

BURLINGTON RESOURCES

SAN JUAN DIVISION

November 13, 1996

Mr. William LeMay
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: San Juan 28-6 Unit #147M
1190'FSL, 1190'FEL Section 29, T-28-N, R-06-W, Rio Arriba County, NM
API #30-039-25590

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Mesa Verde and Basin Dakota pools in the subject well. This is a new drill Mesa Verde/Dakota well spud October 1996.

To comply with the New Mexico Oil Conservation Division rules, Burlington Resources Oil & Gas Company is submitting the following for your approval of this commingling:

1. Form C107A - Application for Downhole Commingling;
2. C-102 plat for each zone showing its spacing unit and acreage dedication;
3. No production curve attached, as this is a new drill;
4. Notification list of offset operators - Burlington is the unit operator;
5. Shut in wellhead pressure and calculated down hole pressure;
6. Nine-section plats for the Mesa Verde and Dakota.

Notification of Mesa Verde and Dakota interest owners is covered under Case #11628 before the New Mexico Oil Conservation Division.

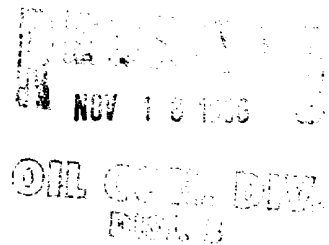
The allocation formula will be based off actual flow rates from the Mesa Verde and Dakota formations.

Please let me know if you require additional data.

Sincerely,



Peggy Bradfield
Regulatory/Compliance Administrator



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 PO BOX 4289 FARMINGTON NM 87499
Operator AddressSAN JUAN 28 6 UNIT
Lease147M
Well No.P-29-28N-6W
Unit Ltr. - Sec - Twp - RgeRIO ARRIBA
County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7462 API NO. 30-039-25590 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. 871 psi (see attachment) (Original) b. 1210 psi (see attachment)	a. b.	a. 1007 psi (see attachment) b. 3280 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1178		BTU 1045
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: % WILL BE SUPPLIED UPON COMPLETION	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) Case #11628

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 Peggy Bradfield TITLE Regulatory Administrator DATE 11-12-96TYPE OR PRINT NAME Peggy Bradfield TELEPHONE NO. (505) 326-9700

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer 00, 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-101
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	Pool Code	Pool Name	Well Number
30-039-	72319/71599	Blanco Mesaverde/Basin Dakota	147M
Property Code	Property Name	Operator Name	Elevation
7462	San Juan 28-6 Unit	MERIDIAN OIL INC.	6512'
OGRID No.			
14538			

10 Surface Location

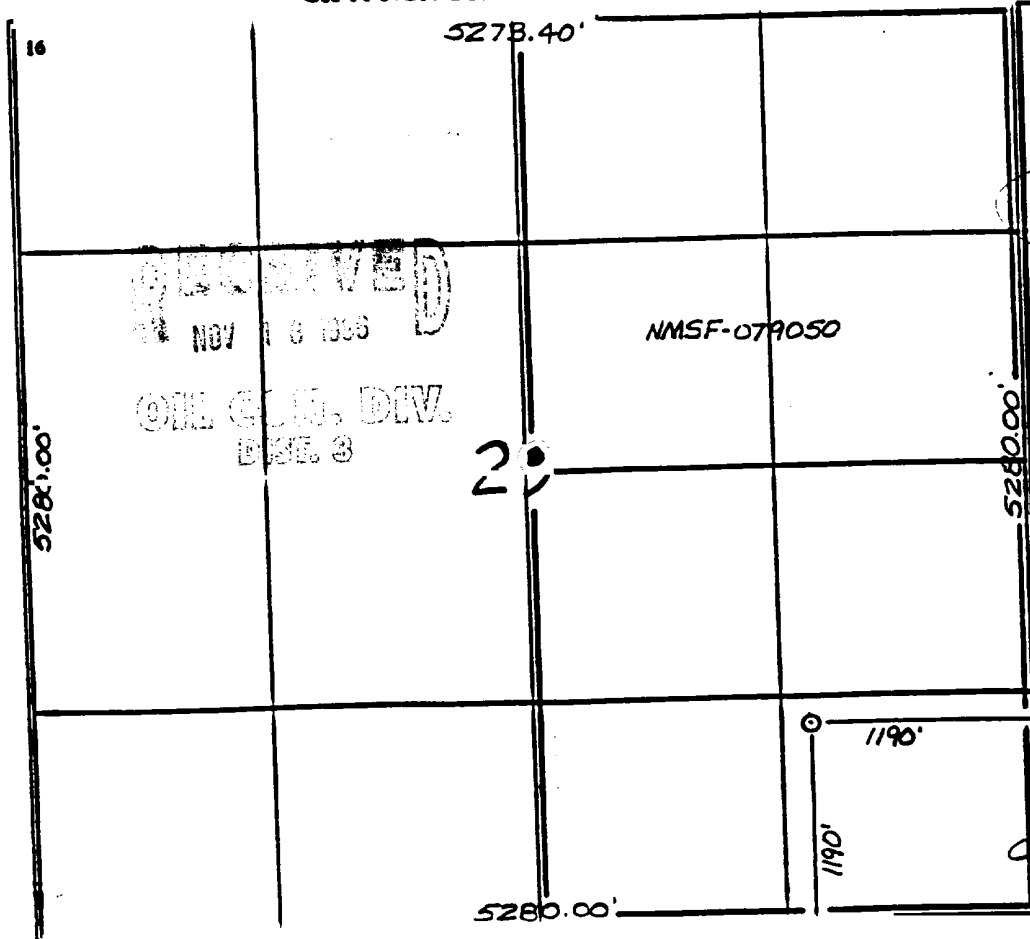
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
P	29	28 N	6 W		1190	South	1190	East	R.A.

11 Bottom Hole Location if Different From Surface

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

12 Dedicated Acres: E/320
13 Joint or Infill: E/320
14 Commencement 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: Peggy Bradfield
Printed Name: Peggy Bradfield
Title: Regulatory Administrator
Date: 9-3-96

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: 7-17-96
Signature: [Signature]

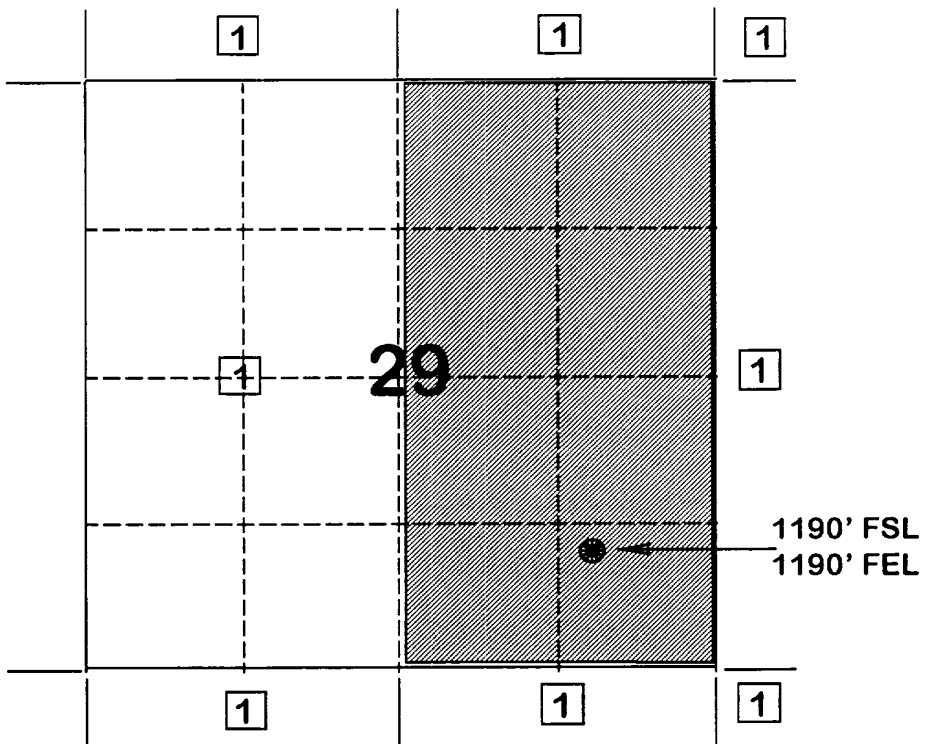
Professional Seal: 8857
Surveyor: 8857

BURLINGTON RESOURCES OIL AND GAS COMPANY

**San Juan 28-6 Unit #147M
OFFSET OPERATOR \ OWNER PLAT**

Mesaverde/Dakota Formations Commingle Well

Township 28 North, Range 6 West



1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.

SAN JUAN 28-6 #147M

CURRENT DAKOTA PRESSURE
(BASED ON CURRENT AVERAGE OF OFFSET WELLS)

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.627
COND. OR MISC. (C/M)	C
%N2	0.11
%CO2	1.13
%H2S	0
DIAMETER (IN)	1.5
DEPTH (FT)	7550
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	851
BOTTOMHOLE PRESSURE (PSIA)	1006.8

OFFSET DAKOTA WELLS - CURRENT PRESSURE

SAN JUAN 28-6 UNIT #147 DAKOTA-CURRENT	752
SAN JUAN 28-6 UNIT #156 DAKOTA-CURRENT	812
SAN JUAN 28-6 UNIT #130 DAKOTA-CURRENT	922
SAN JUAN 28-6 UNIT #116 DAKOTA-CURRENT	1062
SAN JUAN 28-6 UNIT #155 DAKOTA-CURRENT	683
SAN JUAN 28-6 UNIT #142 DAKOTA-CURRENT	902
SAN JUAN 28-6 UNIT #143 DAKOTA-CURRENT	932
SAN JUAN 28-6 UNIT #165 DAKOTA-CURRENT	742
AVERAGE SURFACE PRESSURE	851

NOTE : SEE OFFSET WELL PLAT

Page No. : 6

Print Time: Thu Oct 03 11:41:45 1996

Property ID: 1858

Property Name: SAN JUAN 28-6 UNIT	147	:	:	500	CF: 90	SIP:
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Table Name: K:\ARIES\RR97PDP\TEST.DBF

--DATE-- ---CUM GAS-- M SIWHP

McF Psi

06/25/70 0 2667.0²

12/28/70	56869	1342.0
----------	-------	--------

08/16/71 100789 1010.0

05/22/72	146195	963.0
----------	--------	-------

08/21/73	209594	782.0
----------	--------	-------

05/05/75	294672	719.0
----------	--------	-------

07/05/77	379500	688.0
----------	--------	-------

06/28/79 443496 620.0

07/13/81 507161 715.0

10/12/83 568014 799.0

06/27/85 610617 735.0

10/05/88 682526 807.0

05/08/90 723435 752.0 ← 100

DA < DTA

4014

W. 11

Page No.: 1

Print Time: Mon Oct 28 09:00:06 1996

Property ID: 1834

Property Name: SAN JUAN 28-6 UNIT | 116 | 51503A-1

Table Name: K:\ARIES\RR97PDP\TEST.DBF

--DATE-- ---CUM GAS-- M SIWHP
Mcf Psi

04/13/63	0	2344.0
06/03/63	0	2319.0
10/10/65	131000	1888.0
04/12/66	221000	1712.0
03/22/67	438000	1349.0
04/01/68	635000	1199.0
08/18/69	886880	1065.0
05/25/70	1004577	983.0
05/04/71	1150546	947.0
05/22/72	1280057	877.0
08/21/73	1395984	954.0
06/24/75	1562550	737.0
08/08/77	1721157	823.0
04/24/79	1812014	902.0
09/29/81	1932574	850.0
09/22/83	2008556	1005.0
06/07/85	2066901	1026.0
06/29/90	2196606	982.0
05/28/92	2231803	1062.0

Sakota

off

← Cum Gas

Page No.: 1

Print Time: Mon Oct 28 09:00:32 1996

Property ID: 1845

Property Name: SAN JUAN 28-6 UNIT | 130 | 44095A-1

Table Name: K:\ARIES\RR97PDP\TEST.DBF

--DATE--	---CUM GAS--	M SIWHP
-----	-----Mcf-----	-----Psi-----

12/11/72	0	2576.0
08/13/73	32130	1511.0
07/31/74	91848	932.0
06/24/75	124594	808.0
07/12/76	165344	699.0
08/08/77	198333	700.0
10/01/79	249061	720.0
11/07/85	356493	827.0
05/28/92	455548	922.0

Latvia

← 00000004

Page No.: 1

Print Time: Mon Oct 28 09:00:47 1996

Property ID: 1853

Property Name: SAN JUAN 28-6 UNIT | 142 | 52219A-1

Table Name: K:\ARIES\RR97PDP\TEST.DBF

--DATE-- ---CUM GAS-- M SIWHP
■■■■■■■■■■ ■■■■■■Mcf■■■■■ ■■■■Psi■■■■■

10/10/68	0	2724.0
06/23/69	141000	1311.0
07/28/70	268900	1027.0
05/04/71	351458	1019.0
05/22/72	435764	933.0
08/21/73	514734	1094.0
06/24/75	609222	1185.0
08/08/77	729933	1020.0
04/24/79	818442	1017.0
10/14/81	938325	940.0
09/22/83	1000218	1099.0
05/23/85	1055187	1029.0
09/18/88	1156616	1144.0
06/03/90	1231410	992.0
04/29/92	1296987	902.0

Lakota

← current

Page No.: 1

Print Time: Mon Oct 28 09:00:59 1996

Property ID: 1854

Property Name: SAN JUAN 28-6 UNIT | 143 | 51786A-1

Table Name: K:\ARIES\RR97PDP\TEST.DBF

--DATE-- ---CUM GAS-- M SIWHP
Mcf Psi

11/19/68	0	2743.0
04/29/69	87000	1271.0
04/21/70	215730	1084.0
03/23/71	302275	987.0
08/08/72	418249	654.0
09/04/73	493753	574.0
05/05/75	581829	754.0
07/05/77	679034	782.0
10/04/79	764405	892.0
07/13/81	826881	840.0
10/12/83	912573	795.0
06/27/85	955376	859.0
10/04/88	1027677	912.0
05/08/90	1072135	892.0
05/28/92	1122390	932.0

Page No. : 1

Print Time: Mon Oct 28 09:01:15 1996

Property ID: 1866

Property Name:	SAN JUAN 28-6 UNIT	155	52432A-1
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Table Name: K:\ARIES\RR97PDP\TEST.DBF

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--DATE--  ---CUM GAS--  M SIWHP
|||||Mcft|||Psi|||
```

08/02/71	0	2580.0
12/14/71	65825	1460.0
05/22/72	120934	1157.0
01/19/73	186832	929.0
08/21/73	234099	949.0
11/19/73	250085	929.0
06/24/75	347829	702.0
08/08/77	468270	520.0
04/24/79	538967	632.0
09/29/81	625605	720.0
09/22/83	680667	811.0
11/07/85	727042	796.0
06/29/90	827710	592.0
05/28/92	871568	683.0

Table Name: K:\ARIES\RR97PDP\TEST.DBF

```
--DATE--  ---CUM GAS--  M SIWHP
#####  #####Mcf#####Psi
```

05/26/71	0	2718.0
11/02/71	69650	1555.0
08/08/72	145860	944.0
09/04/73	216261	765.0
08/01/75	311593	762.0
00/17/77	370014	705.0
00/17/77	370014	705.0
00/17/77	370014	705.0
10/17/77	402033	705.0
06/28/79	448480	687.0
07/13/81	520078	685.0
10/12/83	586662	803.0
11/01/85	649067	679.0
10/04/88	712408	824.0
05/08/90	756147	812.0

Page No.: 1

Print Time: Mon Oct 28 09:01:40 1996

Property ID: 1874

Property Name: SAN JUAN 28-6 UNIT | 165 | 44094A-1

Table Name: K:\ARIES\RR97PDP\TEST.DBF

--DATE-- ---CUM GAS-- M SIWHP
.....Mcf..... Psi

08/02/72	0	2688.0
10/19/72	30809	1828.0
09/04/73	156985	972.0
04/16/74	207691	933.0
05/05/75	291900	855.0
00/17/77	387671	877.0
00/17/77	387671	877.0
00/17/77	387671	877.0
10/17/77	428480	877.0
06/28/79	512595	807.0
07/13/81	611251	719.0
10/12/83	686234	839.0
06/27/85	791549	822.0
10/04/88	912004	712.0
05/29/90	954354	812.0
05/28/92	1009329	742.0

Dakota

← Current

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.694
COND. OR MISC. (C/M)	C
%N2	0.29
%CO2	1.21
%H2S	0
DIAMETER (IN)	1.5
DEPTH (FT)	7557
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	2667
BOTTOMHOLE PRESSURE (PSIA)	3279.8

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.689
COND. OR MISC. (C/M)	C
%N2	0.2
%CO2	0.83
%H2S	0
DIAMETER (IN)	2
DEPTH (FT)	5426
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	756
BOTTOMHOLE PRESSURE (PSIA)	870.9

SAN JUAN 28-6 #7 MESAVERDE - (CURRENT)

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.689
COND. OR MISC. (C/M)	C
%N2	0.2
%CO2	0.83
%H2S	0
DIAMETER (IN)	2
DEPTH (FT)	5426
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1094
BOTTOMHOLE PRESSURE (PSIA)	1210.0

Page No.: 8

Print Time: Thu Oct 03 11:41:46 1996

Property ID: 10540

Property Name: SAN JUAN 28-6 UNIT | 7 | : : 2621 CF: 95 SIP:

Table Name: K:\ARIES\RR97PDP\TEST.DBF

--DATE-- ---CUM GAS-- M SIWHP

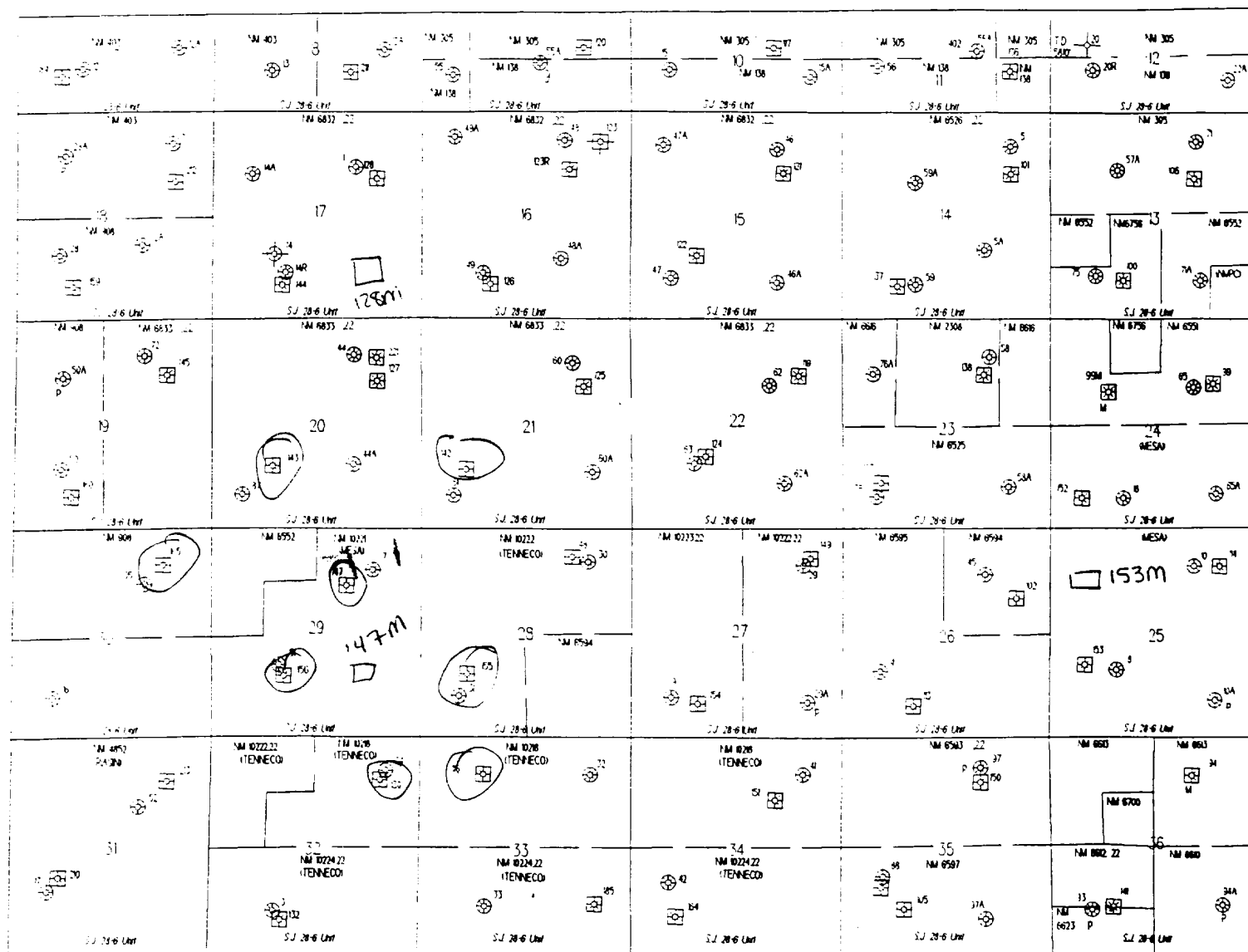
-----Mcf-----Psi-----

05/14/58	27000	1094.0
06/14/59	42000	1109.0
06/14/60	51000	1118.0
06/13/61	66000	916.0
05/29/62	77000	957.0
08/28/62	0	1043.0
12/15/62	88000	972.0
05/09/63	93000	669.0
05/26/64	110000	934.0
03/08/65	131000	728.0
04/12/66	153000	722.0
10/16/67	198000	645.0
04/01/68	205000	809.0
05/25/70	259616	617.0
08/16/71	298823	553.0
05/22/72	324118	512.0
04/16/74	378137	485.0
06/08/76	428548	642.0
07/15/95	708541	756.0

MECAVERDE

Paper
corn

CUR



SAN JUAN 28-6 UNIT