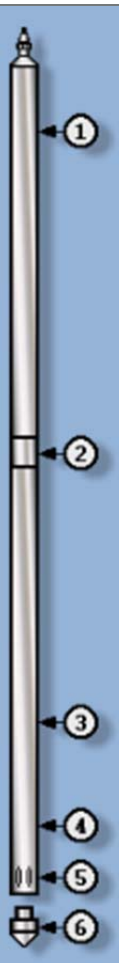
9075 Compensated Neutron Logging Tool



Background Information
The Compensated Neutron tool contains a two detector, neutron system which uses a 5.0 Curie, Am241Be source to record neutron porosity of the formation. Additionally, the tool also records short and long neutron counts, natural gamma, temperature and a deep guard resistivity.

Features

Properties Measured (see diagram)		Tool Specifications
1. Natural Gamma: 2.9 x 10.2 cm (1.125 x 4.5 in.) NaI Scintillation Offset: 30.5 cm (12 in.) **2. Deep Guard Resistivity:** Upper guard, measure and lower guard electrodes, 3 m (10 ft.) Offset for measure electrode:147.3 cm (58 in.)	**3. Neutron Detector, Far Spacing:** He^3 3.8 x 24.4 cm (1.5 x 9.6 in.) 61cm (24 in.) spacing Offset: 218.4cm (86 in.) **4. Neutron Detector, Near Spacing:** He^3 2.9 x 10.1 cm (1.125 x 4.0 in.) 32.4 cm (12.75 in.) spacing Offset: 241.3cm (95 in.) **5. Temperature Measurement:** Thermal temperature on needle sensor. Offset: 265.4 cm (104.5 in.) **6. Radioactive Source:** 5 Ci AmBe 241 neutron source, bullplug Offset: 276.9 cm (108 in.)	**Length:** 282 cm (111 in.) **Temperature:** 85 C (185 F) **Diameter:** 5.1 cm (2.0 in.) **Pressure:** 232 kg/cc (3300 PSI) **Weight:** 16.4 kg (36 lb.) **Logging Speed:** 9 m/min. (30 ft./min.) **Tool Voltage Required:** 70 VDC

Sensor Response Ranges

Sensor	Response Limits	Accuracy
Natural Gamma	0-10,000 API units	+/-5%
Near Neutron CPS	0 to 20,000	+/-5% cps
Far Neutron CPS	0 to 5000	+/-5% cps
Neutron Porosity	-10 to 100% porosity	+/-2% to 60%
Resistivity	0 to 20,000 ohm meters	+/-5%
Temperature	32 to 150 degrees F.	+/-5%

Tool Information

Item	Part #
Compensated Neutron Logging Tool	250050A
Source w/Shield Am 241 Be	Please Inquire
Source Handling Tool	101502
Guard Resistivity Calibration Fixture	335227