



# BURLINGTON RESOURCES

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SAN JUAN DIVISION

October 3, 1997

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

Re: San Juan 28-6 Unit #142M  
1830'FNL, 2525'FWL Section 21, T-28-N, R-06-W, Rio Arriba County, NM  
API #30-039-not yet assigned

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 is a new drill Mesa Verde/Dakota well for the 1998 Program.

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. Anticipated production curve for the Mesa Verde and Dakota for at least year;
4. Notification list of offset operators - Burlington is the operator of the unit;
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-10696 dated November 12, 1996.

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

Xc: Bureau of Land Management - Farmington  
NMOCD - Aztec



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

District II  
PO Drawer 00, Artesia, NM 88211-0719

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

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

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

Form C-1  
Revised February 21, 19  
Instructions on be  
Submit to Appropriate District Offi  
State Lease - 4 Copi  
Fee Lease - 3 Copi

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number		2 Pool Code		3 Pool Name	
4 Property Code		5 Property Name SAN JUAN 28-6 UNIT			6 Well Number 142M
7 GRID No.		8 Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY			9 Elevation 6461'

10 Surface Location

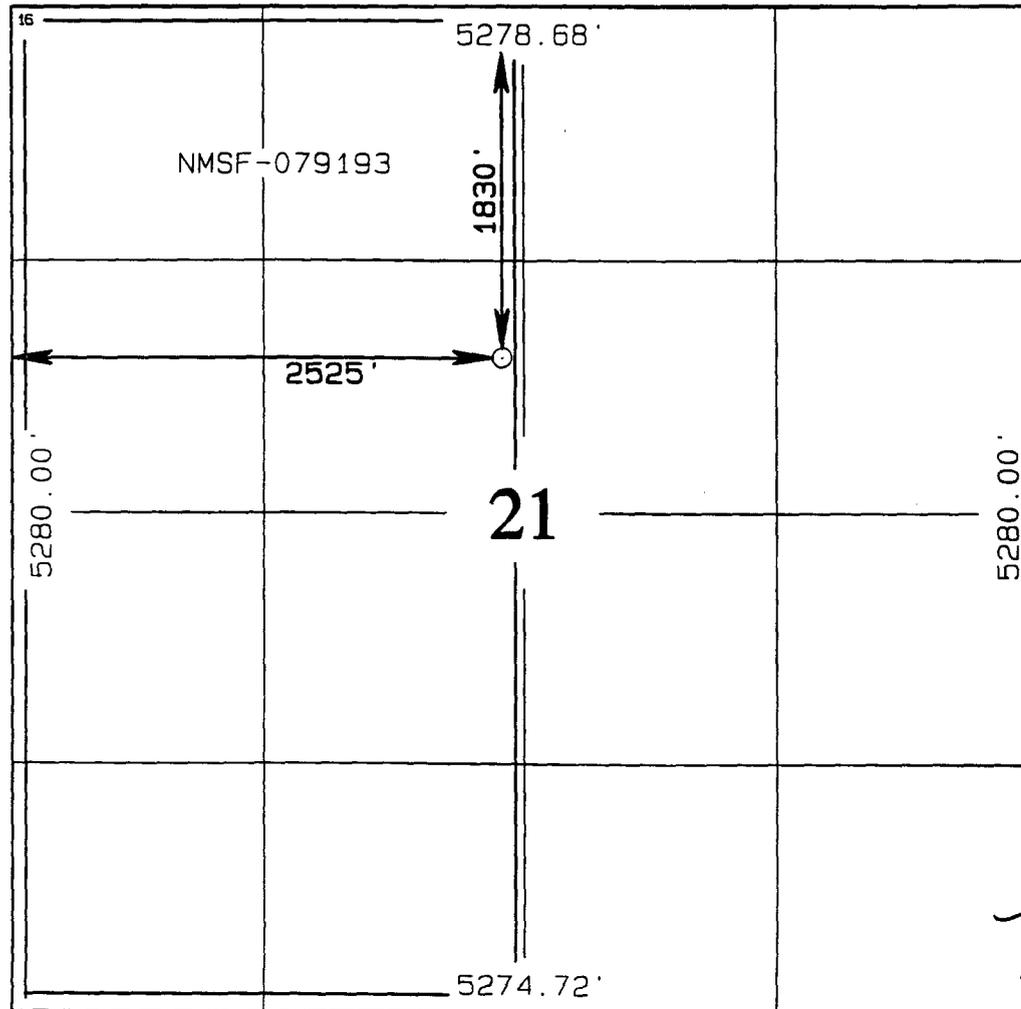
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	21	28	6		1830	North	2525	WEST	RIO ARRIBA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



17 OPERATOR CERTIFICATION  
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature \_\_\_\_\_

Printed Name \_\_\_\_\_

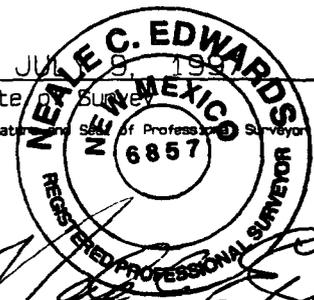
Title \_\_\_\_\_

Date \_\_\_\_\_

18 SURVEYOR CERTIFICATION  
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey \_\_\_\_\_

Signature of Professional Surveyor \_\_\_\_\_



6857  
Certificate Number



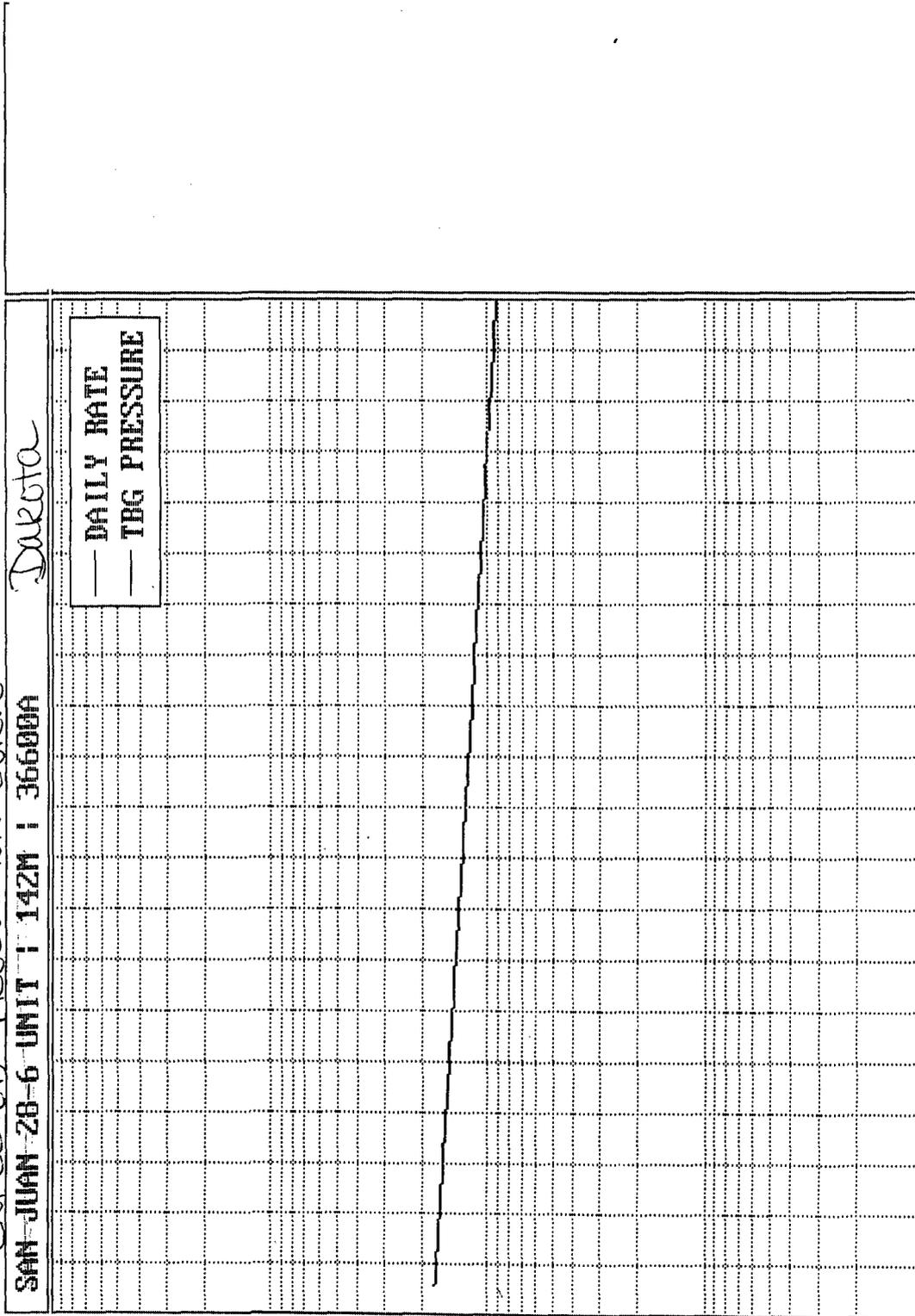
# EXPECTED PRODUCTION CURVE

• OIL  
• WATER/GAS  
• GAS  
• WATER

SAN JUAN 28-6 UNIT : 142M : 36600A

Dakota

— DAILY RATE  
— TBG PRESSURE



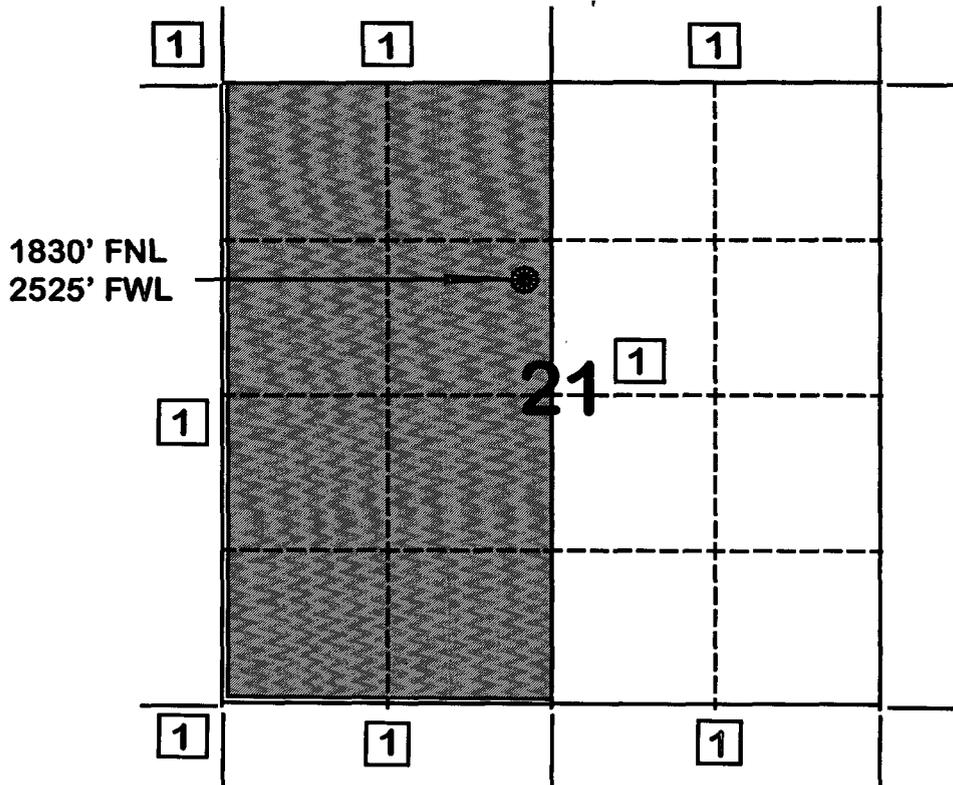
Major = GAS

**BURLINGTON RESOURCES OIL AND GAS COMPANY**

**San Juan 28-6 Unit #142M  
OFFSET OPERATOR \ OWNER PLAT**

**Mesaverde / Dakota Formations Commingle Well**

Township 28 North, Range 6 West



1) Burlington Resources Oil and Gas Company

**SJ 28-6 Unit #142M**  
 Bottom Hole Pressures  
 Flowing and Static BHP  
 Cullender and Smith Method  
 Version 1.0 3/13/94

<b>Mesaverde</b>		<b>Dakota</b>	
<u>MV-Current</u>		<u>DK-Current</u>	
GAS GRAVITY	0.632	GAS GRAVITY	0.604
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.11	%N2	0.13
%CO2	0.51	%CO2	1.34
%H2S	0	%H2S	0
DIAMETER (IN)	2	DIAMETER (IN)	2.375
DEPTH (FT)	5664	DEPTH (FT)	7626
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	452	SURFACE PRESSURE (PSIA)	866
BOTTOMHOLE PRESSURE (PSIA)	514.3	BOTTOMHOLE PRESSURE (PSIA)	1019.3
<u>MV-Original</u>		<u>DK-Original</u>	
GAS GRAVITY	0.632	GAS GRAVITY	0.604
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.11	%N2	0.13
%CO2	0.51	%CO2	1.34
%H2S	0	%H2S	0
DIAMETER (IN)	2	DIAMETER (IN)	2.375
DEPTH (FT)	5664	DEPTH (FT)	7626
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1117	SURFACE PRESSURE (PSIA)	2687
BOTTOMHOLE PRESSURE (PSIA)	1287.8	BOTTOMHOLE PRESSURE (PSIA)	3196.1

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Print Time: Mon Aug 18 13:01:53 1997

Property ID: 4050

Property Name: SAN JUAN 28-6 UNIT | 60 | 51875A-1

Table Name: K:\ARIES\RR98PDP\TEST.DBF

San Juan 28-6 Unit

# 142 M

Mesaverde Offset

--DATE--	---CUM GAS--	M SIWHP	
.....	.....Mcf.....	.....Psi.....	
04/13/56	0	1117.0	- original
12/30/57	239000	897.0	
10/29/58	437000	656.0	
06/14/59	562000	683.0	
06/14/60	722000	694.0	
06/13/61	902000	665.0	
09/10/62	1054000	705.0	
05/16/63	1125000	705.0	
05/26/64	1270000	675.0	
03/08/65	1342000	692.0	
04/12/66	1476000	656.0	
11/01/67	1662000	595.0	
04/01/68	1708000	615.0	
06/23/69	1858000	548.0	
05/25/70	1956615	555.0	
05/04/71	2061478	498.0	
05/22/72	2176352	499.0	
08/21/73	2305983	487.0	
07/31/74	2393908	489.0	
01/01/76	2527805	441.0	
11/01/76	2615554	441.0	
05/15/78	2783574	444.0	
12/04/79	2948073	404.0	
04/18/80	2980089	404.0	
05/18/82	3070584	432.0	
06/22/84	3161528	443.0	
10/17/86	3241095	434.0	
11/26/89	3313005	556.0	
08/25/91	3331150	550.0	
09/10/91	3332540	562.0	
05/03/93	3398816	452.0	- current

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Print Time: Mon Aug 18 13:01:54 1997

Property ID: 1842

Property Name: SAN JUAN 28-6 UNIT | 126 | 52204A-1

Table Name: K:\ARIES\RR98PDP\TEST.DBF

San Juan 28-6 Unit

# 142 M

Dakota Offset

--DATE--	---CUM GAS--	M	SIWHP
.....	.....Mcf.....	.....	.....Psi.....
08/26/67	0	2687.0	-original
09/07/67	0	2686.0	
12/08/67	22000	1830.0	
07/12/68	96000	1317.0	
09/09/69	174000	1104.0	
08/19/70	230018	1059.0	
03/23/71	260311	1030.0	
08/08/72	332132	762.0	
09/04/75	467553	632.0	
08/01/77	525349	812.0	
05/08/79	572109	772.0	
04/15/83	680632	777.0	
05/23/85	740853	895.0	
07/08/88	814628	1052.0	
06/05/90	878588	882.0	
07/01/92	934728	866.0	-current



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. 11628  
ORDER NO. R-10696

APPLICATION OF BURLINGTON RESOURCES  
OIL & GAS COMPANY FOR THE ESTABLISHMENT  
OF A DOWNHOLE COMMINGLING "REFERENCE  
CASE" FOR ITS SAN JUAN 28-6 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 28-6 Unit, San Juan County, New Mexico.

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

- 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 28-6 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 28-6 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 28-6 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 449 MMCFG and 186 MMCFG, respectively;
- c) the average initial producing rate for a newly drilled or recompleted Dakota and Pictured Cliffs gas well is approximately 254 MCFGD and 216 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 28-6 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 28-6 Unit, the applicant presented engineering evidence and testimony which indicates that:

- c) providing notice to each interest owner within the San Juan 28-6 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 28-6 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 28-6 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 28-6 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 28-6 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 28-6 Unit, San Juan County, New Mexico, is hereby approved.