

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 -

2683

**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  
X DHC    CTB    PLC    PC    OLS    OLM

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

00 FEB 23 PM 12:46

OIL CONSERVATION DIV.

[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*  
Signature

Regulatory/Compliance Administrator

Print or Type Name

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

54M

32-27N-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-XXXX 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: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 681 psi (see attachment)		a. (Current) 1113 psi (see attachment)
	b. (Original) 1416 psi (see attachment)		b. (Original) 2984 psi (see attachment)
6. Oil Gravity (EAPI) or Gas BTU Content	BTU 1236		BTU 1258
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  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

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

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

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

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

AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-		<sup>2</sup> Pool Code 72319/71599		<sup>3</sup> Pool Name Blanco Mesaverde/Basin Dakota	
<sup>4</sup> Property Code 7452		<sup>5</sup> Property Name SAN JUAN 27-4 UNIT			<sup>6</sup> Well Number 54M
<sup>7</sup> OGRID No. 14538		<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY			<sup>9</sup> Elevation 6960'

#### <sup>10</sup> Surface Location

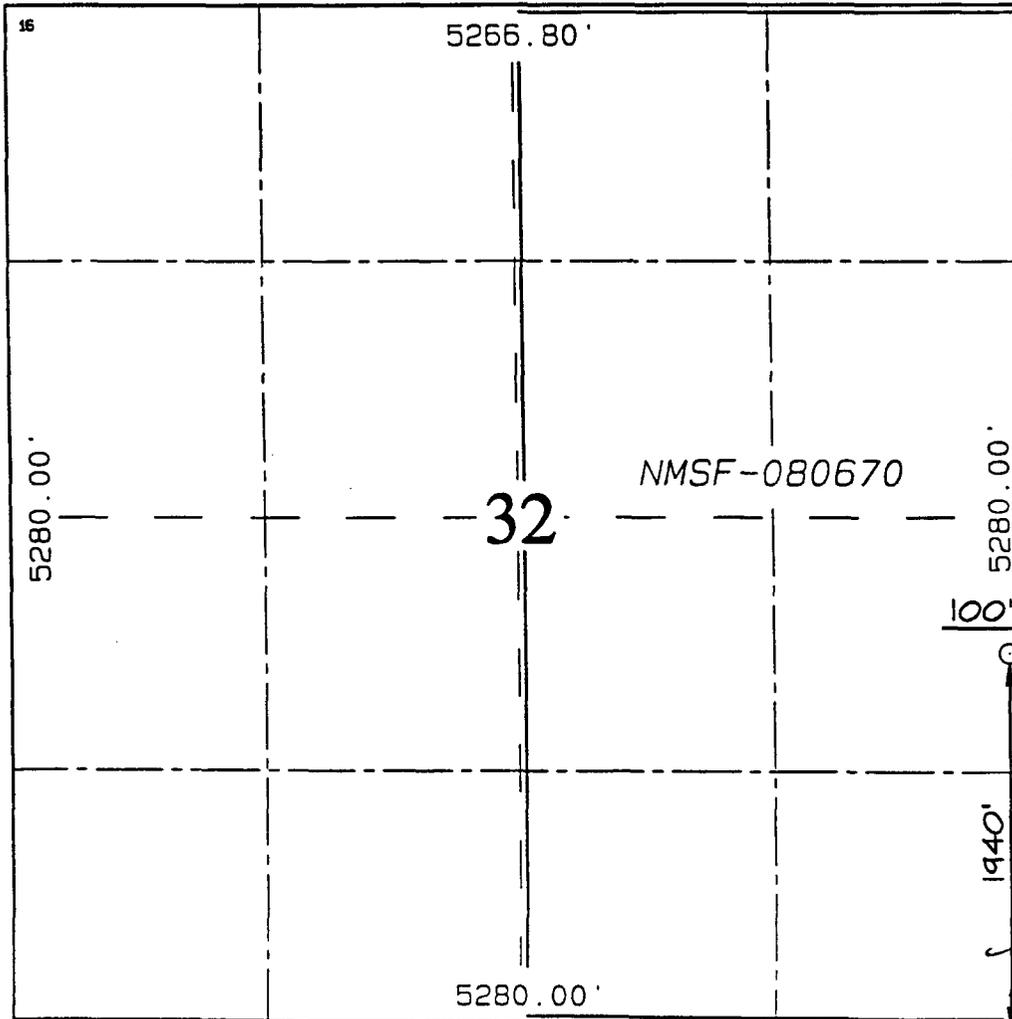
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	32	27N	4W		1940	SOUTH	100	EAST	RIO ARRIBA

#### <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 Acres MV-E/320 DK-E/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

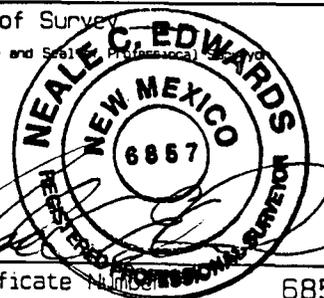
Date

#### <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.

DECEMBER 14, 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)  
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3535 East 30th Street: (87402-8801)  
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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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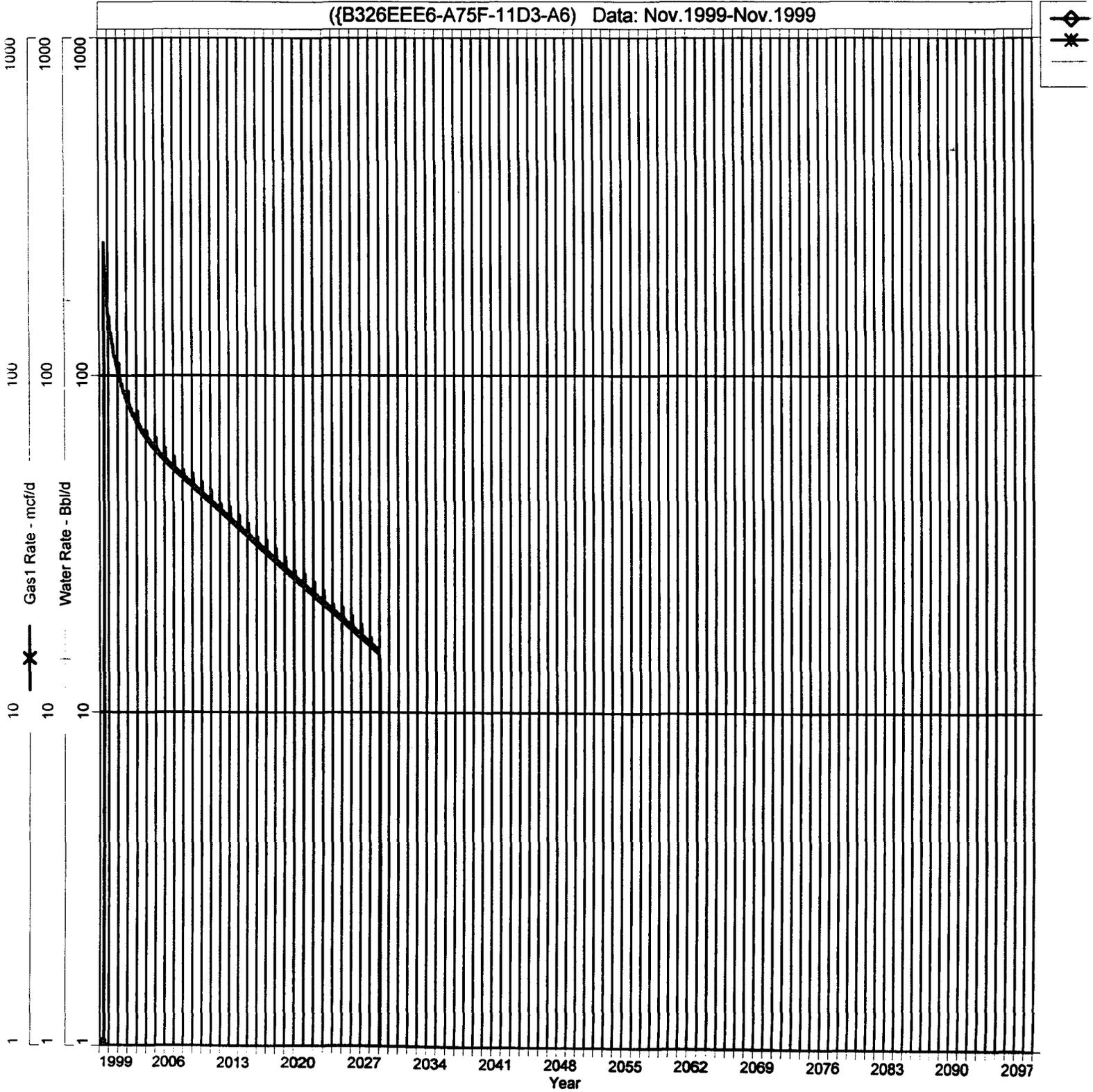
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San Juan 27-4 Unit #54M

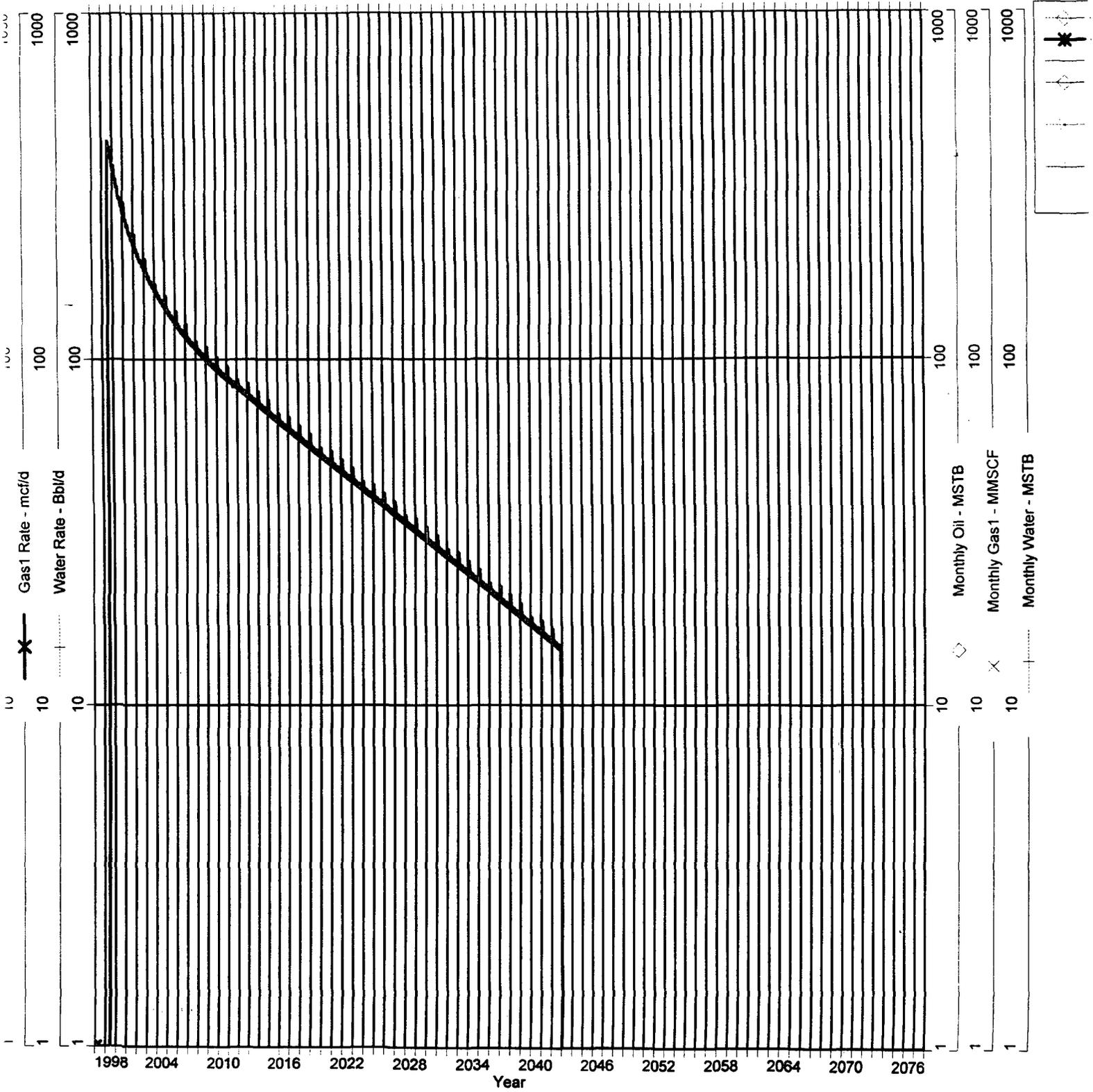
Expected Production

Mesaverde Formation

((B326EEE6-A75F-11D3-A6) Data: Nov.1999-Nov.1999



San Juan 27-4 Unit #54M  
Expected Production  
Dakota Formation



**San Juan 27-4 Unit #54M**

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>0.712</u>	GAS GRAVITY	<u>0.728</u>
COND. OR MISC. (C/M)	<u>C</u>	COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.18</u>	%N2	<u>0.22</u>
%CO2	<u>0.82</u>	%CO2	<u>0.94</u>
%H2S	<u>0</u>	%H2S	<u>0</u>
DIAMETER (IN)	<u>2.375</u>	DIAMETER (IN)	<u>2.375</u>
DEPTH (FT)	<u>6387</u>	DEPTH (FT)	<u>8163</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>574</u>	SURFACE PRESSURE (PSIA)	<u>892</u>
BOTTOMHOLE PRESSURE (PSIA)	<input type="text" value="680.8"/>	BOTTOMHOLE PRESSURE (PSIA)	<input type="text" value="1112.7"/>
<b><u>MV-Original</u></b>		<b><u>DK-Original</u></b>	
GAS GRAVITY	<u>0.712</u>	GAS GRAVITY	<u>0.714</u>
COND. OR MISC. (C/M)	<u>C</u>	COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.18</u>	%N2	<u>0.19</u>
%CO2	<u>0.82</u>	%CO2	<u>1.04</u>
%H2S	<u>0</u>	%H2S	<u>0</u>
DIAMETER (IN)	<u>2.375</u>	DIAMETER (IN)	<u>2.375</u>
DEPTH (FT)	<u>6387</u>	DEPTH (FT)	<u>7934</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>1170</u>	SURFACE PRESSURE (PSIA)	<u>2372</u>
BOTTOMHOLE PRESSURE (PSIA)	<input type="text" value="1415.8"/>	BOTTOMHOLE PRESSURE (PSIA)	<input type="text" value="2984.2"/>

Page No.: 2

Print Time: Tue Nov 30 13:00:12 1999

Property ID: 1193

Property Name: SAN JUAN 27-4 UNIT | 136 | 44664A

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

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

01/07/80	0	1170.0
01/14/80	0	1171.0
07/07/80	36010	831.0
11/05/81	112702	691.0
11/05/82	166527	670.0
05/18/84	204737	724.0
11/03/86	284668	602.0
09/11/89	382599	603.0
09/18/91	412088	797.0
11/18/91	419946	785.0
07/30/93	468534	574.0

San Juan 27-4 Unit #54M

Mesaverde Offset

Page No.: 1  
Print Time: Tue Nov 30 13:00:12 1999  
Property ID: 1267  
Property Name: SAN JUAN 27-4 UNIT | 54 | 51794A  
Table Name: R:\RESERVES\GDPNOS\TEST.DBF

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

10/16/68	0	2372.0
06/13/69	30546	1405.0
06/24/70	107646	1040.0
05/18/71	159044	921.0
06/13/72	216124	812.0
07/06/77	396984	822.0
05/01/79	461922	821.0
06/01/81	526538	723.0
05/20/85	605428	972.0
04/22/90	726234	983.0
06/15/93	801881	892.0

San Juan 27-4 Unit #54M

Dakota Offset

