

DATE IN 8/18/06	SUSPENSE	ENGINEER WILL JONES	LOGGED IN 8/21/06	TYPE DHC	APP NO. PTD50623349001
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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
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

Form C-107A
Revised June 10, 2003

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

APPLICATION FOR DOWNHOLE COMMINGLING

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

Lease **JICARILLA 464-30** #9 N - SEC. 30 T30N R3W Rio Arriba
Unit Letter-Section-Township-Range County

OGRID No. 013925 Property Code 22864 API No. 30-039-25789 Lease Type: ☒ Federal ☐ State ☐ Fee

"THIS IS PART OF THE BLACK HILLS PERMIT CLEAN-UP PROGRAM"

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Cabresto Canyon Tertiary		Basin Fruitland Coal
Pool Code	97037		71629
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	1665' - 1672'		3800' - 3850'
Method of Production (Flowing or Artificial Lift)	Pumping		Pumping
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)	258		1130
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1052		1165
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: 11/17/05 Rates: 344 MCF/D	Date: Rates:	Date: 12/5/05 Rates: 132 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 50% 72%	Oil Gas % %	Oil Gas 50% 28%

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 August 16, 2006

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

E-MAIL ADDRESS mike@pippinllc.com

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

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

DISTRICT IV
PO Box 2088, Santa Fe, NM 87504-2088

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-25788	*Pool Code 97037	*Pool Name Cabresto Canyon; Tertiary
*Property Code 22864	*Property Name JICARILLA 464-30	*Well Number 9
*OCHD No. 151618	*Operator Name MALLON OIL CO.	*Elevation 7195'

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
	30	30-N	3-W		400	SOUTH	800	WEST	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

¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

<div>18 FD. U.S.G.L.O. BRASS CAP 1917</div> <div>N 00°02'00" W 2931.72' (RECORD)</div> <div>5653.60' (MEASURED)</div> <div>N 00°12'00" W 2822.18' (RECORD)</div> <div>800'</div> <div>400'</div> <div>FD. U.S.G.L.O. BRASS CAP 1917</div> <div>S 89°57'00" E 4081' (RECORD)</div>	<div>APR 2002 RECEIVED OIL CON. DIV DIST. 3</div>	<div>¹⁷ OPERATOR CERTIFICATION</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</div> <div>Signature <i>Robert Bloylock</i></div> <div>Printed Name Robert Bloylock</div> <div>Title District Manager</div> <div>Date 4/18/02</div> <div>¹⁸ SURVEYOR CERTIFICATION</div> <div>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.</div> <div>12-30 Date of Survey</div> <div>Signature and Seal <i>[Signature]</i></div> <div>8894 NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR</div> <div>Certificate Number</div>
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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ AFI Number 30-039-25789		² Pool Code 71629	³ Pool Name Basin Fruitland Coal
⁴ Property Code	⁵ Property Name Jicarilla 464-30		⁶ Well Number 9
⁷ OGRID No. 013925	⁸ Operator Name Black Hills Gas Resources, Inc.		⁹ Elevation 7195'

¹⁰ Surface Location

UL or lot no. N	Section 30	Township 30N	Range 03W	Lot 14n	Feet from the 400	North/South line South	Feet from the 800	East/West line West	County Rio Arriba
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 14n	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 781.86	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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. Signed Anatha Snell Printed Name Admin. Tech. Title and E-mail Address 2/28/06 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. Date of Survey Signature and Seal of Professional Surveyor Certificate Number

HOLD C104 FOR NSP

BLACK HILLS GAS RESOURCES, INC.
JICARILLA 464-30 #9 FRTC/Tertiary
N Section 30 T30N R3W
8/17/2006
API#: 30-039-25789

Commingle Allocation Calculations

OIL

The Basin Fruitland Coal and Cabresto Canyon Tertiary gas pools do not make any oil in the vicinity of the subject well.

GAS

During completion operations in November and December 2005, stabilized gas tests were taken from both the FRTC and the Tertiary.

The Fruitland Coal (only) choke test stabilized at 75 psi on a ¼" choke for an 8 hour period on 12/5/05.

$$Q = .0555 * C * P \quad \begin{array}{l} C = \text{coefficient for } \frac{1}{4}" \text{ choke} = 26.51 \\ P = \text{gauge pressure} + 15 \text{ psi} = 90 \text{ psi} \end{array}$$

$$Q = .0555 * 26.51 * 90 = 132 \text{ MCF/D.}$$

The Tertiary (only) choke test stabilized at 40 psi on a ½" choke for a 2 hour period on 11/17/05.

$$Q = .0555 * C * P \quad \begin{array}{l} C = \text{coefficient for } \frac{1}{2}" \text{ choke} = 112.72 \\ P = \text{gauge pressure} + 15 \text{ psi} = 55 \text{ psi} \end{array}$$

$$Q = .0555 * 112.72 * 55 = 344 \text{ MCF/D.}$$

$$\text{Total gas} = 132 + 344 = 476 \text{ MCF/D.}$$

$$\% \text{ FRTC} = \frac{132}{476} = 28\%$$

$$\% \text{ Tertiary} = \frac{344}{476} = 72\%$$