AHC 2/20/97

BURLINGTON RESOURCES

SAN JUAN DIVISION

January 29, 1997

SENT FEDERAL EXPRESS

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

Re:

San Juan 28-5 Unit #58M

1845'FSL, 1060'FEL Section 30, T-28-N, R-5-W, Rio Arriba County, NM

CONTERVATION DICK

API #30-039-25597

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;
- C-102 plat for each zone showing its spacing unit and acreage dedication; 2.
- Production curve not available new drill well; 3.
- 4. Notification list of offset operators - Burlington is the offset operator;
- Shut in wellhead pressure and calculated down hole pressure; 5.
- 6. Nine-section plats for the Mesa Verde and Dakota.

Notification of Mesa Verde and Dakota interest owners is covered under Reference Order #R-10695 issued November 12, 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.

Peggy Bradfield

Regulatory/Compliance Administrator

encs.

DISTRICT I

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

<u>DISTRICT II</u>

. . .

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

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

Burlington Resources Oil & Gas Company

State of New Mexico Energy, Minerals and Natural Resources Department **OIL CONSERVATION DIVISION**

Form C-107-New 3-12-96 **APPROVAL PROCESS:**

X Administrative ___Hearing

EXISTING WELLBOR

2040 S. Pacheco Santa Fe, New Mexico 87505-6429 APPLICATION FOR DOWNHOLE COMMINGLING

__ YES __ NO

PO Box 4289, Farmington, NM 87499

Operator	Add	ress	
San Juan 28-5 Unit	58M 1 3	0-28-5	Rio Arriba
Lease	Well No. Unit	Ltr Sec - Twp - Rge	County
OGRID NO14538 Property C	-d- 7460 AD NO 20 0	20 25507 Fodoval v Stato	Spacing Unit Lease Types: (check 1 or more)
OGRID NO14538 Property Co	oge _/460 API NO. 30-0	39-25597_rederal _x, State	, (and/or) Fee
The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
Pool Name and Pool Code	Blanco Mesaverde - 72319		Basin Dakota - 71599
Top and Bottom of Pay Section (Perforations)	4934-5910' est.		7478-7830' est.
3. Type of production (Oil or Gas)	gas		gas
Method of Production (Flowing or Artificial Lift)	flowing		flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current	(Current) a. 591 psi (see attachment)	a.	a. 1049 psi (see attachment)
Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Original) b. 1246 psi (see attachment)	b.	b. 3177 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1192		BTU 1073
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: NA Rates:	Date: Rates:	Date: NA Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	Date: NA	Date:	Date: NA
* If Producing, give data and oil/gas/water water of recent test (within 60 days)	Rates:	Rates:	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: % will be supplied upon completion
9. If allocation formula is based un attachments with supporting da 10. Are all working, overriding, and If not, have all working, overriding have all offset operators been of the second of the seco	royalty interests identical in all ng, and royalty interests been regiven written notice of the proposes. No If yes, are fluids cowill the allocation formula be released by commingling? Individual of this application of this application of this application of the source of the sou	commingled zones? notified by certified mail? used downhole commingling? mpatible, will the formations not iablex_ YesNo (If No, a vith each other?x_ Yes! Yes _X_ No(If Yes, attach expetther the Commissioner of PublicationX_ Yes No	Yesx_NoYesx_NoYesx_No _x_YesNo be damaged, will any cross-flowed ttach explanation) No blanation) Lands or the United States Bureau
I hereby certify that the inform	ation above is true and co	mplete to the best of my know	rledge and belief.
SIGNATURE . (A.	TITLE_Prod	duction EngineerDAT	E1/28/97
TYPE OR PRINT NAME _Jame	s A. Smith TE	ELEPHONE NO. (505) 3	26-9700

District i PO Box 1980, Hubbs, NM 88241-1980 District ii PO Drawer OD, Artesia, NM 88211-0719 District iii 1000 Rio Brazza Rd., Aztec, NM 87410

PO Baz 2088, Santa Fe, NM 87504-2088

District IV

State of New Mexico
Energy, Minerals & Natural Resources Department

DIVISION Submit to

Form C-101 Revised February 21, 199-Instructions on back Submit to Appropriate District Office

State Lease - 4 Copie: Fee Lease - 3 Copie:

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

AMENDED REPORT

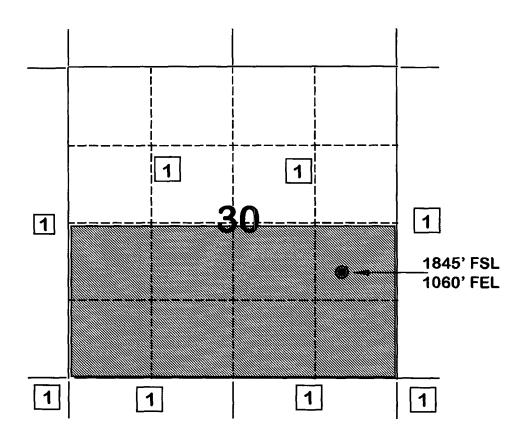
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BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 28-5 Unit #58M OFFSET OPERATOR \ OWNER PLAT

Mesaverde/Dakota Formations Commingle Well

Township 28 North, Range 5 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

GAS GRAVITY	0.699
COND. OR MISC. (C/M)	С
%N2	0.25
%CO2	0.89
%H2S	0
DIAMETER (IN)	2
DEPTH (FT)	5645
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	512
BOTTOMHOLE PRESSURE (PSIA)	591.0

SAN JUAN 28-5 #20 MESAVERDE - (CURRENT)

FLOWING AND STATIC BHP CULLENDER AND SMITH METHOD

VERSION 1.0 3/13/94

GAS GRAVITY	0.7
COND. OR MISC. (C/M)	С
%N2	0.26
%CO2	0.72
%H2S	0
DIAMETER (IN)	2.5
DEPTH (FT)	4996
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1083
BOTTOMHOLE PRESSURE (PSIA)	1246.4

SAN JUAN 28-5 UNIT #20 MESAVERDE - ORIGINAL

Page No.: 1
Print Time: Thu Oct 03 11:37:23 1996
Property ID: 3928
Property Name: SAN JUAN 28-5 UNIT | 20 | : : 1940 CF: 93 SIP: Table Name: K:\ARIES\RR97PDP\TEST.DBF

	CUM_GAS Mcf						
05/09/57 05/23/57 07/30/57 11/06/58 06/14/59 06/14/60 06/13/61 09/24/62 05/09/63 05/26/64 05/03/65 06/07/66 05/25/67 11/04/68 08/18/69 04/15/70 06/22/71 06/15/76 01/03/78 11/03/78 06/04/80 04/20/83 05/01/84 10/20/86 05/11/89 06/17/91 08/02/91	0 0 43000 286000 409000 548000 663000 765000 839000 939000 1042000 1165000 1271000 1413000 1498706 1556163 1677267 1770974 1885643 1982177 2122999 2171800 2267412 2319200 2420595 2539342 2572221 2628022 2717274 2808003 2809565		e original	Mesa verde 28-5	Parent # 58m	Well	of
04/01/93	2855308	512.0	~ Willent				

SAN JUAN 28-5 #58M

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)	C
%N2	0.29
%CO2	1.21
%H2S	0
DIAMETER (IN)	1.5
DEPTH (FT)	7557
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	
SURFACE PRESSURE (PSIA)	867
BOTTOMHOLE PRESSURE (PSIA)	1049.3

OFFSET DAKOTA WELLS - CURRENT PRESSURE

AVERAGE SURFACE PRESSURE	867
SAN JUAN 28-5 UNIT #66 DAKOTA-CURRENT	732
SAN JUAN 28-5 UNIT #62 DAKOTA-CURRENT	960
SAN JUAN 28-5 UNIT #60 DAKOTA-CURRENT	782
SAN JUAN 28-5 UNIT #59M DAKOTA-CURRENT	638
SAN JUAN 28-5 UNIT #59 DAKOTA-CURRENT	1001
SAN JUAN 28-5 UNIT #54 DAKOTA-CURRENT	1083
SAN JUAN 28-5 UNIT #42 DAKOTA-CURRENT	896
SAN JUAN 28-5 UNIT #58 DAKOTA-CURRENT	844

NOTE: SEE OFFSET WELL PLAT

FLOWING AND STATIC BHP CULLENDER AND SMITH METHOD

VERSION 1.0 3/13/94

GAS GRAVITY	0.694
COND. OR MISC. (C/M)	C
%N2	0.29
%CO2	1.21
%H2S	
DIAMETER (IN)	1.5
DEPTH (FT)	7557
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	
SURFACE PRESSURE (PSIA)	2581
BOTTOMHOLE PRESSURE (PSIA)	3177.3

SAN JUAN 28-5 UNIT #58 DAKOTA-ORIGINAL

Page No.: 2
Print Time: Thu Oct 03 11:41:41 1996
Property ID: 1775
Property Name: SAN JUAN 28-5 UNIT | 58/| : : 1388 CF: 92 SIP: Table Name: K:\ARIES\RR97PDP\TEST.DBF

	CUM_GAS Mcf	M SIWHP		
10/25/62	0	2550.0		
11/06/62	0	2581.0≪	original	
03/21/63	53000	1723.0	·	
05/26/64	175000	1279.0	2	- (
05/03/65	282000	1168.0	Vote Varent Well	0+
10/05/66	455000	899.0	Dakota Parent Well 28-5 #58m	
05/25/67	521000	944.0	28-5 #59M	
05/27/68	608000	990.0	00 9 4 30.	
08/18/69	720307	816.0		
07/28/70	802439	836.0		
06/22/71	888042	783.0		
06/07/72	960014	902.0		
07/23/73	1032856	876.0		
09/04/75	1186638	698.0		
06/01/77	1296057	668.0		
06/07/79	1412699	725.0		
05/01/81	1517182	660.0		
09/19/83	1597909	834.0		
11/18/85	1675254	800.0		
10/13/88	1760065	1050.0		
04/24/90	1832892	802.0		
03/29/92	1894396	844.0<	· Carcart	

Page No.: 1

Print Time: Mon Nov 04 15:32:23 1996

Property ID: 1767

Property Name: SAN JUAN 28-5 UNIT | 42 | 53420A-1
Table Name: K:\ARIES\RR97PDP\TEST.DBF

	CUM_GAS Mcf	
06/14/60 08/04/60	0	2669.0 2668.0
12/06/60	137000	1785.0
06/13/61	343000	1412.0
09/09/62	566000	1542.0
05/06/63	655000	1537.0
04/22/64	767000	1502.0
10/18/65	1152000	1143.0
10/05/66	1337000	975.0
05/25/67 05/27/68	1454000 1608000	1074.0
06/27/69	1771000	657.0
07/28/70	1855086	1206.0
06/21/71	1966278	831.0
06/07/72	2069532	886.0
08/29/73	2177209	904.0
09/04/75	2349005	862.0
06/01/77	2485098	808.0
06/06/79 05/01/81 11/04/81	2620949 2712834	882.0 919.0
02/17/84 05/17/85	2752286 2834723 2890529	884.0 1065.0 1030.0
10/13/88	3017484	1152.0
04/24/90	3102388	954.0
03/29/92	3147068	896.0

Page No.: 2
Print Time: Mon Nov 04 15:32:23 1996

Property ID: 1770
Property Name: SAN JUAN 28-5 UNIT | 54 | 50693A-1
Table Name: K:\ARIES\RR97PDP\TEST.DBF

	CUM_GAS Mcf	M SIWHP Psi				
12/24/62	0	2625.0			~ C	_
01/15/63	0	2629.0	1	Water	()++	52+ 453m
05/06/63	41000	1679.0	٦٥		~	
04/22/64	137000	1348.0		28	-5	#53m
06/21/65	256000	1229.0				-
05/23/66	361000	1141.0				
05/26/67	473000	984.0				
05/20/68	572000	957.0				
06/19/70	755870	858.0				
04/27/71	822634	822.0				
05/15/72	905811	833.0				
07/23/73	972655	1046.0				
05/05/75	1057586	1132.0				
07/05/77	1137950	1182.0				
10/04/79	1206041	1182.0				
08/12/81	1252029	1224.0				
12/12/85	1351967	1160.0				
10/04/88	1410682	1112.0				
04/08/90	1431387	1522.0				
04/04/94	1512579	1083.0	- wirent			

Page No.: 3
Print Time: Mon Nov 04 15:32:24 1996
Property ID: 1776
Property Name: SAN JUAN 28-5 UNIT | 597 | 50675A-1
Table Name: K:\ARIES\RR97PDP\TEST.DBF

	CUM_GAS						
10/30/62	0	2699.0					
11/28/62	0	2698.0		<			
03/21/63	62000	2414.0		Mik	ota	C_{1}	ff
05/26/64	260000	2176.0				_	• •
10/18/65	559000	1746.0		Jak	28	-5	+
06/07/66	689000	1965.0			_		
05/25/67	844000	1557.0					
05/27/68	1047000	1417.0					
08/18/69	1255084	1317.0					
07/28/70	1380561	1274.0					
06/22/71	1498479	1232.0					
06/07/72	1602424	1152.0					
07/23/73	1699919	1165.0					
04/30/75	1874751	1072.0					
06/01/77	2036561	1049.0					
06/07/79	2165728	1050.0					
05/01/81	2266029	1085.0					
03/04/82	2295796	1064.0					
09/19/83	2354456	1085.0					
11/18/85	2429888	1039.0					
11/10/88	2511812	1016.0					
04/22/90	2562823	1022.0					
11/21/92	2606661	1001.0	- wrrent				

Page No.: 4

Print Time: Mon Nov 04 15:32:24 1996
Property ID: 1777
Property Name: SAN JUAN 28-5 UNIT | 59M | 53424B-1
Table Name: K:\ARIES\RR97PDP\TEST.DBF

DATE	CUM_GAS Mcf			Nakota	Offset
11/11/81	0	1978.0		<u> </u>	
03/04/82	47673	1120.0		28-5	# 58m
09/19/83	262274	611.0			
11/01/84	385862	612.0			
11/18/85	483650	593.0			
11/09/88	634868	584.0			
04/22/90	722677	612.0			
05/28/92	800657	718.0			
05/24/93	834299	638.0←	current		

Page No.: 5
Print Time: Mon Nov 04 15:32:25 1996

Property ID: 1778

Property Name: SAN JUAN 28-5 UNIT | 60 | 50694A-1

Table Name: K:\ARIES\RR97PDP\TEST.DBF

	CUM_GAS	M SIWHP			
11/29/62 04/28/63	0 59000	2069.0 1844.0			
04/22/64	259000	1755.0		Dakota	Offs
01/04/65 05/23/66	315000 620000	1949.0 1945.0		28-5	# 52
05/26/67 05/20/68	869000 1084000	1412.0 1416.0			- 00,
05/15/69 06/19/70	1359583 1609494	1124.0 1088.0			
04/27/71 05/15/72	1772012	1062.0			
07/05/73	1975467 2227884	1059.0			
04/30/75 06/01/77	2515249 2757933	921.0 924.0			
05/01/79 05/04/81	2942223 3114533	910.0 890.0			
09/19/83 06/04/85	3229436 3321764	903.0 905.0			
10/23/88	3475228	882.0			
06/29/90 09/01/92	3564454 3628052	920.0 782.0	< current		

Page No.: 6
Print Time: Mon Nov 04 15:32:25 1996
Property ID: 1781
Property Name: SAN JUAN 28-5 UNIT | 62 | 50697A-1
Table Name: K:\ARIES\RR97PDP\TEST.DBF

DATE	CUM_GAS Mcf		
			Dakota Offszt 28-5 #53m
00/01/73 00/01/73 10/01/73 09/04/75 06/10/77 05/01/79 05/01/81 09/19/83 05/17/85	704814 704814 747092 840933 930727 1013510 1113659 1172422 1209387	927.0 927.0 927.0 904.0 846.0 877.0 764.0 953.0	- Current

Page No.: 7

Print Time: Mon Nov 04 15:32:26 1996

Property ID: 1786
Property Name: SAN JUAN 28-5 UNIT | 66 | 50695A-1
Table Name: K:\ARIES\RR97PDP\TEST.DBF

	CUM_GAS	M SIWHP
12/06/62	0	2737.0
12/30/62	0	2736.0
08/26/63	137000	2370.0
04/22/64	224000	2242.0
06/21/65	499000	2076.0
05/23/66	751000	1924.0
05/26/67	1017000	1782.0
05/20/68	1376000	1580.0
05/15/69	1753583	1364.0
06/19/70	1978344	1373.0
04/27/71	2196845	1236.0
05/15/72	2471108	1171.0
07/05/73	2731127	1138.0
04/30/75	3098131	992.0
06/01/77	3597270	855.0
05/01/79	3870710	954.0
05/04/81	4270027	715.0
09/19/83	4553194	800.0
05/17/85	4731556	749.0
10/23/88	5022339	887.0
04/21/90	5207326	766.0
09/01/92	5437954	732.0

					-
NM2302A → 7 RA 会会 78E → 72	**E **M 3303A *** **	MM 2306	% P NM 2300 원 10 광 ^{QA} 전 %	1M 1301 96E 17 8A 102 103 104 105 105 105 105 105 105 105 105	NM 2001 NM 2006 22.59
37.35 % 1M.330 8E. [©] 90 ⊕ ME. ©90 ⊕	50 35 06 100 201 30 ⊕ T 3 ⊕ ∑ S	12, 295 th 1M COI 3M COI 3M	SJ 29-5 (n NM 2501 S ³⁷ ROM FEB 93 M	SJ 26-5 Un 1M 2301 9E 26 经 97	3. 33-5 Cb SM 2006 SM 2006 22.30 SM 27022 SM 27022 SM
13 NM 0639 NM 0639 NM 34	17 NN 6639 V SJ 285 Ut NP FO	60 €	15 NN 10 202,22	14 801A00 NM 406	is
37 295 (In 4N/CP)	5.7 29.5 (h. Nº 47.0) 5.7 29.5 (h. NN 2006, 22.30 MA 68.19 MA 68.2 5.00 MA 68.2 5.0	2J. 3-5 Uh 1M. 2006. 2230 NM. 4417 ?SM FC ⊕ M M+PB ₹3 76	SJ 28-5 Uh NM 4418 22.30 NM 2006 22.30 87 30 87 30	S.J. 28-5 Uh NM 2006. 22.30	31, 29-5 Un MA ROMERO & MELYAN et or NM 4906, 2230 NM 4907, 2230
NN 6638	2p =	0 NAPO 67 67 68 62 6 NA	22 *** *** *** *** *** *** *** *** ***	23 55 86 52 86	24 7 (24) 20 (24)
53, 39-5 th 7M-666	IM 5008.22 20	13M 7008 12, 20	MA ROMERO & M.EL.VAN et op 1M 4807, 22.30	NM 2007, 22:30,50	W 1007, 202020 - € #6
234 2008 22 20 33 25-5 cm	M ≥ 39	25	27	26	78 S S S S S S S S S S S S S S S S S S S
₩ 7508 55.30	MA ROMERO B MELLYAN et GE 18M 4908, 2230 32	NM 2397 & A 09 53 52 PA 85	NM 8738, 2220	13 € 55 55 55 55 55 55 55 55 55 55 55 55 5	. अ. श. २० २० ⊕
SUMSUM	38 金 图 % SJ 38-5 Un	33 33 33 33 33 34 67 67 67 67 67 67 67 67 67 67 67 67 67	NM 2307 & A 34 6	35 NM 8738 NM 8738 SJ 28-5 Un	38 →MOCO -2 MM 87392230

TINU 2-8S NALL NAZ

X - DK OFFSET WELLS USED FOR CURRENT AVG. PSI.

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. 11627 ORDER NO. R-10695

APPLICATION OF BURLINGTON RESOURCES OIL & GAS COMPANY FOR THE ESTABLISHMENT OF A DOWNHOLE COMMINGLING "REFERENCE CASE" FOR ITS SAN JUAN 28-5 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 12th 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 28-5 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 28-5 Unit which encompasses some 17,399 acres in Township 28 North, Range 5 West, NMPM, San Juan County, New Mexico.
- (5) Within the San Juan 28-5 Unit, the applicant currently operates sixty-seven (67) Basin-Dakota Gas Pool wells, seventy-one (71) Blanco-Mesaverde Gas Pool wells, sixteen (16) Gobernador-Pictured Cliffs, Oso-Pictured Cliffs and Tapacito-Pictured Cliffs Gas Pool wells, and nineteen (19) 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 28-5 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 28-5 Unit:

- 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 28-5 Unit; and,
- d) establish a "reference case" or an administrative procedure for authorizing the downhole commingling of existing or future drilled wells within the San Juan 28-5 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 28-5 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 1,258 MMCFG and 77 MMCFG, respectively;
 - c) the average initial producing rate for a newly drilled or recompleted Dakota and Pictured Cliffs gas well is approximately 276 MCFGD and 136 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 28-5 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 28-5 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 were approximately 3,149 psi and 1,143 psi, respectively; and,
- b) the average current shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations are approximately 1,059 psi and 714 psi, respectively.
- (10) There is sufficient pressure data available within the San Juan 28-5 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 28-5 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 28-5 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 28-5 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 28-5 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 28-5 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 28-5 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 28-5 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 28-5 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 28-5 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 28-5 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 28-5 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 28-5 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 28-5 Unit of such proposed commingling.
- (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

WILLIAM J. LeMAY

Director

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