EJERCICIO FQ4EE2S01:

COMBUSTIÓN DEL METANO (CH_4)

¿g H_2O? con 5 litros CH_4 a 20°C y 600 mmHg

$$\underset{16}{CH_4} + 2\underset{64}{O_2} \longrightarrow \underset{44}{CO_2} + 2\underset{36}{H_2O}$$

$V = 5$ litros de CH_4 $\quad P = \frac{600}{760}$ atm ; $\quad T = 20 + 273$

$$P \cdot V = n \cdot R \cdot T$$

$$\frac{600}{760} \cdot 5 = \frac{g_{CH_4}}{16} \cdot 0{,}082 \cdot (20 + 273)$$

$$\boxed{g_{CH_4} = 2{,}63\ g}$$

$$2{,}63\ g\ CH_4 \ \frac{36\ g\ H_2O}{16\ g\ CH_4} = \boxed{5{,}92\ g\ H_2O}$$