

DATE IN 12/24/97	SUSPENSE 1/13/98	ENGINEER DC	LOGGED KW	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

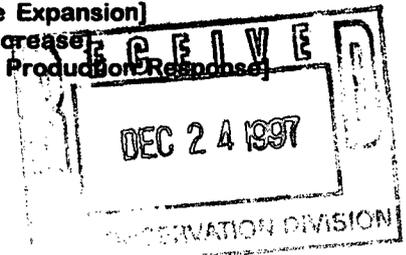
1789

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

Peggy Bradfield
Signature

Regulatory/Compliance Administrator

Title

12/27/97
Date

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 :

X Administrative Hearing

APPLICATION FOR DOWNHOLE COMMINGLING EXISTING WELLBORE YES x NO

Burlington Resources Oil & Gas Company

PO Box 4289, Farmington, NM 87499

Operator Address San Juan 28-6 Unit 102M O 26-28-6 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. 30-039-25641 Federal x State (and/or) Fee

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, Oil Gravity (API) or Gas BTU Content, Producing or Shut-In?, Production Marginal?, Fixed Percentage Allocation Formula.

- 9. If allocation formula is based upon something other than current or past production...
10. Are all working, overriding, and royalty interests identical in all commingled zones?
11. Will cross-flow occur?
12. Are all produced fluids from all commingled zones compatible with each other?
13. Will the value of production be decreased by commingling?
14. If this well is on, or communitized with, state or federal lands...
15. NMOCD Reference Cases for Rule 303(D) Exceptions:
16. ATTACHMENTS:

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 12/23/97

TYPE OR PRINT NAME Sean Woolverton TELEPHONE NO. (505) 326-9700

District I
 PO Box 1988, Hobbs, NM 88241-1988
 District II
 PO Drawer 00, Aramis, NM 88211-0719
 District III
 1000 N. Hrazar 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-102
 Revised February 21, 1994
 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 102M	
OCRID No. 14538	Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY			Elevation 6697'	

10 Surface Location

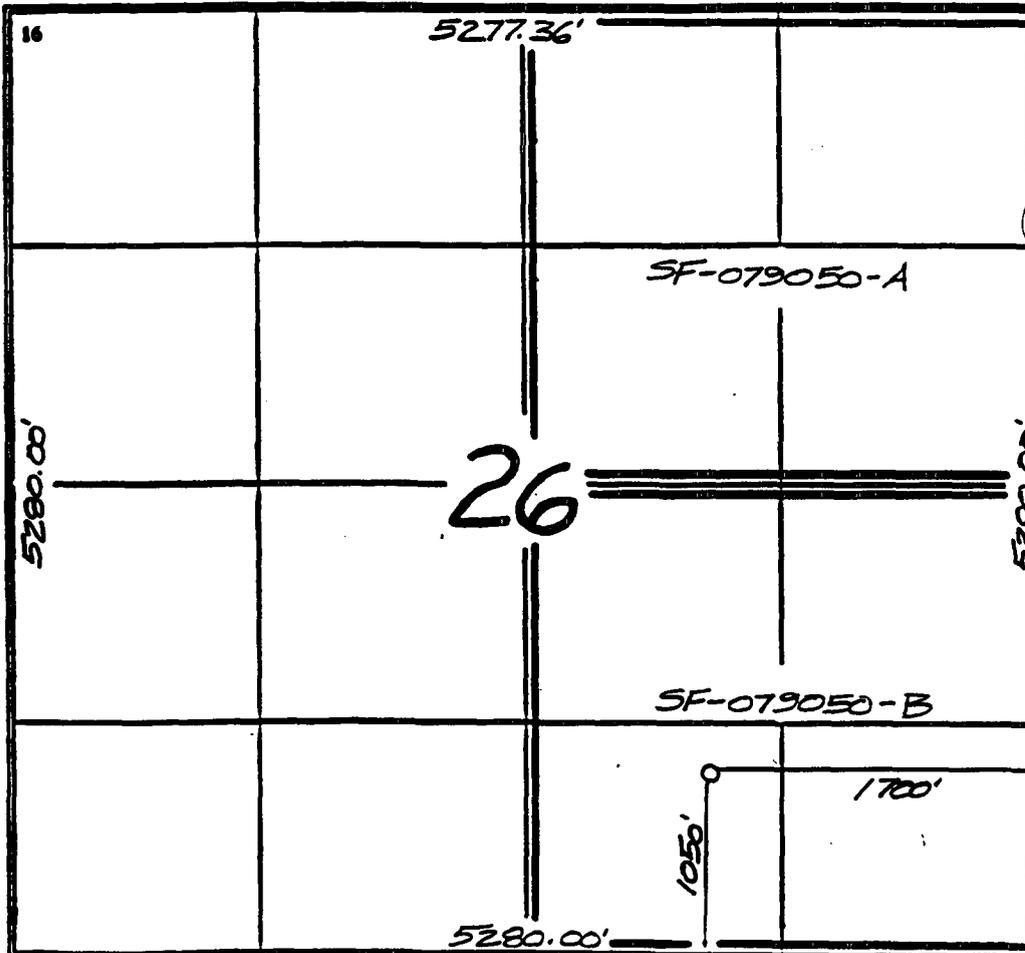
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	26	28-N	6-W		1050	South	1700	East	R.A.

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: E/320-E/320
 13 Joint or Infill:
 14 Consolidation Code:
 15 Order No.:

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

12-30-96
 Date

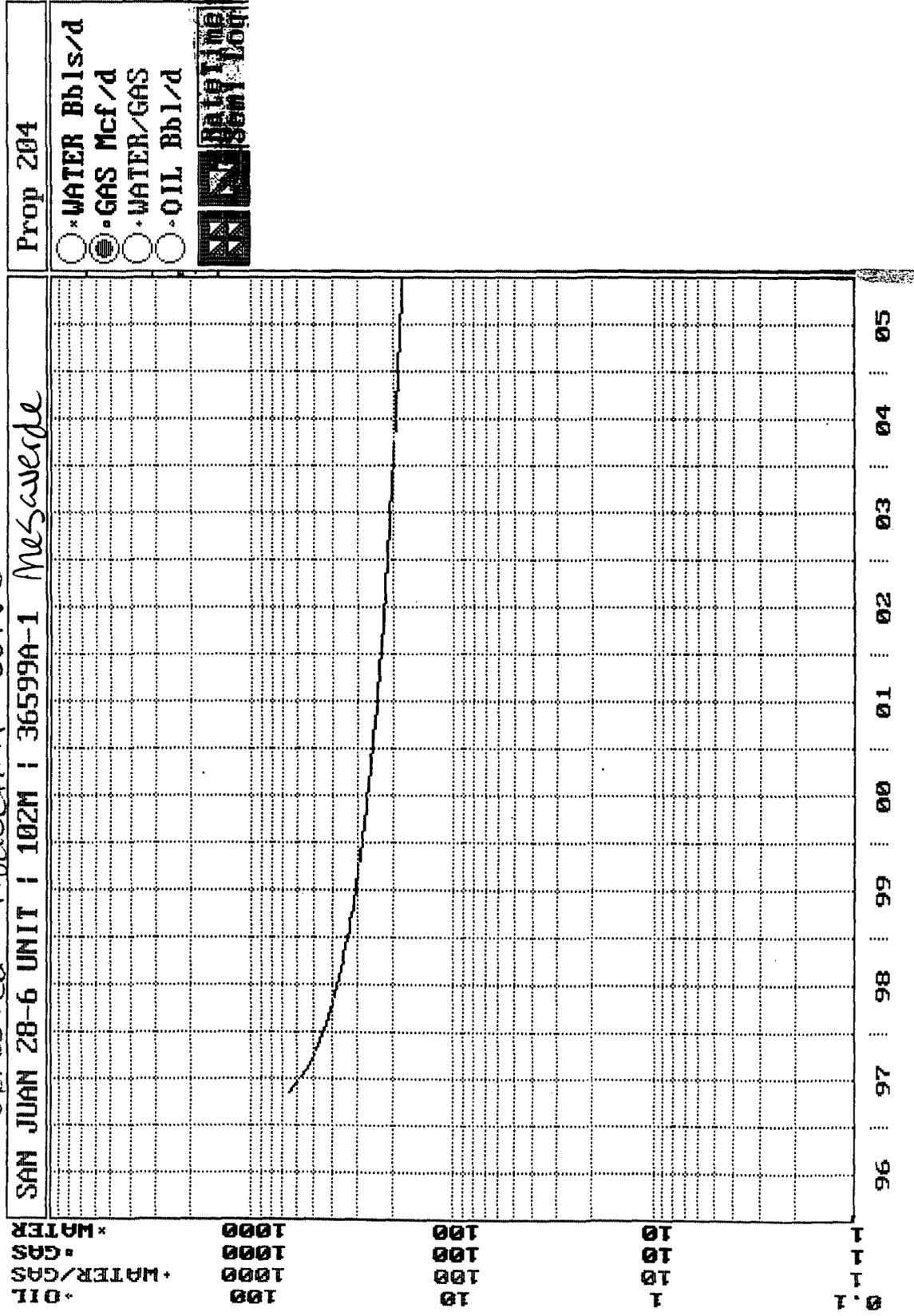
18 SURVEYOR CERTIFICATION

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.

10/16/96
 Date of Survey
 Signature of Surveyor

HERBERT C. EDWARDS
 6857
 6857
 Certificate Number

Expected Production Curve



SJ 28-6 Unit #102M

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>																																																
<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%;">GAS GRAVITY</td><td style="text-align: right; border-bottom: 1px solid black;">0.711</td></tr> <tr><td>COND. OR MISC. (C/M)</td><td style="text-align: right; border-bottom: 1px solid black;">C</td></tr> <tr><td>%N2</td><td style="text-align: right; border-bottom: 1px solid black;">0.4</td></tr> <tr><td>%CO2</td><td style="text-align: right; border-bottom: 1px solid black;">1</td></tr> <tr><td>%H2S</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>DIAMETER (IN)</td><td style="text-align: right; border-bottom: 1px solid black;">2.375</td></tr> <tr><td>DEPTH (FT)</td><td style="text-align: right; border-bottom: 1px solid black;">5770</td></tr> <tr><td>SURFACE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">60</td></tr> <tr><td>BOTTOMHOLE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">137</td></tr> <tr><td>FLOWRATE (MCFPD)</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>SURFACE PRESSURE (PSIA)</td><td style="text-align: right; border-bottom: 1px solid black;">620</td></tr> <tr><td>BOTTOMHOLE PRESSURE (PSIA)</td><td style="text-align: right; border: 1px solid black;">723.9</td></tr> </table>	GAS GRAVITY	0.711	COND. OR MISC. (C/M)	C	%N2	0.4	%CO2	1	%H2S	0	DIAMETER (IN)	2.375	DEPTH (FT)	5770	SURFACE TEMPERATURE (DEG F)	60	BOTTOMHOLE TEMPERATURE (DEG F)	137	FLOWRATE (MCFPD)	0	SURFACE PRESSURE (PSIA)	620	BOTTOMHOLE PRESSURE (PSIA)	723.9	<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%;">GAS GRAVITY</td><td style="text-align: right; border-bottom: 1px solid black;">0.657</td></tr> <tr><td>COND. OR MISC. (C/M)</td><td style="text-align: right; border-bottom: 1px solid black;">C</td></tr> <tr><td>%N2</td><td style="text-align: right; border-bottom: 1px solid black;">0.17</td></tr> <tr><td>%CO2</td><td style="text-align: right; border-bottom: 1px solid black;">1.07</td></tr> <tr><td>%H2S</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>DIAMETER (IN)</td><td style="text-align: right; border-bottom: 1px solid black;">2.375</td></tr> <tr><td>DEPTH (FT)</td><td style="text-align: right; border-bottom: 1px solid black;">7616</td></tr> <tr><td>SURFACE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">60</td></tr> <tr><td>BOTTOMHOLE TEMPERATURE (DEG F)</td><td style="text-align: right; border-bottom: 1px solid black;">198</td></tr> <tr><td>FLOWRATE (MCFPD)</td><td style="text-align: right; border-bottom: 1px solid black;">0</td></tr> <tr><td>SURFACE PRESSURE (PSIA)</td><td style="text-align: right; border-bottom: 1px solid black;">940</td></tr> <tr><td>BOTTOMHOLE PRESSURE (PSIA)</td><td style="text-align: right; border: 1px solid black;">1127.6</td></tr> </table>	GAS GRAVITY	0.657	COND. OR MISC. (C/M)	C	%N2	0.17	%CO2	1.07	%H2S	0	DIAMETER (IN)	2.375	DEPTH (FT)	7616	SURFACE TEMPERATURE (DEG F)	60	BOTTOMHOLE TEMPERATURE (DEG F)	198	FLOWRATE (MCFPD)	0	SURFACE PRESSURE (PSIA)	940	BOTTOMHOLE PRESSURE (PSIA)	1127.6
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Page No.: 8

Print Time: Mon Dec 22 13:22:40 1997

Property ID: 1832

Property Name: SAN JUAN 28-6 UNIT | 113 | 50754A-1

Table Name: K:\ARIES\RR98PDP\TEST.DBF

SJ 28-6 Unit
#102M

Dk Offset

--DATE-- M SIWHP
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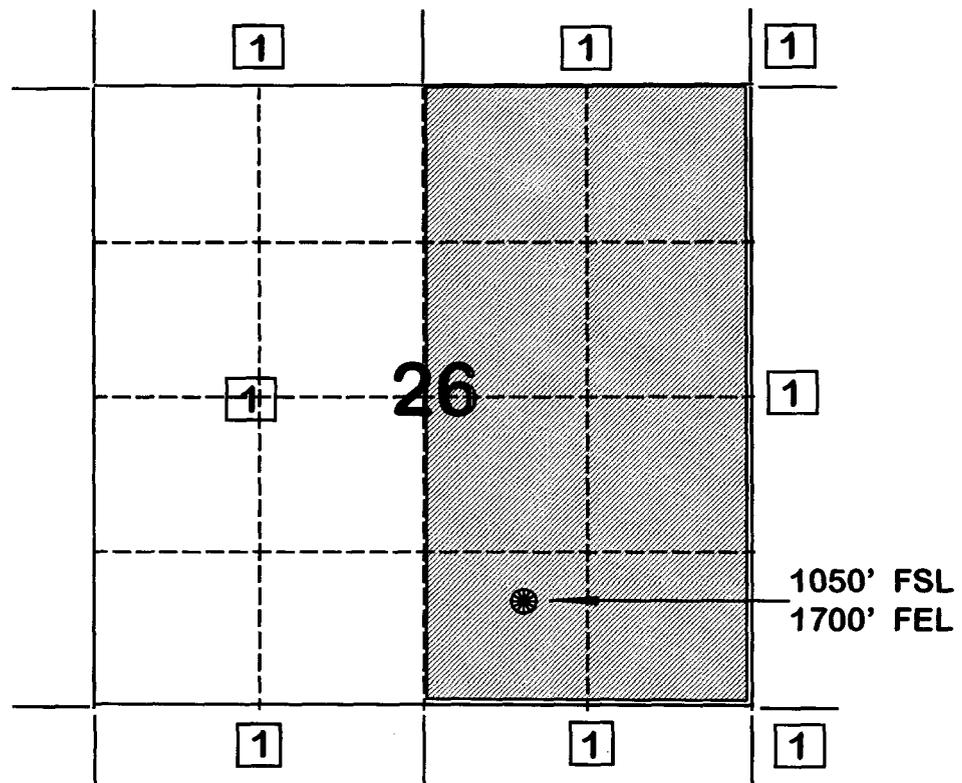
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10/30/63	2666.0	
10/01/64	1351.0	
09/08/65	1182.0	
04/12/66	1035.0	
03/22/67	1250.0	
04/01/68	1092.0	
08/19/69	867.0	
05/25/70	991.0	
05/04/71	1015.0	
05/22/72	933.0	
08/21/73	911.0	
06/24/75	992.0	
08/08/77	825.0	
04/24/79	890.0	
09/29/81	954.0	
09/22/83	976.0	
11/07/85	1004.0	
01/07/86	920.0	
10/15/88	1052.0	
06/08/90	1002.0	
03/29/92	940.0	-current

BURLINGTON RESOURCES OIL AND GAS COMPANY

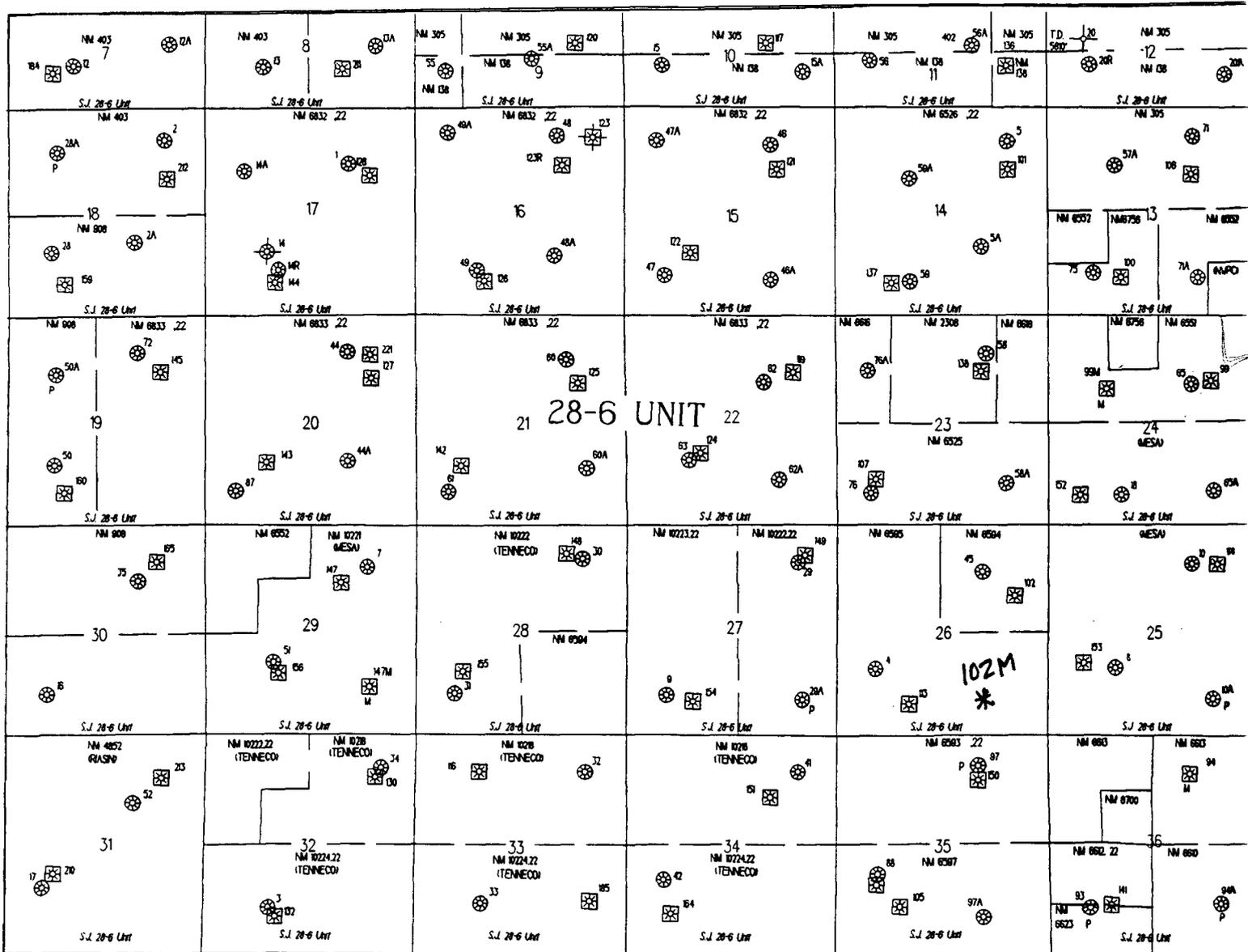
**San Juan 28-6 Unit #102M
OFFSET OPERATOR \ OWNER PLAT**

Mesaverde/Dakota Formations Commingle Well

Township 28 North, Range 6 West



1) Burlington Resources Oil and Gas Company



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.