

DATE IN 8/7/06	SUSPENSE	ENGINEER WILL JONES	LOGGED IN 8/8/06	TYPE DHC 3758	APP NO. pTDSOL622031434
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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 _____			

RECEIVED

District II  
W. Grand Avenue, NM 87701  
District III  
1000 Rio Bravo Road, Santa Fe, NM 87410

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

District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
AUG 07 2006

APPLICATION FOR DOWNHOLE COMMINGLING

BLACK HILLS GAS RESOURCES, INC. c/o Mike Pippin LLC (agent), 3104 N. Sullivan, Farmington, NM 87401  
Oil Conservation Division Address  
1220 S. St. Francis Drive P SEC. 30 T29N R02W Rio Arriba  
SANTA FE, NM 87505 Unit Letter-Section-Township-Range County

OGRID No. 013925 Property Code 33865 API No. 30-039-29530 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	WC 29N 2W 30: Fruitland Sand		<del>East-Slope Pictured Cliffs</del> WILDCAT
Pool Code	97533		72400
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	3345'-52'		3430'-3512'
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 Btu 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: 7/29/06 Rates: 66 MCF/D	Date: Rates:	Date: 7/25/06 Rates: 231 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% 22%	Oil Gas % %	Oil Gas 100% 78%

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 3, 2006  
TYPE OR PRINT NAME Mike Pippin TELEPHONE NO. ( 505 ) 327-4573  
E-MAIL ADDRESS mike@pippinllc.com

BLACK HILLS GAS RESOURCES, INC.  
JICARILLA 29-02-30 #34 PC / FRTS  
I Section 30 T29N R02W  
8/3/2006  
API#: 30-039-29530

## Commingle Allocation Calculations

### OIL

The Fruitland Sand 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 July 2006, stabilized gas tests were taken on both the PC and the Fruitland Sand.

The **Pictured Cliffs** choke test stabilized at 22 psi on a 1/2" choke for 2 hours on 7/25/06.

$$Q = .0555 \cdot C \cdot P \quad \begin{array}{l} C = \text{coefficient for } 1/2" \text{ choke} = 112.72 \\ P = \text{gauge pressure} + 15 \text{ psi} = 37 \text{ psi.} \end{array}$$

$$Q = .0555 \cdot 112.72 \cdot 37 = 231 \text{ MCF/D.}$$

The **Fruitland Sand** choke test stabilized at 30 psi on a 1/4" choke for a 1 hour period on 7/29/06.

$$Q = .0555 \cdot C \cdot P \quad \begin{array}{l} C = \text{coefficient for } 1/4" \text{ choke} = 26.51 \\ P = \text{gauge pressure} + 15 \text{ psi} = 45 \text{ psi.} \end{array}$$

$$Q = .0555 \cdot 26.51 \cdot 45 = 66 \text{ MCF/D.}$$

$$\text{Total gas} = 231 + 66 = 297 \text{ MCF/D.}$$

$$\% \text{ Pictured Cliffs} = \frac{231}{297} = 78\%$$

$$\% \text{ FRTS} = \frac{66}{297} = 22\%$$

**District I**  
1625 N. French Dr., Hobbs, NM 88240

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

**District III**  
1000 Rio Grande Rd., Aztec, NM 87410

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

**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 October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number <b>30-039-29530</b>		<sup>2</sup> Pool Code <b>97533</b>	<sup>3</sup> Pool Name <b>WC 29N29W30: Fruitland Sand</b>
<sup>4</sup> Property Code <b>33865</b>	<sup>5</sup> Property Name <b>Hearlita 29-02-30</b>		<sup>6</sup> Well Number <b>34</b>
<sup>7</sup> OGRID No. <b>013925</b>	<sup>8</sup> Operator Name <b>Black Hills Gas Resources, Inc.</b>		<sup>9</sup> Elevation <b>7046' GL</b>

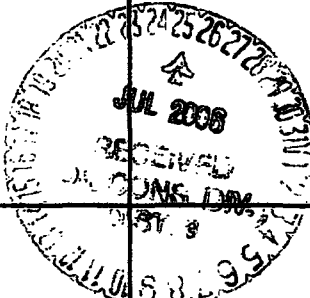
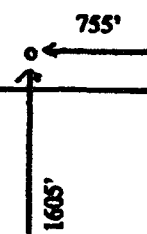
**<sup>10</sup> Surface Location**

UL or lot no. <b>I</b>	Section <b>30</b>	Township <b>29-N</b>	Range <b>2-W</b>	Lot 10n	Feet from the <b>1605'</b>	North/South line <b>South</b>	Feet from the <b>755'</b>	East/West line <b>East</b>	County <b>Rio Arriba</b>
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**<sup>11</sup> Bottom Hole Location If Different From Surface**

UL or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres <b>160</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code		<sup>15</sup> 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.

<div style="text-align: center;">  </div>	<div style="text-align: center;">  </div>		<b><sup>17</sup> OPERATOR CERTIFICATION</b> 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 undivided 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. Signature: <u><i>Loren Diehl</i></u> Date: <u>6-23-06</u> Printed Name: <u>Loren Diehl</u>
			<b><sup>18</sup> SURVEYOR CERTIFICATION</b> 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: _____

DISTRICT I  
1905 N. French Dr., Hobbs, N.M. 88240

DISTRICT II  
1201 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III  
1009 Rio Grande Rd., Aztec, N.M. 87410

DISTRICT IV  
1220 South St. Francis Dr., Santa Fe, NM 87605

State of New Mexico  
Energy, Minerals & Natural Resources Department

**OIL CONSERVATION DIVISION**

1220 South St. Francis Dr.  
Santa Fe, NM 87605

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**

*API Number		*Pool Code	*Pool Name
		72400	E. Blanco / Pictured Cliffs
*Property Code	*Property Name		*Well Number
-24245 33865	JICARILLA 29-02-30		34
*OCSID No.	*Operator Name		*Elevation
013925	BLACK HILLS GAS RESOURCES		7046'

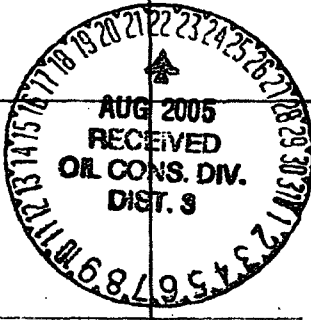
**10 Surface Location**

UL or lot no.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
1	30	29-N	2-W		1605	SOUTH	755	EAST	RIO ARriba

**11 Bottom Hole Location If Different From Surface**

UL or lot no.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
*Dedicated acres		*Joint or Infill		*Consolidation Code		*Order No.			
160 acres - SE/4									

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

16		FD P+C 8894		17	
LOT 1				<b>OPERATOR CERTIFICATION</b>	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.					
Signature <u>Kathy L. Schneebeck</u>					
Printed Name Kathy L. Schneebeck					
LOT 2		Permit Agent for Black Hills			
LOT 3		Title April 14, 2005			
LOT 4		Date			
FD MRKD STONE W/ P+C 8894		18			
N 89-13-08 W 5239.20' (M)		<b>SURVEYOR CERTIFICATION</b>			
		I hereby certify that the well location shown on this plat was plotted from first-order or second-order survey made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief.			
		Signature <u>[Signature]</u>			
		Date April 14, 2005			
		Certificate Number 14831			