DATE IN: 2/10/99	SUSPENSE 3/2/99	ENGINEER DC	LOGGED BY KW	TYPE DHC

ABOVE THIS LINE FOR DIVISION USE ONLY

2223

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

2040 South Pacheco, Santa Fe, NM 87505

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

RECEIVED FEB 10 1999 OIL CONSERVATION DIVISION

[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
	Peggy Bradfield		

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

APPLICATION FOR DOWNHOLE COMMINGLING

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

APPROVAL PROCESS :
_X_ Administrative ___Hearing

EXISTING WELLBORE
__ YES __x_ NO

Burlington Resources Oil & Gas Company — Operator
PO Box 4289, Farmington, NM 87499 — Address

San Juan 27-4 Unit — Lease
47M — Well No.
20-27N-04W — Unit Ltr. - Sec - Twp - Rge
Rio Arriba — 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 Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Current) a. 528 psi (see attachment) (Original) b. 1293 psi (see attachment)	a. b.	a. 1214 psi (see attachment) b. 3331 psi (see attachment)
6. Oil Gravity (API) or Gas BTU Content	BTU 1197		BTU 1180
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	Date: n/a Rates:	Date: Rates:	Date: n/a Rates:
* 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 _x__No
If not, have all working, overriding, and royalty interests been notified by certified mail? _x_Yes ____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). ___ _____ 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
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-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	[2] Pool Code	[3] Pool Name

[4] Property Code	[5] Property Name	[6] Well Number
	SAN JUAN 27-4 UNIT	47M

[7] OGRID No.	[8] Operator Name	[9] Elevation
	BURLINGTON RESOURCES OIL & GAS COMPANY	6817'

[10] Surface Location

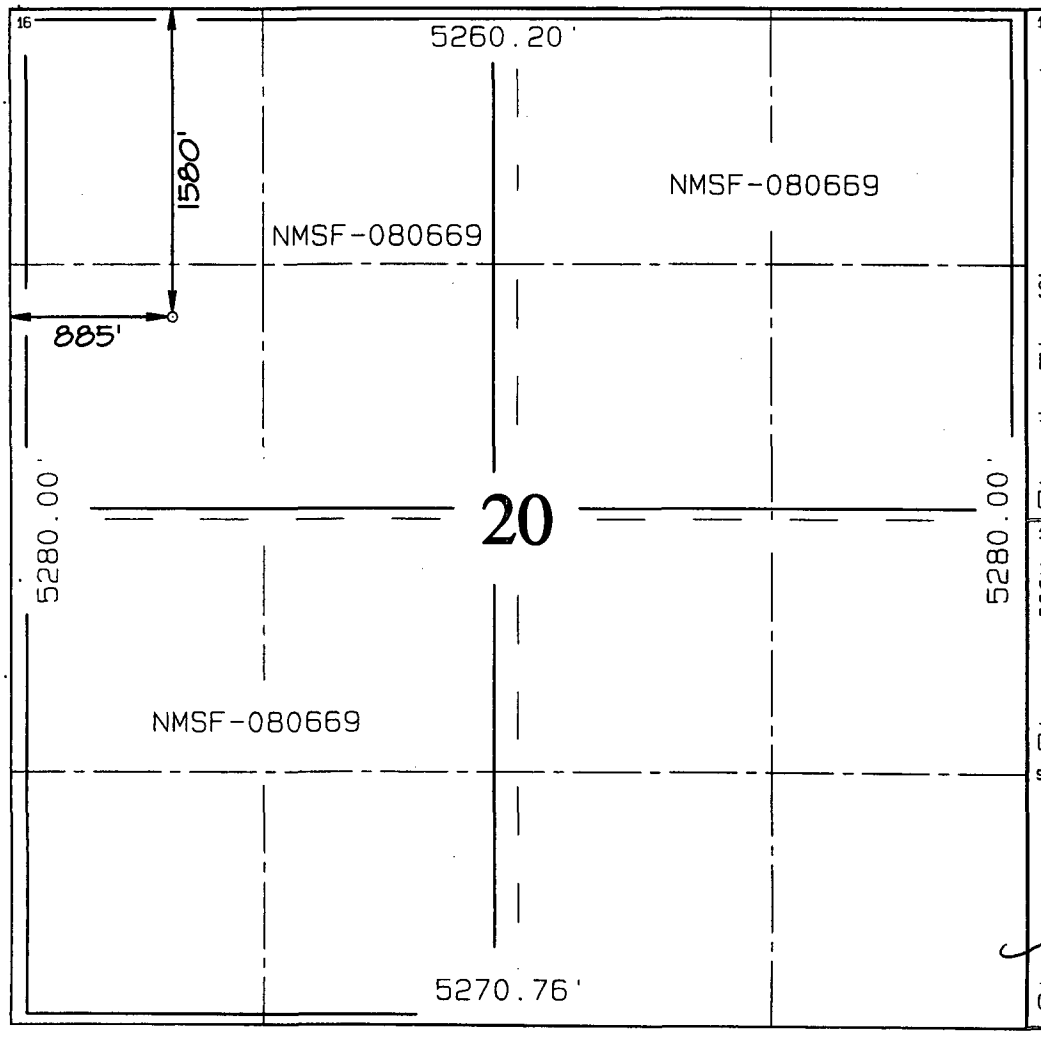
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	20	27N	4W		1580	NORTH	885	WEST	RIO ARRIBA

[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	[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

Signature

Printed Name

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 by me or under my supervision, and that the same is true and correct to the best of my belief.

AUGUST 5, 1998
Date of Survey

Signature and Seal of Professional Surveyor

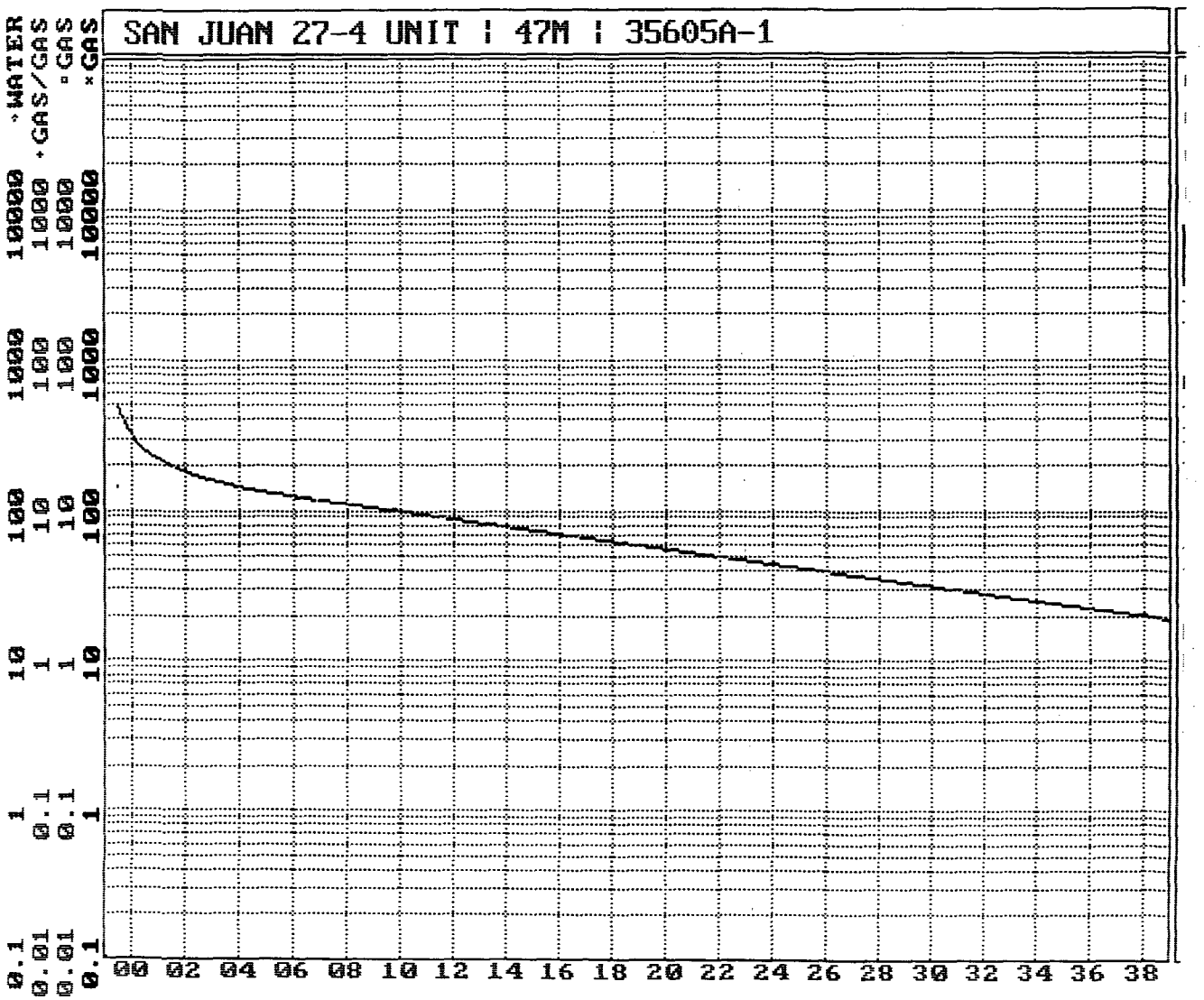
NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

6857
Certificate Number

San Juan 27-5 Unit #47M

Expected Production Curve

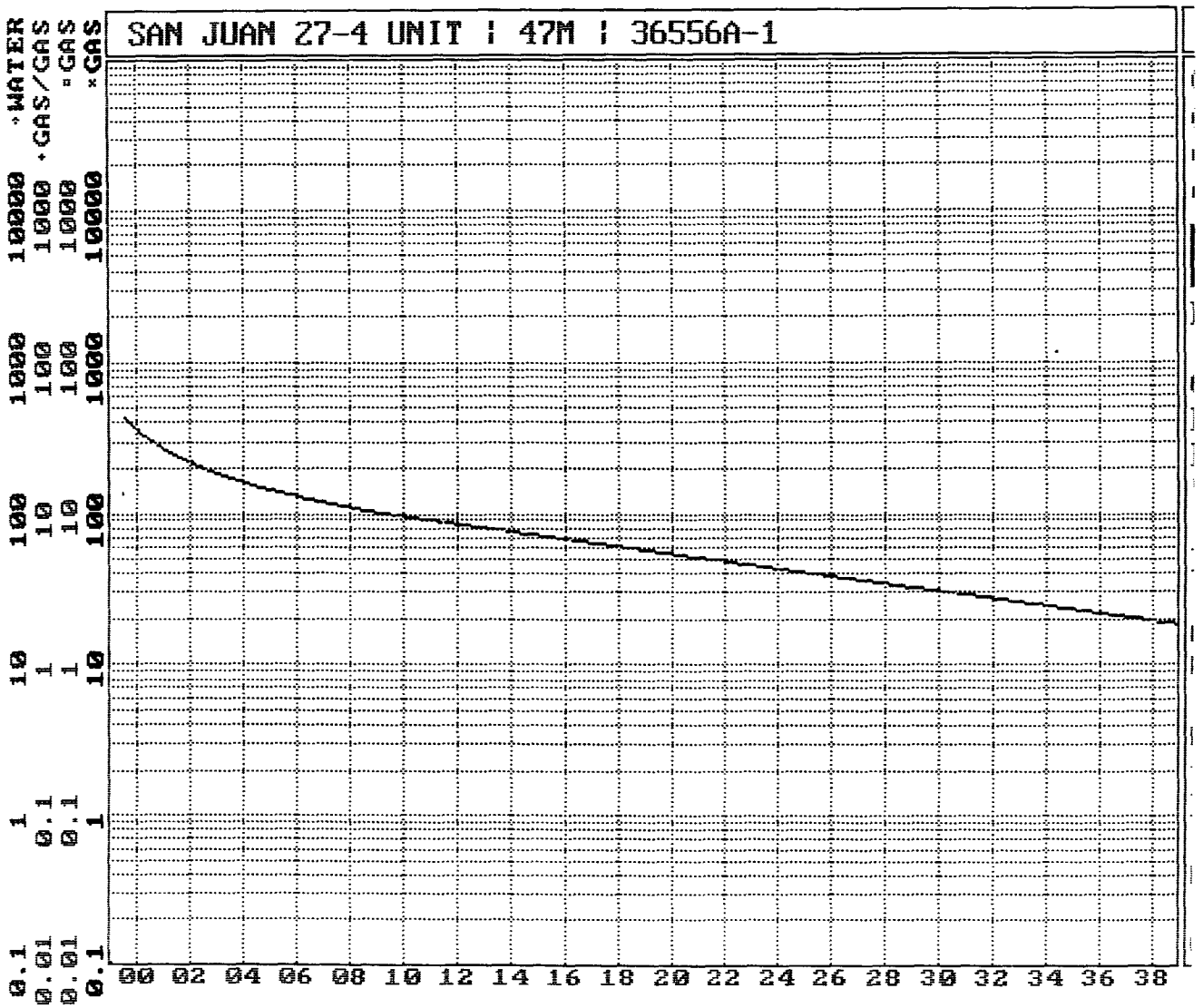
Mesaverde Formation



San Juan 27-5 Unit #47M

Expected Production Curve

Dakota Formation



San Juan 27-4 Unit #47M

Bottom Hole Pressures

Flowing and Static BHP

Cullender and Smith Method

Version 1.0 3/13/94

Mesaverde

MV-Current

GAS GRAVITY	0.703
COND. OR MISC. (C/M)	C
%N2	0.14
%CO2	0.99
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	5994
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	453
BOTTOMHOLE PRESSURE (PSIA)	528.4

MV-Original

GAS GRAVITY	0.703
COND. OR MISC. (C/M)	C
%N2	0.14
%CO2	0.99
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	5994
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1088
BOTTOMHOLE PRESSURE (PSIA)	1293.4

Dakota

DK-Current

GAS GRAVITY	0.693
COND. OR MISC. (C/M)	C
%N2	0.16
%CO2	1.1
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	7869
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	991
BOTTOMHOLE PRESSURE (PSIA)	1213.7

DK-Original

GAS GRAVITY	0.693
COND. OR MISC. (C/M)	C
%N2	0.16
%CO2	1.1
%H2S	0
DIAMETER (IN)	2.375
DEPTH (FT)	7869
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	2687
BOTTOMHOLE PRESSURE (PSIA)	3331.4

Page No.: 1
Print Time: Thu Feb 04 08:39:00 1999
Property ID: 4544
Property Name: SAN JUAN 27-4 UNIT | 105 | 53327B-1
Table Name: Q:\PUBLIC\GENTITY\GDPNOS\TEST.DBF

--DATE--	---CUM GAS-- Mcf	M SIWHP Psi
09/20/76	0	1088.0
10/07/76	0	1102.0
04/04/77	29351	690.0
05/10/78	91453	403.0
05/03/79	126239	317.0
06/23/80	162154	314.0
04/30/82	210351	376.0
06/04/87	298322	438.0
09/08/89	338204	332.0
08/20/91	352885	441.0
09/11/91	352945	453.0

San Juan 27-5 Unit #47M

Mesaverde Offset

Page No.: 1
Print Time: Thu Feb 04 08:39:11 1999
Property ID: 1255
Property Name: SAN JUAN 27-4 UNIT | 45 | 51743A-1
Table Name: Q:\PUBLIC\GENTITY\GDPNOS\TEST.DBF

--DATE--	---CUM_GAS-- Mcf	M_SIWHP Psi
08/14/68	0	2687.0
12/04/68	21000	1545.0
05/29/69	68623	1279.0
08/28/70	145230	1206.0
04/08/71	178152	1296.0
08/09/72	241123	1080.0
06/09/75	352802	952.0
08/01/77	439381	956.0
05/03/79	503091	964.0
02/17/82	578624	1010.0
09/21/83	613268	1125.0
06/05/85	656677	952.0
10/11/88	731814	977.0
04/22/90	771412	923.0
03/29/92	806220	991.0

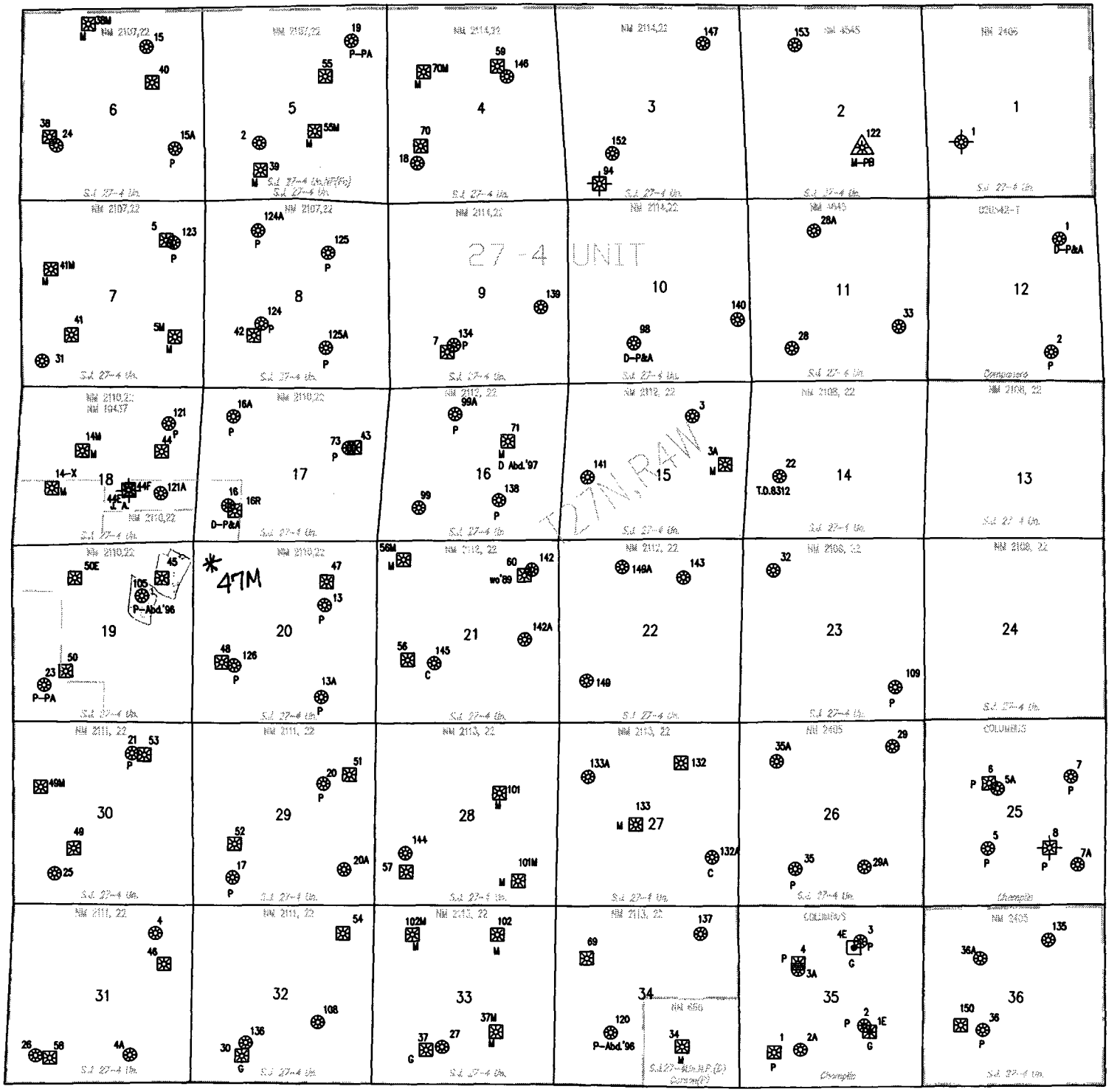
San Juan 27-5 Unit #47M

Dakota Offset

San Juan 27-5 Unit #47M

Blanco Mesaverde / Basin Dakota

27N - 4W - 20



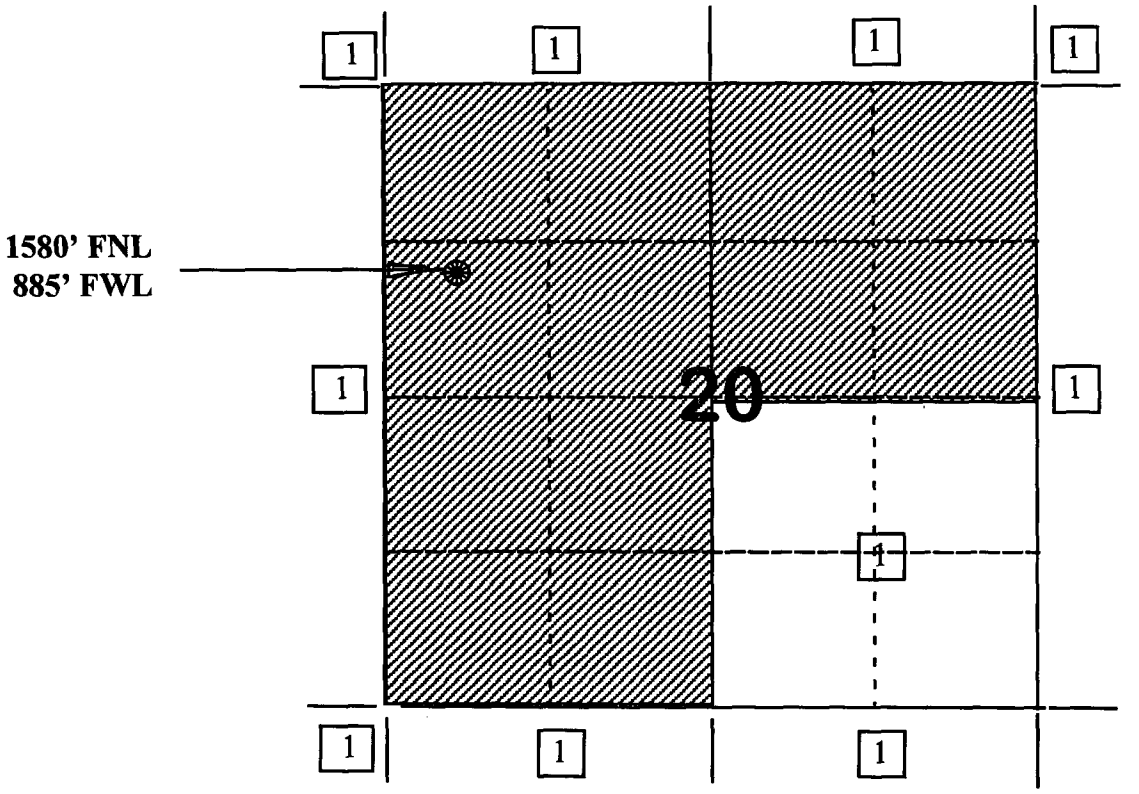
BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 27-4 Unit #47M

OFFSET OPERATOR/OWNER PLAT

Mesaverde (W/2) / Dakota (N/2) Formations Commingle 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

Bedrock Limited Partners
PO Box 36480
Albuquerque, NM 87176

x

BURLINGTON RESOURCES

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

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

SAN JUAN DIVISION
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 Fearrington Post
Pittsboro, NC 27312