		1							· · · · · · · · · · · · · · · · · · ·
DATE IN 7	18/	98	SUSPENSE 7/	28/98	ENGINEER L	50	LOGGED BY	K/	TYPE DHC
· · ·	$\overline{}$	•		7					

#### NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -2040 South Pacheco, Santa Fe, NM 87505



	ΑI	MINISTRATIVE APPLICATION COVERSHEET
TH	HIS COVERSHEET IS M	ANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
Appi	ication Acronyms	
		[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location] [DD-Directional Drilling] [SD-Simultaneous Dedication]
	-	ole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
	_	Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] FX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
	IEOD Ouglis	[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] ed Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
	•	
[1]	TYPE OF AP	PLICATION - Check Those Which Apply for [A]  Location - Spacing Unit - Directional Drilling
		□ NSL □ NSP □ DD □ SD
		One Only for [B] or [C]
	[B]	Commingling - Storage - Measurement  DHC CONSERVATION DIVISION  OLS CONSERVATION DIVISION
		ASHC GCIB GFLC GCLS GCEW
	[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
		□ WFX □ PMX □ SWD □ IPI □ EOR □ PPR
[2]	NOTIFICAT	ION REQUIRED TO: - Check Those Which Apply, or Does Not Apply
[2]	[A]	Working, Royalty or Overriding Royalty Interest Owners
	[]	Township, respany or systeming respany morest symmetry
	[B]	Offset Operators, Leaseholders or Surface Owner
	(C)	Ameliantian is One Which Describe Dublished Level Nation
	[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

#### INFORMATION / DATA SUBMITTED IS COMPLETE - Certification [3]

☐ Waivers are Attached

[E]

[F]

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

Regulations of the Oil	Conservation Division. Furt	ther, I assert that the attache	ed with all applicable Rules and application for administrative
ipproval is accurate and ORRI) is common. <i>I ui</i>	complete to the best of my kn  nderstand that any omission is	nowledge and where applicab of data (including API num	le, verify that all interest (WI, RI bers, pool codes, etc.), pertinent
information and any rec	uired notification is cause to	have the application package	re returned with no action taken
Note: Sta	itement must be completed by an in	ndividual with managerial and/or su	pervisory capacity.
	Say Stad	Luid	
Print or Type Name	Signátúré	Title	Date

#### DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico Energy, Minerals and Natural Resources Department

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

#### **OIL CONSERVATION DIVISION**

APPROVAL PROCESS:

DISTRICT II 811 South First St., Artesia, NM 88210-2835

2040 S. Pacheco Santa Fe, New Mexico 87505-6429 \_X\_ Administrative \_\_\_Hearing EXISTING WELLBORE

DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410-1693

APPLICATION FOR DOWNHOLE COMMINGLING

\_\_YES \_\_x\_NO

Burlington Resources Oil & Gas Company PO Box 4289, Farmington, NM 87499							
Operator Address							
San Juan 27-4 Unit		8-27N-04W	Rio Arriba				
Lease	Well No. Unit L	tr Sec - Twp - Rge	County				
OGRID NO14538 Property Code	e7452 API NO30-03	9-not assignedFederalx_	ng Unit Lease Types: (check 1 or more)				
The following facts are submitted in support of downhole commingling:  1. Pool Name and	Upper Zone	Internediate Zone	Lower Zone Basin Dakota - 71599				
Pool Code	Bialico Mesaverde - 72313		Basili Bakota - 7 1055				
Top and Bottom of     Pay Section (Perforations)	will be supplied upon completion		will be supplied upon completion				
Type of production     (Oil or Gas)	gas		gas				
Method of Production     (Flowing or Artificial Lift)	flowing		flowing				
5. Bottomhole Pressure	(Current) a. 612 psi (see attachment)	a.	a. 921 psi (see attachment)				
Oil Zones - Artificial Lift:							
Estimated Current Gas & Oil - Flowing:	(Original) b. 1340 psi (see attachment)	b.	b. 3101 psi (see attachment)				
Measured Current All Gas Zones: Estimated or Measured Original	b. 1340 psi (see attachment)		, ,				
6. Oil Gravity (API) or Gas BTU Content	BTU 1167		BTU 1054				
7. Producing or Shut-In?	shut in		shut in				
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 water of recent test (within 60 days)	Date: n/a Rates:	Date: 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: %	Oil: Gas: %				
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?  If not, have all working, overriding, and royalty interests been notified by certified mail?  Have all offset operators been given written notice of the proposed downhole commingling?  —x_YesNo							
11. Will cross-flow occur? _x_ 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 reliablex_ YesNo (If No, attach explanation)							
12. Are all produced fluids from all co	mmingled zones compatible with	each other?x_Yes No	0				
13. Will the value of production be de-	creased by commingling?Yo	es _X_ No (If Yes, attach expla	nation)				
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 applicationXYes No							
15. NMOCD Reference Cases for Rule							
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 San Worken ton TITLE: Reservoir Engineer DATE: 06-29-98							

TYPE OR PRINT NAME <u>Sean Woolverton</u> TELEPHONE NO. (505) 326-9700

District I 90 Box 1980, Hobbs, NM 88241-1980

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

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

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

4

State of New Mexico
Energy, Manerals & Natural Resources Department

Revised February 21, 1 Instructions on t Submit to Appropriate District Off State Lease – 4 Cop Fee Lease – 3 Cop

CertIficate

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

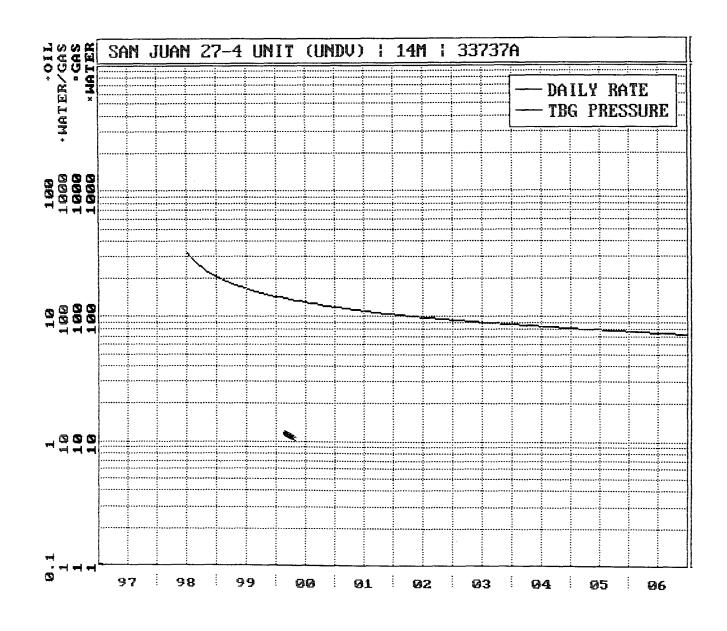
AMENDED REPO

Form C-

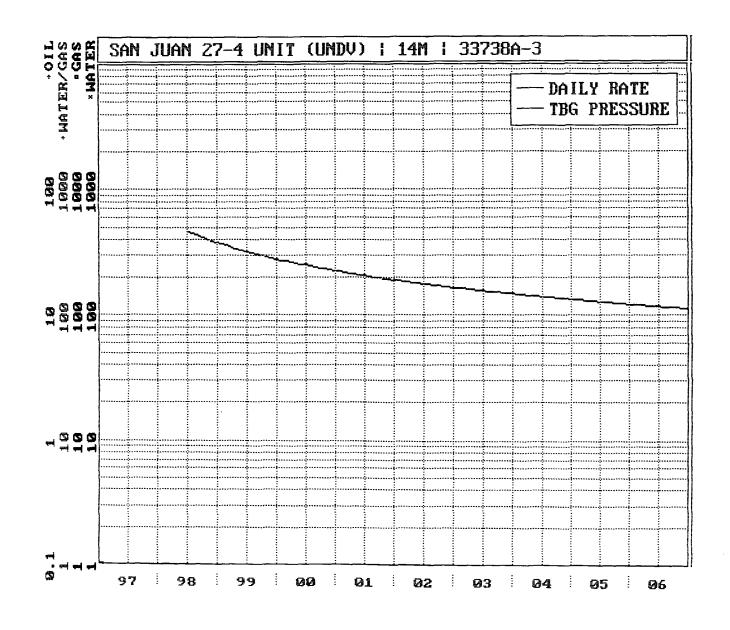
WELL LOCATION AND ACREAGE DEDICATION PLAT \*Pool Code Pool Name 'API Number 30 - 039 -72319/71599 Blanco Mesaverde/Basin Dakota Well Number Property Code Property Name 7452 SAN JUAN 27-4 UNIT 14M \*Elevation 'OGRID No. Operator Name 6714 BURLINGTON RESOURCES OIL & GAS COMPANY 14538 <sup>10</sup> Surface Location Feet from the East/West line UL or lot no. Section TOWNSHID Lot Ido North/South line Feet from the RIÓ WEST 27N 4W 1850 18 1850 NORTH ARRIB 11 Bottom Hole Location If Different From Surface North/South line Feet from the County UL or lot no. Sect ion Range Feet from the East/West line 13 Joint or Infill <sup>14</sup> Consolidation Code <sup>15</sup> Onder No. 12 Dedicated Acres MV-W/321.12. DK-W/321.12 NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATE: OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION " OPERATOR CERTIFICATIO 5287.261 I hereby certify that the information contained herein true and complete to the best of my knowledge and bel 1 1850 NMSF-080659 Signature eggy Bradfield 1850' Printed Name Regulatory Administrato Title 00 00 Date 5280 5280. 18 SURVEYOR CERTIFICATIO I hereby certify that the well location shown on this was plotted from field notes of actual surveys made by or under my supervision, and that the same is true and connect to the best of my belief. 3 FEBRUARY 10, 1998 Date of Survey FEE

5291.22

# San Juan 27-4 Unit #14M Expected Production Curve Blanco Mesaverde



# San Juan 27-4 Unit #14M Expected Production Curve Basin Dakota



#### SJ 27-4 Unit #14M

Bottom Hole Pressures Flowing and Static BHP Cullender and Smith Method Version 1.0 3/13/94

Mesaverde	Dakota		
MV-Current	DK-Current		
GAS GRAVITY  COND. OR MISC. (C/M)  %N2  0.53  %CO2  0.84  %H2S  DIAMETER (IN)  DEPTH (FT)  SURFACE TEMPERATURE (DEG F)  BOTTOMHOLE TEMPERATURE (DEG F)  SURFACE PRESSURE (PSIA)  BOTTOMHOLE PRESSURE (PSIA)  612.1	GAS GRAVITY COND. OR MISC. (C/M) %N2 %N2 %CO2 1.48 %H2S DIAMETER (IN) DEPTH (FT) SURFACE TEMPERATURE (DEG F) BOTTOMHOLE TEMPERATURE (DEG F) FLOWRATE (MCFPD) SURFACE PRESSURE (PSIA)  BOTTOMHOLE PRESSURE (PSIA)  920.8		
MV-Original	DK-Original		
GAS GRAVITY COND. OR MISC. (C/M)  %N2  %CO2  DIAMETER (IN)  DEPTH (FT)  SURFACE TEMPERATURE (DEG F)  BOTTOMHOLE TEMPERATURE (DEG F)  FLOWRATE (MCFPD)  SURFACE PRESSURE (PSIA)  BOTTOMHOLE PRESSURE (PSIA)  1339.8	GAS GRAVITY COND. OR MISC. (C/M)  %N2		

Page No.: 2

Print Time: Fri Jan 16 10:58:57 1998

Property ID: 1631

Property Name: SAN JUAN 27-4 UNIT | 41 | 51788A-1 Table Name: K:\ARIES\RR98PDP\TEST.DBF

DATE	M SIWHP
09/19/68	2569.0 - CVIGLICAL
05/29/69	2359.0
06/09/70	1235.0
05/03/71	1390.0
02/09/72	1484.0
05/16/73	1204.0
06/23/75	967.0
07/06/77	843.0
05/05/80	899.0
05/21/81	931.0
09/22/83	1007.0
06/06/85	941.0
05/19/88	1235.0
05/30/90	924.0
07/28/92	774.0 - Current

San Juan 27-4 # 14M Dalkota Offset

Page No.: 1

Print Time: Fri Jan 16 10:58:57 1998

Property ID: 3801
Property Name: SAN JUAN 27-4 UNIT | 31 | 50483A-1
Table Name: K:\ARIES\RR98PDP\TEST.DBF

07/20/61 1142.0 - Original 08/16/61 1132.0 12/12/62 813.0 04/19/63 801.0 04/29/64 708.0 07/29/65 655.0 08/01/66 688.0 08/04/67 627.0 05/10/68 642.0 10/07/70 579.0 07/22/71 534.0 06/06/72 522.0 06/04/74 462.0 06/25/76 479.0 08/02/78 482.0 06/04/80 442.0 04/30/82 492.0 05/03/84 540.0	Set
10/21/86 524.0 09/04/89 690.0 02/21/91 542.0 04/11/91 554.0 05/03/93 530.0 - CWrent	

### San Juan 27-4 Unit #14M Blanco Mesaverde/ Basin Dakota 27N-4W-18D

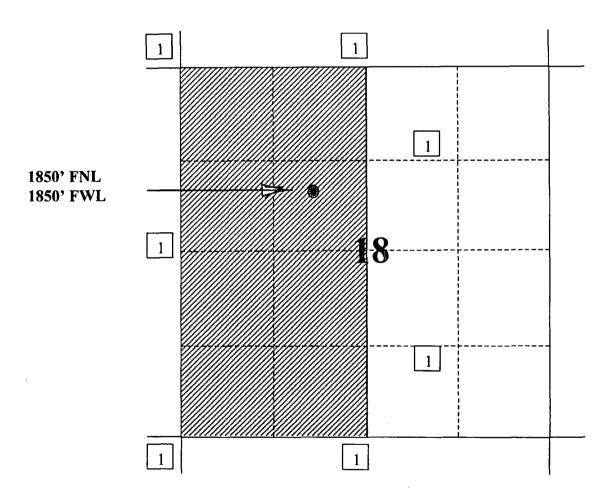
6	\$\$ <sup>5</sup> \$\$ \$\$ P	5 <sup>2</sup>	see 2	19 146 4 70 53 18	3 \$	53 ∰ 2  ∠ M+B	1
7 - ₩ - ₩ - ₩ - ₩	5 25 25 p	124A	125 P P 150A P	27-4 L 9 59	NIT	\$ <sup>28A</sup> 11  \$ <sup>35</sup> \$ <sup>36</sup>	12 \$\infty^2 \rightarrow \frac{2}{80} \rightarrow \frac{2}{P}
*1419		FA PA PAA D-PAA	73 p	99A P 77 W 197 16 D Abd 97	**************************************	22 \$\implies 14 \tag{TD.830}	13
50E 33 EES P-PA	45 95 🔀	20 ************************************	47 23 13 80 P	60 M2 w038 PAP 21 56 H5 PAP C	мз <b>⊕</b> 22 <b>⊕</b> мя	23 (00g P)	24
30 ₩ ₩ <b>8</b> 9 ¤	21 23 22 23	29 83 85	& 20 × 20 × 20 × 20 × 20 × 20 × 20 × 20	疑 <sup>101</sup> 28 <sup>M</sup> ⇔ <sup>57</sup> 図	53A 经32 ● 53 № 经3 27 ● 652A c	26  \$\infty\$ \\ \operatorname{	P
31 26 50 4	\$ * EZ	32 30 (8) 30 (8)	5₁ ⊠	33 33 6 28 69	69 ₩  137  ₩  137  137  137  138  139  P-Abd:96  M	4E 37 P 33A G 35 P 32E E	36 36 82 93°

### **BURLINGTON RESOURCES OIL AND GAS COMPANY**

#### San Juan 27-4 Unit #14M

## OFFSET OPERATOR/OWNER PLAT Mesaverde / Dakota Formations Commingle Well

Township 27 North, Range 4 West



1) Burlington Resources