



Semi-log (Superposition) Analysis:

Due to the fact that there were rate changes prior to the well test the semi-log analysis was conducted using the Superposition time function. above plot contains the values obtained from the straight line drawn through the IARF period. The equations listed below were used to determine the desired reservoir parameters

$$Kh = (162.6 * \mu * B) / m'$$

$$S = 1.151 * \left[\frac{(P_{1hr} - P_0)}{m'(Q_n - 1 - Q_n)} - \log \left(\frac{K}{\phi * \mu * Ct * r_w^2} \right) + 3.2275 \right]$$

BEFORE THE
OIL CONSERVATION COMMISSION
Case No. 11750 Exhibit No. 8
Submitted By:
Chesapeake Inc.
Hearing Date: May 1, 1997