

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Engineering Bureau -  
 2040 South Pacheco, Santa Fe, NM 87505



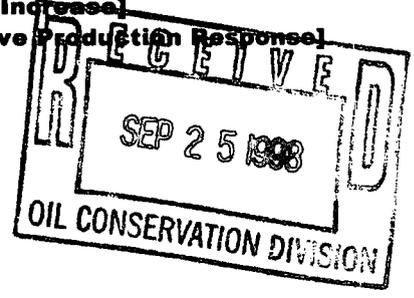
2117

**ADMINISTRATIVE APPLICATION COVERSHEET**

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

- [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
- [DD-Directional Drilling] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]



[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Directional Drilling  
 NSL    NSP    DD    SD

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement  
 DHC    CTB    PLC    PC    OLS    OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX    PMX    SWD    IPI    EOR    PPR

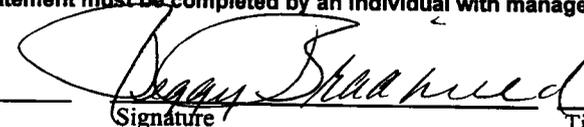
[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or  Does Not Apply

- [A]  Working, Royalty or Overriding Royalty Interest Owners
- [B]  Offset Operators, Leaseholders or Surface Owner
- [C]  Application is One Which Requires Published Legal Notice
- [D]  Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E]  For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F]  Waivers are Attached

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

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. *I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.*

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name \_\_\_\_\_ Signature  Title \_\_\_\_\_ Date \_\_\_\_\_

**DISTRICT I**

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

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 :**

Administrative  Hearing

**APPLICATION FOR DOWNHOLE COMMINGLING**

**EXISTING WELLBORE**

YES  NO

**Burlington Resources Oil & Gas Company**

**PO Box 4289, Farmington, NM 87499**

Operator **San Juan 28-6 Unit** Address **179 N 13-27N-06W Rio Arriba**

Lease Well No. Unit Ltr. - Sec - Twp - Rge County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7462 API NO. 30-039-20669 Federal \_\_\_\_\_, State \_\_\_\_\_, (and/or) Fee

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Cereza Canyon Gallup - 96766		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	6395' - 6575'		7354' - 7564'
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 Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Current) Est. a. 1963	a.	a. 888
	(Original) Est. b. 1963	b.	b. 3180
6. Oil Gravity (°API) or Gas BTU Content	BTU (Est.) 1224		BTU 1048
7. Producing or Shut-In?	Shut-in		producing
Production Marginal? (yes or no)	no		yes
* If Shut-In and oil/gas/water rates of last production  <small>Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data</small>	Date: n/a Rates:	Date: n/a Rates:	Date: n/a Rates:
	Date: n/a Rates: n/a	Date: n/a Rates: n/a	Date: n/a Rates: 102 MCF/D
* If Producing, give data and oil/gas/water water of recent test (within 60 days)			
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: % Gas: % will be supplied upon completion	Oil: % Gas: % will be supplied upon completion	Oil: % Gas: % will be supplied upon completion

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  No  
If not, have all working, overriding, and royalty interests been notified by certified mail?  Yes  No  
Have all offset operators been given written notice of the proposed downhole commingling?  Yes  No

11. Will cross-flow occur?  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.  Yes  No (If No, attach explanation)

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

13. Will the value of production be decreased by commingling?  Yes  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.  Yes  No

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). R-10696

**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 Jennifer Dobson TITLE Production Engineer DATE 09-17-98

TYPE OR PRINT NAME Jennifer Dobson TELEPHONE NO. (505) 326-9700

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 Dept.

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

Form C-10  
Revised February 21, 1996  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number 30-039-20669		'Pool Code 96766/71599		'Pool Name WC:Cereza Canyon Gallup/Basin Dakota	
'Property Code 7462		'Property Name SAN JUAN 28-6 UNIT			'Well Number 179
'OGRID No. 14538		'Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY			'Elevation 6419'

<sup>10</sup> Surface Location

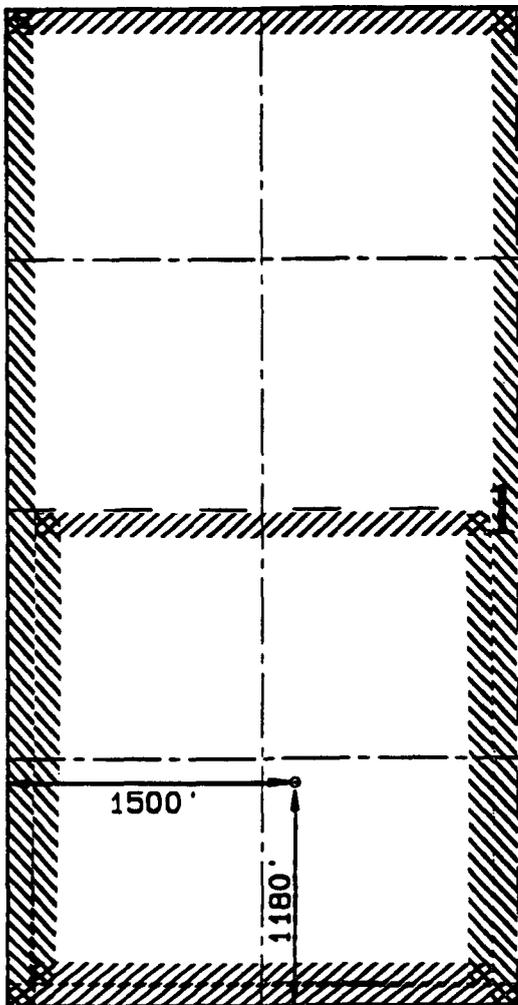
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	27N	6W		1180	South	1500	West	RIO ARriba

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres Gal - 160 DK - W/320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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



\*Not re-surveyed:  
Prepared from plat  
By: David O. Vilven  
Dated: April 13, 1973

RECEIVED  
DEC 3 1997  
OIL CON. DIV.  
DIST. 3

<sup>17</sup> OPERATOR CERTIFICATION

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

*Peggy Bradford*  
Signature

Peggy Bradford  
Printed Name

Regulatory Administrator  
Title

12-2-97  
Date

12-2-97  
Date

<sup>18</sup> 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.

NOVEMBER 20, 1997

Date of Survey

Signature and Seal of Professional



Certificate Number

DK

Prop 1776 \*

GAS Mcf/d  
 OIL Bbl/d  
 OIL/GAS  
 WATER Bbls/d

RateTime  
 Semi Log

EUR

Cum

Rem

Rem%

Yrs

Date 1/1/1999

Act

Qmo

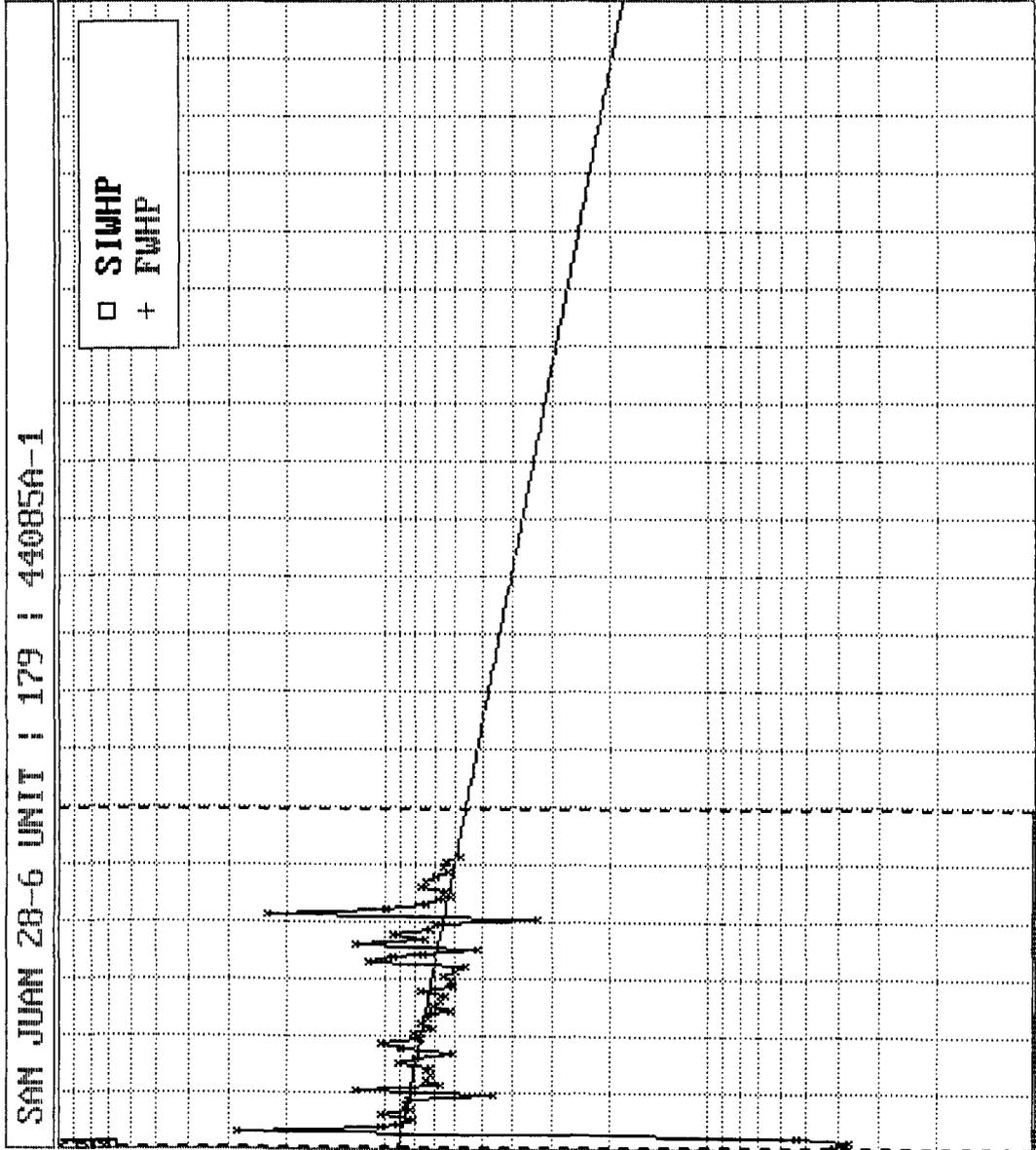
Q

n

De

Qab

GetQual 98PDP



\* WATER  
 \* OIL/GAS  
 \* OIL  
 \* GAS

10  
 1  
 0.1  
 10  
 100

93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12

Major = GAS

SAN JUAN 28-6 UNIT : 179 :

• OIL  
• WATER/GAS  
• GAS  
• WATER

100  
1000  
1000

10  
100  
100

1  
10  
10

0.1  
1  
1

DAILY RATE  
TBG PRESSURE

• WATER Bbls/d  
• GAS Mcf/d  
• WATER/GAS  
• OIL Bbl/d

Rate Time  
Semi Log

EUR

Cum  
Rem  
Rem%  
Yrs

Date

Act  
Qmo

Q  
n  
De

Qab

GetQual BOBMED

96 98 00 02 04 06 08 10 12 14 16 18 20 22 24 26 28 30 32

Ma.jor = GAS

**SJ 28-6 #179**  
**Bottom Hole Pressures**  
**Cullender and Smith Method**  
Version 1.0 3/13/94

<b>Dakota</b>	
<b><u>DK-Current</u></b>	
GAS GRAVITY	<u>0.601</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.17</u>
%CO2	<u>1.41</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>1.5</u>
DEPTH (FT)	<u>7605</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>144</u>
FLOWRATE (MCFPD)	<u>102</u>
SURFACE PRESSURE (PSIA)	<u>749</u>
BOTTOMHOLE PRESSURE (PSIA)	<u>888.2</u>
<b><u>DK-Original</u></b>	
GAS GRAVITY	<u>0.601</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.17</u>
%CO2	<u>1.41</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>1.5</u>
DEPTH (FT)	<u>7605</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>144</u>
FLOWRATE (MCFPD)	<u>102</u>
SURFACE PRESSURE (PSIA)	<u>2640</u>
BOTTOMHOLE PRESSURE (PSIA)	<u>3180.2</u>

Company: BURLINGTON RESOURCES  
Well: SAN JUAN 28-6 #179  
Field: GALLUP FORMATION  
Engineer:  
Gauge Type: AMERADA  
Gauge Range:  
Gauge Depth: 6750 ft  
Serial No.:

County: RIO ARRIBA  
State: NEW MEXICO  
Date: 07/20/1998  
Well Type:  
Test Type: STATIC GRADIENT  
Status: SHUT-IN  
File Name: 32120-1

Tubing: 1 1/2" TO 6938  
Tubing: TO  
Casing: TO  
Perfs.: 6393-6980  
Shut-in Time 168 hrs

Oil Level  
H2O Level 6695 ft

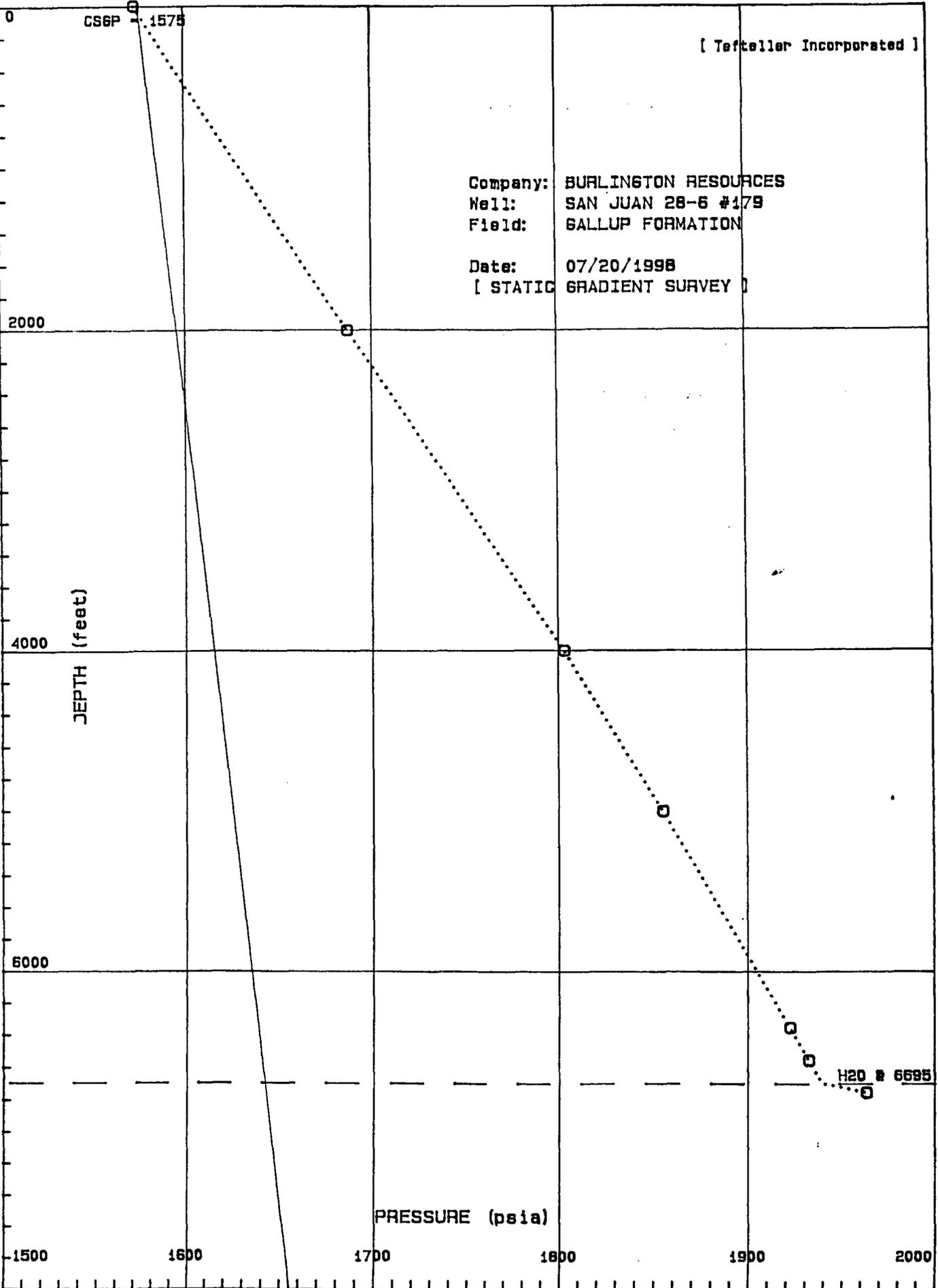
Shut-in BHP 1963 @ 6750 ft Shut-in BHT 0 F @ 0 ft  
Shut-in WHP 1573 Shut-in WHT 0 F  
Casing CSGP 1575

[ Tefteller Incorporated ]

#	MD	TVD	PRESSURE	PSI/ft
1	0	0	1573.00	
2	2000	2000	1687.00	0.057
3	4000	4000	1803.00	0.058
4	5000	5000	1855.00	0.052
5	6350	6350	1922.00	0.050
6	6550	6550	1932.00	0.050
7	6750	6750	1963.00	0.155

[ Tefteller Incorporated ]

Company: BURLINGTON RESOURCES  
Well: SAN JUAN 28-6 #179  
Field: GALLUP FORMATION  
Date: 07/20/1998  
[ STATIC GRADIENT SURVEY ]







DP NO: 44085A  
 SAN JUAN 28-6 UNIT

179

DATE: 980819 (YYMMDD FORMAT)

SCROLL FORWARD BY DATE: \_

S

E L	DATE PRODUCED	HOURS ON	-OIL PRODN-		-GAS PRODN-		-WATER PRODN-	
			(BOPD	BOPM)	(MCFD	MCFM)	(BWPD	BWPM)
_	08/19/98	24.0	0.00	0.00	114	2219	0.00	0.00
_	08/18/98	8.4	0.00	0.00	229	2105	0.00	0.00
_	08/17/98	0.0	0.00	0.00	0	1876	0.00	0.00
_	08/16/98	0.0	0.00	0.00	0	1876	0.00	0.00
_	08/15/98	0.0	0.00	0.00	0	1876	0.00	0.00
_	08/14/98	0.0	0.00	0.00	0	1876	0.00	0.00
_	08/13/98	11.0	0.00	0.00	18	1876	0.00	0.00
_	08/12/98	24.0	0.00	0.00	88	1858	0.00	0.00
_	08/11/98	24.0	0.00	0.00	95	1770	0.00	0.00
_	08/10/98	24.0	0.00	0.00	110	1675	0.00	0.00
_	08/09/98	24.0	0.00	0.00	110	1565	0.00	0.00

ENTER I UNDER SEL FOR MAINTENANCE

PF12=MAIN MENU                      PF6=NRI      PF10=BROWSE MENU      PF11=INQ/UPDATE MENU  
 ENTER=BACKWARDS                      PF24=HELP

DP NO: 44085A

DATE: 980808 (YYMMDD FORMAT)

SAN JUAN 28-6 UNIT

179

SCROLL FORWARD BY DATE: \_

S

E	DATE	HOURS	-OIL PRODN-	-GAS PRODN-	-WATER PRODN-			
L	PRODUCED	ON	(BOPD	BOPM)	(MCFD	MCFM)	(BWPD	BWPM)
_	08/08/98	24.0	0.00	0.00	123	1455	0.00	0.00
_	08/07/98	24.0	0.00	0.00	130	1332	0.00	0.00
_	08/06/98	24.0	0.00	0.00	136	1202	0.00	0.00
_	08/05/98	24.0	0.00	0.00	217	1066	0.00	0.00
_	08/04/98	24.0	0.00	0.00	317	849	0.00	0.00
_	08/03/98	24.0	0.00	0.00	532	532	0.00	0.00
_	08/02/98	24.0	0.00	0.00	0	0	0.00	0.00
_	08/01/98	24.0	0.00	0.00	0	0	0.00	0.00
_	07/31/98	24.0	0.00	0.00	0	159	0.00	0.00
_	07/30/98	0.0	0.00	0.00	0	159	0.00	0.00
_	07/29/98	0.0	0.00	0.00	0	159	0.00	0.00

ENTER I UNDER SEL FOR MAINTENANCE

PF12=MAIN MENU

PF6=NRI PF10=BROWSE MENU  
ENTER=BACKWARDSPF11=INQ/UPDATE MENU  
PF24=HELP

DK

FUNCTION (A,C,D,I) I                   \*\* DATA AT TEST PRESSURE UNLESS NOTED \*\*

MP NUMBER                   87825   SAN JUAN 28-6 UNIT                   179

EFFECTIVE DATE            19960701

REGION CD                   42            SAN JUAN

MP TYPE CODE              10            GAS METER - WELLHEAD SALES

-----

SAMPLE TYPE CODE (GAS,LIQ,BTU)   GAS                    ----- BTU/CF -----

SAMPLE DATE                   19951218               --- (AT 14.73 PSIG) ---

SAMPLE LINE PRESSURE (PSIG)   \_\_\_\_\_               WET 1029.779   DRY 1048.000

SAMPLE LINE TEMPERATURE (DEG F) \_\_\_\_\_

TEST DATE                    \_\_\_\_\_               ----- BTU/CF -----

TEST PRESSURE (PSIG)        \_14.730            WET 1029.779 DRY 1048.000

TEST TEMPERATURE (DEG F)   60                    VAPOR FACTOR        \_\_\_\_\_

TEST LIFE (MONTHS)         \_12

TESTER SOURCE BA NUMBER     098795   EL PASO FIELD SERVICES

TEST PURPOSE CODE         \_\_\_\_\_

-----

03=DETAIL SCR   04=MP-NM BRWS   06=MP/DS LST   07=MP/WN LST

11=PREV SCR    12=MAIN MENU     20=NEXT REC

21=REFRESH SCR 22=PREV MENU    24=HELP        PA1=TERMINATE

\_\_\_\_\_

\*\* DATA AT 14.730 PSIG UNLESS NOTED \*\*

	MOL %	GPM (AT 14.73)
HYDROGEN	_____	
HELIUM	_____	
NITROGEN	__0.17	
OXYGEN	_____	
HYDROGEN SULFIDE	_____	
CARBON DIOXIDE	__1.41	
METHANE	__94.58	
ETHANE	__2.55	0.6821
PROPANE	__0.57	0.1571
ISO-BUTANE	__0.16	0.0523
N-BUTANE	__0.14	0.0441
ISO-PENTANE	__0.08	0.0293
N-PENTANE	__0.05	0.0181
HEXANE	_____	
HEXANE PLUS	__0.29	0.1265
HEPTANE PLUS	_____	
TOTALS	100.00	1.1095

MP NUMBER 87825  
EFFECTIVE DATE 19960701

-- GASOLINE CONTENT (GPM) --  
26/70 GASOLINE \_\_\_\_\_  
100% PROPANE \_\_\_\_\_  
EXCESS BUTANES \_\_\_\_\_  
TOTAL \_\_\_\_\_

----- SPECIFIC GRAVITY -----  
CALCULATED \_\_0.6010  
MEASURED \_\_\_\_\_

SULPHUR GRAINS / 100 CU FT \_\_\_\_\_

03=MAIN SCREEN

24=HELP

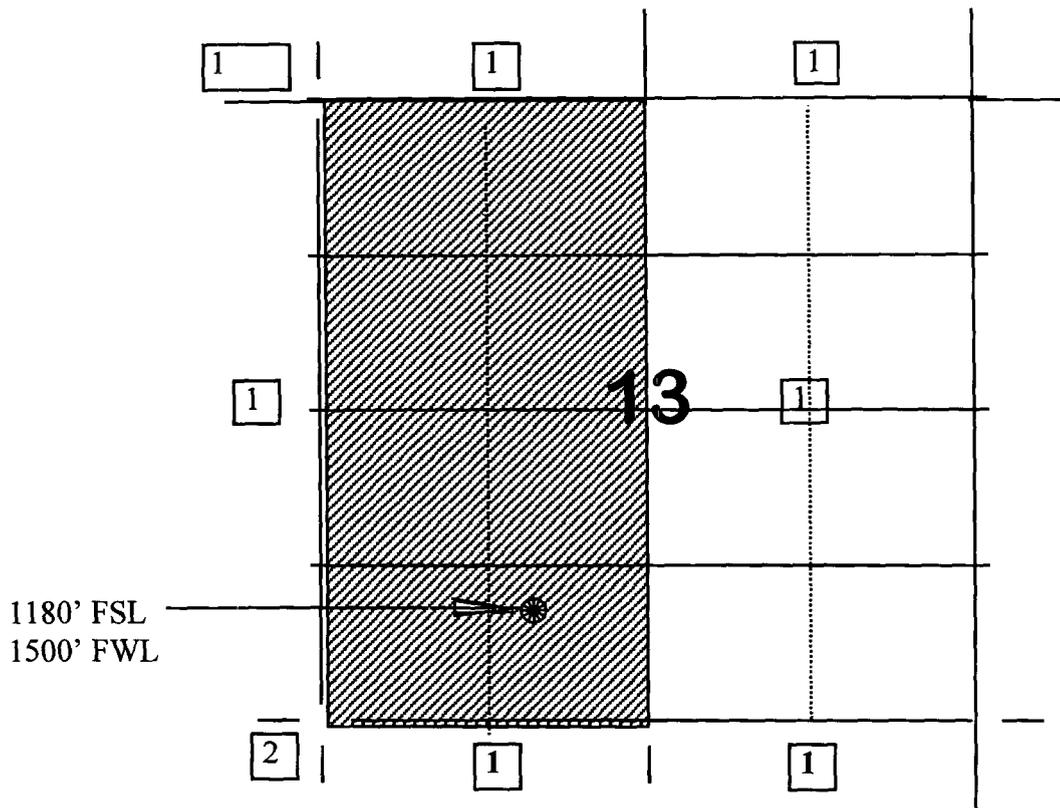
PA1=TERMINATE

**BURLINGTON RESOURCES OIL AND GAS COMPANY**

**San Juan 28-6 Unit #179**

**OFFSET OPERATOR/OWNER PLAT**  
**Gallup(SW/4), Dakota (W/2) Formations**  
**Down-hole Commingle**

**Township 28 North, Range 6 West**



- 1) Burlington Resources
- 2) Union Oil Company of California  
P.O. Box 3100  
Midland, Texas 79702

DATE: September 02, 1998  
 NAME: SAN JUAN 28-6 UNIT 179  
 FORM: DAKOTA  
 LOCATION  
 UNIT: N  
 SEC: 13  
 TWN: 27N  
 RNG: 6W

LEGEND  
 \* COMPLETION DATE  
 \* WELL NAME  
 \* MCF/D-CUM(MMF)  
 \* BOP/D-CUM(MBO)

<p>4/98 *          San Juan 28-6 Unit 156M          43/1 (98) 0/0          7/71 *          San Juan 28-6 Unit 158          43/759 (98) 0/0          [11]          5/74 *          San Juan 28-6 Unit 208          68/909 (98) 0/2</p>	<p>3/98 *          San Juan 28-6 Unit 182M          109/6 (98) 0/0          8/71 *          San Juan 28-6 Unit 161          119/1504 (98) 0/0          [12]          8/73 *          San Juan 28-6 Unit 182          114/1422 (98) 0/3</p>	<p>3/86 *          San Juan 27-5 Unit 126M          38/339 (98) 0/0          8/71 *          San Juan 27-5 Unit 126          81/1432 (98) 0/0          [7]          4/86 *          San Juan 27-5 Unit 69M          96/550 (98) 0/1</p>
<p>4/98 *          San Juan 28-6 Unit 181M          9/0 (98) 0/0          [14]          10/73 *          San Juan 28-6 Unit 181          49/1055 (98) 0/0          7/72 *          San Juan 28-6 Unit 168          54/839 (98) 0/0</p>	<p>2/98 *          San Juan 28-6 Unit 179M          230/21 (98) 0/0          7/73 *          San Juan 28-6 Unit 183          213/2899 (98) 0/6          [13]          9/73 *          San Juan 28-6 Unit 179          63/1347 (98) 0/0</p>	<p>11/85 *          San Juan 27-5 Unit 163M          64/853 (98) 0/1          4/72 *          San Juan 27-5 Unit 137          107/1284 (98) 0/0          [18]          11/73 *          San Juan 27-5 Unit 163          103/1407 (98) 0/1          12/85 *          San Juan 27-5 Unit 137E          171/974 (98) 0/1</p>
<p>7/62 *          Rincon Unit 173          127/2645 (98) 0/7</p>	<p>11/69 *          San Juan 28-6 Unit 146          110/1929 (98) 0/5</p>	<p>4/72 *          San Juan 27-5 Unit 138          74/1969 (98) 0/3          [19]          9/71 *          San Juan 27-5 Unit 133          211/3039 (98) 0/4          3/86 *          San Juan 27-5 Unit 138E          146/879 (98) 0/1</p>

T  
27  
N

R-5-W

R-6-W

DATE: September 02, 1998  
 NAME: SAN JUAN 28-6 UNIT 179  
 FORM: GALLUP  
 LOCATION  
 UNIT: N  
 SEC: 13  
 TWIN: 27N  
 RNG: 6W

T  
27  
N

[7]	[12]	[11]
[18]	[13] San Juan 28-6 Unit 179	[14]
[19]	[24]	[23]

LEGEND  
 COMPLETION DATE  
 WELL NAME  
 MCF/D-CUM(MMF)  
 BOP/D-CUM(MBO)

R-5-W

R-6-W

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:

"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 28-6 Unit which encompasses some 27,735 acres in Townships 27 and 28 North, Range 6 West, NMPM, San Juan County, New Mexico.

(5) Within the San Juan 28-6 Unit, the applicant currently operates ninety (90) Basin-Dakota Gas Pool wells, one hundred twenty-six (126) Blanco-Mesaverde Gas Pool wells, fifty-one (51) South Blanco-Pictured Cliffs Gas Pool wells, and fifty-eight (58) 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 28-6 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 28-6 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 28-6 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:

- a) the average shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations at the time of initial development was approximately 3,172 psi and 1,173 psi, respectively; and,
- b) the average current shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations is approximately 980 psi and 393 psi, respectively.

(10) There is sufficient pressure data available within the San Juan 28-6 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 28-6 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 28-6 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 28-6 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 28-6 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 28-6 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.

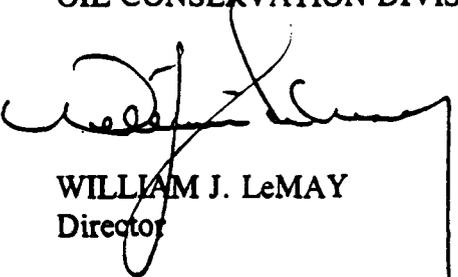
(2) Upon filing of Division Form No. C-107-A's for wells subsequently downhole commingled within the San Juan 28-6 Unit Area, the applicant shall not be required to submit supporting data to justify the classification of the Pictured Cliffs and Dakota formations as "marginal", supporting data to verify 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 28-6 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 28-6 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

S E A L