

(4) NO AFTERBURNING:

$$\frac{F}{\dot{m}_c + \dot{m}_F} = \frac{293.92}{1 + 3.94} \left\{ \left[\frac{2}{\gamma - 1} \frac{7}{(2.25)(2.168)} (2.25(2.168)(0.346) - 1) \right]^{\frac{1}{2}} - 2.5 \right. \\ \left. + 3.94 \left[\left[\frac{2}{\gamma - 1} (2.25(1.22) - 1) \right]^{\frac{1}{2}} - 2.5 \right] \right\}$$

$$\frac{F}{\dot{m}_c + \dot{m}_F} = \underline{\underline{89.8}} \quad \frac{\text{N.S}}{\text{kg}}$$

$$f = \frac{(1000)(215)}{4.43(10)^7} [7 - 2.25(2.168)] = 0.0103$$

$$S = \frac{0.0103(10)^6}{(1 + 3.94)(89.8)} = \underline{\underline{23.22}} \quad \frac{\text{mg}}{\text{N.S}}$$