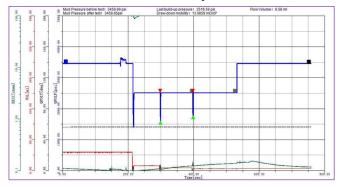


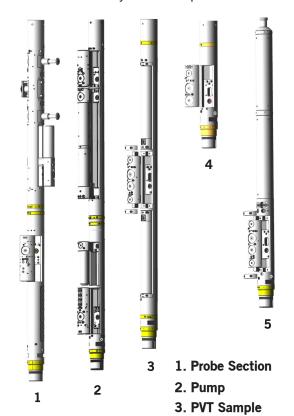
Modular Formation Pressure Tester (MFPT)

GOWell's Modular Formation Pressure Tester (MFPT) is a new generation wireline formation tester that is fully compatible with GOWell's GallopStar logging system. The modular design of MFPT allows for flexible operations and future expansion. A key design feature is plug-in modules that allow easy maintenance and rapid post-job servicing. MFPT has highly integrated electronics, mechanical and hydraulic systems for reliable field operations. MFPT includes industry-standard Quartz pressure gauge for accurate pressure measurements. Hydraulic pump module for pumpout and sampling operations and Fluid identification capability for real-time fluid monitoring. The logging software controls are both simple and intuitive for ease of field operations and provide automatic operations wherever possible.

Pre-Test Example



Formation P = 173.5 bar (2516.6psi) Hydrostatic P = 238.5 bar (3459.9psi) Mobility = 13 md/cp



Exit Modular
 Large Sample

DESCRIPTION

GOWell's Modular Formation tester measures formation fluid pressure, fluid mobility, fluid gradients and fluid sampling. The tool incorporates a number of features to optimize pressure and sampling. Industry standard Quartz Pressure provides accuracy and repeatable pressure measurements.

APPLICATIONS

- Formation pressure and Fluid Mobility measurements
- Sampling and Fluid ID
- Gradient and Fluid contact identification
- Reserves and production estimation

FEATURES

- Accurate formation pressure and mobility measurements
- Variable volume pretesting and multiple drawdowns per set
- Isolation valve reduces flowline volume for faster build-ups
- Modular tool designed for easy maintenance
- Variable rate pump, fluidID sensors
- PVT sampling: more than 6 samples collected in one trip
- Real-time Bubble-Point test
- Gallopstar compatible

ISPECIFICATIONS

		MFPT - Modular Formation Pressure Tester		
	General Specs			
	Maximum Pressure Maximum Temperature Diameter Borehole Application Tool Length Weight Max. Setting Pressure Resistivity Measurement Range Pre-Test Volume PVT Sample Large Sample	20,000 PSI (140 Mpa) 350°F (177°C) 4.72 in. (120 mm) 6 in 19 in. (150 mm-482 mm) 54 ft. (16.45m) 1302 lbs (590.7 kg) 3600 PSI 0.02~20Ω.m 2-250 cc. 2 per module 2 per module		
	Measurements			
	Probe Section Pump PVT Sample Exit Modular Large Sample	Length	100.4 in. (2.55 m) 100.4 in. (2.55 m) 85.5 in. (2.17 m) 28.8 in. (0.73 m) 80.7 in. (2.05 m)	
		Weight	254 lbs (115.2 kg) 242 lbs (109.6 kg) 208 lbs (94.3 kg) 74 lbs (33.5 kg) 152 lbs (68.8 kg)	
н	Quartz Measurement Range	Range Accuracy Sensitivity	0-16000 PSI ±0.02% FS 0.01PSI	
	Bubble Point Measurement			
	Pump			
	Capacity Max. Pressure Differential Max. Pump rate	661ml/stroke (Forward:388ml & Reverse:273ml) 5000 PSI 1/2 Litre/min		