SHENKAI

Calculation of the direction and distance of the formation boundary and oil-water interface by making use of azimuthal gamma, azimuthal resistivity, and compensated resistivity

Optimize the drilling trajectory to maintain drilling near the upper interface in the reservoir

The azimuthal resistivity detection depth is much deeper than that of traditional resistivity tools, and the formation changes can be detected for a longer time in advance, so as to improve the drilling speed and quality, and reduce risks

Max. working temperature: 175°C

Max. working pressure: 25000psi

Mass Memory: 1GB

Annular pressure: range: 25000 PSI,Accuracy: ±24PSI

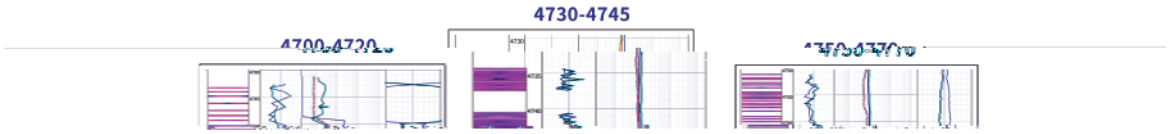
Azimuthal gamma: 16 sectors,0-1000API

Azimuthal resistivity: 16 sectors,Max Detection distance: 15 ft

Compensated resistivity: 400KHz, 2MHz,0.2-3000 ohm-m

Parameter	Value	Unit
AziExpress length	4.16	M
Max. operate temperature	175	°C
Max. survival temperature	185	°C
Max. operate pressure	25000	Psi
vibration	20	G RMS
shock	1000	G
Max. Boundary detection distance	4.6	M
Annular pressure measurement range	25000	Psi

Case 1：Application in formation angle sudden change



TVD

MD

Drill out casing

In middle of the formation

Approaching lower boundary

Approaching upper boundary

Case 2:Application in discontinuous formation