

BURLINGTON RESOURCES

SAN JUAN DIVISION

January 29, 1997

SENT FEDERAL EXPRESS

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

RECEIVED
FEB - 3 1997

OIL CON. DIV.
DIST. 3

Re: San Juan 28-5 Unit #58M
1845'FSL, 1060'FEL Section 30, T-28-N, R-5-W, Rio Arriba County, NM
API #30-039-25597 *I*

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Mesa Verde and Basin Dakota pools in the subject well. This well is a new Mesa Verde/Dakota well that is being drilled and completed in 1997.

To comply with the New Mexico Oil Conservation Division rules, Burlington Resources Oil & Gas Company is submitting the following for your approval of this commingling:

1. Form C107A - Application for Downhole Commingling;
2. C-102 plat for each zone showing its spacing unit and acreage dedication;
3. Production curve - not available - new drill well;
4. Notification list of offset operators - Burlington is the offset operator;
5. Shut in wellhead pressure and calculated down hole pressure;
6. Nine-section plats for the Mesa Verde and Dakota.

Notification of Mesa Verde and Dakota interest owners is covered under Reference Order #R-10695 issued November 12, 1996 attached.

We will consult with the Supervisor of the Aztec District Office of the New Mexico Oil Conservation Division to establish an allocation formula.

Please let me know if you require additional data.

Sincerely,



Peggy Bradfield
Regulatory/Compliance Administrator

encs.

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**APPLICATION FOR DOWNHOLE COMMINGLING**Form C-107-
New 3-12-96**APPROVAL PROCESS :**☒ Administrative ☐ Hearing**EXISTING WELLBOR**☐ YES ☐ NO**Burlington Resources Oil & Gas Company****PO Box 4289, Farmington, NM 87499**

Operator

Address

San Juan 28-5 Unit**58M****I 30-28-5****Rio Arriba**

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7460 API NO. 30-039-25597 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	Blanco Mesaverde - 72319		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	4934-5910' est.	<div style="text-align: center;"> RECEIVED FEB - 3 1997 OIL CON. DIV. DIST. 3 </div>	7478-7830' est.
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. 591 psi (see attachment)	a.	a. 1049 psi (see attachment)
	(Original) b. 1246 psi (see attachment)	b.	b. 3177 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1192		BTU 1073
7. Producing or Shut-In?	Shut in		Shut in
Production Marginal? (yes or no)	no		yes
* If Shut-In and oil/gas/water rates	Date: NA	Date: NA	Date: NA

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-
New 3-12-96

APPROVAL PROCESS :

☒ Administrative ☐ Hearing

EXISTING WELLBOR

☐ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil & Gas Company

PO Box 4289, Farmington, NM 87499

Operator
San Juan 28-5 Unit 58M I 30-28-5 Rio Arriba
Lease Well No. Unit Ltr. - Sec - Twp - Rge County
Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7460 API NO. 30-039-25597 Federal ☒ , State , (and/or) Fee

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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. 591 psi (see attachment) (Original) b. 1246 psi (see attachment)	a. DIST. 3 b.	a. 1049 psi (see attachment) b. 3177 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1192		BTU 1073
7. Producing or Shut-In?	Shut in		Shut in
Production Marginal? (yes or no)	no		yes
* If Shut-In and oil/gas/water rates of last production <small>Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data</small>	Date: NA Rates:	Date: Rates:	Date: NA Rates:
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: NA Rates:	Date: Rates:	Date: NA Rates:
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: % Gas: % will be supplied upon completion	Oil: % Gas: %	Oil: % Gas: % will be supplied upon completion

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-10695 attached
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 J. A. Smith TITLE Production Engineer DATE 1/28/97

TYPE OR PRINT NAME James A. Smith TELEPHONE NO. (505) 326-9700

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1008 Rio Hondo Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

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

Form C-1
Revised February 21, 19
Instructions on 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-		Pool Code 72319/71599	Pool Name Blanco Mesaverde/Basin Dakota
Property Code 7460	Property Name San Juan 28-5 Unit		Well Number 58M
GRID No. 14538	Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY		Distance 6560'

10 Surface Location

UL or lot no. I	Section 30	Township 28 N	Range 5 W	Lot Idn	Feet from the 1845	North/South line South	Feet from the 1060	East/West line East	County R.A.
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11 Bottom Hole Location if Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres 5/328	13 Joint or Infill	14 Consolidation Code	15 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

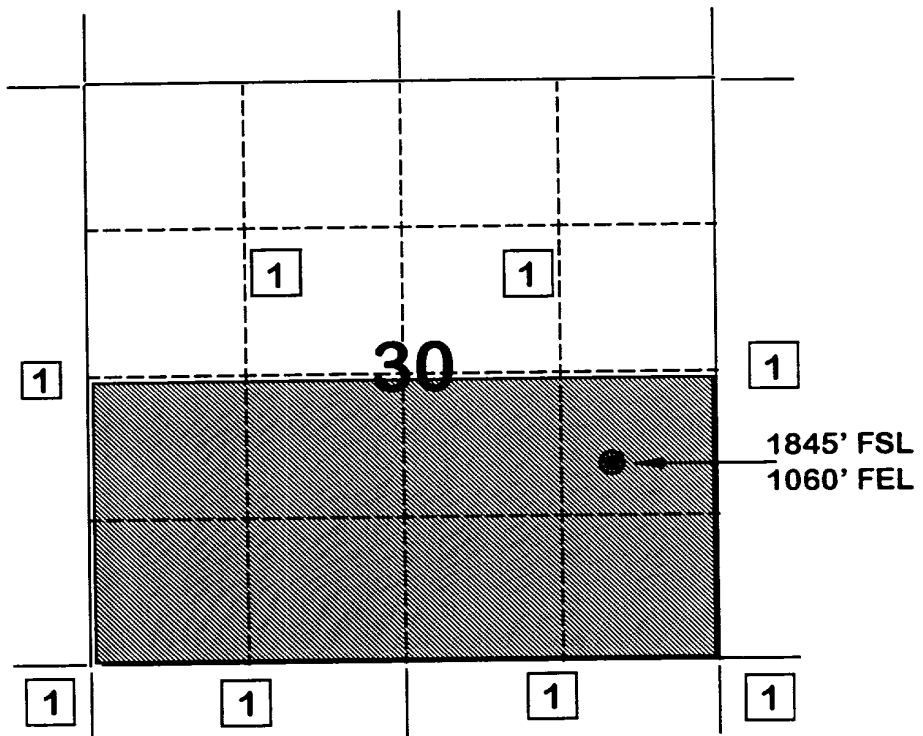
16	5280.00'		17 OPERATOR CERTIFICATION: I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Peggy Bradfield Printed Name Regulatory Administrator Title Date 8-30-96	
5280.00'	30		18 SURVEYOR CERTIFICATION: I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey 8-30-96 Signature and Seal of Surveyor NEALE C. EDWARDS 0857 6857 Certificate Number	
SF-079472		1060'		
SF-079521A		1845'		
5280.00'				

BURLINGTON RESOURCES OIL AND GAS COMPANY

**San Juan 28-5 Unit #58M
OFFSET OPERATOR \ OWNER PLAT**

Mesaverde/Dakota Formations Commingle Well

Township 28 North, Range 5 West



1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.699
COND. OR MISC. (C/M)	C
%N2	0.25
%CO2	0.89
%H2S	0
DIAMETER (IN)	2
DEPTH (FT)	5645
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	512
BOTTOMHOLE PRESSURE (PSIA)	591.0

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.7
COND. OR MISC. (C/M)	C
%N2	0.26
%CO2	0.72
%H2S	0
DIAMETER (IN)	2.5
DEPTH (FT)	4996
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1083
BOTTOMHOLE PRESSURE (PSIA)	1246.4

Page No.: 1

Print Time: Thu Oct 03 11:37:23 1996

Property ID: 3928

Property Name: SAN JUAN 28-5 UNIT | 20 | : : 1940 CF: 93 SIP:

Table Name: K:\ARIES\RR97PDP\TEST.DBF

--DATE-- ---CUM GAS-- M SIWHP
-----Mcft-----Psi-----

05/09/57	0	1083.0	← Original
05/23/57	0	1082.0	
07/30/57	43000	862.0	
11/06/58	286000	712.0	
06/14/59	409000	661.0	
06/14/60	548000	645.0	
06/13/61	663000	681.0	
09/24/62	765000	700.0	
05/09/63	839000	662.0	
05/26/64	939000	649.0	
05/03/65	1042000	607.0	
06/07/66	1165000	601.0	
05/25/67	1271000	584.0	
11/04/68	1413000	594.0	
08/18/69	1498706	590.0	
04/15/70	1556163	575.0	
06/22/71	1677267	517.0	
06/07/72	1770974	532.0	
07/23/73	1885643	482.0	
07/15/74	1982177	487.0	
02/07/76	2122999	467.0	
12/07/76	2171800	467.0	
01/03/78	2267412	459.0	
11/03/78	2319200	459.0	
06/04/80	2420595	417.0	
04/20/83	2539342	478.0	
05/01/84	2572221	588.0	
10/20/86	2628022	539.0	
05/11/89	2717274	522.0	
06/17/91	2808003	492.0	
08/02/91	2809565	504.0	
04/01/93	2855308	512.0	← Current

Mesa Verde Parent Well of
28-5 #5811

SAN JUAN 28-5 #58M

CURRENT DAKOTA PRESSURE
(BASED ON CURRENT AVERAGE OF OFFSET WELLS)

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.694
COND. OR MISC. (C/M)	C
%N2	0.29
%CO2	1.21
%H2S	0
DIAMETER (IN)	1.5
DEPTH (FT)	7557
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	867
BOTTOMHOLE PRESSURE (PSIA)	1049.3

OFFSET DAKOTA WELLS - CURRENT PRESSURE

SAN JUAN 28-5 UNIT #58 DAKOTA-CURRENT	844
SAN JUAN 28-5 UNIT #42 DAKOTA-CURRENT	896
SAN JUAN 28-5 UNIT #54 DAKOTA-CURRENT	1083
SAN JUAN 28-5 UNIT #59 DAKOTA-CURRENT	1001
SAN JUAN 28-5 UNIT #59M DAKOTA-CURRENT	638
SAN JUAN 28-5 UNIT #60 DAKOTA-CURRENT	782
SAN JUAN 28-5 UNIT #62 DAKOTA-CURRENT	960
SAN JUAN 28-5 UNIT #66 DAKOTA-CURRENT	732
AVERAGE SURFACE PRESSURE	867

NOTE : SEE OFFSET WELL PLAT

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.694
COND. OR MISC. (C/M)	C
%N2	0.29
%CO2	1.21
%H2S	0
DIAMETER (IN)	1.5
DEPTH (FT)	7557
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	2581
BOTTOMHOLE PRESSURE (PSIA)	3177.3

Page No. : 2

Print Time: Thu Oct 03 11:41:41 1996

Property ID: 1775

Property Name: SAN JUAN 28-5 UNIT | 58 | : : 1388 CF: 92 SIP:

Table Name: K:\ARIES\RR97PDP\TEST.DBF

```
--DATE--  ---CUM GAS--  M SIWHP
|||||McF|||||Psi|||
```

10/25/62	0	2550.0	
11/06/62	0	2581.0	← original
03/21/63	53000	1723.0	
05/26/64	175000	1279.0	
05/03/65	282000	1168.0	
10/05/66	455000	899.0	
05/25/67	521000	944.0	
05/27/68	608000	990.0	
08/18/69	720307	816.0	
07/28/70	802439	836.0	
06/22/71	888042	783.0	
06/07/72	960014	902.0	
07/23/73	1032856	876.0	
09/04/75	1186638	698.0	
06/01/77	1296057	668.0	
06/07/79	1412699	725.0	
05/01/81	1517182	660.0	
09/19/83	1597909	834.0	
11/18/85	1675254	800.0	
10/13/88	1760065	1050.0	
04/24/90	1832892	802.0	
03/29/92	1894396	844.0	← current

Lakota Parent well of
28-5 #58m

03/29/92 1894396 844.0 ← Current

Page No. : 1

Print Time: Mon Nov 04 15:32:23 1996

Property ID: 1767

Property Name: SAN JUAN 28-5 UNIT	42	53420A-1
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Table Name: K:\ARIES\RR97PDP\TEST.DBF

```
--DATE--  ---CUM GAS--  M SIWHP
#####  #####Mcft#####Psi#####
```

06/14/60	0	2669.0
08/04/60	0	2668.0
12/06/60	137000	1785.0
06/13/61	343000	1412.0
09/09/62	566000	1542.0
05/06/63	655000	1537.0
04/22/64	767000	1502.0
10/18/65	1152000	1143.0
10/05/66	1337000	975.0
05/25/67	1454000	1074.0
05/27/68	1608000	1035.0
06/27/69	1771000	657.0
07/28/70	1855086	1206.0
06/21/71	1966278	831.0
06/07/72	2069532	886.0
08/29/73	2177209	904.0
09/04/75	2349005	862.0
06/01/77	2485098	808.0
06/06/79	2620949	882.0
05/01/81	2712834	919.0
11/04/81	2752286	884.0
02/17/84	2834723	1065.0
05/17/85	2890529	1030.0
10/13/88	3017484	1152.0
04/24/90	3102388	954.0
03/29/92	3147068	896.0

Dakota Offset
28-5 H 58.11

← current

Page No.: 2

Print Time: Mon Nov 04 15:32:23 1996

Property ID: 1770

Property Name: SAN JUAN 28-5 UNIT | 54 | 50693A-1

Table Name: K:\ARIES\RR97PDP\TEST.DBF

--DATE-- ---CUM_GAS-- M SIWHP
: : : : :
: : : : :
: : : : :

12/24/62	0	2625.0
01/15/63	0	2629.0
05/06/63	41000	1679.0
04/22/64	137000	1348.0
06/21/65	256000	1229.0
05/23/66	361000	1141.0
05/26/67	473000	984.0
05/20/68	572000	957.0
06/19/70	755870	858.0
04/27/71	822634	822.0
05/15/72	905811	833.0
07/23/73	972655	1046.0
05/05/75	1057586	1132.0
07/05/77	1137950	1182.0
10/04/79	1206041	1182.0
08/12/81	1252029	1224.0
12/12/85	1351967	1160.0
10/04/88	1410682	1112.0
04/08/90	1431387	1522.0
04/04/94	1512579	1083.0 ← current

Sakata Offset
28-5 #5311

Page No.: 3

Print Time: Mon Nov 04 15:32:24 1996

Property ID: 1776

Property Name: SAN JUAN 28-5 UNIT | 59 | 50675A-1

Table Name: K:\ARIES\RR97PDP\TEST.DBF

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

10/30/62	0	2699.0
11/28/62	0	2698.0
03/21/63	62000	2414.0
05/26/64	260000	2176.0
10/18/65	559000	1746.0
06/07/66	689000	1965.0
05/25/67	844000	1557.0
05/27/68	1047000	1417.0
08/18/69	1255084	1317.0
07/28/70	1380561	1274.0
06/22/71	1498479	1232.0
06/07/72	1602424	1152.0
07/23/73	1699919	1165.0
04/30/75	1874751	1072.0
06/01/77	2036561	1049.0
06/07/79	2165728	1050.0
05/01/81	2266029	1085.0
03/04/82	2295796	1064.0
09/19/83	2354456	1085.0
11/18/85	2429888	1039.0
11/10/88	2511812	1016.0
04/22/90	2562823	1022.0
11/21/92	2606661	1001.0 ← current

Sakota Offset
28-5 #53m

Page No.: 4

Print Time: Mon Nov 04 15:32:24 1996

Property ID: 1777

Property Name: SAN JUAN 28-5 UNIT | 59M | 53424B-1

Table Name: K:\ARIES\RR97PDP\TEST.DBF

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

11/11/81	0	1978.0
03/04/82	47673	1120.0
09/19/83	262274	611.0
11/01/84	385862	612.0
11/18/85	483650	593.0
11/09/88	634868	584.0
04/22/90	722677	612.0
05/28/92	800657	718.0
05/24/93	834299	638.0 ← current

Dakota

28-5

Offset

= 59m

Page No. : 5

Print Time: Mon Nov 04 15:32:25 1996

Property ID: 1778

Property Name: SAN JUAN 28-5 UNIT	60	50694A-1
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Table Name: K:\ARIES\RR97PDP\TEST.DBF

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

11/29/62	0	2069.0
04/28/63	59000	1844.0
04/22/64	259000	1755.0
01/04/65	315000	1949.0
05/23/66	620000	1945.0
05/26/67	869000	1412.0
05/20/68	1084000	1416.0
05/15/69	1359583	1124.0
06/19/70	1609494	1088.0
04/27/71	1772012	1062.0
05/15/72	1975467	1059.0
07/05/73	2227884	938.0
04/30/75	2515249	921.0
06/01/77	2757933	924.0
05/01/79	2942223	910.0
05/04/81	3114533	890.0
09/19/83	3229436	903.0
06/04/85	3321764	905.0
10/23/88	3475228	882.0
06/29/90	3564454	920.0
09/01/92	3628052	782.0

Dakota Offset
28-5 #53m

← Current

Page No.: 6

Print Time: Mon Nov 04 15:32:25 1996

Property ID: 1781

Property Name: SAN JUAN 28-5 UNIT | 62 | 50697A-1

Table Name: K:\ARIES\RR97PDP\TEST.DBF

--DATE-- ---CUM GAS-- M SIWHP
-----Mcft-----Psi

12/24/62	0	1092.0
04/22/64	85000	1209.0
05/03/65	178000	1133.0
10/05/66	298000	1101.0
05/25/67	344000	1063.0
05/27/68	414000	1023.0
07/28/70	548403	977.0
06/22/71	614648	866.0
06/07/72	679755	909.0
00/01/73	704814	927.0
00/01/73	704814	927.0
00/01/73	704814	927.0
10/01/73	747092	927.0
09/04/75	840933	904.0
06/10/77	930727	846.0
05/01/79	1013510	877.0
05/01/81	1113659	764.0
09/19/83	1172422	953.0
05/17/85	1209387	960.0

Dakota Offset
28-5 #53m

← Current

Page No.: 7
 Print Time: Mon Nov 04 15:32:26 1996
 Property ID: 1786
 Property Name: SAN JUAN 28-5 UNIT | 66 | 50695A-1
 Table Name: K:\ARIES\RR97PDP\TEST.DBF

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

12/06/62	0	2737.0
12/30/62	0	2736.0
08/26/63	137000	2370.0
04/22/64	224000	2242.0
06/21/65	499000	2076.0
05/23/66	751000	1924.0
05/26/67	1017000	1782.0
05/20/68	1376000	1580.0
05/15/69	1753583	1364.0
06/19/70	1978344	1373.0
04/27/71	2196845	1236.0
05/15/72	2471108	1171.0
07/05/73	2731127	1138.0
04/30/75	3098131	992.0
06/01/77	3597270	855.0
05/01/79	3870710	954.0
05/04/81	4270027	715.0
09/19/83	4553194	800.0
05/17/85	4731556	749.0
10/23/88	5022339	887.0
04/21/90	5207326	766.0
09/01/92	5437954	732.0 ← current

Dakota Offset
 28-5 #58m

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION DIVISION FOR
THE PURPOSE OF CONSIDERING:**

**CASE NO. 11627
ORDER NO. R-10695**

**APPLICATION OF BURLINGTON RESOURCES
OIL & GAS COMPANY FOR THE ESTABLISHMENT
OF A DOWNHOLE COMMINGLING "REFERENCE
CASE" FOR ITS SAN JUAN 28-5 UNIT PURSUANT
TO DIVISION RULE 303.E. AND THE ADOPTION
OF SPECIAL ADMINISTRATIVE RULES THEREFOR,
SAN JUAN COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

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

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

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Burlington Resources Oil & Gas Company (Burlington), pursuant to the provisions of Division Rule 303.E., seeks to establish a downhole commingling "reference case" to provide exceptions for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas and (d) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 28-5 Unit, San Juan County, New Mexico.

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

"If sufficient data exists on a lease, pool, formation, geographic area, etc., so as to render it unnecessary to repeatedly provide such data on Form C-107-A, an operator may except any of the various criteria required under Paragraph 303.D. of this rule by establishing a "reference case". The Division, upon its own motion, or by application from an operator, may establish "reference cases" either administratively or by hearing. Upon Division approval of such "reference cases" for specific criteria, subsequent applications to downhole 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 28-5 Unit which encompasses some 17,399 acres in Township 28 North, Range 5 West, NMPM, San Juan County, New Mexico.

(5) Within the San Juan 28-5 Unit, the applicant currently operates sixty-seven (67) Basin-Dakota Gas Pool wells, seventy-one (71) Blanco-Mesaverde Gas Pool wells, sixteen (16) Gobernador-Pictured Cliffs, Oso-Pictured Cliffs and Tapacito-Pictured Cliffs Gas Pool wells, and nineteen (19) Basin-Fruitland Coal Gas Pool wells.

(6) According to its evidence and testimony, Burlington seeks to:

- a) establish a "reference case" for marginal economic criteria in the Dakota and Pictured Cliffs formations whereby these formations and/or pools may be identified as "marginal" on Form C-107-A's subsequently filed for wells within the San Juan 28-5 Unit. The applicant further proposes that the data provided in the immediate case serve as supplemental data or confirmation that these formations and/or pools should be classified as "marginal";
- b) establish a "reference case" for pressure criteria in the Dakota and Pictured Cliffs formations whereby the Division may utilize data provided in the immediate case to verify the pressure data provided on Form C-107-A's subsequently filed for wells within the San Juan 28-5 Unit;

- c) establish a "reference case" whereby the Division utilizes the data presented in the immediate case to endorse or approve certain methods of allocating production whereby the applicant need not submit additional data or justification when proposing a certain method of allocating production on Form C-107-A's subsequently filed for wells within the San Juan 28-5 Unit; and,
- d) establish a "reference case" or an administrative procedure for authorizing the downhole commingling of existing or future drilled wells within the San Juan 28-5 Unit without additional notice to each affected interest owner as required by Division Rule No. 303.D.

(7) In support of its request to except marginal economic criteria, the applicant presented geologic and engineering evidence and testimony which indicates that within the San Juan 28-5 Unit:

- a) the structure and thickness of the Dakota and Pictured Cliffs formations are very consistent;
- b) the average recoverable Dakota and Pictured Cliffs gas reserves underlying an undeveloped drill block are approximately 1,258 MMCFG and 77 MMCFG, respectively;
- c) the average initial producing rate for a newly drilled or recompleted Dakota and Pictured Cliffs gas well is approximately 276 MCFGD and 136 MCFGD, respectively; and,
- d) the estimated ultimate gas recoveries and initial producing rates from the Dakota and Pictured Cliffs formations are insufficient to justify drilling stand alone wells and/or dually completed wells to recover such gas reserves.

(8) The evidence and testimony presented by the applicant indicates that the Dakota and Pictured Cliffs formations within the San Juan 28-5 Unit should be properly classified as "marginal".

(9) In support of its request to except pressure criteria within the Dakota and Pictured Cliffs formations within the San Juan 28-5 Unit, the applicant presented engineering evidence and testimony which indicates that:

- a) the average shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations at the time of initial development were approximately 3,149 psi and 1,143 psi, respectively; and.
- b) the average current shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations are approximately 1,059 psi and 714 psi, respectively.

(10) There is sufficient pressure data available within the San Juan 28-5 Unit so as to except pressure criteria as proposed by the applicant.

(11) The applicant testified that various allocation methods will be utilized for downhole commingled wells within the San Juan 28-5 Unit depending on the circumstances. Some of the methods and circumstances are described as follows:

- a) the subtraction method will likely be utilized in those instances involving the Basin-Fruitland Coal Gas Pool and in those instances where a zone with a well established decline rate is commingled with a newly completed zone;
- b) a fixed allocation formula will be utilized in those instances where production history for both zones is available, or in those instances where newly completed zones are tested and stabilized flow rates obtained.

(12) The allocation methods proposed by the applicant are routinely utilized by industry and approved by the Division and therefore, the proposal to except allocation formulas should be approved.

(13) In support of its request to establish a "reference case" or administrative procedure for providing notice within the San Juan 28-5 Unit the applicant presented evidence and testimony which indicates that:

- a) the interest ownership between two zones within a given wellbore in the San Juan 28-5 Unit is generally not common;
- b) pursuant to Division Rule No. 303.D., applicant is currently required to notify all interest owners within the San Juan 28-5 Unit every time a Form C-107-A is submitted to the Division. There are a considerable number of such interest owners within the unit;

- c) providing notice to each interest owner within the San Juan 28-5 Unit of subsequent downhole comminglings is unnecessary and is an excessive burden on the applicant;
- d) the downhole commingling of wells within the San Juan 28-5 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 28-5 Unit should not violate the correlative rights of any interest owner;
- e) no interest owner appeared at the hearing in opposition to the establishment of a "reference case" or administrative procedure for notice.

(14) An administrative procedure should be established within the San Juan 28-5 Unit for obtaining approval for subsequent downhole commingled wells without notice to Unit interest owners, provided however that, all other provisions contained within Division Rule No. 303.C. are complied with.

(15) Approval of the proposed "reference cases" for marginal economic criteria, pressure criteria, allocation formulas and notice will lessen the burden on the applicant insofar as providing the data required pursuant to Division Rule No. 303.D. and Form C-107-A, will provide the applicant a streamlined method for obtaining downhole commingling approvals within the San Juan 28-5 Unit, and will not violate correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of Burlington Resources Oil & Gas Company to establish a "reference case" for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas and (d) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 28-5 Unit, San Juan County, New Mexico, is hereby approved.

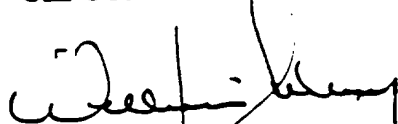
(2) Upon filing of Division Form No. C-107-A's for wells subsequently downhole commingled within the San Juan 28-5 Unit Area, the applicant shall not be required to submit supporting data to justify the classification of the Pictured Cliffs and Dakota formations as "marginal", supporting data to verify the Pictured Cliffs and Dakota pressure information provided, and support or justification for utilizing a given method or formula for allocation of production, provided however, in the event any of the data described above appearing on Form C-107-A appears to be beyond the data range provided in this case, the Division may require the submittal of additional supporting data.

(3) In order to obtain Division authorization to downhole commingle wells within the San Juan 28-5 Unit, the applicant shall file a Form C-107-A with the Santa Fe and Aztec Offices of the Division. Such application shall contain all the information required under Rule No. 303.C. of the Division Rules and Regulations, provided however that the applicant shall not be required to provide notice to all interest owners within the San Juan 28-5 Unit of such proposed commingling.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LeMAY
Director

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