

DATE IN

3/3/97

SUSPENSE

3/24/97

ENGINEER

BS

LOGGED

MN

TYPE

DHC

ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

## 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]

1492

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

[A] Location - Spacing Unit - Directional Drilling

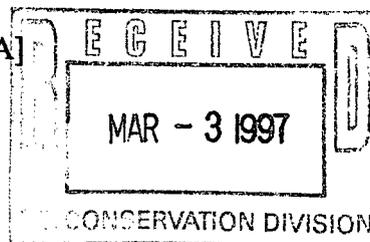
 NSL  NSP  DD  SD

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

2-27-97

# **BURLINGTON RESOURCES**

---

SAN JUAN DIVISION

February 27, 1997

SENT FEDERAL EXPRESS

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

Re: San Juan 32-9 Unit #41A  
815'FSL, 1120'FEL Section 31, T-32-N, R-9-W, San Juan County, NM  
API #30-045-29129

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Pictured Cliffs and Blanco Mesa Verde in the subject well. This well was originally drilled as a Pictured Cliffs/Mesa Verde dual; it is intended to commingle.

To comply with the New Mexico Oil Conservation Division rules, Burlington Resources Oil & Gas 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 for Pictured Cliffs and Mesa Verde for at least one year;
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 Pictured Cliffs

Notification of Mesa Verde and Dakota interest owners is covered under Order #R-10692 issued November 1, 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.  
xc: Bureau of Land Management

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 87505-8429

Form C-107-A  
New 3-12-96

APPROVAL PROCESS :

Administrative  Hearing

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

YES  NO

Burlington Resources Oil & Gas Company  
87499

PO Box 4289, Farmington, NM

Operator **San Juan 32-9 Unit** Address **41A P 31-32-9 San Juan**

Lease Well No. Unit Ltr. - Sec - Twp - Rge County Spacing Unit Lease Types: (check 1 or more)  
OGRID NO. 14538 Property Code 7473 API NO. 30-045-29129 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 Pic.Cliffs - 72359		Blanco Mesa Verde - 72319
2. Top and Bottom of Pay Section (Perforations)	3611-3717'		5166-6224'
3. Type of production (Oil or Gas)	gas		gas
4. Method of Production (Flowing or Artificial Lift)	flowing		flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current	(Current) a. 604 psi from offset well (see attachment)	a.	a. 423 psi from offset well (see attachment)
Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Original) b. 874 psi from offset well (see attachment)	b.	b. 1277 psi from offset well (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1126		BTU 1155
7. Producing or Shut-In?	producing		producing
Production Marginal? (yes or no)	yes		no
* If Shut-In and oil/gas/water rates of last production	Date: n/a Rates:	Date: Rates:	Date: n/a 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: 12-96 Rates: 211 mcf/d; 0.4 bopd	Date: Rates:	Date: 12-96 Rates: 230 mcf/d; 1.4 bopd
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-10692

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 Mary Ellen Lutey TITLE Production Engineer DATE 2/17/97

TYPE OR PRINT NAME Mary Ellen Lutey TELEPHONE NO. ( 505 ) 326-9700

Submit to Appropriate District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89  
RECEIVED  
BLM

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

94 NOV 19 01 0: 27

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Azusa, NM 88210

DISTRICT III  
1000 Rio Grande Rd., Azusa, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT  
All Distances must be from the outer boundaries of the section

Operator MERIDIAN OIL INC.		Lease SAN JUAN 32-9 UNIT		Well No. 41-A
Unit Letter P	Section 31	Township 32 NORTH	Range 9 WEST	County SAN JUAN
Actual Footage Location of Well: 815 feet from the SOUTH line and 1120 feet from the EAST line				
Ground level Elev. 6765'	Producing Formation Mesa Verde/Pic Cliffs		Foot Blanco /Blanco	Dedicated Acreage: 309.21 Acres

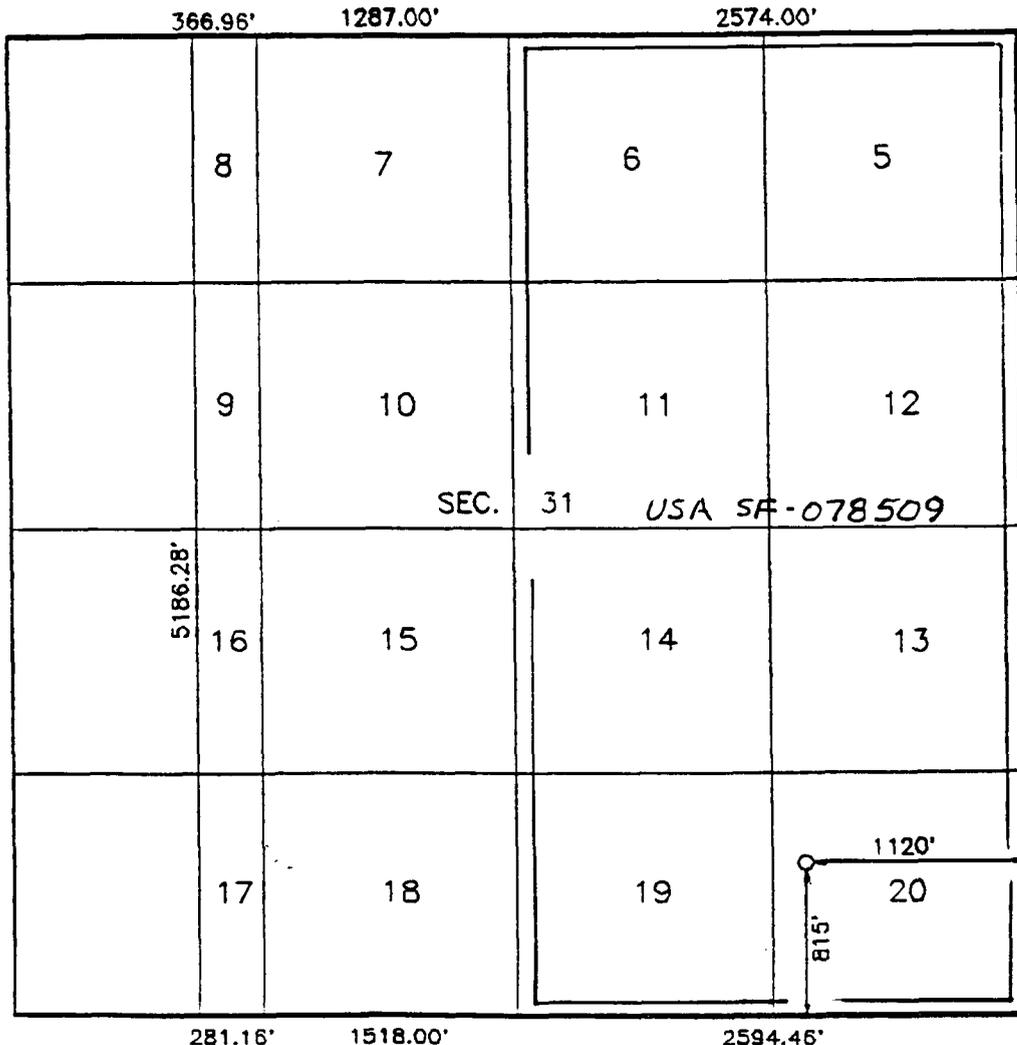
1. Outline the acreage dedicated to the subject well by colored pencil or indelible marks on the plat below.

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
 Yes  No If answer is "yes" type of consolidation unitization

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



**OPERATOR CERTIFICATION**  
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Peggy Bradfield*  
Signature  
Peggy Bradfield  
Printed Name  
Regulatory Representative  
Position  
Meridian Oil Inc.  
Company  
5-4-94  
Date

**SURVEYOR CERTIFICATION**  
I hereby certify that the well location shown on this plat was plotted from field notes, actual surveys made by me or under my supervision, and that the same is true or correct to the best of my knowledge and belief.

3/25/94

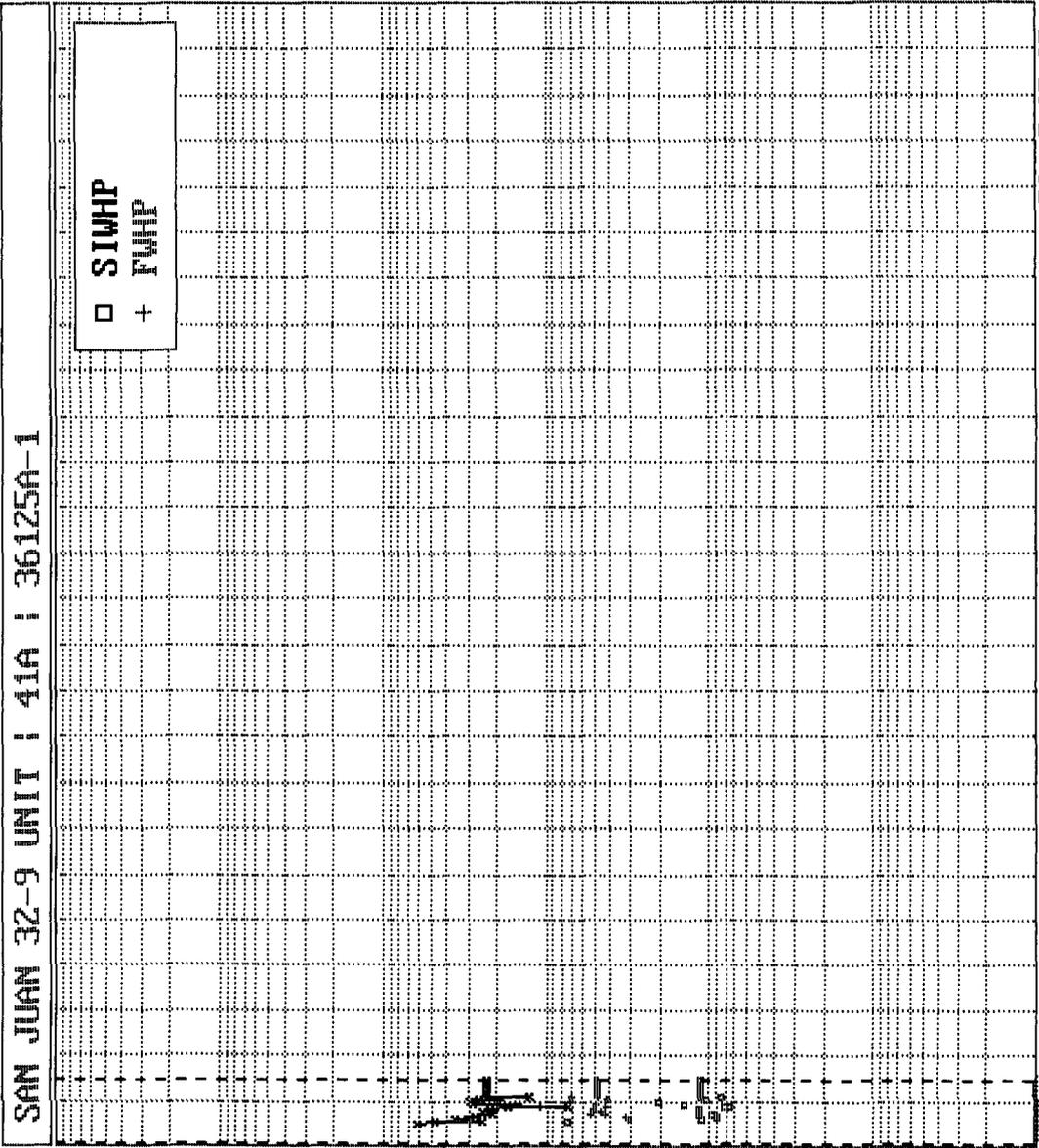
Don Surry, G. EDW  
Neville R. J. [unclear]  
Signature  
Professional Surveyor  
9857  
6857

MV

Prop 10450 \*

- GAS Mcf/d
- OIL Bbl/d
- OIL/GAS
- WATER Bbls/d

RateTime  
 Semi Log



Major = GAS

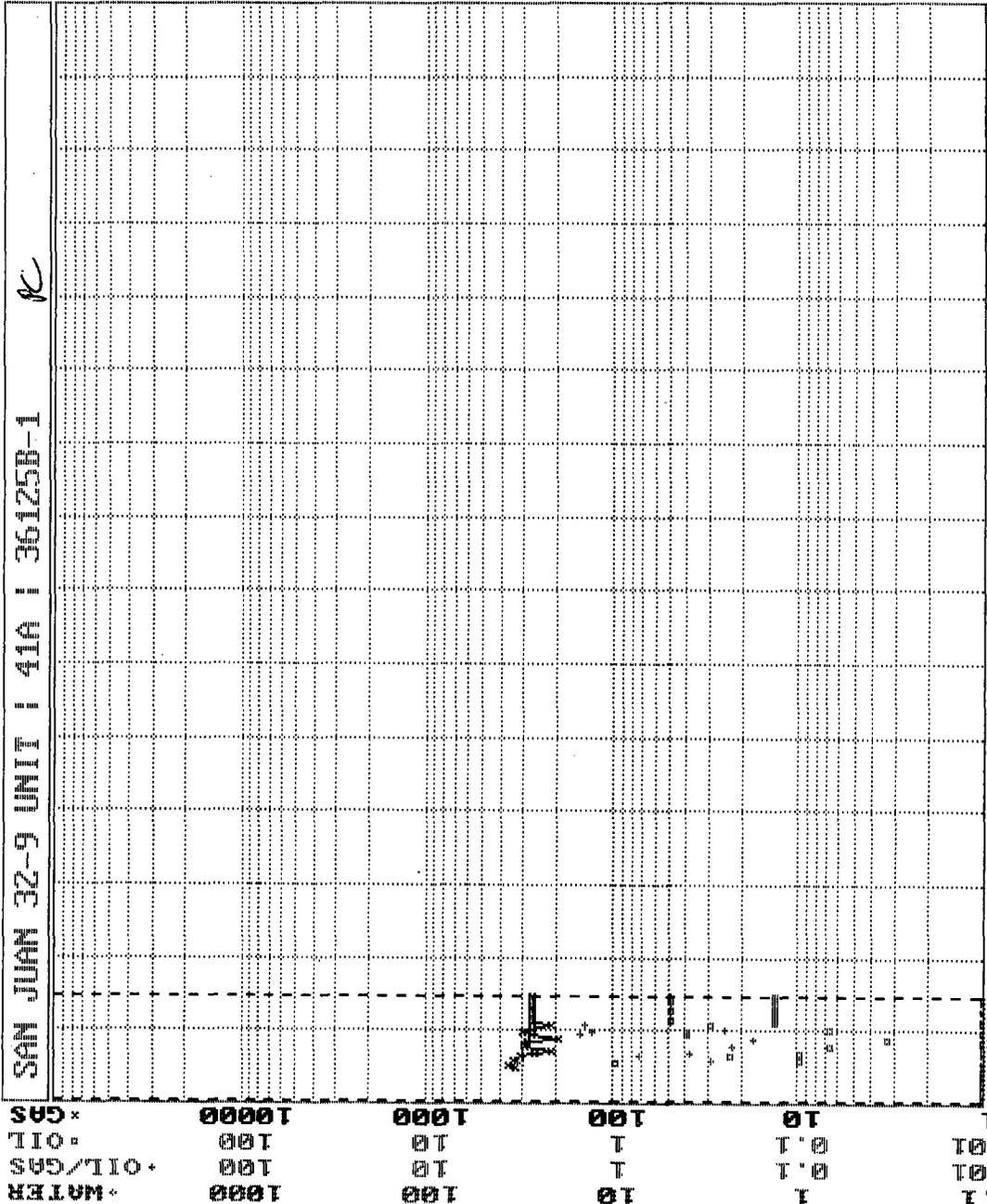
10000 \* WATER  
 1000 \* OIL/GAS  
 1000 \* OIL  
 \* GAS

Prop 165 \*

SAN JUAN 32-9 UNIT | 41A | 36125B-1

Ⓚ

- \* GAS Mcf/d
  - OIL Bbl/d
  - OIL/GAS
  - WATER Bbls/d
- RateTime  
Semi Log



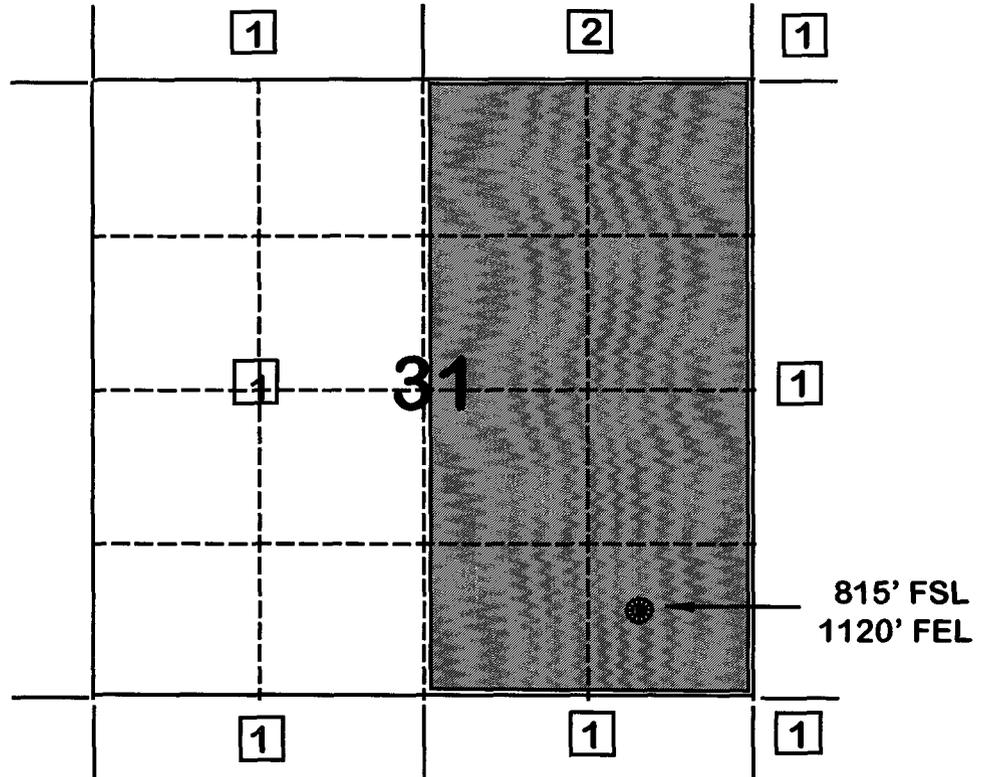
Major = GAS

**BURLINGTON RESOURCES OIL AND GAS COMPANY**

**San Juan 32-9 Unit #41A  
OFFSET OPERATOR \ OWNER PLAT**

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

**Township 32 North, Range 9 West**



- 1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.
- 2) Amoco Production Company  
Attn: Bruce Zimney  
P.O. Box 800  
Denver, CO 80201

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

VERSION 10.3/13/94

GAS GRAVITY	<u>0.67</u>
COND. OR MISC. (C/M)	<u>C</u>
%N2	<u>0.15</u>
%CO2	<u>1.67</u>
%H2S	<u>0</u>
DIAMETER (IN)	<u>2.4</u>
DEPTH (FT)	<u>6250</u>
SURFACE TEMPERATURE (DEG F)	<u>60</u>
BOTTOMHOLE TEMPERATURE (DEG F)	<u>150</u>
FLOWRATE (MCFPD)	<u>0</u>
SURFACE PRESSURE (PSIA)	<u>365</u>
BOTTOMHOLE PRESSURE (PSIA)	<u>423.1</u>

SAN JUAN 32-9 UNIT #41A MESAVERDE - (CURRENT )

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

VERSION 10/3/13/54

GAS GRAVITY	<u>0.67</u>	
COND. OR MISC. (C/M)	<u>C</u>	
%N2	<u>0.15</u>	
%CO2	<u>1.67</u>	
%H2S	<u>0</u>	
DIAMETER (IN)	<u>2.4</u>	
DEPTH (FT)	<u>6250</u>	
SURFACE TEMPERATURE (DEG F)	<u>60</u>	
BOTTOMHOLE TEMPERATURE (DEG F)	<u>150</u>	
FLOWRATE (MCFPD)	<u>0</u>	
SURFACE PRESSURE (PSIA)	<u>1082</u>	
BOTTOMHOLE PRESSURE (PSIA)	<table border="1"><tr><td>1276.7</td></tr></table>	1276.7
1276.7		

SAN JUAN 32-9 UNIT #41A MESAVERDE - (ORIGINAL )

# MV OFFSET

Organize Data ScreenGraph Economics Report Plot Utility Quit  
Browsing: SAN JUAN 32-9 UNIT | 7 | 69845-1 Property No.: 4861  
Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/34/103224  
Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

--DATE--	---CUM GAS--	M SIWHP
	Mcf	Psi
10/01/53	0	1082.0
07/23/54	48000	898.0
09/08/55	106000	857.0
12/07/56	216000	779.0
01/23/58	376000	729.0
09/22/58	446000	786.0
12/06/58	461000	749.0
09/14/59	538000	792.0
05/14/60	602000	761.0
09/28/61	717000	766.0
06/18/62	786000	736.0
01/04/63	827000	676.0
10/29/64	946000	711.0
05/25/65	997000	713.0
10/11/66	1103000	722.0

F1=Help F3=PrvPro F5=PrvTbl F7=Calcu F9=Utils Alt+TableLtr=Change Table  
F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R & L

Organize Data ScreenGraph Economics Report Plot Utility Quit  
Browsing: SAN JUAN 32-9 UNIT | 7 | 69845-1 Property No.: 4861  
Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 34/34/103224  
Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

--DATE--	---CUM GAS--	M SIWHP
	Mcf	Psi
06/11/71	1533027	621.0
06/29/72	1647297	571.0
05/23/73	1750504	535.0
04/16/74	1847413	542.0
05/07/76	2086673	529.0
04/11/78	2271543	524.0
06/03/80	2457904	513.0
06/03/82	2580779	543.0
07/19/84	2664836	571.0
04/28/86	2740651	472.0
09/13/89	2935003	462.0
03/18/91	2990448	432.0
04/08/91	3010020	444.0
07/29/93	3096589	377.0
08/15/93	3103027	365.0

F1=Help F3=PrvPro F5=PrvTbl F7=Calcu F9=Utils Alt+TableLtr=Change Table  
F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R & L

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

VERSION 10.3/13/94

GAS GRAVITY	<u>0.66</u>	
COND. OR MISC. (C/M)	<u>C</u>	
%N2	<u>0.14</u>	
%CO2	<u>2.09</u>	
%H2S	<u>0</u>	
DIAMETER (IN)	<u>1.25</u>	
DEPTH (FT)	<u>6250</u>	
SURFACE TEMPERATURE (DEG F)	<u>60</u>	
BOTTOMHOLE TEMPERATURE (DEG F)	<u>110</u>	
FLOWRATE (MCFPD)	<u>0</u>	
SURFACE PRESSURE (PSIA)	<u>517</u>	
BOTTOMHOLE PRESSURE (PSIA)	<table border="1"><tr><td>604.0</td></tr></table>	604.0
604.0		

SAN JUAN 32-9 UNIT #41A PICTURED CLIFFS - (CURRENT)

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

VERSION 1.0 3/13/94

GAS GRAVITY	<u>0.66</u>	
COND. OR MISC. (C/M)	<u>C</u>	
%N2	<u>0.14</u>	
%CO2	<u>2.09</u>	
%H2S	<u>0</u>	
DIAMETER (IN)	<u>1.25</u>	
DEPTH (FT)	<u>6250</u>	
SURFACE TEMPERATURE (DEG F)	<u>60</u>	
BOTTOMHOLE TEMPERATURE (DEG F)	<u>110</u>	
FLOWRATE (MCFPD)	<u>0</u>	
SURFACE PRESSURE (PSIA)	<u>743</u>	
BOTTOMHOLE PRESSURE (PSIA)	<table border="1"><tr><td>873.7</td></tr></table>	873.7
873.7		

SAN JUAN 32-9 UNIT #41A PICTURED CLIFFS - (ORIGINAL )

FARMINGTON 1996 MONTHLY PRODUCTION FOR 36125A  
 SAN JUAN 32-9 UNIT 41A  
 BLANCO MESAVERDE (PRORATED GAS FIELD) MESAVERDE ZONE

PHS030M1

MO	T	S	DAYS		OIL			GAS			WATER		PROD	C
			ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	PROD		
1	2	F	31	02	32		01	7733	31	1134	15.025			
2	2	F	29	02	26		01	3770	29	1134	15.025			
3	2	F	26	02	27		01	8556	26	1105	15.025			
4	2	F	30	02	58	41.2	01	7973	30	1114	15.025			
5	2	F	29	02	10		01	6141	29	1134	15.025			
6	2	F	30	02	13		01	4843	30	1130	15.025			
7	2	F	31	02	52		01	3575	31	1128	15.025			
8	2	F	31	02	20	46.5	01	3863	31	1128	15.025			
9	2	F	24	02	20		01	2691	24	1128	15.025			
10	2	F	31	02	23		01	5776	31	1128	15.025			
11	2	F	30	02	46		01	6065	30	1117	15.025			
12	2	F	31	02	42	1.4 BOPD	01	230 MF 1133	31	1117	15.025			

PF6 - RETURNS TO ANNUAL DISPLAY PF3 - TRANSFER TO UPDATE  
 PF10 - HELP INFORMATION PF9 - DISPLAY MONTHLY INJECTION  
 00/00/00 00:00:00:0 PRS 02/05/97

B MY JOB NUM LU #14

FARMINGTON 1996 MONTHLY PRODUCTION FOR 36125B  
 SAN JUAN 32-9 UNIT 41A  
 BLANCO PICTURED CLIFFS (GAS) FIELD PICTURED CLIFFS ZONE

PHS030M1

MO	T	S	DAYS		OIL			GAS			WATER		PROD	C
			ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	PROD		
1	2	F	31	02	2		01	8139	31	1106	15.025			
2	2	F	29	02	9		01	6473	29	1106	15.025			
3	2	F	31	02	33	57.9	01	10558	31	1106	15.025			
4	2	F	30	02	9		01	9043	30	1106	15.025			
5	2	F	27	02	4		01	6609	27	1173	15.025			
6	2	F	30	02	9		01	6061	30	1173	15.025			
7	2	F	31	02	10	67.1	01	5434	31	1167	15.025			
8	2	F	26	02	4		01	4739	26	1167	15.025			
9	2	F	24	02	6		01	2647	24	1167	15.025			
10	2	F	31	02	3		01	6295	31	1167	15.025			
11	2	F	30	02	17		01	5901	30	1120	15.025			
12	2	F	31	02	12	0.4 BOPD	01	211 MF 6545	31	1120	15.025			

PF6 - RETURNS TO ANNUAL DISPLAY PF3 - TRANSFER TO UPDATE  
 PF10 - HELP INFORMATION PF9 - DISPLAY MONTHLY INJECTION  
 00/00/00 00:00:00:0 PRS 02/05/97

B MY JOB NUM LU #14



**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. 11601  
ORDER NO. R-10692**

**APPLICATION OF BURLINGTON RESOURCES  
OIL & GAS COMPANY FOR THE ESTABLISHMENT  
OF A DOWNHOLE COMMINGLING "REFERENCE  
CASE" 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 August 22, 1996, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 1st 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 and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 32-9 Unit, San Juan County, New Mexico.

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

**CASE NO. 11601**  
**Order No. R-10692**  
**Page -2-**

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"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 32-9 Unit which encompasses some 21,864 acres in Townships 31 and 32 North, Ranges 9 and 10 West, NMPM, San Juan County, New Mexico.

(5) Within the San Juan 32-9 Unit, the applicant currently operates two (2) Basin-Dakota Gas Pool wells, one hundred twenty-eight (128) Blanco-Mesaverde Gas Pool wells and thirty-two (32) Blanco-Pictured Cliffs 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 32-9 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 32-9 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 32-9 Unit; and,

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- d) establish a "reference case" or an administrative procedure for authorizing the downhole commingling of existing or future drilled wells within the San Juan 32-9 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 32-9 Unit:

- a) the structure and thickness of the Dakota and Pictured Cliffs formations are very consistent;
- b) the average recoverable Pictured Cliffs gas reserves underlying an undeveloped drill block are approximately 700 MMCFG.
- c) initial producing rates for newly drilled or recompleted Pictured Cliffs gas wells range from 150-600 MCFGD;
- d) the San Juan 32-9 Unit Well Nos. 113 and 114 were recently drilled to test the Dakota formation within the unit. Both wells proved non-productive in the Dakota formation; and,
- e) 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 32-9 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 32-9 Unit, the applicant presented engineering evidence and testimony which indicates that:

- a) the average shut-in pressure within the Pictured Cliffs formation at the time of initial development was approximately 562 psi; and,

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- b) the average current shut-in pressure within the Pictured Cliffs formation is approximately 349 psi.

(10) The applicant did not present sufficient bottomhole pressure data within the Dakota and Pictured Cliffs formations within the San Juan 32-9 Unit so as to justify the establishment of a "reference case" for pressure criteria.

(11) The applicant testified that various allocation methods will be utilized for downhole commingled wells within the San Juan 32-9 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 where a zone with a well established decline rate is commingled with a newly completed zone; and,
- 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 32-9 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 32-9 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 32-9 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 32-9 Unit of subsequent downhole comminglings is unnecessary and is an excessive burden on the applicant;

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- d) the downhole commingling of wells within the San Juan 32-9 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 32-9 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 32-9 Unit for obtaining approval for subsequently 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, 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 32-9 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) allocation formulas and (c) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 32-9 Unit, San Juan County, New Mexico, is hereby approved.

(2) The application of Burlington Resources Oil & Gas Company to establish a "reference case" for pressure criteria in the Dakota and Pictured Cliffs formation within the San Juan 32-9 Unit is hereby denied.

(3) Upon filing of Division Form No. C-107-A's for wells subsequently downhole commingled within the San Juan 32-9 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" 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.

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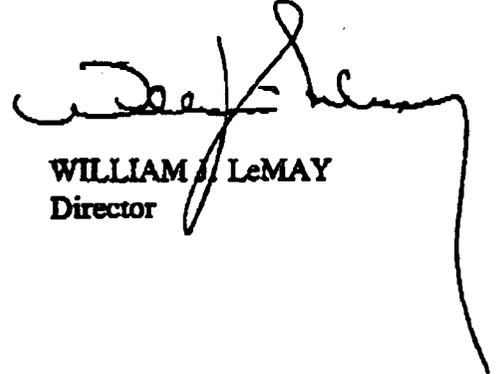
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(4) In order to obtain Division authorization to downhole commingle wells within the San Juan 32-9 Unit, the applicant shall file a Form C-107-A with the Santa Fe and Aztec Offices of the Division. Such application shall contain all the information 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 32-9 Unit of such proposed commingling.

(5) 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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