

In no event shall the amount of injected gas being credited to a well be such as to cause the net gas-oil ratio,  $\frac{P_g - I_g}{P_o}$ , to be less than 2,000 cubic feet of gas per barrel of oil produced.

**RULE 8.** Credit for daily average net water injected into the Horseshoe-Gallup Oil Pool through any injection well located within the project area may be converted to its gas equivalent and applied to any well producing with a gas-oil ratio in excess of two thousand cubic feet of gas per barrel of oil. Total credit for net water injected in the project area shall be the gas equivalent volume of the daily average net water injected during a one-month period. The daily average gas equivalent of net water injected shall be computed in accordance with the following formula:

$$E_g = (V_w \text{ inj} - V_w \text{ prod}) \times 5.61 \times \frac{P_a}{15.025} \times \frac{520^\circ}{T_r} \times \frac{1}{Z}$$

where:

- $E_g$  = Average daily gas equivalent of net water injected, cubic feet
- $V_w \text{ inj}$  = Average daily volume of water injected, barrels
- $V_w \text{ prod}$  = Average daily volume of water produced, barrels
- 5.61 = Cubic foot equivalent of one barrel of water
- $P_a$  = Average reservoir pressure at mid-point of the pay zones of Horseshoe-Gallup Oil Pool in project area, psig + 12.01, as determined from most recent survey
- 15.025 = Pressure base, psi
- $520^\circ$  = Temperature base of  $60^\circ\text{F}$  expressed as absolute temperature
- $T_r$  = Reservoir temperature of  $87^\circ\text{F}$  expressed as absolute temperature ( $547^\circ\text{R}$ )
- $Z$  = Compressibility factor from analysis of Horseshoe-Gallup gas at average reservoir pressure,  $P_a$ , interpolated from compressibility tabulation below: