

DATE IN 12/24/97	SUSPENSE 1/13/98	ENGINEER DC	LOGGED W	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1790

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

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

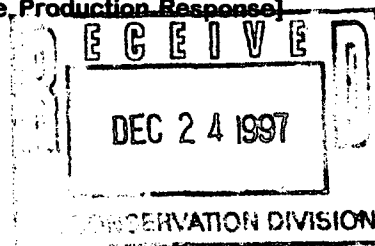
Check One Only for [B] and [C]

[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 - Statement of Understanding

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, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Peggy Bradfield

Regulatory/Compliance Administrator

Print or Type Name

Signature

Title

12/27/97
Date

DISTRICT I

P.O. Box 1880, Hobbs, NM 88241-1880

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 & Gas Company

PO Box 4289, Farmington, NM 87499

Operator

Address

SAN JUAN 27-5 UNIT

37

A-20-27N-05W

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

Spacing Unit Lease Types: (check 1 or more)

County

OGRID NO. 14538 Property Code 7455 API NO. 30-039-70190 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	Pictured Cliffs - 85920		Blanco Mesaverde - 72319
2. Top and Bottom of Pay Section (Perforations)	3270-3330'		4914-5532'
3. Type of production (Oil or Gas)	gas		gas
4. Method of Production (Flowing or Artificial Lift)	flowing		flowing
5. Bottomhole Pressure	(Current) a. 510 psi	a.	a. 537 psi
Oil Zones - Artificial Lift: Estimated Current			
Gas & Oil - Flowing: Measured	(Original) b. 1209 psi	b.	b. 1280 psi
Current All Gas Zones: Estimated or			
6. Oil Gravity ($^{\circ}$ API) or Gas BTU Content	BTU 1106		BTU 1178
7. Producing or Shut-In?	producing		producing
Production Marginal? (yes or no)	yes		yes
* If Shut-In and oil/gas/water rates of last production	Date: Rates:	Date: Rates:	Date: Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data			
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: 9/97 Rates: 15 MCFD	Date: Rates:	Date: 9/97 Rates: 76 MCFD
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: % Gas: % To Be Supplied Upon Completion	Oil: % Gas: %	Oil: % Gas: % To 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 ☐ No15. NMOC Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). R-10694

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 12-23-97TYPE OR PRINT NAME Jennifer L. Dobson TELEPHONE NO. (505) 599-4026

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

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APPROVAL PROCESS :

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil & Gas Company

PO Box 4289, Farmington, NM 87499

Operator Address
SAN JUAN 27-5 UNIT 37 A-20-27N-05W Rio Arriba
Lease Well No. Unit Ltr. - Sec - Twp - Rge Spacing Unit Lease Types: (check 1 or more)
OGRID NO. 14568 Property Code 007972700 API NO. 30-0-701900 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	Pictured Cliffs - 72439		Blanco Mesaverde - 72319
2. Top and Bottom of Pay Section (Perforations)	3270-3330'		4914-5532'
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) a. 510 psi (Original) b. 1209 psi	a. b.	a. 537 psi b. 1280 psi
6. Oil Gravity (°API) or Gas BTU Content	BTU 1106		BTU 1178
7. Producing or Shut-In?	producing		producing
Production Marginal? (yes or no)	yes		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: Rates:	Date: Rates:	Date: Rates:
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: 9/97 Rates: 15 MCFD	Date: Rates:	Date: 9/97 Rates: 78 MCFD
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: % Gas: % To Be Supplied Upon Completion	Oil: % Gas: %	Oil: % Gas: % To 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-10694
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* 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 L. Dobson TITLE Production Engineer DATE 11/12/97TYPE OR PRINT NAME Jennifer L. Dobson TELEPHONE NO. (505) 599-4026

Well Location and Acreage Dedication Plat

Section A.

Date **FEBRUARY 4, 1958**

Operator **EL PASO NATURAL GAS COMPANY** Lease **SAN JUAN 27-5 UNIT** SF **079392**
 Well No. **37 (PM)** Unit Letter **A** Section **20** Township **27-N** Range **5-W** NMPM
 Located **800** Feet From **NORTH** Line, **840** Feet From **EAST** Line
 County **RIO ARriba** G. L. Elevation **6481** Dedicated Acreage **320 & 160** Acres
 Name of Producing Formation **MESA VERDE & PICTURED CLIFF** Pool **MV - BLANCO, PC - WILDCAT**

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?
 Yes ☒ No ☐
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes ☐ No ☐ If answer is "yes", Type of Consolidation.
3. If the answer to question two is "no", list all the owners and their respective interests below:

Owner

Land Description

RECEIVED
FEB 18 1958

Section B.

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

El Paso Natural Gas Company

(Operator)

Original Signed **D. C. Johnston**

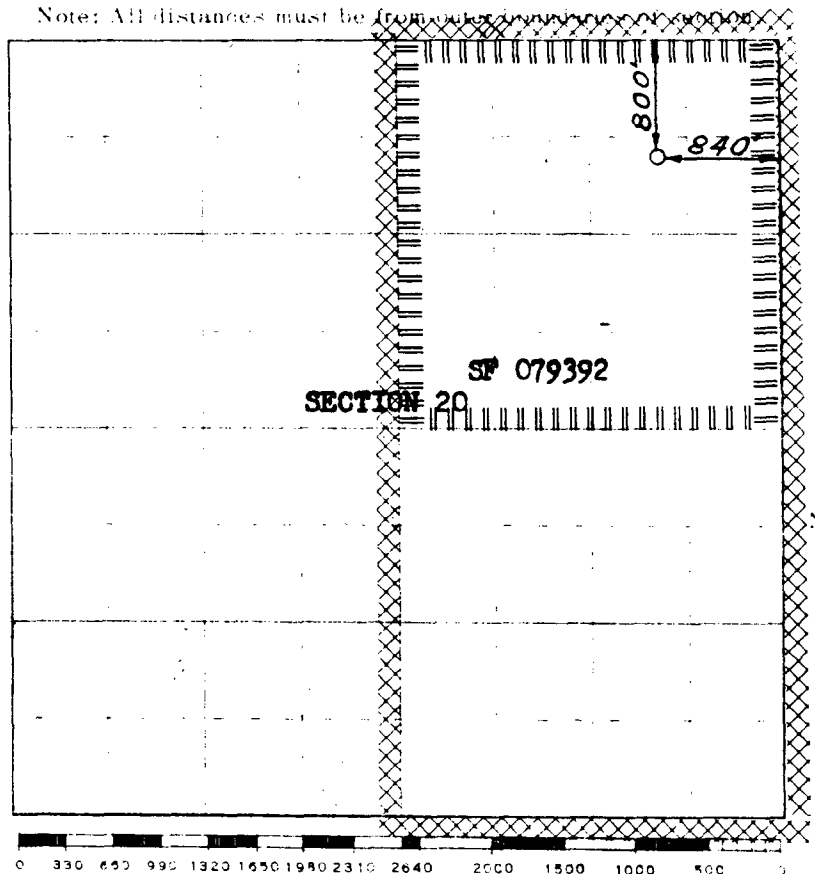
(Representative)

Box 997

(Address)

Farmington, New Mexico

Note: All distances must be from corner to corner.



Scale 4 inches equal 1 mile

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

(Seal)

Date Surveyed **DECEMBER 26, 1957**

David J. Kilven
 Registered Professional Engineer and/or Land Surveyor

Farmington, New Mexico

FARMINGTON

1997 MONTHLY PRODUCTION FOR 53369A

PHS030M1

SAN JUAN 27-5 UNIT

37

TAPACITO P.C. (PRO GAS) FIELD

PICTURED CLIFFS ZONE

DAYS =====			OIL =====		=====		GAS =====							
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F					01	576	31	1113	15.025			
2	2	F					01	504	28	1106	15.025			
3	2	F					01	516	31	1106	15.025			
4	2	F					01	453	30	1106	15.025			
5	2	F					01	459	31	1106	15.025			
6	2	F					01	454	30	1106	15.025			
7	2	F					01	495	31	1106	15.025			
8	2	F					01	390	25	1106	15.025			
9	2	F					01	436	30	1106	15.025			
10														
11														
12														

PF6 - RETURNS TO ANNUAL DISPLAY

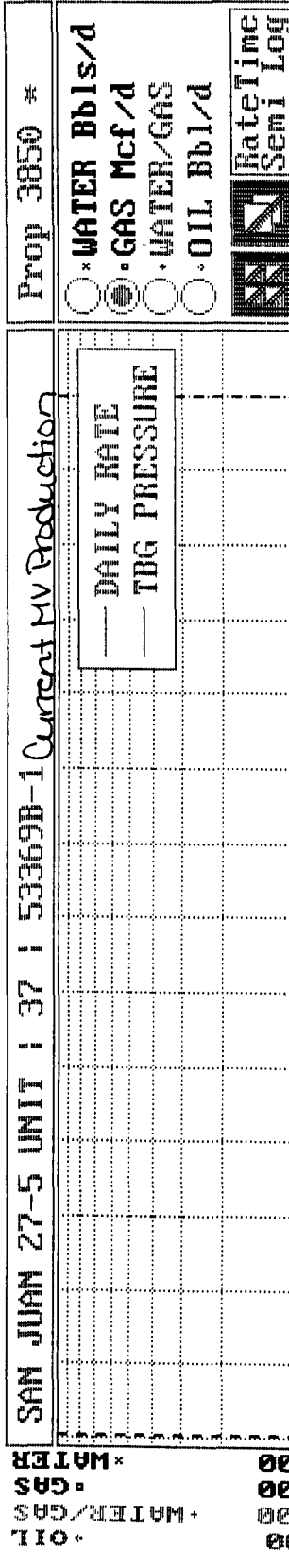
PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION

PF9 - DISPLAY MONTHLY INJECTION

00/00/00 00:00:00:0

PRS 11/05/97



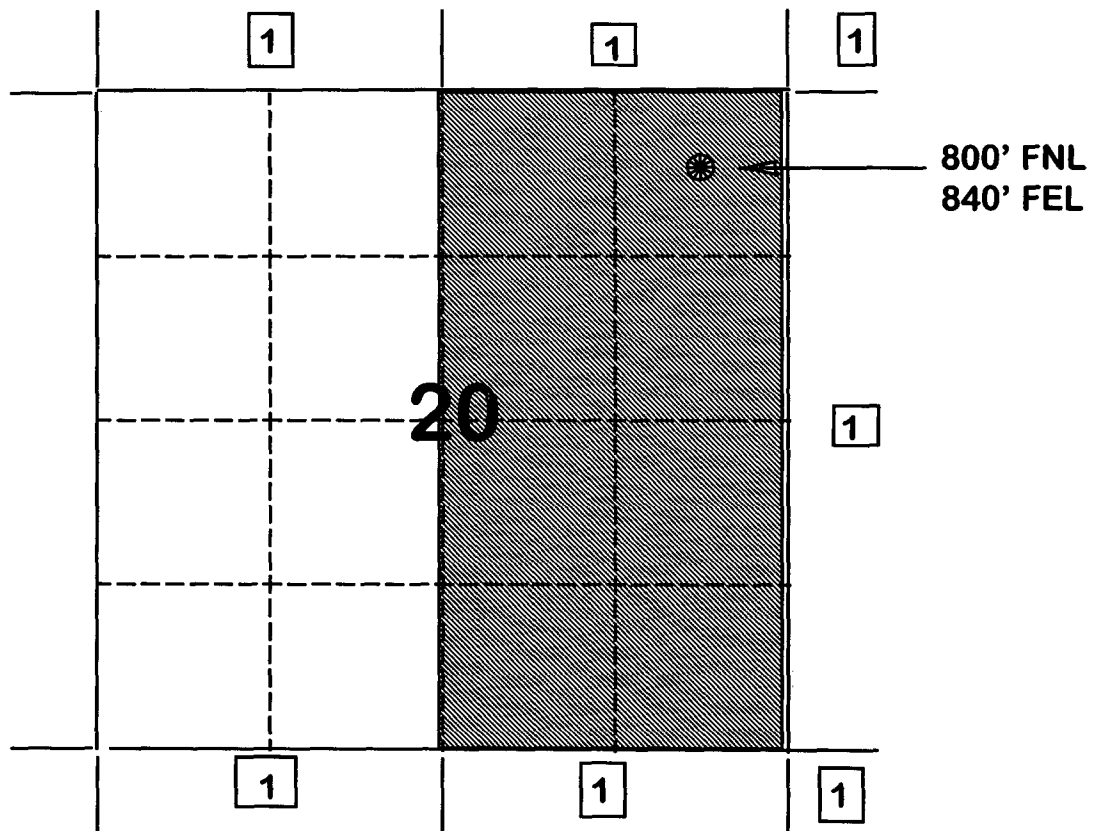
BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 27-5 Unit #37

OFFSET OPERATOR \ OWNER PLAT

Pictured Cliffs (NE/4) / Mesaverde (E/2) Formations Commingle Well

Township 27 North, Range 5 West



1) Burlington Resources

FARMINGTON 1997 MONTHLY PRODUCTION FOR 53369B
 SAN JUAN 27-5 UNIT 37
 BLANCO MESAVERDE (PRORATED GAS FIELD MESAVERDE ZONE

PHS030M1

DAYS =====			OIL =====		=====		GAS =====							
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F					01	3194	31	1178	15.025			
2	2	F					01	3095	28	1178	15.025			
3	2	F					01	2853	31	1182	15.025			
4	2	F					01	2637	30	1182	15.025			
5	2	F					01	2226	31	1182	15.025			
6	2	F					01	1822	30	1182	15.025			
7	2	F					01	2184	31	1182	15.025			
8	2	F					01	2284	28	1182	15.025			
9	2	F					01	2326	30	1182	15.025			
10														
11														
12														

PF6 - RETURNS TO ANNUAL DISPLAY
 PF10 - HELP INFORMATION

PF3 - TRANSFER TO UPDATE
 PF9 - DISPLAY MONTHLY INJECTION
 PRS 11/05/97

00/00/00 00:00:00:0

San Juan 27-5 #37
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Pictured Cliffs		Mesaverde	
<u>PC - Current</u>		<u>MV-Current</u>	
GAS GRAVITY	0.639	GAS GRAVITY	0.694
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.37	%N2	0.29
%CO2	0.54	%CO2	0.75
%H2S	0	%H2S	0
DIAMETER (IN)	1.995	DIAMETER (IN)	1.995
DEPTH (FT)	3300	DEPTH (FT)	5223
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	100	BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	471	SURFACE PRESSURE (PSIA)	471
BOTTOMHOLE PRESSURE (PSIA)	509.9	BOTTOMHOLE PRESSURE (PSIA)	536.7
<u>PC - Original</u>		<u>MV-Original</u>	
GAS GRAVITY	0.639	GAS GRAVITY	0.694
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.37	%N2	0.29
%CO2	0.54	%CO2	0.75
%H2S	0	%H2S	0
DIAMETER (IN)	1.995	DIAMETER (IN)	1.995
DEPTH (FT)	3300	DEPTH (FT)	5223
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	100	BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1107	SURFACE PRESSURE (PSIA)	1107
BOTTOMHOLE PRESSURE (PSIA)	1209.2	BOTTOMHOLE PRESSURE (PSIA)	1280.2

Page No.: 1

Print Time: Thu Nov 13 13:58:50 1997

Property ID: 6799

Property Name: SAN JUAN 27-5 UNIT | 37 | 53369A-1 PC Pressure History

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

--DATE-- ---CUM GAS-- M SIWHP
-----Mcf-----Psi-----

03/08/58	0	1107.0	original
06/10/58	0	1106.0	
12/06/58	8000	795.0	
06/14/59	17000	697.0	
06/14/60	35000	641.0	
06/13/61	48000	622.0	
10/01/62	64000	619.0	
04/19/63	70000	634.0	
04/29/64	81000	604.0	
05/10/65	89000	612.0	
04/19/66	97000	593.0	
09/13/67	106000	576.0	
05/02/68	110000	555.0	
06/22/69	119111	507.0	
05/22/70	124783	487.0	
07/22/71	133706	438.0	
06/06/72	139833	447.0	
06/04/74	156164	442.0	
02/20/84	208703	346.0	
06/05/84	209819	350.0	
04/21/86	214280	370.0	
08/22/89	222126	347.0	
08/30/91	227046	471.0	current

Page No.: 1

Print Time: Thu Nov 13 14:00:23 1997

Property ID: 3850

Property Name: SAN JUAN 27-5 UNIT | 37 | 53369B-1 MV Pressure History

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

--DATE-- ---CUM GAS-- M SIWHP
Mcf Psi

03/08/58	0	1110.0	original
06/03/58	0	1109.0	
12/06/58	24000	883.0	
06/14/59	45000	863.0	
06/14/60	78000	833.0	
11/22/60	94000	763.0	
06/13/61	118000	722.0	
10/01/62	164000	690.0	
04/19/63	182000	681.0	
04/29/64	214000	651.0	
05/10/65	243000	649.0	
04/19/66	269000	654.0	
05/16/67	297000	635.0	
05/02/68	321000	634.0	
10/07/70	382596	599.0	
07/22/71	401792	582.0	
06/06/72	425578	537.0	
06/04/74	482198	442.0	
06/25/76	532643	511.0	
04/21/86	693136	634.0	
04/23/91	744493	510.0	
05/20/91	746822	498.0	current

DATE: November 17, 1997
 NAME: SAN JUAN 27-5 UNIT 37
 FMT: PICTURED CLIFFS
 LOCATION
 UNIT: A
 SEC: 20
 TWN: 27N
 RNG: 05W

<p>10/74 * San Juan 27-5 Unit 186 2/244 (97) 0/0</p> <p>[18] 3/59 * San Juan 27-5 Unit 47 19/468 (97) 0/0</p> <p>11/85 * San Juan 27-5 Unit 49A 23/103 (97) 0/1</p>	<p>P&A 8/61 * San Juan 27-5 Unit 65 25/708 (82) 0/0</p> <p>[17] 6/74 * San Juan 27-5 Unit 180 26/210 (97) 0/0</p> <p>7/248 (95) 0/0 San Juan 27-5 Unit 179</p> <p>92/2036 (97) 0/0 San Juan 27-5 Unit 15</p> <p>0/528 (95) 0/0 San Juan 27-5 Unit 151</p>	<p>7/73 * San Juan 27-5 Unit 152 38/540 (97) 0/0</p> <p>6/58 * San Juan 27-5 Unit 38 22/1335 (97) [16] 0/0</p> <p>P&A 7/73 * San Juan 27-5 Unit 151</p>
<p>P&A 5/74 * San Juan 27-5 Unit 187 11/100 (85) 0/0</p> <p>3/60 * San Juan 27-5 Unit 50 10/533 (97) [19] 0/0</p> <p>3/59 * San Juan 27-5 Unit 48 11/332 (97) 0/0</p>	<p>3/58 * San Juan 27-5 Unit 37 16/253 (97) 0/0</p> <p>[20] 5/61 * San Juan 27-5 Unit 58 18/226 (97) 0/0</p>	<p>4/58 * San Juan 27-5 Unit 30 22/3443 (97) 0/0</p> <p>P&A 7/73 * San Juan 27-5 Unit 153 2/226 (90) 0/0</p> <p>[21] 6/59 * San Juan 27-5 Unit 41 34/433 (97) 0/0</p> <p>12/230 (97) 0/0 San Juan 27-5 Unit 154</p>
<p>INA 5/74 * San Juan 27-5 Unit 188 2/98 (93) 0/0</p> <p>5/58 * San Juan 27-5 Unit 34 17/384 (97) 0/0</p>	<p>P&A 7/59 * San Juan 27-5 Unit 4 16/188 (96) 0/0</p> <p>[29]</p>	<p>9/62 * San Juan 27-5 Unit 71 7/163 (97) 0/0</p> <p>[28] 4/60 * San Juan 27-5 Unit 51 3/265 (97) 0/0</p>

LEGEND
 FIRST DELIVERY DATA
 WELL NAME
 MCF/D-CUM(MMCF)
 BOPD-CUM(MBO)

DATE: November 17, 1997
 NAME: San Juan 27-5 Unit 37
 FMT: MESAVERDE
 LOCATION
 UNIT: A
 SEC: 20
 TWN: 27N
 RNG: 05W

<p>8/96 *</p> <p>San Juan 27-5 Unit 163M 311/129 (97) 0/0</p> <p>10/60 *</p> <p>San Juan 27-5 Unit 49 160/466 (97) 0/0</p> <p>[18]</p> <p>3/59 *</p> <p>San Juan 27-5 Unit 47 92/452 (97) 0/0</p> <p>11/85 *</p> <p>San Juan 27-5 Unit 49A 108/525 (97) 0/1</p>	<p>3/57 *</p> <p>San Juan 27-5 Unit 26 53/891 (97) 0/0</p> <p>[17]</p> <p>9/53 *</p> <p>San Juan 27-5 Unit 3 258/295 (97) 1/0</p>	<p>7/96 *</p> <p>San Juan 27-5 Unit 40M 263/204 (97) 0/0</p> <p>7/58 *</p> <p>San Juan 27-5 Unit 38 31/1359 (97) [16] 0/0</p> <p>3/56 *</p> <p>San Juan 27-5 Unit 15 106/720 (97) 0/1</p>	<p>4/58 *</p> <p>San Juan 27-5 Unit 30 156/549 (97) 0/0</p> <p>[21]</p> <p>3/59 *</p> <p>San Juan 27-5 Unit 41 165/431 (97) 2/0</p> <p>7/96 *</p> <p>San Juan 27-5 Unit 125E 124/48 (97) 0/0</p>
<p>3/60 *</p> <p>San Juan 27-5 Unit 50 133/504 (97) 0/0</p> <p>[19]</p> <p>3/59 *</p> <p>San Juan 27-5 Unit 48 213/943 (97) 0/0</p>	<p>3/58 *</p> <p>San Juan 27-5 Unit 37 72/862 (97) 0/0</p> <p>INA</p> <p>3/86 *</p> <p>San Juan 27-5 Unit 139M 0/267 (93) 0/1</p> <p>2/57 *</p> <p>San Juan 27-5 Unit 19 61/1278 (97) 0/0</p>	<p>9/53 *</p> <p>San Juan 27-5 Unit 4 253/868 (97) 1/0</p> <p>4/86 *</p> <p>San Juan 27-5 Unit 165M 233/620 (97) 1/2</p> <p>9/56 *</p> <p>San Juan 27-5 Unit 17 211/3612 (97) 0/10</p>	<p>9/62 *</p> <p>San Juan 27-5 Unit 71 86/772 (97) 1/1</p> <p>[28]</p> <p>4/60 *</p> <p>San Juan 27-5 Unit 51 33/590 (97) 0/0</p>
<p>10/85 *</p> <p>San Juan 27-5 Unit 34A 191/777 (97) 2/6</p> <p>7/67 *</p> <p>San Juan 27-5 Unit 34 130/2578 (97) 1/10</p>	<p>12/55 *</p> <p>San Juan 27-5 Unit 13 325/572 (97) 2/1</p> <p>[30]</p>	<p>9/53 *</p> <p>San Juan 27-5 Unit 4 253/868 (97) 1/0</p> <p>4/86 *</p> <p>San Juan 27-5 Unit 165M 233/620 (97) 1/2</p> <p>9/56 *</p> <p>San Juan 27-5 Unit 17 211/3612 (97) 0/10</p>	<p>9/62 *</p> <p>San Juan 27-5 Unit 71 86/772 (97) 1/1</p> <p>[28]</p> <p>4/60 *</p> <p>San Juan 27-5 Unit 51 33/590 (97) 0/0</p>

LEGEND
 FIRST DELIVERY DATA
 *
 WELL NAME
 MCF/D-CUM(MMCF)
 BOPD-CUM(MBO)

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. 11626
ORDER NO. R-10694

APPLICATION OF BURLINGTON RESOURCES
OIL & GAS COMPANY FOR THE ESTABLISHMENT
OF A DOWNHOLE COMMINGLING "REFERENCE
CASE" FOR ITS SAN JUAN 27-5 UNIT PURSUANT
TO DIVISION RULE 303.E AND THE ADOPTION
OF SPECIAL ADMINISTRATIVE RULES THEREFOR.
SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 17 and November 7, 1996, at Santa Fe, New Mexico, before Examiners David R. Catanach and Michael E. Stogner, respectively.

NOW, on this 12th day of November, 1996, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises.

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Burlington Resources Oil & Gas Company (Burlington) pursuant to the provisions of Division Rule 303.E., seeks to establish a downhole commingling "reference case" to provide exceptions for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas and (d) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 27-5 Unit, San Juan County, New Mexico.
- (3) Division Rule No. 303.E., amended by Order No. R-10470-A, currently states:

"If sufficient data exists on a lease, pool, formation, geographic area, etc., so as to render it unnecessary to repeatedly provide such data on Form C-107-A, an operator may except any of the various criteria required under Paragraph 303.D. of this rule by establishing a "reference case". The Division, upon its own motion, or by application from an operator, may establish "reference cases" either administratively or by hearing. Upon Division approval of such "reference cases" for specific criteria, subsequent applications to downhole commingle (Form C-107-A) will be required only to cite the Division order number which established such exceptions and shall not be required to submit data for those criteria."

(4) The applicant is the current operator of the San Juan 27-5 Unit which encompasses some 23,043 acres in Township 27 North, Range 5 West, NMPM, San Juan County, New Mexico.

(5) Within the San Juan 27-5 Unit, the applicant currently operates one hundred and one (101) Basin-Dakota Gas Pool wells, one hundred and five (105) Blanco-Mesaverde Gas Pool wells, eighty-seven (87) South Blanco-Pictured Cliffs and Tapacito-Pictured Cliffs Gas Pool wells, and four (4) 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 27-5 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 27-5 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 27-5 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 27-5 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 27-5 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 583 MMCFG and 426 MMCFG, respectively;
- c) the average initial producing rate for a newly drilled or recompleted Dakota and Pictured Cliffs gas well is approximately 393 MCFGD and 63 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 27-5 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 27-5 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 3.141 psi and 1.118 psi, respectively; and.
- b) the average current shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations are approximately 1.032 psi and 441 psi, respectively.

(10) There is sufficient pressure data available within the San Juan 27-5 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 27-5 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 in the 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 27-5 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 27-5 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 27-5 Unit every time a Form C-107-A is submitted to the Division. There is a considerable number of such interest owners within the unit;

- c) providing notice to each interest owner within the San Juan 27-5 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 27-5 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 27-5 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 27 Unit for obtaining approval for subsequent downhole commingled wells without notice Unit interest owners, provided however that, all other provisions contained with 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 107-A, will provide the applicant a streamlined method for obtaining downhole commingling approvals within the San Juan 27-5 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 27-5 Unit, San Juan County, New Mexico, is hereby approved.

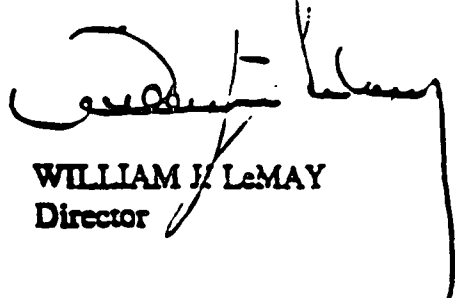
(2) Upon filing of Division Form No. C-107-A's for wells subsequently downhole commingled within the San Juan 27-5 Unit Area, the applicant shall not be required to submit supporting data to justify the classification of the Picured Cliffs and Dakota formations as "marginal", supporting data to verify the Picured 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 27-5 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 27-5 Unit of such proposed commingling.

(4) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM H. LeMAY
Director

S E A L