

|                  |                  |             |              |          |
|------------------|------------------|-------------|--------------|----------|
| DATE IN 10/19/99 | SUSPENSE 11/8/99 | ENGINEER DC | LOGGED BY MW | TYPE DHC |
|------------------|------------------|-------------|--------------|----------|

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Engineering Bureau -  
 2040 South Pacheco, Santa Fe, NM 87505



2511

**ADMINISTRATIVE APPLICATION COVERSHEET**

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**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]

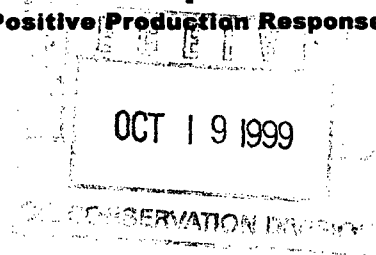
[1] **TYPE OF APPLICATION - Check Those Which Apply for [A]**

[A] Location - Spacing Unit - Directional Drilling  
☐ NSL ☐ NSP ☐ DD ☐ SD

Check One Only for [B] or [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 - Certification**

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 (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.**

**Note: Statement must be completed by an individual with managerial and/or supervisory capacity.**

Print or Type Name

Signature

Title

Date

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

Form C-107-A  
Revised August 1999

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

**Burlington Resources Oil and Gas**

|                                             |                            |                               |                                                                                                                             |
|---------------------------------------------|----------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Operator<br><b>Bolack Tommy</b>             | 1M                         | Address<br><b>J-1-30N-12W</b> | <b>San Juan</b>                                                                                                             |
| Lease                                       | Well No.                   | Unit Ltr. - Sec - Twp - Rge   | County                                                                                                                      |
| Spacing Unit Lease Types: (check 1 or more) |                            |                               |                                                                                                                             |
| OGRID NO. <b>14538</b>                      | Property Code <b>18629</b> | API NO. <b>30-045-25389</b>   | Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> (and/or) Fee <input checked="" type="checkbox"/> |

| 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)                                                                                                                                                                                                                                                                                           | 4586-4842                              |                   | 6036-6904                         |
| 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: Estimated Current<br>Gas & Oil - Flowing: Measured Current<br>All Gas Zones: Estimated Or Measured Original                                                                                                                                                                        | a. (Current) 287 psi (see attachment)  | a.                | a. 823 psi (see attachment)       |
|                                                                                                                                                                                                                                                                                                                                           | b. (Original) 958 psi (see attachment) | b.                | b. 2026 psi (see attachment)      |
| 6. Oil Gravity (EAPI) or Gas BTU Content                                                                                                                                                                                                                                                                                                  | BTU 1210                               |                   | BTU 1104                          |
| 7. Producing or Shut-In?                                                                                                                                                                                                                                                                                                                  | Producing                              |                   | Producing                         |
| Production Marginal? (yes or no)<br><br>* If Shut-In, give date 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<br><br>* If Producing, give date and oil/gas/water rates of recent test (within 60 days) | Yes                                    |                   | Yes                               |
|                                                                                                                                                                                                                                                                                                                                           | Date:<br>Rates:                        | Date:<br>Rates:   | Date:<br>Rates:                   |
|                                                                                                                                                                                                                                                                                                                                           | Date: 9/2/99<br>Rates: 126 mcf/d       | Date:<br>Rates:   | Date: 9/2/99<br>Rates: 67 mcf/d   |
|                                                                                                                                                                                                                                                                                                                                           |                                        |                   |                                   |
| 8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)                                                                                                                                                                                                                                                     | Will be supplied upon completion.      |                   | 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
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 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 10-08-99  
TYPE OR PRINT NAME Mary Ellen Lutey TELEPHONE NO. ( 505 ) 326-9700

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

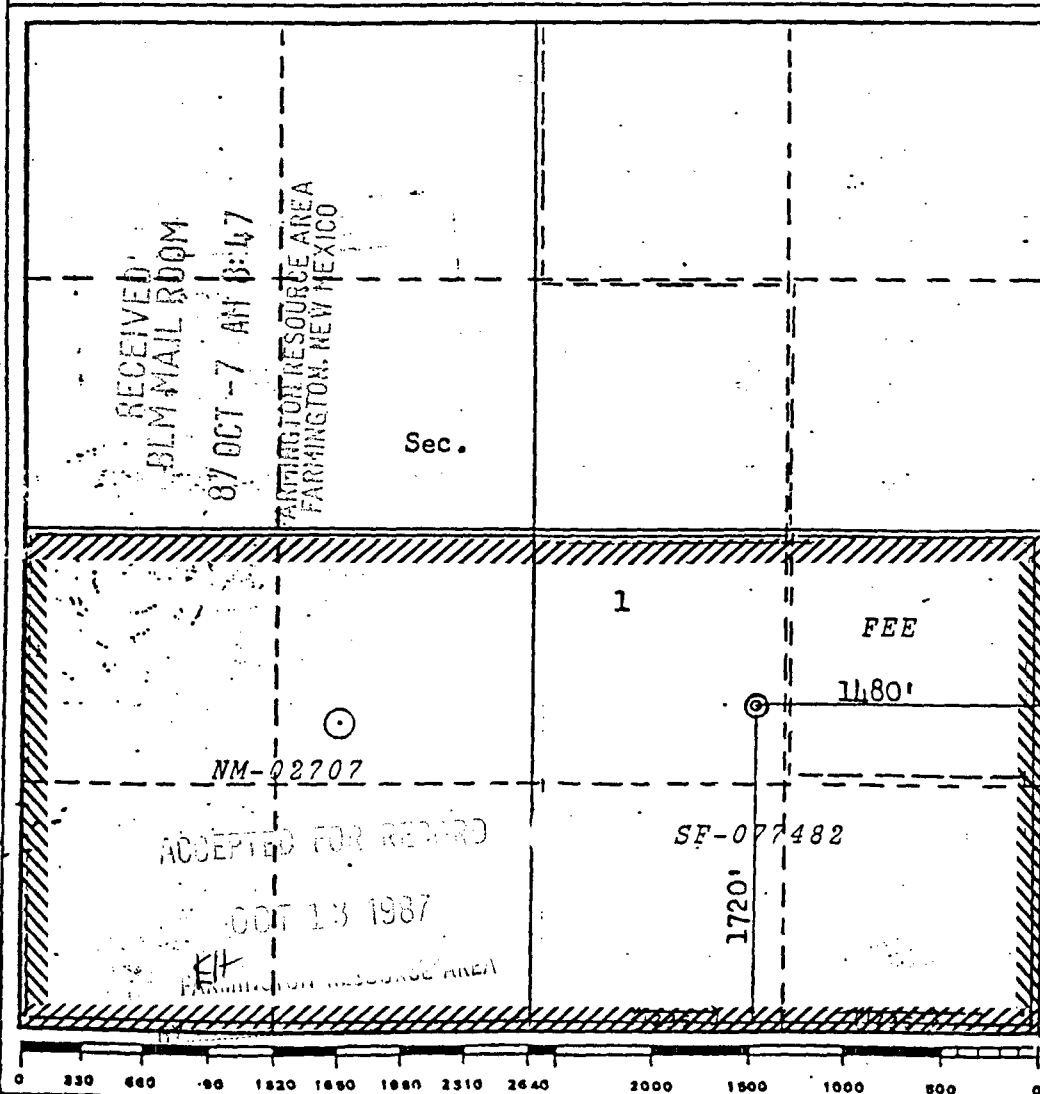
|                                                                                                                                |                                          |                              |                                        |                           |
|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------------------------|----------------------------------------|---------------------------|
| Operator<br><b>SOUTHLAND ROYALTY COMPANY</b>                                                                                   |                                          | Lease<br><b>TOMMY BOLACK</b> |                                        | Well No.<br><b>157M</b>   |
| Unit Letter<br><b>J</b>                                                                                                        | Section<br><b>1</b>                      | Township<br><b>30N</b>       | Range<br><b>12W</b>                    | County<br><b>San Juan</b> |
| Actual Footage Location of Well:<br><b>1720</b> feet from the <b>South</b> line and <b>1180</b> feet from the <b>East</b> line |                                          |                              |                                        |                           |
| Ground Level Elev.<br><b>5826</b>                                                                                              | Producing Formation<br><b>Mesa Verde</b> | Pool<br><b>Blanco</b>        | Dedicated Acreage:<br><b>320</b> Acres |                           |

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 Communitization

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

Position  
Drilling Clerk

Company  
Southland Royalty Company

Date  
10-1-87

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

January 1988

Registered Professional Engineer and/or Land Surveyor

*[Signature]*  
Fred B. Kerr Jr.

Certificate No.

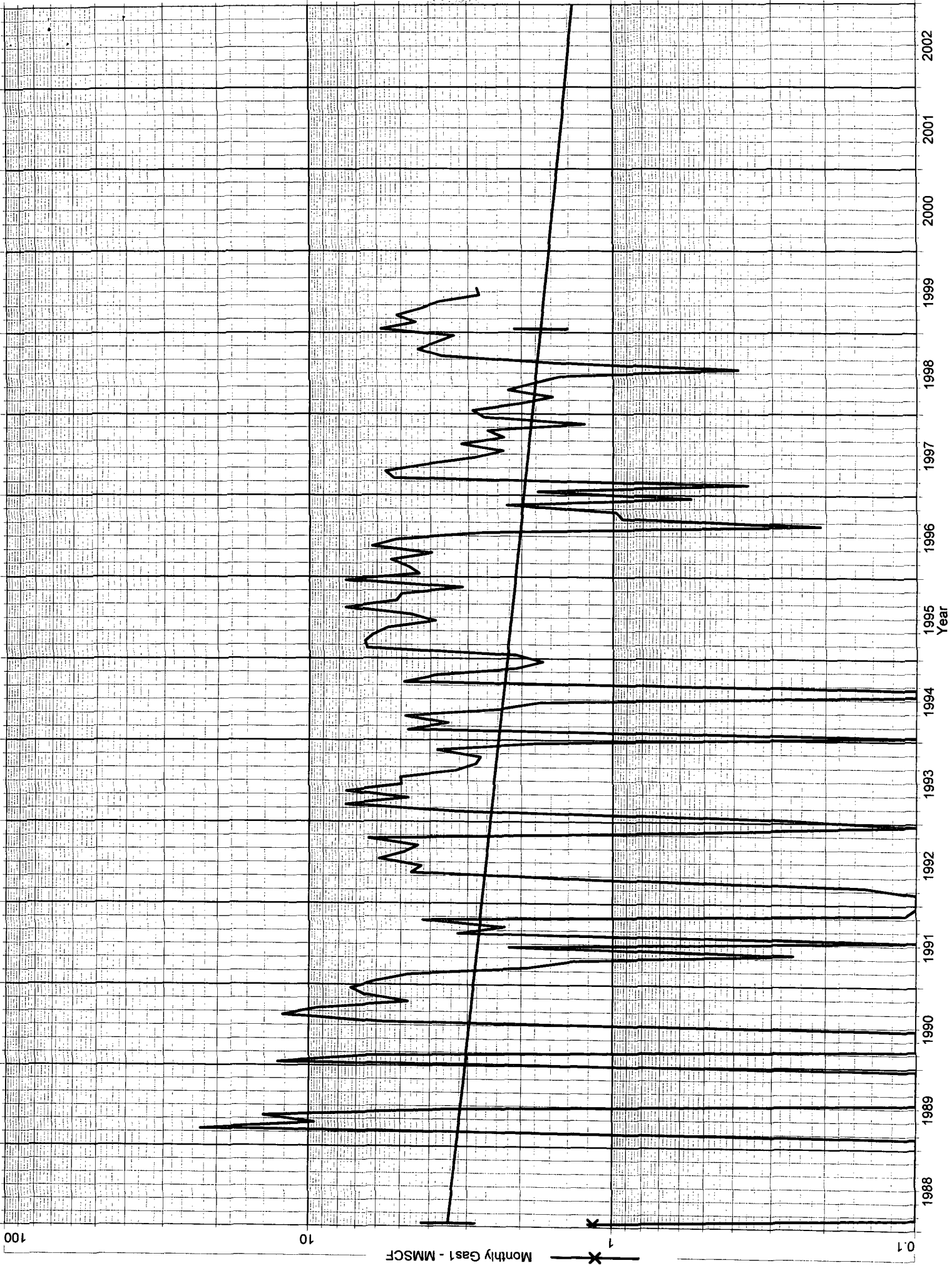
3950

OPERATOR

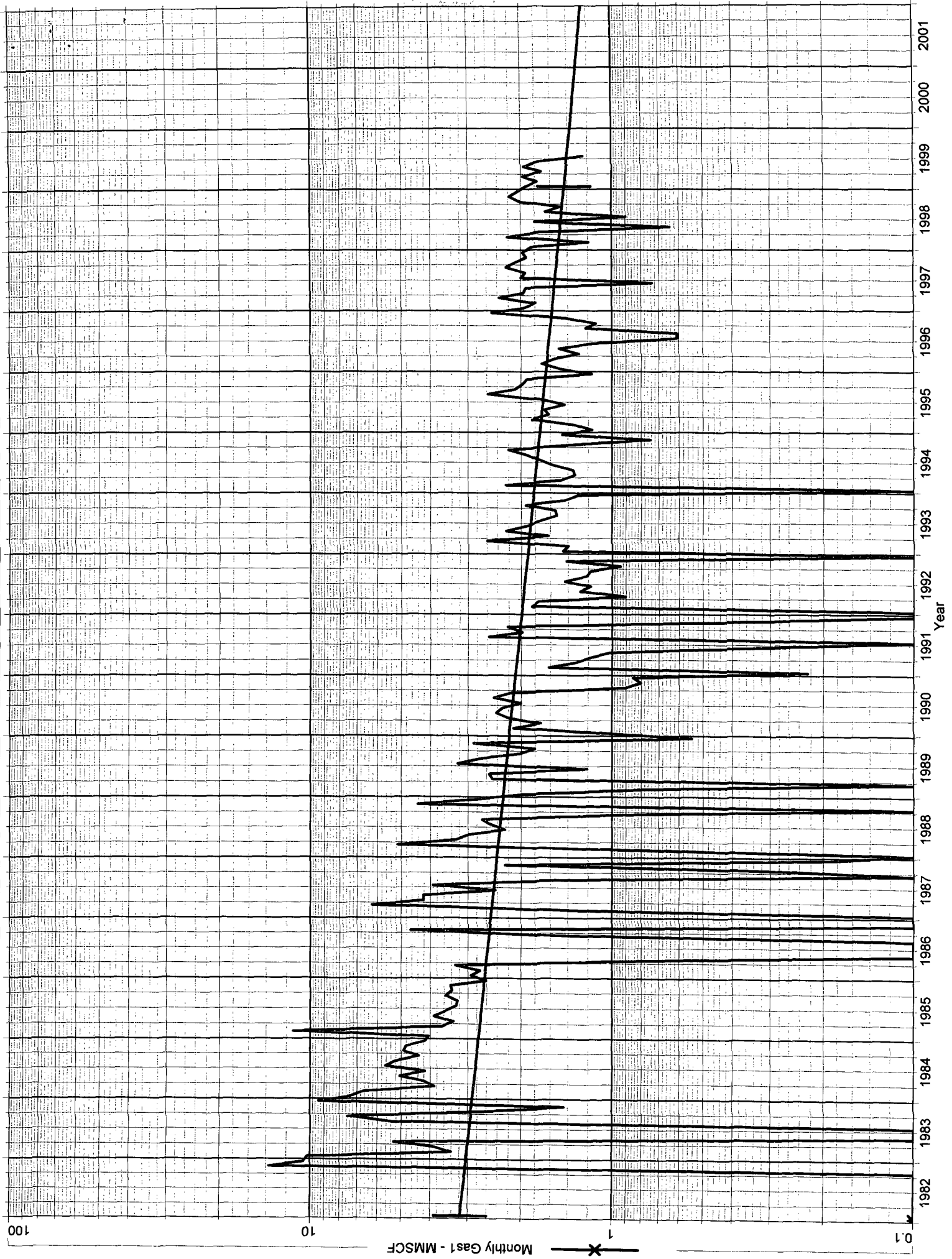
|    |                        | year | month | day | wh psi | cum prod |                                        |
|----|------------------------|------|-------|-----|--------|----------|----------------------------------------|
| MV | BOLACK TOMMY 1M/600702 | 1989 |       | 4   | 21     | 830      | original                               |
|    | BOLACK TOMMY 1M        | 1990 |       | 4   | 10     | 854      |                                        |
|    | BOLACK TOMMY 1M        | 1991 |       | 6   | 17     | 713      |                                        |
|    | BOLACK TOMMY 1M        | 1991 |       | 7   | 8      | 725      |                                        |
|    | BOLACK TOMMY 1M        | 1993 |       | 5   | 3      | 593      |                                        |
|    |                        |      |       |     |        | 244      |                                        |
|    |                        |      |       |     |        |          | 443.446 current estimate from P/Z data |
| DK | BOLACK TOMMY 1M/600703 | 1982 |       | 7   | 21     | 1,700.00 | original                               |
|    | BOLACK TOMMY 1M        | 1982 |       | 12  | 18     | 1,355.00 |                                        |
|    | BOLACK TOMMY 1M        | 1983 |       | 10  | 9      | 1,081.00 |                                        |
|    | BOLACK TOMMY 1M        | 1984 |       | 6   | 18     | 758      |                                        |
|    | BOLACK TOMMY 1M        | 1985 |       | 7   | 12     | 728      |                                        |
|    | BOLACK TOMMY 1M        | 1988 |       | 9   | 3      | 777      |                                        |
|    | BOLACK TOMMY 1M        | 1990 |       | 4   | 10     | 675      |                                        |
|    | BOLACK TOMMY 1M        | 1993 |       | 8   | 15     | 947      |                                        |
|    |                        |      |       |     |        | 695      |                                        |
|    |                        |      |       |     |        |          | 451.814 current estimate from P/Z data |

**Bolack Tommy #1M**  
**Bottom Hole Pressures**  
**Flowing and Static BHP**  
**Cullender and Smith Method**  
Version 1.0 1/14/98

| <b>Mesaverde</b>               |              | <b>Dakota</b>                  |               |
|--------------------------------|--------------|--------------------------------|---------------|
| <u><b>MV-Current</b></u>       |              | <u><b>DK-Current</b></u>       |               |
| GAS GRAVITY                    | <u>0.692</u> | GAS GRAVITY                    | <u>0.643</u>  |
| COND. OR MISC. (C/M)           | <u>M</u>     | COND. OR MISC. (C/M)           | <u>M</u>      |
| %N2                            | <u>0.28</u>  | %N2                            | <u>0.39</u>   |
| %CO2                           | <u>0.59</u>  | %CO2                           | <u>1.67</u>   |
| %H2S                           | <u>0</u>     | %H2S                           | <u>0</u>      |
| DIAMETER (IN)                  | <u>5.5</u>   | DIAMETER (IN)                  | <u>1.5</u>    |
| DEPTH (FT)                     | <u>4714</u>  | DEPTH (FT)                     | <u>6470</u>   |
| SURFACE TEMPERATURE (DEG F)    | <u>60</u>    | SURFACE TEMPERATURE (DEG F)    | <u>60</u>     |
| BOTTOMHOLE TEMPERATURE (DEG F) | <u>135</u>   | BOTTOMHOLE TEMPERATURE (DEG F) | <u>164</u>    |
| FLOWRATE (MCFPD)               | <u>0</u>     | FLOWRATE (MCFPD)               | <u>0</u>      |
| SURFACE PRESSURE (PSIA)        | <u>256</u>   | SURFACE PRESSURE (PSIA)        | <u>707</u>    |
| BOTTOMHOLE PRESSURE (PSIA)     | <u>287.2</u> | BOTTOMHOLE PRESSURE (PSIA)     | <u>822.6</u>  |
| <u><b>MV-Original</b></u>      |              | <u><b>DK-Original</b></u>      |               |
| GAS GRAVITY                    | <u>0.692</u> | GAS GRAVITY                    | <u>0.643</u>  |
| COND. OR MISC. (C/M)           | <u>M</u>     | COND. OR MISC. (C/M)           | <u>M</u>      |
| %N2                            | <u>0.28</u>  | %N2                            | <u>0.39</u>   |
| %CO2                           | <u>0.59</u>  | %CO2                           | <u>1.67</u>   |
| %H2S                           | <u>0</u>     | %H2S                           | <u>0</u>      |
| DIAMETER (IN)                  | <u>5.5</u>   | DIAMETER (IN)                  | <u>1.5</u>    |
| DEPTH (FT)                     | <u>4714</u>  | DEPTH (FT)                     | <u>6470</u>   |
| SURFACE TEMPERATURE (DEG F)    | <u>60</u>    | SURFACE TEMPERATURE (DEG F)    | <u>60</u>     |
| BOTTOMHOLE TEMPERATURE (DEG F) | <u>135</u>   | BOTTOMHOLE TEMPERATURE (DEG F) | <u>164</u>    |
| FLOWRATE (MCFPD)               | <u>0</u>     | FLOWRATE (MCFPD)               | <u>0</u>      |
| SURFACE PRESSURE (PSIA)        | <u>842</u>   | SURFACE PRESSURE (PSIA)        | <u>1712</u>   |
| BOTTOMHOLE PRESSURE (PSIA)     | <u>957.6</u> | BOTTOMHOLE PRESSURE (PSIA)     | <u>2025.6</u> |



244654060003.332 BOLACK TOMMY 1M (244654060003.332) Data: Jan. 1982-Aug. 1999 DIC





261293164135.538 BOLACK TOMMY 1M (261293164135.538) Data: Jan.1988-Jun.1999

Operator: BURLINGTON RESOURCES OG  
Field: BLANCO MESAVERDE (PRORATED GAS)

Zone:  
Type: Gas  
Group: None

P/Z FC 1 (P/Z Analysis)

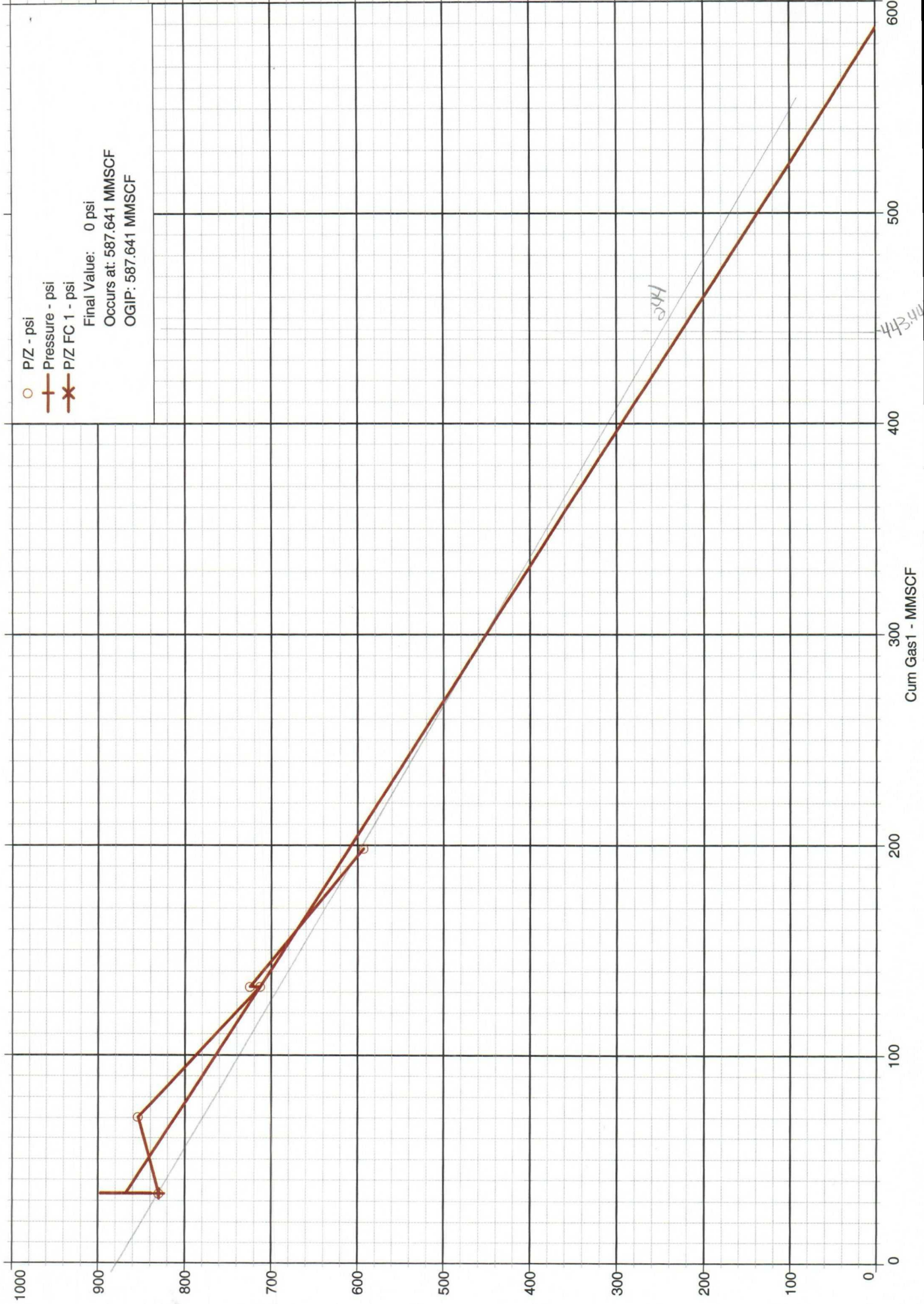
Based On: P/Z

Vs: Cum Gas1

Final Value: 0 psi

Occurs at: 587.641 MMSCF

Production Cums  
Oil: 0 MSTB  
Gas: 443.446 MMSCF  
Water: 0-MSTB  
Cond: 1.43686 MSTB





244654060003.332 BOLACK TOMMY 1M (244654060003.332) Data: Jan. 1982-Jun. 1999

Operator: BURLINGTON RESOURCES OG  
Field: BASIN DAKOTA (PRORATED GAS)

Zone:  
Type: Gas  
Group: None

Pressure FC 1 (P/Z Analysis)  
Based On: Pressure  
Vs: Cum Gas1  
Final Value: 0 psi  
Occurs at: 645.353 MMSCF

Production Cums  
Oil: 0 MSTB  
Gas: 451.815 MMSCF  
Water: 2.72262 MSTB  
Cond: 10.1411 MSTB



# Monthly Prod History (DM)

Tuesday, September 01, 1998 Through Tuesday, August 31, 1999

Select By : Completions

Pressure Base : None  
Units :  
Rounded (y/n) : No

Page No : 1

Report Number : R\_027

Print Date : 09/23/1999, 1:14:44 P

Sort By :

| PROD                      |      | DAYS |    |    | OIL    |        | GAS       |      | WATER |     | SUPP |
|---------------------------|------|------|----|----|--------|--------|-----------|------|-------|-----|------|
| MO.                       | TY   | ST   | PM | ON | PROD   | SOL    | PROD      | SOLD | INJ   | INJ |      |
| Well: BOLACK TOMMY 1M DK  |      |      |    |    |        |        |           |      |       |     |      |
| 10/98                     | PG   | P    | FL | 31 | 108.96 | 0.00   | 0         | 0    | 0     | 0   | 0.00 |
| 11/98                     | PG   | P    | FL | 29 | 3.46   | 0.00   | 2,181     | 0    | 13    | 0   | 0.00 |
| 12/98                     | PG   | P    | FL | 31 | 27.78  | 0.00   | 2,052     | 0    | 9     | 0   | 0.00 |
| Totals :                  | 1998 |      |    |    | 140.20 | 0.00   | 4,232.38  | 0.00 | 22.62 | 0   | 0.00 |
| 01/99                     | PG   | P    | FL | 31 | 11.19  | 42.44  | 1,930     | 0    | 9     | 0   | 0.00 |
| 02/99                     | PG   | P    | FL | 28 | 23.15  | 0.00   | 1,766     | 0    | 8     | 0   | 0.00 |
| 03/99                     | PG   | P    | FL | 31 | 18.51  | 0.00   | 1,972     | 0    | 9     | 0   | 0.00 |
| 04/99                     | PG   | P    | FL | 30 | 13.88  | 0.00   | 1,711     | 0    | 8     | 0   | 0.00 |
| 05/99                     | PG   | P    | FL | 31 | 18.51  | 0.00   | 1,960     | 0    | 9     | 0   | 0.00 |
| 06/99                     | PG   | P    | FL | 30 | 16.68  | 178.73 | 1,731     | 0    | 8     | 0   | 0.00 |
| 07/99                     | PG   | P    | FL | 28 | 10.45  | 0.00   | 1,238     | 0    | 6     | 0   | 0.00 |
| 08/99                     | PG   | P    | FL | 31 | 6.94   | 0.00   | 0         | 0    | 0     | 0   | 0.00 |
| Totals :                  | 1999 |      |    |    | 119.32 | 221.17 | 12,308.30 | 0.00 | 55.63 | 0   | 0.00 |
| Totals BOLACK TOMMY 1M DK |      |      |    |    | 259.52 | 221.17 | 16,540.68 | 0.00 | 78.25 | 0   | 0.00 |
| Well: BOLACK TOMMY 1M MV  |      |      |    |    |        |        |           |      |       |     |      |
| 10/98                     | PG   | P    | FL | 0  | 153.80 | 0.00   | 0         | 0    | 0     | 0   | 0.00 |
| 11/98                     | PG   | P    | FL | 30 | 8.10   | 0.00   | 3,823     | 0    | 0     | 0   | 0.00 |
| 12/98                     | PG   | P    | FL | 31 | 11.56  | 0.00   | 3,343     | 0    | 0     | 0   | 0.00 |
| Totals :                  | 1998 |      |    |    | 173.46 | 0.00   | 7,166.47  | 0.00 | 0.00  | 0   | 0.00 |
| 06/99                     | PG   | P    | FL | 30 | 0.00   | 0.00   | 2,755     | 0    | 0     | 0   | 0.00 |
| 07/99                     | PG   | P    | FL | 31 | 3.46   | 0.00   | 2,811     | 0    | 2     | 0   | 0.00 |
| 04/99                     | PG   | P    | FL | 30 | 16.17  | 0.00   | 4,313     | 0    | 0     | 0   | 0.00 |
| 05/99                     | PG   | P    | FL | 31 | 16.17  | 0.00   | 3,744     | 0    | 0     | 0   | 0.00 |
| 08/99                     | PG   | P    | FL | 31 | 16.17  | 0.00   | 0         | 0    | 0     | 0   | 0.00 |
| 01/99                     | PG   | P    | FL | 31 | 18.26  | 167.36 | 5,829     | 0    | 0     | 0   | 0.00 |
| 02/99                     | PG   | P    | FL | 28 | 2.32   | 0.00   | 4,469     | 0    | 0     | 0   | 0.00 |
| 03/99                     | PG   | P    | FL | 31 | 11.58  | 0.00   | 5,170     | 0    | 0     | 0   | 0.00 |
| Totals :                  | 1999 |      |    |    | 84.12  | 167.36 | 29,091.39 | 0.00 | 2.32  | 0   | 0.00 |
| Totals BOLACK TOMMY 1M MV |      |      |    |    | 257.58 | 167.36 | 36,257.86 | 0.00 | 2.32  | 0   | 0.00 |