

DATE IN 2/23/00	SUSPENSE 3/14/00	ENGINEER DC	LOGGED KV	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION  
- Engineering Bureau -

*2684*

**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

OIL CONSERVATION DIV  
00 FEB 23 PM 12:46

[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 Cole

*Peggy Cole*

Regulatory/Compliance Administrator

Print or Type Name

Signature

Title

Date

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
DISTRICT II  
811 South First St., Artesia, NM 88210  
DISTRICT III  
1000 Rio Brazos Rd, Aztec, NM 87410  
DISTRICT IV  
2040 S. Pacheco, Santa Fe, NM 87505

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  
Revised August 1999

APPROVAL PROCESS:

Administrative  Hearing

EXISTING WELLBORE

YES  NO

**APPLICATION FOR DOWNHOLE COMMINGLING**

BURLINGTON RESOURCES OIL & GAS COMPANY

PO BOX 4289, FARMINGTON, NM 87499

Operator

Address

SAN JUAN 27-4 UNIT

16M

17-27N-04W

RIO ARriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7452 API NO. 30-039-XXXXX Federal  State  (and/or) Fee

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)	WILL BE SUPPLIED UPON COMPLETION		WILL BE SUPPLIED UPON COMPLETION
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: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 515 psi (see attachment)		a. (Current) 1087 psi (see attachment)
	b. (Original) 1324 psi (see attachment)		b. (Original) 2263 psi (see attachment)
6. Oil Gravity (EAPI) or Gas BTU Content	BTU 1196		BTU 1147
7. Producing or Shut-In?	SHUT-IN		SHUT-IN
Production Marginal? (yes or no)  * If Shut-In, give 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  * If Producing, give date and oil/gas/water rates of recent test (within 60 days)	NO		YES
	Date: N/A Rates:	Date: N/A Rates:	Date: N/A Rates:
	Date: N/A Rates:	Date: N/A Rates:	Date: N/A Rates:
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: % Gas: % WILL BE SUPPLIED UPON COMPLETION	Oil: % Gas: % WILL BE SUPPLIED UPON COMPLETION	Oil: % Gas: % 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

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 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

*Wayne Fletcher*

TITLE PRODUCTION ENGINEER

DATE:

12-10-99

TYPE OR PRINT NAME

B. WAYNE FLETCHER

TELEPHONE NO. 505-326-9700

District I  
PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised February 21, 1994

District II  
PO Drawer DD, Artesia, NM 88211-0719

Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

AMENDED REPORT

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-		*Pool Code 72319/71599		*Pool Name Blanco Mesaverde/Basin Dakota	
*Property Code 7452		*Property Name SAN JUAN 27-4 UNIT			*Well Number 16M
*GRID No. 14538		*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY			*Elevation 6804'

<sup>10</sup> Surface Location

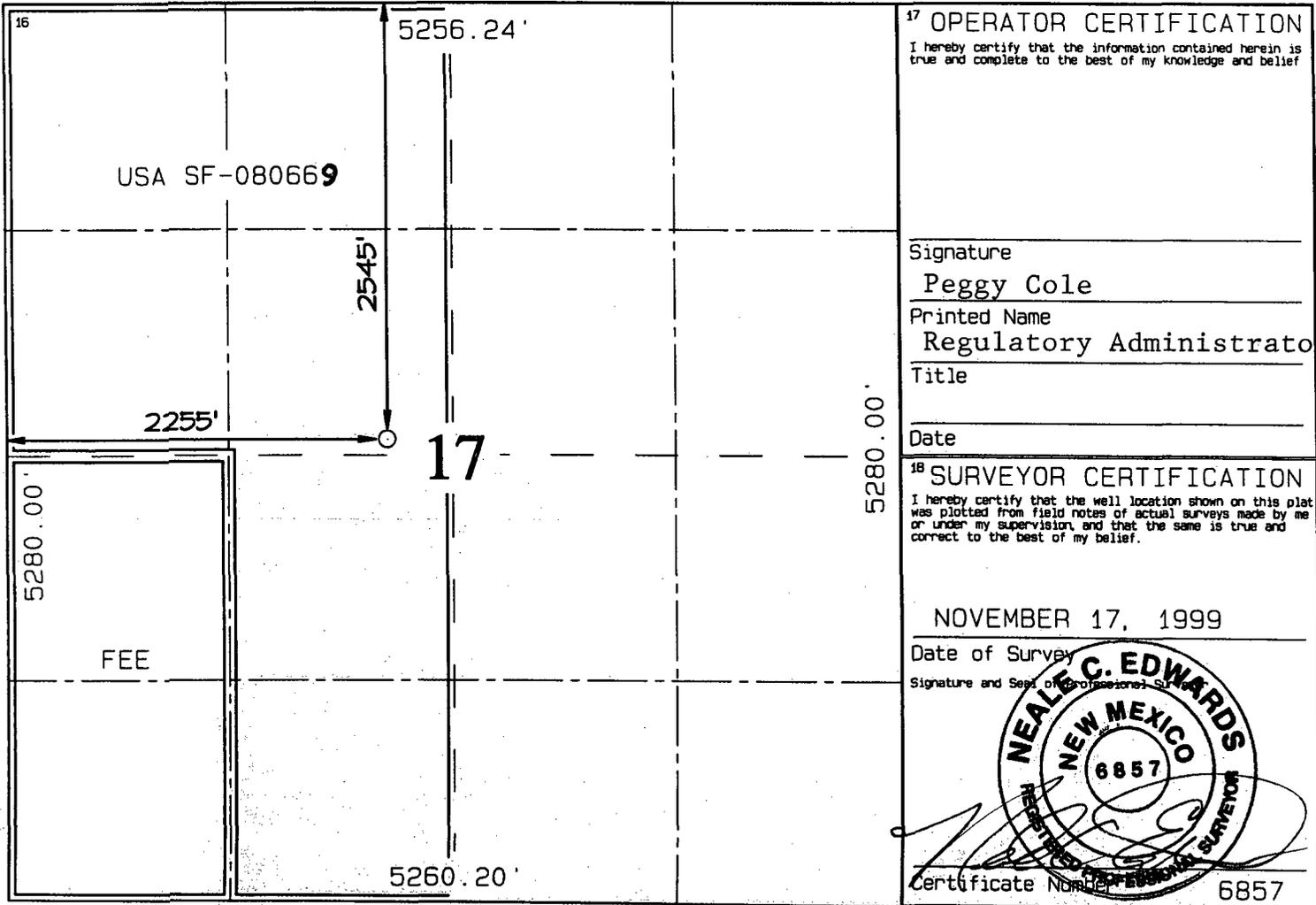
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	17	27N	4W		2545	NORTH	2255	WEST	RIO ARRIBA

<sup>11</sup> 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

<sup>12</sup> Dedicated Access MV-W/320 DK-W/320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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



<sup>17</sup> OPERATOR CERTIFICATION  
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature  
Peggy Cole  
Printed Name  
Regulatory Administrator  
Title

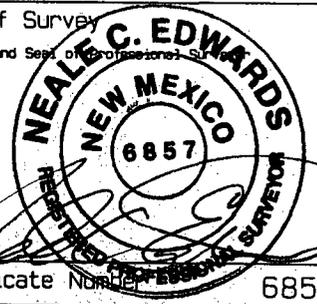
Date

<sup>18</sup> 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.

NOVEMBER 17, 1999

Date of Survey

Signature and Seal of Professional Surveyor



Certificate Number 6857

***BURLINGTON  
RESOURCES***

SAN JUAN DIVISION  
3535 East 30th Street: (87402-8801)  
P.O. BOX 4289  
Farmington, New Mexico 87499-4289

***BURLINGTON  
RESOURCES***

SAN JUAN DIVISION  
3535 East 30th Street: (87402-8801)  
P.O. BOX 4289  
Farmington, New Mexico 87499-4289

---

Mary Chappell  
PO Box 1865  
Corrales, NM 87048

x

Harco LTD Partnership  
PO Box 216  
Roswell, NM 88202-0216

***BURLINGTON  
RESOURCES***

SAN JUAN DIVISION  
3535 East 30th Street: (87402-8801)  
P.O. BOX 4289  
Farmington, New Mexico 87499-4289

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SAN JUAN DIVISION  
3535 East 30th Street: (87402-8801)  
P.O. BOX 4289  
Farmington, New Mexico 87499-4289

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James Harrington  
PO Box 13535  
Albuquerque, NM 87192

x

Tempe LTD Partnership  
652 Fearington Post  
Pittsboro, NC 27312

***BURLINGTON  
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3535 East 30th Street: (87402-8801)  
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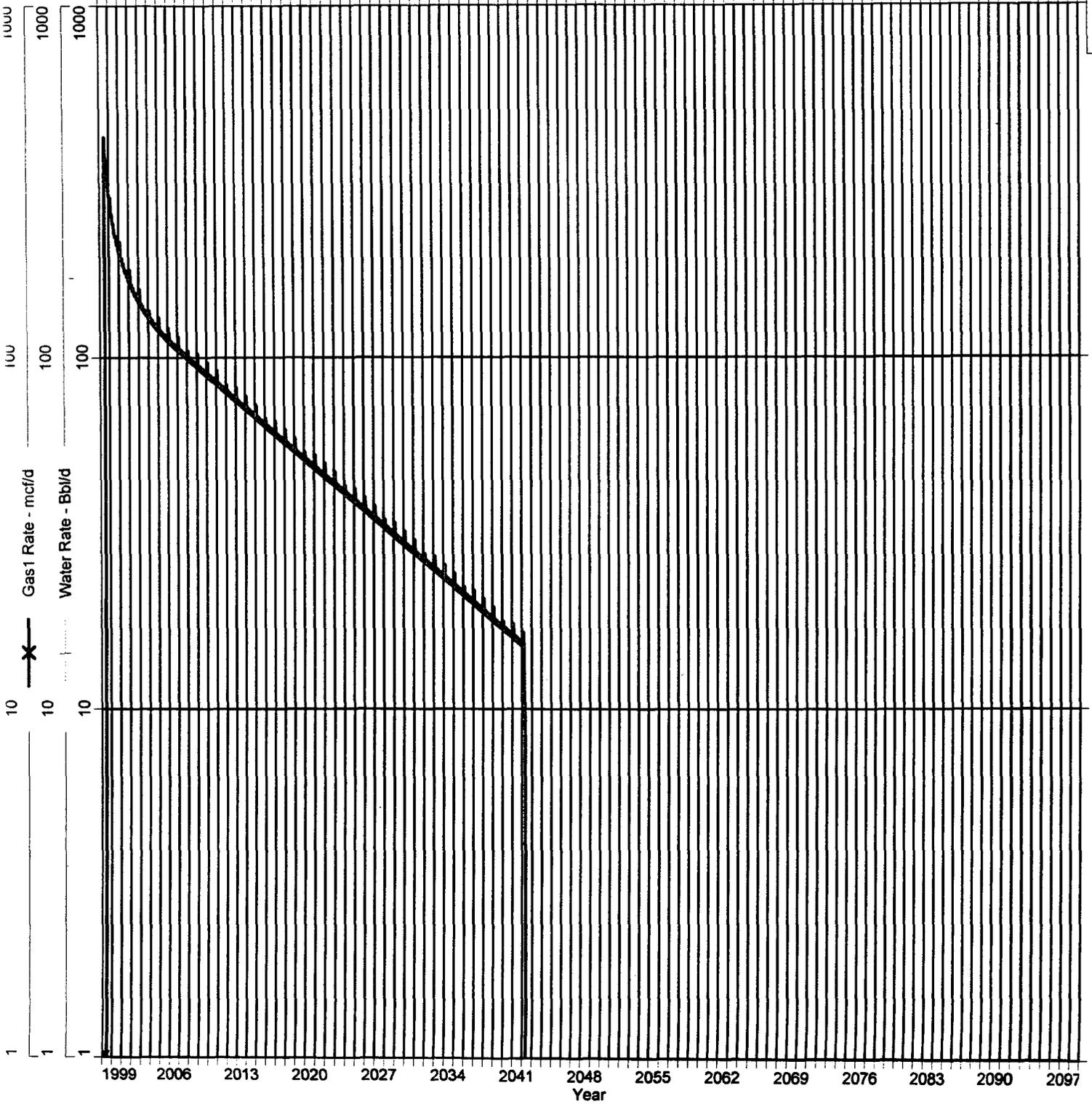
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San Juan 27-4 Unit #16M

Expected Production

Mesaverde Formation

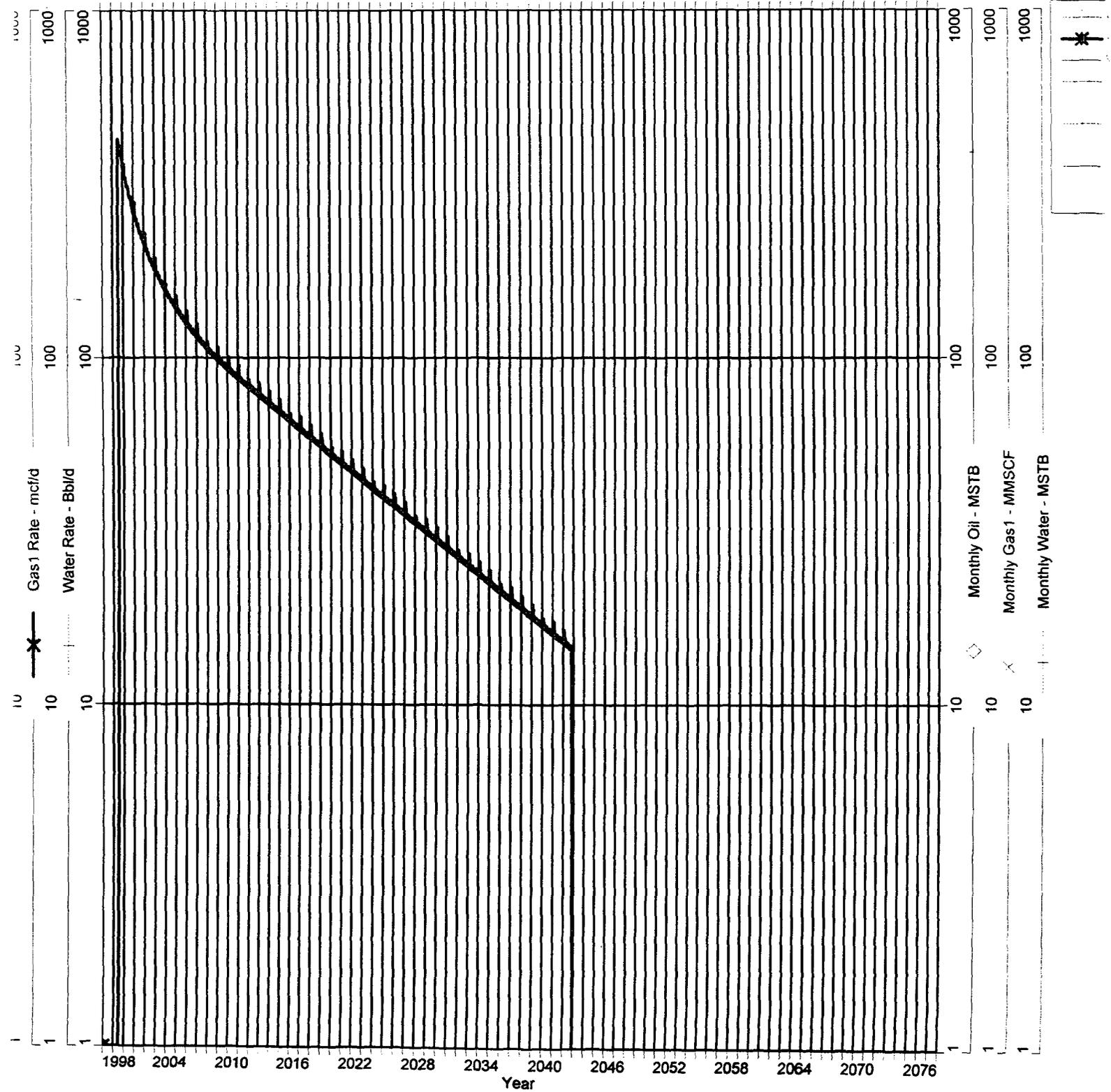
{412600F2-A72F-11D3-BF} Data: Nov.1999-Nov.1999



# San Juan 27-4 Unit #16M

## Expected Production

### Dakota Formation



# San Juan 27-4 Unit #16M

Bottom Hole Pressures

Flowing and Static BHP

Cullender and Smith Method

Version 1.0 3/13/94

<b>Mesaverde</b>		<b>Dakota</b>	
<b><u>MV-Current</u></b>		<b><u>DK-Current</u></b>	
GAS GRAVITY	<u>0.688</u>	GAS GRAVITY	<u>0.662</u>
COND. OR MISC. (C/M)	<u>C</u>	COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.13</u>	%N2	<u>0.14</u>
%CO2	<u>0.92</u>	%CO2	<u>1.31</u>
%H2S	<u>0</u>	%H2S	<u>0</u>
DIAMETER (IN)	<u>2.375</u>	DIAMETER (IN)	<u>2</u>
DEPTH (FT)	<u>6126</u>	DEPTH (FT)	<u>8011</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>	SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>137</u>	BOTTOMHOLE TEMPERATURE (DEG F)	<u>198</u>
FLOWRATE (MCFPD)	<u>0</u>	FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>442</u>	SURFACE PRESSURE (PSIA)	<u>897</u>
BOTTOMHOLE PRESSURE (PSIA)	<span style="border: 1px solid black; padding: 2px;">515.2</span>	BOTTOMHOLE PRESSURE (PSIA)	<span style="border: 1px solid black; padding: 2px;">1087.1</span>
<b><u>MV-Original</u></b>		<b><u>DK-Original</u></b>	
GAS GRAVITY	<u>0.688</u>	GAS GRAVITY	<u>0.662</u>
COND. OR MISC. (C/M)	<u>C</u>	COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.13</u>	%N2	<u>0.14</u>
%CO2	<u>0.92</u>	%CO2	<u>1.31</u>
%H2S	<u>0</u>	%H2S	<u>0</u>
DIAMETER (IN)	<u>2.375</u>	DIAMETER (IN)	<u>2</u>
DEPTH (FT)	<u>6126</u>	DEPTH (FT)	<u>8011</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>	SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>137</u>	BOTTOMHOLE TEMPERATURE (DEG F)	<u>198</u>
FLOWRATE (MCFPD)	<u>0</u>	FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>1114</u>	SURFACE PRESSURE (PSIA)	<u>1837</u>
BOTTOMHOLE PRESSURE (PSIA)	<span style="border: 1px solid black; padding: 2px;">1323.5</span>	BOTTOMHOLE PRESSURE (PSIA)	<span style="border: 1px solid black; padding: 2px;">2262.5</span>

Page No.: 1  
 Print Time: Tue Nov 30 07:15:50 1999  
 Property ID: 1190  
 Property Name: SAN JUAN 27-4 UNIT | 134 | 53341A  
 Table Name: R:\RESERVES\GDPNOS\TEST.DBF

--DATE-- ---CUM GAS-- M SIWHP  
 :::::MCf::::: :::::Psi:::::

10/27/79	0	1114.0
07/24/80	8416	846.0
08/09/80	29422	0.0
11/03/80	68831	722.0
06/02/81	99565	672.0
11/01/82	214976	595.0
09/22/83	261335	631.0
06/21/84	311595	569.0
06/09/87	464404	413.0
04/15/89	559185	792.0
01/24/91	653432	517.0
03/07/91	657696	529.0
05/03/93	774239	442.0

San Juan 27-4 Unit #16M

Mesaverde Offset

Page No.: 1

Print Time: Tue Nov 30 07:15:29 1999

Property ID: 1280

Property Name: SAN JUAN 27-4 UNIT | 7 | 49580A

Table Name: R:\RESERVES\GDPNOS\TEST.DBF

--DATE-- ---CUM GAS-- M SIWHP  
Mcf Psi

06/26/56	0	1837.0
08/02/56	0	1836.0
06/14/59	85000	1242.0
09/22/60	116000	1244.0
06/13/61	138000	1186.0
07/31/62	188000	1038.0
01/07/63	207000	1078.0
01/02/64	244000	1091.0
07/29/65	312000	998.0
08/01/66	354000	693.0
08/04/67	398000	936.0
09/23/68	448000	944.0
06/09/70	521759	710.0
07/30/71	565772	711.0
05/30/72	595584	929.0
06/09/75	712411	912.0
08/01/77	807884	887.0
10/15/79	890610	879.0
11/02/81	957297	897.0
09/22/83	993331	970.0
01/06/86	1049929	897.0

San Juan 27-4 Unit #16M

Dakota Offset

