

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT - " for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Phillips Petroleum Company

3. Address and Telephone No.

5525 Highway 64, NBU 3004, Farmington, NM 87401

505-599-3454

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Unit L, 1450' FSL & 840' FWL
Section 17, T29N, R5W

5. Lease Designation and Serial No.

SF-078281

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

San Juan 29-5 Unit

8. Well Name and No.

SJ 29-5 Unit #74

9. API Well No.

30-039-21029

10. Field and Pool, or exploratory Area

Blanco Mesaverde

11. County or Parish, State

Rio Arriba, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other Add pay & Stimulate
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The abovementioned well was perforated in the Lewis Shale zone of the Blanco Mesaverde formation. See the attached for the details on perms and stimulation procedure used.

14. I hereby certify that the foregoing is true and correct

Signed

Patsy Chagston

Title Regulatory Assistant

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

Date 2-28-97

ACCEPTED FOR RECORD

MAR 05 1997

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false statement or representations as to any matter within its jurisdiction.

* See Instruction on Reverse Side

NMCCD

FARMINGTON DISTRICT OFFICE

San Juan 29-5 #74
SF-078281; 1450' FSL & 840' FWL
Section 17, T29N, R5W; Rio Arriba County, NM

Procedures used to add the Lewis Shale pay to existing Mesaverde formation and stimulate.

2/18/97

MIRU Big A #18. ND WH & NU BOPs. Test- Good. COOH w/2-3/8" production tubing. RU Bluejet & RIH w/RBP & set @ 4750'. Dumped 2 sx sand on top of RBP. COOH. PT RBP & casing. Good test. GIH & perf'd 1 spf 120° phasing as follows:

4665'-4670'	=	5'	=	5 holes
4598'-4603'	=	5'	=	5 holes
4535'-4545'	=	10'	=	10 holes
4452'-4457'	=	5'	=	5 holes
4315'-4320'	=	5'	=	5 holes
4280'-4290'	=	10'	=	10 holes
<u>4265'-4275'</u>	=	<u>10'</u>	=	<u>10 holes</u>
TOTALS		50'	=	50 HOLES

RIH w/4-1/2" Baker "C-1" Packer & set @ 4188'. Load casing w/2% Kcl & PT - Good. RU BJ and acidized with 1000 gal. of 15% Hcl Acid w/75 ball sealers. Balled off @ 5600 psi. Surged off balls. Released packer and knocked balls off. RU N₂ frac & flowback lines. BJ frac'd as follows:

75,000 gal of 2% Kcl water w/30# gel.
215,520 # 20/40 AZ sand
869,000 scf N₂ w/50% quality foam
Sand ramped 1 to 6 ppg.
Treating pressure Max-5600#, min. 5200#, avg. 5450#.
Inj. rate 20 bpm, ISDP 3000#.

Immediate flowback for forced closure. Flowed back @ 86hrs on 1/4" choke. COOH Backer C-1 Packer. Clean out wellbore w/N₂. COOH w/4-1/2" RBP. GIH w/2-3/8" production tubing and laned @ 5808'. 4-1/2" Baker R-3 packer @ 4738' and Baker model "L" sliding sleeve @ 4183', blast jts to cover Lewis perms @ 4185'-4738'. ND BOPs & NU WH. Opened sliding sleeve. RD & MO Big A 18 @ 2/26/97. Turned well back over to production department.

295#74ls.prc

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☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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In February 1997 the Lewis Shale pay was added to the existing Mesaverde interval. A packer and sliding sleeve in the tubing was placed across the Lewis Shale interval for testing. The packer and sliding sleeve were removed as follows:

1/8/98

MIRU Big A #40. Closed sliding sleeve and set plug-in "F" nipple. ND.WH. installed BPV & NU BOPs. Unseat packer and POOH with packer and sliding sleeve. Land tubing @ 5805'. ND BOPs & NU WH. Pull BPV. PT tubing. Pumped off check. RD & MO. Turned well back over to production department.

RECEIVED
JAN 26 1998
OIL CON. DIV.
DIST. 3

RECEIVED
JAN 13 1998
OIL CON. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct

Signed Patsy Clugston Title Regulatory Assistant

Date 1-12-98

(This space for Federal or State office use)

Approved by

Title

AL

Date

Conditions of approval, if any:

JAN 23 1998

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

FARMINGTON DISTRICT OFFICE

* See Instruction on Reverse Side

SWM

NUM

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

5525 Hwy. 64, Farmington, NM 87401

Operator

Address

San Juan 29-5 Unit

#74

Unit L, Section 17, T29N, R5W

Rio Arriba

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 17654 Property Code 0009256 API No. 30-039-21029 Lease Type: ☒ 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. 3302' – 3424'		4275' – 5778'
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: 110 mcf & 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 ☒
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 11, 2002

TYPE OR PRINT NAME Brad Peterson TELEPHONE NO. (505) 599-3486 e-mail- btpete@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 # 74

Dear Sirs,

Phillips Petroleum is proposing to commingle the Fruitland Coal and Mesaverde formations on the San Juan 29-5 # 74 (Reference Case No. R-10770). Currently the Mesaverde is producing independently 110 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 bwpd 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 # 74 showing the 36 month forecast, a 36 month Mesaverde gas production forecast, estimated Fruitland Coal gas rate vs time plot for the 29-5 # 74 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

District I

1625 N. French Dr., Hobbs, NM 88240

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District III

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District IV

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

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 30-039-21029	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 74
⁷ OGRID No. 017654	⁸ Operator Name PHILLIPS PETROLEUM COMPANY	⁹ Elevation 6562'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	17	29N	5W		1450'	South	840'	West	Rio Arriba

¹¹ 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
L									

¹² Dedicated Acres 320 W/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

¹⁶	¹⁷ 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
	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. 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.

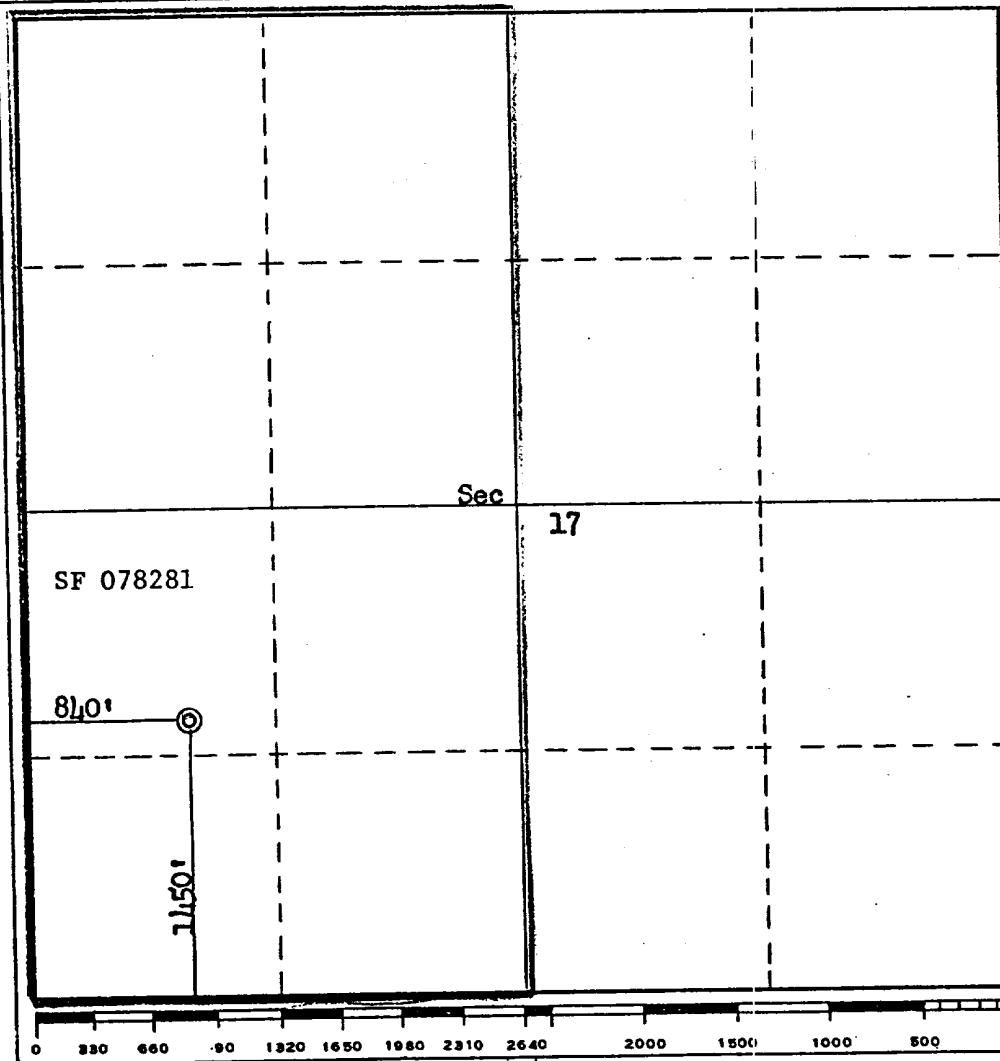
Operator Northwest Pipeline Corporation			Lease San Juan 29-5 Unit		Well No. 74
Unit Letter L	Section 17	Township 29N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 1150 feet from the South line and 840 feet from the West line					
Ground Level Elev. 6562	Producing Formation Mesa Verde		Pool Blanco Mesa Verde		Dedicated Acreage: 320 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.) NW 1/4 SW 1/4 Sec 17, 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

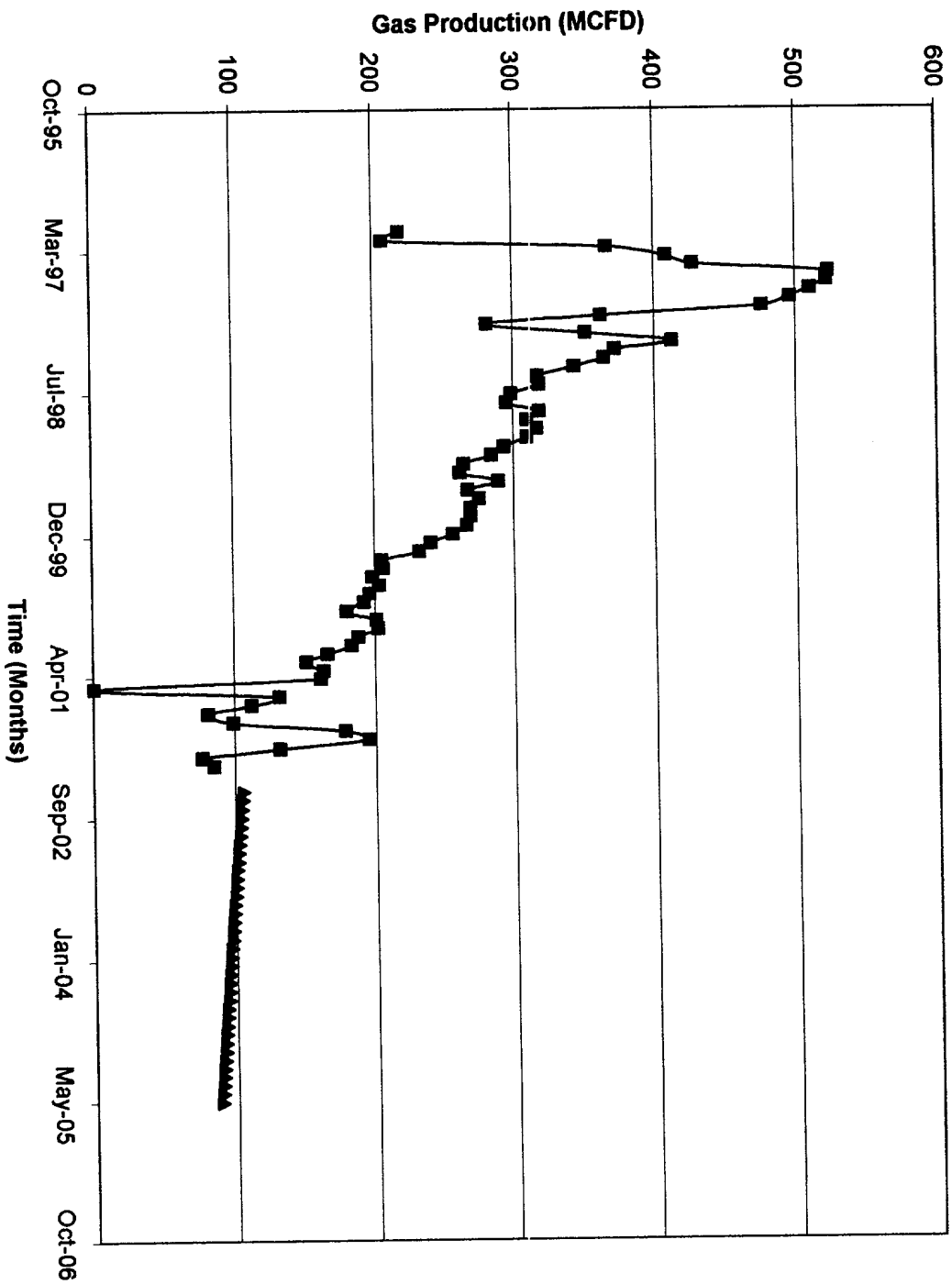
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name O.B. Whitenburg is
Position Drilling & Production 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.
Certificate No. 3950

29-5 # 74 Mesaverde Production and Forecast

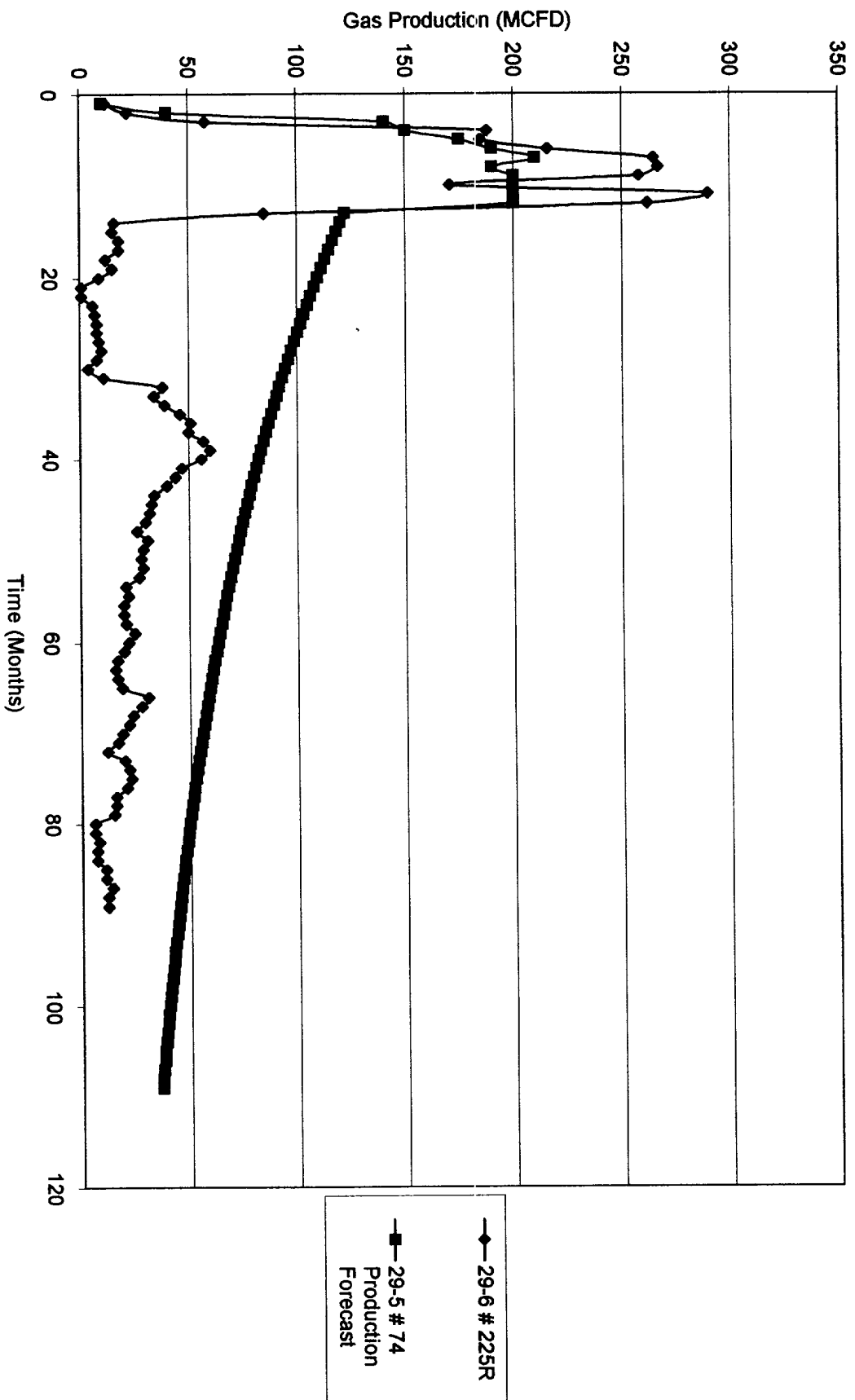


—■— Past Production
- - -▲- - Production Forecast

29-5 # 74 Mesa Verde Production Forecast

Month	Year	Average Rate (MCFD)	Monthly Volume (MMCF)
6	2002	106.64	106.91
7	2002	106.09	106.36
8	2002	105.55	105.82
9	2002	105.01	105.28
10	2002	104.48	104.74
11	2002	103.95	104.21
12	2002	103.42	103.68
1	2003	102.9	103.16
2	2003	102.38	102.64
3	2003	101.87	102.12
4	2003	101.36	101.61
5	2003	100.85	101.11
6	2003	100.35	100.6
7	2003	99.85	100.1
8	2003	99.36	99.6
9	2003	98.87	99.11
10	2003	98.38	98.62
11	2003	97.89	98.14
12	2003	97.41	97.65
1	2004	96.94	97.18
2	2004	96.46	96.7
3	2004	95.99	96.23
4	2004	95.53	95.76
5	2004	95.06	95.3
6	2004	94.61	94.83
7	2004	94.15	94.38
8	2004	93.7	93.92
9	2004	93.25	93.47
10	2004	92.8	93.02
11	2004	92.36	92.58
12	2004	91.92	92.14
1	2005	91.48	91.7
2	2005	91.04	91.26
3	2005	90.61	90.83
4	2005	90.19	90.4
5	2005	89.76	89.97
6	2005	89.34	89.55

29-5 # 74 Production Forecast for Fruitland Coal



29-5 # 74 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.