

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

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

Form C-107A
Revised May 15, 2000

APPLICATION TYPE
X Single Well
____ Establish Pre-Approved Pools
EXISTING WELLBORE
X Yes ____ No

APPLICATION FOR DOWNHOLE COMMINGLING

PHILLIPS PETROLEUM COMPANY

5525 Hwy. 64, Farmington, NM 87401

Operator

Address

San Juan 29-5 Unit

#25

Unit G, Section 18, T29N, R5W

Rio Arriba

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 17654 Property Code 0009256 API No. 30-039-07625 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.3240' – 3370'		4192' – 5798'
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)	1200 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: 70 mcf/d & 1 bwpd, 1 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 X

If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

Yes X No ____

Are all produced fluids from all commingled zones compatible with each other?

Yes X No ____

Will commingling decrease the value of production?

Yes ____ No X

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 X 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 11, 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 12, 2002

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

Application for Downhole Commingling
On the San Juan 29-5 # 25

Dear Sirs,

Phillips Petroleum is proposing to commingle the Fruitland Coal and Mesaverde formations on the San Juan 29-5 # 25 (Reference Case No. R-10770). Currently the Mesaverde is producing independently 70 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 24 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. A gas rate inclining to 200 mcf/d within six months of completion and an initial water rate of 2 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 # 25 showing the 36 month forecast, a 36 month Mesaverde gas production forecast, estimated Fruitland Coal gas rate vs time plot for the 29-5 # 25 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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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

¹ API Number 30-039-07625	² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code 009256	⁵ Property Name San Juan 29-5 Unit	⁶ Well Number 25
⁷ OGRID No. 017654	⁸ Operator Name PHILLIPS PETROLEUM COMPANY	⁹ Elevation 6500'

¹⁰ Surface Location

UL or lot no. G	Section 18	Township 29N	Range 5W	Lot Idn	Feet from the 1650'	North/South line North	Feet from the 1650'	East/West line East	County Rio Arriba
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. G	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 320 E/2	¹³ Joint or Infill Y	¹⁴ Consolidation Code U	¹⁵ 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

<div style="position: relative; height: 400px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-style: dashed;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%);">SECTION 18</div> <div style="position: absolute; top: 10%; left: 40%;">1650'</div> <div style="position: absolute; top: 40%; left: 50%;">1650'</div> <div style="position: absolute; top: 60%; left: 50%;">SF-078281 2560 acres</div> </div> </div>	<p>17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Patsy Clugston</i> Signature Patsy Clugston Printed Name Sr. Regulatory Clerk Title June 5, 2002 Date</p>
	<p>18 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.</p> <p>see original C102</p> <p>Date of Survey dated 8/24/55 Signature and Seal of Professional Surveyor: signed by James P. Leese #1463 Certificate Number</p>

Well Location and Acreage Definition Plat

Section A.

Date **MARCH 28, 1958**

Operator **PACIFIC NORTHWEST PIPELINE CORPORATION** Lease **SAN JUAN 29-5 UNIT** SF **078281**
 Well No. **25-18** Unit Letter **G** Section **18** Township **29-N** Range **5-W** NMPM
 Located **1650** Feet From **NORTH** Line **1650** Feet From **EAST** Line
 County **RIO ARriba** G. L. Elevation **6500** Dedicated Acreage **320** Acres
 Name of Producing Formation **MESA VERDE** Pool **BLANCO MESA VERDE**

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?
 Yes ☒ No ☐
2. If the answer to question one is "no", have the interests of all the owners been fully communitized by agreement or otherwise? Yes ☐ No ☐ If answer is "Yes", Explain Circumstances.

3. If the answer to question two is "no", list all the owners and their respective interest below:

Owner

Land Description

RECEIVED

APR 11 1958

U. S. GEOLOGICAL SURVEY
FARMINGTON, NEW MEXICO

Section B.

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

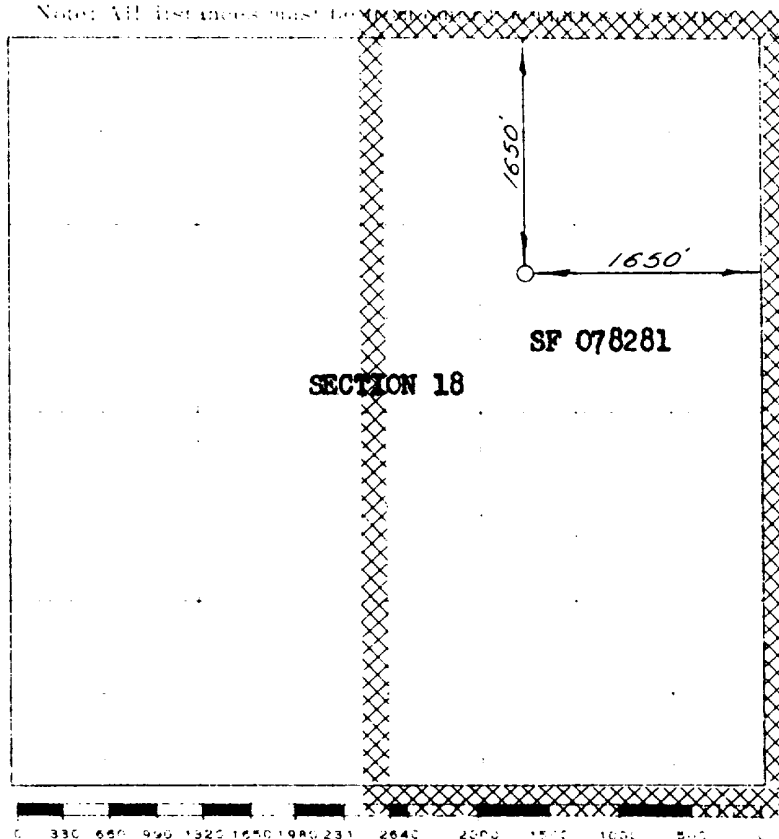
(Operator)

Original signed by **L. F. Stone**
(Representative)

(Address)

Pacific Northwest Pipeline Corp.
418 1/2 W. Broadway
Farmington, New Mexico

Note: All distances must be in feet.



Scale 1 inch equals 1 mile



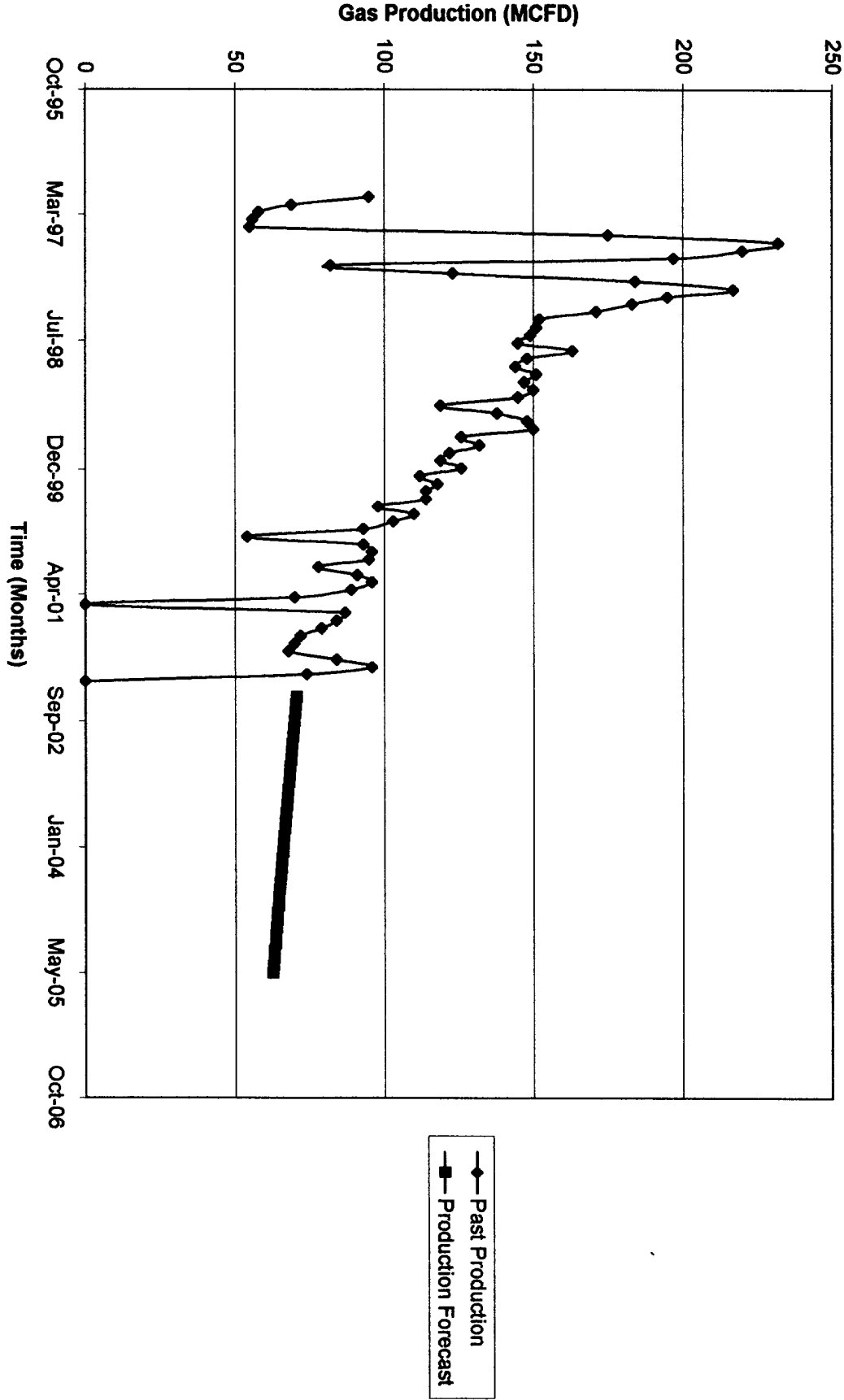
Farmington, New Mexico

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

Date Surveyed **AUGUST 24, 1955**

James P. Lease
Registered Professional Engineer and/or Land Surveyor

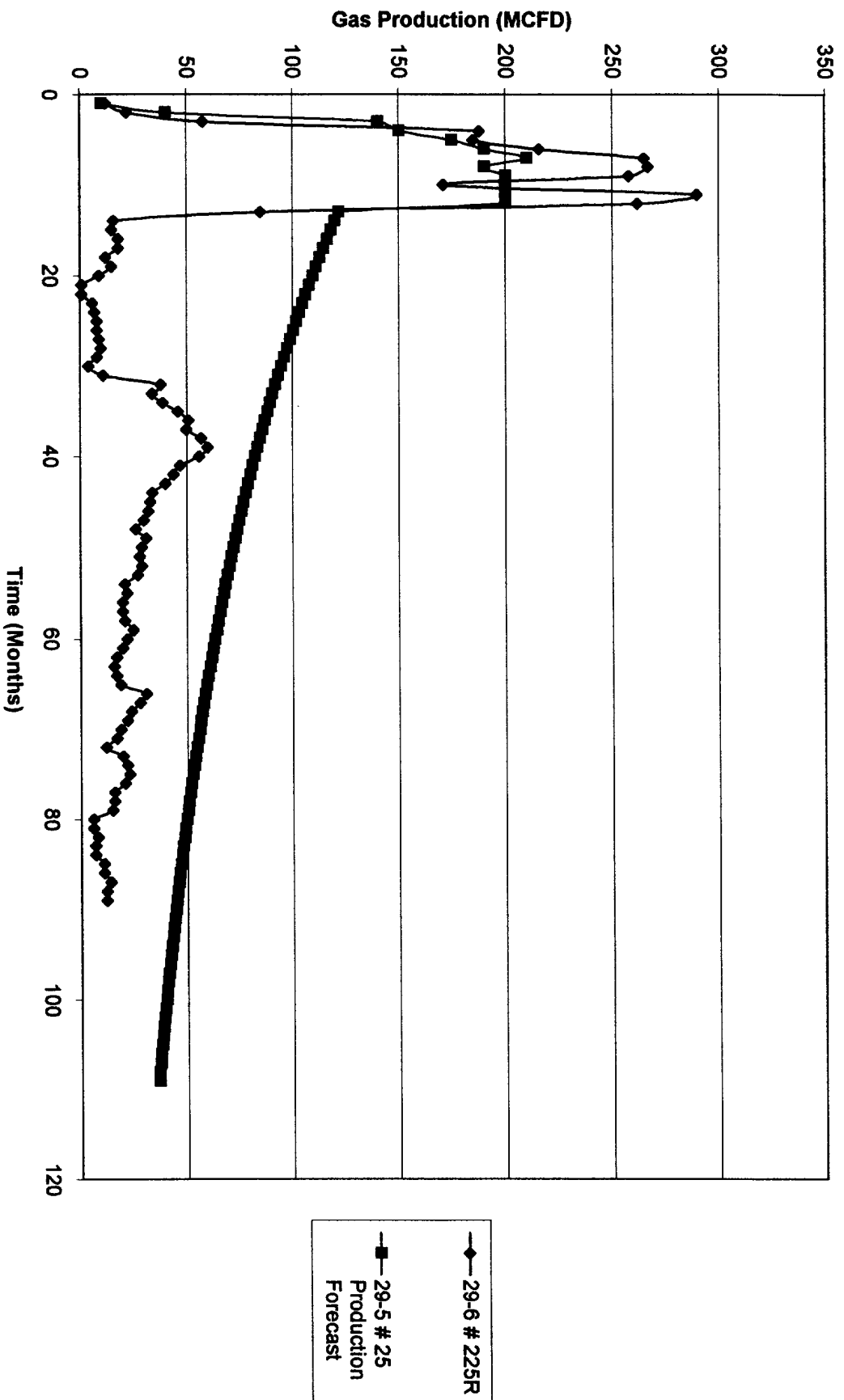
29-5 # 25 Mesaverde Production and Forecast



29-5 # 25 Mesa Verde Production Forecast

Month	Year	Average Rate (MCFD)	Monthly Volume (MMCF)
6	2002	70.48	2.11
7	2002	70.24	2.18
8	2002	70	2.17
9	2002	69.76	2.09
10	2002	69.52	2.16
11	2002	69.28	2.08
12	2002	69.05	2.14
1	2003	68.81	2.13
2	2003	68.58	1.92
3	2003	68.35	2.12
4	2003	68.12	2.04
5	2003	67.89	2.1
6	2003	67.66	2.03
7	2003	67.43	2.09
8	2003	67.21	2.08
9	2003	66.98	2.01
10	2003	66.76	2.07
11	2003	66.53	2
12	2003	66.31	2.06
1	2004	66.09	2.05
2	2004	65.87	1.91
3	2004	65.65	2.04
4	2004	65.44	1.96
5	2004	65.22	2.02
6	2004	65	1.95
7	2004	64.79	2.01
8	2004	64.58	2
9	2004	64.37	1.93
10	2004	64.15	1.99
11	2004	63.94	1.92
12	2004	63.74	1.98
1	2005	63.53	1.97
2	2005	63.32	1.77
3	2005	63.12	1.96
4	2005	62.91	1.89
5	2005	62.71	1.94
6	2005	62.5	1.88

29-5 # 25 Production Forecast for Fruitland Coal



29-5 # 25 Fruitland Coal Completion Economics

	Commingle with Mesaverde Case	New Drill Case
Rate of Return	33.8%	-3.0%
Payout	2.2 years	Never
Net Present Value at 13%	\$60,100	- \$186,500
Capital Outlay	\$129,500	\$421,000
Net Investment/Barrel of Oil Equivalent	\$3.47	\$11.27

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