

BURLINGTON RESOURCES

SAN JUAN DIVISION

October 10, 1996

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

Re: McDermitt #1M ^E
1450'FNL, 1100'FWL Section 6, T-31-N, R-12-W, San Juan County, NM
API #30-045-26257

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 is included, showing 45% from the Mesa Verde and and 55% from the Dakota formation.

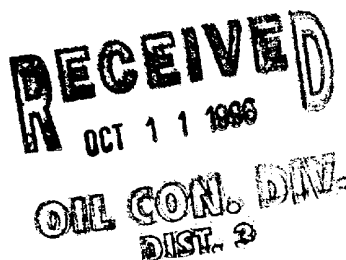
Please let me know if you require additional data.

Sincerely,



Peggy Bradfield
Regulatory/Compliance Administrator

encs.



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

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

APPROVAL PROCESS :
___X___ Administrative
___Hearing
EXISTING WELLBORE
___X___ YES ___ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil & Gas Company		PO Box 4289, Farmington, NM 87499	
Operator	Address		
McDurmitt	1M E-6-31N-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 7306 API NO. 30-045-26257 Federal X 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)	4582-4922'		6774-6902'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure	(Current) a. 524 psi (see attachment)	a.	a. 481 psi (see attached)
Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Original) b. 1077 psi (see attachment)	b.	b. 1584 psi (see attached)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1190		BTU 1195
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	Date: N/A Rates:	Date: Rates:	Date: N/A Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data			
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: 8-98 Rates: 47 MCF/D	Date: Rates:	Date: 8-98 Rates: .38 BOPD, 38 MCF/D
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: % Gas: % Will be supplied when completed	Oil: % Gas: %	Oil: % Gas: % Will be supplied when completed

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? ☒ Yes ___ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ___ No
Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ___ No
11. Will cross-flow occur? ☒ ___ 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. ☒ Yes ___ No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ___ No
13. Will the value of production be decreased by commingling? ___ Yes ☒ 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. ☒ 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 Regulatory Administrator DATE 10-2-96

TYPE OR PRINT NAME Peggy Bradfield TELEPHONE NO. (505) 326-9700

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

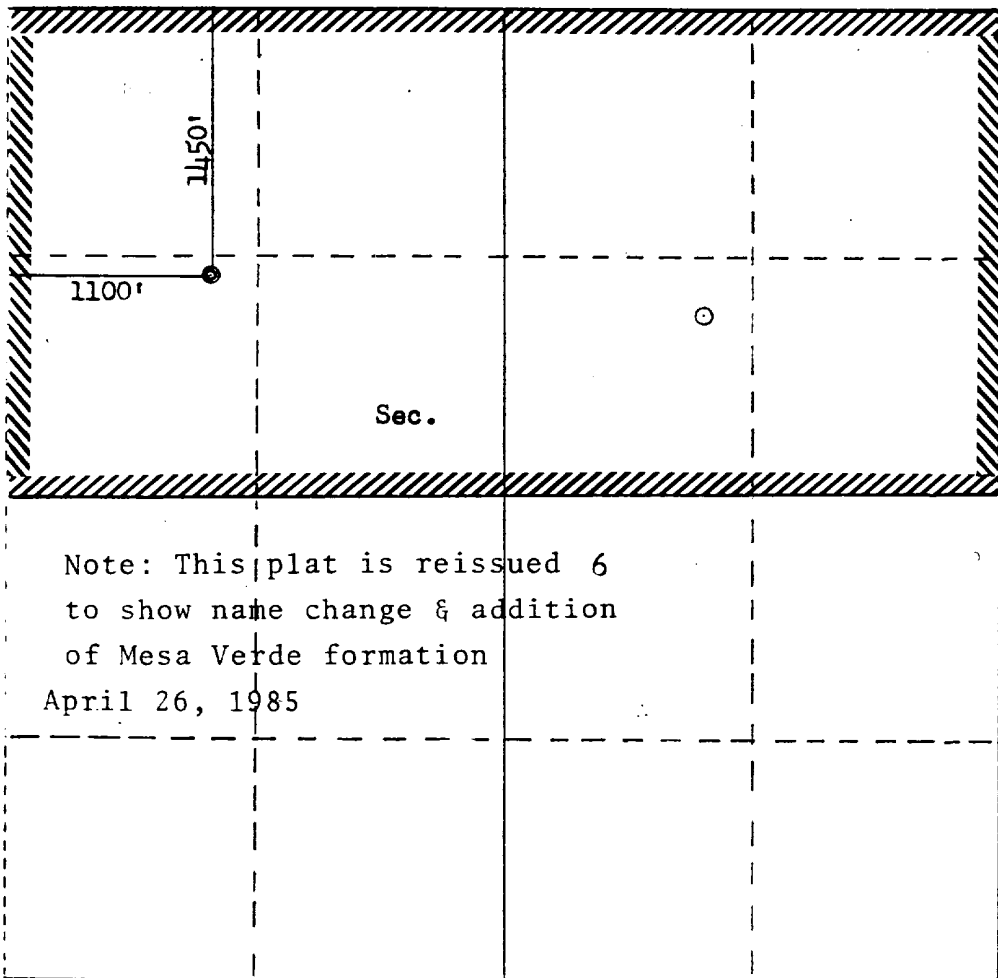
Operator EL PASO NATURAL GAS COMPANY			Lease McDURMITT (NM 019413)		Well No. 1M
Initials E	Section 6	Township 31N	Range 12W	County San Juan	
Actual Footage Location of Well: 1450 feet from the North line and 1100 feet from the West line					
Ground Level Elev: 5881	Producing Formation Mesa Verde Dakota		Pool Blanco Basin		Dedicated Acreage: 312.76 & 312.76 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 _____

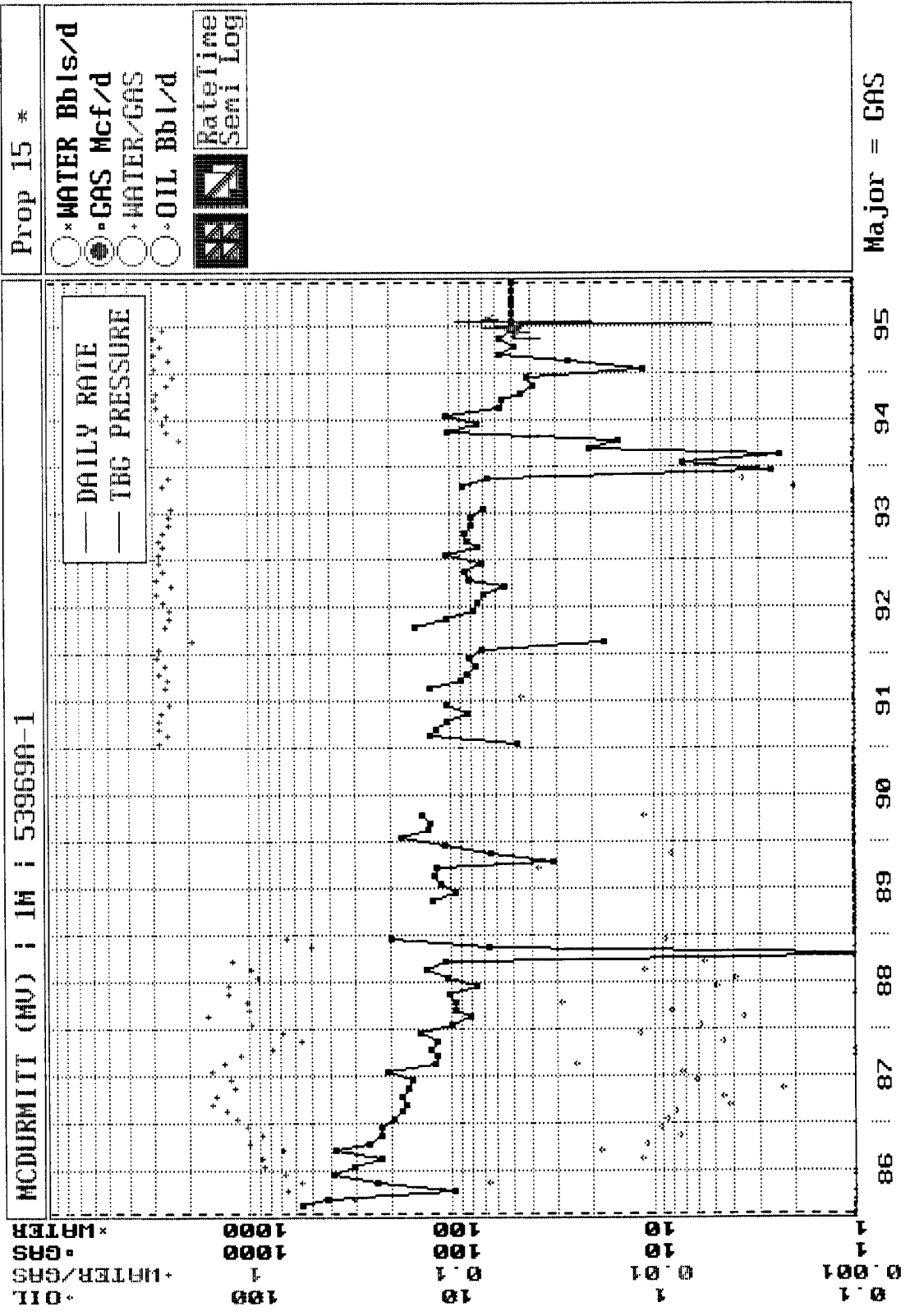
If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

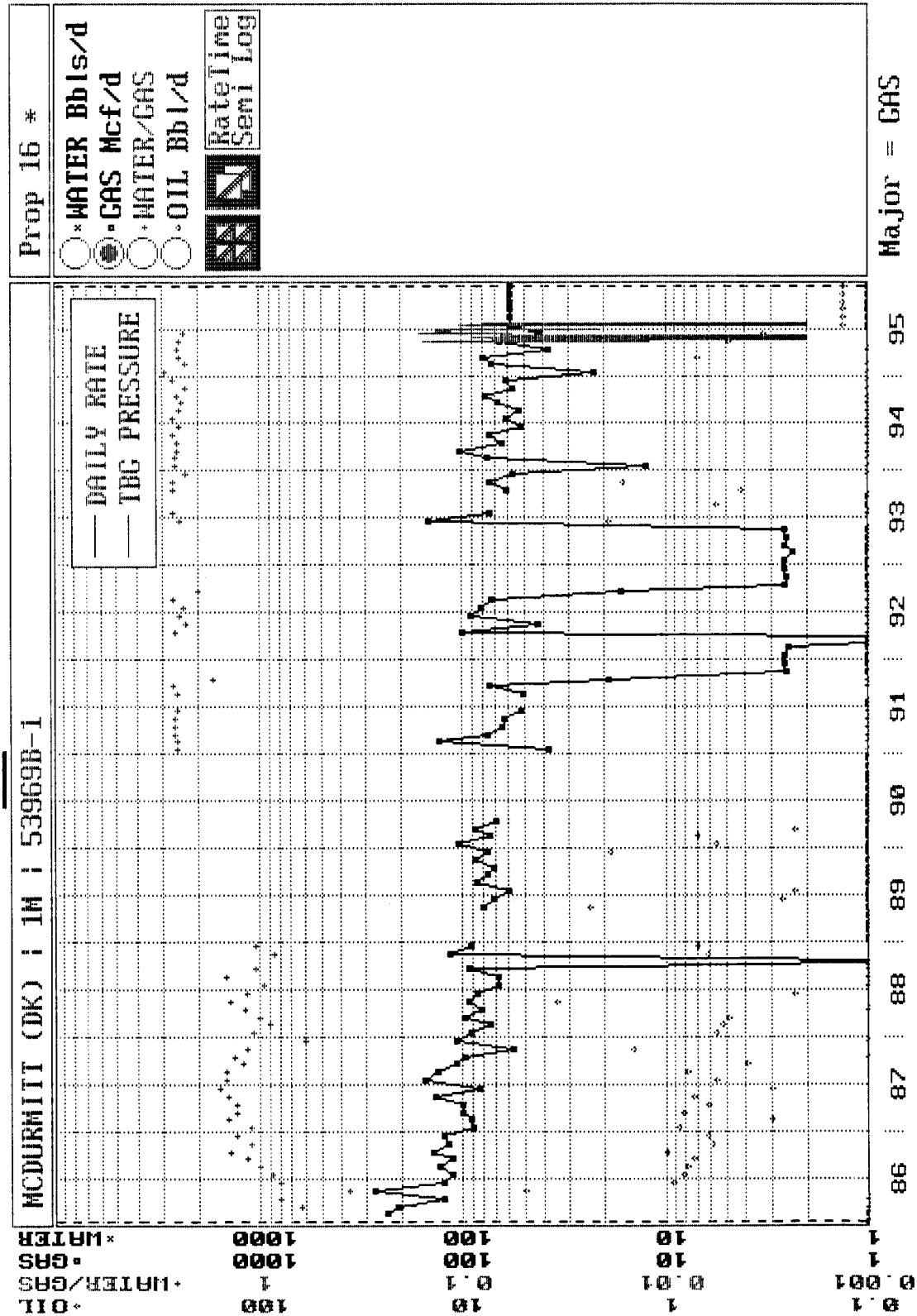
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



Scale: 1"=1000'

CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Name	Drilling Clerk
Position	El Paso Natural Gas Co.
Company	
Date	
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	February 1, 1985
Registered Professional Engineer and Land Surveyor	Fred B. Kerr, Jr.
Certificate No.	3950



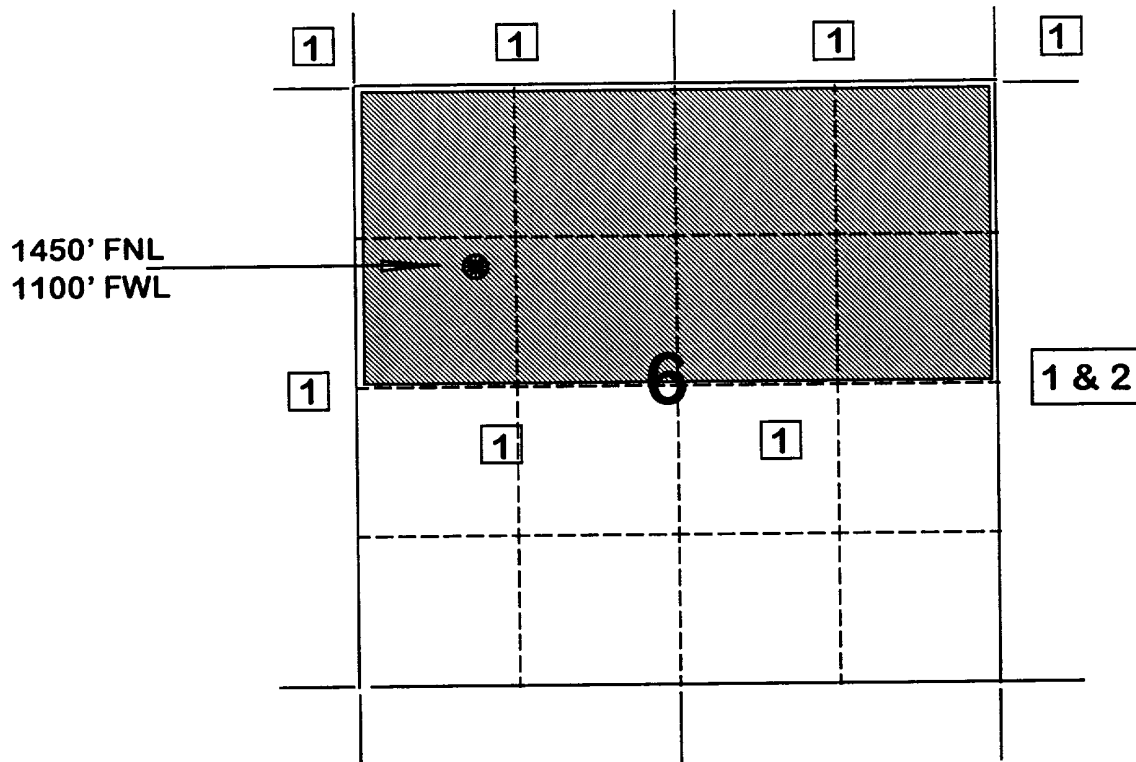


BURLINGTON RESOURCES OIL AND GAS COMPANY

**McDermitt #1M
OFFSET OPERATOR \ OWNER PLAT**

Mesaverde / Dakota Formations Commingle Well

Township 31 North, Range 12 West



- 1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.
- 2) Snyder Oil Corporation
777 Main, Suite 2500
Ft. Worth, TX 76102

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	<u>0.694</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.18</u>
%CO2	<u>0.7</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>2.5</u>
DEPTH (FT)	<u>4922</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>150</u>
FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>463</u>
BOTTOMHOLE PRESSURE (PSIA)	<div>523.6</div>

MCDURMITT #1M MESAVERDE - (CURRENT)

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.694
COND. OR MISC. (C/M)	C
%N2	0.18
%CO2	0.7
%H2S	0
DIAMETER (IN)	2.5
DEPTH (FT)	4922
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	942
BOTTOMHOLE PRESSURE (PSIA)	1076.7

MCDURMITT #1M MESAVERDE - (ORIGINAL)

Organize Data ScreenGraph Economics Report Plot Utility Quit
 Browsing: MCDURMITT (MV) | 1M | 53969A-1 Property No.: 15
 Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/8/467
 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■■■	■■■■■■■■	■■■■■■■■
«					942.0			»
«		0	187.0		711.0	0.0		»
«		0	185.0		403.0	0.0		»
«		0	185.0		393.0	0.0		»
«		0	172.0		384.0	0.0		»
«					403.0			»
«		0	208.0		415.0	0.0		»
«					463.0			»

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

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	<u>0.699</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.16</u>
%CO2	<u>0.76</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>2.5</u>
DEPTH (FT)	<u>6902</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>200</u>
FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>1314</u>
BOTTOMHOLE PRESSURE (PSIA)	<u>1583.9</u>

MCDURMITT #1M DAKOTA - (ORIGINAL)

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.694
COND. OR MISC. (C/M)	C
%N2	0.18
%CO2	0.16
%H2S	0.76
DIAMETER (IN)	2.5
DEPTH (FT)	6902
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	409
BOTTOMHOLE PRESSURE (PSIA)	481.2

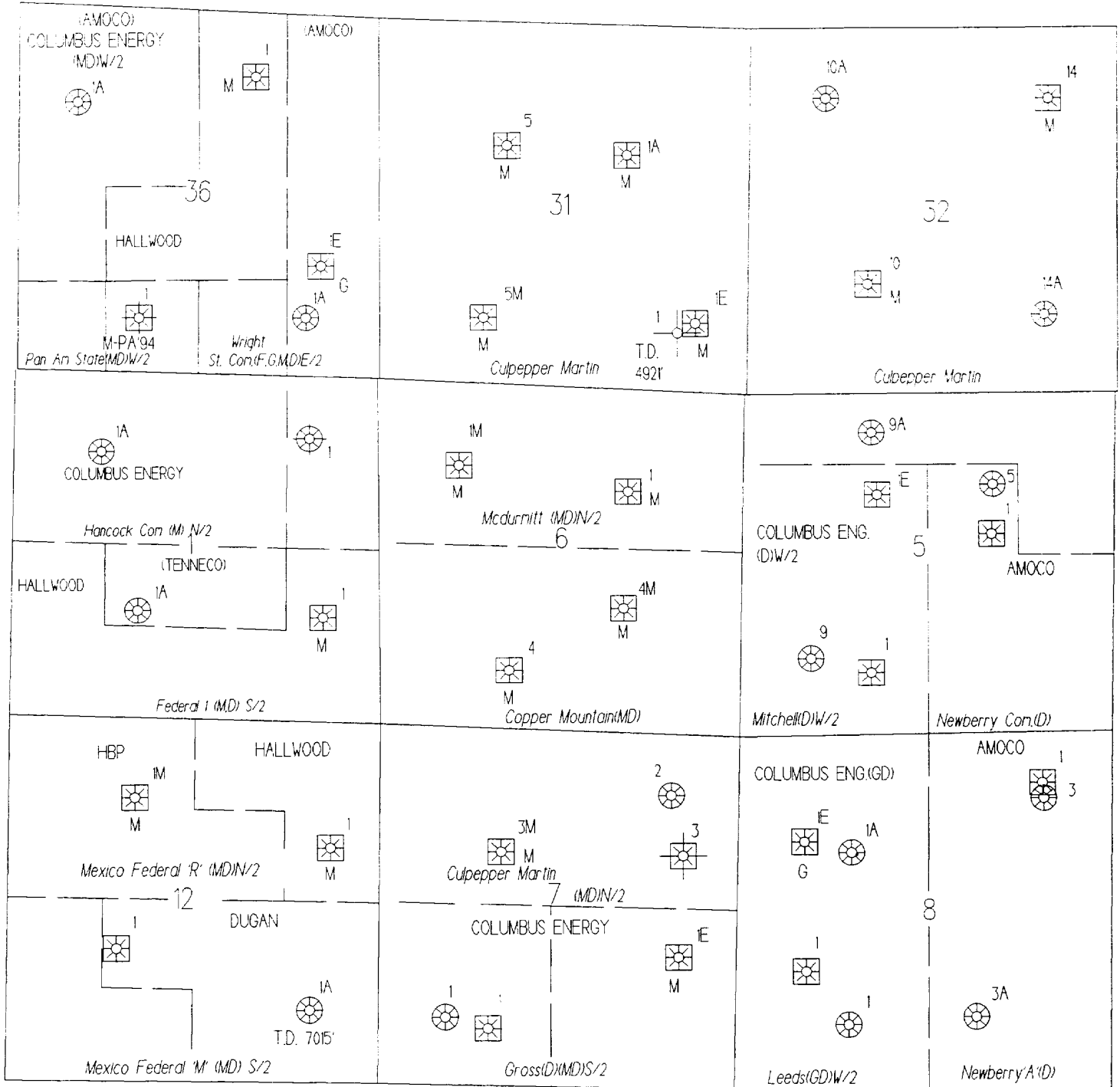
MCDURMITT #1M DAKOTA - (CURRENT)

Organize Data ScreenGraph Economics Report Plot Utility Quit
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 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██	██████████	██████████
«					1314.0			»
«		0	180.0		853.0	0.0		»
«		0	185.0		620.0	0.0		»
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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

McDURMITT #1M
SECTION 6, T31N, R12W
BLANCO MESAVERDE/BASIN DAKOTA



R-13-W

R-12-W

PRODUCTION ALLOCATION FORMULA METHOD

**McDurmitt #1M
(Mesaverde/Dakota) Commingle
Unit E, 6-T31N-R12W
San Juan County, New Mexico**

Allocation Formula Method:

Current Production from Mesaverde formation = 50 MCFD

Current Production from Dakota formation = 60 MCFD

$$\frac{[(MV \& DK) 110 \text{ MCFD} - (MV) 50 \text{ MCFD}]}{(MV \& DK) 110 \text{ MCFD}} = (DK) \% \quad \textbf{\underline{Dakota 55\%}}$$

$$\frac{[(MV \& DK) 110 \text{ MCFD} - (DK) 60 \text{ MCFD}]}{(MV \& DK) 110 \text{ MCFD}} = (MV) \% \quad \textbf{\underline{Mesaverde 45\%}}$$