

DISTRICT I
1625 N. Fre. in 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
Operator

PO Box 4289, Farmington, NM 87499
Address

San Juan 27-4 Unit
Lease

16A
Well No.

D, Sec 17, T27N, R4W
Unit Ltr. - Sec - Twp - Rge

Rio Arriba
County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 7452 API NO. 30-039-2137900 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)	3514' - 3604'		5207' - 6072'
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. 472 psia @ 3559' (Original) b. 1183 psia @ 3559'	a. RECEIVED JUL 13 1999 b.	a. 261 psia @ 5640' 1281 psia @ 5640'
6. Oil Gravity (EAPI) or Gas BTU Content	1216 BTU	OIL CON. DIV. DIST. 3	1248 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: 39 MCFD 0 BOD, 0 BWD	Date: Rates:	Date: 05/31/99 Rates: 166 MCFD, 0.5 BOD, 0 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

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-102
Supersedes O-129
Effective 1-1-65

All distances must be from the outer boundaries of the Section

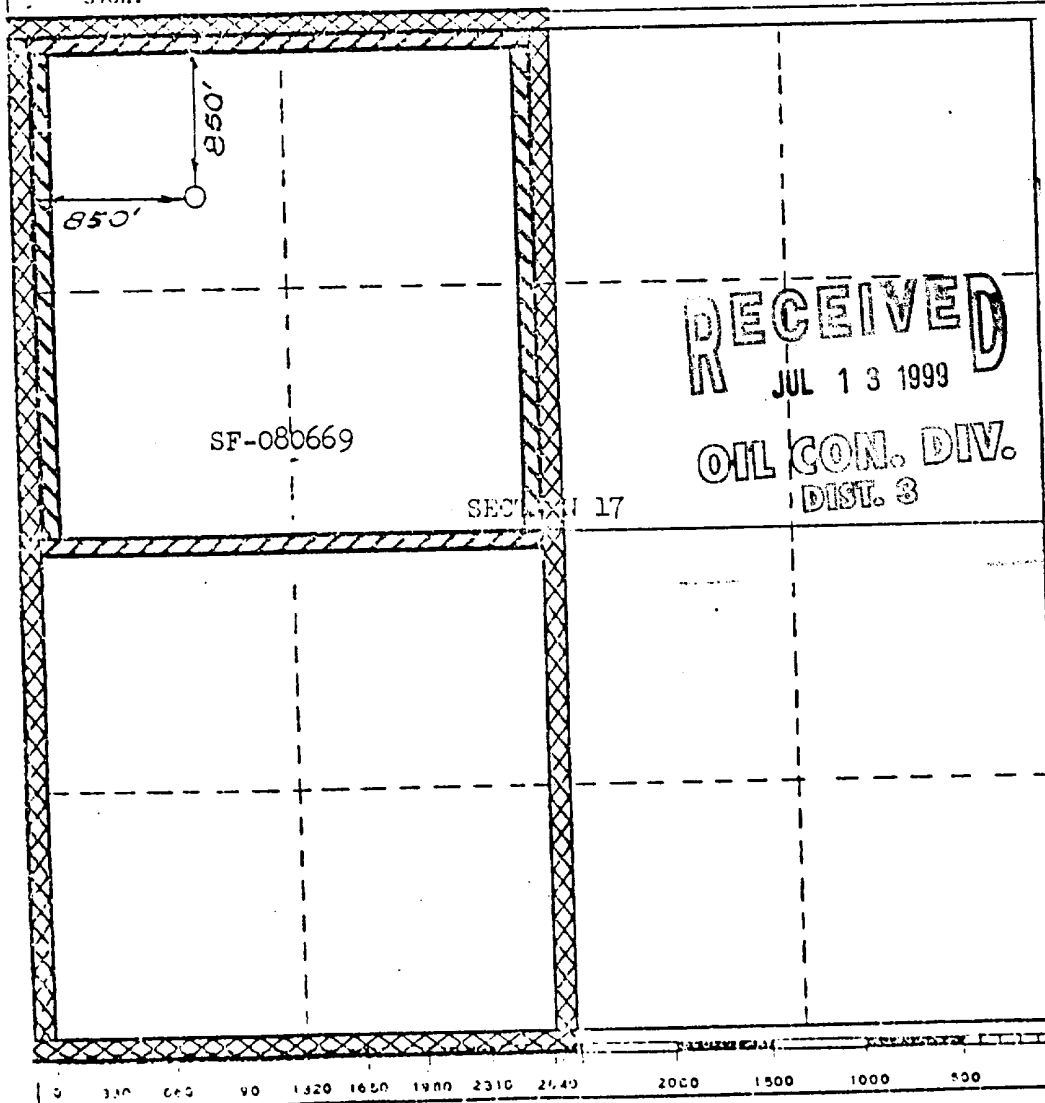
Operator EL PASO NATURAL GAS COMPANY		Location SAN JUAN 27-4 UNIT (SF-080669)		Well No. 134
Section F	Section 17	Township 27-N	Range 4-W	County RIO ARriba
Actual Well Location of Well:				
850		NORTH		850
feet from the		line and		feet from the
WEST		WEST		WEST
Ground Level Elev. 6665	Productive Formation PICTURED CLIFFS & MESA VERDE	Foot TAPACITO PICTURED CLIFFS BLANCO MESA VERDE		Dedicated Acreage: 160.0 & 320.0 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. 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. NOTE: THIS PLAT IS REISSUED TO SHOW DUAL COMPLETION. 4-6-77



CERTIFICATION

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

A. G. Davis

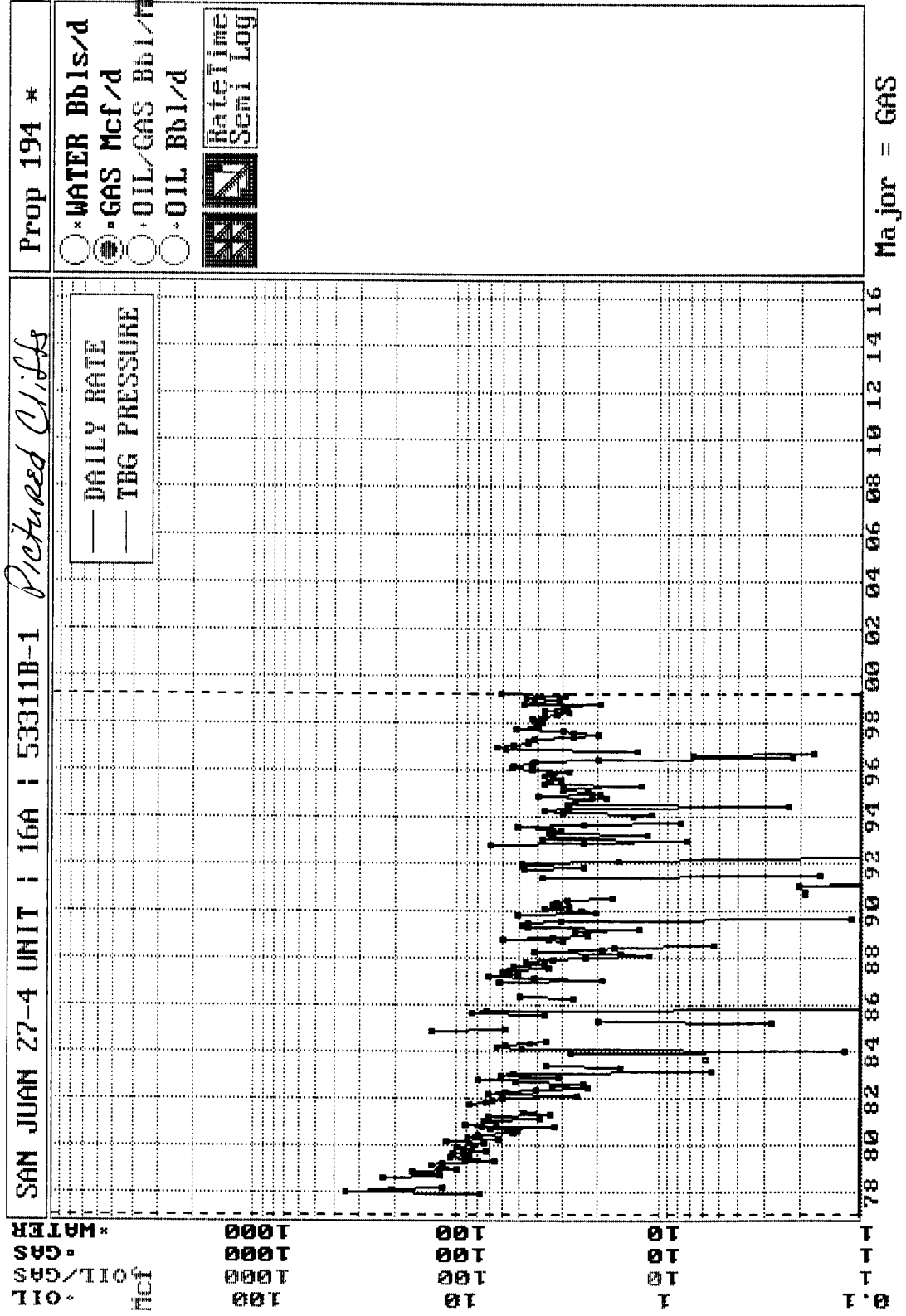
Name
Drilling Clerk
Position
El Paso Natural Gas Compar
Company
April 11, 1977
Date

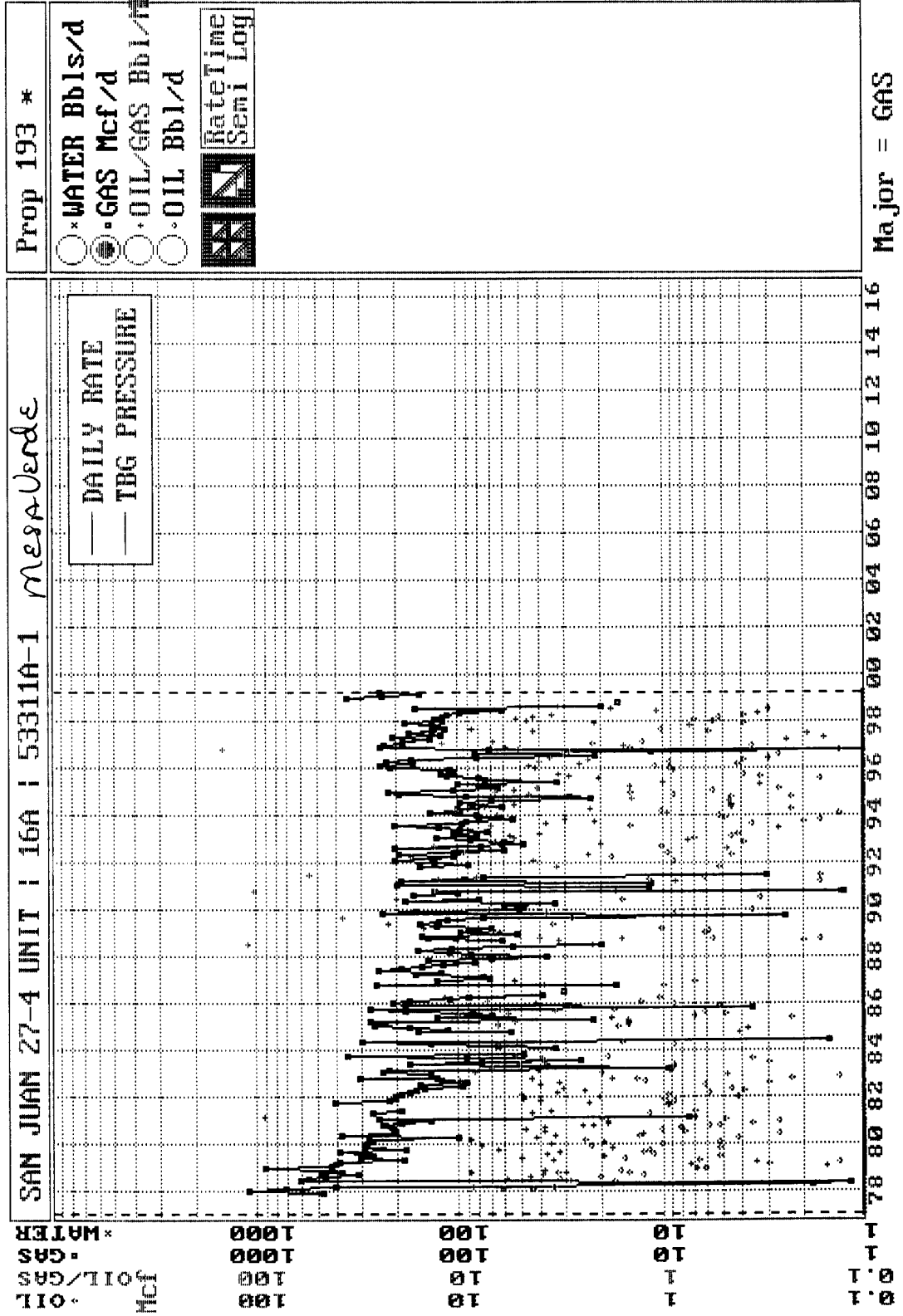
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
MARCH 4, 1977

Registered Professional Engineer
and/or Land Surveyor

Emil O. Blue
Certificate No. 1760





Page No.: 1
Print Time: Mon Jun 07 07:44:36 1999
Property ID: 193
Property Name: SAN JUAN 27-4 UNIT | 16A | 53311A-1 *Mesa Verde*
Table Name: S:\JSMITH\ARIES\99WORK\TEST.DBF

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

08/05/77	0	1062.0	<i>Initial</i>
01/10/78	48161	669.0	
12/08/78	209285	524.0	
10/03/79	305134	483.0	
10/02/80	394101	476.0	
11/01/82	505743	514.0	
05/03/84	565158	549.0	
10/21/86	660887	544.0	
08/22/89	767852	454.0	
03/07/91	818623	582.0	
03/18/91	818623	570.0	
05/03/93	891193	509.0	
06/19/97	1130701	0.0	
05/18/98	1345201	0.0	
3/99	1141617	353	

*Current
Based on Cum Gas vs Pressure Curve*

Page No.: 2

Print Time: Mon Jun 07 07:44:36 1999

Property ID: 194

Property Name: SAN JUAN 27-4 UNIT | 16A | 53311B-1 *Pictured Cliffs*

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

<u>--DATE--</u>	<u>---CUM GAS--</u>	<u>M SIWHP</u>
	<u>Mcf</u>	<u>Psi</u>

11/30/77	0	1083.0	<i>Initial</i>
01/10/78	19512	646.0	
08/02/78	33902	636.0	
05/01/79	66684	495.0	
06/04/80	101131	444.0	
11/01/82	143121	499.0	
05/03/84	157160	529.0	
04/18/86	172065	530.0	
08/22/89	206103	484.0	
08/30/91	215893	600.0	
05/03/93	229172	503.0	
3/99	295,606	336	<i>Current</i>

Based on Cum Gas vs Pressure Curve

San Juan 27-4 Unit #16A
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	0.698	GAS GRAVITY	0.706
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.8	%N2	0.39
%CO2	0.23	%CO2	0.86
%H2S	0	%H2S	0
DIAMETER (IN)	6.456	DIAMETER (IN)	4.052
DEPTH (FT)	3559	DEPTH (FT)	5640
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	115	BOTTOMHOLE TEMPERATURE (DEG F)	147
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	430	SURFACE PRESSURE (PSIA)	227
BOTTOMHOLE PRESSURE (PSIA)	471.8	BOTTOMHOLE PRESSURE (PSIA)	260.7
<u>PC-Original</u>		<u>MV-Original</u>	
GAS GRAVITY	0.698	GAS GRAVITY	0.706
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.8	%N2	0.39
%CO2	0.23	%CO2	0.86
%H2S	0	%H2S	0
DIAMETER (IN)	6.456	DIAMETER (IN)	4.052
DEPTH (FT)	3559	DEPTH (FT)	5640
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	115	BOTTOMHOLE TEMPERATURE (DEG F)	147
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1064	SURFACE PRESSURE (PSIA)	1088
BOTTOMHOLE PRESSURE (PSIA)	1182.6	BOTTOMHOLE PRESSURE (PSIA)	1280.5

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, 10:45:44

Completion	Date	Cur Oil	Cum Oil	Cur Gas	Cum Gas	Cur Wat	Cum Wat
SAN JUAN 27-4 UNIT 16A MV	11/30/1998	0.00	0.00	0.00	0.00	0.00	0.00
	12/31/1998	5.79	5.79	10,656.58	10,656.58	0.00	0.00
	01/31/1999	64.50	70.29	7,044.91	17,701.49	18.60	18.60
	02/28/1999	26.60	96.89	4,575.37	22,276.86	16.28	34.88
	03/31/1999	0.00	96.89	7,162.55	29,439.41	6.95	41.83
	04/30/1999	32.43	129.32	5,614.56	35,053.97	23.25	65.08
	05/31/1999	16.20	145.52	5,153.78	40,207.75	0.00	65.08
	06/30/1999	0.00	145.52	0.00	40,207.75	0.00	65.08
	11/30/1998	0.00	0.00	1,313.28	1,313.28	0.00	0.00
	12/31/1998	0.00	0.00	1,003.51	2,316.79	0.00	0.00
	01/31/1999	0.00	0.00	1,438.79	3,755.58	0.00	0.00
	02/28/1999	0.00	0.00	936.79	4,692.37	0.00	0.00
PE	03/31/1999	0.00	0.00	1,893.68	6,586.05	0.00	0.00
	04/30/1999	0.00	0.00	1,444.66	8,030.71	0.00	0.00
	05/31/1999	0.00	0.00	1,206.45	9,237.16	0.00	0.00
	06/30/1999	0.00	0.00	0.00	9,237.16	0.00	0.00

FARMINGTON ANNUAL PRODUCTION FOR 53311A PHS020M1
 SAN JUAN 27-4 UNIT 16A
 BLANCO MESAVERDE (PRORATED GAS FIELD MESAVERDE ZONE
 ===== OIL CUM ===== ===== GAS CUM =====
 PC DATE BBLs PC DATE MCF DATE BBLs

```
=====
YEAR      OIL      OIL CUM      GAS      GAS CUM      WATER      WATER CUM
1997      189      3957      55665     1090056
1998      63       4020      22122     1112178
```

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 53311A
 SAN JUAN 27-4 UNIT 16A
 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	31	02	21		01	4041	31	1200	15.025			
2	2	F	28	02	16		01	3669	28	1200	15.025			
3	2	F	31	02	12		01	3482	31	1200	15.025			
4	2	F	25	02	1		01	2974	25	1200	15.025			
5	2	F	29	02	2		01	1857	29	1200	15.025			
6	2	F	30	02	9		01	4970	30	1200	15.025			
7	2	S	4	02	2		01	619	4	1196	15.025			
8	2	S		02		57.8	01				15.025			
9	2	S	1	02			01	510	1	1196	15.025			
10	2	S		02			01				15.025			
11	2	S					01				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 53311B

PHS020M1

SAN JUAN 27-4 UNIT 16A

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
1997                                14061     278522
1998                                10498     289020
```

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
SAN JUAN 27-4 UNIT
TAPACITO (PICTURED CLIFFS) FIELD

1998 MONTHLY PRODUCTION FOR 53311B
16A

PHS030M1

PICTURED CLIFFS ZONE

DAYS =====			OIL =====		=====		GAS =====							
MO	T	S	ON	PC	PROD	GRV	PC	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	S					01	1218	19	1196	15.025			
2	2	F					01	1310	26	1196	15.025			
3	2	F					01	1148	31	1196	15.025			
4	2	F					01	984	27	1196	15.025			
5	2	F					01	863	29	1196	15.025			
6	2	F					01	1151	30	1221	15.025			
7	2	F					01	921	31	1221	15.025			
8	2	F					01	869	31	1221	15.025			
9	2	F					01	607	30	1221	15.025			
10	2	F					01	1427	31	1221	15.025			
11														
12														

PF6 - RETURNS TO ANNUAL DISPLAY
PF10 - HELP INFORMATION

PF3 - TRANSFER TO UPDATE
PF9 - DISPLAY MONTHLY INJECTION
PRS 12/05/98

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

BURLINGTON RESOURCES OIL AND GAS COMPANY

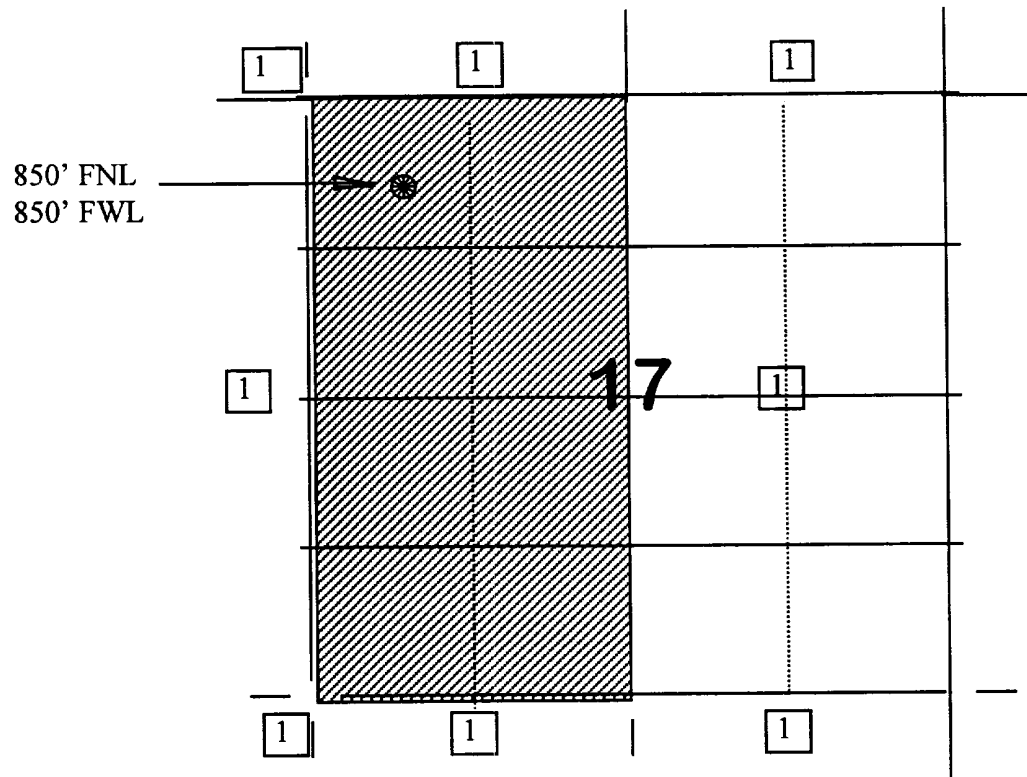
San Juan 27-4 Unit #16A

OFFSET OPERATOR/OWNER PLAT

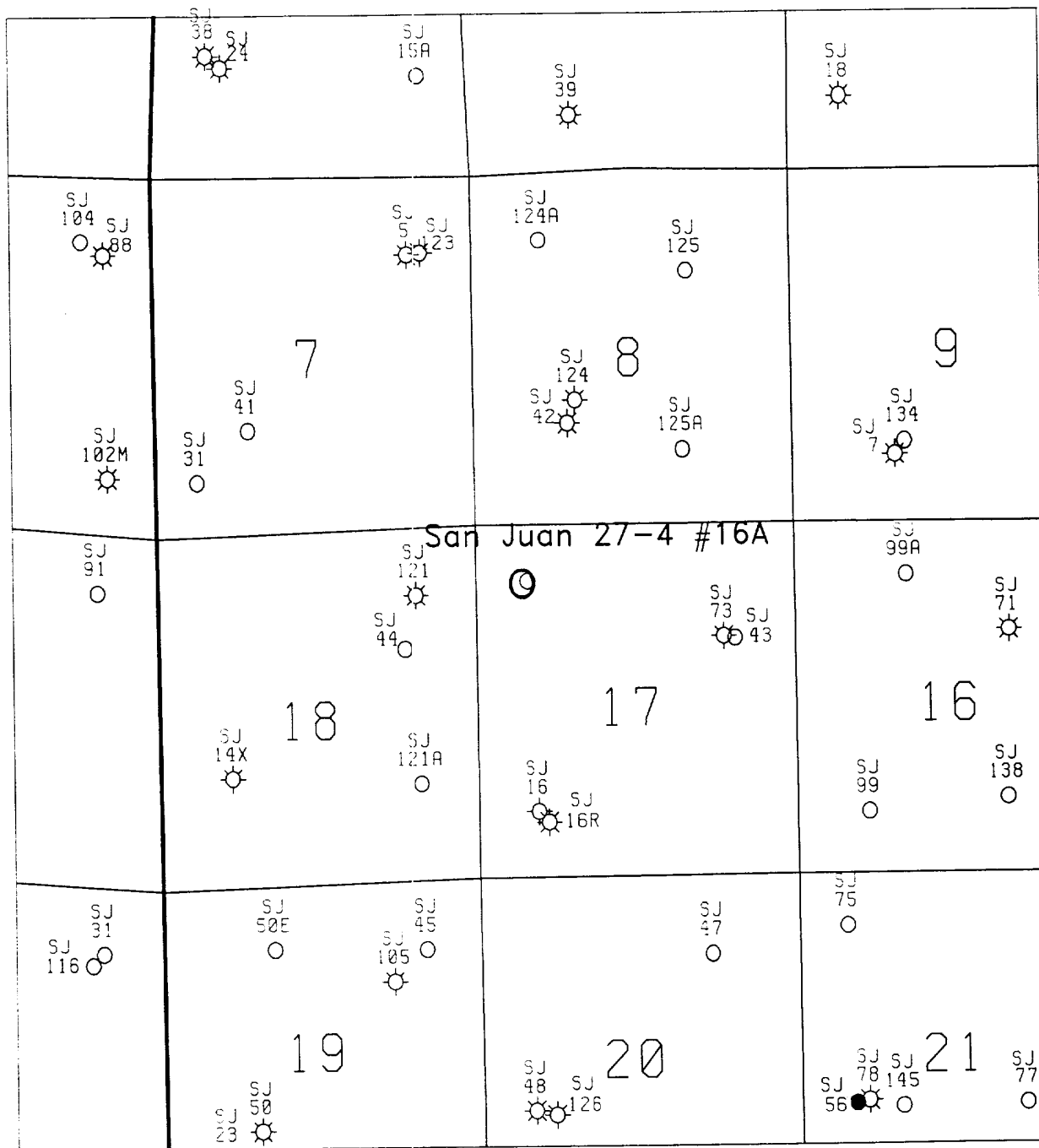
Pictured Cliffs (NW/4) & Mesaverde (W/2) Formations

Commingle well

Township 27 North, Range 4 West



1) Burlington Resources



San Juan 27-4 #16A
Sec 17, T27N, R4W
Pictured Cliffs/Mesa