

$$\text{Elevation} = 4 \text{ ft.} + 6 \text{ ft.} = 10$$

$$\text{Friction head} = 1.27 \times .5 = 1.9$$

$$\text{pressure head} = 2$$

$$\text{TDH} = \text{Elevation head} + \text{Friction head} + \text{Pressure head}$$

$$\text{TDH} = 10 + 1.9 + 2$$

$$\text{TDH} = 13.9$$

$$\frac{1}{2} \text{ inch } 40 \text{ tap @ } 2 \text{ ft, } L = 7.11 \times 3 = 21 + 2 = 23 \text{ gpm}$$

$$240 \text{ ft} \times .65 = 156$$

$$156 \times .66 = 102.96 \text{ gal/dose}$$

$$\text{drawdown} = \frac{103 \text{ gal/dose}}{21 \text{ gal/line}} = 5 \text{ inches}$$