

DATE IN 1/28/00	SUSPENSE 2/17/00	ENGINEER DC	LOGGED KW	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
- Engineering Bureau -

2637

**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]

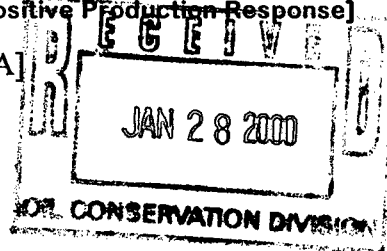
**[1] TYPE OF APPLICATION - Check Those Which Apply for [A]**

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

Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement  
X 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] X 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 Cole

Print or Type Name

Signature

Regulatory/Compliance Administrator

Title

Date

DISTRICT II

811 South First St., Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410

DISTRICT IV

2040 S. Pacheco, Santa Fe, NM 87505

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

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

BURLINGTON RESOURCES OIL & GAS COMPANY  
Operator

PO Box 4289, Farmington, NM 87499  
Address

SAN JUAN 29-7 UNIT  
Lease

11A  
Well No.

D 03 T29N 07W  
Unit Ltr. - Sec - Twp - Rge

RIO ARriba  
County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7465 API NO. 30-039-25564 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)	4854' - 5552'		7417' - 7629'
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	a. (Current) 207.1 psia @ 5203' b. (Original) 746.4 @ 5203'	a. b.	a. 503.2 @ 7551' b. 1719.6 @ 7551'
6. Oil Gravity (EAPI) or Gas BTU Content	1343 BTU		1037 BTU
7. Producing or Shut-In?	PRODUCING		PRODUCING
Production Marginal? (yes or no)	YES		YES
* If Shut-In, give date 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 date and oil/gas/water rates of recent test (within 60 days)	Date: 11/30/99 Rates: 292.2 MCFD, 0 BOPD, 0 BWPD	Date: Rates:	Date: 11/30/99 Rates: 81.02 MCFD, 0 BOPD, 0 BWPD
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: % Gas: %	Oil: % Gas: %	Oil: % Gas: %

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

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-10697

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 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  TITLE Operations Engineer DATE 1-18-00

TYPE OR PRINT NAME MIKE HADDENHAM 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 N. Main 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-10  
Revised February 21, 199  
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 7465	Property Name San Juan 29-7 Unit	Well Number 11A
OGRID No. 14538	Operator Name MERIDIAN OIL INC.	Elevation 6250'

10 Surface Location

UL or lot no. D	Section 3	Township 29N	Range 7W	Lot Ids	Feet from the 900	North/South line North	Feet from the 790	East/West line West	County R.A.
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ids	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres W/317.83	13 Joint or Infill W/317.83	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	5280.100'	17 OPERATOR CERTIFICATION
5280.100'	5280.100'	I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief
5280.100'	5280.100'	<i>Peggy Bradfield</i> Signature
5280.100'	5280.100'	Peggy Bradfield Printed Name
5280.100'	5280.100'	Regulatory Administrator Title
5280.100'	5280.100'	3-12-96 Date
5280.100'	5280.100'	18 SURVEYOR CERTIFICATION
5280.100'	5280.100'	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.
5280.100'	5280.100'	1-5-96 Date of Survey
5280.100'	5280.100'	Signature and Title of Professional Surveyor
5280.100'	5280.100'	8857 Certificate Number

01/10/2000

**BURLINGTON RESOURCES OIL & GAS COMPANY**  
**DAILY HISTORY REPORT - ESTIMATED PRODUCTION VOLUMES BY WELL**  
**FOR MONTH ENDING: 1999-11-30**

Pressure Base 14.73

3576701 SAN JUAN 29-7 UNIT 11A MV

Date	Gas Sales	Net Gas	Est. Oil	Net Oil	Est. Water
11/01/1999	379.000	200.130	0.491	0.259	0.000
11/02/1999	376.000	198.546	0.491	0.259	0.000
11/03/1999	373.000	196.962	0.491	0.259	0.000
11/04/1999	373.000	196.962	0.491	0.259	0.000
11/05/1999	361.000	190.626	0.491	0.259	0.000
11/06/1999	369.000	194.850	0.491	0.259	0.000
11/07/1999	369.000	194.850	0.491	0.259	0.000
11/08/1999	363.000	191.682	0.491	0.259	0.000
11/09/1999	364.000	192.210	0.491	0.259	0.000
11/10/1999	359.000	189.570	0.491	0.259	0.000
11/11/1999	333.000	175.840	0.491	0.259	0.000
11/12/1999	375.000	198.018	0.491	0.259	0.000
11/13/1999	372.000	196.434	0.491	0.259	0.000
11/14/1999	369.000	194.850	0.491	0.259	0.000
11/15/1999	367.000	193.794	0.491	0.259	0.000
11/16/1999	367.000	193.794	0.491	0.259	0.000
11/17/1999	366.000	193.266	0.491	0.259	0.000
11/18/1999	137.000	72.343	0.491	0.259	0.000
11/19/1999	42.000	22.178	0.491	0.259	0.000
11/20/1999	15.000	7.921	0.491	0.259	0.000
11/21/1999	1.000	0.528	0.491	0.259	0.000
11/22/1999	375.000	198.018	0.491	0.259	0.000
11/23/1999	462.000	243.959	0.491	0.259	0.000
11/24/1999	462.000	243.959	0.491	0.259	0.000
11/25/1999	62.000	32.739	0.491	0.259	0.000
11/26/1999	33.000	17.426	0.491	0.259	0.000
11/27/1999	15.000	7.921	0.491	0.259	0.000
11/28/1999	15.000	7.921	0.491	0.259	0.000
11/29/1999	413.000	218.084	1.430	0.755	0.000
11/30/1999	499.000	263.496	1.430	0.755	0.000
Asset Identifier 3576701	8766.000	4628.877	16.608	8.762	0.000

292.2 awg

01/10/2000

Pressure Base 14.73

3576702 SAN JUAN 29-7 UNIT 11A DK

**BURLINGTON RESOURCES OIL & GAS COMPANY**  
**DAILY HISTORY REPORT - ESTIMATED PRODUCTION VOLUMES BY WELL**  
**FOR MONTH ENDING: 1999-11-30**

Date	Gas Sales	Net Gas	Est. Oil	Net Oil	Est. Water
11/01/1999	114.000	76.921	0.000	0.000	0.000
11/02/1999	109.000	73.547	0.000	0.000	0.000
11/03/1999	110.000	74.222	0.000	0.000	0.000
11/04/1999	113.000	76.246	0.000	0.000	0.000
11/05/1999	106.000	71.523	0.000	0.000	0.000
11/06/1999	108.000	72.873	0.000	0.000	0.000
11/07/1999	108.000	72.873	0.000	0.000	0.000
11/08/1999	109.000	73.547	0.000	0.000	0.000
11/09/1999	108.000	72.873	0.000	0.000	0.000
11/10/1999	109.000	73.547	0.000	0.000	0.000
11/11/1999	109.000	73.547	0.000	0.000	0.000
11/12/1999	107.000	72.198	0.000	0.000	0.000
11/13/1999	111.000	74.897	0.000	0.000	0.000
11/14/1999	105.000	70.848	0.000	0.000	0.000
11/15/1999	109.000	73.547	0.000	0.000	0.000
11/16/1999	110.000	74.222	0.000	0.000	0.000
11/17/1999	102.000	68.824	0.000	0.000	0.000
11/18/1999	92.000	62.077	0.000	0.000	0.000
11/19/1999	88.000	59.378	0.000	0.000	0.000
11/20/1999	87.000	58.703	0.000	0.000	0.000
11/21/1999	90.000	60.727	0.000	0.000	0.000
11/22/1999	102.000	68.824	0.000	0.000	0.000
11/23/1999	46.000	31.038	0.000	0.000	0.000
11/24/1999	46.000	31.038	0.000	0.000	0.000
11/25/1999	2.000	1.349	0.000	0.000	0.000
11/26/1999	0.000	0.000	0.000	0.000	0.000
11/27/1999	0.000	0.000	0.000	0.000	0.000
11/28/1999	0.000	0.000	0.000	0.000	0.000
11/29/1999	9.000	6.073	0.000	0.000	0.000
11/30/1999	22.000	14.844	0.000	0.000	0.000
Asset Identifier 3576702	2431.000	1640.306	0.000	0.000	0.000

81.0 avg

**San Juan 29-7 Unit #11A**  
**Sec. 03, T29N R07W**  
**Rio Arriba County, New Mexico**

**Production Allocation Based On Cumulative Production Through 11/30/99**

	Cumulative Production		% Allocation	
	MCF	Bbl Oil	% Gas	% Oil
Mesaverde	292	0	78.30%	0.00%
Dakota	81	0	21.70%	0.00%
Total	373	0	100.00%	0.00%

**Gas Allocation:**

**Mesaverde**

$$\frac{\text{(Total Mesaverde Production)} \quad 292 \text{ MCF}}{\text{(Total Combined Production)} \quad 373 \text{ MCF}} = 78.30\% \quad 78$$

**Dakota**

$$\frac{\text{(Total Dakota Production)} \quad 81 \text{ MCF}}{\text{(Total Combined Production)} \quad 373.2 \text{ MCF}} = 21.70\% \quad 22$$

**Oil Allocation:**

**Mesaverde**

$$\frac{\text{(Total Mesaverde Production)} \quad 0 \text{ Bbl Oil}}{\text{(Total Combined Production)} \quad 0 \text{ Bbl Oil}} = 0.00\%$$

**Dakota**

$$\frac{\text{(Total Dakota Production)} \quad 0 \text{ Bbl Oil}}{\text{(Total Combined Production)} \quad 0 \text{ Bbl Oil}} = 0.00\%$$

**San Juan 29-7 #11A**  
**Bottom Hole Pressures**  
**Flowing and Static BHP**  
**Cullender and Smith Method**  
Version 1.0 3/13/94

<b>Mesaverde</b>		<b>Dakota</b>	
<u><b>MV-Current</b></u>		<u><b>DK-Current</b></u>	
GAS GRAVITY	0.714	GAS GRAVITY	0.611
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.15	%N2	0.24
%CO2	1.03	%CO2	2.94
%H2S	0	%H2S	0
DIAMETER (IN)	6.456	DIAMETER (IN)	4.052
DEPTH (FT)	5203	DEPTH (FT)	7551
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	140	BOTTOMHOLE TEMPERATURE (DEG F)	184
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	182	SURFACE PRESSURE (PSIA)	430
BOTTOMHOLE PRESSURE (PSIA)	207.1	BOTTOMHOLE PRESSURE (PSIA)	503.2
<u><b>MV-Original</b></u>		<u><b>DK-Original</b></u>	
GAS GRAVITY	0.714	GAS GRAVITY	0.611
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.15	%N2	0.24
%CO2	1.03	%CO2	2.94
%H2S	0	%H2S	0
DIAMETER (IN)	6.456	DIAMETER (IN)	4.052
DEPTH (FT)	5203	DEPTH (FT)	7551
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	140	BOTTOMHOLE TEMPERATURE (DEG F)	184
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	648	SURFACE PRESSURE (PSIA)	1446
BOTTOMHOLE PRESSURE (PSIA)	746.4	BOTTOMHOLE PRESSURE (PSIA)	1719.6

**Sample Date: 19980413****Hydrocarbon Fractions**

**Mol % C1: 95.89**  
**Mol % C2: 1.45**  
**Mol % C3: 0.24**  
**Mol % iC4: 0.14**  
**Mol % nC4: 0.06**  
**Mol % iC5: 0.06**  
**Mol % nC5: 0.02**  
**Mol % C6: 0**  
**Mol % C6+: 0.09**  
**Mol % C7: 0**

**Impurities**

**Mol % H2: 0**  
**Mol % He: 0**  
**Mol % N2: 0.1**  
**Mol % O2: 0**  
**Mol % H2S: 0**  
**Mol % CO2: 1.95**

**Test Pressure: 14.73****Test Temperature: 60****Wet BTU Factor (BTU/CF at 14.73): 1001.283****Dry BTU Factor (BTU/CF at 14.73): 1019****Measured Specific Gravity: 0****Calculated Specific Gravity: 0.591**

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**Sample Date: 19970402****Hydrocarbon Fractions**

**Mol % C1: 85.76**  
**Mol % C2: 7.03**  
**Mol % C3: 2.89**  
**Mol % iC4: 0.59**  
**Mol % nC4: 0.81**  
**Mol % iC5: 0.31**  
**Mol % nC5: 0.23**  
**Mol % C6: 0**  
**Mol % C6+: 0.62**  
**Mol % C7: 0**

**Impurities**

**Mol % H2: 0**  
**Mol % He: 0**  
**Mol % N2: 0.41**  
**Mol % O2: 0**  
**Mol % H2S: 0**  
**Mol % CO2: 1.35**

**Test Pressure: 14.73****Test Temperature: 60****Wet BTU Factor (BTU/CF at 14.73): 1145.728****Dry BTU Factor (BTU/CF at 14.73): 1166****Measured Specific Gravity: 0****Calculated Specific Gravity: 0.678**

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**Sample Date: 19970101****Hydrocarbon Fractions****Mol % C1: 94.92****Mol % C2: 1.74****Mol % C3: 0.36****Mol % iC4: 0.22****Mol % nC4: 0.1****Mol % iC5: 0.11****Mol % nC5: 0.04****Mol % C6: 0****Mol % C6+: 0.36****Mol % C7: 0****Impurities****Mol % H2: 0****Mol % He: 0****Mol % N2: 0.29****Mol % O2: 0****Mol % H2S: 0****Mol % CO2: 1.86****Test Pressure: 14.73****Test Temperature: 60****Wet BTU Factor (BTU/CF at 14.73): 1018.97****Dry BTU Factor (BTU/CF at 14.73): 1037****Measured Specific Gravity: 0****Calculated Specific Gravity: 0.602**

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**Sample Date: 19980526****Hydrocarbon Fractions****Mol % C1: 81.64****Mol % C2: 9.56****Mol % C3: 4.27****Mol % iC4: 0.84****Mol % nC4: 1.15****Mol % iC5: 0.43****Mol % nC5: 0.31****Mol % C6: 0****Mol % C6+: 0.62****Mol % C7: 0****Impurities****Mol % H2: 0****Mol % He: 0****Mol % N2: 0.15****Mol % O2: 0****Mol % H2S: 0****Mol % CO2: 1.03****Test Pressure: 14.73****Test Temperature: 60****Wet BTU Factor (BTU/CF at 14.73): 1213.528****Dry BTU Factor (BTU/CF at 14.73): 1235****Measured Specific Gravity: 0****Calculated Specific Gravity: 0.714**

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**Sample Date: 19970402****Hydrocarbon Fractions****Mol % C1: 82.24****Mol % C2: 9.45****Mol % C3: 4.18****Mol % iC4: 0.78****Mol % nC4: 1.07****Mol % iC5: 0.37****Mol % nC5: 0.26****Mol % C6: 0****Mol % C6+: 0.4****Mol % C7: 0****Impurities****Mol % H2: 0****Mol % He: 0****Mol % N2: 0.2****Mol % O2: 0****Mol % H2S: 0****Mol % CO2: 1.05****Test Pressure: 14.73****Test Temperature: 60****Wet BTU Factor (BTU/CF at 14.73): 1192.893****Dry BTU Factor (BTU/CF at 14.73): 1214****Measured Specific Gravity: 0****Calculated Specific Gravity: 0.702**

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**Sample Date: 19970101****Hydrocarbon Fractions****Mol % C1: 78.1****Mol % C2: 9.61****Mol % C3: 4.81****Mol % iC4: 1.13****Mol % nC4: 1.48****Mol % iC5: 0.77****Mol % nC5: 0.64****Mol % C6: 0****Mol % C6+: 2.36****Mol % C7: 0****Impurities****Mol % H2: 0****Mol % He: 0****Mol % N2: 0.17****Mol % O2: 0****Mol % H2S: 0****Mol % CO2: 0.93****Test Pressure: 14.73****Test Temperature: 60****Wet BTU Factor (BTU/CF at 14.73): 1319.65****Dry BTU Factor (BTU/CF at 14.73): 1343****Measured Specific Gravity: 0****Calculated Specific Gravity: 0.782**

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# OIL CONSERVATION DIVISION

API # 30-039-25564

Page 1  
Revised 10/01/78

## NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator BURLINGTON RESOURCES OIL & GAS CO. Lease SAN JUAN 29-7 UNIT Well No. 11A

Location  
of Well: Unit D Sect 03 Twp. 029N Rge. 007W County RIO ARRIBA

	NAME OF RESERVOIR OR POOL	TYPE OF PROD. (Oil or Gas)	METHOD OF PROD. (Flow or Art. Lift)	PROD. MEDIUM (Tbg. or Csg.)
Upper Completion	MESAVERDE	Gas	Artificial	Tubing
Lower Completion	DAKOTA	Gas	Flow	Tubing

### PRE-FLOW SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in 06/11/1999	Length of time shut-in 120 Hours	SI press. psig 182	Stabilized? (Yes or No)
Lower Completion	06/11/1999	72 Hours	430	

### FLOW TEST NO. 1

Commenced at (hour,date)*		06/14/1999		Zone producing (Upper or Lower)	
TIME (hour,date)	LAPSED TIME SINCE*	PRESSURE		PROD. ZONE	REMARKS
		Upper Completion	Lower Completion	TEMP	
6/15/199	96 Hours	182	143		open for flow
6/16/199	120 Hours	183	142		

Production rate during test

Oil: \_\_\_\_\_ BOPD based on \_\_\_\_\_ Bbls. in \_\_\_\_\_ Hours. \_\_\_\_\_ Grav. \_\_\_\_\_ GOR \_\_\_\_\_

Gas: \_\_\_\_\_ MCFPD; Tested thru (Orifice or Meter): \_\_\_\_\_

### MID-TEST SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in	Length of time shut-in	SI press. psig	Stabilized? (Yes or No)
Lower Completion				

(Continue on reverse side)

**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. 11629  
ORDER NO. R-10697**

**APPLICATION OF BURLINGTON RESOURCES  
OIL & GAS COMPANY FOR THE ESTABLISHMENT  
OF A DOWNHOLE COMMINGLING "REFERENCE  
CASE" FOR ITS SAN JUAN 29-7 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 8th 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 29-7 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 29-7 Unit which encompasses some 22,500 acres in Township 29 North, Range 7 West, NMPM, San Juan County, New Mexico.

(5) Within the San Juan 29-7 Unit, the applicant currently operates fifty-five (55) Basin-Dakota Gas Pool wells, one hundred thirty-one (131) Blanco-Mesaverde Gas Pool wells, thirteen (13) Blanco-Pictured Cliffs and South Blanco-Pictured Cliffs Gas Pool wells, and forty-nine (49) 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 29-7 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 29-7 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 29-7 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 29-7 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 29-7 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 245 MMCFG and 76 MMCFG, respectively;
- c) the average initial producing rate for a newly drilled or recompleted Dakota and Pictured Cliffs gas well is approximately 218 MCFGD and 238 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 29-7 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 29-7 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 3,209 psi and 1,148 psi, respectively; and,
- b) the average current shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations is approximately 952 psi and 655 psi, respectively.

(10) There is sufficient pressure data available within the San Juan 29-7 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 29-7 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 29-7 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 29-7 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 29-7 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 29-7 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 29-7 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 29-7 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 29-7 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 29-7 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 29-7 Unit, San Juan County, New Mexico, is hereby approved.

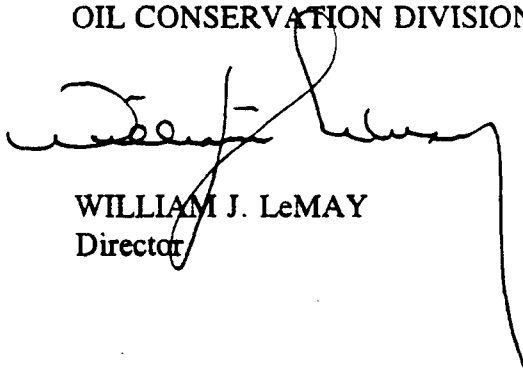
(2) Upon filing of Division Form No. C-107-A's for wells subsequently downhole commingled within the San Juan 29-7 Unit Area, the applicant shall not be required to submit supporting data to justify the classification of the Pictured Cliffs and Dakota formations as "marginal", supporting data to verify 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 29-7 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 29-7 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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