

| | | | | | |
|-----------------|----------|------------------------|-------------------|----------|------------------------|
| DATE IN 7/21/06 | SUSPENSE | WILL JONES ENGINEER | LOGGED IN 7/21/06 | TYPE DHC | APP NO. PTD50620254361 |
|-----------------|----------|------------------------|-------------------|----------|------------------------|

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

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



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

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.

Print or Type Name

Signature

Title

Date

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
1230 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised June 10, 2003

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

APPLICATION TYPE
☒ Single Well
☐ Establish Pre-Approved Pools
EXISTING WELLBORE
☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

BLACK HILLS GAS RESOURCES, INC. c/o Mike Pippin LLC (agent), 3104 N. Sullivan, Farmington, NM 87401
Operator Address

JICARILLA 28-02-08 #23 G SEC. 8 T28N R02W Rio Arriba
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 013925 Property Code 34496 API No. 30-039-29311 Lease Type: ☒ Federal ☐ State ☐ Fee

THIS IS PART OF THE BLACK HILLS CLEAN-UP PROGRAM

| DATA ELEMENT | UPPER ZONE | INTERMEDIATE ZONE | LOWER ZONE |
|--|-----------------------------------|-------------------|---|
| Pool Name | Basin Fruitland Coal | | UNDES CHAZA MESA East Blanco Pictured Cliffs |
| Pool Code | 71629 | | 72400 74960 |
| Top and Bottom of Pay Section (Perforated or Open-Hole Interval) | 3641'-3661' | | 3679'-3756' |
| Method of Production (Flowing or Artificial Lift) | Flowing | | Flowing |
| 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) | | | |
| Oil Gravity or Gas BTU (Degree API or Gas BTU) | 1165 | | 1175 |
| Producing, Shut-In or New Zone | Producing | | Producing |
| 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: 4/15/05 Rates: 118 MCF/D | Date: Rates: | Date: 4/8/05 Rates: 70 MCF/D |
| Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.) | Oil Gas 0% 19% | Oil Gas % % | Oil Gas 100% 81% |

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

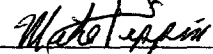
If application is to establish Pre-Approved Pools, the following additional information will be required:
List of other orders approving downhole commingling within the proposed Pre-Approved Pools
List of all operators within the proposed Pre-Approved Pools
Proof that all operators within the proposed 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 Mike Pippin TITLE Petroleum Engineer - Agent DATE July 17, 2006

TYPE OR PRINT NAME Mike Pippin TELEPHONE NO. (505) 327-4573

E-MAIL ADDRESS mike@pippinllc.com

| | | |
|--|---|--|
| | <div data-bbox="638 1151 659 1200" style="transform: rotate(-90deg);">1790'</div> | <div data-bbox="1097 1017 1471 1046">17 OPERATOR CERTIFICATION</div> <div data-bbox="1047 1051 1515 1253"><p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p><div data-bbox="1047 1257 1515 1330"><div></div><div data-bbox="1325 1261 1471 1300">7-14-06</div></div><div data-bbox="1047 1304 1515 1330"><div>Signature</div><div>Date</div></div></div> |
| | <div data-bbox="667 1357 688 1376">O</div> <div data-bbox="842 1372 893 1395">1930'</div> | <div data-bbox="1047 1357 1515 1406"><div>Mike Pippin</div><div>Printed Name</div></div> |
| <div data-bbox="534 1483 557 1506">8</div> | | <div data-bbox="1053 1491 1485 1525">18 SURVEYOR CERTIFICATION</div> <div data-bbox="1047 1530 1515 1713"><p>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.</p></div> |
| | | <div data-bbox="1047 1717 1515 1770"><div>Date of Survey</div><div>Signature and Seal of Professional Surveyor:</div></div> <div data-bbox="1047 1915 1515 1942"><div>Certificate Number</div></div> |

DISTRICT I
1825 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
811 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised August 15, 2000

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | |
|---------------------------|--------------------------------------|---------------------|--|
| *API Number 3003929311 | | *Pool Code 72400 | *Pool Name East Blanco; Pictured Cliffs |
| *Property Code 24245 | *Property Name JICARILLA 28-02-08 | | *Well Number 23 |
| *OCSID No. 013925 | *Operator Name MALLON OIL CO. | | *Elevation 7333' |

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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| G | 8 | 28-N | 2-W | | 1790 | NORTH | 1930 | EAST | RIO ARRIBA |

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 |
|------------------|---------|----------|------------------|---------|---------------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |
| *Dedicated Acres | | | *Joint or Infill | | *Consolidation Code | | *Order No. | | |
| | | | | | | | | | |

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

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| | |
|--|--|
| | <p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Kathy L. Schneebeck</u> Signature</p> <p>Kathy L. Schneebeck Printed Name</p> <p>Agent for Mallon Oil Company Title</p> <p>June 30, 2004 Date</p> |
| | <p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p></p> <p>14831 Certificate Number</p> |

BLACK HILLS GAS RESOURCES, INC.
JICARILLA 28-02-08 #23 PC / FRTC
G Section 8 T28N R02W
7/17/2006
API#: 30-039-29311

Commingle Allocation Calculations

OIL

The Basin Fruitland Coal gas pool does not make any oil in the vicinity of the subject well. The East Blanco Pictured Cliffs gas pool does produce a little oil. Therefore, any and all oil will be assigned to the Pictured Cliffs.

GAS

During completion operations in April 2005, stabilized gas tests were taken on the PC alone, then on the FRTC alone

The **Pictured Cliffs** choke test stabilized at 185 psi on a 1/8" choke for a 12 hour period on 4/8/05.

$$Q = .0555 * C * P \quad \begin{array}{l} C = \text{coefficient for } 1/8" \text{ choke} = 6.25 \\ P = \text{gauge pressure} + 15 \text{ psi} = 200 \text{ psi.} \end{array}$$

$$Q = .0555 * 6.25 * 200 = 70 \text{ MCF/D.}$$

The **Fruitland Coal** choke test stabilized at 4 psi on a 1/2" choke for a 1 hour (charted) period on 4/15/05.

$$Q = .0555 * C * P \quad \begin{array}{l} C = \text{coefficient for } 1/2" \text{ choke} = 112.72 \\ P = \text{gauge pressure} + 15 \text{ psi} = 19 \text{ psi.} \end{array}$$

$$Q = .0555 * 112.72 * 19 = 118 \text{ MCF/D.}$$

$$\text{Total gas} = 70 + 118 = 188 \text{ MCF/D.}$$

$$\% \text{ Pictured Cliffs} = \frac{70}{188} = 37\%$$

$$\% \text{ FRTC} = \frac{118}{188} = 63\%$$