

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 & Gas Company

PO Box 4289, Farmington, NM 87499

Operator

Address

San Juan 28-5 Unit

77M

F

27-28N-05W

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7460 API NO. 30-039-not assigned 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. 690 psi (see attachment) (Original) b. 1293 psi (see attachment)	RECEIVED JUN 8 1998 OIL CON. DIV. DIST. 3 a. b. 3244 psi (see attachment)	a. 969 psi (see attachment) b. 3244 psi (see attachment)
6. Oil Gravity (API) or Gas BTU Content	BTU 1184		BTU 1039
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 * If Producing, give data and oil/gas/water rates of recent test (within 60 days)	Date: n/a Rates:	Date: Rates:	Date: n/a Rates:
	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 ☐ No11. 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 ☐ No13. 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. NMOC Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). Reference Order R-10695 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: Reservoir Engineer DATE: 06-08-98TYPE OR PRINT NAME Sean Woolverton TELEPHONE NO. (505) 326-9700

District I
PO Box 1990, Hobbs, NM 88241-1990

District II
PO Drawer CO, 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-1
Revised February 21, 1988
Instructions on District Office
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 7460	Property Name SAN JUAN 28-5 UNIT		Well Number 77M
GRID No. 14538	Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		Elevation 6774'

10 Surface Location

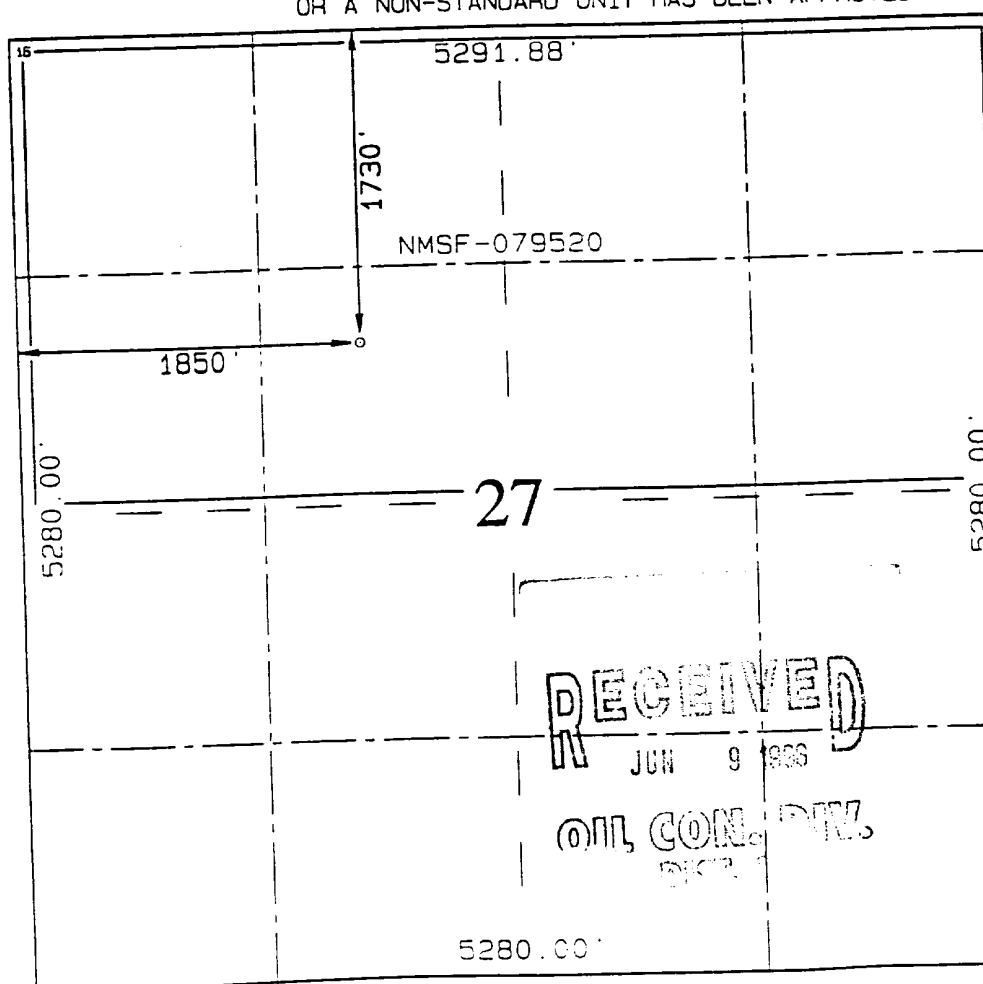
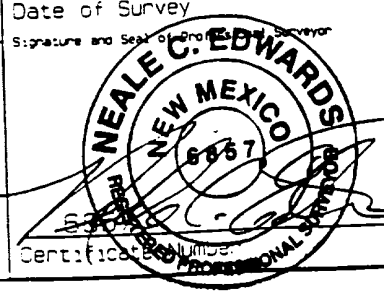
UL or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
F	27	28N	5W		1730	NORTH	1850	WEST	RIO ARRIE

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County

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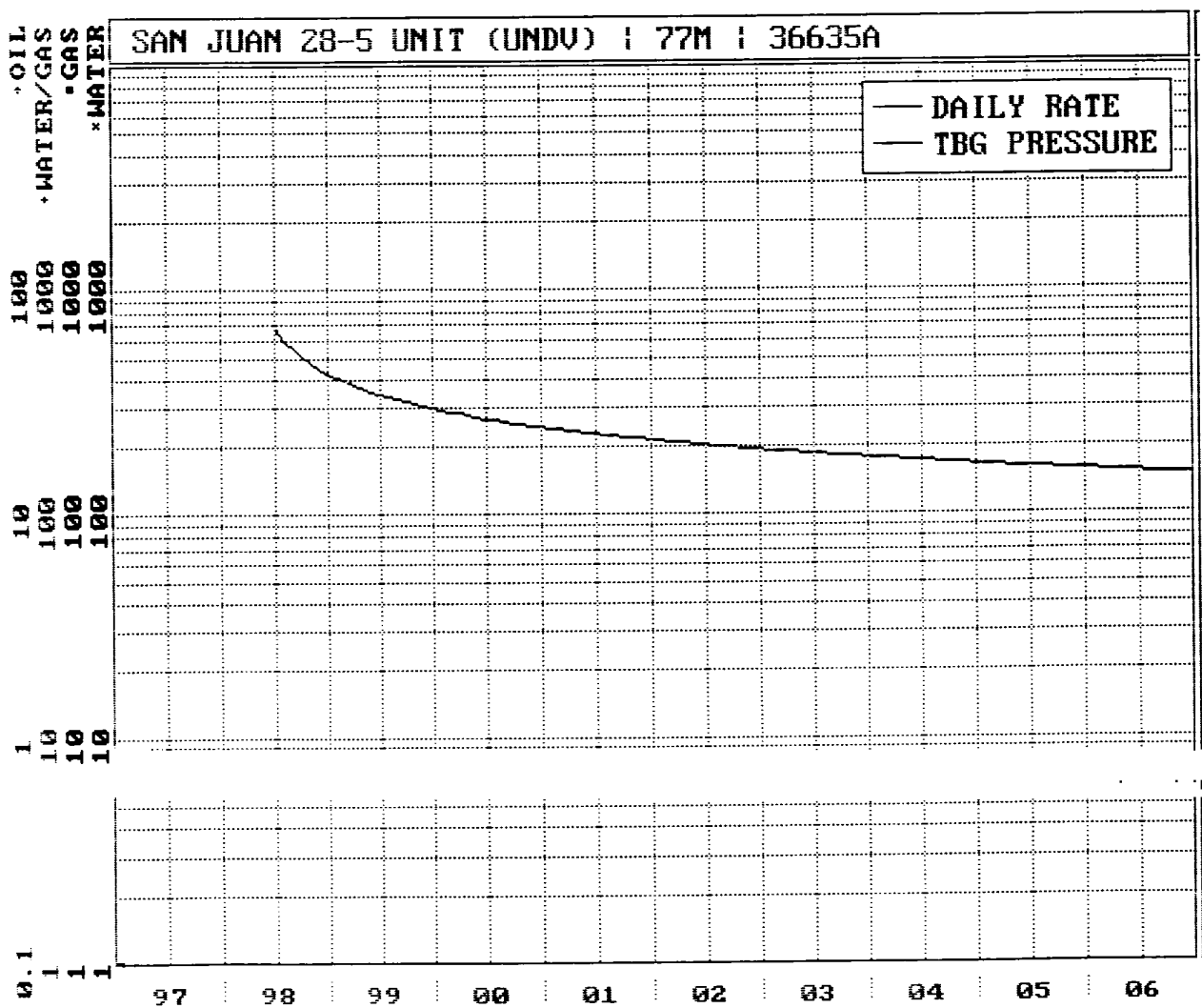
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	17 OPERATOR CERTIFICATION I hereby certify that the information contained here is true and complete to the best of my knowledge and belief. Signature Peggy Bradfield Printed Name Regulatory Administrator Title Date
	18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made or under my supervision, and that the same is true and correct to the best of my belief. FEBRUARY 11, 1998 Date of Survey Signature and Seal of Professional Surveyor 
	RECEIVED JUN 9 1998 OIL CONSERVATION DIVISION 5280.00'

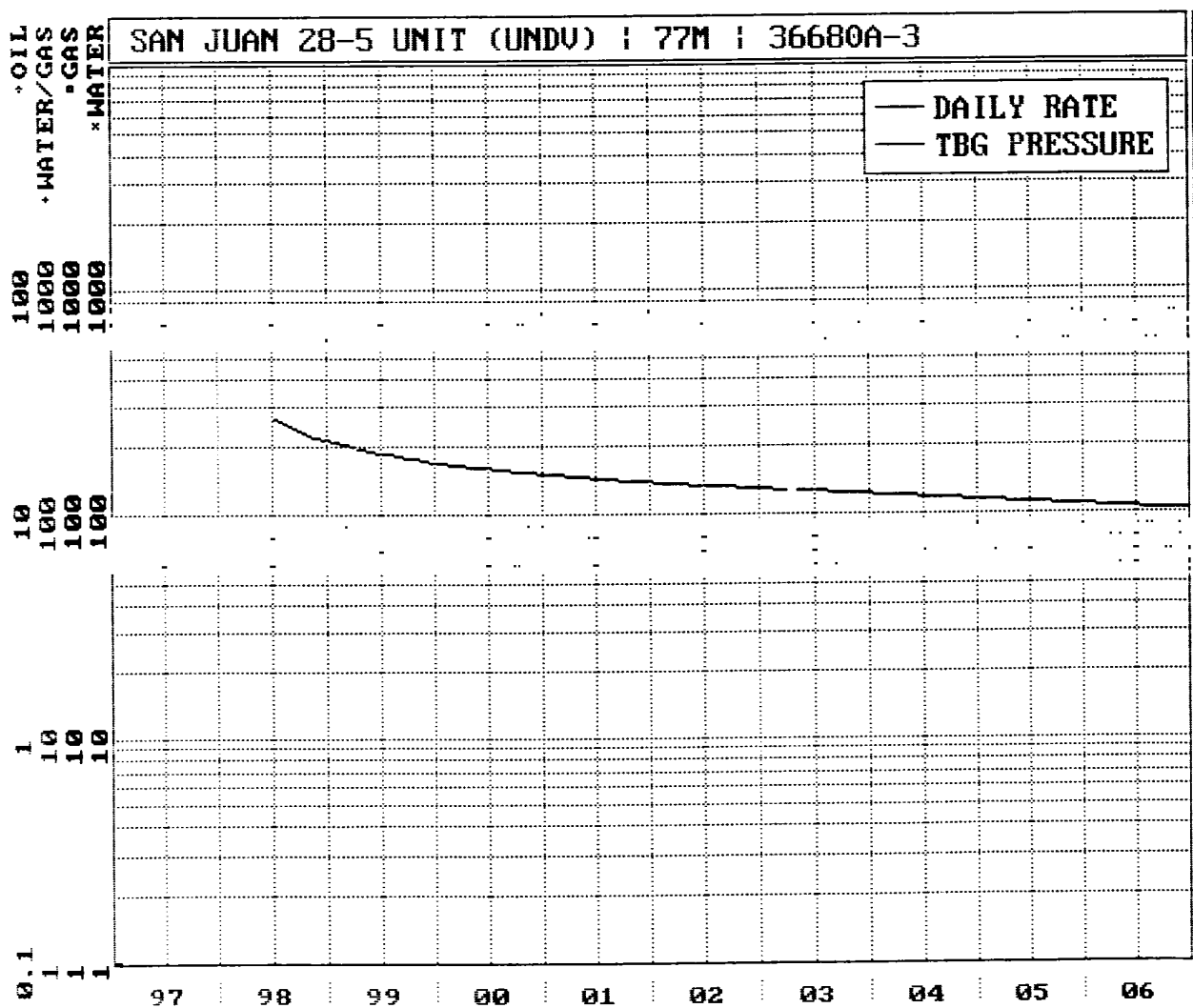
San Juan 28-5 Unit #77M

Expected Production Curve

Blanco Mesaverde



San Juan 28-5 Unit #77M
Expected Production Curve
Basin Dakota



SJ 28-5 Unit #77M

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	0.694	GAS GRAVITY	0.621
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.22	%N2	0.11
%CO2	0.89	%CO2	2.34
%H2S	0	%H2S	0
DIAMETER (IN)	2	DIAMETER (IN)	2.375
DEPTH (FT)	5900	DEPTH (FT)	8066
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)	592	SURFACE PRESSURE (PSIA)	812
BOTTOMHOLE PRESSURE (PSIA)	690.0	BOTTOMHOLE PRESSURE (PSIA)	969.1
<u>MV-Original</u>		<u>DK-Original</u>	
GAS GRAVITY	0.694	GAS GRAVITY	0.621
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.22	%N2	0.11
%CO2	0.89	%CO2	2.34
%H2S	0	%H2S	0
DIAMETER (IN)	2	DIAMETER (IN)	2.375
DEPTH (FT)	5900	DEPTH (FT)	8066
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)	1094	SURFACE PRESSURE (PSIA)	2683
BOTTOMHOLE PRESSURE (PSIA)	1293.3	BOTTOMHOLE PRESSURE (PSIA)	3243.8

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Print Time: Thu Feb 12 14:39:55 1998

Property ID: 3952

Property Name: SAN JUAN 28-5 UNIT	40	52100A-1
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Table Name: K:\ARIES\RR98PDP\TEST.DBF

--DATE-- M SIWHP

..... Psi.....

05/24/60	1094.0	-original
06/16/60	1093.0	
10/14/60	685.0	
06/13/61	732.0	
12/04/62	713.0	
07/16/63	777.0	
01/24/64	716.0	
11/11/65	731.0	
08/01/66	760.0	
08/04/67	664.0	
05/10/68	687.0	
06/19/70	707.0	
04/27/71	672.0	
05/15/72	672.0	
04/19/74	607.0	
06/25/76	677.0	
08/02/78	710.0	
06/04/80	637.0	
05/31/82	581.0	
05/02/84	629.0	
04/17/86	616.0	
09/20/89	606.0	
03/18/91	694.0	
09/10/91	706.0	
07/30/93	592.0	-current

San Juan 28-5 Unit # 77m
mesaverdie offset

Page No.: 1

Print Time: Thu Feb 12 14:38:03 1998

Property ID: 10062

Property Name: SAN JUAN 28-5 UNIT | 82 | 52291A-1

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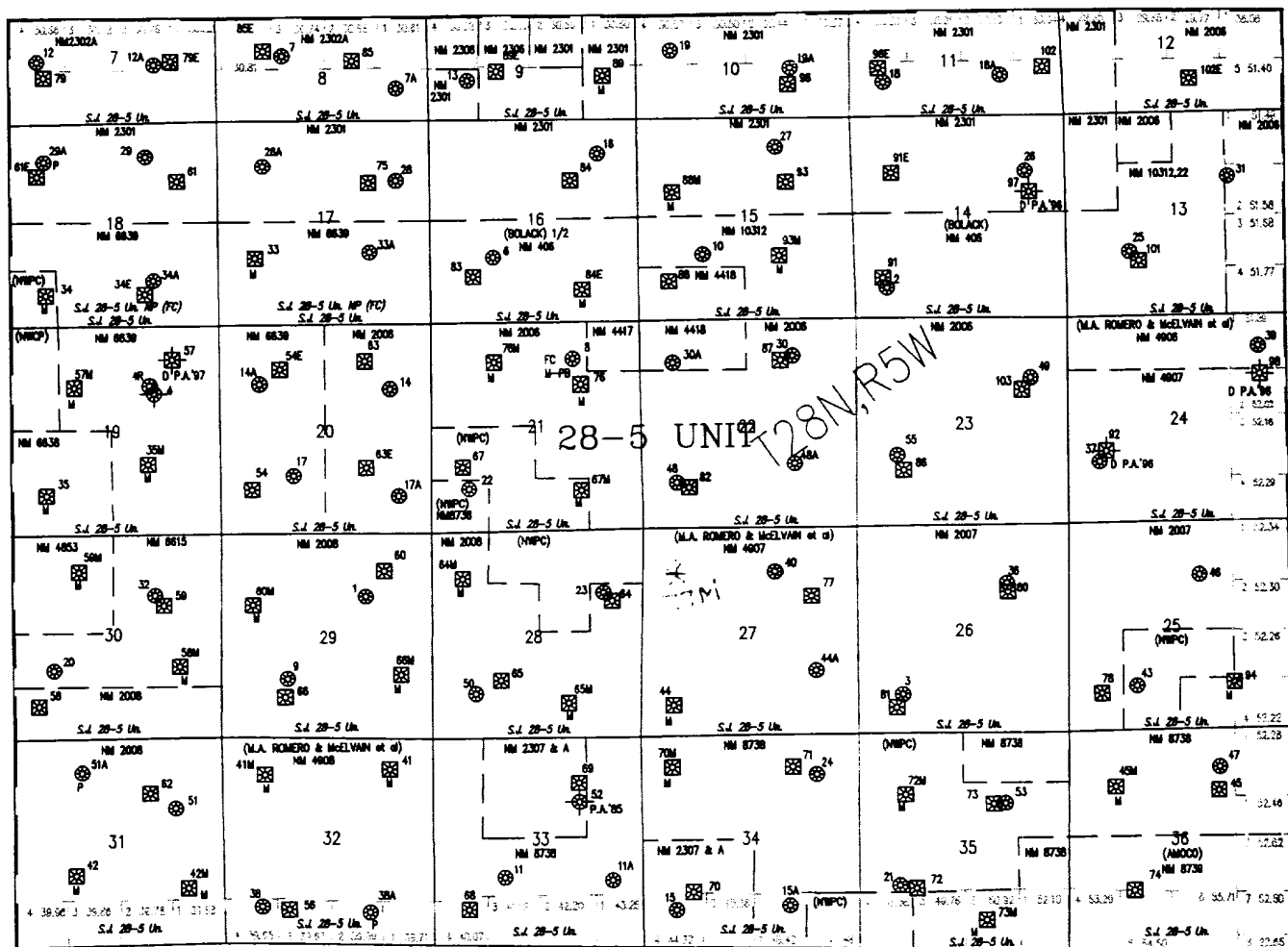
--DATE-- M SIWHP
■■■■■■■■■■ ■■■■Psi■■■■

08/08/69	2683.0	- original
06/19/70	1237.0	
08/17/71	970.0	
05/15/72	1060.0	
07/05/73	1334.0	
08/13/75	1132.0	
06/15/77	1229.0	
07/02/79	1327.0	
06/11/81	535.0	
09/27/83	711.0	
07/11/85	874.0	
10/04/88	812.0	-current

San Juan 28-5 Unit #77M

Dakota Offset

San Juan 28-5 Unit #77M
Blanco Mesaverde / Basin Dakota
28N-05W-27

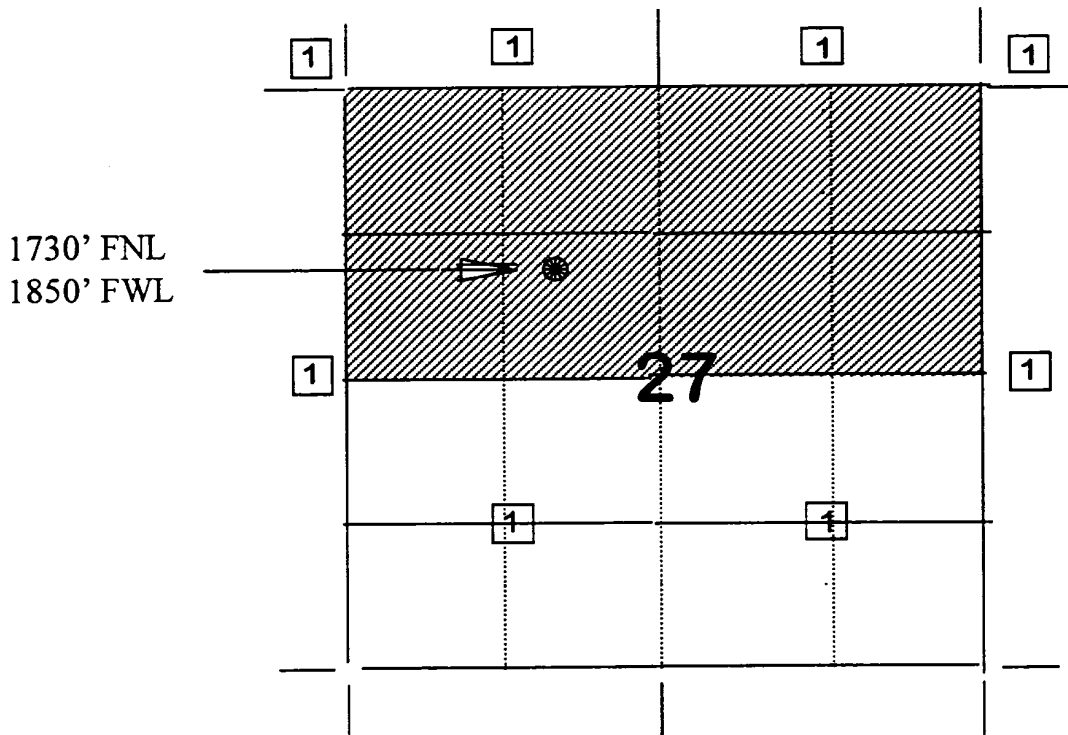


BURLINGTON RESOURCES OIL AND GAS COMPANY

**San Juan 28-5 Unit #77M
OFFSET OPERATOR \ OWNER PLAT**

Mesaverde / Dakota Formations Commingle Well

Township 28 North, Range 5 West



1) Burlington Resources