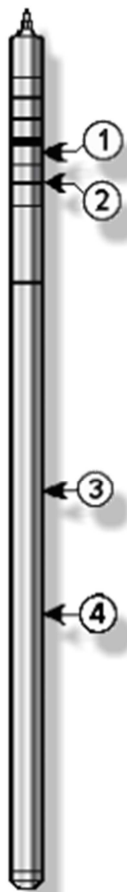


# CENTURY GEOPHYSICAL LLC.

## PRODUCT DESCRIPTION

### 4841 (DIL) Express Stack™ Dual Induction, Shallow LL7, SP Tool

The 4841 tool is a multi-parameter resistivity tool primarily used for oil/gas and water well logging. The tool records four different parameters simultaneously in one pass of the borehole. The four parameters are the following: spontaneous potential, laterolog, deep and medium induction conductivity. The induction curves are corrected for skin effect, and then converted to resistivity. This tool is capable of recording a true resistivity (Rt) of the formation with the deep induction having a 65 in. (152.4 cm) depth of investigation. It requires the use of the 4000 Stack Gamma Ray Tool Sub, which provides the needed telemetry, and is compatible with all other express stack tools except the 4239 inline litho-density tool.



Features	
Properties Measured (see diagram)	Tool Specifications
<p><b>1. SP</b> Offset 28.0 cm (11 in. )</p> <p><b>2. Shallow LL7</b> Offset 82.8 cm.(32.6 in. ) Depth of Investigation: 12" Vertical resolution: 10"</p> <p><b>3. Deep Induction Measure Point</b> Offset 308.6 cm (121.5 in.) Depth of Investigation: 65" Vertical Resolution: 60"</p> <p><b>4. Medium Induction Measure Point</b> Offset 339.1cm (133.5 in. ) Depth of Investigation: 30" Vertical Resolution: 30"</p>	<p><b>Length:</b> 495.3cm(195 in.)</p> <p><b>Temperature:</b> 125° (257F)</p> <p><b>Diameter:</b> 6.4cm (2.5 in.)</p> <p><b>Pressure:</b> 350kg/cm<sup>2</sup> ( 5000psi)</p> <p><b>Weight:</b> 38.5 kg.( 84.8 lbs. )</p> <p><b>Logging Speed:</b> 18m/m(60ft/min.)</p>

Sensor Response Ranges		
Sensor	Response Limits	Accuracy
Deep Induction	0-1,000 mmho/m	+/- 2 mmho/m
Medium Induction	0-1,000 mmho/m	+/- 2 mmho/m
Spontaneous Potential	-400 to 400 mv	5%
LL7 Resistivity	0-10,000 ohm/m	5%