

DATE IN 6/25/97	SUSPENSE 7/15/97	ENGINEER DC	LOGGED N	TYPE DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

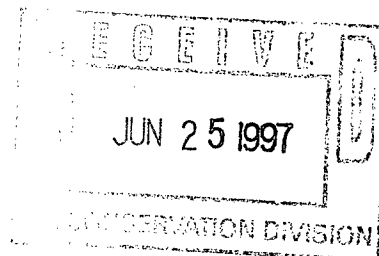
[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
 [DD-Directional Drilling] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [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] and [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 - Statement of Understanding

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, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Peggy Bradfield
 Print or Type Name

Signature

Regulatory/Compliance Administrator

Title

Date

6/24/97

BURLINGTON RESOURCES

SAN JUAN DIVISION

June 24, 1997

SENT FEDERAL EXPRESS

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

Re: Atlantic #5A
950'FSL, 1800'FEL, Section 22, T-31-N, R-10-W
30-045-22428

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Pictured Cliffs and Mesa Verde in the subject well.

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. Production curves for Pictured Cliffs and Mesa Verde;
4. Notification list of offset operators;
5. Shut in wellhead pressure and calculated down hole pressure of surrounding wells;
6. Nine-section plats for the Pictured Cliffs and Mesa Verde.

Working, overriding and royalty interests are identical in the commingled zones.

We will consult with the Supervisor of the Aztec District Office of the New Mexico Oil Conservation Division to establish an allocation formula.

Please let me know if you require additional data.

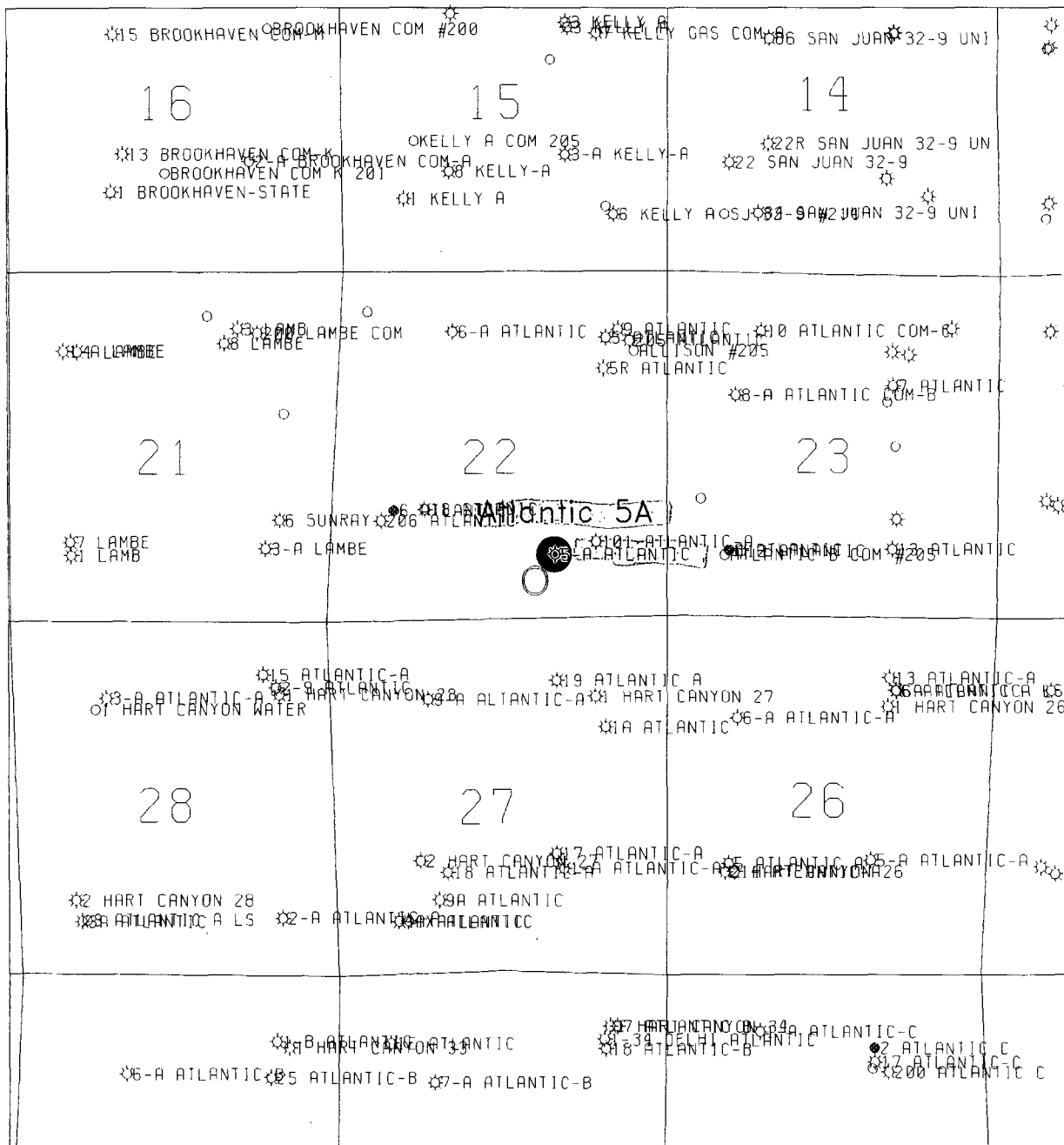
Sincerely,



Peggy Bradfield

Regulatory/Compliance Administrator

xc: Bureau of Land Management - hand delivered



Atlantic 5A
 Sec220 T31N R10W
 PC/MV

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

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

☒ YES ☐ NO

BURLINGTON RESOURCES OIL & GAS COMPANY

PO Box 4289, Farmington, NM 87499

Operator

Address

Atlantic

5A

O, Sec. 22, T31N, R10W

San Juan

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 6795 API NO. 30-045-22428 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 Pictured Cliffs - 7239		Blanco Mesa Verde - 72319
2. Top and Bottom of Pay Section (Perforations)	3070' - 3146'		4581' - 5712'
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. 323 psia (Original) b. 781 psia	a. b.	a. 311 psia b. 705 psia
6. Oil Gravity (°API) or Gas BTU Content	1108		1240
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (yes or no)	Yes		No
* 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: Rates:	Date: Rates:	Date: Rates:
* If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: 4/14/97 Rates: 159 MCFD	Date: Rates:	Date: 4/14/97 Rates: 427 MCFD
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: Gas: supplied upon completion	Oil: % Gas: %	Oil: Gas: 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 communized 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 Kevin L. Midkiff TITLE Operations Engineer DATE 06-23-97TYPE OR PRINT NAME Kevin L. Midkiff TELEPHONE NO. (505) 326-9700

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

Operator EL PASO NATURAL GAS COMPANY			Lease ATLANTIC (NM-013688)		Well No. 5A
Unit Letter 0	Section 22	Township 31-N	Range 10-W	County SAN JUAN	
Actual Footage Location of Well: 950 feet from the SOUTH line and 1800 feet from the EAST line					
Ground Level Elev. 6314	Producing Formation MESA VERDE / P.C.		Pool BLANCO MESA VERDE	Dedicated Acreage: 309.95 / 160 Acres	

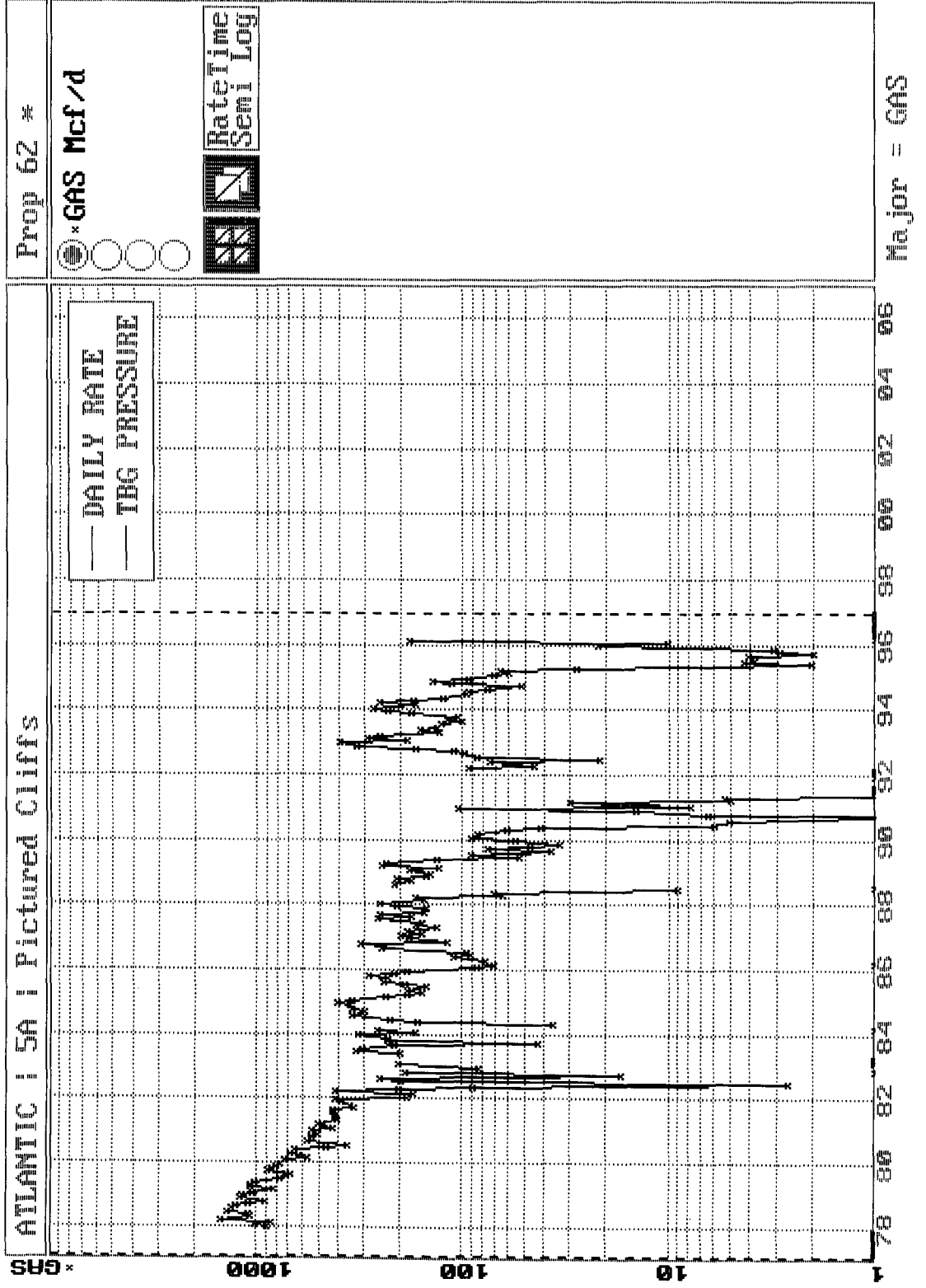
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is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

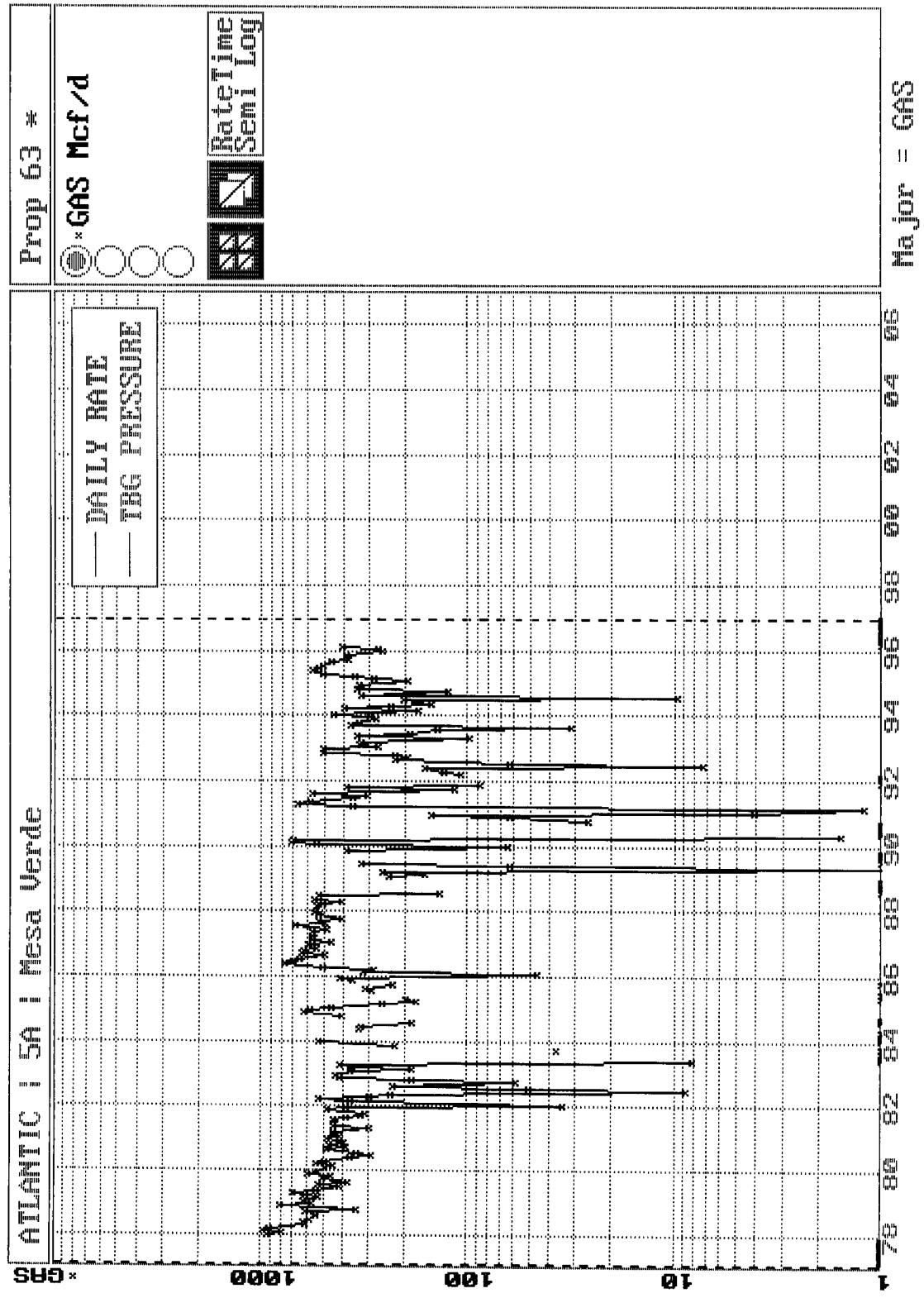
☐ Yes ☐ No If answer is "yes," type of consolidation _____

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.

	<p align="center">CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p align="right">Original Signed by D. G. Brice</p>
	<p>Name _____</p> <p>Position Drilling Clerk</p> <p>Company El Paso Natural Gas</p> <p>Date March 25, 1977</p>
	<p>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.</p>
	<p>Date Surveyed MARCH 10, 1977</p> <p>Registered Professional Engineer and/or Land Surveyor</p> <p align="right"><i>David O. Kuen</i></p> <p>Certificate No. 1760</p>



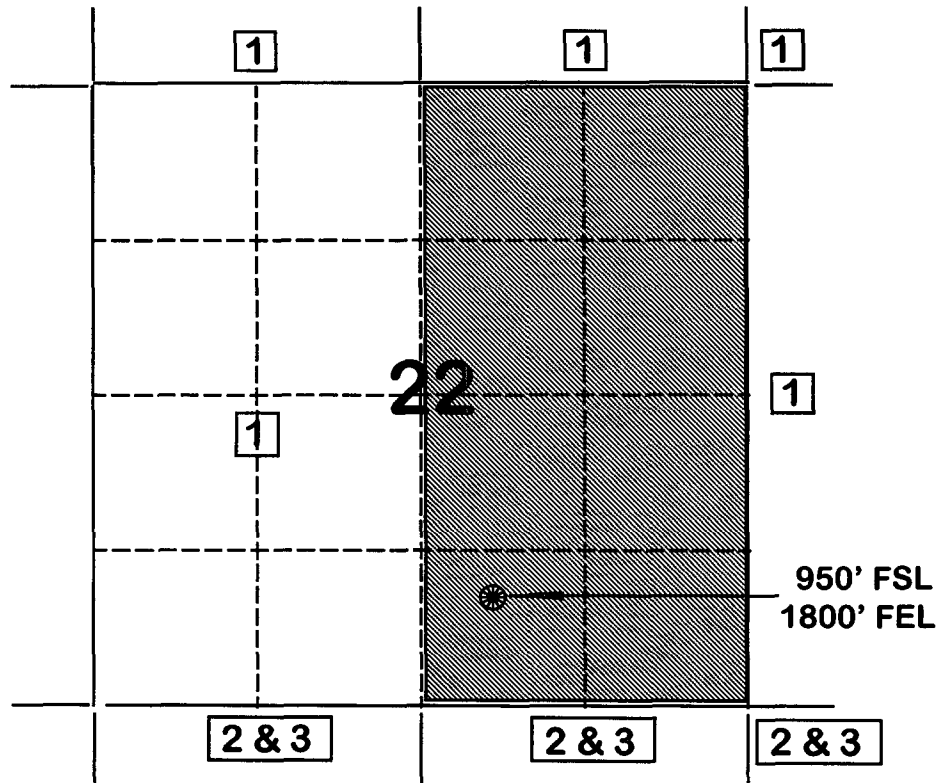


BURLINGTON RESOURCES OIL AND GAS COMPANY

**Atlantic #5A
OFFSET OPERATOR \ OWNER PLAT**

Pictured Cliffs (SE/4)/Mesaverde (E/2) Formations Commingle Well

Township 31 North, Range 10 West



- 1) Burlington Resources Oil and Gas Company
- 2) Amoco Production Company
Attn: Bruce Zimney
P.O. Box 800
Denver, CO 80201
- 3) S G Interest
811 Dallas, Suite 1605
Houston, TX 77002

Page No.: 1
Print Time: Wed Apr 16 11:19:00 1997
Property ID: 62
Property Name: ATLANTIC | 5A | Pictured Cliffs
Table Name: C:\ARIES\WORK\TEST.DBF

<u>--DATE--</u>	<u>---CUM_GAS--</u> Mcf	<u>M_SIWHP</u> Psi
10/20/77	0	721.0 ✓
01/04/78	27199	702.0
05/09/78	196801	659.0
06/21/79	631178	537.0
07/17/80	901172	425.0
11/04/82	1189324	381.0
06/20/84	1281549	381.0
05/19/93	1730503	300.0

Page No.: 1
Print Time: Wed Apr 16 11:30:14 1997
Property ID: 63
Property Name: ATLANTIC | 5A | Mesa Verde
Table Name: C:\ARIES\WORK\TEST.DBF

<u>--DATE--</u>	<u>---CUM_GAS--</u> Mcf	<u>M SIWHP</u> Psi
10/20/77	0	611.0
01/04/78	28546	481.0
05/09/78	147961	387.0
06/21/79	374273	369.0
07/17/80	556732	387.0
05/20/82	817184	367.0
06/20/84	945118	406.0
08/27/86	1197940	284.0
11/28/89	1609063	393.0
06/10/91	1738191	359.0
07/30/91	1747629	347.0
05/19/93	1899623	230.0
08/17/93	1901308	272.0

Atlantic No. 5A
Bottom Hole Pressures
Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

Mesaverde		Pictured Cliffs	
<u>MV-Current</u>		<u>PC-Current</u>	
GAS GRAVITY	0.738	GAS GRAVITY	0.658
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.26	%N2	0.2
%CO2	1.33	%CO2	1.77
%H2S	0	%H2S	0
DIAMETER (IN)	1.995	DIAMETER (IN)	1.38
DEPTH (FT)	5147	DEPTH (FT)	3108
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	148	BOTTOMHOLE TEMPERATURE (DEG F)	110
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	272	SURFACE PRESSURE (PSIA)	300
BOTTOMHOLE PRESSURE (PSIA)	310.9	BOTTOMHOLE PRESSURE (PSIA)	323.1
<u>MV-Original</u>		<u>PC-Original</u>	
GAS GRAVITY	0.738	GAS GRAVITY	0.658
COND. OR MISC. (C/M)	M	COND. OR MISC. (C/M)	M
%N2	0.26	%N2	0.2
%CO2	1.33	%CO2	1.77
%H2S	0	%H2S	0
DIAMETER (IN)	1.995	DIAMETER (IN)	1.38
DEPTH (FT)	5147	DEPTH (FT)	3108
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	148	BOTTOMHOLE TEMPERATURE (DEG F)	110
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	611	SURFACE PRESSURE (PSIA)	721
BOTTOMHOLE PRESSURE (PSIA)	705.0	BOTTOMHOLE PRESSURE (PSIA)	780.7

FARMINGTON ANNUAL PRODUCTION FOR 53524B PHS020M1
 ATLANTIC 5A
 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
1987	1306	12448	195639	1466708		
1988	630	13078	98094	1564802		
1989	107	13185	46222	1611024		
1990	244	13429	66977	1678001		
1991	309	13738	104908	1782909		
1992	233	13971	64871	1847780		
1993	389	14360	92756	1940536		
1994	436	14796	93910	2034446		
1995	869	15665	146587	2181033		
1996	521	16186	120130	2301163		

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

B MY JOB LU #33

FARMINGTON ANNUAL PRODUCTION FOR 53524B PHS020M1
 ATLANTIC 5A
 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
1997	63	16249	20341	2321504		

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

B MY JOB LU #33

FARMINGTON

1997 MONTHLY PRODUCTION FOR 53524B

PHS030M1

ATLANTIC 5A

BLANCO MESAVERDE (PRORATED GAS FIELD

MESAVERDE ZONE

MO	T	S	DAYS	ON	PC	OIL	PROD	GRV	PC	GAS	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F	31	02			35		01		10116	31	1166	15.025			
2	2	F	28	02			28		01		10225	28	1168	15.025			
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

PF6 - RETURNS TO ANNUAL DISPLAY

PF10 - HELP INFORMATION

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

PF3 - TRANSFER TO UPDATE

PF9 - DISPLAY MONTHLY INJECTION

PRS 04/03/97

B MY JOB

NUM LU #33

FARMINGTON ANNUAL PRODUCTION FOR 53524A PHS020M1
 ATLANTIC 5A
 BLANCO PICTURED CLIFFS (GAS) 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
1987      67595      1541765
1988      49532      1591297
1989      40555      1631852
1990      15412      1647264
1991      1473       1648737
1992      43496      1692233
1993      61746      1753979
1994      50719      1804698
1995      8186       1812884
1996      8942       1821826
```

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

B MY JOB LU #33

FARMINGTON ANNUAL PRODUCTION FOR 53524A PHS020M1
 ATLANTIC 5A
 BLANCO PICTURED CLIFFS (GAS) 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      10353      1832179
```

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

B MY JOB LU #33

FARMINGTON

1997 MONTHLY PRODUCTION FOR 53524A

PHS030M1

ATLANTIC 5A

BLANCO PICTURED CLIFFS (GAS) FIELD

ICTURED CLIFFS ZONE

MO	T	S	DAYS	ON	PC	OIL	PROD	GRV	PC	GAS	PROD	ON	BTU	PRESS	WATER	PROD	C
1	2	F							01		5443	31	1038	15.025			
2	2	F							01		4910	28	1030	15.025			
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
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 04/03/97

B MY JOB

NUM LU #33

FDG055M4 S031
START OF DATA
DP NO: 53524a
ATLANTIC
S

WELL PRODUCTION 8/8'S VOLUME

04/16/97 16:14:43

Pictured Cliffs

DATE: 970414 (YYMMDD FORMAT)

5A SCROLL FORWARD BY DATE: _

E	DATE	HOURS	-OIL PRODN-	-GAS PRODN-	-WATER PRODN-
L	PRODUCED	ON	(BOPD BOPM)	(MCFD MCFM)	(BWPD BWPM)
-	04/14/97	24.0	0.00 0.00	159 2434	0.00 0.00
-	04/13/97	24.0	0.00 0.00	164 2275	0.00 0.00
-	04/12/97	24.0	0.00 0.00	161 2111	0.00 0.00
-	04/11/97	24.0	0.00 0.00	164 1950	0.00 0.00
-	04/10/97	24.0	0.00 0.00	171 1786	0.00 0.00
-	04/09/97	24.0	0.00 0.00	176 1615	0.00 0.00
-	04/08/97	24.0	0.00 0.00	176 1439	0.00 0.00
-	04/07/97	24.0	0.00 0.00	176 1263	0.00 0.00
-	04/06/97	24.0	0.00 0.00	176 1087	0.00 0.00
-	04/05/97	24.0	0.00 0.00	177 911	0.00 0.00
-	04/04/97	24.0	0.00 0.00	177 734	0.00 0.00

ENTER I UNDER SEL FOR MAINTENANCE

PF12=MAIN MENU PF6=NRI PF10=BROWSE MENU PF11=INQ/UPDATE MENU
B MY JOB ENTER=BACKWARDS LU #33 PF24=HELP

FDG055M4 S031
START OF DATA
DP NO: 53524b
ATLANTIC
S

WELL PRODUCTION 8/8'S VOLUME

04/16/97 16:15:01

Mesa Verde

DATE: 970414 (YYMMDD FORMAT)

5A SCROLL FORWARD BY DATE: _

E	DATE	HOURS	-OIL PRODN-	-GAS PRODN-	-WATER PRODN-
L	PRODUCED	ON	(BOPD BOPM)	(MCFD MCFM)	(BWPD BWPM)
-	04/14/97	24.0	1.27 17.78	427 6006	0.00 0.00
-	04/13/97	24.0	1.27 16.51	435 5579	0.00 0.00
-	04/12/97	24.0	1.27 15.24	444 5144	0.00 0.00
-	04/11/97	24.0	1.27 13.97	452 4700	0.00 0.00
-	04/10/97	24.0	1.27 12.70	464 4248	0.00 0.00
-	04/09/97	24.0	1.27 11.43	482 3784	0.00 0.00
-	04/08/97	24.0	1.27 10.16	412 3302	0.00 0.00
-	04/07/97	24.0	1.27 8.89	412 2890	0.00 0.00
-	04/06/97	24.0	1.27 7.62	412 2478	0.00 0.00
-	04/05/97	24.0	1.27 6.35	414 2066	0.00 0.00
-	04/04/97	24.0	1.27 5.08	414 1652	0.00 0.00

ENTER I UNDER SEL FOR MAINTENANCE

PF12=MAIN MENU PF6=NRI PF10=BROWSE MENU PF11=INQ/UPDATE MENU
B MY JOB ENTER=BACKWARDS LU #33 PF24=HELP