

SPEX

# Memory Logging Services

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**SPEX Offshore (UK) Ltd.** offers a range of Production Logging Services utilising GE Sondex logging tools. The service is conducted in memory mode and can be deployed on both slickline and coiled tubing.

The tools are robust and designed to operate and take precise measurements in extreme downhole conditions. Our memory production logging services efficiently and accurately evaluate your well's parameters. Downhole fluid properties and well conditions can be monitored to evaluate production and injection performance. Memory production logging services use a range of combinable sensors to provide advanced measurements, with the same accuracy and quality as those from the real-time configuration.

Following measurements are currently available:

- Casing Collar Locator (CCL)
- Temperature
- Pressure

## Key features

- Short tools enable operations with minimum rig-up height
- Multiple sensors and add-in sensor options for each type of operation
- Memory Read Out (MRO) conveyed on slickline / coiled tubing
- Compact surface system
- Simultaneous operation with any GE Sondex Ultrawire tool
- No limitations to well deviation
- Extensive and proven track record
- All tools rated to a minimum 15,000 psi (1,030 bar) and 177 °C (350 °F)
- Corrosion resistant tools

## Tools

### CCL-015 Casing Collar Locator



As the tool passes a collar, lines of magnetic flux between two opposing permanent magnets are disturbed. This causes a low frequency voltage or Electro Magnetic Field to be induced in a coil, mounted between the permanent magnets. Finally, the signal is converted by a voltage-controlled oscillator for recording in the Ultrawire™ section of the tool.

### PRT-016 Platinum Resistance Thermometer



The PRT provides a continuous borehole fluid temperature log. This can aid identification of fluid origin and points of inflow.

## UMT-007 Ultrawire Memory Tool



Data from the logging sensors is transmitted to the UMT at the top of the string. Data is stored in non-volatile flash memory chips under the control of a downhole processor. This tool can support all the standard GE Sondex Ultrawire™ tools.

## QPS-019 Quartz Pressure Sensor

The QPS provides a continuous log of borehole fluid pressure and also provides reservoir pressure draw-down and build-up data during flowing tests.

## DTR-005 Depth / Time Recorder



The purpose of the DTR is to record depth against time and for this data to be downloaded into Ultrawire™ Memlog and merged with the UMT data, which yields data against time. The output of this UW Memlog program is depth against downhole tool data.

The depth is correlated to the slick-line depth system on the winch by means of changing the wheel circumference input on the DTR as the tool-string is run in the well.

	UMT	QPS	PRT	CCL
Pressure	20,000 psi	15,000 psi	15,000 psi	15,000 psi
Temp	350 °F			
OD	1-11/16"			
Length	12-1/2"	19"	12-1/2"	18-1/2"

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