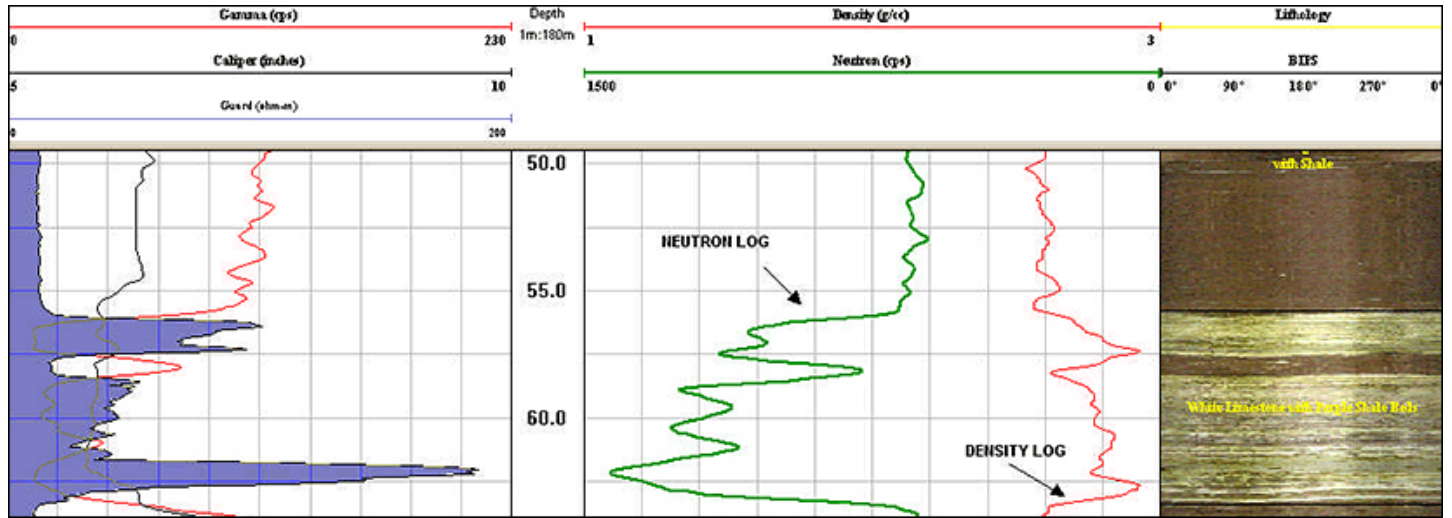


QL40-NEU Neutron Thermal Neutron



Description

The QL40-NEU neutron probe utilizes a He-3 thermal neutron detector. It measures Neutron porosity in counts per second, which can be directly related to the porosity of the formation. The probe has been carefully designed to maximize the detector sensitivity so that good results can be achieved with source strength of only 1 Curie. The source is carried in a specially designed shield and the probe itself is the source handling tool.

The QL40-NEU tool is stackable within the Quick Link (QL) product line or it can be run as a standalone tool. It can be run in any borehole environment.

Applications

- Quantitative In-situ Porosity
- Petrophysical Properties
- Aquifer Quality and Delineation
- Moisture Content of Unsaturated Matrix
- Used with other logs, can detect gas zones and identify gas-liquid contacts

Operating Conditions

Borehole Fluid

- Water
 Mud
 Dry

Casing

- Uncased
 PVC Borehole
 Steel

Centralization

- Required
 Non-Required

Features & Benefits

- Improved thin bed resolution
- Real-time Quantitative Porosity
- Americium Beryllium Source
- Operates on any standard wireline (Mono, 4, 7 conductor, or Coax)
- Can be combined with other logging tools of the QL product line or operated as a standalone tool.

Specifications – Metric/English

Specification	Metric	Imperial
Diameter	40 mm	1.6"
Length	1.34 m	46"
Weight	5.5 Kg	12 lbs.



Max. Temp.	70°C	158°F
Max. Pressure	200 bar	2900 psi

Sensor: He-3

Source-Detector Spacing: 35 cm / 13.77 “

Source: 1- 3 Curie Am241Be

Measurement: Neutron Porosity (cps)

QL Stack Possibilities

- **QL40NEU** + QL40GR (Gamma): Exploration, Petrophysical Properties
- **QL40NEU** + QL40GR (Gamma) + QL40DEV (Deviation) : Exploration, Borehole Deviation
- **QL40NEU** + QL4SGR (Spectral Gamma) + QL40ELOG (Resistivity): Groundwater Suite tools, Quantitative Analysis, Lithology, Porosity Estimates

Documentation

[Data Sheet](#)