

CC GasMix Worksheet

Tuesday, January 27, 2026 10:36 AM

Depth = fsw = ata

Set Point **SP** = Diluent Flush **DF** =

PN₂ (max) = **TGD**=

loop density calc

$$FO_2^{loop} = \frac{SP}{D_{ata}} = \text{---} = \text{---} \times 1.428 = \text{---} \quad FO_2^{dil} = \frac{DF}{D_{ata}} = \text{---} = \text{---}$$

$$FN_2^{loop} = \frac{PN_2}{D_{ata}} = \text{---} = \text{---} \times 1.251 = \text{---}$$

$$FHe^{loop} = 1 - FN_2^{loop} - FO_2^{loop} = \text{---} \times 0.179 = \text{---}$$

ata ↓ loop density

$$\text{---} * \text{---} = \text{---}$$

If loop density > TGD then perform Gas Density gas Fraction calculations:

$$FHe^{loop} = \frac{SP \cdot d_{O_2} + (D_{ata} - SP) \cdot d_{N_2} - TGD}{D_{ata} \cdot (d_{N_2} - d_{He})}$$

$$= \frac{\text{---} * 1.428 + (\text{---}) * 1.251 - \text{---}}{\text{---} * 1.072}$$

$$= \text{---}$$

$$= \text{---}$$

Calculate ω to get diluent gas fraction from loop gas fractons

$$\omega = \frac{D_{ata} - SP}{D_{ata} - DF} = \text{---} = \text{---}$$

$$FHe^{dil} = \frac{FHe^{loop}}{\omega} = \text{---} = \text{---}$$