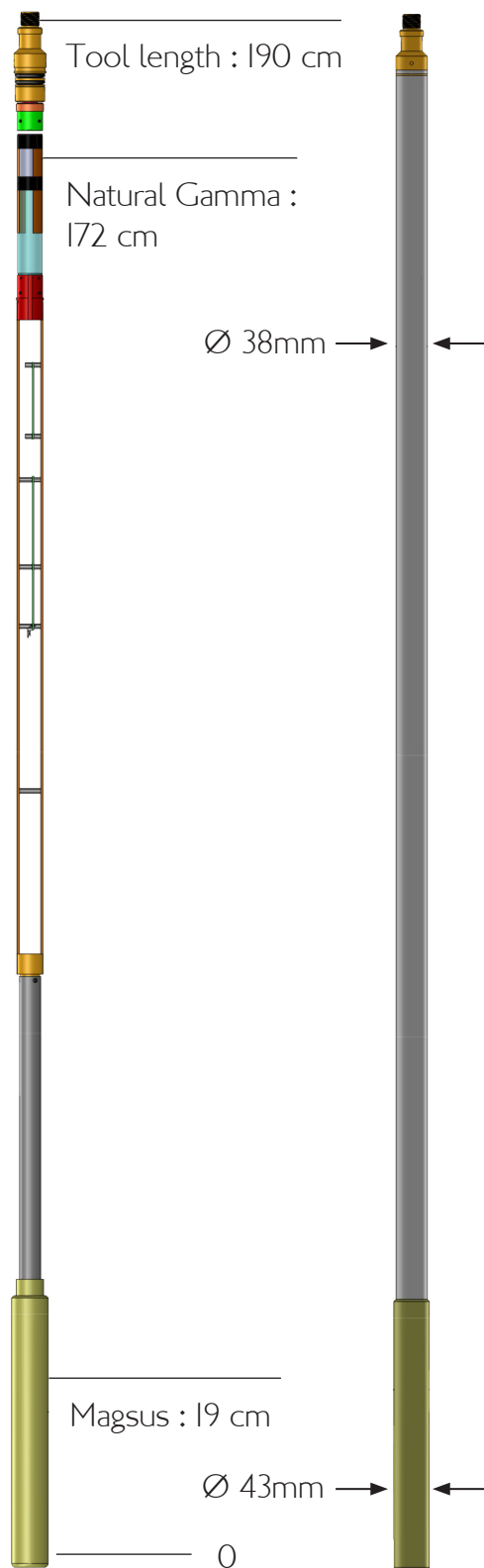


Magnetic Susceptibility Probe MAG 43 & MAG 43G



Magnetic susceptibility is a physical parameter that can provide useful information in a number of mining-related contexts. These include uranium and iron ore (BIF) exploration and cases where high-susceptibility minerals such as magnetite are associated with a primary target mineral. The Electromind MAG42 probe incorporates the industry-leading BSS02 detector from Bartington Instruments. This low-frequency electromagnetic device was developed specifically for the mining sector and ensures a stable response over a wide range of temperature and pressure conditions.

As an option, the probe can be supplied with a natural gamma detector to provide additional lithological information or for horizon correlation purposes.

SPECIFICATIONS

Tool diameter : 43 mm

Body diameter : 38 mm

Length : 1900 mm

Weight : 6 kg

Max. Temp / Pressure : 70°C / 200 bar

DATA / SENSOR PARAMETERS

Operating frequency : 1.439 kHz

Vertical resolution : 25 mm

Measuring range : 10⁻⁵ to 10⁻¹ cgs

ACCESSORIES / OPTIONS

Natural gamma detector : 25 x 50 mm NaI(Tl) crystal

BOREHOLE CONDITIONS

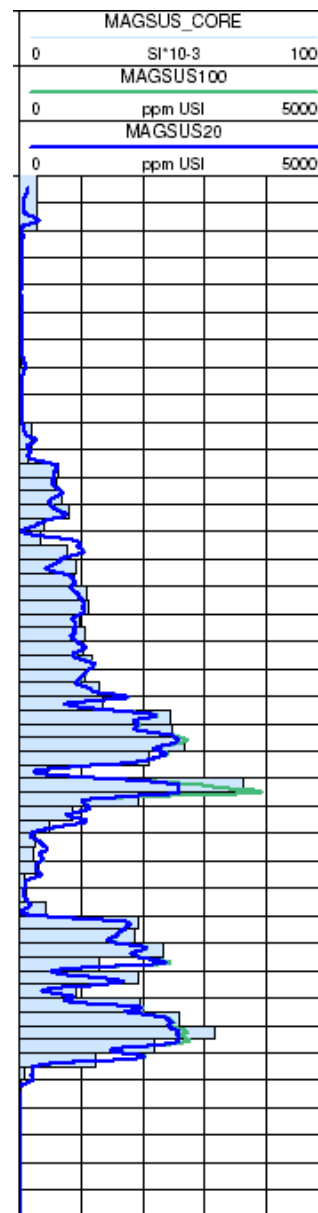
Dry or fluid-filled borehole

Examples

Banded iron formation. Magnetite gives rise to a very strong magnetic susceptibility response.



Comparison between magnetic susceptibility results from a MAG42 geophysical logging probe and a hand-held device used on core samples. Using the geophysical logging method, production rates of up to 300 meters per hour can be achieved.



Magnetic susceptibility log recorded in the iron-bearing formations underlying the « Minette » region of Luxembourg.

