

CENTURY GEOPHYSICAL LLC.

PRODUCT DESCRIPTION

9057 MultiParameter E-Logging Tool

Background Information- The Multi-Parameter E-Log, Neutron logging tool was developed to replace the 9055 which was historically Century's most popular tool. The tool duplicates all parameters on the 9055 while adding the 16 inch normal, 64 inch normal, and lateral resistivities. The 9057 natural gamma circuit features a low dead time and the ability to measure very high count rates making it a favorite for uranium logging. The tool records ten different parameters simultaneously in one pass of the borehole. The ten parameters are the following: natural gamma, spontaneous potential, single point resistance, 16 in. normal resistivity, 64 in. normal resistivity, 48 in. lateral resistivity, neutron-neutron, temperature, delta temperature, slant angle (tilt) and azimuth (bearing). Slant angle, azimuth, and natural gamma are optional.

Features

Properties Measured (see diagram)		Tool Specifications
<p>1. Natural Gamma: 2.2 x 10.16 cm (0.875 x 4.0 in.) NaI Scintillation Offset: 14.7 cm (5.8 in.)</p> <p>2. 64 in. Normal Resistivity: Offset: 109.2 cm (43 in.)</p> <p>3. 16 in. Normal Resistivity: Offset: 170.2 cm (67 in.)</p> <p>4. Neutron-Neutron: He³ Detector 2.54 cm x 15.2 cm (1 in. x 6 in.) Offset: 200.7 cm (79 in.)</p> <p>5. Lateral Resistivity 48 in. Offset: 139.7 cm (55 in.)</p>	<p>6. Spontaneous Potential: +/- 0.1 mv resolution Offset: 27.7 cm (10.9 in.)</p> <p>7. Single Point Resistance: +/- 0.1 ohm resolution Offset: 190.5 cm (75 in.)</p> <p>8. Temperature & Delta Temperature: 0.004 C (0.007 F) resolution Offset: 220.5 cm (86.8 in.)</p> <p>9. Slant Angle & Azimuth: 3-axis magnetometer and 2-axis inclinometer Offset: 200.7 cm (79 in.)</p>	<p>Length: 237 cm (93.6 in.) Temperature: 70C (158F) Diameter: 53 mm (2.1 in.) Pressure: 281 kg/cm² (4000 PSI) Weight: 15 kg (33 lb.) Logging Speed: 9 m/min. (30 ft./min.) Tool Voltage Required: 36 VDC</p>

Sensor Response Ranges

Sensor	Response Limits	Accuracy
Natural Gamma (NG)	0-400,000 API units	+/-5%
16 in. (16N) & 64 in. Normal (64N) & Lateral Resistivity (LR)	0-2,000 ohm/meters	+/-5%
Spontaneous Potential (SP)	-400 - +400 mv	+/-5%
Temperature (TEMP)	0 C - 70 C (32 - 160 F)	+/-5%
Single Point Resistance (SPR)	0-2,000 ohms	+/-5%
Neutron-Neutron (NN)	0-20,000 API	+/-5%
X - Y Inclination (XYI)	0-45 degrees	+/-0.5 degrees
Azimuth (AZ)	0-360 degrees	+/-2 degrees

Tool Information

Item	Model #	Part #
Tool with 16N, 64N, LR, SP, SPR, NN, TEMP (No Natural Gamma)	7057	336600C
Tool with NG, 16N, 64N, LR, SP, SPR, NN, TEMP	8057	336600A
Magnetic Deviation Option and Same Parameters as 8057	9057	336600B
Source w/Shield Am 241 Be		PLEASE INQUIRE
Source Handling Tool		101502
Deviation Calibration Test Stand		317430
SP/Resistivity Calibration Box		335230

