

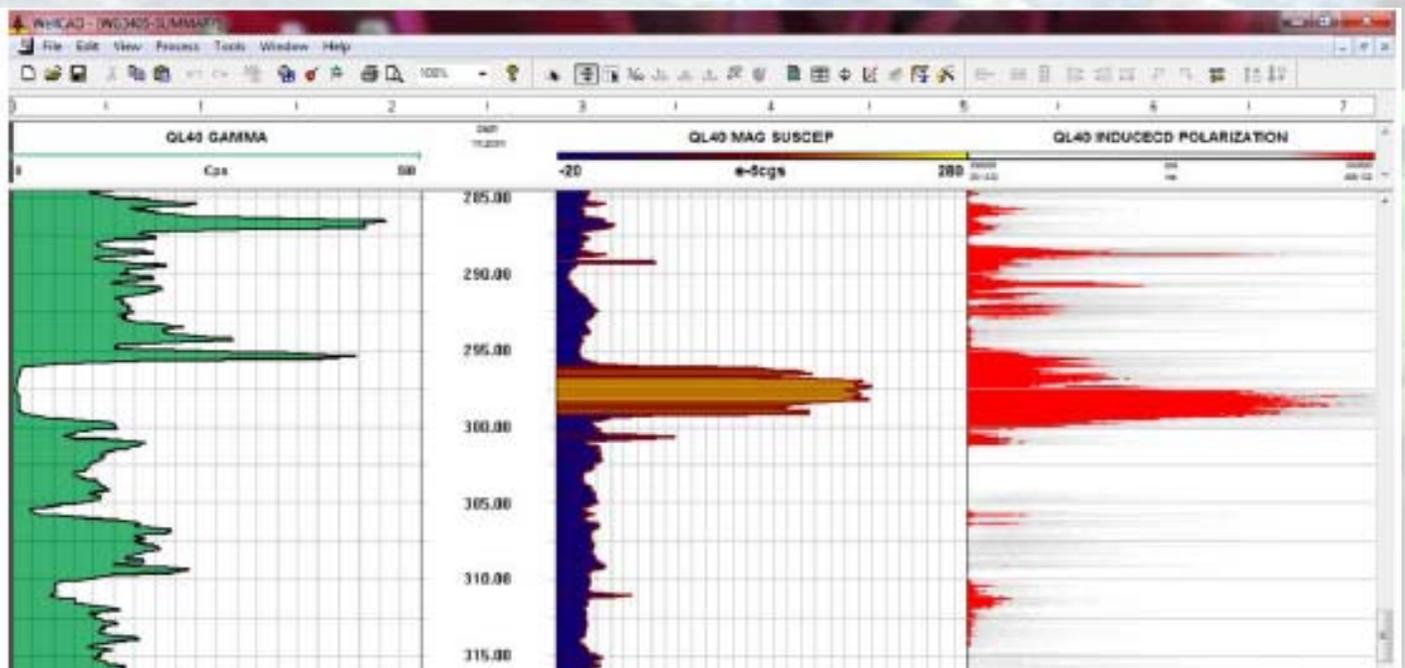
QL40MGS-1000 MAGNETIC SUSCEPTIBILITY

The QL40-MGS borehole magnetic susceptibility tool is typically used in mining, geotechnical, and lithology applications.

All electronic circuitry resides in a high strength non-magnetic enclosure. The operating frequency is chosen to be sufficiently low to avoid interference from rock conductivities and the circuitry is temperature compensated to minimize thermally induced drift. The QL40-MGS is offered with one or two measuring ranges and will resolve strata down to 25 mm. Probe response is practically instantaneous (<0.5s).

The extended range is designed for measurements in complex igneous or metamorphic rocks up to high magnetite rocks. This extended range has been chosen so as to identify layers containing magnetite (0.005 – 100%). The main use of the probe is for prospection on deposits of Fe minerals – magnetite, pyrite and hematite. These data are to be used for quantitative interpretation of the magnetic components in the rocks and estimation of the thickness of layers. In this way, the QL40-MGS can directly be used for economic evaluation of the deposit.

The QL40-MGS tool is offered in standard range, extended range, dual range magnetic susceptibility, and as a combination tool with induction. All of these options are stackable within the Quick Link (QL) product line or can be run as a standalone tools.



WellCAD screenshot QLGAM +QLMGS + QLIP showing mineralization
Central China



QL40MGS 1000 MAGNETIC SUSCEPTIBILITY

Applications

- Delineation of kimberlite deposits
- Economic evaluation of deposits
- Mineral exploration and characterization
- Lithology studies
- Extended range used in complex igneous or metamorphic rocks up to high magnetite rocks
- Ore Identification and quality correlation

Operating Conditions

Water, Mud, or Dry

Uncased or PVC cased, Not Steel casing

Centralization: Non Required

Features & Benefits

- Two depths of investigation for detailed formation characterization
- Less temperature drift than other tools on the market
- Easy to calibrate for specific borehole magnetic susceptibility ranges
- Operates on any standard wireline (Mono, 4, 7 conductor, or Coax)
- Slim, 45 mm diameter. One-person operation.
- Can be combined with other logging tools of the QL product line or operated as a standalone tool.

Specifications - Metric/English

Diameter:	45 mm / 1.77"
Length:	1.5 m / 59"
Weight:	7 Kg / 15 lbs.
Max. Temperature:	70°C / 158°F
Max. Pressure:	200 bar / 2900 psi
Sensor:	Two coil system
Intercoil Spacing:	Standard: 25 cm Extended: 30 cm
Range:	Standard: 10-5 to 0.5 SI units Extended: 10-4 to 2 SI units
Op. Frequency:	~2 kHz
Accuracy:	< 3% F.S.
Zero Drift:	Standard: < 2.10 ⁻⁵ SI units/ 10°C Extended: < 1.10 ⁻⁴ SI units/ 10°C

QL Stack Possibilities

- **QL40MGS + QL40GR (Gamma):** Lithology tool, Glacial till characterization
- **QL40MGS + QL40IP (Induced Polarization) :** Clay Typing, Geotech
- **QL40MGS + QL40IP (Induced Polarization) + QL40GR (Gamma):** Mining Exploration tool
- **QL40MGS + QL40IP (Induced Polarization) + QL40IND (Induction):** Mineral and Ore body Identification

