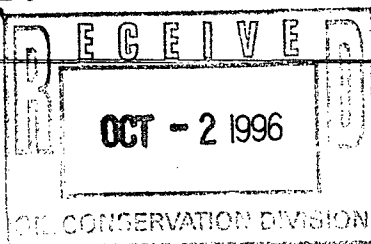


D# C 1392 10/22/96

BURLINGTON RESOURCES

SAN JUAN DIVISION



September 30, 1996

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

Re: Culpepper Martin #1A
1850'FNL, 1850'FEL Section 31, T-32-N, R-12-W, San Juan County, NM
API #30-045-25112

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 - Burlington is the offset operator;
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,

A handwritten signature in cursive script, appearing to read "Peggy Bradfield".

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 :

☒ Administrative
☐ Hearing

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

☒ YES ☐ NO

Burlington Resources Oil & Gas Company

PO Box 4289, Farmington, NM 87499

Operator

Address

Culpepper Martin

1A

G-31-32N-12

San Juan

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 6935 API NO. 30-045-25112 Federal , State X, (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)	4213-4808'		6752-6992'
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. 587 psi (see attachment) (Original) b. 767 psi (see attachment)	a. b.	a. 668 psi (see attachment) b. 1011 psi (see attachment)
6. Oil Gravity (^o API) or Gas BTU Content	BTU 1193		BTU 1178
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 of recent test (within 60 days)	Date: 8/96 Rates: 115 MCF/D, 0 BOPD	Date: Rates:	Date: 8/96 Rates: 68 MCF/D, 0 BOPD
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? ☒ Yes ☐ 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 9-25-96

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

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

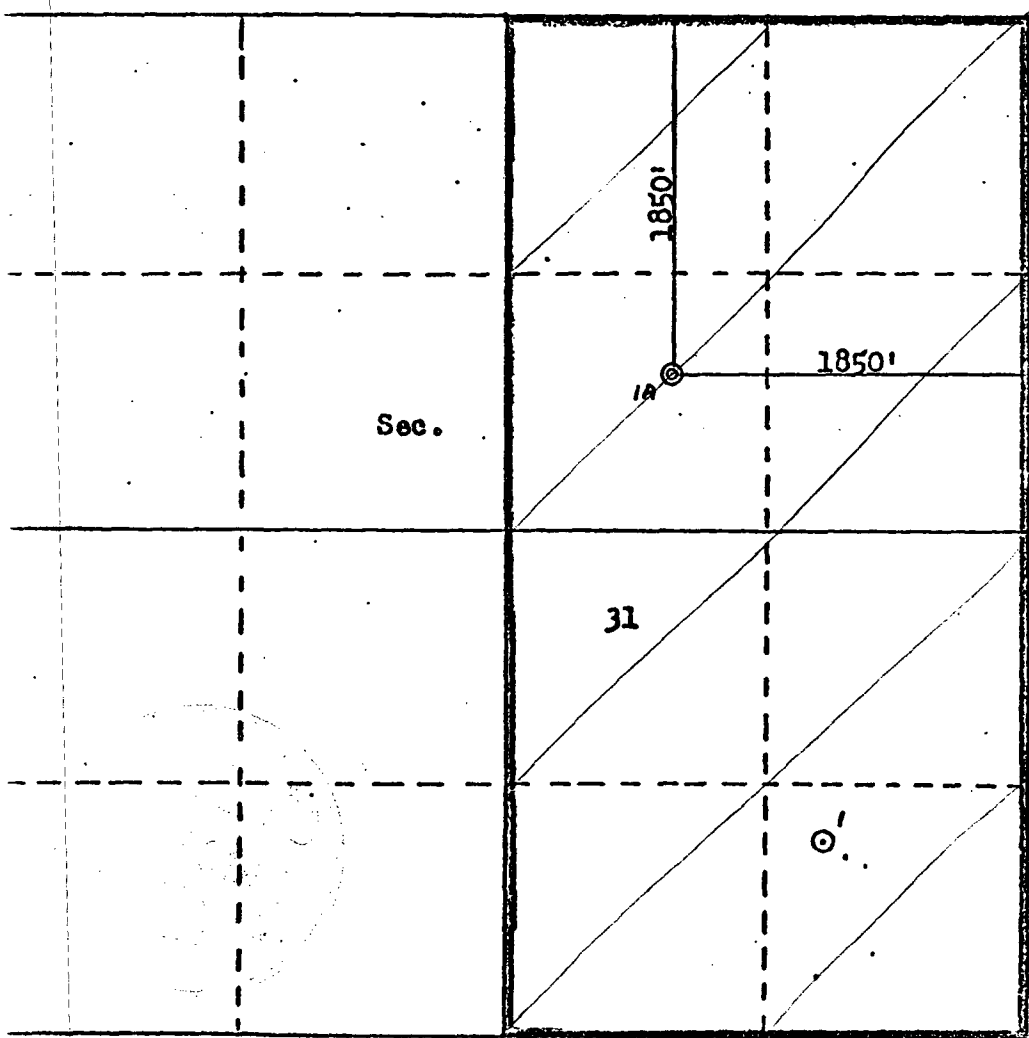
Operator UNION TEXAS PETROLEUM COMPANY			Lease CULPEPPER-MARTIN		Well No. 1A
Well Letter 0	Section 31	Township 32N	Range 12W	County San Juan	
Actual Footage Location of Well: 1850 feet from the North line and 1850 feet from the East line					
Ground Level Elev: 5812	Producing Formation Mesaverde, Dakota		Pool Blanco Mesaverde, Basin Dakota		Dedicated Acreage: E 320 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 _____

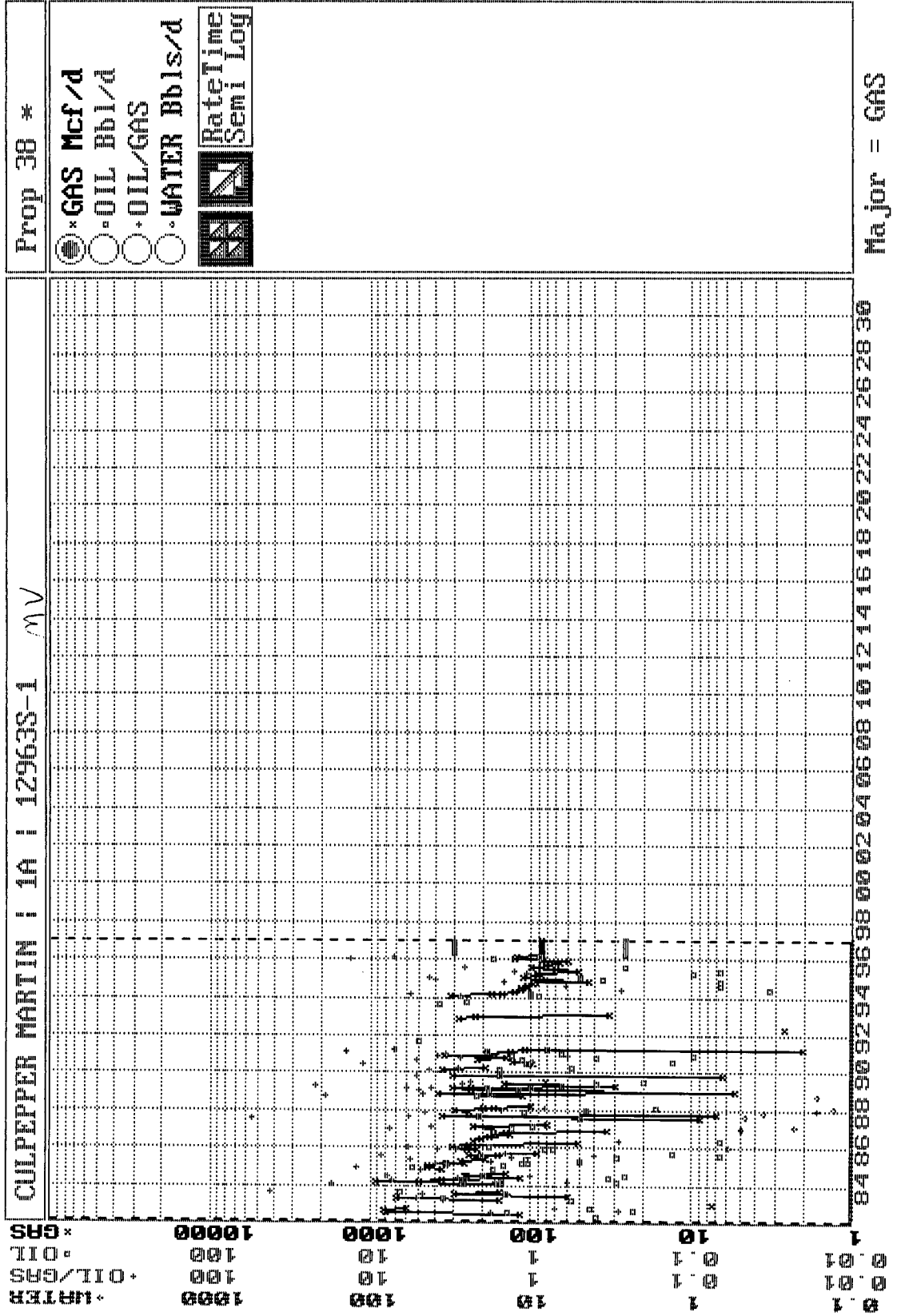
If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

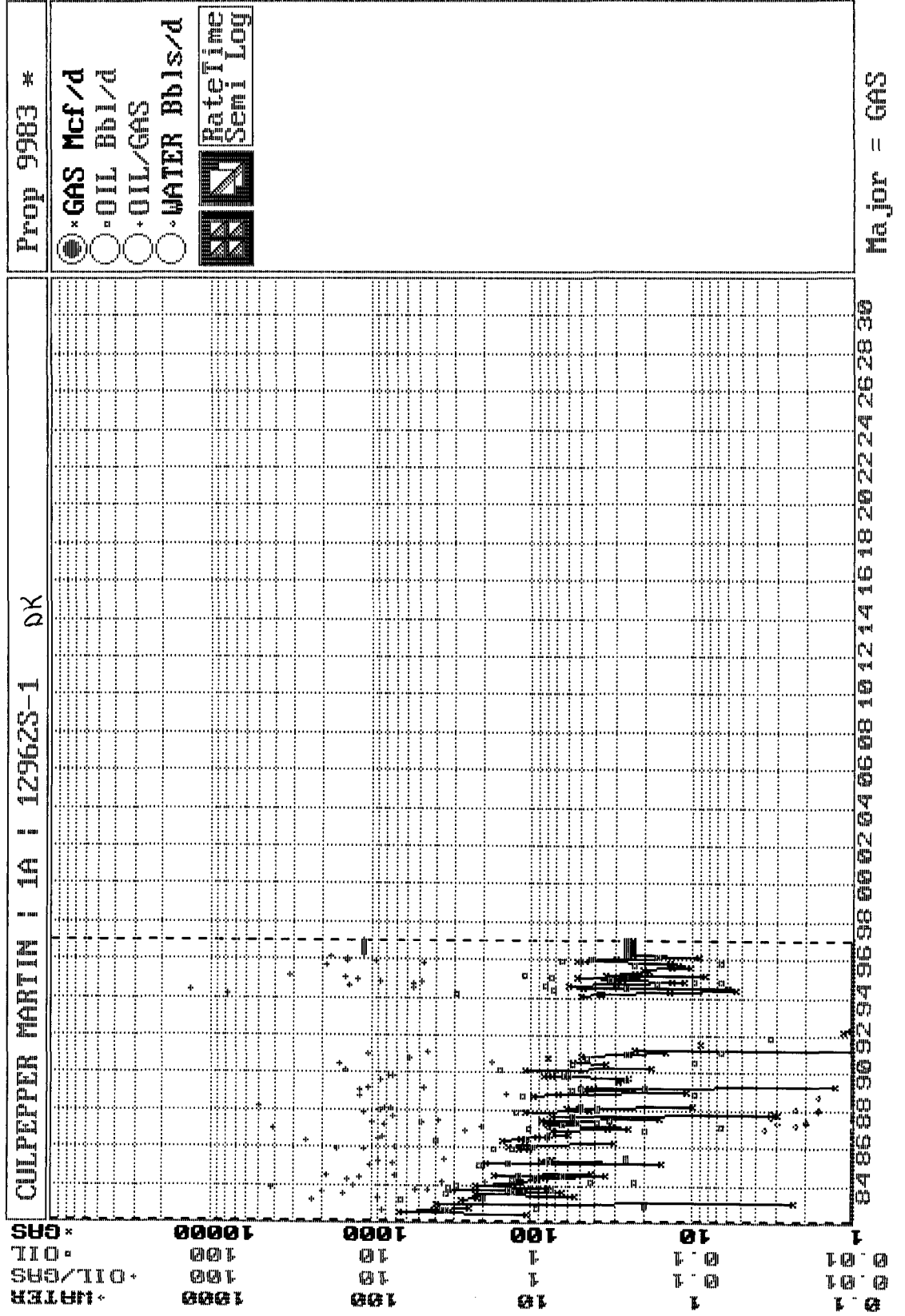
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



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 <i>Thomas C. Balla</i>	
Position District Petroleum Engineer	
Company Union Texas Petroleum Corp.	
Date July 6, 1981	
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 June 16, 1981	
Registered Professional Engineer and Land Surveyor <i>Fred B. Kerr Jr.</i>	
Certificate No. 3950	



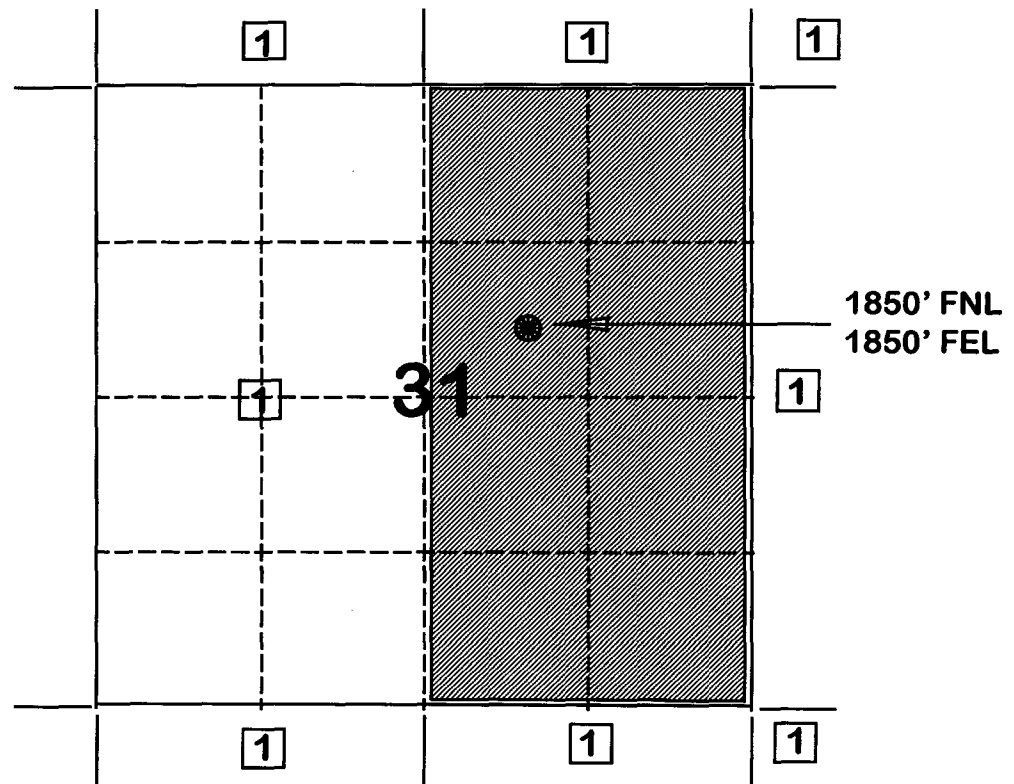


BURLINGTON RESOURCES OIL AND GAS COMPANY

**CULPEPPER MARTIN #1A
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.

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.688
COND. OR MISC. (C/M)	C
%N2	0.16
%CO2	0.78
%H2S	0
DIAMETER (IN)	2.5
DEPTH (FT)	6992
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	849
BOTTOMHOLE PRESSURE (PSIA)	1010.7

CULPEPPER MARTIN #1A DAKOTA - (ORIGINAL)

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.688
COND. OR MISC. (C/M)	C
%N2	0.16
%CO2	0.78
%H2S	0
DIAMETER (IN)	2.5
DEPTH (FT)	6992
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	565
BOTTOMHOLE PRESSURE (PSIA)	667.8

CULPEPPER MARTIN #1A DAKOTA -(CURRENT)

State: 30 Lease Name: CULPEPPER MARTIN
 Prod: 2 County Name: SAN JUAN
 Ident: 32N12W31G00DK Reservoir Name: DAKOTA
 District: 4 Operator Name: MERIDIAN OIL INC
 Location: 31G 32N 12W Field Name: BASIN (DAKOTA)
 Retrieval code: 251,045,32N12W31G00DK Well: 00001A Total Depth: 7100
 Gas Gath: WFS Status: ACT Upper Perf: 0
 API No: 2511200 Comp Date: 000000 Lower Perf: 0

Date	Cum to Test	WHSIP	BHP	P/Z	BDWtr	BDCnd	WHFlw	Poten	MC	Pt	Z	FAC
19820808	27,273	849	0	0	0	0	494	532	2	0.000		
19840418	117,564	547	0	0	0	0	455	118	2	0.000		
19850515	145,216	574	0	0	0	0	453	95	2	0.000		
19880323	200,076	366	0	0	0	0	309	15	2	0.000		
19920401	229,856	565	0	0	0	0	360	178	2	0.000		

***** BOTTOM OF DATA *****

F1=HELP F2=SPLIT F3=END F4=RETURN F5=RFIND F6=RCHANGE
 F7=UP F8=DOWN F9=SWAP F10=LEFT F11=RIGHT F12=RETRIEVE
 B MY JOB LU #25

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.696
COND. OR MISC. (C/M)	C
%N2	0.16
%CO2	0.74
%H2S	0
DIAMETER (IN)	2.5
DEPTH (FT)	4808
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	677
BOTTOMHOLE PRESSURE (PSIA)	767.2

CULPEPPER MARTIN #1A MESAVERDE - (ORIGINAL)

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.696
COND. OR MISC. (C/M)	C
%N2	0.16
%CO2	0.74
%H2S	0
DIAMETER (IN)	2.5
DEPTH (FT)	4808
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	520
BOTTOMHOLE PRESSURE (PSIA)	587.3

CULPEPPER MARTIN #1A MESAVERDE - (CURRENT)

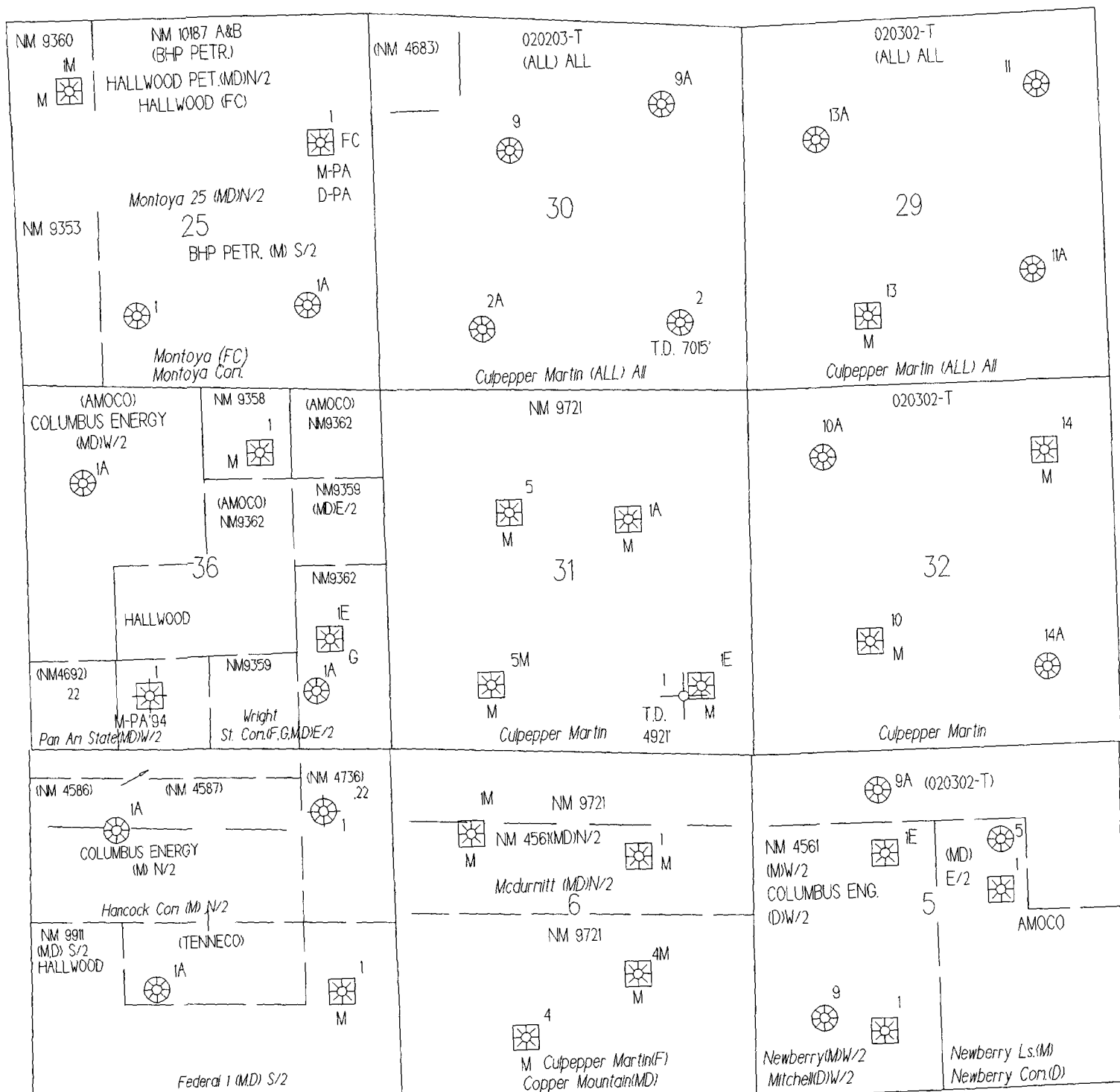
State: 30 Lease Name: CULPEPPER MARTIN
 Prod: 2 County Name: SAN JUAN
 Ident: 32N12W31G00MV Reservoir Name: MESAVERDE
 District: 4 Operator Name: MERIDIAN OIL INC
 Location: 31G 32N 12W Field Name: BLANCO (MESAVERDE)
 Retrieval code: 251,045,32N12W31G00MV Well: 00001A Total Depth: 7100
 Gas Gath: WFS Status: ACT Upper Perf: 0
 API No: 2511200 Comp Date: 000000 Lower Perf: 0

Date	Cum to Test	WHSIP	BHP	P/Z	BDWtr	BDCnd	WHFlw	Poten	MC	Pt	Z	FAC
19830501	97,407	677	0	0	0	0	518	632		2	0.000	
19840418	168,117	619	0	0	0	0	456	405		2	0.000	
19860312	320,594	542	0	0	0	0	430	170		2	0.000	
19891101	469,582	520	0	0	0	0	324	435		2	0.000	

***** BOTTOM OF DATA *****

F1=HELP F2=SPLIT F3=END F4=RETURN F5=RFIND F6=RCHANGE
 F7=UP F8=DOWN F9=SWAP F10=LEFT F11=RIGHT F12=RETRIEVE
 B MY JOB LU #25

CULPEPPER MARTIN #1A BLANCO MESAVERDE/BASIN DAKOTA SECTION 31, T32N, R12W



R-13-W

R-12-W

T
32
N

T
31
N

PRODUCTION ALLOCATION FORMULA METHOD

**Culpepper Martin #1A
(Mesaverde/Dakota) Commingle
Unit G, NE/4, 31-T32N-R12W
San Juan County, New Mexico**

Allocation Formula Method:

Current Production from Mesaverde formation = 100 MCFD

Current Production from Dakota formation = 28 MCFD

$$\frac{[(MV \& DK) 128 \text{ MCFD} - (MV) 100 \text{ MCFD}]}{(MV \& DK) 128 \text{ MCFD}} = (DK) \% \quad \textbf{Dakota 22\%}$$

$$\frac{[(MV \& DK) 128 \text{ MCFD} - (DK) 28 \text{ MCFD}]}{(MV \& DK) 128 \text{ MCFD}} = (MV) \% \quad \textbf{Mesaverde 78\%}$$