

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First St., Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410
DISTRICT IV
2040 S. Pacheco, Santa Fe, NM 87505

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
Revised March 17, 1999
APPROVAL PROCESS:
☒ Administrative ☐ Hearing
EXISTING WELLBORE
☒ YES ☐ NO

BURLINGTON RESOURCES OIL & GAS COMPANY PO Box 4289, Farmington, NM 87499
Operator Address

San Juan 27-4 Unit 138 O, Sec 16, T27N, R4W 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. 30-039-2237300 Federal ☒ State (and/or) Fee

The following facts are submitted in support of downhole commingling: 1. Pool Name and Pool Code	Upper Zone Tapacito Pictured Cliff - 85920	Intermediate Zone	Lower Zone Blanco Mesa Verde - 72319
2. Top and Bottom of Pay Section (Perforations)	4058' - 4132'		5678' - 6556'
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: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	(Current) a. 504 psia @ 4095' (Original) b. 1217 psia @ 4095'		a. 388 psia @ 6117' b. 1375 psia @ 6117'
6. Oil Gravity (EAPI) or Gas BTU Content	1210 BTU		1171 BTU
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	Yes		Yes
* If Shut-In, give date 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: Rates:	Date: Rates:	Date: Rates:
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 05/31/99 Rates: 10 MCFD 0 BOD, 0 BWD	Date: Rates:	Date: 05/31/99 Rates: 164 MCFD, 0.5 BOD, 0.2 BWD
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Oil: Gas: Will supply for commingling	Oil: % Gas: %	Oil: Gas: Will supply for commingling

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).

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 Timothy J. Friesenhahn TITLE Operations Engineer DATE 07-06-99

TYPE OR PRINT NAME Timothy J. Friesenhahn TELEPHONE NO. (505) 326-9700

All distances must be from the outer boundaries of the Section.

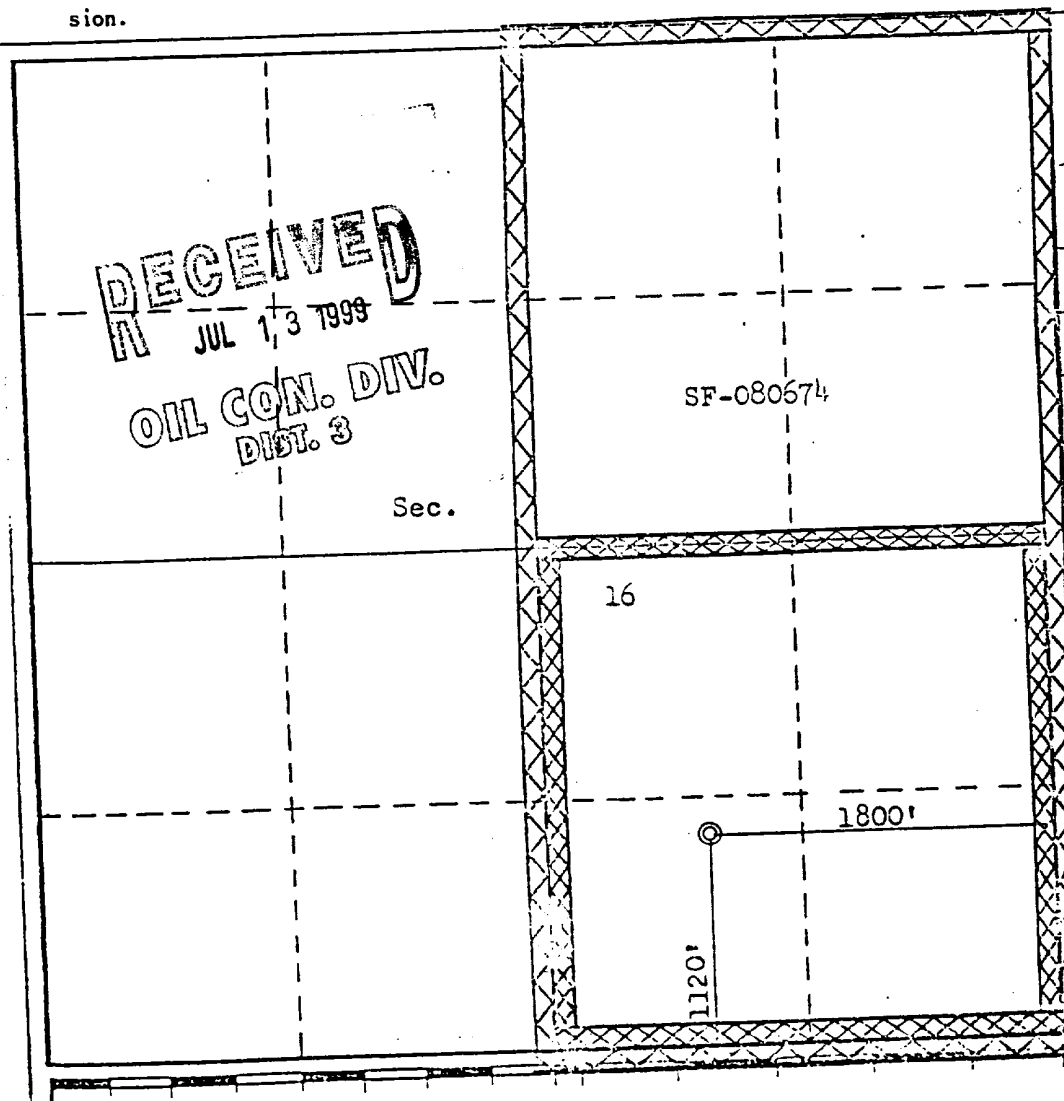
Owner EL PASO NATURAL GAS COMPANY			Lease SAN JUAN 27-L UNIT (SF-080674)		Well No. 138
Unit Letter 0	Section 16	Township 27N	Range LW	County Rio Arriba	
Actual Footage Location of Well:					
1120	feet from the South	line and	1800	feet from the East	line
Ground Level Elev. 7177	Producing Formation PICTURED MESA VERDE - CLIFFS		Footwall APACITO PICTURED CLIFFS EXT. BLANCO MESA VERDE		Dedicated Acreage: 160.00 & 320.00 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Unitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

[Signature]

Name
Drilling Clerk

Position
El Paso Natural Gas C

Company
April 22, 1980

Date

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 knowledge and belief.

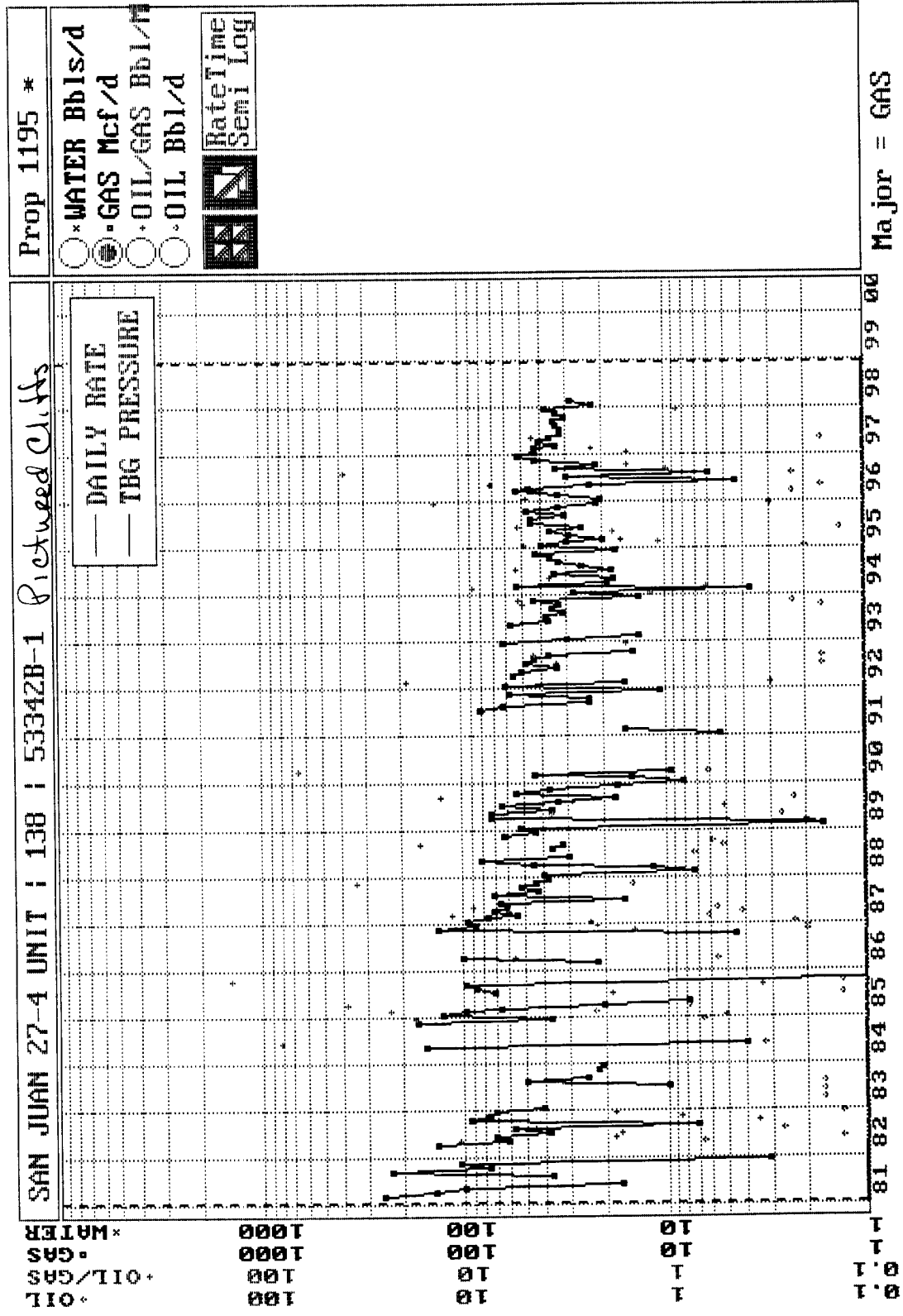
Date Surveyed

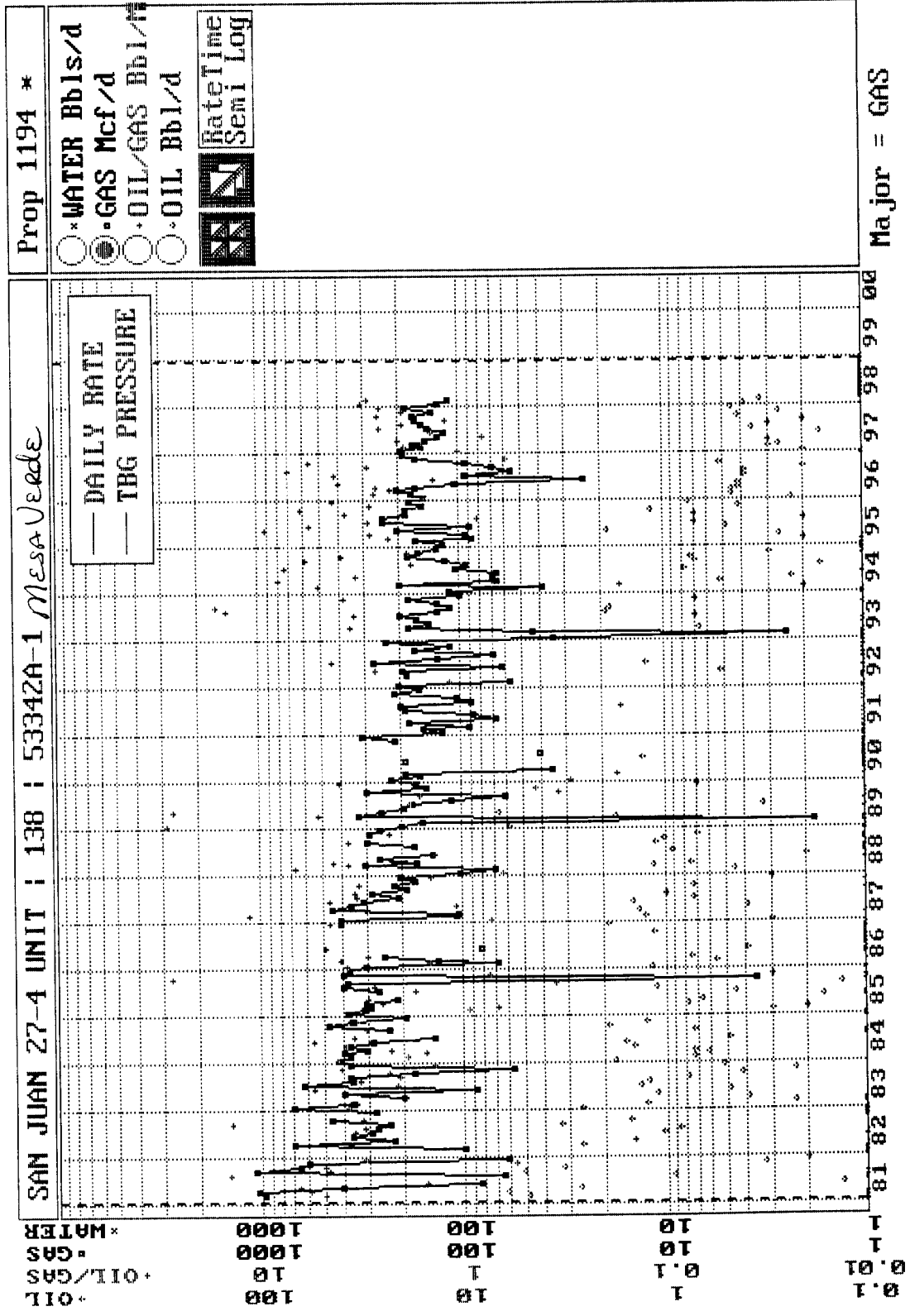
December 19, 1979

Registered Professional Engineer and/or Land Surveyor

[Signature]
Fred H. Marr Jr.

Certificate No. **2050**





Page No.: 2
 Print Time: Fri May 21 09:28:20 1999
 Property ID: 192
 Property Name: SAN JUAN 27-4 UNIT | 138 | 53342B-1 *PC*
 Table Name: S:\JSMITH\ARIES\99WORK\TEST.DBF

--DATE--	---CUM_GAS-- Mcf	M SIWHP Psi
----------	---------------------	----------------

09/24/80	0	1067.0
05/18/81	15042	696.0
11/03/82	45860	571.0
09/13/83	51850	689.0
06/05/84	57972	654.0
11/21/86	89994	551.0
10/04/89	137963	510.0
10/01/91	148488	536.0
11/08/93	173311	597.0

Original

5/31/99

232,659 441

*CURRENT
BASED ON Cum GAS vs Pressure Curve*

Page No.: 1

Print Time: Fri May 21 09:28:19 1999

Property ID: 191

Property Name: SAN JUAN 27-4 UNIT | 138 | 53342A-1 JYV

Table Name: S:\JSMITH\ARIES\99WORK\TEST.DBF

--DATE--	---CUM_GAS--	M SIWHP
	Mcf	Psi

09/24/80	0	1151.0
05/18/81	74188	746.0
11/03/82	232276	514.0
09/13/83	335699	634.0
06/05/84	419839	573.0
04/21/86	587190	514.0
10/04/89	812916	551.0
06/17/91	886572	455.0
09/16/91	901238	467.0
05/31/93	980496	508.0

3/31/99

1,257,533

323

Original

Current

Based on Cum GAS vs Pressure Curve

San Juan 27-4 Unit #138
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Pictured Cliffs		Mesa Verde	
<u>PC-Current</u>		<u>MV-Current</u>	
GAS GRAVITY	0.701	GAS GRAVITY	0.685
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.82	%N2	0.15
%CO2	0.12	%CO2	0.92
%H2S	0	%H2S	0
DIAMETER (IN)	6.456	DIAMETER (IN)	4.052
DEPTH (FT)	4095	DEPTH (FT)	6117
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	128	BOTTOMHOLE TEMPERATURE (DEG F)	161
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	453	SURFACE PRESSURE (PSIA)	335
BOTTOMHOLE PRESSURE (PSIA)	503.7	BOTTOMHOLE PRESSURE (PSIA)	387.7
<u>PC-Original</u>		<u>MV-Original</u>	
GAS GRAVITY	0.701	GAS GRAVITY	0.685
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.82	%N2	0.15
%CO2	0.12	%CO2	0.92
%H2S	0	%H2S	0
DIAMETER (IN)	6.456	DIAMETER (IN)	4.052
DEPTH (FT)	4095	DEPTH (FT)	6117
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	128	BOTTOMHOLE TEMPERATURE (DEG F)	161
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1079	SURFACE PRESSURE (PSIA)	1163
BOTTOMHOLE PRESSURE (PSIA)	1217.2	BOTTOMHOLE PRESSURE (PSIA)	1375.2

Cumulative Monthly Well Report

October 1998 -- June 1999

Select By : Completions
Sort By :

Page No : 1
Report Number : R_290
Last Update :
Print Date : 06/28/1999, 10:42:36

Completion	Date	Cur Oil	Cum Oil	Cur Gas	Cum Gas	Cur Wat	Cum Wat
SAN JUAN 27-4 UNIT 138	11/30/1998	12.75	12.75	4,373.27	4,373.27	5.03	5.03
	12/31/1998	13.91	26.66	3,679.55	8,052.82	4.23	9.26
	01/31/1999	13.91	40.57	3,797.20	11,850.02	4.37	13.63
	02/28/1999	10.43	51.00	2,726.55	14,576.57	3.14	16.76
	03/31/1999	11.59	62.59	4,186.40	18,762.97	4.81	21.58
	04/30/1999	15.35	77.93	4,668.39	23,431.36	5.37	26.95
	05/31/1999	17.12	95.06	5,084.42	28,515.78	5.85	32.79
	06/30/1999	0.00	95.06	0.00	28,515.78	0.00	32.79
	11/30/1998	0.00	0.00	1,248.66	1,248.66	0.00	0.00
	12/31/1998	0.00	0.00	741.91	1,990.57	0.00	0.00
	01/31/1999	0.00	0.00	712.50	2,703.07	0.00	0.00
	02/28/1999	0.00	0.00	976.84	3,679.91	0.00	0.00
	03/31/1999	0.00	0.00	861.52	4,541.43	0.00	0.00
	04/30/1999	0.00	0.00	847.67	5,389.10	0.00	0.00
	05/31/1999	0.00	0.00	311.81	5,700.91	0.00	0.00
	06/30/1999	0.00	0.00	0.00	5,700.91	0.00	0.00

FARMINGTON ANNUAL PRODUCTION FOR 53342B PHS020M1
 SAN JUAN 27-4 UNIT 138
 TAPACITO (PICTURED CLIFFS) FIELD PICTURED CLIFFS ZONE
 ===== OIL CUM ===== ===== GAS CUM ===== ===== WATER CUM =====
 PC DATE BBLs PC DATE MCF DATE BBLs

```
=====
YEAR      OIL      OIL CUM      GAS      GAS CUM      WATER      WATER CUM
1991              416      8605      150588
1992      22      438      12918      163506
1993      12      450      10221      173727
1994      10      460      10113      183840
1995      23      483      12357      196197
1996      24      507      11221      207418
1997      11      518      13223      220641
1998      5       523      8724       229365
```

POSITION CURSOR BY YEAR AND PRESS ENTER TO DISPLAY MONTHLY PRODUCTION
 ENTER - CONTINUES ANNUAL DISPLAY PF3 - TRANSFER TO UPDATE
 PF6 - RETURN TO WELL-INFO DISPLAY PF9 - ANNUAL INJECTION DISPLAY
 PF10 - HELP INFORMATION

FARMINGTON 1998 MONTHLY PRODUCTION FOR 53342B
 SAN JUAN 27-4 UNIT 138
 TAPACITO (PICTURED CLIFFS) FIELD

PHS030M1

PICTURED CLIFFS ZONE

DAYS =====					OIL =====		=====		GAS =====					
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F	31	02			01	692	31	1205	15.025			
2	2	F	28	02			01	879	28	1205	15.025			
3	2	F	31	02			01	898	31	1205	15.025			
4	2	F	30	02			01	928	30	1205	15.025			
5	2	S	4	02			01	49	4	1205	15.025			
6	2	F	2	02			01	152	2	1205	15.025			
7	2	F	31	02	4		01	1430	31	1205	15.025			
8	2	F	31	02			01	785	31	1205	15.025			
9	2	F	30	02	1		01	128	30	1205	15.025			
10	2	F	31	02			01	1536	31	1205	15.025			
11	2	F					01	1247		1205	15.025			
12														

PF6 - RETURNS TO ANNUAL DISPLAY
 PF10 - HELP INFORMATION

PF3 - TRANSFER TO UPDATE
 PF9 - DISPLAY MONTHLY INJECTION
 PRS 01/06/99

00/00/00 00:00:00:0

FARMINGTON ANNUAL PRODUCTION FOR 53342A PHS020M1

SAN JUAN 27-4 UNIT 138

BLANCO MESAVERDE (PRORATED GAS FIELD MESAVERDE ZONE

===== OIL CUM ===== GAS CUM ===== WATER CUM =====

PC DATE BBLs PC DATE MCF DATE BBLs

YEAR	OIL	OIL CUM	GAS	GAS CUM	WATER	WATER CUM
1991	1	2921	50999	915885	61	613
1992	55	2976	52169	968054	60	673
1993	176	3152	43610	1011664	52	725
1994	111	3263	41193	1052857	41	766
1995	205	3468	59558	1112415	69	835
1996	111	3579	45668	1158083	52	887
1997	101	3680	57154	1215237	68	955
1998	114	3794	42477	1257714	50	1005

POSITION CURSOR BY YEAR AND PRESS ENTER TO DISPLAY MONTHLY PRODUCTION

ENTER - CONTINUES ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF6 - RETURN TO WELL-INFO DISPLAY

PF9 - ANNUAL INJECTION DISPLAY

PF10 - HELP INFORMATION

FARMINGTON 1998 MONTHLY PRODUCTION FOR 53342A
 SAN JUAN 27-4 UNIT 138
 BLANCO MESAVERDE (PRORATED GAS FIELD MESAVERDE ZONE

PHS030M1

DAYS =====			OIL =====			=====			GAS =====					
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F	26	02	12	55.8	01	3863	26	1171	15.025		5	
2	2	F	28	02	10		01	3476	28	1171	15.025		4	
3	2	F	31	02	5		01	3604	31	1171	15.025		4	
4	2	F	30	02	13		01	4145	30	1171	15.025		5	
5	2	F	27	02	15		01	4090	27	1179	15.025		5	
6	2	F	30	02	8		01	3110	30	1179	15.025		4	
7	2	F	31	02	19		01	4370	31	1179	15.025		5	
8	2	F	31	02	13		01	3697	31	1179	15.025		4	
9	2	F	30	02	7		01	3329	30	1179	15.025		4	
10	2	F	31	02	12		01	4426	31	1179	15.025		5	
11	2	F					01	4367		1179	15.025		5	
12														

PF6 - RETURNS TO ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION

PF9 - DISPLAY MONTHLY INJECTION

00/00/00 00:00:00:0

PRS 01/06/99

BURLINGTON RESOURCES OIL AND GAS COMPANY

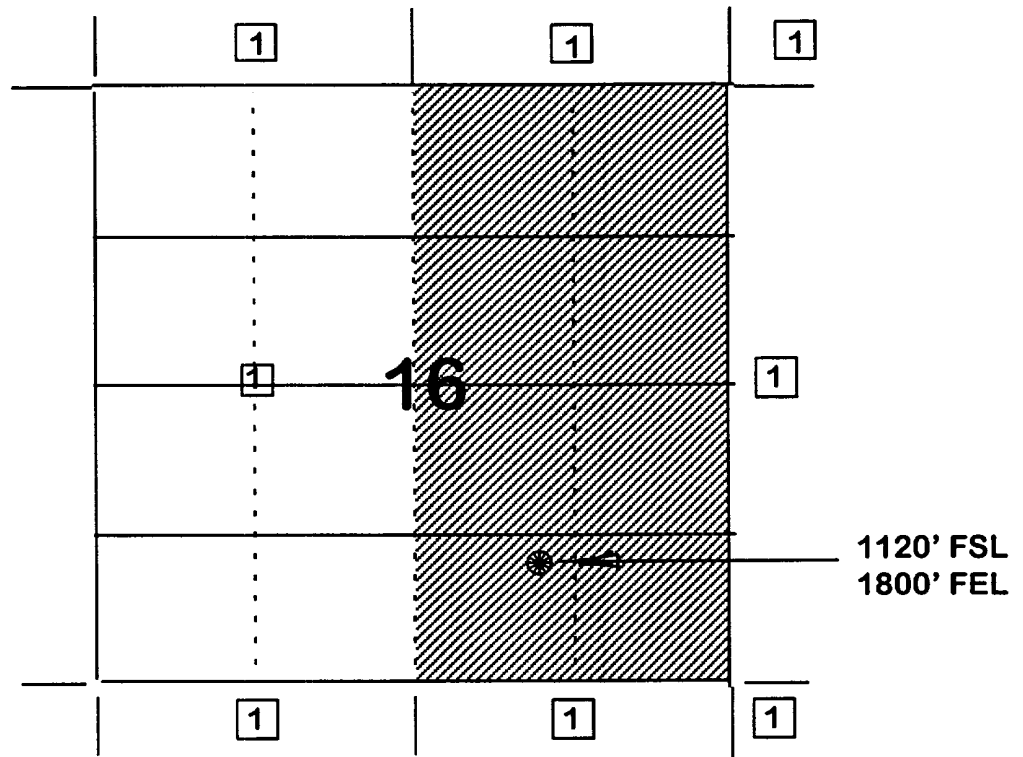
San Juan 27-4 Unit #138

OFFSET OPERATOR \ OWNER PLAT

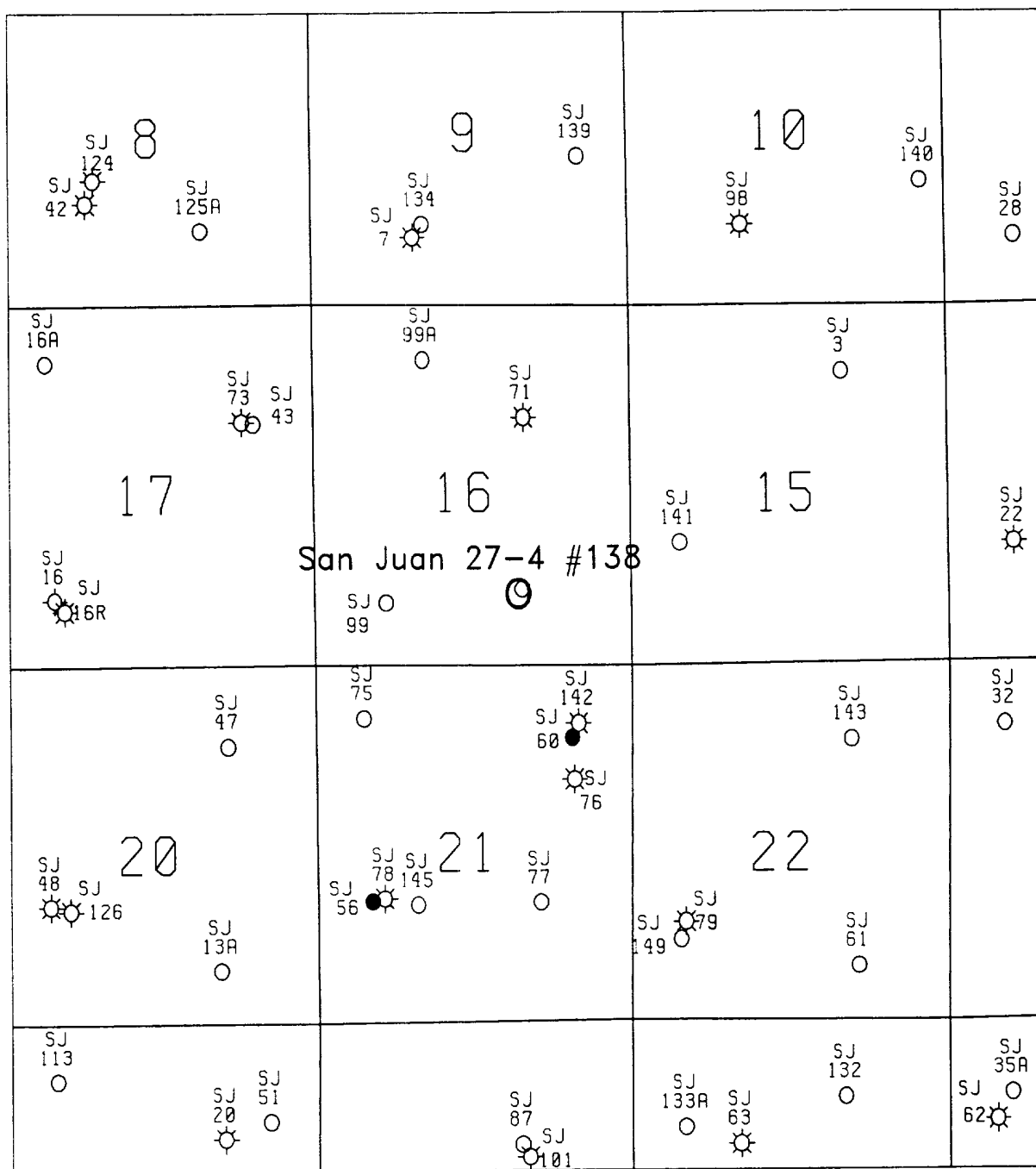
Pictured Cliffs (SE/4) & Mesaverde (E/2) Formations

Commingled well

Township 27 North, Range 4 West



1) Burlington Resources



San Juan 27-4 #138
Sec 16, T27N, R4W
Pictured Cliffs/Mesa Verde