4 bwp/d were determined.

Economics for commingling the Fruitland Coal with the Mesaverde and for drilling a new well to complete the Fruitland Coal show completing the Fruitland Coal in this area is only economical by completing the Fruitland Coal in existing Mesaverde wells.

Attached is the C-102 and acreage dedication, Mesaverde gas rate vs time plot for the 29-5 # 61 showing the 36 month forecast, a 36 month Mesaverde gas production forecast, estimated Fruitland Coal gas rate vs time plot for the 29-5 # 61 showing offset production, and economics for commingling the Fruitland Coal with the Mesaverde and drilling and completing the Mesaverde.

Sincerely,

PHILLIPS PETROLEUM

Brad Peterson  
Reservoir Engineer

cc: OCD – Aztec  
BLM – Farmington  
NM Commissioner of Public Lands – Santa Fe

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1625 N. French Dr., Hobbs, NM 88240  
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State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 15, 2000  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-039-21028	<sup>2</sup> Pool Code 71629	<sup>3</sup> Pool Name Basin Fruitland Coal
<sup>4</sup> Property Code 009256	<sup>5</sup> Property Name San Juan 29-5 Unit	<sup>6</sup> Well Number 61
<sup>7</sup> GRID No. 017654	<sup>8</sup> Operator Name PHILLIPS PETROLEUM COMPANY	<sup>9</sup> Elevation 6847'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	9	29N	5W		1520'		900'	East	Rio Arriba

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H									

<sup>12</sup> Dedicated Acres 320 E/2	<sup>13</sup> Joint or Infill Y	<sup>14</sup> Consolidation Code U	<sup>15</sup> Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16	SECTION 9	SF-80179 320 acres	SF-078642	<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>Patsy Clugston</i> Signature Patsy Clugston Printed Name Sr. Regulatory Clerk Title 6/5/02 Date
				<sup>18</sup> SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. see original C102 Date of Survey dated 9/13/74 Signature and Seal of Professional Surveyor:  Signed by Fred B. Kerr, Jr. #3950 Certificate Number

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator <b>Northwest Pipeline Corporation</b>			Lease <b>San Juan 29-5 Unit</b>		Well No. <b>61</b>
Unit Letter <b>H</b>	Section <b>9</b>	Township <b>29N</b>	Range <b>5W</b>	County <b>Rio Arriba</b>	
Actual Footage Location of Well: <b>1520</b> feet from the <b>North</b> line and <b>900</b> feet from the <b>East</b> line					
Ground Level Elev. <b>6847</b>	Producing Formation <b>Mesa Verde</b>		Pool <b>Blanco Mesa Verde</b>		Dedicated Acreage: <b>320</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☒ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) SE 1/4, NE 1/4, Sec. 9, T29N, R5W

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name O.B. Whitenburg js

Position  
Production & Drilling Eng.

Company  
Northwest Pipeline Corp.

Date September 20, 1974

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

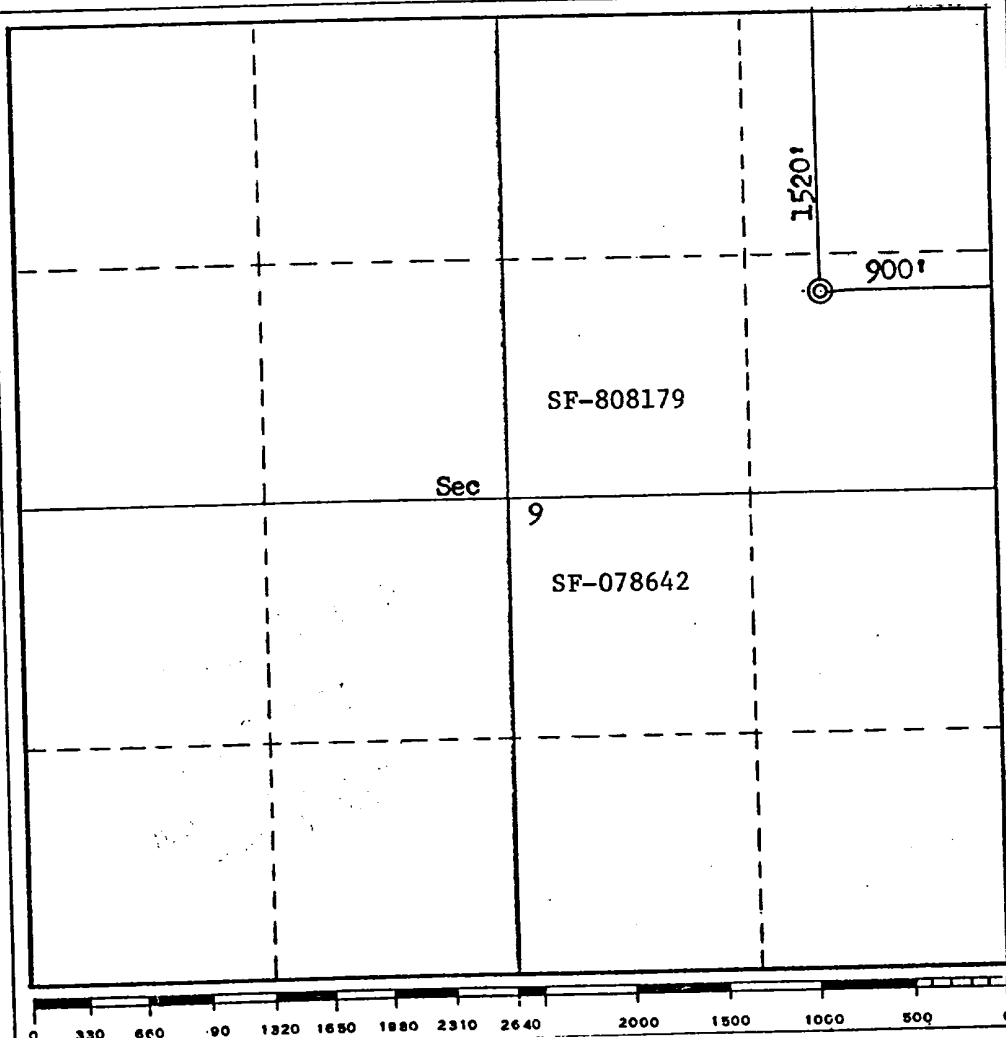
Date Surveyed  
September 13, 1974

Registered Professional Engineer  
and/or Land Surveyor

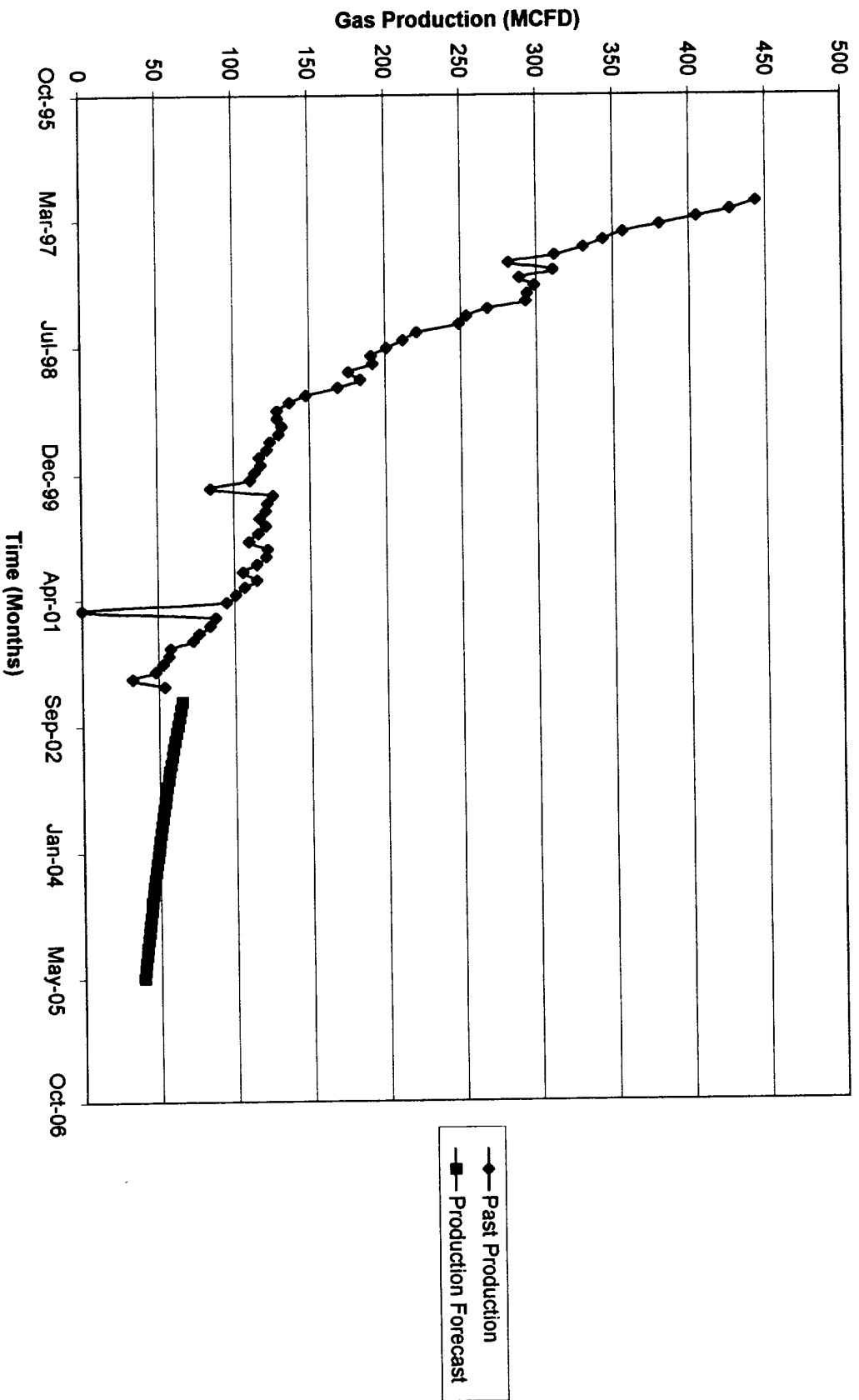
Fred B. Kerr Jr.  
Fred B. Kerr Jr.

Certificate No.

3950



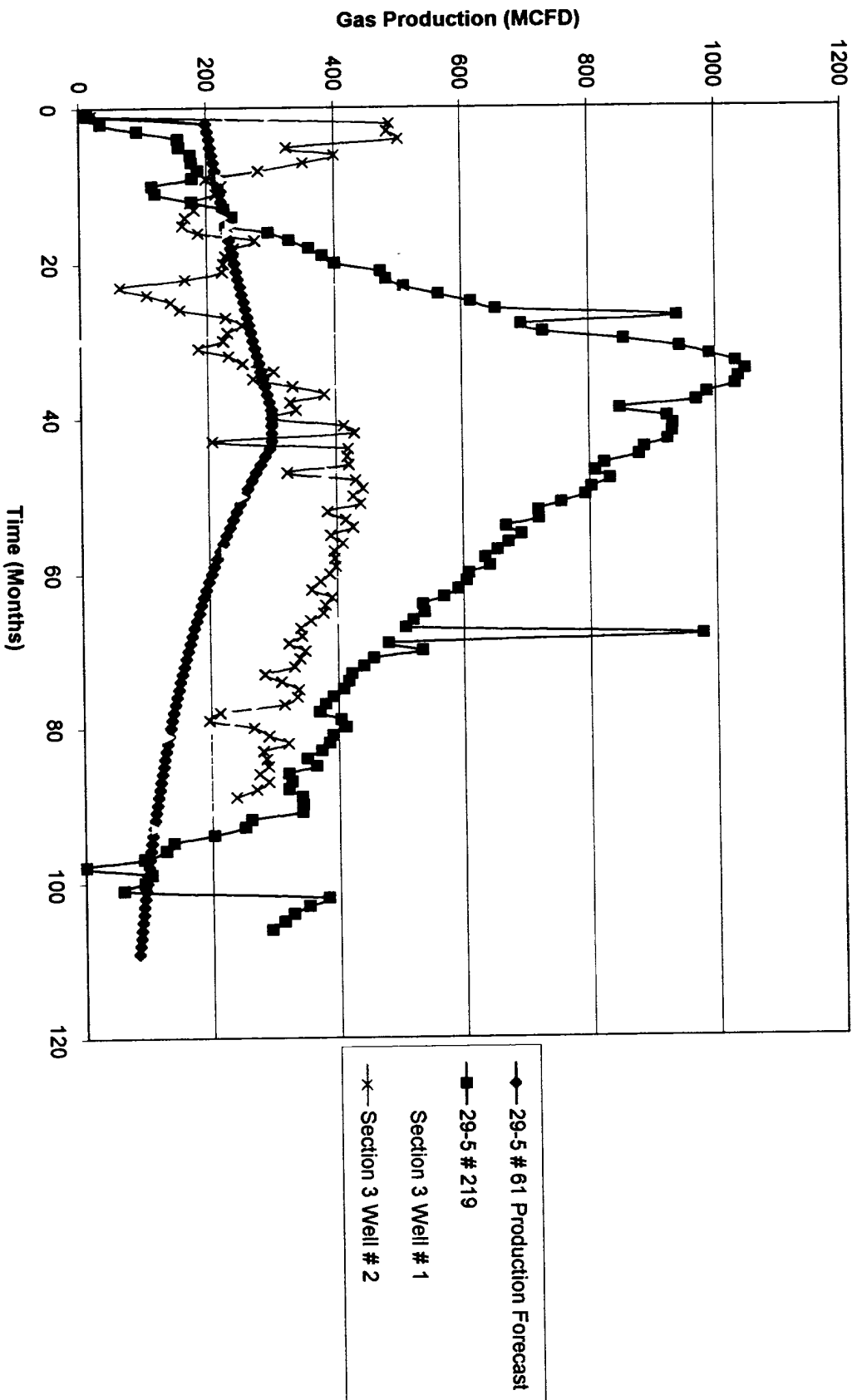
# 29-5 # 61 Mesaverde Production and Forecast



## 29-5 # 61 Mesa Verde Production Forecast

Month	Year	Average Rate (MCFD)	Monthly Volume (MMCF)
6	2002	65.0675	2.3
7	2002	64.0135	2.33
8	2002	62.985	2.3
9	2002	61.982	2.19
10	2002	61.0045	2.22
11	2002	60.044	2.12
12	2002	59.109	2.16
1	2003	58.1995	2.12
2	2003	57.307	1.89
3	2003	56.44	2.06
4	2003	55.5815	1.96
5	2003	54.7485	2
6	2003	53.941	1.9
7	2003	53.142	1.94
8	2003	52.36	1.91
9	2003	51.6035	1.82
10	2003	50.8555	1.85
11	2003	50.1245	1.77
12	2003	49.4105	1.8
1	2004	48.7135	1.78
2	2004	48.0335	1.64
3	2004	47.362	1.73
4	2004	46.7075	1.65
5	2004	46.0615	1.68
6	2004	45.4325	1.6
7	2004	44.8205	1.63
8	2004	44.217	1.61
9	2004	43.622	1.54
10	2004	43.044	1.57
11	2004	42.4745	1.5
12	2004	41.922	1.53
1	2005	41.378	1.51
2	2005	40.8425	1.35
3	2005	40.3155	1.47
4	2005	39.797	1.4
5	2005	39.2955	1.43
6	2005	38.794	1.37

# 29-5 # 61 Production Forecast for Fruitland Coal



## 29-5 # 61 Fruitland Coal Completion Economics

	Commingle with Mesaverde Case	New Drill Case
Rate of Return	25.6%	-0.2%
Payout	3.2 years	12.9 years
Net Present Value at 13%	\$58,500	- \$183,900
Capital Outlay	\$129,500	\$423,100
Net Investment/Barrel of Oil Equivalent	\$3.27	\$10.68

The economics were ran using the same production forecast for the Fruitland Coal.  
Economics assumed the well would be fraced for both cases.