DHC 1382 10/15/96

BURLINGTON RESOURCES

SAN JUAN DIVISION

RECEIVED
SEP 25 1996
OIL CONSERVATION DIVISION

September 24, 1996

Mr. William LeMay
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: Culpepper Martin SRC #3
990'FSL, 1650'FWL Section 33, T-32-N, R-12-W, San Juan County, NM
API #30-045-12205

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Mesa Verde and Basin Dakota pools in the subject well. This is currently a dual Mesa Verde/Dakota well.

To comply with the New Mexico Oil Conservation Division rules, Burlington Resources Oil & Gas Company is submitting the following for your approval of this commingling:

1. Form C107A - Application for Downhole Commingling;
2. C-102 plat for each zone showing its spacing unit and acreage dedication;
3. Production curve for both the Dakota and Mesa Verde for at least one year;
4. Notification list of offset operators;
5. Shut in wellhead pressure and calculated down hole pressure;
6. Nine-section plats for the Mesa Verde and Dakota.

The ownership for both the Mesa Verde and Dakota are common in this well. No notification to interest owners is required.

The allocation formula will be based off actual flow rates from the Mesa Verde and Dakota formations.

Please let me know if you require additional data.

Sincerely,

Peggy Bradfield

Peggy Bradfield
Regulatory/Compliance Administrator

encs.

3535 East 30th St., 87402-8891, P.O. Box 4289, Farmington, New Mexico 87499-4289, Telephone 505-326-9700, Fax 505-326-9833

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
811 South First St., Artesia, NM 88210-2835
DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107-A
New 3-12-96

APPROVAL PROCESS :
_X_ Administrative
___Hearing

EXISTING WELLBORE
_X__ YES ___ NO

Burlington Resources Oil & Gas Company		PO Box 4289, Farmington, NM 87499	
Operator		Address	
Culpepper Martin SRC	**3**	**N-33-32N-12W**	**San Juan**
Lease	Well No.	Unit Ltr. - Sec - Twp - Rge	County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. _14538__ Property Code _18505____ API NO. 30-045-12205___Federal ____ , State _____, (and/or) Fee __X_____

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Blanco Mesaverde - 72319		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	4743-4996'		6923-7036'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Current) a. 702 psi (see attachment)	a.	a. 942 psi (see attachment)
	(Original) b 1238 psi (see attachment)	b.	b. 1926 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1204		BTU 1169
7. Producing or Shut-In?	producing		producing
Production Marginal? (yes or no)	No		Yes
* If Shut-In 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:N/A Rates:	Date: Rates:	Date: N/A Rates:
* If Producing, give data and oil/gas/water water of recent test (within 60 days)	Date: 8/96 rates: 80 MCF/D 1.37 BOPD	Date: Rates:	Date: 8/96 Rates: 15 MCF/D .19 BOPD
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Will be supplied upon completion		Will be supplied upon completion

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? _X_Yes ___No
If not, have all working, overriding, and royalty interests been notified by certified mail? _X_Yes ___No
Have all offset operators been given written notice of the proposed downhole commingling? _X_Yes ___No

11. Will cross-flow occur? _X__ __ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. _X____ Yes _____No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? _X__ Yes ___ No

13. Will the value of production be decreased by commingling? ___ Yes _X_ No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application._X_Yes ___ No

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). _____

16. 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 all offset operators.
* Notification list of working, overriding, and royalty interests for uncommon interest cases.
* Any additional statements, data, or documents required to support commingling.

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

SIGNATURE Peggy Bradfield TITLE_RegulatoryAdministrator_DATE 9-24-96_____

TYPE OR PRINT NAME _Peggy Bradfield___ TELEPHONE NO. (505__) 326-9700_____

NEW MEXICO

OIL CONSERVATION COMMISSION

Gas Well Plat

Date March 4, 1954

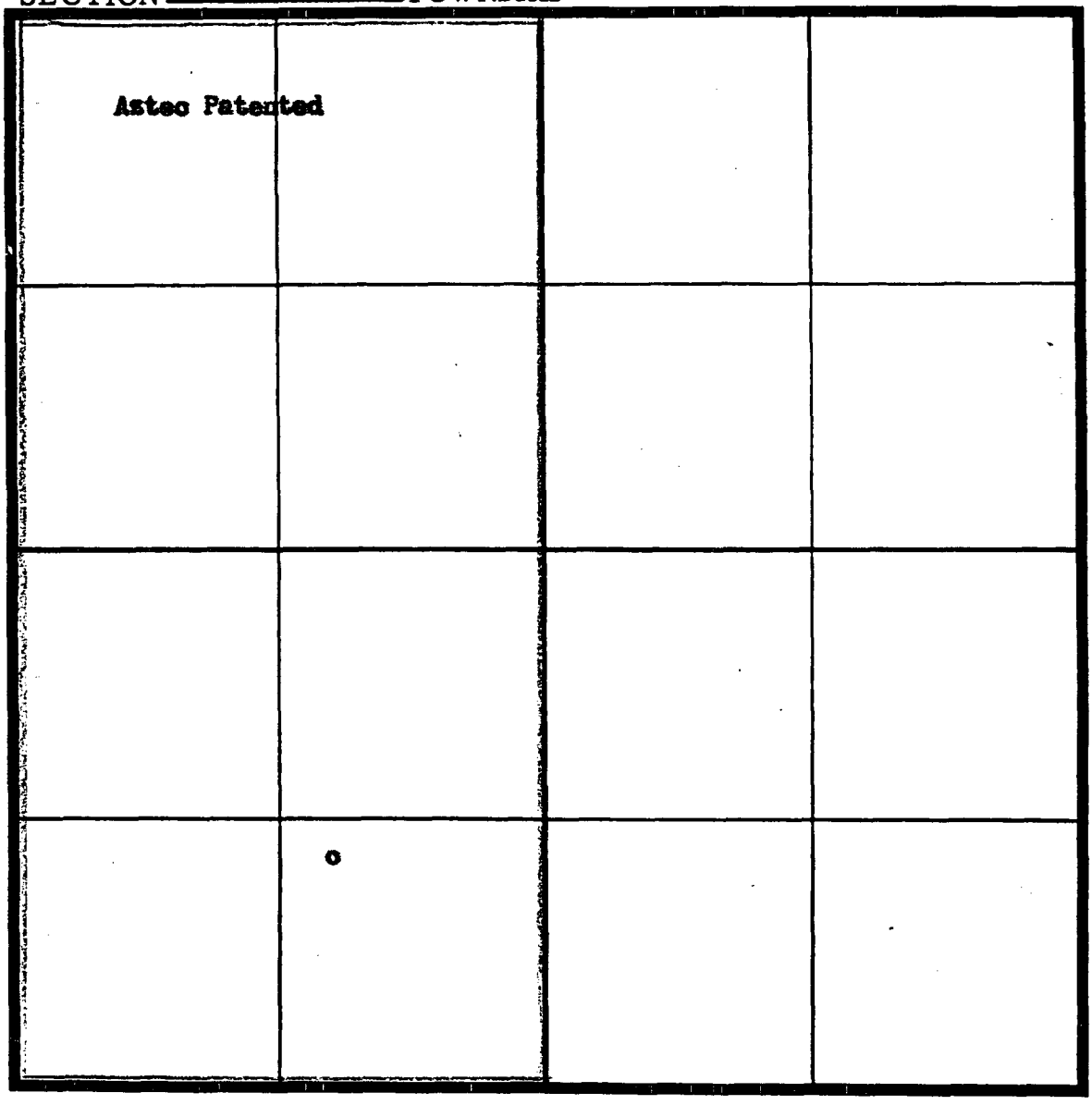
Astec Oil & Gas Co. (Operator) | Culpepper-Martin SRC (Lease) | 3 (Well No.)

Name of Producing Formation Mesaverde Pool Blanco

No. Acres Dedicated to the Well 320

Indicate land status and show ownership. All Patented Acreage

SECTION 33 TOWNSHIP 32-N RANGE 12-W



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

Original Signed By
A. M. [illegible]

Name

Position Engineer

Representing Astec Oil & Gas Co.

Address Burt Bldg., Dallas

(over)

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

WF

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

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

Operator	Lease	Well No.
Aztec Oil and Gas	Culpepper Martin SRC	3

Unit Letter	Section	Township	Range	County
I	33	32N	12W	San Juan

Actual Footage Location of Well: 1650 feet from the West line and 990 feet from the South line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
5903 GL	Dakota	Basin Dakota	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

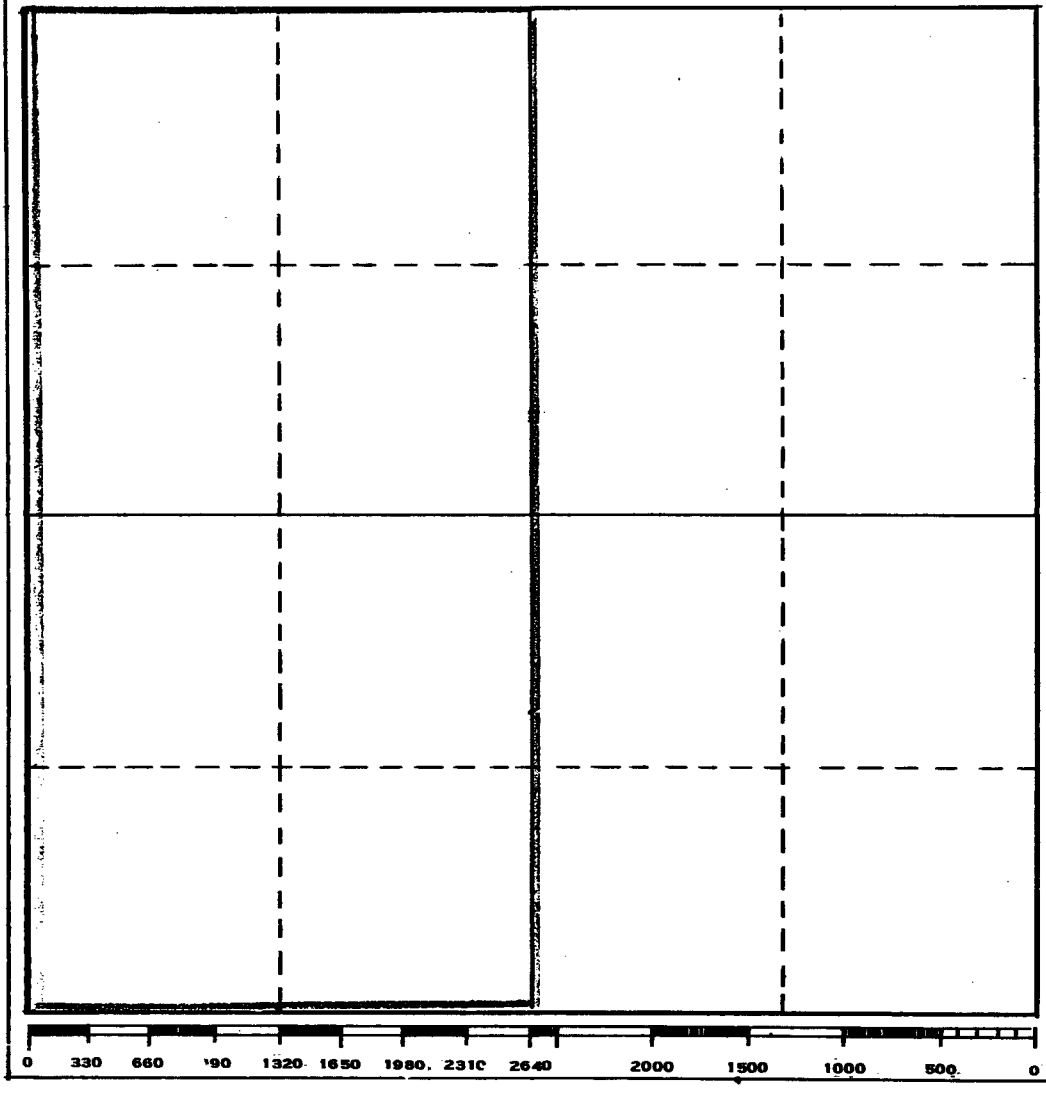
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.) _____

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: ~~ORIGINAL SIGNED BY JOE C. SALMON~~ Joe C. Salmon

Position: District Superintendent

Company: Aztec Oil and Gas

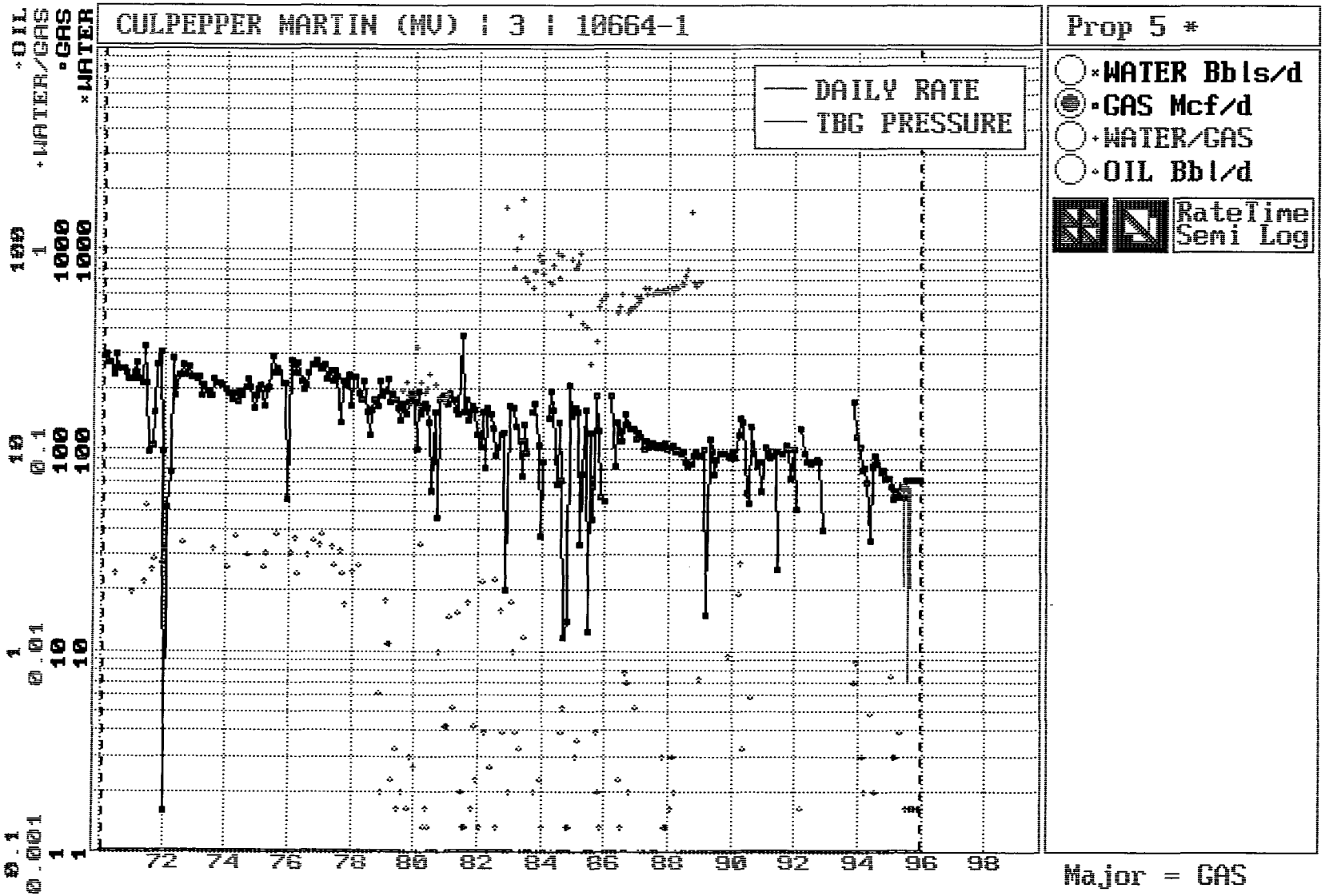
Date: Oct. 27, 1966

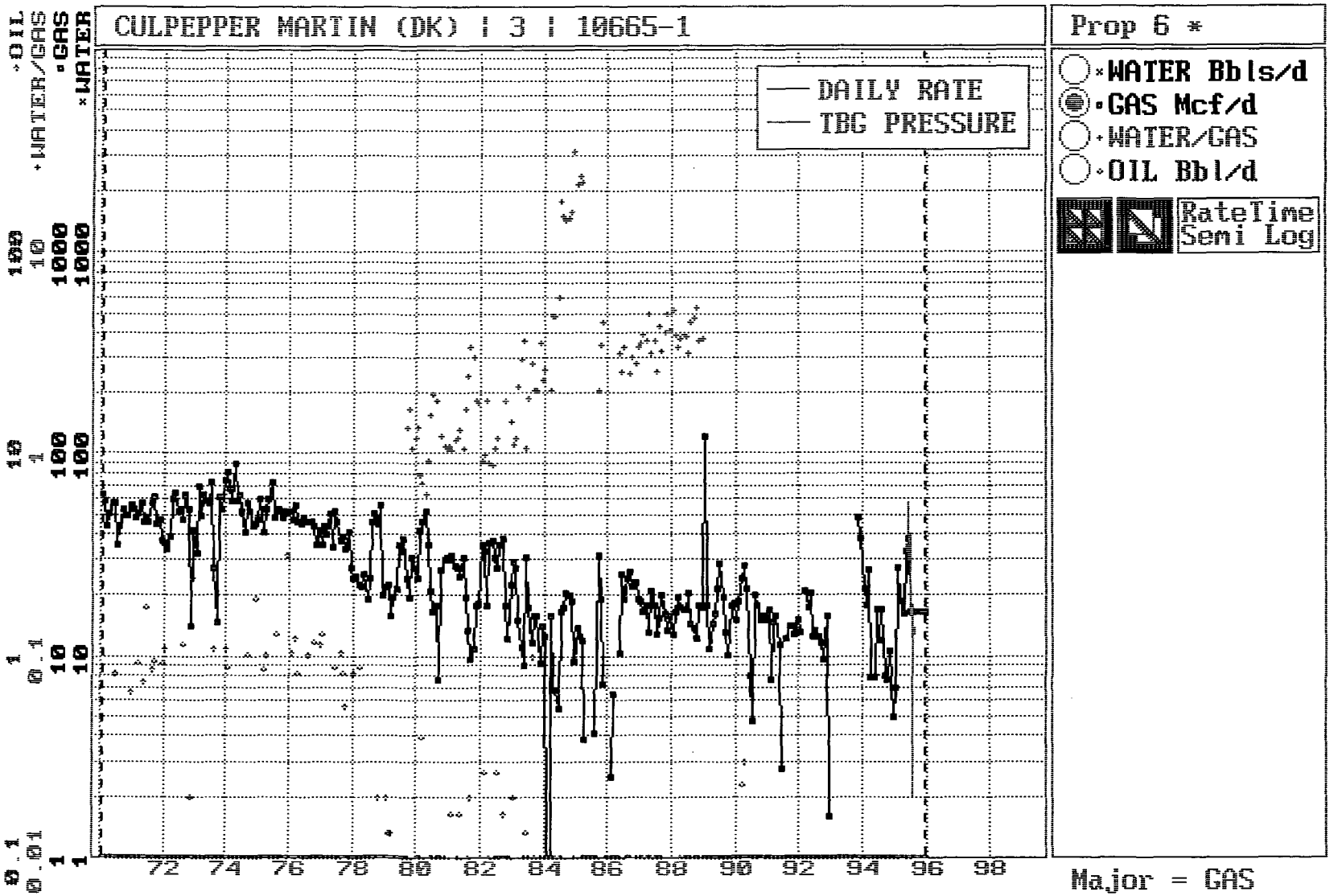
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.


CULPEPPER MARTIN (MV) | 3 | 10664-1
DAILY RATE
TBG PRESSURE
Prop 5 *
WATER Bbls/d
GAS Mcf/d
WATER/GAS
OIL Bbl/d
RateTime
Semi Log
Major = GAS
OIL
WATER/GAS
GAS
WATER
72
74
76
78
80
82
84
86
88
90
92
94
96
98


CULPEPPER MARTIN (DK) | 3 | 10665-1
DAILY RATE
TBG PRESSURE
Prop 6 *
WATER Bbls/d
GAS Mcf/d
WATER/GAS
OIL Bbl/d
RateTime
Semi Log
Major = GAS
OIL
WATER/GAS
GAS
WATER
72
74
76
78
80
82
84
86
88
90
92
94
96
98

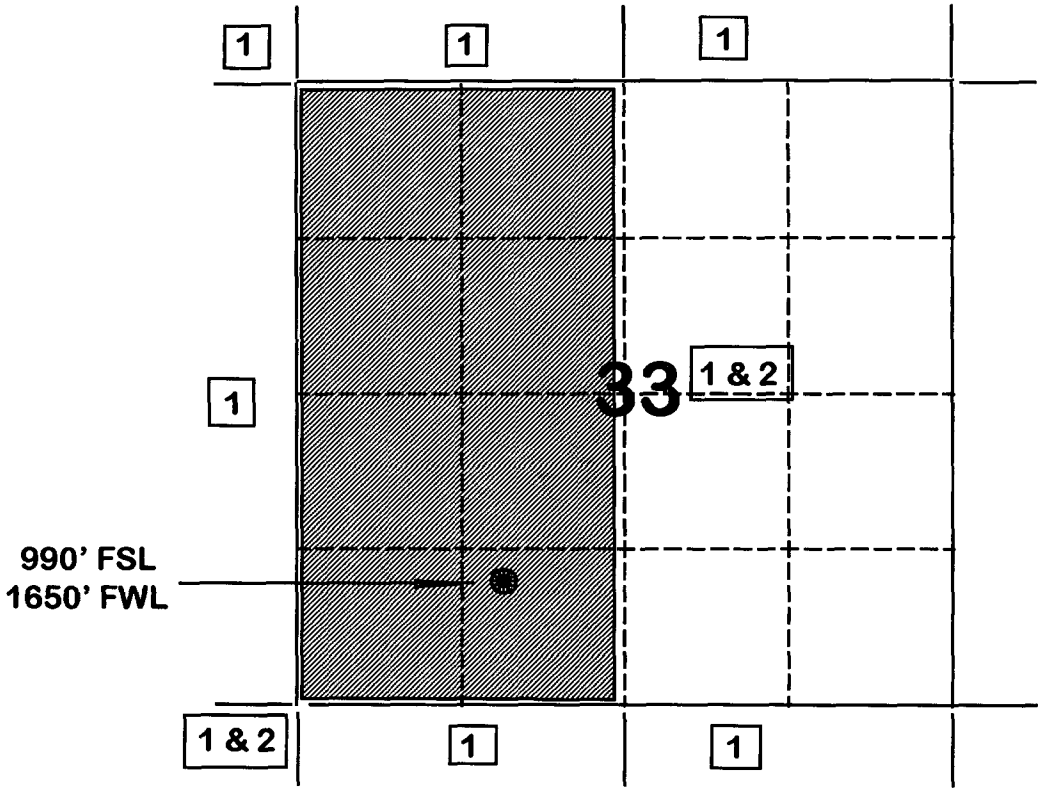
BURLINGTON RESOURCES OIL AND GAS COMPANY

CULPEPPER MARTIN SRC #3

OFFSET OPERATOR \ OWNER PLAT

Mesaverde/Dakota Formations Commingle Well

Township 32 North, Range 12 West



1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.
2) Amoco Production Company
   Bruce Zimney
   P.O. Box 800
   Denver, CO 80201

FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD
VERSION 1.0 3/13/94

GAS GRAVITY	**0.7**
COND. OR MISC. (C/M)	**C**
%N2	**0.26**
%CO2	**0.72**
%H2S	**0**
DIAMETER (IN)	**2.5**
DEPTH (FT)	**4996**
SURFACE TEMPERATURE (DEG F)	**60**
BOTTOMHOLE TEMPERATURE (DEG F)	**150**
FLOWRATE (MCFPD)	**0**
SURFACE PRESSURE (PSIA)	**1084**
BOTTOMHOLE PRESSURE (PSIA)	1247.5

CULPEPPER MARTIN SRC #3 MESAVERDE - (ORIGINAL)

FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD
VERSION 1.0 3/13/94

GAS GRAVITY	**0.7**
COND. OR MISC. (C/M)	**C**
%N2	**0.26**
%CO2	**0.72**
%H2S	**0**
DIAMETER (IN)	**2.5**
DEPTH (FT)	**4996**
SURFACE TEMPERATURE (DEG F)	**60**
BOTTOMHOLE TEMPERATURE (DEG F)	**150**
FLOWRATE (MCFPD)	**0**
SURFACE PRESSURE (PSIA)	**617**
BOTTOMHOLE PRESSURE (PSIA)	702.3

CULPEPPER MARTIN SRC #3 MESAVERDE - (CURRENT)

Organize Data ScreenGraph Economics Report Plot Utility Quit
Browsing: CULPEPPER MARTIN (MV) | 3 | 10664-1 Property No.: 5
Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/18/467
Item: 12/32/33 Name: GAS_RATE Type: Numeric Len: 8/197/203 Dec: 0

GAS_RATE	WTR_RATE	WHT	M_FWHP-	M_FBHP-	M_SIWHP	M_SIBHP	C_FWHP-	C_FBHP-
			Psi	Psi	Psi	Psi		
«	0		0.0		1084.0	1234.0		»
«	0		476.0		559.0	630.0		»
«	0		417.0		559.0	630.0		»
«	0		393.0		446.0	501.0		»
«	0		393.0		523.0	589.0		»
«	0		334.0		521.0	586.0		»
«			334.0		521.0	586.0		»
«	0		334.0		521.0	586.0		»
«	0		372.0		459.0	516.0		»
«	0		362.0		497.0	559.0		»
«	0		442.0		456.0	513.0		»
«	0		375.0		454.0	510.0		»
«	0		402.0		501.0	564.0		»
«	0		429.0		514.0	579.0		»
«	0		312.0		453.0	509.0		»
▼								▼

F1=Help F3=PrvPro F5=PrvTbl F7=Calcu F9=Utils Alt+TableLtr=Change Table
F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R & L

Organize Data ScreenGraph Economics Report Plot Utility Quit
Browsing: CULPEPPER MARTIN (MV) | 3 | 10664-1 Property No.: 5
Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 18/18/467
Item: 12/32/33 Name: GAS_RATE Type: Numeric Len: 8/197/203 Dec: 0

GAS_RATE	WTR_RATE	WHT	M_FWHP- Psi	M_FBHP- Psi	M_SIWHP Psi	M_SIBHP Psi	C_FWHP-	C_FBHP-
0			393.0		446.0	501.0		
0			393.0		523.0	589.0		
0			334.0		521.0	586.0		
			334.0		521.0	586.0		
0			334.0		521.0	586.0		
0			372.0		459.0	516.0		
0			362.0		497.0	559.0		
0			442.0		456.0	513.0		
0			375.0		454.0	510.0		
0			402.0		501.0	564.0		
0			429.0		514.0	579.0		
0			312.0		453.0	509.0		
					515.0			
0			392.0		527.0	593.0		
0			342.0		617.0	696.0		

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Job #8824 is spooled to Laser8@OPRENG@FAR.

FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD
VERSION 1.0 3/13/94

GAS GRAVITY	**0.69**
COND. OR MISC. (C/M)	**C**
%N2	**0.24**
%CO2	**1.45**
%H2S	**0**
DIAMETER (IN)	**2.5**
DEPTH (FT)	**7036**
SURFACE TEMPERATURE (DEG F)	**60**
BOTTOMHOLE TEMPERATURE (DEG F)	**200**
FLOWRATE (MCFPD)	**0**
SURFACE PRESSURE (PSIA)	**1591**
BOTTOMHOLE PRESSURE (PSIA)	1926.2

CULPEPPER MARTIN SRC #3 DAKOTA - (ORIGINAL)

FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD
VERSION 1.0 3/13/94

GAS GRAVITY	**0.69**
COND. OR MISC. (C/M)	**C**
%N2	**0.24**
%CO2	**1.45**
%H2S	**0**
DIAMETER (IN)	**2.5**
DEPTH (FT)	**7036**
SURFACE TEMPERATURE (DEG F)	**60**
BOTTOMHOLE TEMPERATURE (DEG F)	**200**
FLOWRATE (MCFPD)	**0**
SURFACE PRESSURE (PSIA)	**791**
BOTTOMHOLE PRESSURE (PSIA)	941.6

CULPEPPER MARTIN SRC #3 DAKOTA - (CURRENT)

Organize Data ScreenGraph Economics Report Plot Utility Quit

Browsing: CULPEPPER MARTIN (DK) | 3 | 10665-1 Property No.: 6

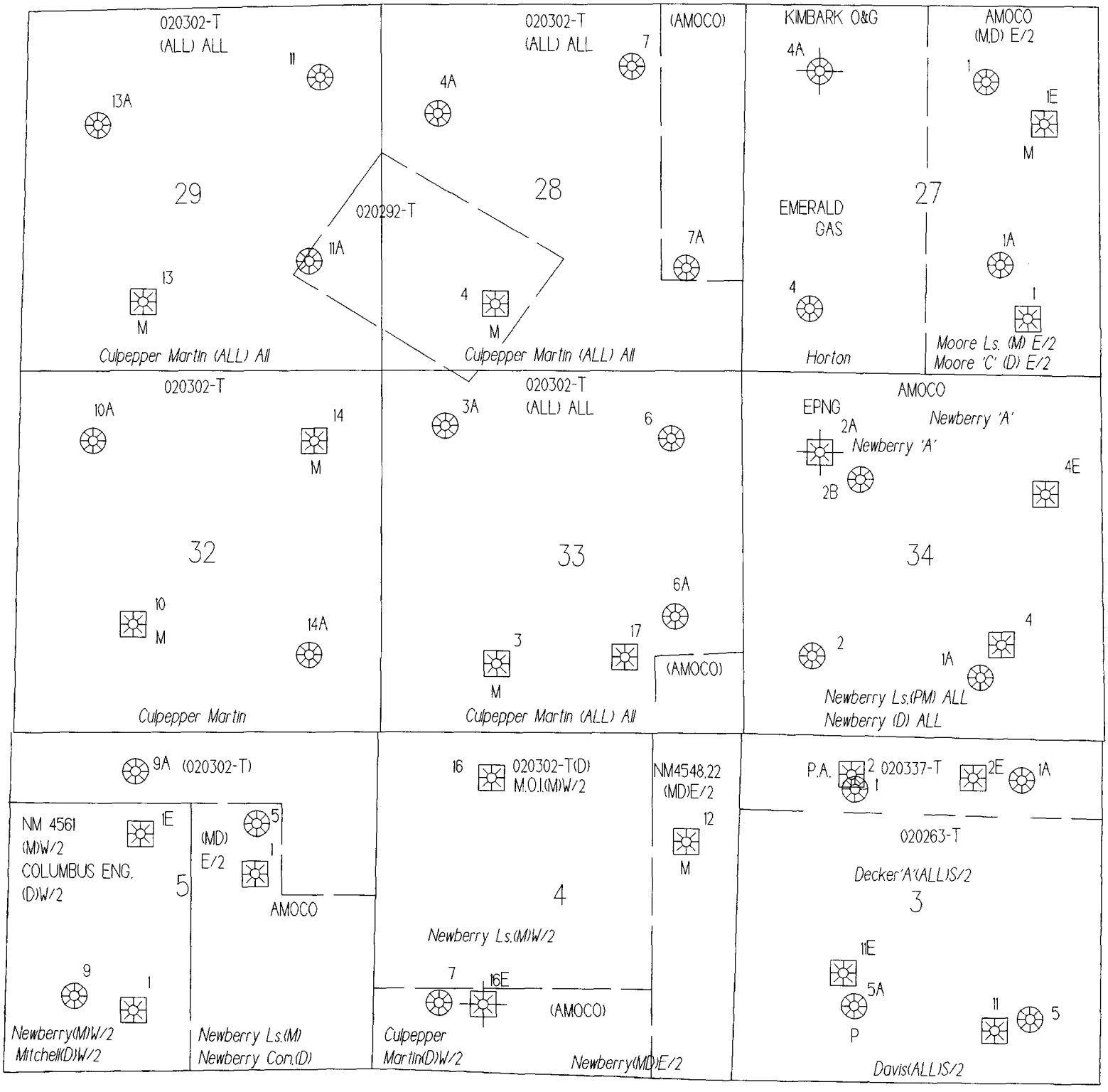
Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 12/12/467

Item: 12/32/33 Name: GAS_RATE Type: Numeric Len: 8/197/203 Dec: 0

GAS_RATE	WTR_RATE	WHT	M_FWHP-Psi	M_FBHP-Psi	M_SIWHP Psi	M_SIBHP Psi	C_FWHP-	C_FBHP-
0			0.0		1591.0	1916.0		
0			0.0		0.0	0.0		
0			466.0		520.0	612.0		
0			466.0		520.0	612.0		
0			408.0		861.0	1022.0		
0			321.0		965.0	1148.0		
0			312.0		780.0	924.0		
0			439.0		644.0	760.0		
0			434.0		947.0	1126.0		
0			432.0		905.0	1075.0		
0			362.0		909.0	1080.0		
0			317.0		791.0	937.0		

F1=Help F3=PrvPro F5=PrvTbl F7=Calcu F9=Utils Alt+TableLtr=Change Table
F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R & L

CULPEPPER MARTIN #3
BLANCO MESAVERDE/BASIN DAKOTA
SECTION 33, T32N, R12W



PRODUCTION ALLOCATION FORMULA METHOD

Culpepper Martin #3
(Mesaverde/Dakota) Commingle
Unit N, SW/4, 33-T32N-R12W
San Juan County, New Mexico

Allocation Formula Method:

Current Production from Mesaverde formation = 70 MCFD

Current Production from Dakota formation = 19 MCFD

$$\frac{[(MV \,\&\, DK)\ 89\ \text{MCFD} - (MV)\ 70\ \text{MCFD}]}{(MV \,\&\, DK)\ 89\ \text{MCFD}} = (\text{DK})\ \%\ \text{Dakota } 21\%$$

$$\frac{[(MV \,\&\, DK)\ 89\ \text{MCFD} - (DK)\ 19\ \text{MCFD}]}{(MV \,\&\, DK)\ 89\ \text{MCFD}} = (\text{MV})\ \%\ \text{Mesaverde } 79\%$$