

DATE IN 2/10/99	SUSPENSE 3/2/99	ENGINEER DC	LOGGED BY RN	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
2040 South Pacheco, Santa Fe, NM 87505



2225

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

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

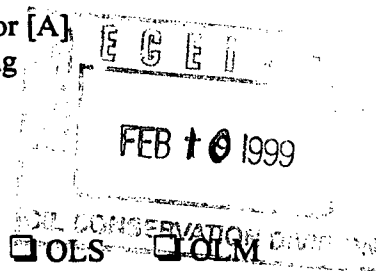
Check One Only for [B] or [C]

[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 - Certification**

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 (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name

Signature

Title

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 87505-6429Form 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 27-4 Unit	45M	19-27N-04W	Rio Arriba
Lease	Well No.	Unit Ltr. - Sec - Twp - Rge	County
Spacing Unit Lease Types: (check 1 or more)			
OGRID NO.	14538	Property Code	7452
API NO.	30-039-not assigned	Federal	x
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	(Current) a. 634 psi (see attachment)	a.	a. 1125 psi (see attachment)
Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Original) b. 1373 psi (see attachment)	b.	b. 2942 psi (see attachment)
6. Oil Gravity (API) or Gas BTU Content	BTU 1218		BTU 1136
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	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 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). ☐ 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 Wayne Fletcher TITLE: Production Engineer DATE: 02-04-99

TYPE OR PRINT NAME: Wayne Fletcher TELEPHONE NO.: (505) 326-9700

District I
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-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

¹ API Number 30-039-	² Pool Code 72319/71599	³ Pool Name Blanco Mesaverde/Basin Dakota
⁴ Property Code 7452	⁵ Property Name SAN JUAN 27-4 UNIT	⁶ Well Number 45M
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	⁹ Elevation 6804'

¹⁰ Surface Location

UL or lot no. 0	Section 19	Township 27N	Range 4W	Lot Idn	Feet from the 1150	North/South line SOUTH	Feet from the 1670	East/West line EAST	County RIO ARriba
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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.							

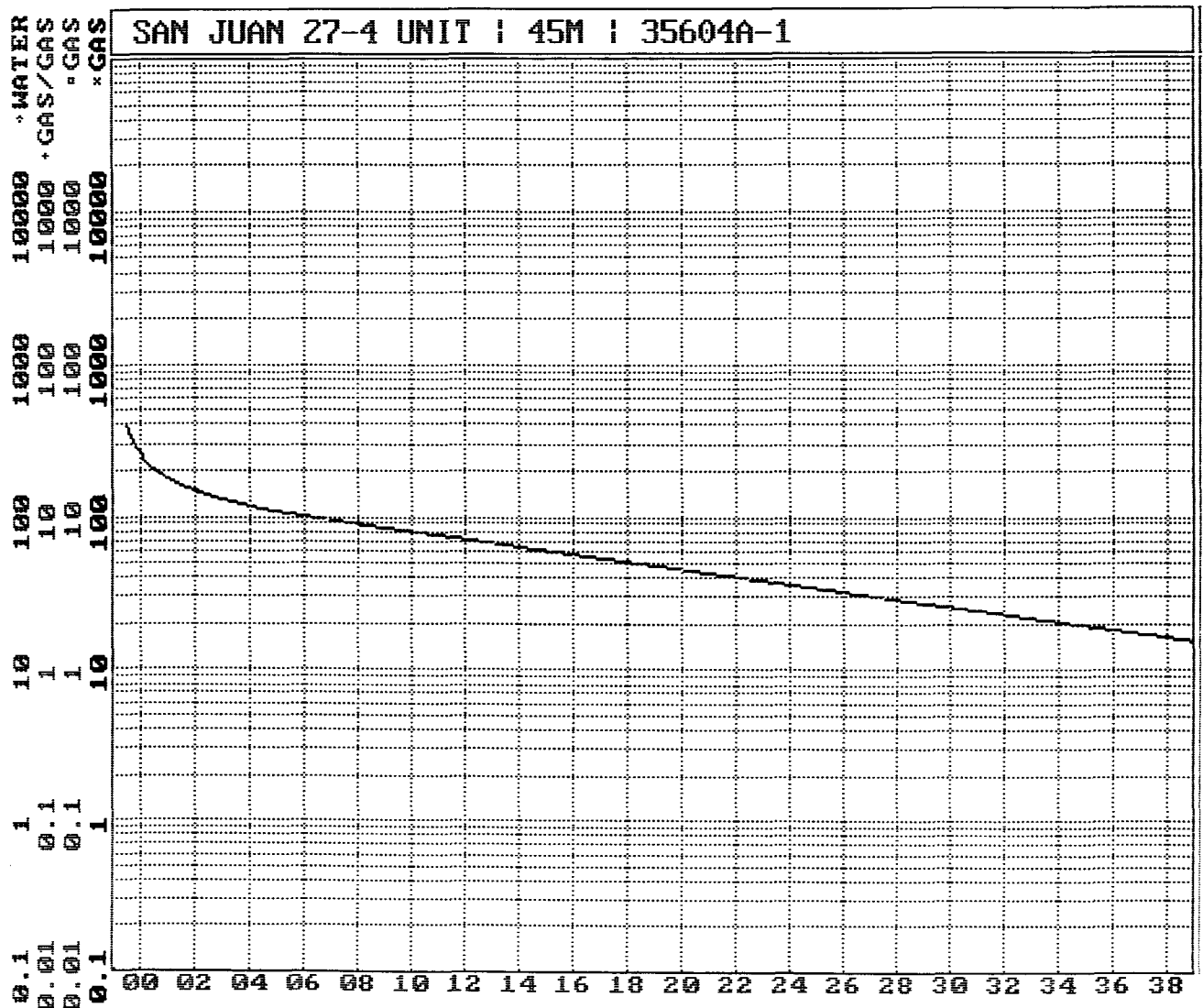
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

¹⁶	5291.22'	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief
1		Signature Peggy Bradfield Printed Name Regulatory Administrator Title
2	NMSF-080669	Date
3	19	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.
4	5293.20'	AUGUST 5, 1998 Date of Survey Signature and Seal of Professional Surveyor NEALE C. EDWARDS NEW MEXICO 6857 Certification Number

San Juan 27-4 Unit #45M

Expected Production Curve

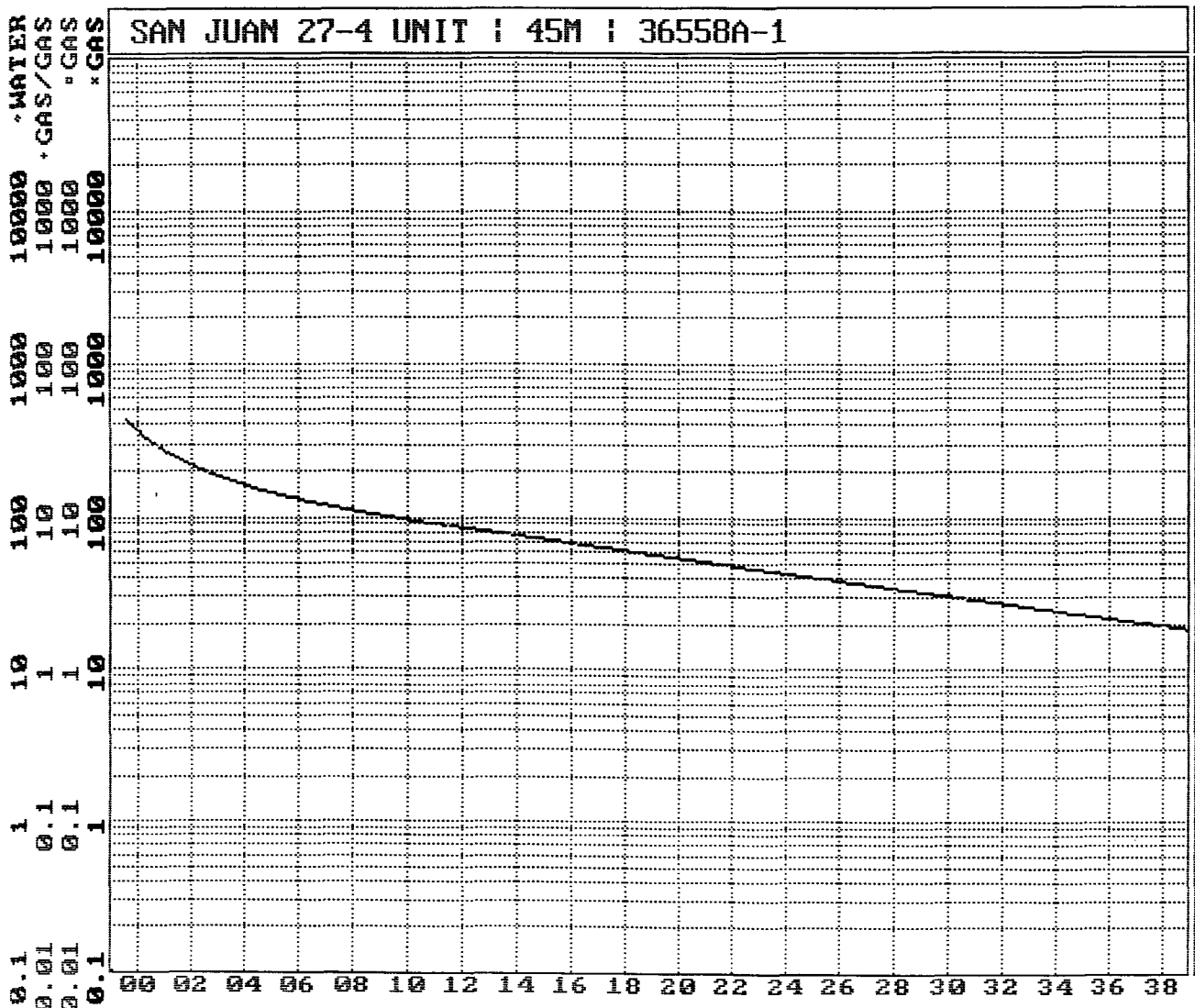
Mesaverde Formation



San Juan 27-4 Unit #45M

Expected Production Curve

Dakota Formation



San Juan 27-4 Unit #45M

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	0.715	GAS GRAVITY	0.666
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.16	%N2	0.21
%CO2	0.83	%CO2	1.14
%H2S	0	%H2S	0
DIAMETER (IN)	2.375	DIAMETER (IN)	1.5
DEPTH (FT)	5891	DEPTH (FT)	7983
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)	542	SURFACE PRESSURE (PSIA)	927
BOTTOMHOLE PRESSURE (PSIA)	634.2	BOTTOMHOLE PRESSURE (PSIA)	1125.2
<u>MV-Original</u>		<u>DK-Original</u>	
GAS GRAVITY	0.715	GAS GRAVITY	0.666
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.16	%N2	0.21
%CO2	0.83	%CO2	1.14
%H2S	0	%H2S	0
DIAMETER (IN)	2.375	DIAMETER (IN)	1.5
DEPTH (FT)	5891	DEPTH (FT)	7983
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)	1151	SURFACE PRESSURE (PSIA)	2386
BOTTOMHOLE PRESSURE (PSIA)	1372.7	BOTTOMHOLE PRESSURE (PSIA)	2941.8

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 ■■■■■■■■ ■■■■■■Mcf■■■■■ ■■■■Psi■■■■

10/17/60	0	1151.0
11/03/60	0	1151.0
09/13/61	48000	766.0
08/06/62	80000	646.0
04/19/63	103000	628.0
05/07/64	127000	592.0
05/10/65	145000	562.0
04/19/66	166000	547.0
08/04/67	199000	531.0
05/02/68	214000	548.0
08/28/70	264082	522.0
04/08/71	273724	544.0
08/09/72	291791	429.0
11/06/83	431466	551.0
12/06/83	431466	551.0
11/04/86	469993	513.0
03/18/91	515089	530.0
04/01/91	515089	542.0

San Juan 27-4 Unit #45M

Mesaverde Offset

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Mcf Psi

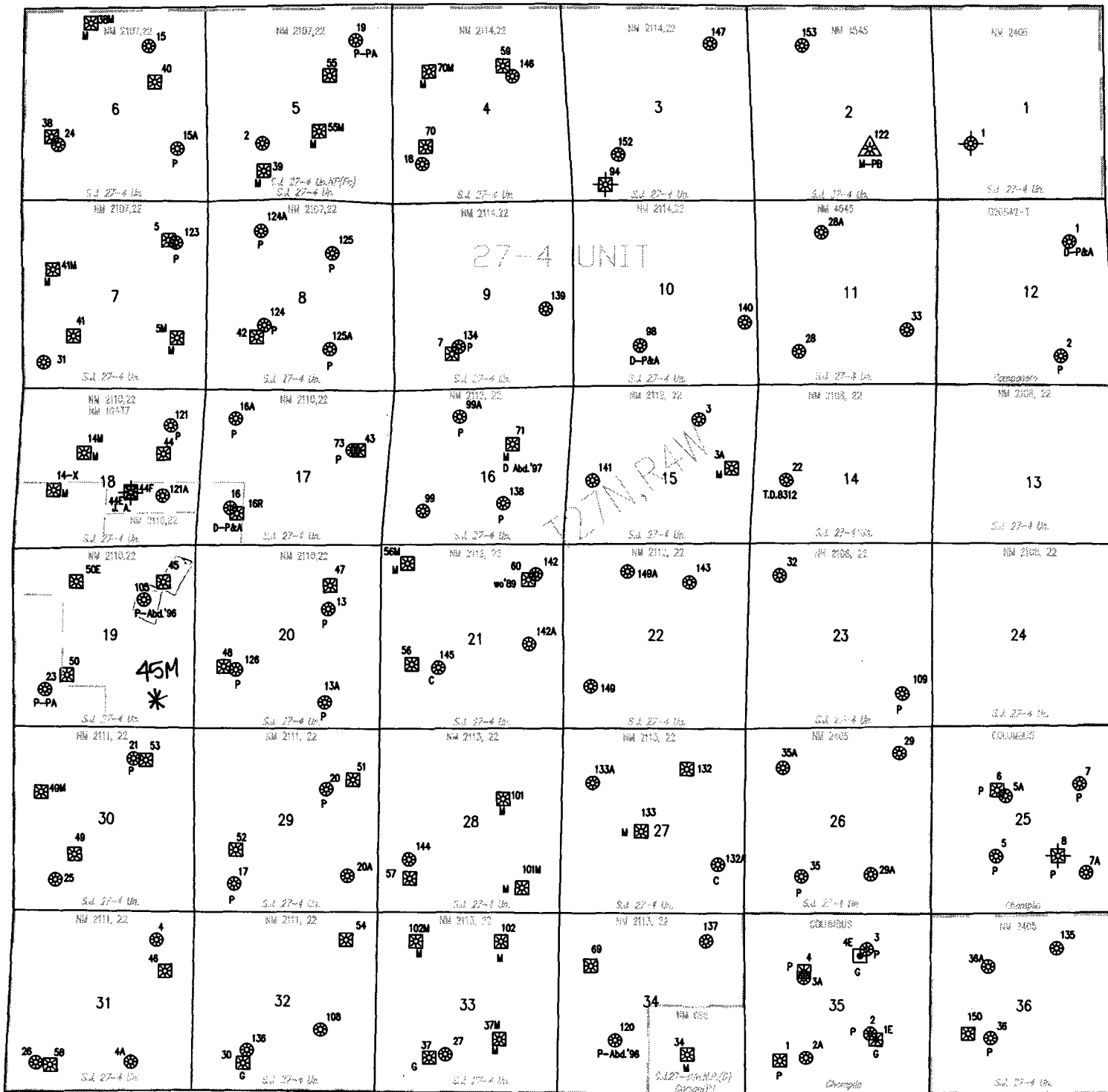
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06/24/75	53969	1865.0
06/25/76	331522	1512.0
07/06/77	549246	1507.0
11/01/79	1009326	1230.0
04/20/81	1270868	972.0
09/19/83	1524535	1106.0
06/05/85	1641947	1195.0
10/11/88	1900869	1104.0
04/22/90	2090929	952.0
05/28/92	2246504	927.0

San Juan 27-4 Unit #45M

Dakota Offset

San Juan 27-4 Unit #45M
Blanco Mesaverde / Basin Dakota

27N - 4W - 19



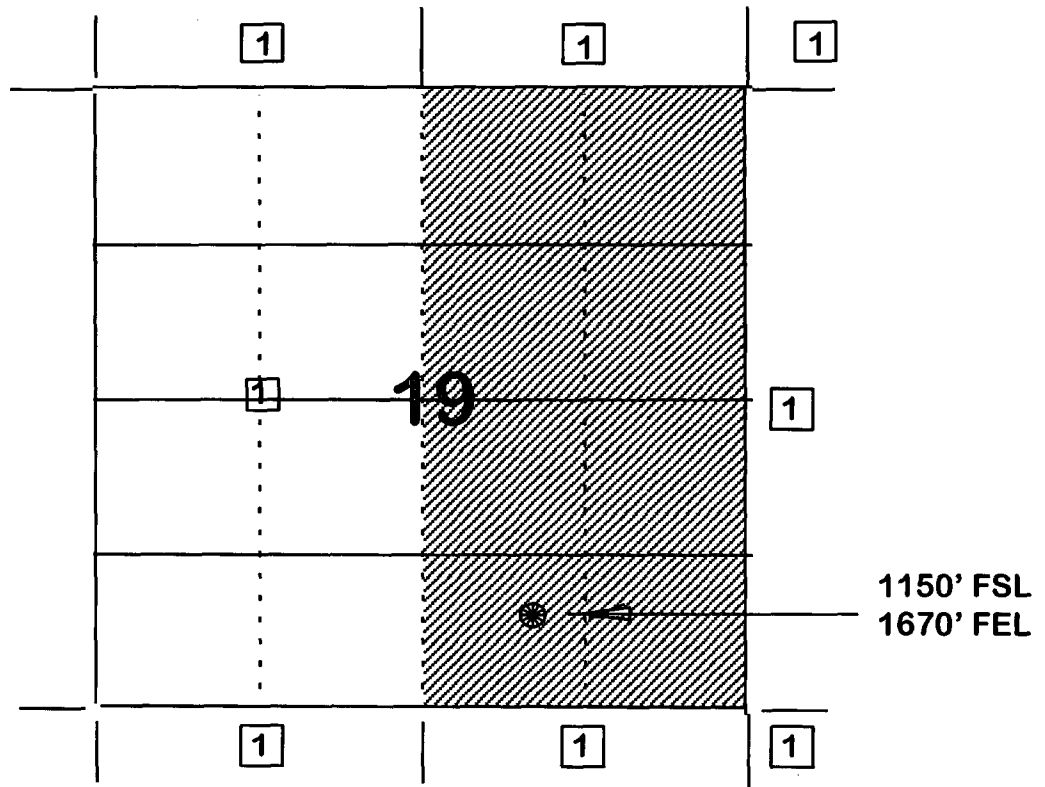
BURLINGTON RESOURCES OIL AND GAS COMPANY

**OFFSET OPERATOR \ OWNER PLAT
San Juan 27-4 Unit #45M**

Mesaverde/Dakota Formations

Commingled well

Township 27 North, Range 4 West



1) Burlington Resources

**BURLINGTON
RESOURCES**

SAN JUAN DIVISION
3535 East 30th Street: (87402-8801)
P.O. BOX 4289
Farmington, New Mexico 87499-4289

**BURLINGTON
RESOURCES**

SAN JUAN DIVISION
3535 East 30th Street: (87402-8801)
P.O. BOX 4289
Farmington, New Mexico 87499-4289

Bedrock Limited Partners
PO Box 36480
Albuquerque, NM 87176

x

Mary Jone Chappell
PO Box 1865
Corrales, NM 87048

**BURLINGTON
RESOURCES**

SAN JUAN DIVISION
3535 East 30th Street: (87402-8801)
P.O. BOX 4289
Farmington, New Mexico 87499-4289

**BURLINGTON
RESOURCES**

SAN JUAN DIVISION
3535 East 30th Street: (87402-8801)
P.O. BOX 4289
Farmington, New Mexico 87499-4289

Cinco General Partnership
PO Box 451
Albuquerque, NM 87103-0451

x

Harco LTD Partnership
PO Box 216
Roswell, NM 88202

**BURLINGTON
RESOURCES**

SAN JUAN DIVISION
3535 East 30th Street: (87402-8801)
P.O. BOX 4289
Farmington, New Mexico 87499-4289

**BURLINGTON
RESOURCES**

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3535 East 30th Street: (87402-8801)
P.O. BOX 4289
Farmington, New Mexico 87499-4289

James V. Harrington
PO Box 13535
Albuquerque, NM 87192

x

Tempe LTD Partnership
c/o F.E. & M.K. Harrington
652 Fearington Post
Pittsboro, NC 27312