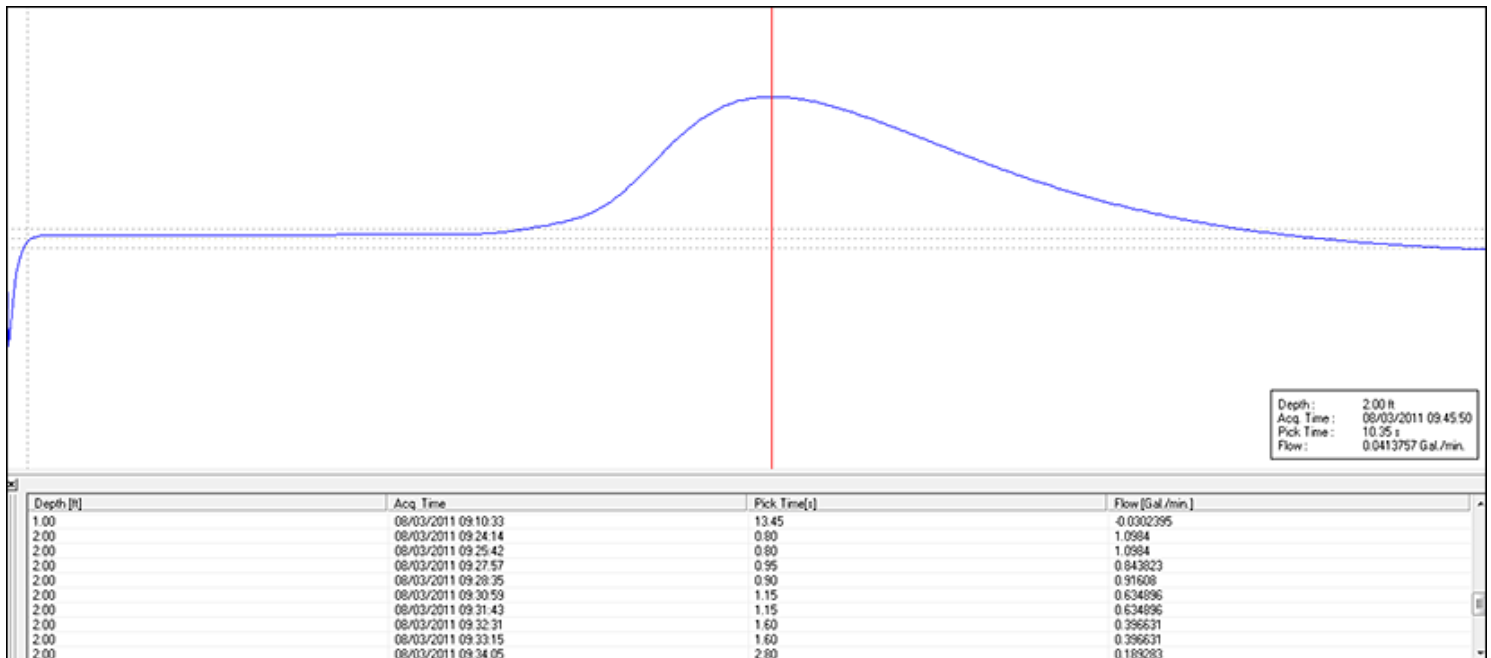


HFP-2293 Heat Pulse Flowmeter



Description

The HFP-2293 Heat Pulse Flowmeter is a unique flowmeter tool designed to measure low flow rates in the borehole environment. It will also give the direction of the flow of fluid vertically. To detect these low flow rates, measurements must be made while the probe is stationary at different depths within the borehole. The probe is run standalone.

Matrix Heat software is used with the HFP-2293 and is compatible Matrix Logging Systems. Individual heat-flow waveforms can be saved, and text files with depth and flow rate can be imported into WellCAD for a histogram-type presentation.

Applications

- Measure interval and/or fracture-specific low flow rates
- Identification of hydrostratigraphic units
- Determine transmissivity and hydraulic head
- Confirmation of predicted transmissive zones in open hole

Operating Conditions

Borehole Fluid

Water

Mud



Dry

Casing

Uncased

PVC Borehole

Steel

Centralization

Required

Non-Necessary

Features & Benefits

- Designed by the USGS, industry standard tool for use in very low flow zones.
- Supplied with diverters for 4", 6" & 8" (100, 150, 200mm) boreholes to provide optimum results in a variety of borehole diameters
- Includes Matrix Heat acquisition (waveform viewing & time picking) and processing software
- Slim, 41 mm diameter. One-person operation.

Specifications – Metric/English

Specification	Metric	Imperial
Diameter	41 mm	1.63"
Length	1.22 m	48"
Weight	5.5 Kg	12 lbs.
Max. Temp.	70°C	158°F
Max. Pressure	200 bar	2900 psi

Sensor: Two thermistors

Measuring Range: 0.113 lpm to 3.785 lpm (0.03 gpm to 1.0 gpm)

Measuring Range: 0.046 m/min to 3.962 m/min (0.15 ft/min to 13 ft/min)

Accuracy: 5% midrange to 15% extremes

Resolution: 5%

Documentation

[Data Sheet](#)

[User Guide](#)

[Matrix Heat Software User Guide](#)

