

Cased hole

## TzSP-2INGK-43M\* Digital dual pulsed neutron-neutron logging tool

is designed for rock neutron parameters detection, oil/gas saturation estimation after some neutron lifetime (effective capture cross section  $\sigma_a$ ) and water-saturated porosity coefficient determination (water content).

### APPLICATION

Unlike the pulsed neutron gamma-ray logging tool TzSP-2INGK-43M is effective for enhanced gamma-ray registration in fiberglass well system.

TzSP-2INGK-43M and TzSP-2INNK-43 can be combined with a collar locator with the LM-GK-43 channel.

### SPECIFICATIONS

Thermal neutron lifetime measurement range $\tau$ , microsec	50 ÷ 1000
Thermal neutron lifetime measurement relative error $\tau$ , %	±2
Water-filled porosity measurement range, %	1 ÷ 40
Neutron generator type	ING-10-20-120, ING-10-20-150
Quantity/Time channel width, microsec	2×64 / 40
Downhole tool supply voltage, V	150
Power consumption, W	up to 50
Probe length, mm	300, 600
Telemetry system	Manchester-2
Data rate, kbaud	20
Maximum operating temperature, °C	120/150
Maximal operating pressure, MPa	120
Downhole tool dimensions, mm:	
- diameter	43
- length	3100
Weight, kg	up to 25

TzSP-2INNK-43 logging tool is to be run with GECTOR, VULCAN V3 and KEDR log recorder with one-core or three-core cable.

\*The apparatus is certificated.



