

DATE IN 1/27/98	SUSPENSE 2/16/98	ENGINEER DC	LOGGED NW	TYPE DHC
--------------------	---------------------	----------------	--------------	-------------

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
 [DD-Directional Drilling] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

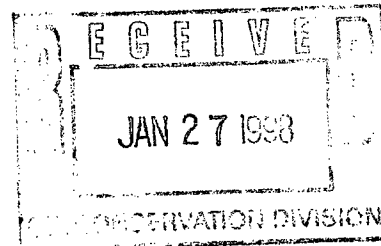
[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling
☐ NSL ☐ NSP ☐ DD ☐ SD

Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR



[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Peggy Bradfield

Print or Type Name

Signature

Regulatory/Compliance Administrator

Title

Date

1/24/98

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 87505-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS :

☒ Administrative
☐ Hearing

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

☒ YES ☐ NO

Burlington Resources Oil and Gas

PO Box 4289, Farmington, NM 87499

Operator

Culpepper Martin

#12

Address

N-20-32N-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 8935 API NO. 30-045-12202 Federal , State , Fee X

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Mesa Verde- 72319		Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	4628'-4734'		6886'-7000'
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	(Current) a. 745 psi (see attachment) (Original) b. 1291 psi (see attachment)		a. 1070 psi (see attachment) (offset analogy - Culpepper Martin #4) b. 2336 psi (see attachment) (offset analogy - Culpepper Martin #4)
6. Oil Gravity ($^{\circ}$ API) or Gas BTU Content	BTU 1204		BTU 1180
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	Yes		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: N/A Rates:
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: 10/97 Rates: 73 mcf/d 0.0 bopd		Date: 10/97 Rates: 35 mcf/d 0.0 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? ☒ 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 ☐ No11. 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 ☐ No13. 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 Mary Ellen Lutey TITLE Production Engineer DATE 12-23-97TYPE OR PRINT NAME Mary Ellen Lutey TELEPHONE NO. (505) 326-9700

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Section A.

Date July 7, 1959

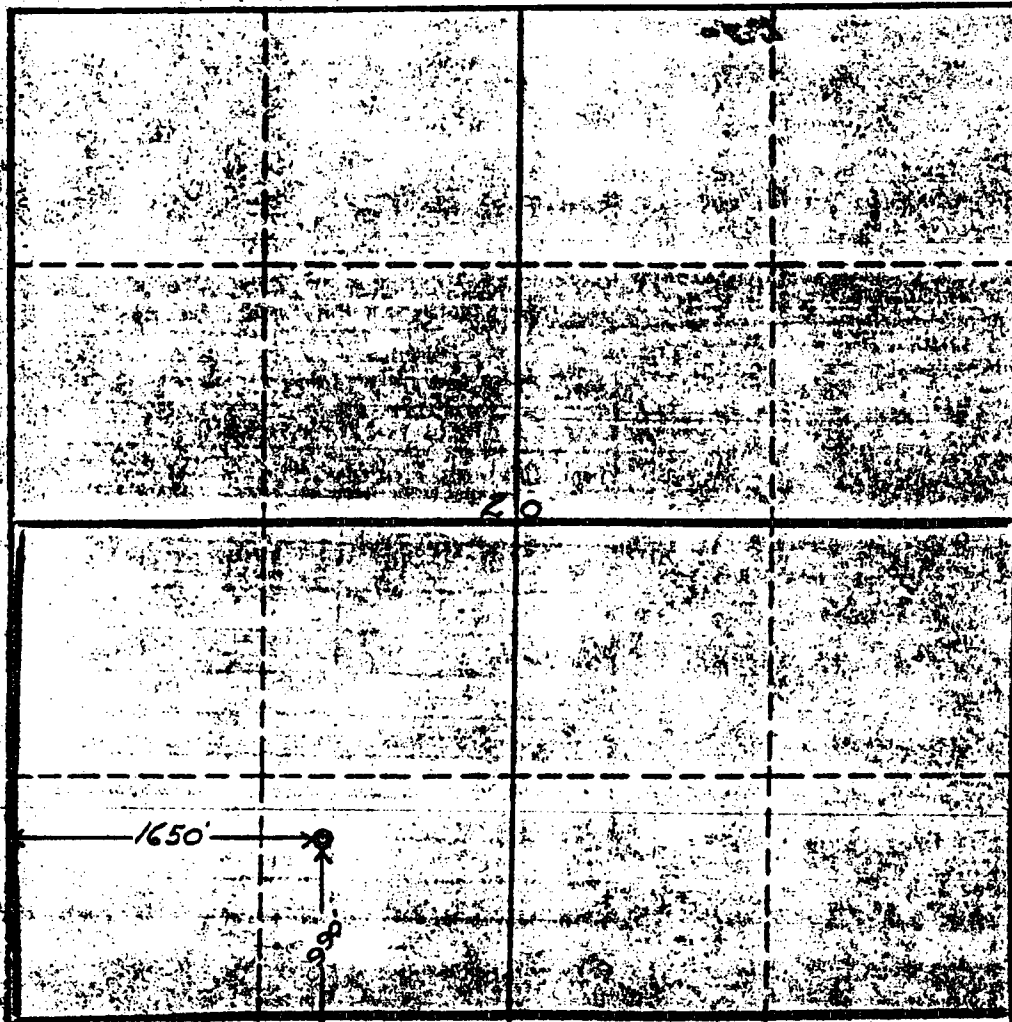
Operator Astec Oil & Gas Company Lease Culpepper-Martin
Well No. 12 Unit Letter F Section 20 Township 32-N Range 12-N NMP
Located 990 Feet From South Line, 1650 Feet From West Line
County San Juan G. L. Elevation 5902 Dedicated Acreage 2.00 Acre
Name of Producing Formation Point Lookout Pool Blanco-Mesa Verde

1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below?
Yes X No
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communication agreement or otherwise? Yes No If answer is "no,"
Type of Consolidation
3. If the answer to question two is "no," list all the owners and their respective interests below

Owner

Land Description

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.

AZTEC OIL & GAS COMPANY

(Operator)

ORIGINAL SIGNED BY JOE C. SIEM

(Representative)

P. O. Box 120

Farmington, New Mexico

Address

This is to certify that the well location shown on the plat in Section A is correct from field notes and actual survey made and of and by my supervision and to the same in accordance with the best of my knowledge and belief.

Date Surveyed July 7, 1959

Ernest V. Lakobaw

Ernest V. Lakobaw
Registered Land Surveyor

Certificate No. 1545

**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 Astec Oil and Gas		Lease Colquhoun Martin		Well No. 19
Unit Letter #	Section 20	Township 32N	Range 12E	County San Juan
Actual Footage Location of Well: 990 feet from the South line and 1650 feet from the West line				
Ground Level Elev. 990	Producing Formation Dakota	Pool Dakota	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.) _____

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.

<div style="border: 1px dashed black; height: 100px; margin: 5px;"></div>	<div style="border: 1px dashed black; height: 100px; margin: 5px;"></div>	<div style="border: 1px dashed black; height: 100px; margin: 5px;"></div>	<div style="border: 1px dashed black; height: 100px; margin: 5px;"></div>
<div style="border: 1px dashed black; height: 100px; margin: 5px;"></div>	<div style="border: 1px dashed black; height: 100px; margin: 5px;"></div>	<div style="border: 1px dashed black; height: 100px; margin: 5px;"></div>	<div style="border: 1px dashed black; height: 100px; margin: 5px;"></div>

20

3/2

0

CERTIFICATION

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

(Original Signed)
Howard J. Spear

Name _____

Position **Howard J. Spear**

Company **District Geologist**

Date **Astec Oil and Gas**

August 16, 1966

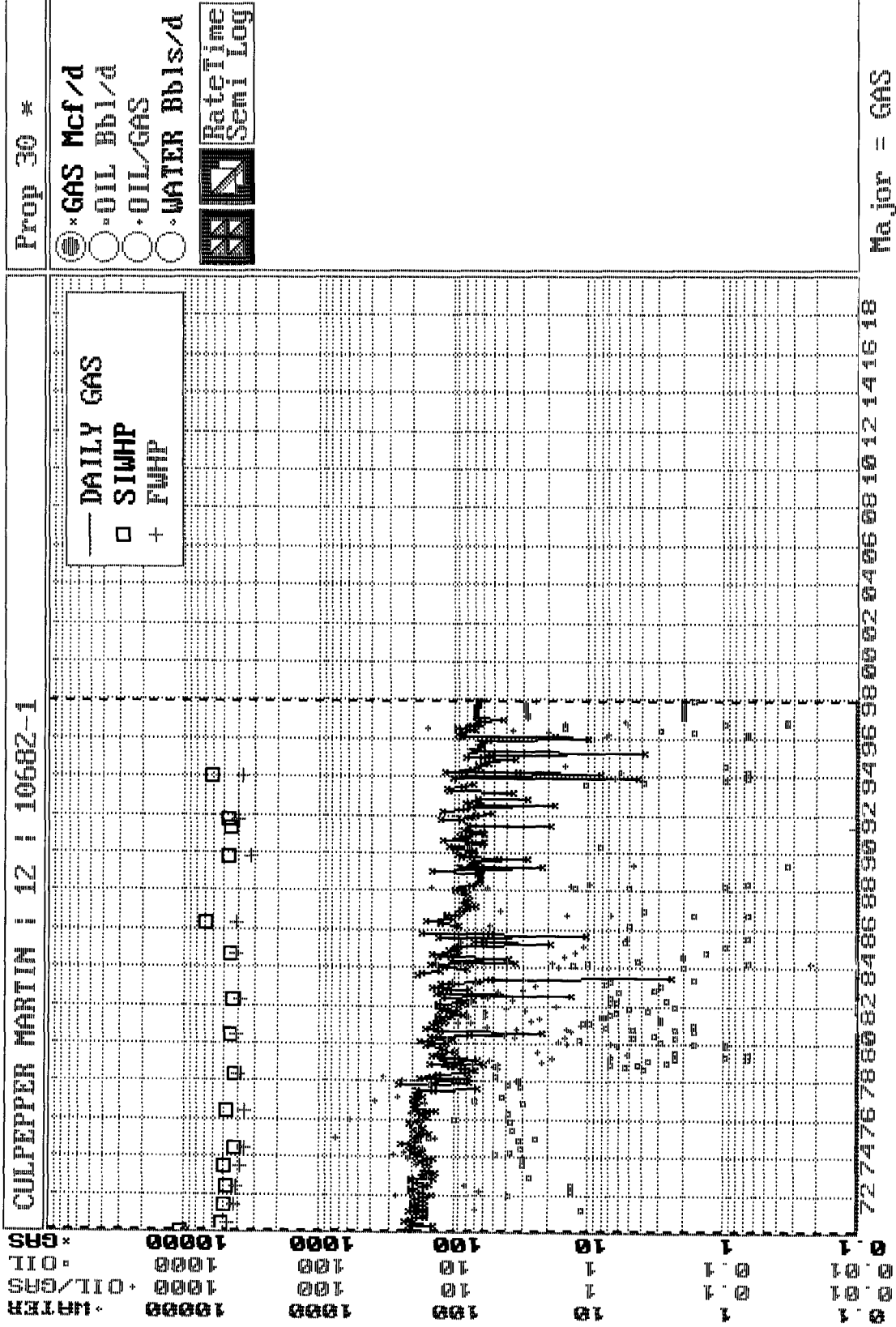
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed _____

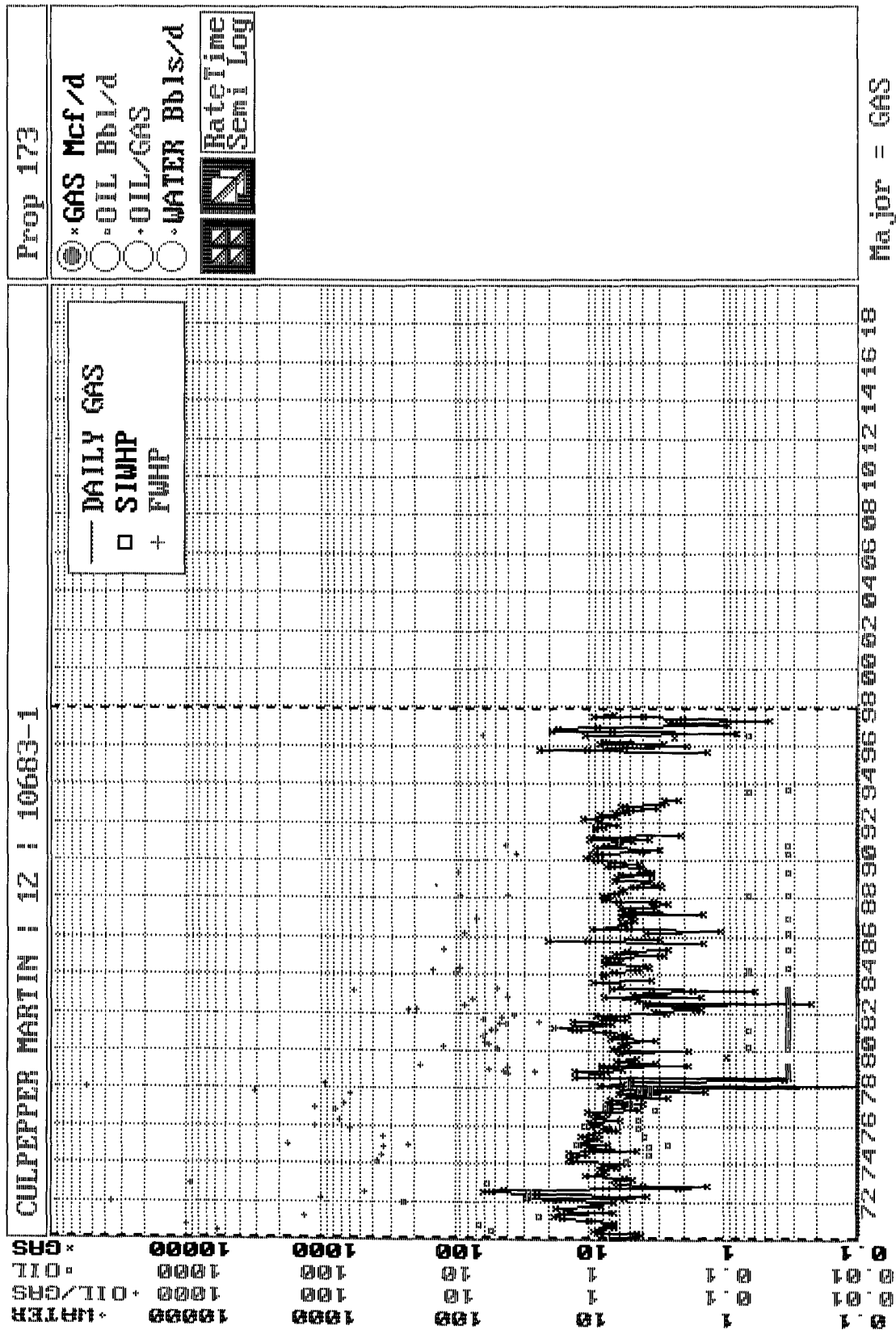
Registered Professional Engineer
and/or Land Surveyor

Certificate No. _____





DK



mv

Page No.: 3

Print Time: Wed Jun 25 14:43:34 1997

Property ID: 2612

Property Name: CULPEPPER MARTIN | 12 | 10682-1

Table Name: K:\ARIES\RR98PDP\TEST.DBF

<u>--DATE--</u>	<u>--CUM OIL--</u>	<u>---CUM GAS--</u>	<u>M SIWHP</u>
	Bbl	Mcf	Psi

08/27/59		0	1062.0
06/18/70		780741	531.0
05/16/71		842609	505.0
05/17/72		909705	486.0
06/17/73		974894	502.0
06/01/74		1038630	431.0
06/17/76		1165682	495.0
05/02/78		1275166	429.0
06/07/80		1360755	452.0
04/07/82		1436231	433.0
08/22/84		1514478	460.0
04/23/86		1556373	709.0
10/26/89		1659760	467.0
04/03/91		1705037	460.0
09/10/91		1711784	472.0
12/29/93		1754753	622.0

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.71
COND. OR MISC. (C/M)	C
%N2	0.57
%CO2	0.77
%H2S	0
DIAMETER (IN)	4.6
DEPTH (FT)	6850
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	155
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	622
BOTTOMHOLE PRESSURE (PSIA)	744.8

CULPEPPER MARTIN #12 MESAVERDE - (CURRENT)

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.71
COND. OR MISC. (C/M)	C
%N2	0.57
%CO2	0.77
%H2S	0
DIAMETER (IN)	1.6
DEPTH (FT)	6850
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	155
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1062
BOTTOMHOLE PRESSURE (PSIA)	1290.6

CULPEPPER MARTIN #12 MESAVERDE - (ORIGINAL)

OK

Page No.: 1

Print Time: Wed Nov 05 09:10:24 1997

Property ID: 234

Property Name: CULPEPPER MARTIN | 4 | 12969S-1

Table Name: K:\ARIES\RR98PDP\TEST.DBF

<u>--DATE--</u>	<u>--CUM OIL--</u> Bbl	<u>---CUM GAS---</u> Mcf	<u>M SIWHP</u> Psi
00/15/83		843217	0.0
03/27/65		0	1953.0
05/18/70		451664	1067.0
04/18/71		501232	1058.0
08/18/72		561965	1059.0
04/18/73		591709	1020.0
08/02/75		673627	981.0
05/03/77		725445	813.0
06/01/79		761778	884.0
07/23/81		802509	796.0
11/08/82		840584	492.0
06/24/83		851982	630.0
07/25/85		892695	480.0
04/19/88		912201	522.0
09/05/90		931458	910.0

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.66
COND. OR MISC. (C/M)	C
%N2	0.37
%CO2	1.71
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	6394
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	910
BOTTOMHOLE PRESSURE (PSIA)	1069.8

CULPEPPER MARTIN #12 DAKOTA - (CURRENT)

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

VERSION 1.0 3/13/94

GAS GRAVITY	0.66
COND. OR MISC. (C/M)	C
%N2	0.37
%CO2	1.71
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	6394
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1953
BOTTOMHOLE PRESSURE (PSIA)	2335.6

CULPEPPER MARTIN #12 DAKOTA - (ORIGINAL)

Package Preparation Volume Data

DPNo: 10682

CULPEPPER MARTIN

12

Form: MV

Supt: 58 RICK MUNCRIEF

FF: 331 NOEL ROGERS

MS: 341 JACK BIRCHFIELD

Pipeline: WFS

Plunger: No

Dual: Yes

Compressor: No

Ownership (No Trust)

	<u>Gas</u>	<u>Oil</u>
GWl:	25.0000%	25.0000%
GNI:	21.8750%	21.8750%

Volumes

(Days On)

	<u>MCFD</u>	<u>BOPD</u>
7 Day Avg	71	0.0
30 Day Avg	73	0.0
60 Day Avg	74	0.0
3 Mo Avg	82	0.0
6 Mo Avg	42	0.0
12 MoAvg	48	0.0

Volumes

(Days in Month)

	<u>MCFD</u>	<u>BOPD</u>
30 Day Avg	73	0.0
60 Day Avg	74	0.0
3 Mo Avg	82	0.0
6 Mo Avg	41	0.0
12 Mo Avg	47	0.0

Prior Year

	<u>MCF/M</u>	<u>BOPM</u>	<u>Days On</u>
Jan	552	0.0	30
Feb	2,777	2.0	15.4
Mar	2,909	2.0	19.7
Apr	2,599	5.0	30
May	2,506	9.0	31
Jun	2,127	0.0	30
Jul	2,989	46.0	31
Aug	2,323	0.0	31
Sept	2,001	1.0	24.9
Oct	2,056	3.0	31
Nov	1,914	1.0	30
Dec	1,333	0.0	31
Total	26,086	69.0	

Current Year

	<u>MCF/M</u>	<u>BOPM</u>	<u>Days On</u>
Jan	0	0.0	31
Feb	0	0.0	28
Mar	6	0.0	31
Apr	0	0.0	30
May	2,012	0.0	31
Jun	3,137	0.0	30
Jul	2,358	0.0	31
Aug	0	0.0	31
Sept	0	0.0	0
Oct	0	0.0	0
Nov	0	0.0	0
Dec	0	0.0	0
Total	7,513	0.0	

Print Form

Exit Volumes Data

Package Preparation Volume Data

DPNo: 10683

CULPEPPER MARTIN

12

Form: DK

Supt: 58 RICK MUNCRIEF

FF: 331 NOEL ROGERS

MS: 341 JACK BIRCHFIELD

Pipeline: WFS

Plunger: No

Dual: Yes

Compressor: No

Ownership (No Trust)

	<u>Gas</u>	<u>Oil</u>
GWI:	25.0000%	25.0000%
GNI:	21.8750%	21.8750%

Prior Year

Current Year

				<u>MCF/M</u>	<u>BOPM</u>	<u>Days On</u>	<u>MCF/M</u>	<u>BOPM</u>	<u>Days On</u>
			Jan	260	0.0	30	29	0.0	31
			Feb	87	0.0	15.4	74	0.0	28
			Mar	243	0.0	19.7	82	0.0	31
<u>Volumes</u>			Apr	0	0.0	30	14	0.0	30
<u>(Days On)</u>	<u>MCFD</u>	<u>BOPD</u>	May	74	0.0	31	64	0.0	31
7 Day Avg	38	0.0	Jun	0	0.0	30	124	0.0	30
30 Day Avg	35	0.0	Jul	329	2.0	31	293	0.0	31
60 Day Avg	22	0.0	Aug	25	0.0	9	0	0.0	31
3 Mo Avg	5	0.0	Sept	211	0.0	26.9	0	0.0	0
6 Mo Avg	4	0.0	Oct	602	0.0	31	0	0.0	0
12 MoAvg	7	0.0	Nov	530	0.0	30	0	0.0	0
			Dec	275	0.0	31	0	0.0	0
<u>Volumes</u>			Total	2,636	2.0		680	0.0	
<u>(Days in Month)</u>	<u>MCFD</u>	<u>BOPD</u>							
30 Day Avg	35	0.0							
60 Day Avg	22	0.0							
3 Mo Avg	5	0.0							
6 Mo Avg	4	0.0							
12 Mo Avg	6	0.0							

Print Form

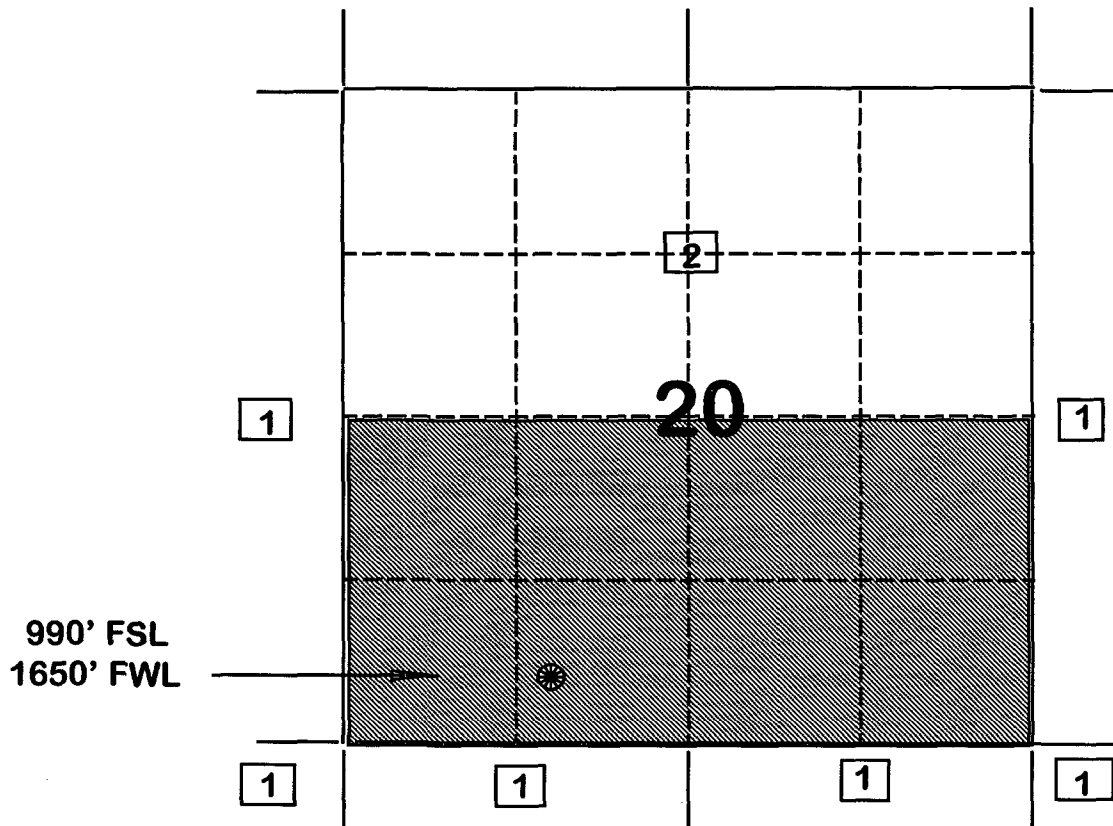
Exit Volumes Data

BURLINGTON RESOURCES OIL AND GAS COMPANY

**Culpepper Martin #12
OFFSET OPERATOR \ OWNER PLAT**

Mesaverde / Dakota Formations Commingle Well

Township 32 North, Range 12 West



- 1) Burlington Resources
- 2) Amoco Production Company
c/o Bruce Zimney
P.O. Box 800
Denver, CO 80201

	18	17	16
1 ☒	19	20 Culpepper Martin #12 ☒	15 ☒ 21
1 ☒	30	29 13 ☒	28 4 ☒
	5 ☒ 1A ☒		

Culpepper Martin #12 ^{j dehart} 11/97
Sec 20 T32N R12W
Dakota