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

APPLICATION FOR DOWNHOLE COMMINGLING

___ YES __X_ NO

| BURLINGTON RESOURCES OIL & GAS COMPANY PO BOX 4289, FARMINGTON, NM 87499 Operator Address | | | | | |
|---|--|---|---|--|--|
| GRENIER | 12M H 13 | 3-31N-12W | SAN JUAN | | |
| Lease | Well No. Unit Ltr | r Sec - Twp - Rge Spa | County cing Unit Lease Types: (check 1 or more) | | |
| OGRID NO14538 Property | Code18530 API NO | _30-045-XXXXX Fede | eralX , State, (and/or) Fee | | |
| The following facts are submitted in support of downhole commingling: | Upper Zone | Intermediate Zone | Lower Zone | | |
| Pool Name and Pool Code | BLANCO MESAVERDE - 72319 | | BASIN DAKOTA - 71599 | | |
| Top and Bottom of Pay Section (Perforations) | WILL BE SUPPLIED UPON COMPLETION | | WILL BE SUPPLIED UPON COMPLETION | | |
| Type of production (Oil or Gas) | GAS | ECENVED. | GAS | | |
| Method of Production (Flowing or Artificial Lift) | FLOWING | DEC 3 U 1939 | FLOWING | | |
| 5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: | | IL COM. DAY. | a. ^(Current) 866 psi (see attachment) | | |
| All Gas Zones: Estimated Or Measured Original | b. ^(Oriiginal) | | b. ^(Oriiginal) | | |
| | 915 psi (see attachment) | | 2360 psi (see attachment) | | |
| 6. Oil Gravity (EAPI) or Gas BTU Content | BTU 1207 | | BTU 1177 | | |
| 7. Producing or Shut-In? | SHUT-IN | | SHUT-IN | | |
| | NO | | YES | | |
| Production Marginal? (yes or no) | Date: N/A | Date: N/A | Date: N/A | | |
| If Shut-In, give date and oil/gas/ water rates of last production | Rates: | Rates: | Rates: | | |
| Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data | Date: N/A | Date: N/A | Date: N/A | | |
| If Producing, give date andoil/gas/ water rates of recent test (within 60 days) | Rates: | Rates: | Rates: | | |
| 8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%) | Oil: Gas: % WILL BE SUPPLIED UPON COMPLETION | Oil: Gas: % WILL BE SUPPLIED UPON COMPLETION | Oil: Gas: % WILL BE SUPPLIED UPON COMPLETION | | |
| 9. If allocation formula is based submit attachments with supp | upon something other than cur | rent or past production, or is be ethod and providing rate project | ased upon some other method, | | |
| 10. Are all working, overriding, and If not, have all working, overri | | | | | |
| 11. Will cross-flow occur?X_' flowed production be recovered. | Yes No | compatible, will the formations ula be reliableX_ Yes I | not be damaged, will any cross- 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? YesX 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 applicationX_Yes No | | | | | |
| 15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). | | | | | |
| * Production curve fo * For zones with no p * Data to support allo | r each zone for at least one yea production history, estimated pro- position method or formula | spacing unit and acreage dedic ar. (If not available, attach exploduction rates and supporting d interests for uncommon interest uired to support commingling. | anation.) ata. | | |
| I hereby certify that the information | on above is true and complete to | o the best of my knowledge and | d belief. | | |
| SIGNATURE Chype In | letchu TITLE | E PRODUCTION ENGINEER | DATE: 12/29/99 | | |
| TYPE OR PRINT NAME B. WAYN | IE FLETCHER TELEI | PHONE NO. 505-326-9700 | | | |

District I PO Box 1980, Hobbs, NM 88241-1980

Oistrict II PO Drawer DD, Antesia, NM 88211-0719

Oistrict III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV PO Box 2088, Santa Fe, NM 87504-2088 State of New Mexico
Energy, Minerals & Natural Resources Department

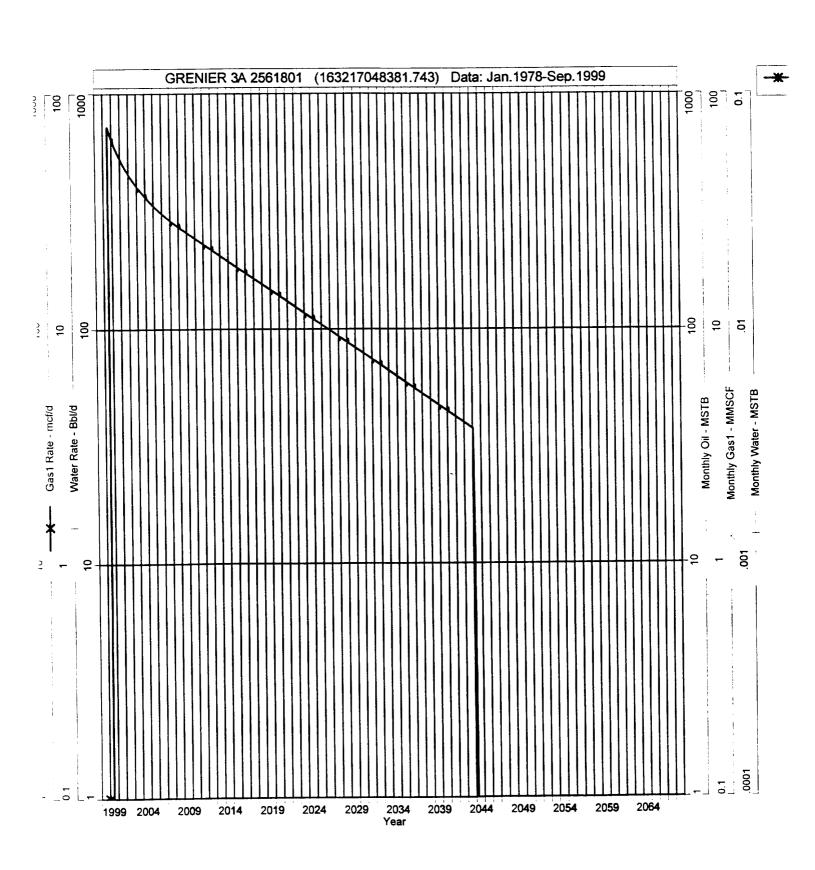
OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Form C-102 Revised February 21, 1994 Instructions on back

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

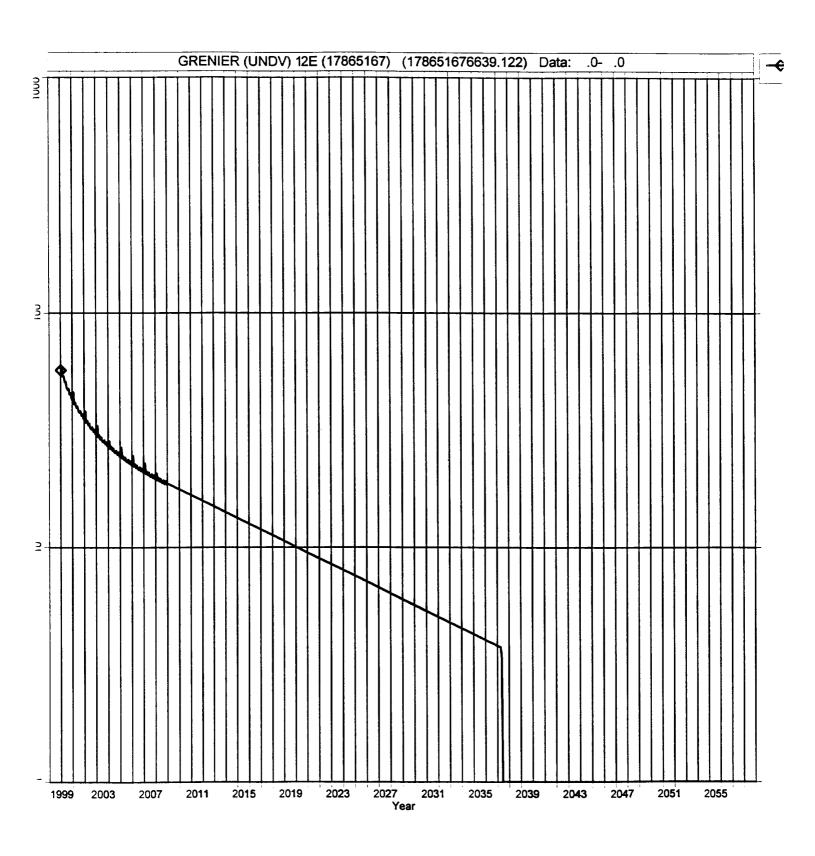
AMENDED REPORT

| | | | WELL | LOCAT | DA DNA NOI | CREAGE D | EDICA | ATION PL | AT | | |
|--------------------|---------------|--------------------------|--------------------------|--------------------|----------------------------|--|------------------|--|---------------------------------------|---|--------------|
| 1,4 | PI Number | | | 'Pool Co | de | - | | 'Pool Name | | | |
| 'Property | Code | | | | Property GREN | | | | | *Well | Number PM |
| 'OGRID | No. | | BURLI | NGTON | Operator RESOURCES | | | | | | |
| | | | | | ¹⁰ Surface | Location | | | | | |
| UL or lot no. | Section 13 | Township 31N | Fange 12W | Let Ion | Feet from the | NORTH | l | Feet from the | East/West 1 | | SAN JUAN |
| UL or lot no. | Section | 11 [Township | Bottom Range | Hole | Location I | f Differe | | rom Surf | ace East/west | line | County |
| | | | | | | | | - | | | |
| 12 Dedicated Acres | 5 | ¹³ Joint or I | nfill ¹⁴ Cons | solidation Cod | e ¹⁵ Order No. | | | | | | |
| NO ALLO | WABLE W | ILL BE OR / | ASSIGNE A NON-S | D TO TH TANDARD | HIS COMPLETI UNIT HAS B | ON UNTIL EEN APPRO | ALL IN VED BY | , THE DIAT | 210N | | |
| 6 | 4 | | 49 OT 3 | 13 | LOT 2 | LOT 1 ,00b LOT 1,00b LOT 1 | 665 5 — | Signatur Printed Title Date 18 SURV I hereby cer was plotted or under my correct to | Name Name Name MBER 1, | ERTIF ell location s of actual that the s | |
| 2683.56 | 26 | 74.32 | | | | L0 | т 7 | Date of signature a | N N N N N N N N N N N N N N N N N N N | EXICO 57 | 6857 |

Grenier #12M
Expected Production
Mesaverde Formation



Grenier #12M
Expected Production
Dakota Formation



Grenier #12M

Bottom Hole Pressures Flowing and Static BHP Cullender and Smith Method Version 1.0 3/13/94

| Mesaverde | Dakota | Dakota | | | |
|--|--|--|--|--|--|
| MV-Current | DK-Current | | | | |
| GAS GRAVITY COND. OR MISC. (C/M) %N2 %CO2 %H2S DIAMETER (IN) DEPTH (FT) SURFACE TEMPERATURE (DEG F) BOTTOMHOLE TEMPERATURE (DEG F) SURFACE PRESSURE (PSIA) BOTTOMHOLE PRESSURE (PSIA) BOTTOMHOLE PRESSURE (PSIA) SURFACE PSIA BOTTOMHOLE PRESSURE (PSIA) 524.6 | GAS GRAVITY COND. OR MISC. (C/M) %N2 %CO2 %H2S DIAMETER (IN) DEPTH (FT) SURFACE TEMPERATURE (DEG F) BOTTOMHOLE TEMPERATURE (DEG F) FLOWRATE (MCFPD) SURFACE PRESSURE (PSIA) BOTTOMHOLE PRESSURE (PSIA) | 0.695 C 0.27 2.07 0 2.375 7137 60 198 0 726 | | | |
| MV-Original | DK-Original | | | | |
| GAS GRAVITY COND. OR MISC. (C/M) %N2 %CO2 %H2S DIAMETER (IN) DEPTH (FT) SURFACE TEMPERATURE (DEG F) BOTTOMHOLE TEMPERATURE (DEG F) SURFACE PRESSURE (PSIA) BOTTOMHOLE PRESSURE (PSIA) 915.0 | GAS GRAVITY COND. OR MISC. (C/M) %N2 %CO2 %H2S DIAMETER (IN) DEPTH (FT) SURFACE TEMPERATURE (DEG F) BOTTOMHOLE TEMPERATURE (DEG F) FLOWRATE (MCFPD) SURFACE PRESSURE (PSIA) BOTTOMHOLE PRESSURE (PSIA) | 0.695 C 0.27 2.07 0 2.375 7137 60 198 0 1935 | | | |

Grenier #12M

Mesaverde Offset

| Well Name | <u>Date</u> | <u>Pressure</u> |
|------------|-------------|-----------------|
| GRENIER 3A | 04/07/77 | 794 |
| GRENIER 3A | 04/02/78 | 620 |
| GRENIER 3A | 08/24/80 | 528 |
| GRENIER 3A | 07/24/84 | 510 |
| GRENIER 3A | 08/22/84 | 532 |
| GRENIER 3A | 07/16/86 | 513 |
| GRENIER 3A | 06/10/89 | 479 |
| GRENIER 3A | 05/15/91 | 447 |
| GRENIER 3A | 07/15/91 | 459 |
| | | |

Grenier #12M Dakota Offset

| Well Name | <u>Date</u> | Pressure |
|------------|-------------|----------|
| GRENIER 11 | 07/10/62 | 1,935 |
| GRENIER 11 | 04/17/70 | 747 |
| GRENIER 11 | 06/17/71 | 699 |
| GRENIER 11 | 04/17/72 | 669 |
| GRENIER 11 | 05/01/73 | 654 |
| GRENIER 11 | 04/17/75 | 686 |
| GRENIER 11 | 06/17/76 | 714 |
| GRENIER 11 | 05/16/77 | 670 |
| GRENIER 11 | 05/01/79 | 627 |
| GRENIER 11 | 05/01/80 | 717 |
| GRENIER 11 | 06/24/81 | 740 |
| GRENIER 11 | 08/24/83 | 847 |
| GRENIER 11 | 05/29/85 | 818 |
| GRENIER 11 | 01/13/88 | 735 |
| GRENIER 11 | 06/07/90 | 797 |
| GRENIER 11 | 04/01/95 | 744 |
| GRENIER 11 | 03/31/94 | 726 |

Grenier #12M Mesaverde / Dakota 31N – 12W – 13

