

# 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.

GOWell's Modular Formation Pressure 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.

#### **FEATURES**

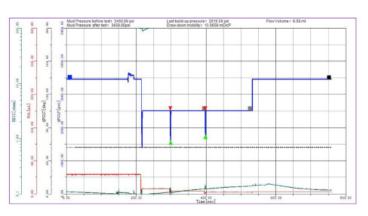
- Variable volume pre-testing and multiple drawdowns per set
- Isolation valve reduces flowline volume for faster build-ups
- · Modular tool designed for easy maintenance
- · Variable pump rate, fluid ID sensors
- PVT sampling: more than 6 samples collected in one trip
- · Real-time Bubble-Point test
- Gallopstar compatible

### **APPLICATIONS**

- · Accurate formation pressure and Fluid Mobility measurements
- · Sampling and Fluid ID
- Gradient and Fluid contact identification
- Reserves and production estimation

## **POWER SUPPLY ELECTRONICS** HYDRAULICS POWER PACKER SECTION **EXIT MODULAR PUMP PVT SAMPLE** LARGE SAMPLE

#### PRE-TEST EXAMPLE



Formation P = 173.5 bar (2,516.6 psi) Hydrostatic P = 238.5 bar (3,459.9 psi) Mobility = 13 md/cp



## MODULAR FORMATION PRESSURE TESTER (MFPT)

## **SPECIFICATIONS**

	N	MFPT	
GENERAL SPECS			
Maximum Pressure	20,000 F	20,000 PSI (140 MPa)	
Maximum Temperature	330°	330°F (165°C)	
Diameter	4.72 ir	4.72 in (120 mm)	
Borehole Range	6 in - 19 in (1	6 in - 19 in (150 mm - 482 mm)	
Tool Length	54 ft	54 ft (16.45 m)	
Weight	1,302 lk	1,302 lbs (590.7 kg)	
Max. Setting Pressure	3,6	3,600 PSI	
Resistivity Measurement Range	0.02	0.02~20 Ohmm	
Pre-Test Volume	2 -	2 - 250 cc	
PVT Sample	2 pe	2 per module	
Large Sample	2 pe	2 per module	
Quartz Measurement Range	Range	0 - 16,000 PSI	
	Accuracy	±0.02% FS	
	Sensitivity	0.01 PSI	
DIMENSIONS			
Power Supply	Length	6.56 ft (2 m)	
	Weight	108.25 lbs (49.1 kg)	
Electronics	Length	7.61 ft (2.32 m)	
	Weight	153.66 lbs (69.7 kg)	
Hydraulics Power	Length	6.82 ft (2.08 m)	
	Weight	165.79 lbs (75.2 kg)	
Packer Section	Length	8.37 ft (2.55 m)	
	Weight	253.97 lbs (115.2 kg)	
Exit Modular	Length	2.40 ft (0.73 m)	
	Weight	73.85 lbs (33.5 kg)	
Pump	Length	8.37 ft (2.55 m)	
	Weight	241.63 lbs (109.6 kg)	
PVT Sample	Length	7.12 ft (2.17 m)	
	Weight	207.90 lbs (94.3 kg)	
Large Sample	Length	6.73 ft (2.05 m)	
	Weight	151.68 lbs (68.8 kg)	
PUMP			
Capacity	661 ml/stroke (Forward	661 ml/stroke (Forward: 388 ml & Reverse: 273 ml)	
Max. Pressure Differentia	5,0	5,000 PSI	
Max. Pump rate	1/2	1/2 Litre/min	