

BLACK HILLS GAS RESOURCES, INC.  
JICARILLA 459-17 #24 PC / FRTC  
H Section 17 T30N R03W  
11/14/2006

## Trimming Allocation Calculations

### OIL

The Basin Fruitland Coal gas pool and the Cabresto Canyon Tertiary do 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

The **Tertiary** (only) choke test stabilized at 25 psi on a ½" choke for 30 minute period on 11/6/06.

$$Q = .0555 * C * P \quad \begin{array}{l} C = \text{coefficient for } \frac{1}{2}'' \text{ choke} = 112.72 \\ P = \text{gauge pressure} + 15 \text{ psi} = 40 \text{ psi.} \end{array}$$

$$Q = .0555 * 112.72 * 40 = \underline{250 \text{ MCF/D.}}$$

During workover operations in June & July 2005, stabilized gas tests were taken on the PC alone, then on the FRTC alone. The attached calculation sheet for DHC-3737 indicates allocations for the PC at 56% and FRTC at 44%.

The **PC & FRTC (together)** choke test stabilized at 11 psi on a ½" choke for a 30 minute period on 11/6/06.

$$Q = .0555 * C * P \quad \begin{array}{l} C = \text{coefficient for } \frac{1}{2}'' \text{ choke} = 112.72 \\ P = \text{gauge pressure} + 15 \text{ psi} = 26 \text{ psi.} \end{array}$$

$$Q = .0555 * 112.72 * 26 = \underline{163 \text{ MCF/D.}}$$

Therefore, the **PC** contribution is  $163 * 56\% = \underline{91 \text{ MCF/D.}}$

And the **FRTC** contribution is  $163 * 44\% = \underline{72 \text{ MCF/D.}}$

$$\text{Total gas} = 250 + 163 = \underline{413 \text{ MCF/D.}}$$

$$\% \text{ PC} = \frac{91}{413} = 22\%$$

$$\% \text{ FRTC} = \frac{72}{413} = 17\%$$

$$\% \text{ TERTIARY} = \frac{250}{413} = 61\%$$