

|                    |                     |                |              |             |
|--------------------|---------------------|----------------|--------------|-------------|
| DATE IN<br>2/24/97 | SUSPENSE<br>3/17/97 | ENGINEER<br>BS | LOGGED<br>KV | TYPE<br>DHC |
|--------------------|---------------------|----------------|--------------|-------------|

ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

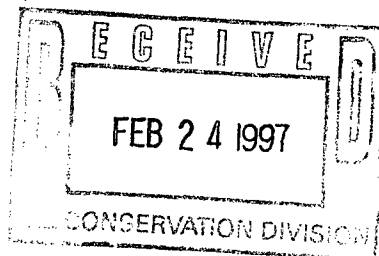
1508

### 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

Regulatory/Compliance Administrator

Print or Type Name

Signature

Title

Date

2-20-97

# BURLINGTON RESOURCES

---

SAN JUAN DIVISION

February 20, 1997

SENT FEDERAL EXPRESS

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

Re: Atlantic C #5A  
870'FSL, 1840'FEL Section 6, T-30-N, R-10-W, San Juan County, NM  
API #30-045-23155

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Pictured Cliffs and Blanco Mesa Verde in the subject well. This well was originally drilled as a Pictured Cliffs/Mesa Verde dual; it is intended to commingle.

To comply with the New Mexico Oil Conservation Division rules, Burlington Resources Oil & Gas 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 curve for Pictured Cliffs and Mesa Verde for at least one year;
4. Notification list of offset operators;
5. Shut in wellhead pressure and calculated down hole pressure;
6. Nine-section plats for the Mesa Verde and Pictured Cliffs

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  
encs.

xc: Bureau of Land Management

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

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

APPROVAL PROCESS :  
\_X\_ Administrative \_\_\_ Hearing  
EXISTING WELLBORE  
\_X\_ YES \_\_\_ NO

APPLICATION FOR DOWNHOLE COMMINGLING

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

Operator Atlantic C Address 5A O 6-30-10 San Juan  
Lease Well No. Unit Ltr. - Sec - Twp - Rge County  
Spacing Unit Lease Types: (check 1 or more)  
OGRID NO. 14538 Property Code 6804 API NO. 30-045-23155 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 Pictured Cliffs - 72359  |                   | Blanco Mesaverde - 72319  |
| 2. Top and Bottom of Pay Section (Perforations)   | 2802-2902'  |                   | 4821-5470'  |
| 3. Type of production (Oil or Gas)  | gas   |                   | gas   |
| 4. Method of Production (Flowing or Artificial Lift)  | flowing   |                   | flowing   |
| 5. Bottomhole Pressure<br>Oil Zones - Artificial Lift:<br>Estimated Current<br>Gas & Oil - Flowing:<br>Measured Current<br>All Gas Zones:<br>Estimated or Measured Original                   | (Current)<br>a. 396 psi (see attachment)<br>(Original)<br>b. 863 psi (see attachment) | a.<br><br>b.      | a. 388 psi (see attachment)<br><br>b. 1033 psi (see attachment) |
| 6. Oil Gravity (°API) or Gas BTU Content  | BTU 1156  |                   | BTU 1173  |
| 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<br><br>Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data | Date: n/a<br>Rates:   | Date:<br>Rates:   | Date: n/a<br>Rates:   |
| * If Producing, give data and oil/gas/water of recent test (within 60 days)   | Date: 12-96<br>Rates: 33 mcf/d; 0 bopd  | Date:<br>Rates:   | Date: 12-96<br>Rates: 183 mcf/d; 0.6 bopd                       |
| 8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)   | Oil: % Gas: %<br>will be supplied upon completion                                     | Oil: % Gas: %     | Oil: % Gas: %<br>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? \_X\_ 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? \_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). \_\_\_\_\_
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 Mary Ellen Lutey TITLE Production Engineer DATE 2/17/97

TYPE OR PRINT NAME Mary Ellen Lutey TELEPHONE NO. ( 505 ) 326-9700

**MEXICO OIL CONSERVATION COMMIS.**  
**WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-121  
Effective 1-1-65

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

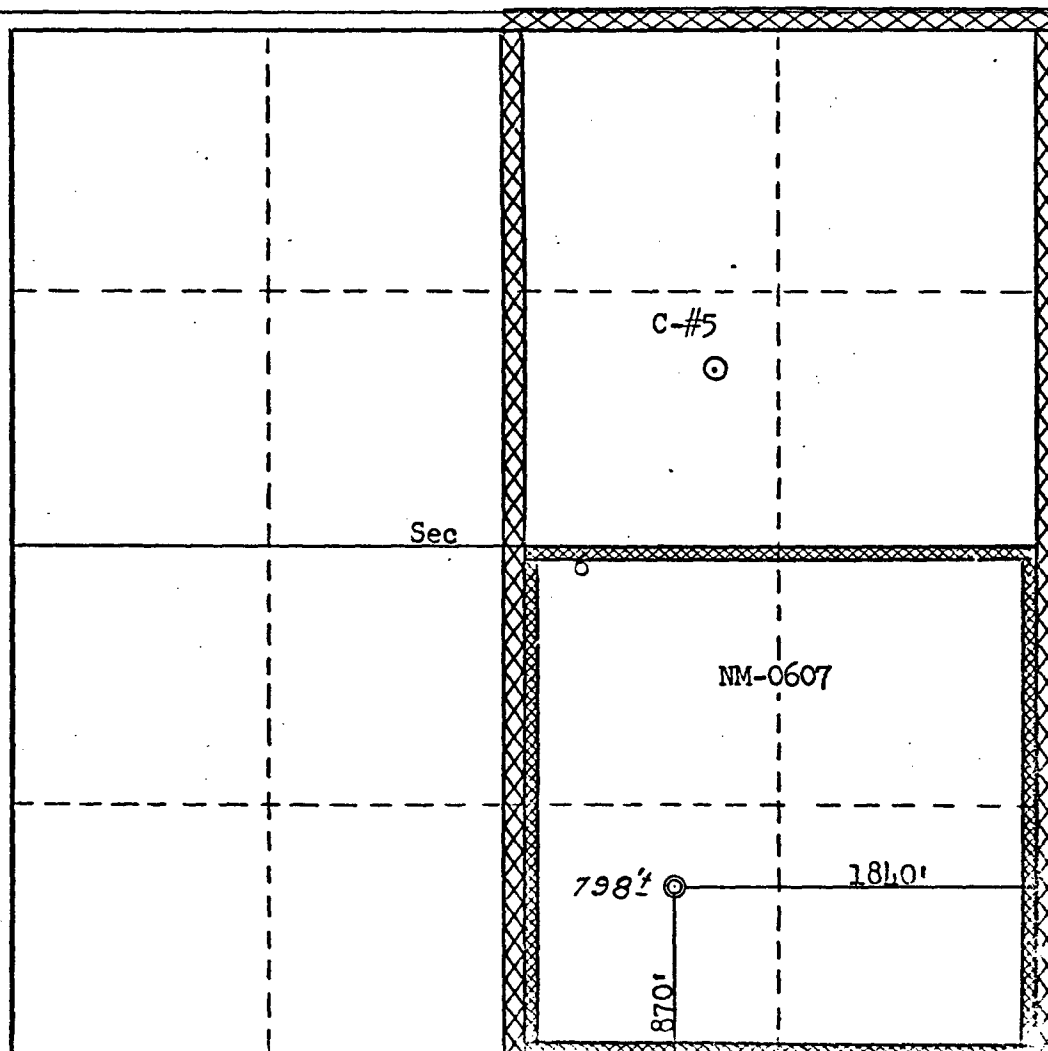
|  |  |                        |  |                           |  |
|--|--|------------------------|--|---------------------------|--|
| Operator<br><b>EL PASO NATURAL GAS COMPANY</b>   |  |                        | Lease<br><b>ATLANTIC C (NM-0607)</b>                         |                           | Well No.<br><b>5A</b>                                  |
| Unit Letter<br><b>0</b>  | Section<br><b>6</b>                                      | Township<br><b>30N</b> | Range<br><b>10W</b>  | County<br><b>San Juan</b> |  |
| Actual Footage Location of Well:<br><b>870</b> feet from the <b>South</b> line and <b>1840'</b> feet from the <b>East</b> line |  |                        |  |                           |  |
| Ground Level Elev.<br><b>6176</b>  | Producing Formation<br><b>Pictured Cliffs-Mesa Verde</b> |                        | Pool Blanco Pictured Cliffs Ext.<br><b>Blanco Mesa Verde</b> |                           | Dedicated Acreage:<br><b>160.78 &amp; 321.98</b> 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.



**CERTIFICATION**

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

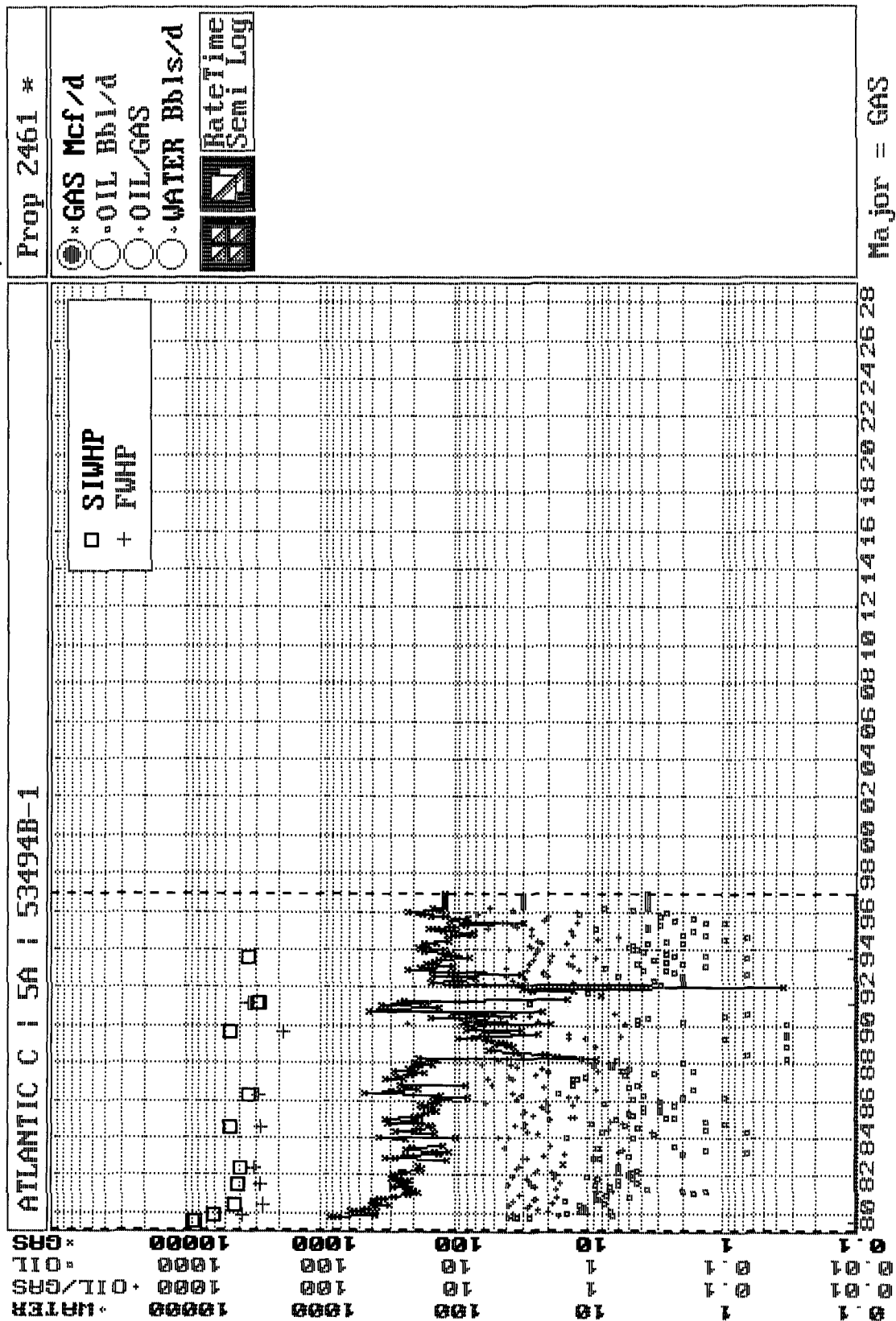
*[Signature]*

Name  
**Drilling Clerk**  
Position  
**El Paso Natural Gas Co**  
Company  
**July 21, 1978**  
Date

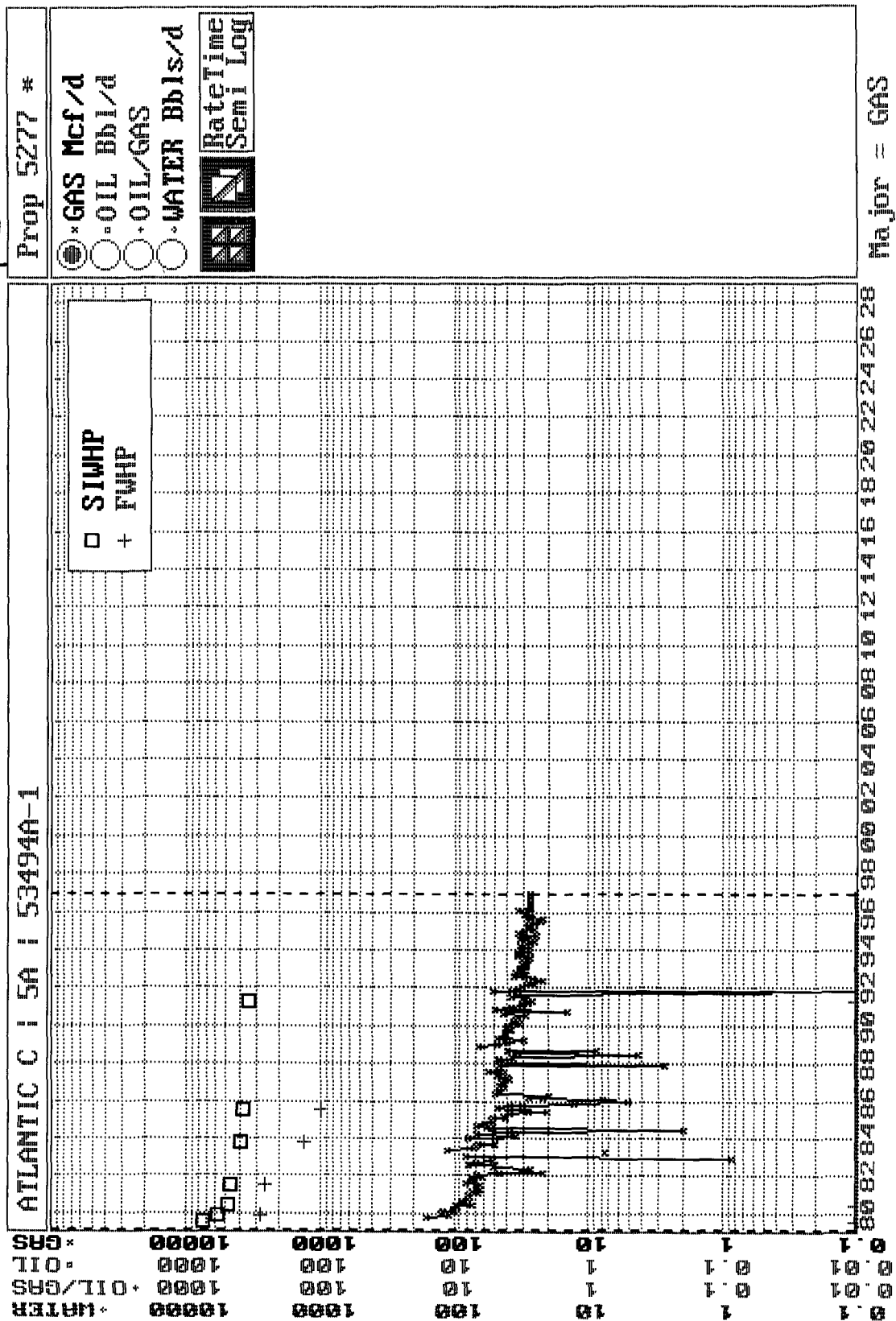
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
**June 22, 1978**  
Registered Professional Engineer  
and/or Land Surveyor  
*[Signature]*  
**Fred J. Kerr, Jr.**  
Certificate No. **3950**  
**B. KERR, JR.**

MV



PC

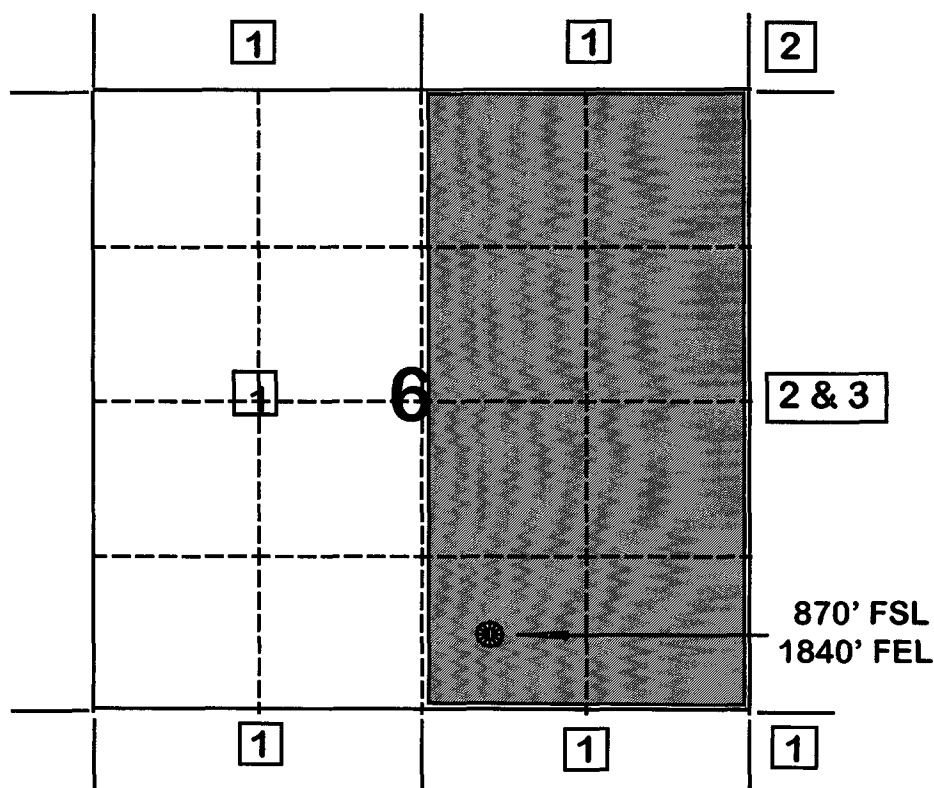


***BURLINGTON RESOURCES OIL AND GAS COMPANY***

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

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

**Township 30 North, Range 10 West**



- 1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.
- 2) Amoco Production Company  
Attn: Bruce Zimney  
P.O. Box 800  
Denver, CO 80201
- 3) SG Interest  
811 Dallas Ste. 1605  
Houston, TX 77002

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

VERSION 10/3/13/94

|                                |       |
|--------------------------------|-------|
| GAS GRAVITY                    | 0.67  |
| COND. OR MISC. (C/M)           | C     |
| %N2                            | 0.15  |
| %CO2                           | 0.81  |
| %H2S                           | 0     |
| DIAMETER (IN)                  | 2.4   |
| DEPTH (FT)                     | 5513  |
| SURFACE TEMPERATURE (DEG F)    | 60    |
| BOTTOMHOLE TEMPERATURE (DEG F) | 150   |
| FLOWRATE (MCFPD)               | 0     |
| SURFACE PRESSURE (PSIA)        | 341   |
| BOTTOMHOLE PRESSURE (PSIA)     | 388.2 |

ATLANTIC C #5A MESAVERDE - (CURRENT )



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

VERSION 1.0 3/13/94

|                                |        |
|--------------------------------|--------|
| GAS GRAVITY                    | 0.67   |
| COND. OR MISC. (C/M)           | C      |
| %N2                            | 0.15   |
| %CO2                           | 0.81   |
| %H2S                           | 0      |
| DIAMETER (IN)                  | 2.4    |
| DEPTH (FT)                     | 5513   |
| SURFACE TEMPERATURE (DEG F)    | 60     |
| BOTTOMHOLE TEMPERATURE (DEG F) | 150    |
| FLOWRATE (MCFPD)               | 0      |
| SURFACE PRESSURE (PSIA)        | 896    |
| BOTTOMHOLE PRESSURE (PSIA)     | 1032.8 |

ATLANTIC C #5A MESAVERDE - (ORIGINAL )

MV

Organize Data ScreenGraph Economics Report Plot Utility Quit  
Browsing: ATLANTIC C | 5A | 53494B-1 Property No.: 2461  
Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/12/103224  
Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

| --DATE-- | ---CUM GAS-- | M SIWHP |
|----------|--------------|---------|
|          | Mcf          | Psi     |
| 07/25/79 | 0            | 896.0   |
| 08/02/79 | 0            | 857.0   |
| 11/01/79 | 60426        | 618.0   |
| 06/16/80 | 153836       | 447.0   |
| 07/02/81 | 263379       | 413.0   |
| 05/10/82 | 337807       | 401.0   |
| 07/10/84 | 450927       | 464.0   |
| 04/02/86 | 560190       | 342.0   |
| 09/12/89 | 727158       | 464.0   |
| 02/18/91 | 798441       | 283.0   |
| 03/19/91 | 803679       | 295.0   |
| 07/12/93 | 883228       | 341.0   |

F1=Help F3=PrvPro F5=PrvTbl F7=Calcu F9=Utils Alt+TableLtr=Change Table  
F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R & L

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

VERSION 10 3/13/94

|                                |       |
|--------------------------------|-------|
| GAS GRAVITY                    | 0.66  |
| COND. OR MISC. (C/M)           | C     |
| %N2                            | 0.33  |
| %CO2                           | 0.59  |
| %H2S                           | 0     |
| DIAMETER (IN)                  | 1.25  |
| DEPTH (FT)                     | 5513  |
| SURFACE TEMPERATURE (DEG F)    | 60    |
| BOTTOMHOLE TEMPERATURE (DEG F) | 110   |
| FLOWRATE (MCFPD)               | 0     |
| SURFACE PRESSURE (PSIA)        | 347   |
| BOTTOMHOLE PRESSURE (PSIA)     | 396.4 |

ATLANTIC C #5A PICTURED CLIFFS - (CURRENT )

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

VERSION 10.3/13/94

|                                |       |
|--------------------------------|-------|
| GAS GRAVITY                    | 0.66  |
| COND. OR MISC. (C/M)           | C     |
| %N2                            | 0.33  |
| %CO2                           | 0.59  |
| %H2S                           | 0     |
| DIAMETER (IN)                  | 1.25  |
| DEPTH (FT)                     | 5513  |
| SURFACE TEMPERATURE (DEG F)    | 60    |
| BOTTOMHOLE TEMPERATURE (DEG F) | 110   |
| FLOWRATE (MCFPD)               | 0     |
| SURFACE PRESSURE (PSIA)        | 748   |
| BOTTOMHOLE PRESSURE (PSIA)     | 863.4 |

ATLANTIC C #5A PICTURED CLIFFS - (ORIGINAL)

PC

Organize Data ScreenGraph Economics Report Plot Utility Quit  
 Browsing: ATLANTIC C | 5A | 53494A-1 Property No.: 5277  
 Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/8/103224  
 Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

| --DATE-- | ---CUM GAS-- | M SIWHP |
|----------|--------------|---------|
|          | Mcf          | Psi     |
| 08/01/79 | 0            | 748.0   |
| 08/02/79 | 0            | 749.0   |
| 11/01/79 | 13239        | 577.0   |
| 06/16/80 | 35064        | 497.0   |
| 07/02/81 | 64399        | 470.0   |
| 09/26/83 | 104720       | 400.0   |
| 07/02/85 | 133296       | 387.0   |
| 04/10/91 | 222000       | 347.0   |

F1=Help F3=PrvPro F5=PrvTbl F7=Calcu F9=Utils Alt+TableLtr=Change Table  
 F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R & L

FARMINGTON

1996 MONTHLY PRODUCTION FOR 53494A

PHS030M1

ATLANTIC C 5A

AZTEC PICTURED CLIFFS (GAS) FIELD

PICTURED CLIFFS ZONE

|    |   |   | DAYS ===== |    | OIL ===== |     | ===== |      | GAS ===== |      |        |       |      |   |  |
|----|---|---|------------|----|-----------|-----|-------|------|-----------|------|--------|-------|------|---|--|
| MO | T | S | ON         | PC | PROD      | GRV | PC    | PROD | ON        | BTU  | PRESS  | WATER | PROD | C |  |
| 1  | 2 | F |            |    |           |     | 01    | 1047 | 31        | 1135 | 15.025 |       |      |   |  |
| 2  | 2 | F |            |    |           |     | 01    | 831  | 29        | 1135 | 15.025 |       |      |   |  |
| 3  | 2 | F |            |    |           |     | 01    | 1071 | 31        | 1135 | 15.025 |       |      |   |  |
| 4  | 2 | F |            |    |           |     | 01    | 885  | 27        | 1135 | 15.025 |       |      |   |  |
| 5  | 2 | F |            |    |           |     | 01    | 1007 | 31        | 1135 | 15.025 |       |      |   |  |
| 6  | 2 | F |            |    |           |     | 01    | 1175 | 26        | 1135 | 15.025 |       |      |   |  |
| 7  | 2 | F |            |    |           |     | 01    | 888  | 31        | 1133 | 15.025 |       |      |   |  |
| 8  | 2 | F |            |    |           |     | 01    | 1179 | 31        | 1133 | 15.025 |       |      |   |  |
| 9  | 2 | F |            |    |           |     | 01    | 959  | 20        | 1133 | 15.025 |       |      |   |  |
| 10 | 2 | F |            |    |           |     | 01    | 1137 | 31        | 1133 | 15.025 |       |      |   |  |
| 11 | 2 | F |            |    |           |     | 01    | 1012 | 30        | 1133 | 15.025 |       |      |   |  |
| 12 | 2 | F |            |    |           |     | 01    | 1012 | 31        | 1133 | 15.025 |       |      |   |  |

PF6 - RETURNS TO ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION

PF9 - DISPLAY MONTHLY INJECTION

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

PRS 02/05/97

B MY JOB

NUM LU #27

FARMINGTON

1996 MONTHLY PRODUCTION FOR 53494B

PHS030M1

ATLANTIC C 5A

BLANCO MESAVERDE (PRORATED GAS FIELD)

MESAVERDE ZONE

|    |   |   | DAYS ===== |    | OIL ===== |      | ===== |      | GAS ===== |      |        |       |      |   |  |
|----|---|---|------------|----|-----------|------|-------|------|-----------|------|--------|-------|------|---|--|
| MO | T | S | ON         | PC | PROD      | GRV  | PC    | PROD | ON        | BTU  | PRESS  | WATER | PROD | C |  |
| 1  | 2 | F | 31         | 02 | 14        |      | 01    | 3818 | 31        | 1152 | 15.025 |       |      |   |  |
| 2  | 2 | F | 29         | 02 | 23        | 61.2 | 01    | 4350 | 29        | 1152 | 15.025 |       |      |   |  |
| 3  | 2 | F | 31         | 02 | 5         |      | 01    | 4614 | 31        | 1152 | 15.025 |       |      |   |  |
| 4  | 2 | F | 28         | 02 | 18        |      | 01    | 3366 | 28        | 1152 | 15.025 |       |      |   |  |
| 5  | 2 | F | 31         | 02 |           |      | 01    | 128  | 31        | 1152 | 15.025 |       |      |   |  |
| 6  | 2 | F | 30         | 02 | 6         |      | 01    | 3229 | 30        | 1152 | 15.025 |       |      |   |  |
| 7  | 2 | F | 31         | 02 | 17        |      | 01    | 3874 | 31        | 1157 | 15.025 |       |      |   |  |
| 8  | 2 | F | 31         | 02 | 10        |      | 01    | 3549 | 31        | 1158 | 15.025 |       |      |   |  |
| 9  | 2 | F | 21         | 02 | 8         |      | 01    | 2459 | 21        | 1157 | 15.025 |       |      |   |  |
| 10 | 2 | F | 31         | 02 | 14        |      | 01    | 4482 | 31        | 1157 | 15.025 |       |      |   |  |
| 11 | 2 | F | 30         | 02 | 16        |      | 01    | 4098 | 30        | 1157 | 15.025 |       |      |   |  |
| 12 | 2 | F | 31         | 02 | 20        | 56.2 | 01    | 5688 | 31        | 1141 | 15.025 |       |      |   |  |

PF6 - RETURNS TO ANNUAL DISPLAY

PF3 - TRANSFER TO UPDATE

PF10 - HELP INFORMATION

PF9 - DISPLAY MONTHLY INJECTION

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

PRS 02/05/97

B MY JOB

NUM LU #27

ATLANTIC C #5A  
SECTION 6, T30N, R10W  
MESAVERDE - PICTURED CLIFFS

