

HF-3 Test 1 - Efficiency corrected

Table 3-1 HF-3 Pre Frac Constant Rate Pumping Test Calculations

Well Efficiency Corrected data Assuming well Efficiency of 3%

Transmissivity (Cooper Jacob method)

$$T = \frac{264 (Q)}{\Delta s}$$

Where

:	T = Transmissivity (gpd/ft)		
	Q = Pumping rate (gpm)	0.8 gpm	(Constant rate test)
	∆s = Drawdown (ft) across	0.24 ft	(From HF-3 drawndown graph)
	one log cycle		

Transmissivity = 880 gpd/ft

Hydraulic Conductivity

$$K = T/b$$

Where:

K = Hydraulic conductivity (ft/day)		
T = Transmissivity (ft ² /day)	118 ft²/day	(T in gpd/ft * 0.134)
b = Aquifer Thickness (ft)	41 ft	(Static water level minus base

Hydraulic Conductivity = 2.88 ft/day

See Figure 3-2 for Time Drawdown graph for Pre-Frac Pumping Test at HF-3