

Ore wells logging Coal and water wells logging

TzSP-KND-53/62 DOWNHOLE FISSION NEUTRON LOGGING TOOL



Designed for direct determination of uranium content in wells at hydrogen-type uranium deposits by fission neutron logging and gamma-ray logging methods.

The use of the equipment is regulated by the «Fission neutron logging instruction for the study of hydrogen deposits" / Comp. G.I. Ganichev, V.A. Zolotnitsky, A.P. Koshelev et al. - L.: NPO «Rudgeofizika», 1986. The downhole tool is to be run with VULCAN V3 log recorder or similar.

Operates with one-core or three-core logging cable.

SPECIFICATIONS

Range of measurement of uranium content, %	0,005-5
Range of measurement of prompt fission neutrons, n/s	0-6x10 ⁴
Range of measurement of water-saturated porosity, %	0-40
Thermal neutron lifetime measurement range, µs	50-2500
Measurement range of neutron yield from a pulsed neutron generator, n / s	2x10 ⁷ - 2x10 ⁹
Uranium content measurement error, %	10
The error in measuring the lifetime of thermal neutrons, %	2
The error in measuring the neutron yield from a pulsed neutron generator, $\%$	2
Uranium detection threshold, %	0,003
Range of gamma radiation exposure dose rate, μR / h	5-10000
The relative error of measuring the exposure dose rate of gamma radiation, %	10
Conversion factor	115±3
«Dead time» of the recording path, $\boldsymbol{\mu}s$	3
Downhole tool supply voltage, V	150
Maximum logging speed, m / h	40-60
Maximum operating temperature, °C	80
Maximum hydrostatic pressure, MPa	20
Length, mm	3200
Diameter, mm	53-62
Weight, kg	20



