## BURLINGTON RESOURCES

SAN JUAN DIVISION

June 2, 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 #93M

1650'FSL, 1850'FEL Section 15, T-28-N, R-5-W, Rio Arriba County, NM

API #30-039-25639

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Mesa Verde and Basin Dakota in the subject well. This well is planned to be drilled and completed as a Mesa Verde/Dakota commingle 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;
- 3. Production curve for Dakota and expected production curve for the Mesa Verde;
- 4. Notification list of offset operators Burlington is the surrounding operator;
- 5. Shut in wellhead pressure and calculated down hole pressure of surrounding wells;
- 6. Nine-section plats for the Mesa Verde and Dakota.

Notification of Mesa Verde and Dakota interest owners is covered under Order R-10695 dated 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.

Shall hill

Sincerely,

Peggy Bradfield

Regulatory/Compliance Administrator

xc: Bureau of Land Management - hand delivered

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DATE IN	6/3/97	SUSPENSE 6/23/97	B5/DC	LOGGED	TYPE DHC	
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		NEW MEXICO	OIL CONSERVA	TION DIVISION		
		ADMINISTRATIV	E APPLICATIO	N COVERSHE	ET	
	THIS COVERSH	EET IS MANDATORY FOR ALL ADMII	NISTRATIVE APPLICATIONS FOR	EXCEPTIONS TO DIVISION RUL	ES AND REGULATIONS	
.pplic:	[PC-P	[NSP-Non-Standard F [DD-Directional mhole Commingling] [0 pol Commingling] [OLS [WFX-Waterflood Expan	S - Off-Lease Storage] ision] [PMX-Pressure iisposal] [IPI-Injectior	neous Dedication] g] [PLC-Pool/Lease [OLM-Off-Lease Mea Maintenance Expans Pressure Increase]	Commingling] isurement] ion]	
1]	TYPE OF A [A]	PPLICATION - Chec Location - Spacing U NSL NSP		ling	JUN - 3 1997	
	Check [B]	Commingling - Store  One Only for [B] and  Commingling - Store	ige - Measurement		CONCERVATION DIVIS	SION
	[C]	Injection - Disposal -  □ WFX □ PMX			ery PPR	
2]	NOTIFICAT	ΓΙΟΝ REQUIRED TO ☐ Working, Royalty			oes Not Apply	
	[B]	☐ Offset Operators,	Leaseholders or Surfa	ace Owner		
	[C]	☐ Application is One	e Which Requires Pu	blished Legal Notice	2	
	[D]	Notification and/o	or Concurrent Approv	al by BLM or SLO		
	[E]	For all of the above	ve, Proof of Notificati	on or Publication is	Attached, and/or,	
	[F]	☐ Waivers are Attac	hed			
3]	INFORMAT	TION / DATA SUBM	ITTED IS COMPLI	ETE - Statement of	Understanding	
cegul pprov U, Ol	ations of the O val is accurate : RRI) is commo	I, or personnel under mil Conservation Division and complete to the best. I understand that arreturned with no action	on. Further, I assert st of my knowledge any omission of data, it	that the attached app and where applicable	olication for administ, verify that all inter	strative rest (WI,
		Note: Statement mus	st be completed by an individual v	vith supervisory capacity.		
eggy Bi	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Stathuild	Regula	ntory/Compliance Administrat	tor G	12/97
rint or	Type Name	Signature		Title	Da	ite

### DISTRICT I

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

DISTRICT II

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

DISTRICT III

State of New Mexico Energy, Minerals and Natural Resources Department

### **APPROVAL PROCESS:**

\_X\_ Administrative \_\_\_Hearing

**EXISTING WELLBORE** 

## \_\_ YES \_x\_NO

## OIL CONSERVATION DIVISION 2040 S. Pacheco Santa Fe, New Mexico 87505-6429

APPLICATION FOR DOWNHOLE COMMINGLING 1000 Rio Brazos Rd, Aztec, NM 87410-1693

rator		ress	Rio Arriba
NN JUAN 28-5 UNIT		5-28N-5W Ltr Sec - Twp - Rge	County
			g Unit Lease Types: (check 1 or more)
The following facts are submitted in support of downhole sommingling:	Upper Zone	Intermediate Zone	Lower
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	(Current) a. 786 psi (see attachment)	a.	a. 1637 psi (see attachment)
Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Original) b. 1273 psi (see attachment)	b.	b. 2927 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1173		BTU 1035
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 dats			
* 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: % will be supplied upon completion
O. If allocation formula is based attachments with supporting do attachments with supporting do attachments with supporting do attachments with supporting do attachments with supporting and if not, have all working, overridded Have all offset operators been at a will cross-flow occur?  1. Will cross-flow occur?  2. Are all produced fluids from all and will the value of production be constant will be a will be a will be a will be a will be an attachment and working attachments.	royalty interests identical in all ing, and royalty interests been a given written notice of the proposition of the proposition of the proposition of the allocation formula be relected to the commingled zones compatible with the allocation formula be relected as a commingle of the commingle of the commingle of this application of the commingle of the committee	commingled zones? notified by certified mail? osed downhole commingling? compatible, will the formations liablex Yes No (If No, with each other? _x_ Yes Yes _X_ No (If Yes, attach ex s, either the Commissioner of PutionX_ Yes No  NO(S)R-10695	Yesx_NoYesx_NoYesx_Nox_YesNo  not be damaged, will any cross attach explanation) _ No planation) blic Lands or the United States
* C-102 for each zone * Production curve for * For zones with no pro * Data to support alloc * Notification list of all	to be commingled showing its so each zone for at least one year oduction history, estimated production method or formula. offset operators. orking, overriding, and royalty in nents, data, or documents requi	pacing unit and acreage dedication. (If not available, attach explanated in the expl	on. tion.)  ases.
hereby certify that the inform	nation above is true and co	mplete to the best of my know	wledge and belief.
SIGNATURE Lean Wooder	tonTITLE_Prod	uction EngineerDA	ΓE 05/27/97

TYPE OR PRINT NAME \_ Sean C. Woolverton \_\_\_\_ TELEPHONE NO. (505) 326-9700

District I PO Box 1980, Hobbs, NM 88241-1980 District II PO Drawer OD, Artesia, NM 88211-0719 District III 1000 Rio Brazos Rd., Azec, NM 87410

PO Box 2088, Santa Fe, NM 87504-2088

District IV

## State of New Mexico Energy, Minerals & Natural Resources Department

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

AMENDED REPORT

	_	WE	LL LO	CATION	I AND ACR	EAGE DEDIC	CATION PL	AT	
'API Number 'Pool Code						<sup>3</sup> Pool Name			
30-039-			7231	9/7159	)/71599 Blanco Mesaverde/Bas			n Dakota	
* Property Code					' Property				* Well Number
7460				Sa	an Juan 2				93M
'OGRID		T	RIIDT.TN	ICTON F	Operator PESOURCES	Neme OIL & GAS	COMPANY		* <del>Elevation</del> 6661 *
14538			OKBIK		10 Surface				
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
J	15	28-N	5-W		1650	South	1850	East	R.A.
			11 Bot	tom Hol	e Location I	f Different Fro	om Surface		
UL or ict no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West tipe	County
"Dedicated Act MV-S/320 DK-E/320 NO ALLO		WILL BE A		D ТО ТН		ON UNTIL ALL EEN APPROVED			CONSOLIDATED
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875		SF	-080	ウラ・ - - - - - -	B	/85oʻ	I hereby car was plotted or under my correct to th	eify that the well le from field notes of supervision, and i to best of my belief 11/16/	that the same is true and t
	FE	   	<i>5</i> 29	30.00	16581		6857		METICO S

N RateTime Semi Log J-WATER Bb1s/d \*GAS Mcf/d 0-01L Bbl/d )-01L/GAS **Prop 273** 46 DAILY GAS SIWHP FWHP **u** + 1 93M 1 35640A-1 Bain Jakota LIM 28-5 JUAN SAN 1000 SUĐ× 10000 901 91 ī •ÕĪr 1000 r.0 Øŀ I. SUS/TIO. 1000 91 · MULEH 00001 661 1.6 Øŀ

1/2

RateTime Semi Log .- WATER Bbls/d \*GHS Mcf/d )•OIL Bb1/d )-01L/GAS Prop 187 GAS SIWHP DAILY FWHP \*\*\*\* **a** + 28-5 UNIT | 93M | 36096A-1 Blones Menowarde JUAN SAN 1888 188 188 1888 100 1 1 . 0 1 . 0 SUD × 10000 t 91 18 OIF. 000 t SUD/TIO: 0001 19999 \* MULEH

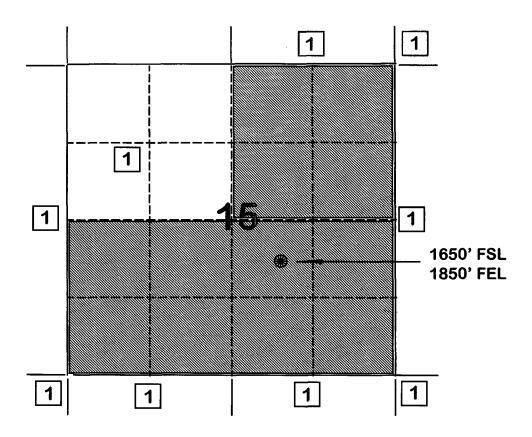
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### **BURLINGTON RESOURCES OIL AND GAS COMPANY**

## San Juan 28-5 Unit #93M OFFSET OPERATOR \ OWNER PLAT

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

Township 28 North, Range 5 West



1) Burlington Resources Oil and Gas Company

REQUESTED RECORD NOT FOUND (NEXT RECORD DISPLAYED)

	OGRAPH TEST MAIN SCREEN 15:09:31.0 05/18/97
FUNCTION (A,C,D,I) i MP NUMBER 89133	** DATA AT TEST PRESSURE UNLESS NOTED ** SAN JUAN 28-5 UNIT 93
REGION CD 42 MP TYPE CODE 10	SAN JUAN
SAMPLE TYPE CODE (GAS,LIQ,BTU) SAMPLE DATE SAMPLE LINE PRESSURE (PSIG) SAMPLE LINE TEMPERATURE (DEG F TEST DATE TEST PRESSURE (PSIG) TEST TEMPERATURE (DEG F) TEST LIFE (MONTHS) TESTER SOURCE BA NUMBER TEST PURPOSE CODE	GAS BTU/CF 19961229 (AT 14.73 PSIG) WET 1035.675 DRY 1054.000  BTU/CF  14.730 WET _1035.675 DRY _1054.000  60 VAPOR FACTOR 6 098795 EL PASO FIELD SERVICES
03=DETAIL SCR 04=MP-NM BRWS 11=PREV SCR 12=MAIN MENU 21=REFRESH SCR 22=PREV MENU B MY JOB	06=MP/DS LST 07=MP/WN LST 20=NEXT REC 24=HELP PA1=TERMINATE LU #2
OPR008M2 S000 O008 CHROMAT	OGRAPH GAS SAMPLE DETAIL 15:09:36.3 05/18/97
GP MOL % (AT 1	M ** DATA AT 14.730 PSIG UNLESS NOTED **
HYDROGEN HELIUM NITROGEN0.20	MP NUMBER 89133 EFFECTIVE DATE 19970201
HYDROGEN SULFIDE  CARBON DIOXIDE 1.55  METHANE 93.23  ETHANE 3.77 1.	GASOLINE CONTENT (GPM) 26/70 GASOLINE 100% PROPANE  EXCESS BUTANES
ISO-BUTANE0.17 0. N-BUTANE0.15 0.	1598 TOTAL 0556 0473 0366 SPECIFIC GRAVITY
HEXANE	0181 CALCULATED0.6070 MEASURED 0873 SULPHER GRAINS / 100 CU FT
	4132
03=MAIN SCREEN B MY JOB NUM	24=HELP PA1=TERMINATE

NUM LU #2

B MY JOB

REQUESTED RECORD NOT FOUND (NEXT RECORD DISPLAYED)
OPR008M1 S001 O008 CHROMATOGRAPH TEST MAIN SCREEN

B MY JOB

20:11:36.1 05/20/97

OPR008M1 S001	0008 CHROMATO	OGRAPH TEST MAIN	SCREEN 20:11:36.1 05/20/97
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REGION CD MP TYPE CODE	42 10	SAN JUAN GAS METER - WE	LLHEAD SALES
SAMPLE TYPE COD SAMPLE DATE SAMPLE LINE PRE SAMPLE LINE TEM TEST DATE TEST PRESSURE ( TEST TEMPERATUR	E (GAS,LIQ,BTU) SSURE (PSIG) PERATURE (DEG F PSIG) E (DEG F) HS) A NUMBER	GAS 19961231  14.730	BTU/CF (AT 14.73 PSIG) WET 1173.241 DRY 1194.000  BTU/CF WET _1173.241 DRY _1194.000
03=DETAIL SCR 11=PREV SCR 21=REFRESH SCR B MY JOB	12=MAIN MENU 22=PREV MENU	06=MP/DS LST 24=HELP LU #3	07=MP/WN LST 20=NEXT REC PA1=TERMINATE
OPR008M2 S001	0008 CHROMATO	OGRAPH GAS SAMPL	E DETAIL 20:11:40.3 05/20/97
	GPI MOL % (AT 1		AT 14.730 PSIG UNLESS NOTED **
HYDROGEN HELIUM NITROGEN OXYGEN	0.36	E	P NUMBER 71318 FFECTIVE DATE 19970201
HYDROGEN SULFID CARBON DIOXIDE METHANE ETHANE	E	 26/ 100 3326 EXC	GASOLINE CONTENT (GPM) 70 GASOLINE % PROPANE ESS BUTANES
PROPANE ISO-BUTANE N-BUTANE ISO-PENTANE	0.67	2192 2964	TOTAL SPECIFIC GRAVITY
N-PENTANE HEXANE HEXANE PLUS	0.25	0906 CAL	CULATED0.6890 SURED
HEPTANE PLUS TOTALS	100.00 4.3	SULPH 2443	ER GRAINS / 100 CU FT
03=MAIN SCR		C# 111	24=HELP PA1=TERMINATE

NUM LU #3

## San Juan 28-5 Unit #93M Bottom Hole Pressures Flowing and Static BHP Cullender and Smith Method

Version 1.0 3/13/94

Mesaverde	Dakota			
<u>MV-Current</u>	DK-Current			
GAS GRAVITY  COND. OR MISC. (C/M)  %N2  0.36  %CO2  0.94  %H2S  0.00  DIAMETER (IN)  DEPTH (FT)  SURFACE TEMPERATURE (DEG F)  BOTTOMHOLE TEMPERATURE (DEG F)  FLOWRATE (MCFPD)  SURFACE PRESSURE (PSIA)  BOTTOMHOLE PRESSURE (PSIA)  785.9	GAS GRAVITY COND. OR MISC. (C/M) %N2 %CO2 %H2S DIAMETER (IN) DEPTH (FT) SURFACE TEMPERATURE (DEG F) BOTTOMHOLE TEMPERATURE (DEG F) FLOWRATE (MCFPD) SURFACE PRESSURE (PSIA) BOTTOMHOLE PRESSURE (PSIA)	0.607 C 0.20 1.55 0.00 2.375 7988 60 164 0 1356		
MV-Original	DK-Original			
GAS GRAVITY  COND. OR MISC. (C/M)  %N2  0.36  %CO2  0.94  %H2S  0.00  DIAMETER (IN)  DEPTH (FT)  SURFACE TEMPERATURE (DEG F)  BOTTOMHOLE TEMPERATURE (DEG F)  FLOWRATE (MCFPD)  SURFACE PRESSURE (PSIA)  0.689  0.36  0.36  0.94  0.49  0.5458  0.00  1.42  0.689  0.36  0.94  0.689  0.36  0.94  0.689  0.36  0.94  0.689  0.36  0.94  0.689  0.36  0.94  0.689  0.36  0.94  0.689  0.689  0.94  0.94  0.94  0.95  0.96  0.96  0.97  0.97  0.98  0.98  0.99	GAS GRAVITY COND. OR MISC. (C/M) %N2 %CO2 %H2S DIAMETER (IN) DEPTH (FT) SURFACE TEMPERATURE (DEG F) BOTTOMHOLE TEMPERATURE (DEG F) FLOWRATE (MCFPD) SURFACE PRESSURE (PSIA) BOTTOMHOLE PRESSURE (PSIA)	0.607 C 0.20 1.55 0.00 2.375 7988 60 164 0 2412		

Page No.: 1

Print Time: Tue May 20 10:52:05 1997
Property ID: 1816
Property Name: SAN JUAN 28-5 UNIT | 93 | 44729A-1
Table Name: K:\ARIES\RR98PDP\TEST.DBF

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11/27/74	0	2412.0	e initial
12/11/74	0	2425.0	
02/18/75	22557	2178.0	
04/09/76	194244	1758.0	
06/15/77	345741	1672.0	
06/05/79	567911	1622.0	
05/05/81	742710	1544.0	
11/02/83	897805	1407.0	
09/26/85	1005132	1182.0	
08/02/88	1082728	1372.0	/
05/08/90	1165642	1356.0	E- curent

MV

Page No.: 1

Print Time: Tue May 20 14:38:49 1997
Property ID: 3910
Property Name: SAN JUAN 28-5 UNIT | 10 | 49498A-1
Table Name: K:\ARIES\RR98PDP\TEST.DBF

DATE	CUM_GAS Mcf	M SIWHP	
01/16/56	0	1894.0	, 1
02/07/56	0	1096.0	t-intial
08/31/56	32000	810.0	
07/30/57	88000	692.0	
11/06/58	141000	740.0	
08/06/59	158000	812.0	
08/14/60	182000	820.0	
12/22/60	200000	670.0	
08/13/61	219000	699.0	
05/08/62	244000	679.0	
07/16/63	278000	676.0	
09/28/64	310000	667.0	
09/01/65	355000	671.0	
08/19/66	394000	614.0	
03/07/67	416000	614.0	
03/01/68	453000	618.0	
08/19/69	512047	539.0	
06/19/70	547811	514.0	
04/27/71	581762	472.0	
05/15/72	629670	450.0	
05/02/74	724333	364.0	
04/09/76	801123	374.0	
05/16/78	860634	537.0	
06/10/80	911241	533.0	
08/03/82	973112	579.0	
08/03/84	1029059		
04/01/87	1081065	652.0	/
03/18/91	1155917	670.0	· - current
09/10/91	1164791	682.0	C

### SAN JUAN 28-5 UNIT

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18 SSI 8	38A ⊕ 75 ⊠ 698 <sup>28</sup>	<b>愛<sup>*</sup></b> 図 <sup>**</sup>	<b>⊗</b> " <b>⊠</b> " <b>⊠</b> "	#E # # # # # # # # # # # # # # # # # #	<b>₩</b> <sup>3</sup>
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쯒 <sup>42</sup>	& ⊠ × & x	⊗¹ ⊗ N	5 82 <sup>70</sup> 5A	35 <sup>2</sup> ∰ 222 <sup>72</sup>	36 ⅓ ⊠

# 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:

a

- (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 commingie (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:

- 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 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

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WILLIAM LEMAY

Director