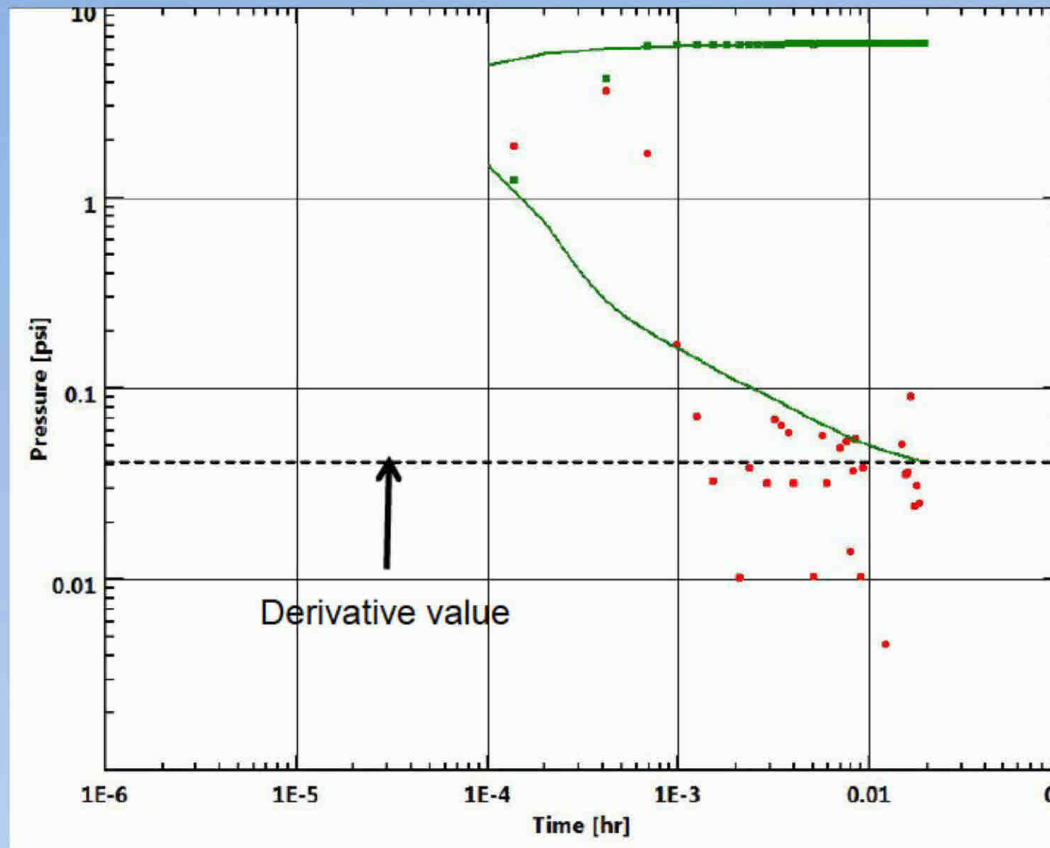


## Step 3: Log-Log Plot to Get Initial Permeability Estimate



M56D Layer Buildup 4 (High-Rate)

$$\text{Permeability} = \frac{162.6 \times q \times \mu}{m \times h}$$

Where:

$$m = (\text{derivative value}) \times 2.303$$

$q$  = flow rate down hole

$\mu$  = viscosity

$h$  = thickness of the layer