

|                 |          |              |                   |          |  |
|-----------------|----------|--------------|-------------------|----------|--|
| DATE IN 4.18.12 | SUSPENSE | ENGINEER WUJ | LOGGED IN 4.18.12 | TYPE DHC | APP NO. <del>12105</del> <del>2162</del> |
|-----------------|----------|--------------|-------------------|----------|--|

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION  
 - Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505



XTO 5380

RECEIVED OOD # BREACHE 58

**ADMINISTRATIVE APPLICATION CHECKLIST**

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

**Application Acronyms:**

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [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 - Simultaneous Dedication  
 NSL  NSP  SD

A-3-26N-6W

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

[D] Other: Specify \_\_\_\_\_

- [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] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

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

KRISTEN D. LYNCH  
 Print or Type Name

Signature

REGULATORY ANALYST  
 Title

4/17/12  
 Date

kristen\_lynch@xtoenergy.com  
 e-mail Address

District I  
1625 N. French Drive, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised June 10, 2003

District II  
1301 W. Grand Avenue, Artesia, NM 88210

**Oil Conservation Division**  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

APPLICATION TYPE

District III  
1000 Rio Brazos Road, Aztec, NM 87410

Single Well

District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

Establish Pre-Approved Pools

EXISTING WELLBORE

Yes  No

**APPLICATION FOR DOWNHOLE COMMINGLING**

XTO ENERGY INC.

382 CR 3100

AZTEC, NM 87410

Operator  
BREECH E

#58

Address  
A Sec 3 T26N R6W

DHC-4559

RIO ARRIBA

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 5380 Property Code 304753 API No 30-039-06737 Lease Type:  Federal  State  Fee

| DATA ELEMENT   | UPPER ZONE  | INTERMEDIATE ZONE                                     | LOWER ZONE  |
|--|---|---|---|
| Pool Name<br>Basin DK/Blanco MV/ Otero CH  | <del>BLANCO MESA VERDE</del><br>OK                | BASIN MANCOS  | BASIN DAKOTA                                      |
| Pool Code  | 72319   | 97232   | 71599   |
| Top and Bottom of Pay Section<br>(Perforated or Open-Hole Interval)  | 4824' - 5429'                                     | 6638' - 6752'   | 7308' - 7551'                                     |
| Method of Production<br>(Flowing or Artificial Lift)   | FLOWING   | FLOWING   | FLOWING   |
| Bottomhole Pressure<br>(Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)       | 576   | 964   | 1479 OK   |
| Oil Gravity or Gas BTU<br>(Degree API or Gas BTU)  |   |   |   |
| Producing, Shut-In or<br>New Zone  | <del>EXISTING</del><br>NEW ZONE                   | <del>New Zone</del><br>PRODUCING                      | PRODUCING   |
| Date and Oil/Gas/Water Rates of<br>Last Production.<br>(Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.) | Date: 2/1/2012<br>Rates 0 BO/719 MCF/ 0 BW        | →   | Date: 2/1/2012<br>Rates: 0 BO/1224 MCF/0 BW       |
| Fixed Allocation Percentage<br>(Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)                     | Oil      Gas      Water<br>0 %      15 %      0 % | Oil      Gas      Water<br>100 %      60 %      100 % | Oil      Gas      Water<br>0 %      25 %      0 % |

**ADDITIONAL DATA**

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes  No   
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes  No

Are all produced fluids from all commingled zones compatible with each other? Yes  No

Will commingling decrease the value of production? Yes  No

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes  No

NMOCD Reference Case No. applicable to this well: \_\_\_\_\_

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, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

**PRE-APPROVED POOLS**

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE \_\_\_\_\_ TITLE REGULATORY ANALYST DATE 4/10/12  
TYPE OR PRINT NAME KRISTEN D. LYNCH TELEPHONE NO. ( 505 ) 333-3206

E-MAIL ADDRESS Kristen\_Lynch@xtoenergy.com

## Jones, William V., EMNRD

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**From:** Jones, William V., EMNRD  
**Sent:** Wednesday, May 09, 2012 10:31 AM  
**To:** 'kristen\_lynch@xtoenergy.com'; 'Lorri\_Bingham@xtoenergy.com'  
**Cc:** Brooks, David K., EMNRD  
**Subject:** Downhole Commingle Applications from XTO in Farmington

Hello Kristen and Lorri:

I am processing 5 of your applications and noticed a couple of things.

- a. There are 3 of these applications that involve different sizes of spacing units, yet interests are shown as "Identical". While it is true these could be identical, it seems odd and wanted to ask if you have checked with your Land department to confirm?
- b. With future applications, please send a copy of the C-102 form for each Well-Completion being commingled. In other words if you are commingling the Otero-Chacra with the Basin-Dakota that well should have a C-102 for each of these pools.
- c. The following three applications have perforation ranges outside the 150% allowed – and reservoir pressures should have been sent with the applications for each Pool in that well.
  - a. 30-039-06737
  - b. 30-045-31913
  - c. 30-045-30819

Please ask your engineer to estimate the Static Reservoir Pressure for each pool being commingled in those three wells and send me the pressures by email. I will then update the C-107A forms and process the permits.

Take Care and have a wonderful day,

William V Jones, P.E.  
Engineering, Oil Conservation Division  
1220 South St. Francis Drive, Santa Fe, NM 87505  
Tel 505.476.3448 ~ Fax 505.476.3462



**Brech E 58 - Downhole Commingle (BHP and Fracture Parting Pressure Calculation)**

|   | <b>Mesaverde</b> | <b>Mancos</b> | <b>Dakota</b> |
|---|------------------|---------------|---------------|
| Gas Specific Gravity                    | 0.694            | 0.681         | 0.698         |
| Depth to Mid Perf (ft)                  | 5295             | 6600          | 7340          |
| Shut in Casing Pressure (psia)          | 591              | 813           | 1209          |
| Surface Temperature (deg F)             | 60               | 60            | 60            |
| Bottom Hole Temperature (deg F)         | 136              | 139           | 150           |
|   |                  |               |               |
| <b>Static BHP (psia)</b>                | <b>676</b>       | <b>964</b>    | <b>1479</b>   |
|   |                  |               |               |
| <b>Fracture Parting Pressure (psia)</b> | <b>3442</b>      | <b>4290</b>   | <b>4771</b>   |

**Breech E 58 - Allocations**

*Wells Only Producing from the Mancos Reservoir within the 9 Section surrounding the Breech E 58 drilled after 2005*

| LEASE     | NO.        | RESERVOIR | Section | Township | Range | FIELD | OPERATOR   | 1st PROD | LAST PROD | DAYS ON | CUMUL          | CUMUL     | CUMUL       | AVERAGE     | AVERAGE     | AVERAGE       |  |
|-----------|------------|-----------|---------|----------|-------|-------|------------|----------|-----------|---------|----------------|-----------|-------------|-------------|-------------|---------------|--|
|           |            |           |         |          |       |       |            |          |           |         | OIL (BBL)      | GAS (MCF) | WATER (BBL) | OIL (BBL/D) | GAS (MCF/D) | WATER (BBL/D) |  |
| BREECH D  | 885E (NPI) | MANCOS    | 11      | 26 N     | 6 W   | BASIN | XTO ENERGY | 20060131 | 20111201  | 2198    | 4175.00        | 327171.00 | 248.00      | 1.90        | 148.85      | 0.11          |  |
| STATE COM | 113E (NPI) | MANCOS    | 2       | 26 N     | 6 W   | BASIN | XTO ENERGY | 20060430 | 20111201  | 1969    | 271.00         | 93422.00  | 807.00      | 0.14        | 47.45       | 0.31          |  |
| BREECH F  | 16 (NPI)   | MANCOS    | 33      | 27 N     | 6 W   | BASIN | XTO ENERGY | 20090830 | 20111201  | 676     | 4723.00        | 144943.00 | 1036.00     | 5.39        | 165.46      | 1.18          |  |
| BREECH F  | 2 (NPI)    | MANCOS    | 33      | 27 N     | 6 W   | BASIN | XTO ENERGY | 20100930 | 20111201  | 518     | 361.00         | 46094.00  | 195.00      | 0.70        | 88.98       | 0.38          |  |
| BREECH A  | 158 (NPI)  | MANCOS    | 10      | 26 N     | 6 W   | BASIN | XTO ENERGY | 20110430 | 20111201  | 284     | 424.00         | 33571.00  | 1314.00     | 1.49        | 118.21      | 4.63          |  |
| BREECH F  | 4M (NPI)   | MANCOS    | 33      | 27 N     | 6 W   | BASIN | XTO ENERGY | 20110930 | 20111201  | 153     | 116.00         | 9117.00   | 91.00       | 0.76        | 59.59       | 0.59          |  |
|           |            |           |         |          |       |       |            |          |           |         | <b>Average</b> |           |             |             |             |               |  |

**Breech E 58 Current Production**

| LEASE    | NO. | RESERVOIR | Section | Township | Range | FIELD  | OPERATOR   | 12 MONTH AVERAGE OF LATEST PROD |             |               |
|----------|-----|-----------|---------|----------|-------|--------|------------|---------------------------------|-------------|---------------|
|          |     |           |         |          |       |        |            | OIL (BBL/D)                     | GAS (MCF/D) | WATER (BBL/D) |
| BREECH E | 58  | DAKOTA    | 3       | 26 N     | 6 W   | BASIN  | XTO ENERGY | 0.00                            | 43.57       | 0.00          |
| BREECH E | 58  | MESAVERDE | 3       | 26 N     | 6 W   | BLANCO | XTO ENERGY | 0.00                            | 25.58       | 0.00          |

**Allocations**

|              | Oil         | Gas         | Water       |
|--------------|-------------|-------------|-------------|
| Mancos       | 100%        | 60%         | 100%        |
| Dakota       | 0%          | 25%         | 0%          |
| Mesaverde    | 0%          | 15%         | 0%          |
| <b>Total</b> | <b>100%</b> | <b>100%</b> | <b>100%</b> |