Pioneer Petrotech Services Inc. (







PPS71 PTS

Geothermal Tool

www.pioneerps.com

Overview of PPS71 PTS Geothermal Tools

Pressure, Temperature and Flow Profile

The PPS71 PTS Geothermal Tools are designed for extreme subsurface conditions. The robust electronics combined with vacuum flask technology allow these products to perform at 350 °C (662 °F) continuously, for four hours. The PTS tool measures pressure, temperature, and flow profile and can be configured as either a memory tool or surface read out (SRO) tool.

The measurements are done with a highly sensitive silicon-sapphire (piezo) transducer, a fast response resistance temperature detector (RTD) and the customer's choice of either a continuous or fullbore spinner flowmeter. Both continuous and fullbore spinners are intended for quantitative use in flow streams with the spinners' greatest quantitative application being injection profiling.

By combining the downhole measurements with a depth recorder, such as PPS's DepthWatcher (PPS36), customers have the capability to create synchronized profile logs.

In addition SmartLog, PPS's proprietary companion software for this tool can be used to create logging files for reports and export LAS files. These profile logs can be opened in any commercial logging software.

- * Operating temperatures up to 350 °C (662 °F)
- * Features a fast response RTD temperature sensor
- * Continuous or fullbore spinners are available
- * Operates in either memory or surface read out mode
- * Surface read out mode using e-line is compatible with the Warrior or PPS SRO acquisition system
- * Can be combined with PPS36 DepthWatcher if depth measurement is needed







PPS36 DepthWatcher





SRO Transmitter

Specifications

PPS71 PTS Geothermal Tools

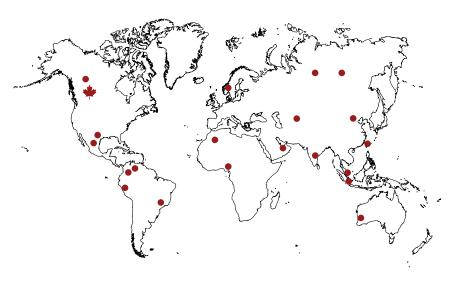
Pressure, Temperature and Flow Profile

Pressure Sensor	Silicon-Sapphire
Pressure Ranges–psi	5K 10K
Temperature Sensor	RTD (Pt1000; 4-wire)
Temperature Rating–Standard Housing	177 °C (350 °F)
Temperature Rating–Flask Housing	300 °C (572 °F) OD 1.56" 350 °C (662 °F) OD 1.75"
Flow Sensor Type	Reed switch/magnetic
Flow Rate Range	5 – 7,000 RPM
Downhole Time (OD 1.75")	4 hours at 350 °C (662 °F)
Downhole Time (OD 1.56")	4 hours at 300 °C (572 °F)
Memory Capacity	6,000,000 data Sets
Sampling Rate	0.1 s – 1.8 hrs/per sample
SRO Data Transmission Distance	Up to 7,000 meters via standard electrical cable
SRO Interface Compatibility	Warrior 8 and up
Service	H ₂ S Services
Overall Length Memory Tool-inches	66.7 (1,694 mm) 1.75" OD tool with 2.125" OD spinner
	66.3 (1,684 mm)1.75" OD tool with 1.69" OD spinner
	66 (1,676 mm) 1.56" OD tool with 1.44" OD spinner
Overall Length SRO Tool-inches	111.9 (2,842 mm) with 2.125" OD spinner
	111.5 (2,832 mm) with 1.69" OD spinner
Housing Material	Stainless Steel 17-4 Inconel 718

Choose a PPS71 Geothermal Tool

	Memory Mode	SRO Mode	Temperature Max.	Pressure Max.	Flow Profile	Casing Collar Locator	Gamma Ray	Memory Capacity
PPS71 PT	$\overline{\checkmark}$	$\overline{\checkmark}$	350°C	10kpsi			ألنم	6,000,000
PPS71 PTS	V	$\overline{\checkmark}$	350°C	10kpsi	V			6,000,000
PPS71 PTS-C	$\overline{\checkmark}$	$\overline{\mathbf{V}}$	350°C	10kpsi	V			2,000,000
PPS71 Elite	$\overline{\checkmark}$	V	350°C	15kpsi	V		V	2,000,000
PPS71 Quartz	$\overline{\mathbf{V}}$	$\overline{\checkmark}$	350°C	18kpsi		$\overline{\checkmark}$	V	2,000,000
PPS71 G-CCL	$\overline{\mathbf{Q}}$	$\overline{\mathbf{A}}$	N/A	N/A	N/A	Ø	V	2,000,000

Smart Gauges and Simple Software









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