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	JAN 3 1 1997		
January 30, 1997	Contract of the second of the		
SENT FEDERAL EXPRESS	S CH CONTERVATION BEAGINN		
Mr. William LeMay			

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

Re: San Juan 29-7 Unit #129M 1850'FSL, 1190'FEL Section 16, T-29-N, R-7-W, Rio Arriba County, NM API #30-039-25592

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 well is a new Mesa Verde/Dakota well that is being drilled and completed in 1997.

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 not available new drill well;
- 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.

Notification of Mesa Verde and Dakota interest owners is covered under Reference Order #R-10697 issued November 8, 1996 attached.

We will consult with the Supervisor of the Aztec District Office of the New Mexico Oil Conservation Division to establish an allocation formula.

Please let me know if you require additional data.

Sincerely, manied

Peggy Bradfield Regulatory/Compliance Administrator

encs.

DISTRICT | 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

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# 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** :

\_\_X Administrative Hearing

**EXISTING WELLBORE** 

**APPLICATION FOR DOWNHOLE COMMINGLING** 

\_\_\_YES \_\_X NO

<sup>Operator</sup> Burlington Resources Oil & Gas Company		Address PO Box 4289, Farmingt o	on, NM 87499
Lease San Juan 29-7 Unit	Well No. 129M	Unit Ltr Sec - Twp - Rge   16-29-7	County <b>Rio Arriba</b> Spacing Unit Lease Types: (check 1 or more)

\_\_ Property Code \_\_\_7465\_\_\_\_ API\_NO. \_\_\_30-039-25592\_\_\_\_ Federal \_\_X\_ , State \_\_x\_, (and/or) Fee OGRID NO. \_\_014538\_\_\_

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	72319 - Blanco Mesa Verde		71599 - Basin Dakota
2. Top and Bottom of Pay Section (Perforations)	3778-5248 est.		7208-7488 est
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	(Current) a.512 psi (see attachment)	a.	a. 784 psi (see attachment)
Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Original) b. 1289 psi (see attachment)	ь.	b. 3368 psi (see attachment)
6. Oil Gravity ( <sup>°</sup> API) or Gas BTU Content	BTU 1198		BTU 1000
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 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 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: 6as: % 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?	Yes X No
If not, have all working, overriding, and royalty interests been notified by certified mail?	Yes X No
Have all offset operators been given written notice of the proposed downhole commingling?	YesX_No YesX_No X_YesNo

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 reliable. \_\_X\_ Yes \_\_\_\_No (If No, attach explanation) 11. Will cross-flow occur?

12. Are all produced fluids from all commingled zones compatible with each other? \_X\_\_ Yes \_\_\_ No

13. Will the value of production be decreased by commingling? \_\_\_ Yes \_X\_\_ 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. \_X\_Yes \_\_\_ No

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). \_\_\_Reference R-10697 attached\_

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 A S G . Sight	TITLE _Production Engineer DATE1/29/97
TYPE OR PRINT NAMEJames A. Smith	TELEPHONE NO. ( _505 ) _327-9700

District I PO Box 1988, Hubbs, NM 88241-1980 District II PO Drawer DD, Artenia, NM 88211-0719 District III 1008 Rio Brazas Rd., Aztec, NM 87410 District IV PO Box 2088, Santa Fc, NM 87504-2088

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#### State of New Mexico Energy, Minersis & Natural Reserves Department

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OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Form C-102 Revised February 21, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

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AMENDED REPORT

		WE	ELL LO	CATION	I AND ACR	EAGE DEDI	CATIO	N PL	AT		
· /	API Numbe	r		<sup>1</sup> Poel Code	•		ډ	Pool Na	æ		
30-03			7231	<u>9/7159</u>		<u>nco llesaver</u>	de/Ba	sin	Dakota		
• Property 0	1			San	'Property Juan 29-7					•	Well Number 129M
' <b>ocrid</b> 14538	No.	BUR	LINGTO	N RESO	'Operator URCES OIL	AND GAS C	OMPAN	Y			6266
					<sup>10</sup> Surface	Location			······································		<u> </u>
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						1850'	9 8 39		88	E0 10 157 157	

# BURLINGTON RESOURCES OIL AND GAS COMPANY

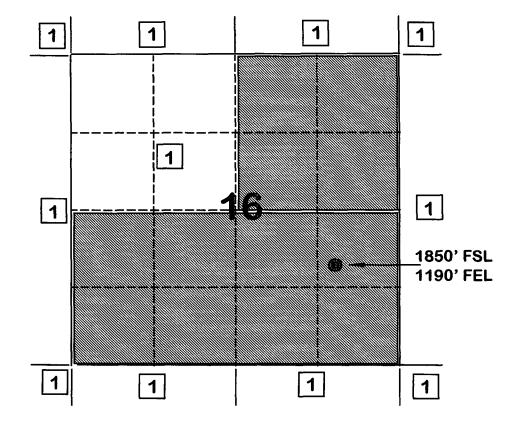
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## San Juan 29-7 Unit #129M OFFSET OPERATOR \ OWNER PLAT

# Mesaverde (E/2) /Dakota (S/2) Formations Commingle Well

Township 29 North, Range 7 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

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GAS GRAVITY	0.703
COND. OR MISC. (C/M)	С
%N2	0.24
%CO2	0.9
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	5749
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	443
BOTTOMHOLE PRESSURE (PSIA)	512.3

SAN JUAN 29-7 #91 MESAVERDE - (CURRENT)

BHPMVORG.XLS

#### FLOWING AND STATIC BHP CULLENDER AND SMITH METHOD VERSION 1.0 3/13/94

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GAS GRAVITY	0.703
COND. OR MISC. (C/M)	C
%N2	0.24
%CO2	0.9
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	5749
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1095
BOTTOMHOLE PRESSURE (PSIA)	1289.1

SAN JUAN 29-7 #91 MESAVERDE - (ORIGINAL )

Print Proper Property Table	e No.: 11 Time: Thu Oct ty ID: 4493 Name: SAN JU Name: K:\ARI	AN 29-7 U ES\RR97PD	NIT   91	: : 38	90 CF: 93	SIP:
	CUM_GAS Mcf					
10/09/52 10/06/53 06/16/54 08/24/55 10/15/56 10/15/56 10/16/57 03/30/58 03/29/59 09/06/60 03/28/61 03/13/62 02/12/63 07/16/64 02/25/65 02/28/66 03/03/67 03/05/68 05/27/69 08/18/70 03/30/71 06/12/72 07/09/73 08/21/74 04/20/76 05/16/78 07/18/80 05/19/82 09/19/84 10/23/89 02/20/91 07/10/91 06/01/93	36000 77000 154000 225000 289000 320000 385000 467000 501000 550000 585000 654000 686000 743000 803000 872000 953771 1121786 1169585 1276918 1364557 1460887 1609048 1798246 1962922 2073183 2151008 2270862 2452441	946.0 744.0 915.0 938.0 677.0 894.0 804.0 938.0 717.0 768.0 900.0 878.0 830.0 844.0 822.0 783.0 771.0 653.0 772.0 749.0 683.0 592.0 744.0 518.0 494.0 518.0 512.0 518.0 512.0 512.0 552.0	- Origin	Mesa	verde Grent	Well

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SAN JUAN 29-7 #129M

CURRENT DAKOTA PRESSURE (BASED ON CURRENT AVERAGE OF OFFSET WELLS)

#### FLOWING AND STATIC BHP CULLENDER AND SMITH METHOD

VERSION 1.0 3/13/94

. . . .

GAS GRAVITY	0.694
COND. OR MISC. (C/M)	С
%N2	0.54
%CO2	1.49
%H2S	0
DIAMETER (IN)	1.5
DEPTH (FT)	7555
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	652
BOTTOMHOLE PRESSURE (PSIA)	784.2

OFFSET DAKOTA WELLS - CURRENT PRESSURE

SAN JUAN 29-7 UNIT #129 DAKOTA-CURRENT	690
SAN JUAN 29-7 UNIT #130 DAKOTA-CURRENT	817
SAN JUAN 29-7 UNIT #49A DAKOTA-CURRENT	801
SAN JUAN 29-7 UNIT #45A DAKOTA-CURRENT	768
SAN JUAN 29-7 UNIT #44A DAKOTA-CURRENT	435
SAN JUAN 29-7 UNIT #65A DAKOTA-CURRENT	400
AVERAGE SURFACE PRESSURE	652

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NOTE : SEE OFFSET WELL PLAT

FLOWING AND STATIC BHP CULLENDER AND SMITH METHOD VERSION 1.0 3/13/94

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GAS GRAVITY	0.694
COND. OR MISC. (C/M)	<u> </u>
%N2	0.54
%CO2	1.49
%H2S	0
DIAMETER (IN)	1.5
DEPTH (FT)	7555
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	2743
BOTTOMHOLE PRESSURE (PSIA)	3368.2

SAN JUAN 29-7 UNIT #129 DAKOTA-ORIGINAL

Page No.: 10 Print Time: Thu Oct 03 11:41:48 1996 Property ID: 2097 Property Name: SAN JUAN 29-7 UNIT | 129 | : : 398 CF: 92 SIP: Table Name: K:\ARIES\RR97PDP\TEST.DBF

--DATE-- ---CUM\_GAS-- M\_SIWHP 0 2743.0 < original 09/20/85

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12/11/85	51031	1566.0	
09/05/86	97694	1250.0	
06/02/87	123427	1321.0	
08/03/88	230968	796.0	
04/04/90	335273	784.0	
04/22/90	335273	765.0	
04/29/92	429397	702.0	
05/28/92	435433	690.0	Corrent
			- · · · · · ·

Dakota Parent well

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Page No.: 1 Print Time: Mon Nov 04 13:31:10 1996 Property ID: 2098 Property Name: SAN JUAN 29-7 UNIT | 130 | 1517-1 Table Name: K:\ARIES\RR97PDP\TEST.DBF

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--DATE-- ---CUM GAS-- M SIWHP Mcf.....Psi 09/13/85 0 2212.0 12/09/85 31267 1512.0 10/03/86 58835 1279.0 879.0 832.0 743.0 817.0 ← wrient Of SJ 29.7 # 129M 10/11/87 108144 879.0 832.0 09/04/88 140560 08/07/90 205466 05/28/92 243176

Page No.: 1 Print Time: Mon Nov 04 13:32:23 1996 Property ID: 2110 Property Name: SAN JUAN 29-7 UNIT | 44A |<sup>0</sup> 69346-1 Table Name: K:\ARIES\RR97PDP\TEST.DBF

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		M_SIWHP		– – DATE <b>– –</b>
Nela		Psi	Mcf	**************************************
Dakota		2542.0	0	08/19/80
		2543.0	0	09/25/80
29-7 H		1574.0	47561	01/19/81
		921.0	123925	08/12/81
		743.0	193190	05/13/82
		812.0	289566	11/21/83
		547.0	399445	06/05/85
		902.0	568312	10/05/88
		562.0	636068	04/22/90
		522.0	731174	05/28/92
	< Wrrent	435.0	786162	04/16/93

Offset

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Izam

Page No.: 1 Print Time: Mon Nov 04 13:32:44 1996 Property ID: 2111 Property Name: SAN JUAN 29-7 UNIT | 45A | 1816-1 Table Name: K:\ARIES\RR97PDP\TEST.DBF

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	CUM_GAS Mcf		Dakota Offsel	
02/19/86	0	1867.0	+ O.	
11/28/86	31741	1556.0	29-7 #12am	
10/11/87	237652	1079.0	29-1	
09/04/88	272065	1150.0		
04/08/90	386863	1033.0		
04/16/93	581933	787.0		
05/31/94	657937	768.04	- Wrrent	

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Page No.: 1 Print Time: Mon Nor Property ID: 2113 Property Name: SAN JU. Table Name: K:\ARI		69348-1 Dake	of offsel
DATECUM_GAS Mcf	M_SIWHP HIPsi		of H IZGM
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08/26/80 0	2014.0	29-1	Ħ 129m
09/02/80 0		~	
01/19/81 51021			
08/12/81 189766	1320.0		
05/13/82 341305	1013.0		
11/21/83 516529	1020.0		
06/05/85 682115	874.0		
11/21/85 740935	846.0		
09/04/88 977979	797.0		
05/09/90 1084091	815.0		
05/28/92 1259966	853.0		
04/16/93 1321171	525.0		
05/31/94 1363337	801.0 < Curren	×	

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Page No.: 1 Print Time: Mon Nov 04 13:33:56 1996 Property ID: 2116 Property Name: SAN JUAN 29-7 UNIT | 65A | 69351-1 Table Name: K:\ARIES\RR97PDP\TEST.DBF

Dakota	offsed
9¢	
29-7 #1	zam

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DATE	CUM_GAS Mcf	M_SIWHP Psi		
08/26/80	0	1812.0		
09/02/80	0	1813.0		
12/04/80	9656	1722.0		
08/12/81	77637	557.0		
02/10/83	128426	646.0		
02/13/84	151286	580.0		
10/10/85	206269	673.0		
10/10/88	258136	462.0		
04/16/93	326247	400.0	$\leftarrow$	wrrent

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85A 93A (NMPC) моі <sup>82</sup> ^88 ₩ & ⊛ ⊕<sup>47</sup> MOL NM 326 79A \*® NM 326 (TENNECO) ⊕<sup>83</sup> (024485-T) NM 8952, 22 (TEXACO) ⊗46 NM 4801 1 M 327, 22,30 6 5 938 💬 Nov 401 22 NM 327, 22,30 ж ® \* \* 46A 0 47A 84A 83A ₽ 82A Ð \$ Ô ֎ ٨ <u>S.J.29</u>-7 Unit S.J.29-7 Unil S.J.29-7 UN SJ29-7 Uni SJ.29-7 UN S.J.29-7 Uhit (TENNECO) (024410-T) NM 8909 (NWPL) NM 9328 0122 NM 327 22.30 37A NM 9328.0122 NM 874 A-B NM 9328.01.22 NM 401, 22 1BOLACK 1/2) 140 35 🛞 ₩, 48 w0'92 83 Ô 80A Ť 63 89 38 |⊕<sup>89∧</sup> ⊕<sup>52</sup> INMP) ¶ ₿ NM 326 (020418-T-1,T-2 INM 8979 A & B 9328.0122 10 NM 401. 22 7 8 NM. 328, 22.30 \_\_\_\_\_\_ ≫\_\_\_\_\_\_\_ NW 338 33 70 (NWPC) 38A \$3 48A 🛞 ⊗ ≋ ⊜52A <del>م</del> 64A 89 🛞 100 × <sup>41</sup> 634 ₿ ÷ SJ29-7 Unit (TENNECO) S.J.29-7 Unit SJ29-7 Uhi S.J.29-7 SJ 29-7 Unit HBOLACKI/2 ©2048-T-IT-2 ∰<sup>33</sup> NM 9328, 0122 NOF 8740 NM 9328,0122 (020407-T (020428-T NM 9328, 9122 ⁵ ⊛ X ⊗<sup>62</sup> \$ 54A 102A 🛞 29A 69 81 (C) *7*6∧ 86∧ ⊠ NM 8979 MPO NWPO (NPC) М 17 18 16 15 (MPC) (NAPC) 13 IMPO NM 401 22 102R \* <sup>29</sup> 33A ⊕ X € • • • • • 76R 62A Ô 56A . 🛞 NMPCI 76 76 ۲ (NMPC) NM 401. 22 . \* IZAM [D.6193] S.J.29-7 Unit S.J.29-7 Unit S.J.29-7 UNI <u>SJ29-7 Unit</u> NM 328, 22,30 S.J.29-7 Unit (NWPC) S.J.29-7 Uh NM 328. 22,30 (TENNECO) NM 9327.01.22 (MPC) 73A MOL NM 9327,01,22 (NMPC) 49 ∰ °® 71 Ð 27 87 87 6 ™⊛ 94A 50 (NAPC) Ô - 23 NMPCI MOJ.(F) 20 NM 893 19 21 24 8 ×. NM 8912 65ANM 9327,0122 NM 9327 0122 NM 9327.0122 NM 9327 0122 .」 94 ∰ X 66 ⊕<sup>67</sup> 73 🛞 Ť 5.*J.29-7* MM 360 78<sup>4</sup> S.J.29-7 Unit S.J.29-7 Linit SJ.29-7 Unit S.J.29-7 Unit S.J.29-7 Uhit (TENNECO) NM 9327.01.22 40 40 40E NM 9327 0122 (TENNECO) /₩ . 78A () () () NM 93290122 (TENNECO) (NMPC) 'n⊛ MOL 12**4**M 105 53 🛞 ₩ M \*⊛ 42 88 83 M 9329 0122 NM 86# 30 28 29 26 25 124 4∎ ₩ 2 NM 9329,01,22 59 128 (TENNECO) 139 109M 40A Been and a second \_ ® ⊠ ™ 圀 × <sup>78</sup> 🛞 🕅 -123 (TENN) м NM 9329 . ج S.J.29-7 Unit NM 9330 S.J.29-7 Uni SJ29-7 Uhit SJ29-7 Uhit S.J.29-7 Uhi NM 304 (TENNECO) NM 4 NM 891 r∈ Ø NM 9329.0122 NM 9329.0122 (TENNECO) NM 307 ° ™ ₩ 105 ب کلا ہے ъM 17 60 106M πE Ĩ B ₩ B ₩. Ô \$5 ∰ 30 30E r Ø 32A ⊠ N GIΛ 70A ⊠ M Ř Ø × m 31 32 33 35 34 36 NM 10324 ,22 м ³₩ 図 ₿\$ ™ ™ 32E 60A 図 ₩6 823 97 \_\_\_\_\_ ⊛ R 翢 . © ‴ ₩ 70 ™E <sup>70</sup> 30A 55A " (\* 61 🛞 \_\_\_\_\_ ⊛ ⊠ × 0 S.J.29-7 Unit 5.J29-7 UN S.J.29-7 Uhit S.J.29-7 Unit SJ29-7 Unit S.J.29-7 Unit SAN JUAN 29-7 UNIT

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X- Dakota Offset wells used for Current AVG PSI Ø- MV Offset

### STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

### IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

### CASE NO. 11629 ORDER NO. R-10697

APPLICATION OF BURLINGTON RESOURCES OIL & GAS COMPANY FOR THE ESTABLISHMENT OF A DOWNHOLE COMMINGLING "REFERENCE CASE" FOR ITS SAN JUAN 29-7 UNIT PURSUANT TO DIVISION RULE 303.E. AND THE ADOPTION OF SPECIAL ADMINISTRATIVE RULES THEREFOR, SAN JUAN COUNTY, NEW MEXICO.

#### **ORDER OF THE DIVISION**

#### **BY THE DIVISION:**

.

This cause came on for hearing at 8:15 a.m. on October 17, and November 7, 1996, at Santa Fe, New Mexico, before Examiners David R. Catanach and Michael E. Stogner, respectively.

NOW, on this 8th day of November, 1996, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Burlington Resources Oil & Gas Company (Burlington), pursuant to the provisions of Division Rule 303.E., seeks to establish a downhole commingling "reference case" to provide exceptions for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas and (d) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 29-7 Unit, San Juan County, New Mexico.

(3) Division Rule No. 303.E., amended by Order No. R-10470-A, currently states:

"If sufficient data exists on a lease, pool, formation, geographic area, etc., so as to render it unnecessary to repeatedly provide such data on Form C-107-A, an operator may except any of the various criteria required under Paragraph 303.D. of this rule by establishing a "reference case". The Division, upon its own motion, or by application from an operator, may establish "reference cases" either administratively or by hearing. Upon Division approval of such "reference cases" for specific criteria, subsequent applications to downhole commingle (Form C-107-A) will be required only to cite the Division order number which established such exceptions and shall not be required to submit data for those criteria."

(4) The applicant is the current operator of the San Juan 29-7 Unit which encompasses some 22,500 acres in Township 29 North, Range 7 West, NMPM, San Juan County, New Mexico.

(5) Within the San Juan 29-7 Unit, the applicant currently operates fifty-five (55) Basin-Dakota Gas Pool wells, one hundred thirty-one (131) Blanco-Mesaverde Gas Pool wells, thirteen (13) Blanco-Pictured Cliffs and South Blanco-Pictured Cliffs Gas Pool wells, and forty-nine (49) Basin-Fruitland Coal Gas Pool wells.

- (6) According to its evidence and testimony, Burlington seeks to:
  - a) establish a "reference case" for marginal economic criteria in the Dakota and Pictured Cliffs formations whereby these formations and/or pools may be identified as "marginal" on Form C-107-A's subsequently filed for wells within the San Juan 29-7 Unit. The applicant further proposes that the data provided in the immediate case serve as supplemental data or confirmation that these formations and/or pools should be classified as "marginal";
  - b) establish a "reference case" for pressure criteria in the Dakota and Pictured Cliffs formations whereby the Division may utilize data provided in the immediate case to verify the pressure data provided on Form C-107-A's subsequently filed for wells within the San Juan 29-7 Unit;
  - c) establish a "reference case" whereby the Division utilizes the data presented in the immediate case to endorse or approve certain methods of allocating production whereby the applicant need not submit additional data or justification when proposing a certain method of allocating production on Form C-107-A's subsequently filed for wells within the San Juan 29-7 Unit; and.

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> d) establish a "reference case" or an administrative procedure for authorizing the downhole commingling of existing or future drilled wells within the San Juan 29-7 Unit without additional notice to each affected interest owner as required by Division Rule No. 303.D.

(7) In support of its request to except marginal economic criteria, the applicant presented geologic and engineering evidence and testimony which indicates that within the San Juan 29-7 Unit:

- a) the structure and thickness of the Dakota and Pictured Cliffs formations are very consistent;
- b) the average recoverable Dakota and Pictured Cliffs gas reserves underlying an undeveloped drill block are approximately 245 MMCFG and 76 MMCFG, respectively;
- c) the average initial producing rate for a newly drilled or recompleted Dakota and Pictured Cliffs gas well is approximately 218 MCFGD and 238 MCFGD, respectively; and,
- d) the estimated ultimate gas recoveries and initial producing rates from the Dakota and Pictured Cliffs formations are insufficient to justify drilling stand alone wells and/or dually completed wells to recover such gas reserves.

(8) The evidence and testimony presented by the applicant indicates that the Dakota and Pictured Cliffs formations within the San Juan 29-7 Unit should be properly classified as "marginal".

(9) In support of its request to except pressure criteria within the Dakota and Pictured Cliffs formations within the San Juan 29-7 Unit, the applicant presented engineering evidence and testimony which indicates that:

- a) the average shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations at the time of initial development was approximately 3,209 psi and 1,148 psi, respectively; and,
- b) the average current shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations is approximately 952 psi and 655 psi, respectively.

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(10) There is sufficient pressure data available within the San Juan 29-7 Unit so as to except pressure criteria as proposed by the applicant.

(11) The applicant testified that various allocation methods will be utilized for downhole commingled wells within the San Juan 29-7 Unit depending on the circumstances. Some of the methods and circumstances are described as follows:

- a) the subtraction method will likely be utilized in those instances involving the Basin-Fruitland Coal Gas Pool and in those instances where a zone with a well established decline rate is commingled with a newly completed zone;
- b) a fixed allocation formula will be utilized in those instances where production history for both zones is available, or in those instances where newly completed zones are tested and stabilized flow rates obtained.

(12) The allocation methods proposed by the applicant are routinely utilized by industry and approved by the Division and therefore, the proposal to except allocation formulas should be approved.

(13) In support of its request to establish a "reference case" or administrative procedure for providing notice within the San Juan 29-7 Unit the applicant presented evidence and testimony which indicates that:

- a) the interest ownership between two zones within a given wellbore in the San Juan 29-7 Unit is generally not common;
- b) pursuant to Division Rule No. 303.D., applicant is currently required to notify all interest owners within the San Juan 29-7 Unit every time a Form C-107-A is submitted to the Division. There are a considerable number of such interest owners within the unit;
- c) providing notice to each interest owner within the San Juan 29-7 Unit of subsequent downhole comminglings is unnecessary and is an excessive burden on the applicant;
- d) the downhole commingling of wells within the San Juan 29-7 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 29-7 Unit should not violate the correlative rights of any interest owner;

e) no interest owner appeared at the hearing in opposition to the establishment of a "reference case" or administrative procedure for notice.

(14) An administrative procedure should be established within the San Juan 29-7 Unit for obtaining approval for subsequent downhole commingled wells without notice to Unit interest owners, provided however that, all other provisions contained within Division Rule No. 303.C. are complied with.

(15) Approval of the proposed "reference cases" for marginal economic criteria, pressure criteria, allocation formulas and notice will lessen the burden on the applicant insofar as providing the data required pursuant to Division Rule No. 303.D. and Form C-107-A, will provide the applicant a streamlined method for obtaining downhole commingling approvals within the San Juan 29-7 Unit, and will not violate correlative rights.

#### **IT IS THEREFORE ORDERED THAT:**

(1) The application of Burlington Resources Oil & Gas Company to establish a "reference case" for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas and (d) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 29-7 Unit, San Juan County, New Mexico, is hereby approved.

(2) Upon filing of Division Form No. C-107-A's for wells subsequently downhole commingled within the San Juan 29-7 Unit Area, the applicant shall not be required to submit supporting data to justify the classification of the Pictured Cliffs and Dakota formations as "marginal", supporting data to verify the Pictured Cliffs and Dakota pressure information provided, and support or justification for utilizing a given method or formula for allocation of production, provided however, in the event any of the data described above appearing on Form C-107-A appears to be beyond the data range provided in this case, the Division may require the submittal of additional supporting data.

(3) In order to obtain Division authorization to downhole commingle wells within the San Juan 29-7 Unit, the applicant shall file a Form C-107-A with the Santa Fe and Aztec Offices of the Division. Such application shall contain all the information required under Rule No. 303.C. of the Division Rules and Regulations, provided however that the applicant shall not be required to provide notice to all interest owners within the San Juan 29-7 Unit of such proposed commingling.

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(4) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION 50 WILLIAM J. LEMAY

Director

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