

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-A New 3-12-96

APPROVAL PROCESS :

Administrative Hearing

EXISTING WELLBORE

YES NO

APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil & Gas Company

PO Box 4289, Farmington, NM 87499

Operator Address San Juan 28-6 Unit 183M I 13-27N-06W 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. 30-039-25769 Federal x State (and/or) Fee x

Table with 4 columns: The following facts are submitted in support of downhole commingling, Upper Zone, Intermediate Zone, Lower Zone. Rows include Pool Name and Pool Code, Top and Bottom of Pay Section (Perforations), Type of production (Oil or Gas), Method of Production (Flowing or Artificial Lift), Bottomhole Pressure (Current and Original), Oil Gravity (API) or Gas BTU Content, Producing or Shut-In?, Production Marginal?, and Fixed Percentage Allocation Formula.

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 x No. If not, have all working, overriding, and royalty interests been notified by certified mail? Yes x No. Have all offset operators been given written notice of the proposed downhole commingling? x Yes No

11. Will cross-flow occur? x 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. x Yes No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? x Yes No

13. Will the value of production be decreased by commingling? Yes x 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. x 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 Sean Woolverton TITLE: Production Engineer DATE: 1/22/98

TYPE OR PRINT NAME Sean Woolverton 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
 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-
 Revised February 21, 1991
 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 7462	Property Name San Juan 28-6 Unit		Well Number 183M
OGRID No. 14538	Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		Elevation 6321'

10 Surface Location

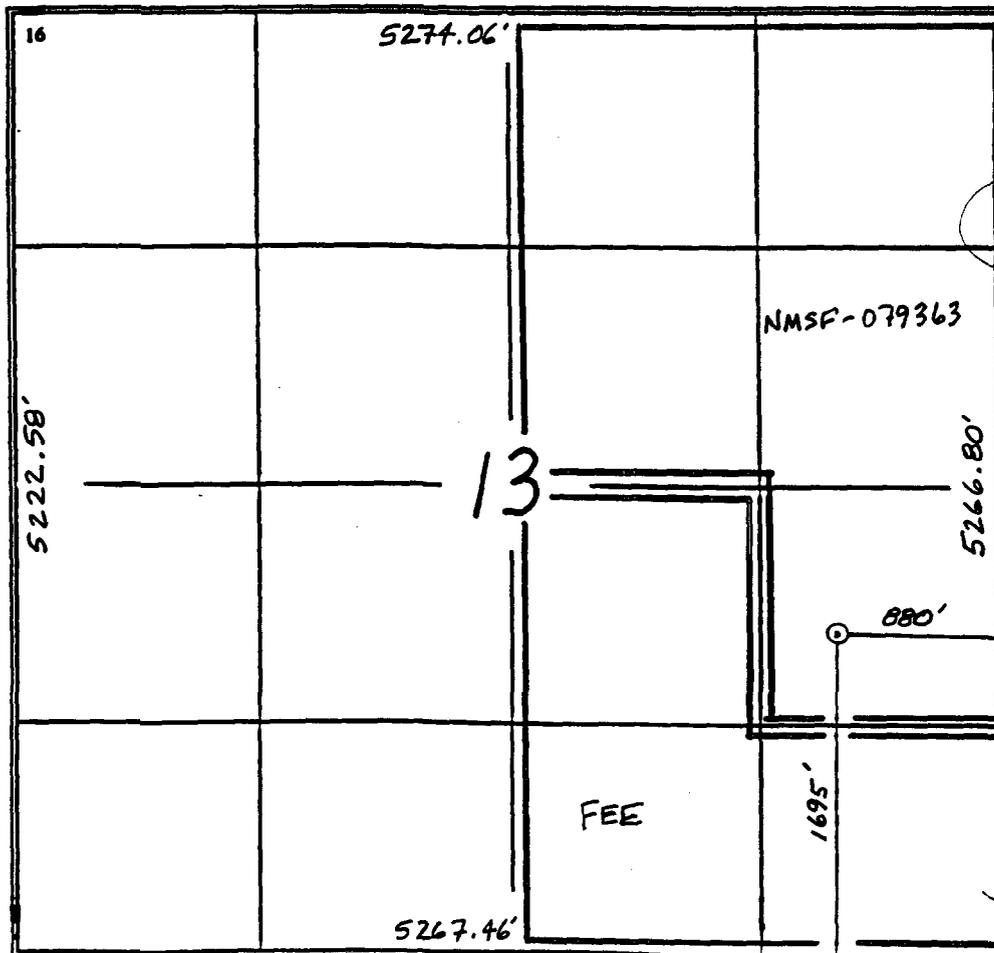
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	13	27-N	6-W		1695	South	880	East	R.A.

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

12 Dedicated Acres MV-E 320 DK-E 320	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



17 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 Administrator
 Title
 7-11-97
 Date

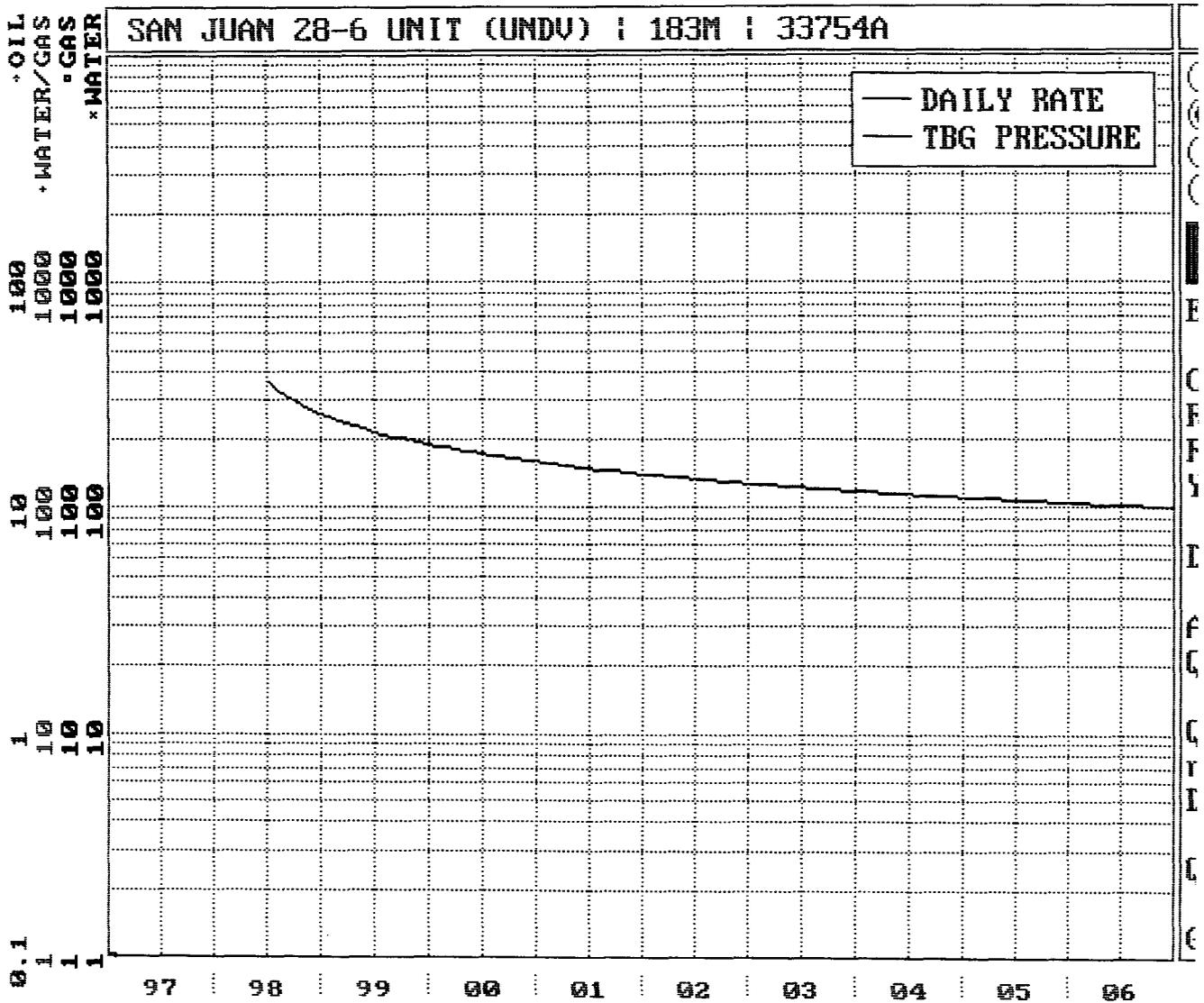
18 SURVEYOR CERTIFICATION

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.

5/21/97
 Date of Survey
 Signature and Seal of Professional Surveyor

6857
 Certificate Number

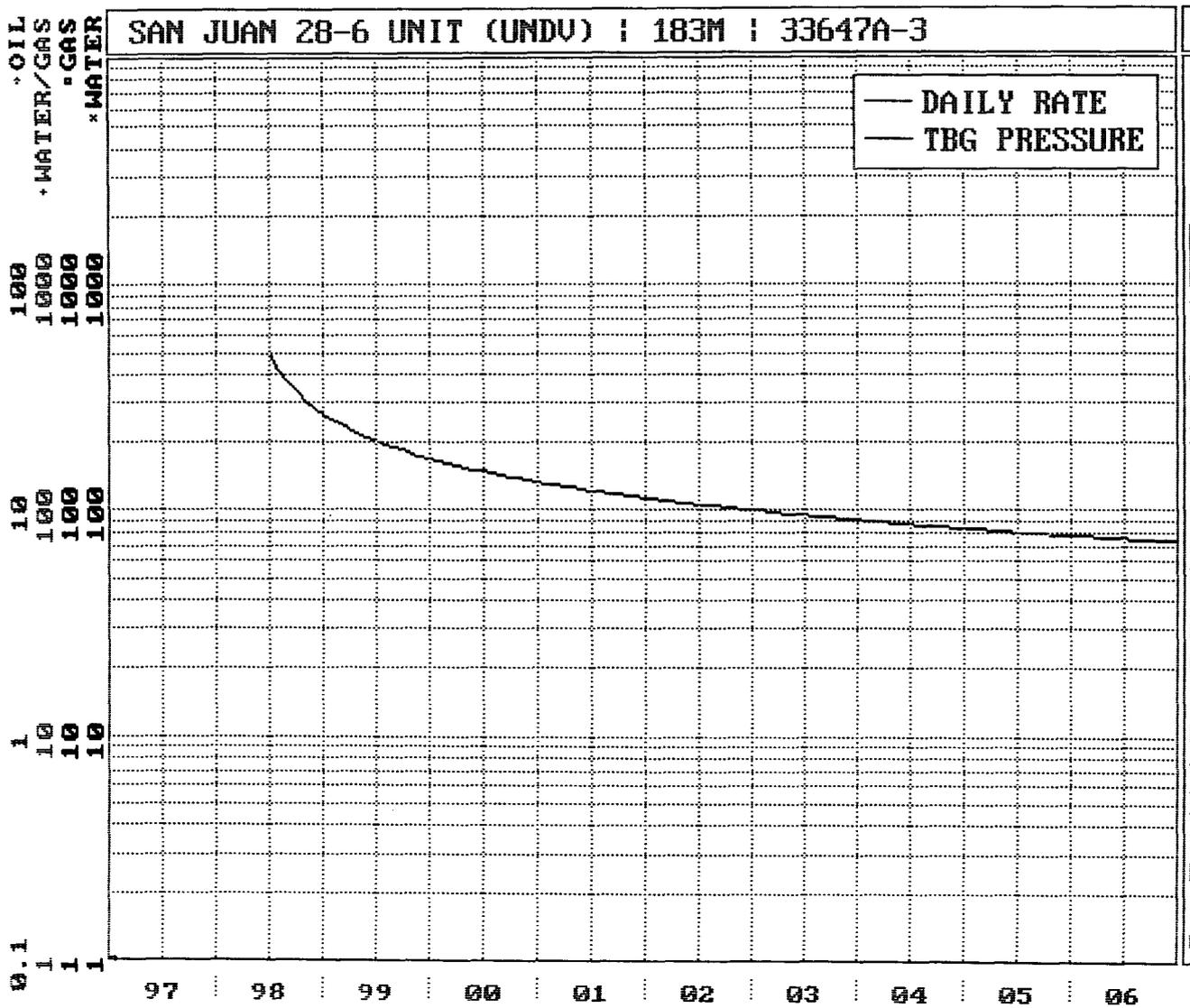
San Juan 28-6 Unit #183M
 Expected Production Curve
 Blanco Mesaverde



San Juan 28-6 Unit #183M

Expected Production Curve

Basin Dakota



SJ 28-6 Unit #183M

Bottom Hole Pressures
 Flowing and Static BHP
 Cullender and Smith Method
 Version 1.0 3/13/94

Mesaverde		Dakota	
<u>MV-Current</u>		<u>DK-Current</u>	
GAS GRAVITY	0.721	GAS GRAVITY	0.63
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.3	%N2	0.24
%CO2	0.77	%CO2	1.48
%H2S	0	%H2S	0
DIAMETER (IN)	2	DIAMETER (IN)	1.5
DEPTH (FT)	5362	DEPTH (FT)	7574
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	530	SURFACE PRESSURE (PSIA)	1005
BOTTOMHOLE PRESSURE (PSIA)	612.0	BOTTOMHOLE PRESSURE (PSIA)	1194.6
<u>MV-Original</u>		<u>DK-Original</u>	
GAS GRAVITY	0.721	GAS GRAVITY	0.63
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.3	%N2	0.24
%CO2	0.77	%CO2	1.48
%H2S	0	%H2S	0
DIAMETER (IN)	2	DIAMETER (IN)	1.5
DEPTH (FT)	5362	DEPTH (FT)	7574
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1083	SURFACE PRESSURE (PSIA)	2773
BOTTOMHOLE PRESSURE (PSIA)	1270.9	BOTTOMHOLE PRESSURE (PSIA)	3323.9

Page No.: 1
Print Time: Tue Jan 13 06:58:53 1998
Property ID: 4084
Property Name: SAN JUAN 28-6 UNIT | 86 | 53444B-1
Table Name: K:\ARIES\RR98PDP\TEST.DBF

--DATE-- M SIWHP
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San Juan 28-6 # 183M

Mesaverde Offset

06/19/58	1083.0	-original
07/09/58	1082.0	
12/06/58	833.0	
09/22/59	748.0	
05/29/60	757.0	
03/05/61	745.0	
05/28/61	713.0	
08/06/62	683.0	
03/19/63	690.0	
10/23/64	697.0	
09/24/65	629.0	
04/12/66	659.0	
09/22/67	663.0	
04/01/68	663.0	
07/06/70	602.0	
06/29/71	592.0	
07/25/72	522.0	
05/02/74	452.0	
07/14/76	507.0	
01/21/77	390.0	
11/21/77	390.0	
05/26/78	399.0	
05/29/80	448.0	
05/11/82	525.0	
06/11/84	518.0	
08/19/86	592.0	
03/18/91	488.0	
08/23/91	500.0	
05/03/93	530.0	-current

Page No.: 1
Print Time: Mon Jan 12 16:21:40 1998
Property ID: 1885
Property Name: SAN JUAN 28-6 UNIT | 183 | 44084A-1
Table Name: K:\ARIES\RR98PDP\TEST.DBF

--DATE-- M SIWHP
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07/02/73	2773.0	-original
09/14/73	2009.0	
05/02/74	1400.0	
05/05/75	1180.0	
07/05/77	1047.0	
08/21/79	958.0	
08/12/81	879.0	
09/28/83	985.0	
09/05/85	924.0	
11/20/85	902.0	
10/05/88	893.0	
04/09/90	980.0	
11/02/92	1005.0	-current

San Juan 28-6 #183M
Dakota Offset

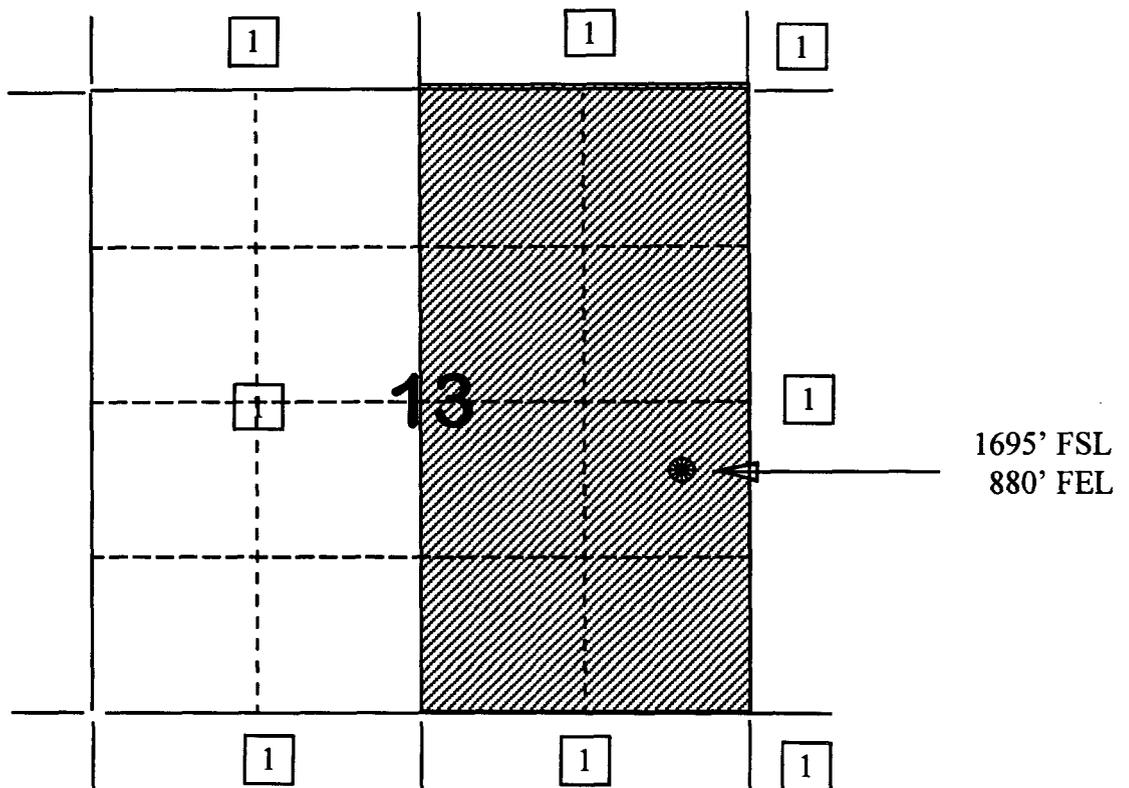
BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 28-6 Unit #183M

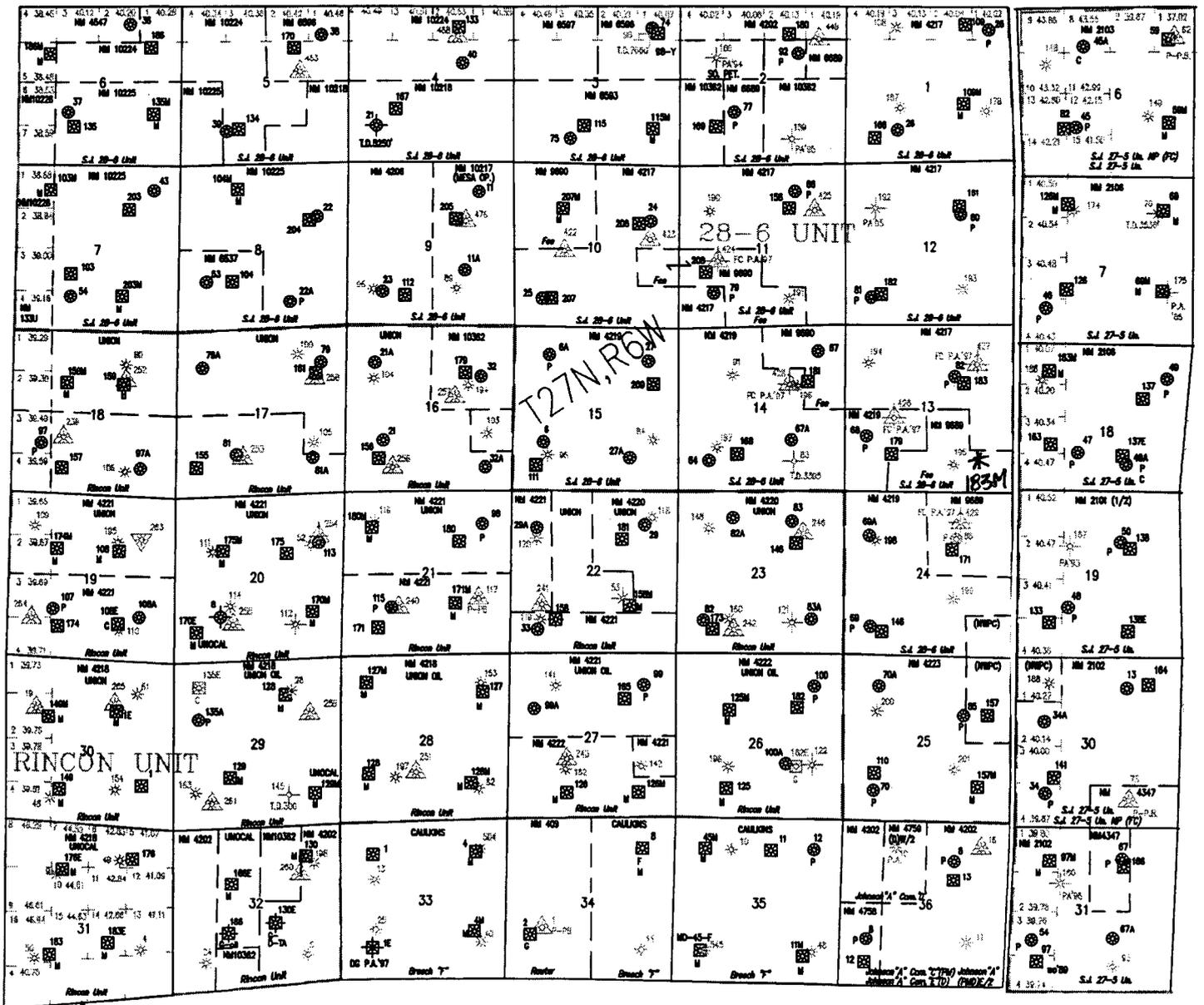
OFFSET OPERATOR/OWNER PLAT

Mesaverde / Dakota Formations Commingle Well

Township 27 North, Range 6 West



San Juan 28-6 Unit #183M
 Blanco Mesaverde / Basin Dakota
 27N-06W-13



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:

- 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:

- 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.