

DATE IN 3/12/97	SUSPENSE 4/1/97	ENGINEER BS	LOGGED KV	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

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

1495

**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]

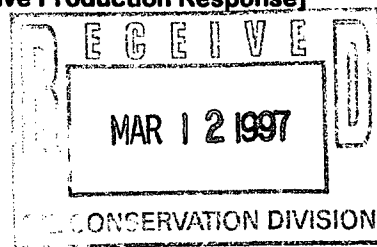
**[1] TYPE OF APPLICATION - Check Those Which Apply for [A]**

[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

Print or Type Name

Signature

Regulatory/Compliance Administrator

Title

Date

3/10/97

# **BURLINGTON RESOURCES**

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SAN JUAN DIVISION

March 10, 1997

SENT FEDERAL EXPRESS

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

Re: San Juan 28-6 Unit #153M  
1200'FNL, 1385'FWL Section 25, T-28-N, R-6-W, Rio Arriba County, NM  
API #30-039-25604

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. Expected production curves;
4. Notification list of offset operators;
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-10696 issued November 7, 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

xc: Bureau of Land Management - hand delivered

## DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

## DISTRICT II

811 South First St., Artesia, NM 88210-2835

## DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico  
Energy, Minerals and Natural Resources Department

## OIL CONSERVATION DIVISION

2040 S. Pacheco  
Santa Fe, New Mexico 87505-6429Form C-107-A  
New 3-12-96

## APPROVAL PROCESS :

☒ Administrative ☐ Hearing

## EXISTING WELLBORE

☒ YES ☐ NO

## APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil &amp; Gas Company

PO Box 4289, Farmington, NM 87499

Operator

Address

San Juan 28-6 Unit

153M

C 25-28-6

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7462 API NO. 30-039-25604 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)	will be supplied upon completion		will be supplied upon completion
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. 844 psi (see attachment)  (Original) b. 1316 psi (see attachment)	a.  b.	a. 1205 psi (see attachment)  b. 2622 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1211		BTU 1032
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  Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	Date: n/a Rates:	Date: Rates:	Date: n/a Rates:
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: n/a Rates:	Date: Rates:	Date: n/a 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) ☐ Reference Order R-10696 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 James A. Smith TITLE Production Engineer DATE 2/21/97TYPE OR PRINT NAME James A. Smith TELEPHONE NO. ( 505 ) 326-9700

District I  
Box 1980, Hobbs, NM 88241-1980  
District II  
PO Drawer 00, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

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

Form C-10  
Revised February 21, 1999  
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 72319/71593	Pool Name Blanco Mesaverde/Basin Dakota
Property Code 7462	Property Name San Juan 28-6 Unit	Well Number 153M
OGRID No. 14538	Operator Name MERIDIAN OIL INC.	Elevation 6646'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
C	25	28 N	6 W		1200	North	1385	West	R.A.

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

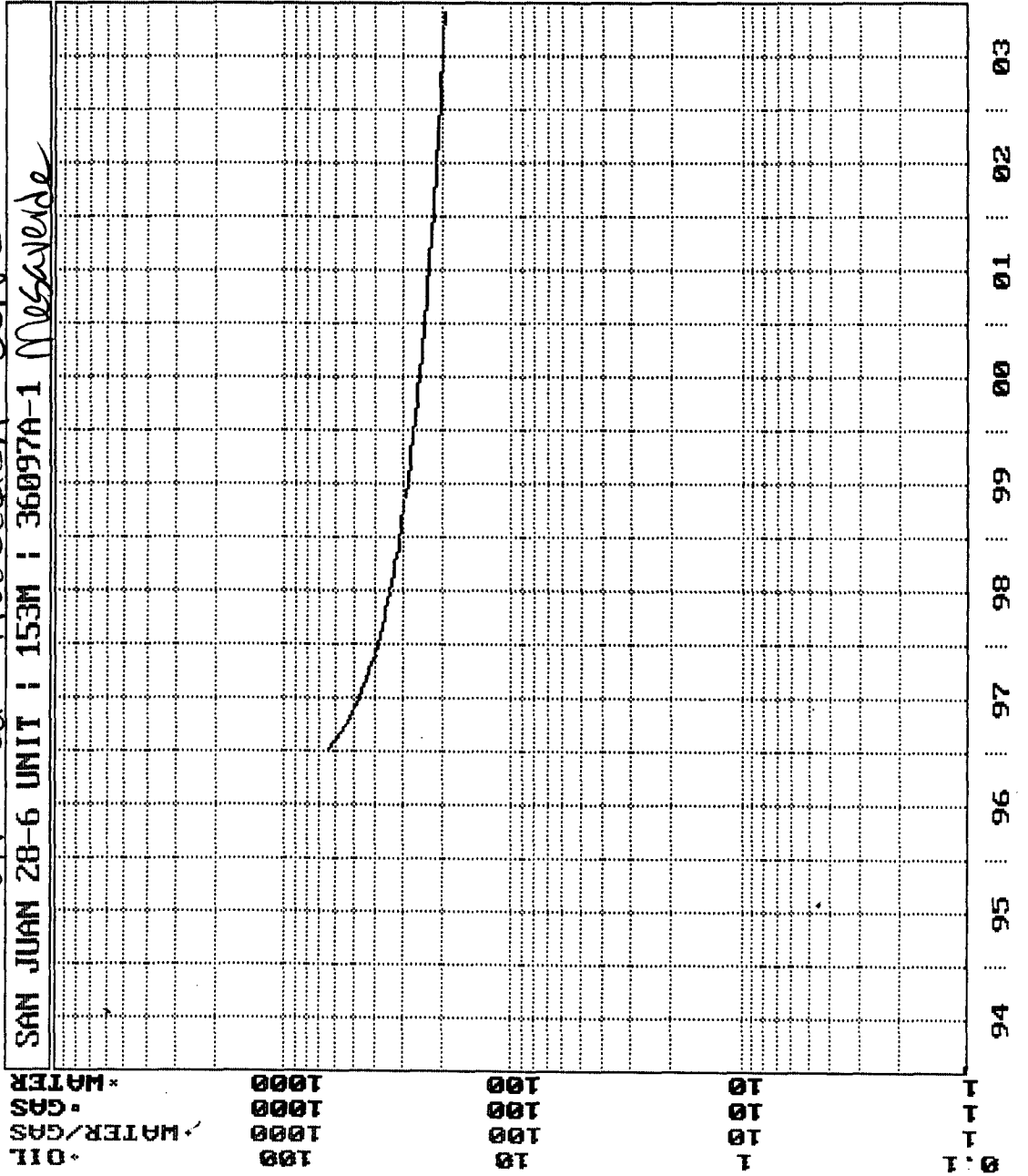
12 Dedicated Acres W/320	13 Joint or Infill W/320	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

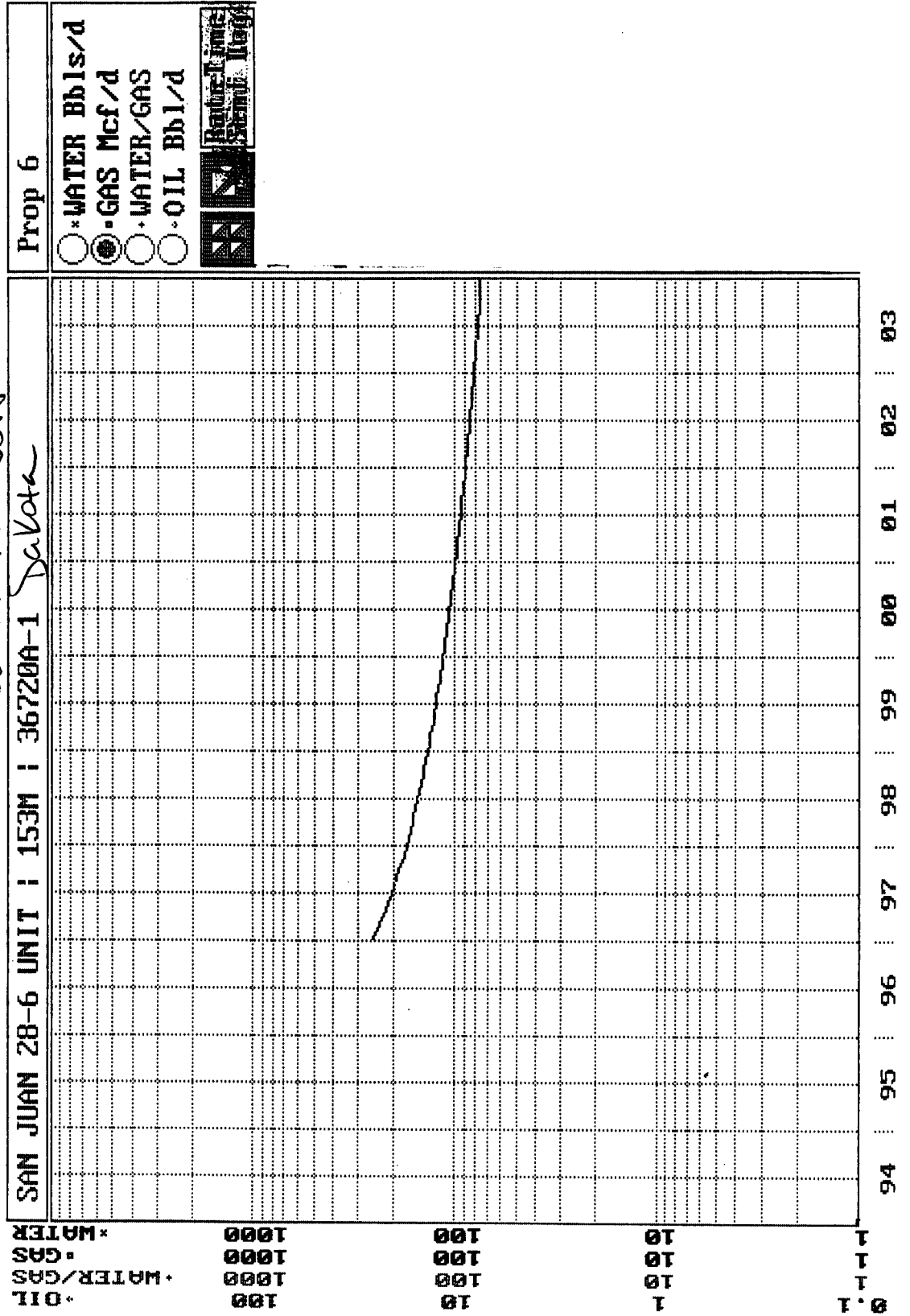
16	5278.68'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Peggy Bradfield Printed Name Regulatory Administrator Title  Date
1385'	1200'	
NM NM-013657	25	
5280.00'	5280.00'	18 SURVEYOR CERTIFICATION 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. 7-25-96 Date of Survey Signature C. Edwards 8857 8857 Certificate Number
5280.00'	5280.00'	

# Expected Production Curve

SAN JUAN 28-6 UNIT : 153M : 36097A-1 Mesavende		Prop 5
<input type="radio"/> OIL	<input type="radio"/> WATER	<input type="radio"/> WATER Bbls/d
<input type="radio"/> WATER/GAS	<input type="radio"/> GAS	<input checked="" type="radio"/> GAS Mcf/d
<input type="radio"/> OIL	<input type="radio"/> WATER/GAS	<input type="radio"/> WATER Bbl/d
<input checked="" type="checkbox"/> Rate Time <input checked="" type="checkbox"/> Semi Log		



# Expected Production Curve



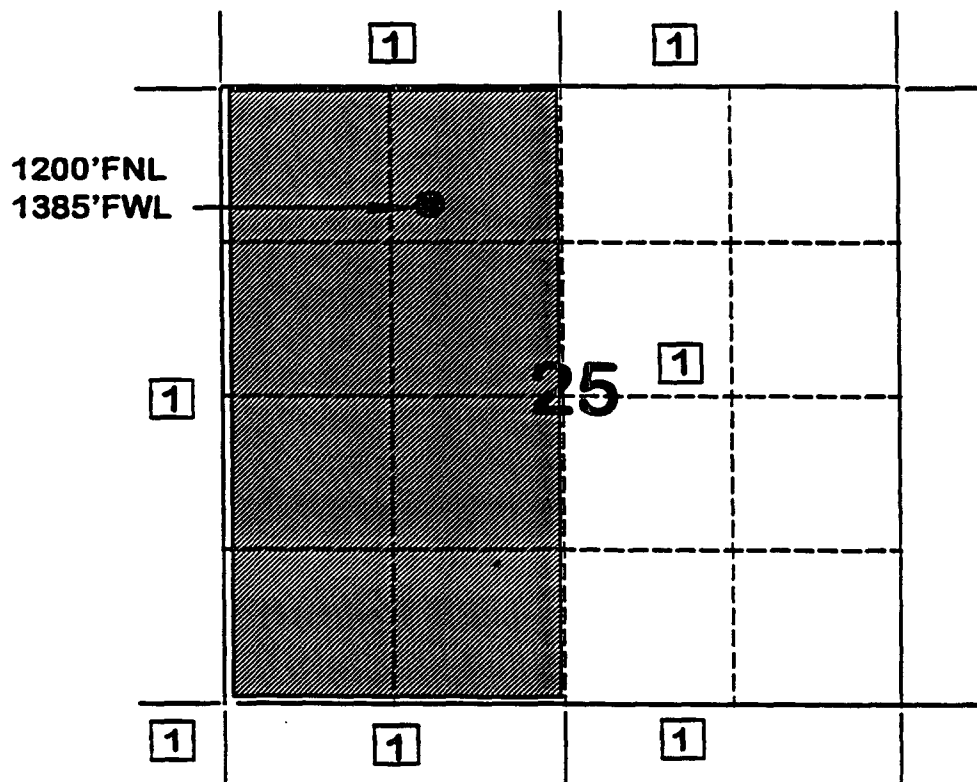
**BURLINGTON RESOURCES OIL AND GAS COMPANY**

**SAN JUAN 28-6 UNIT#153M**

**OFFSET OPERATOR \ OWNER PLAT**

**Mesaverde / Dakota Formations Commingle Well**

**Township 28 North, Range 6 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	0.712
COND. OR MISC. (C/M)	C
%N2	0.36
%CO2	0.9
%H2S	0
DIAMETER (IN)	2
DEPTH (FT)	5921
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	719
BOTTOMHOLE PRESSURE (PSIA)	843.6

SAN JUAN 28-6 #8 MESAVERDE - (CURRENT )



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

VERSION 1.0 3/13/94

GAS GRAVITY	0.712
COND. OR MISC. (C/M)	C
%N2	0.36
%CO2	0.9
%H2S	0
DIAMETER (IN)	2
DEPTH (FT)	5921
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1109
BOTTOMHOLE PRESSURE (PSIA)	1316.4

SAN JUAN 28-6 #8 MESAVERDE - (ORIGINAL )

Page No.: 9

Print Time: Thu Oct 03 11:41:47 1996

Property ID: 10541

Property Name: SAN JUAN 28-6 UNIT | 8 | : : 2983 CF: 95 SIP:

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

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

08/31/54	0	1109.0	← Original
10/04/54	0	1108.0	
08/24/56	16000	876.0	
10/30/57	70000	788.0	
11/06/58	111000	675.0	
06/14/59	141000	723.0	
06/14/60	185000	709.0	
06/13/61	223000	712.0	
06/04/62	258000	699.0	
05/09/63	292000	755.0	
05/26/64	330000	736.0	
03/08/65	359000	701.0	
10/21/66	425000	679.0	
10/16/67	458000	671.0	
10/10/68	493000	664.0	
05/25/70	536228	609.0	
05/04/71	563942	695.0	
05/22/72	594723	683.0	
07/31/74	664136	639.0	
07/12/76	723759	606.0	
05/15/78	769546	602.0	
04/07/86	883258	637.0	
09/04/91	925475	637.0	
10/21/91	926845	625.0	
06/01/93	949604	592.0	
05/12/95	965108	719.0	← current

Mesa verde Parent well  
of  
28-6 #153m

SAN JUAN 28-6 #153M

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	0.43
%CO2	1.35
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	7820
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	986
BOTTOMHOLE PRESSURE (PSIA)	1205.3

## OFFSET DAKOTA WELLS - CURRENT PRESSURE

SAN JUAN 28-6 UNIT #153 DAKOTA-CURRENT	1073
SAN JUAN 28-6 UNIT #102 DAKOTA-CURRENT	1052
SAN JUAN 28-6 UNIT #107 DAKOTA-CURRENT	1057
SAN JUAN 28-6 UNIT #113 DAKOTA-CURRENT	940
SAN JUAN 28-6 UNIT #150 DAKOTA-CURRENT	792
SAN JUAN 28-6 UNIT #152 DAKOTA-CURRENT	948
SAN JUAN 28-6 UNIT #94 DAKOTA-CURRENT	1112
SAN JUAN 28-6 UNIT #99 DAKOTA-CURRENT	910
AVERAGE SURFACE PRESSURE	986

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	0.43
%CO2	1.35
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	7820
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	2108
BOTTOMHOLE PRESSURE (PSIA)	2621.7

SAN JUAN 28-6 UNIT #153 DAKOTA-ORIGINAL

Page No.: 7

Print Time: Thu Oct 03 11:41:45 1996

Property ID: 1864

Property Name: SAN JUAN 28-6 UNIT | 153 | : : 1396 CF: 92 SIP:

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

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

06/28/71	0	2108.0	← original
11/04/71	59748	1350.0	
05/22/72	141958	942.0	
08/21/73	273080	784.0	
06/24/75	419606	692.0	
08/08/77	548187	765.0	
04/24/79	631104	777.0	
09/29/81	736454	854.0	
09/22/83	809081	896.0	
06/07/85	856229	962.0	
05/12/88	919197	928.0	
06/08/90	981751	1052.0	
08/25/92	1041477	1073.0	← current

Dakota Parent well  
for  
28-6 #153m

Page No.: 1

Print Time: Mon Nov 04 14:28:48 1996

Property ID: 1822

Property Name: SAN JUAN 28-6 UNIT | 102 | 50753A-1

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

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

10/13/63	0	2764.0
11/04/63	0	2773.0
10/01/64	146000	1668.0
09/08/65	288000	1295.0
04/12/66	396000	1242.0
03/22/67	530000	1154.0
04/01/68	693000	958.0
11/09/70	1008475	816.0
08/16/71	1076102	694.0
05/22/72	1142927	487.0
08/21/73	1233751	515.0
06/24/75	1343580	566.0
06/01/77	1420378	782.0
06/07/79	1491180	832.0
09/29/81	1554690	880.0
09/22/83	1602701	905.0
11/07/85	1654084	975.0
10/15/88	1703145	1052.0
05/25/90	1741676	1052.0

Dakota Offset of  
28-6 #153m

← current

Page No.: 2

Print Time: Mon Nov 04 14:28:49 1996

Property ID: 1827

Property Name: SAN JUAN 28-6 UNIT | 107 | 52431A-1

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

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

07/13/71	0	2753.0
11/29/71	43127	1646.0
05/22/72	127931	1183.0
08/21/73	247960	1082.0
06/24/75	378202	998.0
08/08/77	521546	895.0
04/24/79	614716	664.0
10/14/81	722097	920.0
09/22/83	781774	1100.0
06/07/85	825383	1110.0
09/19/88	922293	1176.0
06/03/90	981113	1242.0
03/29/92	1029781	1057.0 ← current

Dakota  
28-6  
Offset  
#153m

Page No.: 3  
Print Time: Mon Nov 04 14:28:49 1996  
Property ID: 1832  
Property Name: SAN JUAN 28-6 UNIT | 113 | 50754A-1  
Table Name: K:\ARIES\RR97PDP\TEST.DBF

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

10/07/63	0	2667.0
10/30/63	0	2666.0
10/01/64	93000	1351.0
09/08/65	178000	1182.0
04/12/66	247000	1035.0
03/22/67	319000	1250.0
04/01/68	382000	1092.0
08/19/69	494101	867.0
05/25/70	542382	991.0
05/04/71	608545	1015.0
05/22/72	677963	933.0
08/21/73	757073	911.0
06/24/75	866668	992.0
08/08/77	1008401	825.0
04/24/79	1106719	890.0
09/29/81	1226002	954.0
09/22/83	1283949	976.0
11/07/85	1344595	1004.0
01/07/86	1361852	920.0
10/15/88	1431430	1052.0
06/08/90	1505898	1002.0
03/29/92	1576332	940.0

Dakota Offset  
28-6 #153M

← Current



Page No.: 4  
Print Time: Mon Nov 04 14:28:50 1996  
Property ID: 1861  
Property Name: SAN JUAN 28-6 UNIT | 150 | 52360A-1  
Table Name: K:\ARIES\RR97PDP\TEST.DBF

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

05/11/70	0	2600.0
12/28/70	61355	1480.0
10/19/71	157406	1130.0
05/22/72	201749	1052.0
08/21/73	285814	946.0
06/24/75	400907	889.0
08/08/77	515235	881.0
04/24/79	595681	860.0
09/29/81	689753	1030.0
09/22/83	738508	1014.0
06/07/85	794689	824.0
05/12/88	879454	944.0
06/08/90	945098	992.0
08/06/92	1006829	792.0 ← current

Dakota Offset  
28-6 #153m

Page No.: 5

Print Time: Mon Nov 04 14:28:50 1996

Property ID: 1863

Property Name: SAN JUAN 28-6 UNIT | 152 | 52430A-1

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

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

06/17/71	0	2595.0
11/04/71	57454	1672.0
09/12/72	191126	1257.0
08/21/73	306056	1098.0
09/04/75	529249	799.0
06/01/77	686674	888.0
06/07/79	822847	872.0
09/29/81	963244	1003.0
09/19/83	1076577	920.0
06/04/85	1160701	1019.0
09/15/88	1289154	884.0
06/08/90	1367462	1137.0
08/25/92	1460166	948.0

Dakota Offset  
28-6 #153M

← Current

Page No.: 6  
 Print Time: Mon Nov 04 14:28:51 1996  
 Property ID: 11080  
 Property Name: SAN JUAN 28-6 UNIT | 94 | 53447B-1  
 Table Name: K:\ARIES\RR97PDP\TEST.DBF

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

10/13/59	0	2497.0
11/19/59	0	2496.0
05/24/60	28000	1876.0
09/13/61	168000	1111.0
06/04/62	220000	1565.0
05/16/63	272000	1648.0
05/26/64	330000	1497.0
05/03/65	395000	1058.0
06/07/66	463000	1469.0
05/25/67	521000	1354.0
05/27/68	582000	1274.0
07/28/70	693933	1362.0
06/21/71	743607	1108.0
06/07/72	794317	1202.0
09/04/75	917806	1246.0
06/01/77	987443	1057.0
06/07/79	1070785	1072.0
05/01/81	1134697	980.0
05/17/85	1222348	1042.0
10/09/88	1300990	1162.0
05/29/90	1354796	1112.0
03/29/92	1366999	459.0

Dakota Offset  
 28-6 # 153m

← Current  
 suspect data point  
 Did not use.

Page No.: 7

Print Time: Mon Nov 04 14:28:51 1996

Property ID: 1902

Property Name: SAN JUAN 28-6 UNIT | 99 | 51540A-1

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

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

09/26/65	0	2704.0
10/14/65	0	2703.0
10/21/66	163000	1495.0
10/16/67	279000	1269.0
04/01/68	332000	1129.0
08/19/69	508000	973.0
05/25/70	587929	916.0
05/04/71	677969	933.0
08/16/71	710916	899.0
05/22/72	778643	897.0
07/23/73	877208	868.0
05/05/75	1032341	765.0
07/05/77	1200057	787.0
07/02/79	1326294	712.0
06/11/81	1437472	735.0
09/27/83	1541678	782.0
07/11/85	1633593	727.0
10/05/88	1739234	842.0
05/09/90	1809342	612.0
05/28/92	1869913	910.0

Dakota Offset  
28-6 #153m

← Current



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

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

**CASE NO. 11628  
ORDER NO. R-10696**

**APPLICATION OF BURLINGTON RESOURCES  
OIL & GAS COMPANY FOR THE ESTABLISHMENT  
OF A DOWNHOLE COMMINGLING "REFERENCE  
CASE" FOR ITS SAN JUAN 28-6 UNIT PURSUANT  
TO DIVISION RULE 303.E. AND THE ADOPTION  
OF SPECIAL ADMINISTRATIVE RULES THEREFOR,  
SAN JUAN COUNTY, NEW MEXICO..**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

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

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

**FINDS THAT:**

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Burlington Resources Oil & Gas Company (Burlington), pursuant to the provisions of Division Rule 303.E., seeks to establish a downhole commingling "reference case" to provide exceptions for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas and (d) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 28-6 Unit, San Juan County, New Mexico.

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

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

(4) The applicant is the current operator of the San Juan 28-6 Unit which encompasses some 27,735 acres in Townships 27 and 28 North, Range 6 West, NMPM, San Juan County, New Mexico.

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

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

- a) establish a "reference case" for marginal economic criteria in the Dakota and Pictured Cliffs formations whereby these formations and/or pools may be identified as "marginal" on Form C-107-A's subsequently filed for wells within the San Juan 28-6 Unit. The applicant further proposes that the data provided in the immediate case serve as supplemental data or confirmation that these formations and/or pools should be classified as "marginal";
- b) establish a "reference case" for pressure criteria in the Dakota and Pictured Cliffs formations whereby the Division may utilize data provided in the immediate case to verify the pressure data provided on Form C-107-A's subsequently filed for wells within the San Juan 28-6 Unit;

- c) establish a "reference case" whereby the Division utilizes the data presented in the immediate case to endorse or approve certain methods of allocating production whereby the applicant need not submit additional data or justification when proposing a certain method of allocating production on Form C-107-A's subsequently filed for wells within the San Juan 28-6 Unit; and,
- d) establish a "reference case" or an administrative procedure for authorizing the downhole commingling of existing or future drilled wells within the San Juan 28-6 Unit without additional notice to each affected interest owner as required by Division Rule No. 303.D.

(7) In support of its request to except marginal economic criteria, the applicant presented geologic and engineering evidence and testimony which indicates that within the San Juan 28-6 Unit:

- a) the structure and thickness of the Dakota and Pictured Cliffs formations are very consistent;
- b) the average recoverable Dakota and Pictured Cliffs gas reserves underlying an undeveloped drill block are approximately 449 MMCFG and 186 MMCFG, respectively;
- c) the average initial producing rate for a newly drilled or recompleted Dakota and Pictured Cliffs gas well is approximately 254 MCFGD and 216 MCFGD, respectively; and,
- d) the estimated ultimate gas recoveries and initial producing rates from the Dakota and Pictured Cliffs formations are insufficient to justify drilling stand alone wells and/or dually completed wells to recover such gas reserves.

(8) The evidence and testimony presented by the applicant indicates that the Dakota and Pictured Cliffs formations within the San Juan 28-6 Unit should be properly classified as "marginal".

(9) In support of its request to except pressure criteria within the Dakota and Pictured Cliffs formations within the San Juan 28-6 Unit, the applicant presented engineering evidence and testimony which indicates that:



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

(10) There is sufficient pressure data available within the San Juan 28-6 Unit so as to except pressure criteria as proposed by the applicant.

(11) The applicant testified that various allocation methods will be utilized for downhole commingled wells within the San Juan 28-6 Unit depending on the circumstances. Some of the methods and circumstances are described as follows:

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

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

(13) In support of its request to establish a "reference case" or administrative procedure for providing notice within the San Juan 28-6 Unit the applicant presented evidence and testimony which indicates that:

- a) the interest ownership between two zones within a given wellbore in the San Juan 28-6 Unit is generally not common;
- b) pursuant to Division Rule No. 303.D., applicant is currently required to notify all interest owners within the San Juan 28-6 Unit every time a Form C-107-A is submitted to the Division. There are a considerable number of such interest owners within the unit;

- c) providing notice to each interest owner within the San Juan 28-6 Unit of subsequent downhole comminglings is unnecessary and is an excessive burden on the applicant;
- d) the downhole commingling of wells within the San Juan 28-6 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 28-6 Unit should not violate the correlative rights of any interest owner;
- e) no interest owner appeared at the hearing in opposition to the establishment of a "reference case" or administrative procedure for notice.

(14) An administrative procedure should be established within the San Juan 28-6 Unit for obtaining approval for subsequent downhole commingled wells without notice to Unit interest owners, provided however that, all other provisions contained within Division Rule No. 303.C. are complied with.

(15) Approval of the proposed "reference cases" for marginal economic criteria, pressure criteria, allocation formulas and notice will lessen the burden on the applicant insofar as providing the data required pursuant to Division Rule No. 303.D. and Form C-107-A, will provide the applicant a streamlined method for obtaining downhole commingling approvals within the San Juan 28-6 Unit, and will not violate correlative rights.

**IT IS THEREFORE ORDERED THAT:**

(1) The application of Burlington Resources Oil & Gas Company to establish a "reference case" for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas and (d) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 28-6 Unit, San Juan County, New Mexico, is hereby approved.

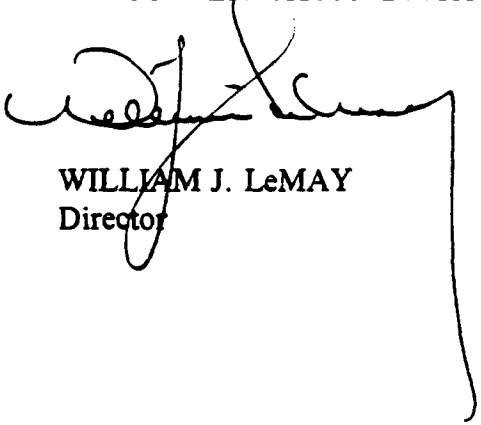
(2) Upon filing of Division Form No. C-107-A's for wells subsequently downhole commingled within the San Juan 28-6 Unit Area, the applicant shall not be required to submit supporting data to justify the classification of the Pictured Cliffs and Dakota formations as "marginal", supporting data to verify the Pictured Cliffs and Dakota pressure information provided, and support or justification for utilizing a given method or formula for allocation of production, provided however, in the event any of the data described above appearing on Form C-107-A appears to be beyond the data range provided in this case, the Division may require the submittal of additional supporting data.

(3) In order to obtain Division authorization to downhole commingle wells within the San Juan 28-6 Unit, the applicant shall file a Form C-107-A with the Santa Fe and Aztec Offices of the Division. Such application shall contain all the information required under Rule No. 303.C. of the Division Rules and Regulations, provided however that the applicant shall not be required to provide notice to all interest owners within the San Juan 28-6 Unit of such proposed commingling.

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LeMAY  
Director

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