

PARSONS ENGINEERING SCIENCE, INC.

Client CSSA Job No. 728487.03 Sheet 1 of 1
Subject Well 10 Hydraulic Conductivity By D.W. Adkison Date 8/29/01
Calculation Checked _____ Rev. _____

Hydraulic conductivity is calculated by:

$$K = \frac{T}{b}$$

where:

- K = hydraulic conductivity
- T = transmissivity
- b = saturated thickness

Therefore:

$$\begin{aligned} K &= \frac{2400 \text{ gpd/ft}}{198 \text{ ft}} \\ &= 12.12 \text{ gpd/ft}^2 \\ &= 12.12 \text{ gpd/ft}^2 \times \frac{1 \text{ ft}^3}{7.48 \text{ gal}} \\ &= 1.62 \text{ ft/day} \times \frac{1 \text{ day}}{24 \text{ hrs}} \times \frac{1 \text{ hr}}{60 \text{ min}} \times \frac{1 \text{ min}}{60 \text{ sec}} \times \frac{12 \text{ in}}{1 \text{ ft}} \times \frac{2.54 \text{ cm}}{1 \text{ in}} \\ &= 5.7 \times 10^{-4} \text{ cm/sec} \end{aligned}$$