| DATE IN 8/29/03 | SUSPENSE 9/12/03 | ENGINEER BRC | LOGGED IN | TYPE DHC | APP NO. PLR0324130212 |
|---|---|---|---|---|---|

ABOVE THIS LINE FOR DIVISION USE ONLY

# NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505

3192

# 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]**

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AUG 28 2003
Oil Conservation Division

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

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ 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

[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.**

| NANCY OLTMANNS | Nancy Oltmanns | Sr. Staff Specialist | 8-27-03 |
|---|---|---|---|
| Print or Type Name | Signature | Title | Date |

NOLTMANNS@br-inc.com
e-mail Address

District I
1625 N. French Drive, Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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

**APPLICATION FOR DOWNHOLE COMMINGLING**

Form C-107A
Revised May 15, 2000

APPLICATION TYPE
___Single Well
___Establish Pre-Approved Pools
EXISTING WELLBORE
___Yes __X__No

**BURLINGTON RESOURCES OIL & GAS COMPANY PO BOX 4289, FARMINGTON, NM 87499**

| Operator | | Address | |
|---|---|---|---|
| **Cain** | **22M** | **B-31-29N-9W** | **San Juan** |
| Lease | Well No. | Unit Letter-Section-Township-Range | County |

OGRID No. __14538__ Property Code__18487____ API No._30-045-31685____Lease Type: __X__Federal ____State ____Fee

| DATA ELEMENT | UPPER ZONE | INTERMEDIATE ZONE | LOWER ZONE |
|---|---|---|---|
| Pool Name | OTERO CHACRA | BLANCO MESAVERDE | BASIN DAKOTA |
| | 82329 | 72319 | 71599 |
| Top and Bottom of Pay Section (Perforated or Open-Hole Interval) | WILL BE SUPPLIED UPON COMPLETION | WILL BE SUPPLIED UPON COMPLETION | WILL BE SUPPLIED UPON COMPLETION |
| Method of Production (Flowing or Artificial Lift) | New Zone | New Zone | New Zone |
| Bottomhole Pressure (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) | Original – 627 psi From San Juan 20B offset (see attachment) | Original – 647 psi From San Juan 20B offset (see attachment) | Original – 829 psi From San Juan 20B offset (see attachment) |
| Oil Gravity or Gas BTU (Degree API or Gas BTU) | BTU 1278 from San Juan 20B offset | BTU 1278 from San Juan 20B offset | BTU 1278 from San Juan 20B offset |
| Producing, Shut-In or New Zone | New Zone | New Zone | New Zone |
| Date 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: |
| Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.) | WILL BE SUPPLIED UPON COMPLETION | WILL BE SUPPLIED UPON COMPLETION | WILL BE SUPPLIED UPON COMPLETION |

## ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes __X__ No_____

Are all produced fluids from all commingled zones compatible with each other? Yes __X__ No_____

Will commingling decrease the value of production? Yes_____ No__X__

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 __X__ 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.
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 Leonard Biemer TITLE Reservior Engineer DATE 8/26/03
nxo
TYPE OR PRINT NAME Leonard Biemer TELEPHONE NO. ( 505 ) 326-9700

obbs, NM 88241-1980

DD, Artesia, NM 88211-0719

ct III
Rio Brazos Rd., Aztec, NM 87410

istrict 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 LOCATION AND ACREAGE DEDICATION PLAT

| 1 API Number | 2 Pool Code | 3 Pool Name |
|---|---|---|
| 30-045- | 72319/71599/82329 | Blanco Mesaverde/Basin Dakota/Otero Chacra |

| 4 Property Code | 5 Property Name | 6 Well Number |
|---|---|---|
| 18487 | CAIN | 22M |

| 7 OGRID No. | 8 Operator Name | 9 Elevation |
|---|---|---|
| 14538 | BURLINGTON RESOURCES OIL & GAS COMPANY | 5776' |

## 10 Surface Location

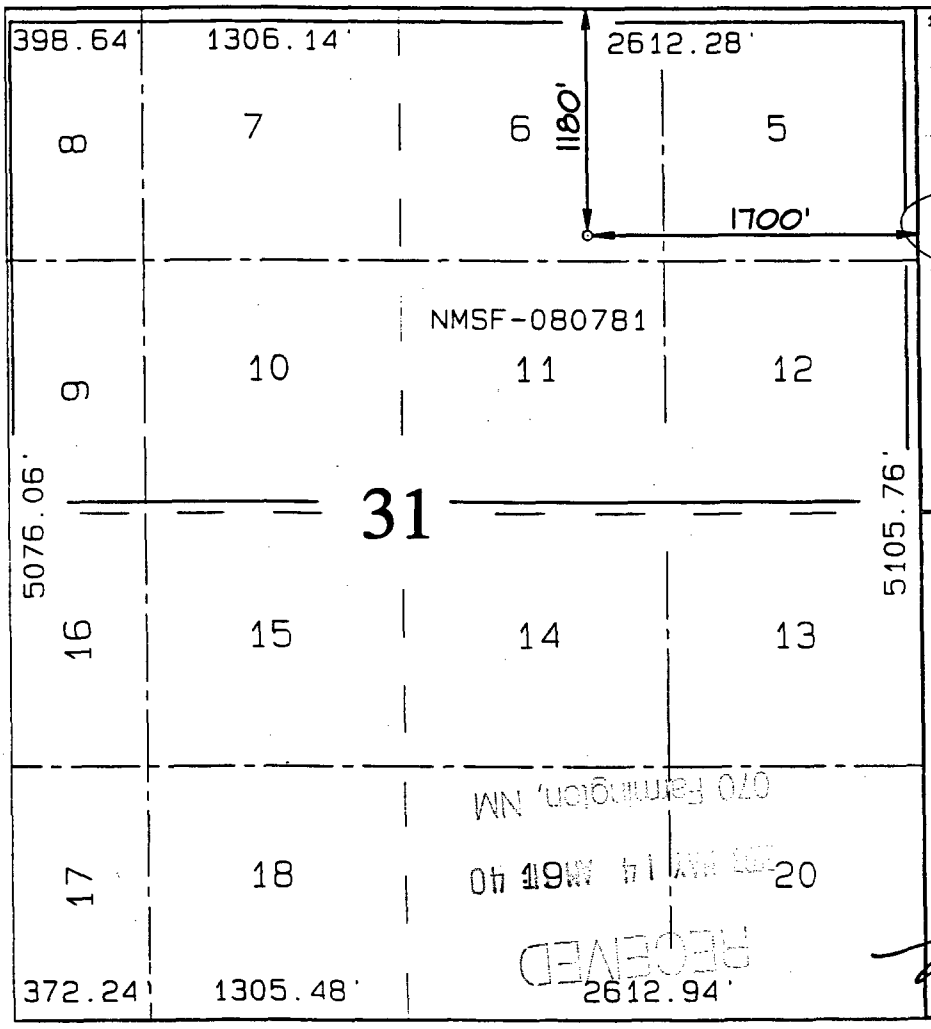
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| B | 31 | 29N | 9W | | 1180 | NORTH | 1700 | EAST | SAN JUAN |

## 11 Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| 12 Dedicated Acres | 13 Joint or Infill | 14 Consolidation Code | 15 Order No. |
|---|---|---|---|
| Cha: NE/152.74<br>MV/DK: N/251.72 | | | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION




## 17 OPERATOR CERTIFICATION

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

Signature: Peggy Cole

Peggy Bradfield
Printed Name

Regulatory Administrator
Title

3-13-03
Date

## 18 SURVEYOR CERTIFICATION

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 belief.

JULY 21, 1998
Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

6857
Certificate Number

070 Farmington, NM

RECEIVED

# Cain #22M (offset San Juan 20B)
## Bottom Hole Pressures
## Flowing and Static BHP
## Cullender and Smith Method
Version 1.0 1/14/98

| Chacra | | Mesaverde | |
|---|---|---|---|
| **CH-Current** | | **MV-Current** | |
| GAS GRAVITY | 0 | GAS GRAVITY | 0 |
| COND. OR MISC. (C/M) | C | COND. OR MISC. (C/M) | C |
| %N2 | 0 | %N2 | 0.00 |
| %CO2 | 0 | %CO2 | 0 |
| %H2S | 0 | %H2S | 0 |
| DIAMETER (IN) | 0 | DIAMETER (IN) | 0 |
| DEPTH (FT) | 0 | DEPTH (FT) | 0 |
| SURFACE TEMPERATURE (DEG F) | 0 | SURFACE TEMPERATURE (DEG F) | 0 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 0 | BOTTOMHOLE TEMPERATURE (DEG F) | 0 |
| FLOWRATE (MCFPD) | 0 | FLOWRATE (MCFPD) | 0 |
| SURFACE PRESSURE (PSIA) | 0 | SURFACE PRESSURE (PSIA) | 0 |
| BOTTOMHOLE PRESSURE (PSIA) | #DIV/0! | BOTTOMHOLE PRESSURE (PSIA) | #DIV/0! |
| **CH-Original** | | **MV-Original** | |
| GAS GRAVITY | 0.744 | GAS GRAVITY | 0.744 |
| COND. OR MISC. (C/M) | C | COND. OR MISC. (C/M) | C |
| %N2 | 0.004 | %N2 | 0.00 |
| %CO2 | 0.010 | %CO2 | 0.01 |
| %H2S | 0 | %H2S | 0 |
| DIAMETER (IN) | 4.5 | DIAMETER (IN) | 4.5 |
| DEPTH (FT) | 3230 | DEPTH (FT) | 4427 |
| SURFACE TEMPERATURE (DEG F) | 60 | SURFACE TEMPERATURE (DEG F) | 60 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 99 | BOTTOMHOLE TEMPERATURE (DEG F) | 119.3 |
| FLOWRATE (MCFPD) | 0 | FLOWRATE (MCFPD) | 0 |
| SURFACE PRESSURE (PSIA) | 570 | SURFACE PRESSURE (PSIA) | 570 |
| BOTTOMHOLE PRESSURE (PSIA) | 626.9 | BOTTOMHOLE PRESSURE (PSIA) | 647.3 |

# Cain #22M (offset San Juan 20B)
## Bottom Hole Pressures
## Flowing and Static BHP
## Cullender and Smith Method
Version 1.0 1/14/98

### Dakota

#### DK-Current

| | |
|---|---|
| GAS GRAVITY | 0 |
| COND. OR MISC. (C/M) | C |
| %N2 | 0 |
| %CO2 | 0 |
| %H2S | 0 |
| DIAMETER (IN) | 0 |
| DEPTH (FT) | 0 |
| SURFACE TEMPERATURE (DEG F) | 0 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 0 |
| FLOWRATE (MCFPD) | 0 |
| SURFACE PRESSURE (PSIA) | 0 |
| BOTTOMHOLE PRESSURE (PSIA) | #DIV/0! |

| | |
|---|---|
| GAS GRAVITY | 0 |
| COND. OR MISC. (C/M) | C |
| %N2 | 0.00 |
| %CO2 | 0 |
| %H2S | 0 |
| DIAMETER (IN) | 0 |
| DEPTH (FT) | 0 |
| SURFACE TEMPERATURE (DEG F) | 0 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 0 |
| FLOWRATE (MCFPD) | 0 |
| SURFACE PRESSURE (PSIA) | 0 |
| BOTTOMHOLE PRESSURE (PSIA) | #DIV/0! |

#### DK-Original

| | |
|---|---|
| GAS GRAVITY | 0.744 |
| COND. OR MISC. (C/M) | C |
| %N2 | 0.0039 |
| %CO2 | 0.001 |
| %H2S | 0 |
| DIAMETER (IN) | 2.375 |
| DEPTH (FT) | 6595 |
| SURFACE TEMPERATURE (DEG F) | 60 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 168 |
| FLOWRATE (MCFPD) | 0 |
| SURFACE PRESSURE (PSIA) | 690 |
| BOTTOMHOLE PRESSURE (PSIA) | 829.2 |

| | |
|---|---|
| GAS GRAVITY | 0 |
| COND. OR MISC. (C/M) | C |
| %N2 | 0.00 |
| %CO2 | 0 |
| %H2S | 0 |
| DIAMETER (IN) | 0 |
| DEPTH (FT) | 0 |
| SURFACE TEMPERATURE (DEG F) | 0 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 0 |
| FLOWRATE (MCFPD) | 0 |
| SURFACE PRESSURE (PSIA) | 0 |
| BOTTOMHOLE PRESSURE (PSIA) | #DIV/0! |