

# CENTURY GEOPHYSICAL LLC.

## PRODUCT DESCRIPTION

### 4175 Express Stack<sub>TM</sub> Dual Neutron Tool

**Background Information**

This tool sub of the 4000 series Express Stack<sub>TM</sub> tools records the neutron porosity of the formation. The tool also records short and long neutron counts. 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<sub>TM</sub> Tools



Features		
Properties Measured (see diagram)		Tool Specifications
<p><b>1. Neutron Detector, Far Spacing</b>  <math>He^3</math> 5.1 x 25.4cm(2x10 in.)                      61cm (24 in. ) spacing                      Offset(from top of Gamma Ray Tool Sub) 263.65cm (103.8 in.)</p> <p><b>2. Neutron Detector, Near Spacing:</b>  <math>He^3</math> 2.9 x 10.1cm(1.125x4.0 in.)                      32.4cm (12.75in. ) spacing                      Offset (from top of Gamma Ray Tool Sub) 291.08cm (114.6in.)</p>	<p><b>3. Neutron Porosity:</b>                      Neutron porosity offset: 297.18cm(117 in.)</p>	<p><b>Length:</b> 194.1cm (76.42 in)</p> <p><b>Temperature:</b> 125c (257F)</p> <p><b>Diameter:</b> 6.35cm (2.5 in)</p> <p><b>Pressure:</b> 350kg/cm<sup>2</sup> (5000 psi)</p> <p><b>Weight:</b> 28 kg (57 lbs.)</p> <p><b>Logging Speed:</b> 9m/min. (30ft/min.)</p>

Sensor Response Ranges		
Sensor	Response Limits	Accuracy
Near Neutron CPS	0 to 20,000	+/- 5% cps
Far Neutron CPS	0-5000	+/- 5% cps
Neutron Porosity	-10 to 100% porosity	+/- 2% to 60%