

ABOVE THIS LINE FOR DIVISION USE ONLY

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



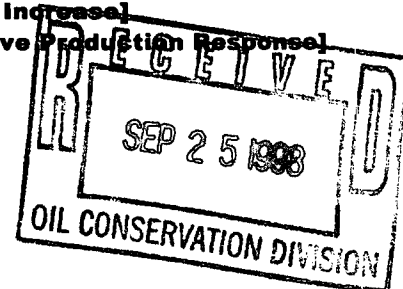
2117

## 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 87505-6429Form C-107-A  
New 3-12-96

## APPROVAL PROCESS :

☒ Administrative ☐ Hearing

## APPLICATION FOR DOWNHOLE COMMINGLING

## EXISTING WELLBORE

☒ YES ☐ NO

Burlington Resources Oil &amp; Gas Company

PO Box 4289, Farmington, NM 87499

Operator

Address

San Juan 28-6 Unit

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 X

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	(Current) Est. a. 1963	a.	a. 888
Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(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  Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	Date: n/a Rates:	Date: n/a Rates:	Date: n/a Rates:
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: n/a Rates: n/a	Date: n/a Rates: n/a	Date: n/a Rates: 102 MCF/D
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 ☐ No11. 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 ☐ No13. 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 09-17-98TYPE 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, 1995  
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

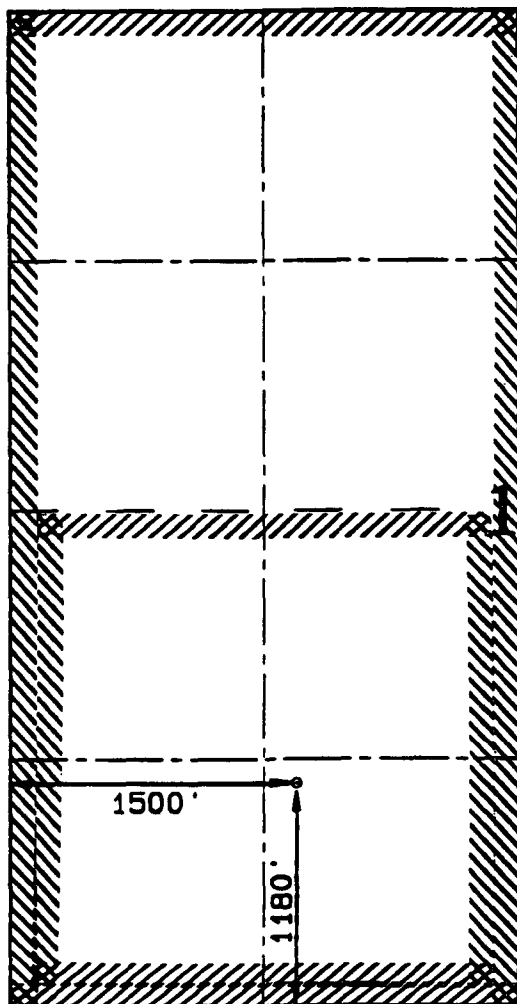
UL or lot no. N	Section 13	Township 27N	Range 6W	Lot 1/4 1180	Feet from the South	North/South line 1500	East/West line West	County RIO ARriba
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#### <sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
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<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.
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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 Bradfield*  
Signature  
Peggy Bradfield  
Printed Name  
Regulatory Administrator  
Title  
12-2-97  
Date

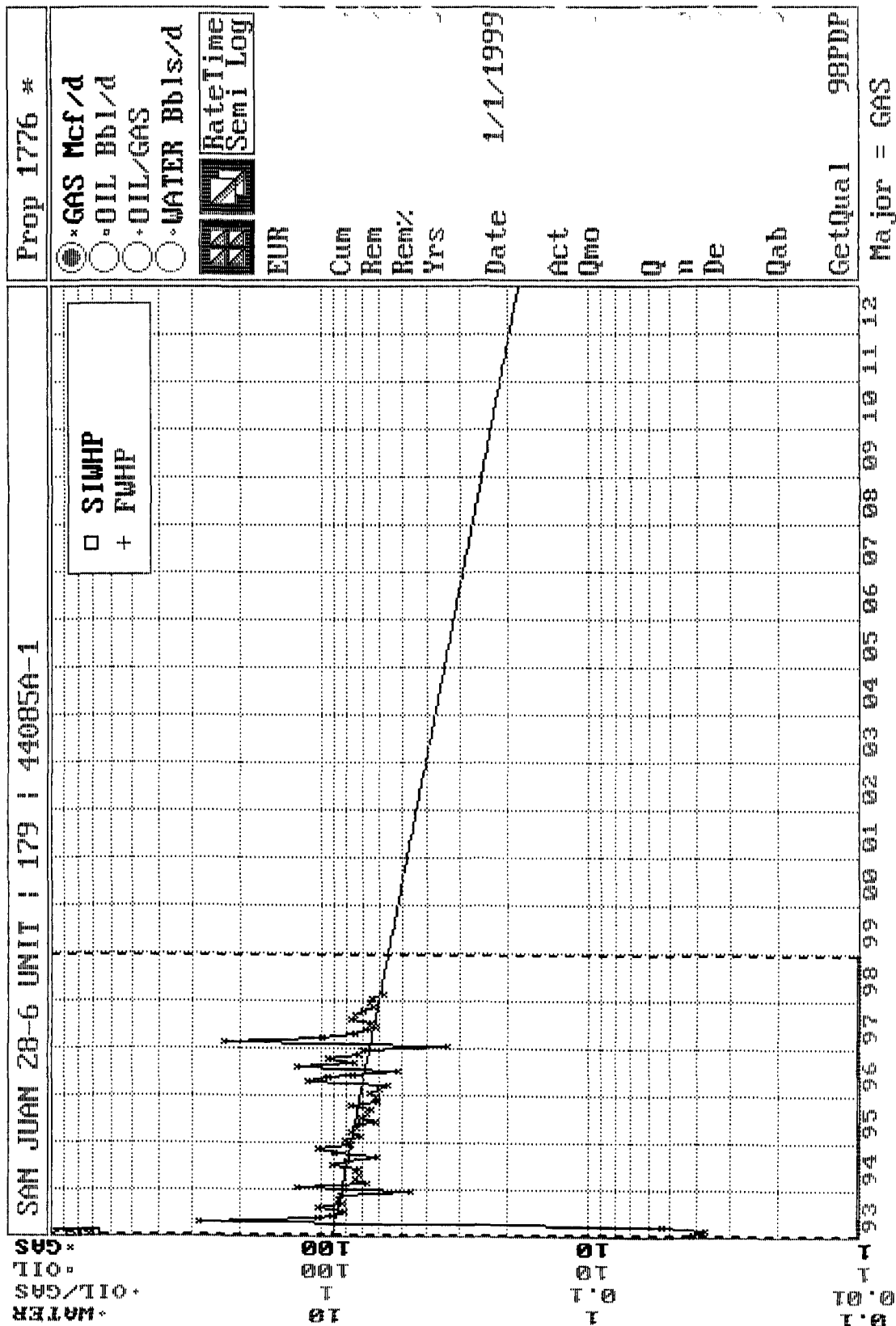
#### <sup>18</sup> SURVEYOR CERTIFICATION

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  
*NEALE C. EDWARDS*  
NEW MEXICO  
6857  
Certificate Number

DK



SAN JUAN 28-6 UNIT : 179 :

• OIL  
• WATER/GAS  
• GAS  
• WATER

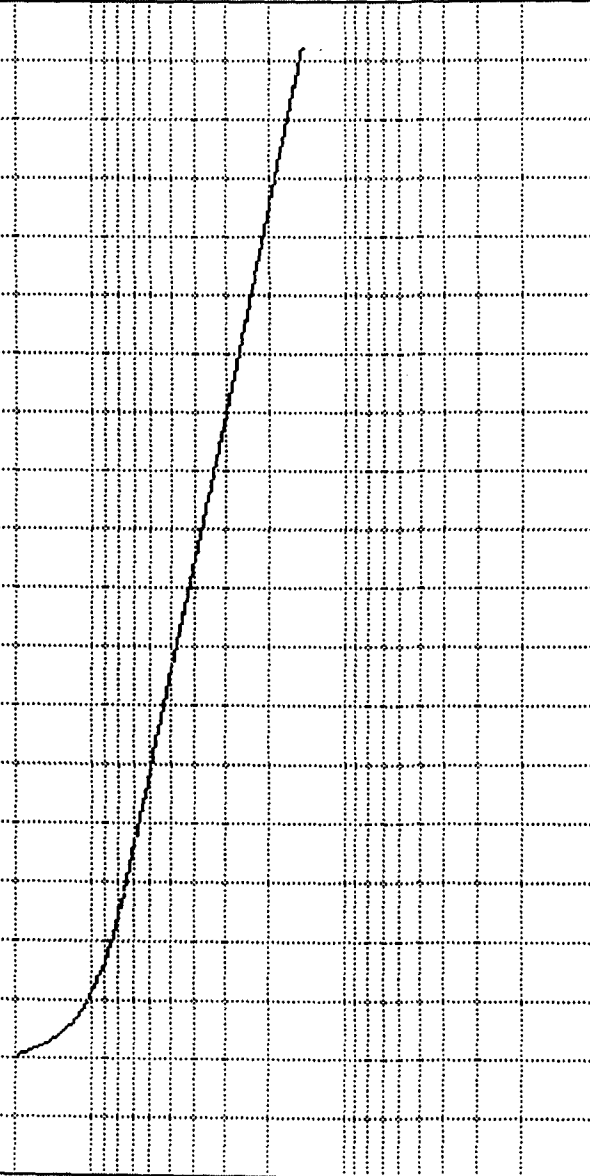
— DAILY RATE  
— TBG PRESSURE

100  
1000  
1000  
1000

10  
100  
100  
100

1  
10  
10  
10

0.1  
1  
1



Prop 665 GL

- ☐ • WATER Bbls/d
- ☒ • GAS Mcf/d
- ☐ • WATER/GAS
- ☐ • OIL Bbl/d

Rate Time  
Semi Log



EUR

Cum 0

Rem

Rem%

Yrs

Date

Act

Qmo

Q

n

De

Qab

GetQual BOBMED

Major = 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)	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">888.2</div>

<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)	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">3180.2</div>

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

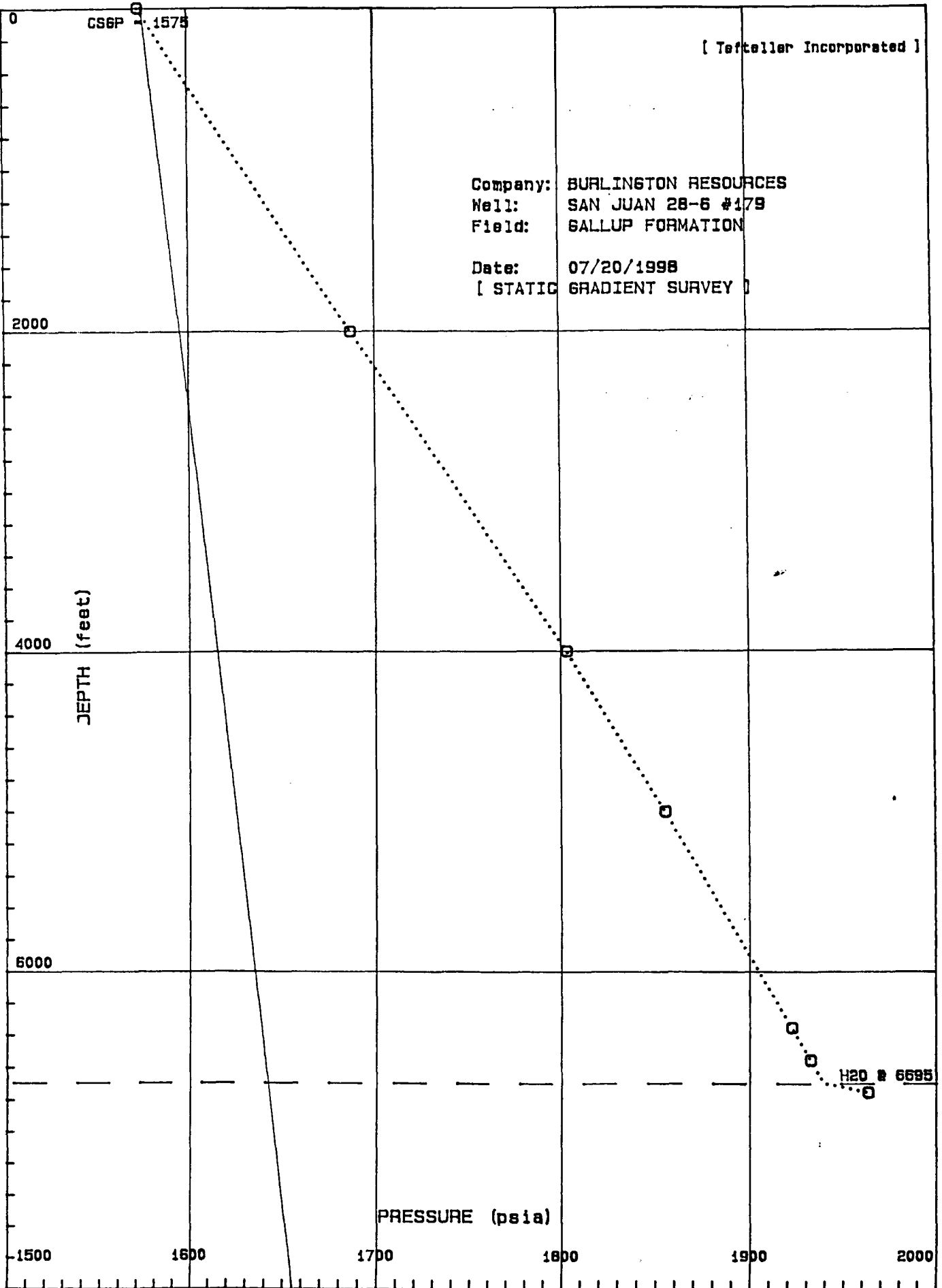
Shut-in BHP 1963 @ 6750 ft Shut-in BHT 0 F @ 0 ft  
Shut-in WHP 1573 Shut-in WHT 0 F  
Casing CSGP 1575

[ 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 ]





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Page No.: 1
Print Time: Wed Sep 02 08:57:39 1998
Property ID: 1776
Property Name: SAN JUAN 28-6 UNIT | 179 | 44085A-1
Table Name: Q:\PUBLIC\GENTITY\GDPNOS\TEST.DBF

```

```
--DATE--   ---CUM_GAS--- M FWHP-  M FBHP-  M SIWHP  M SIBHP
■■■■■■■■■■ ■■■■■■Mcf■■■■ ■■■Psi■■ ■■Psi■■ ■■Psi■■ ■■Psi■■
```

09/07/73	0	0.0	<u>2640.0</u>	3094.0	orig
11/16/73	34066	620.0	1818.0	2129.0	
05/02/74	125354	326.0	1012.0	1176.0	
05/16/75	247379	336.0	830.0	962.0	
06/06/77	420454	138.0	899.0	1043.0	
06/11/79	563110	209.0	733.0	849.0	
08/03/81	709820	172.0	699.0	809.0	
10/11/83	800959	146.0	919.0	1067.0	
09/19/85	905229	133.0	789.0	914.0	
03/05/88	994557	133.0	839.0	973.0	
05/08/90	1099221	116.0	896.0	1040.0	
07/02/92	1187266	169.0	<u>749.0</u>	867.0	Current

FDG055M4 0104

WELL PRODUCTION 8/8'S VOLUME

DK

09/01/98 17:31:10

START OF DATA

DP NO: 44085A

DATE: 980830 (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)
—	08/30/98	24.0	0.00	0.00	51 3051 0.00 0.00
—	08/29/98	24.0	0.00	0.00	53 3000 0.00 0.00
—	08/28/98	24.0	0.00	0.00	61 2947 0.00 0.00
—	08/27/98	24.0	0.00	0.00	75 2886 0.00 0.00
—	08/26/98	24.0	0.00	0.00	65 2811 0.00 0.00
—	08/25/98	24.0	0.00	0.00	65 2746 0.00 0.00
—	08/24/98	24.0	0.00	0.00	79 2681 0.00 0.00
—	08/23/98	24.0	0.00	0.00	93 2602 0.00 0.00
—	08/22/98	24.0	0.00	0.00	93 2509 0.00 0.00
—	08/21/98	24.0	0.00	0.00	93 2416 0.00 0.00
—	08/20/98	24.0	0.00	0.00	104 2323 0.00 0.00

ENTER I UNDER SEL FOR MAINTENANCE

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

102 avg mcf/d - Aug

DP NO: 44085A

DATE: 980819 (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)
_	08/19/98	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	(MCFD	(BWPD			
			BOPM)	MCFM)	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	PF11=INQ/UPDATE MENU
	ENTER=BACKWARDS		PF24=HELP

REQUESTED RECORD NOT FOUND (NEXT RECORD DISPLAYED)

DK

OPR008M1 0104

0008 CHROMATOGRAPH TEST MAIN SCREEN

17:32:30.8 09/01/98

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 \_\_\_\_\_

	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

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

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

- Township 28 North, Range 6 West**

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 158M            43/1 (98)            0/0</p> <p>7/71            San Juan 28-6 Unit 158            43/759 (98)            0/0</p> <p>[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</p> <p>8/71            San Juan 28-6 Unit 161            119/1504 (98)            0/0</p> <p>[12]            8/71            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</p> <p>6/62            San Juan 27-5 Unit 69            148/2610 (98)            0/5</p> <p>8/71            San Juan 27-5 Unit 126            81/1432 (98)            0/0</p> <p>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</p> <p>10/73            San Juan 28-6 Unit 181            49/1055 (98)            0/0</p> <p>[14]            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</p> <p>7/73            San Juan 28-6 Unit 183            213/2899 (98)            0/6</p> <p>[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</p> <p>4/72            San Juan 27-5 Unit 137            107/1284 (98)            0/0</p> <p>[18]            11/73            San Juan 27-5 Unit 137E            171/974 (98)            0/1</p> <p>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>12/68            Rincon Unit 146            83/1483 (98)            0/5</p> <p>[23]            7/72            San Juan 28-6 Unit 168            54/839 (98)            0/0</p>	<p>11/69            San Juan 28-6 Unit 146            110/1929 (98)            0/5</p> <p>4/72            San Juan 28-6 Unit 171            117/1462 (98)            0/0</p> <p>[24]            9/71            San Juan 27-5 Unit 133            211/3039 (98)            0/4</p>	<p>4/72            San Juan 27-5 Unit 138            74/1969 (98)            0/3</p> <p>[19]            3/86            San Juan 27-5 Unit 138E            146/879 (98)            0/1</p>

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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  
TWN: 27N  
RNG: 6W

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

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

T 27 N

R-5-W

R-5-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

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