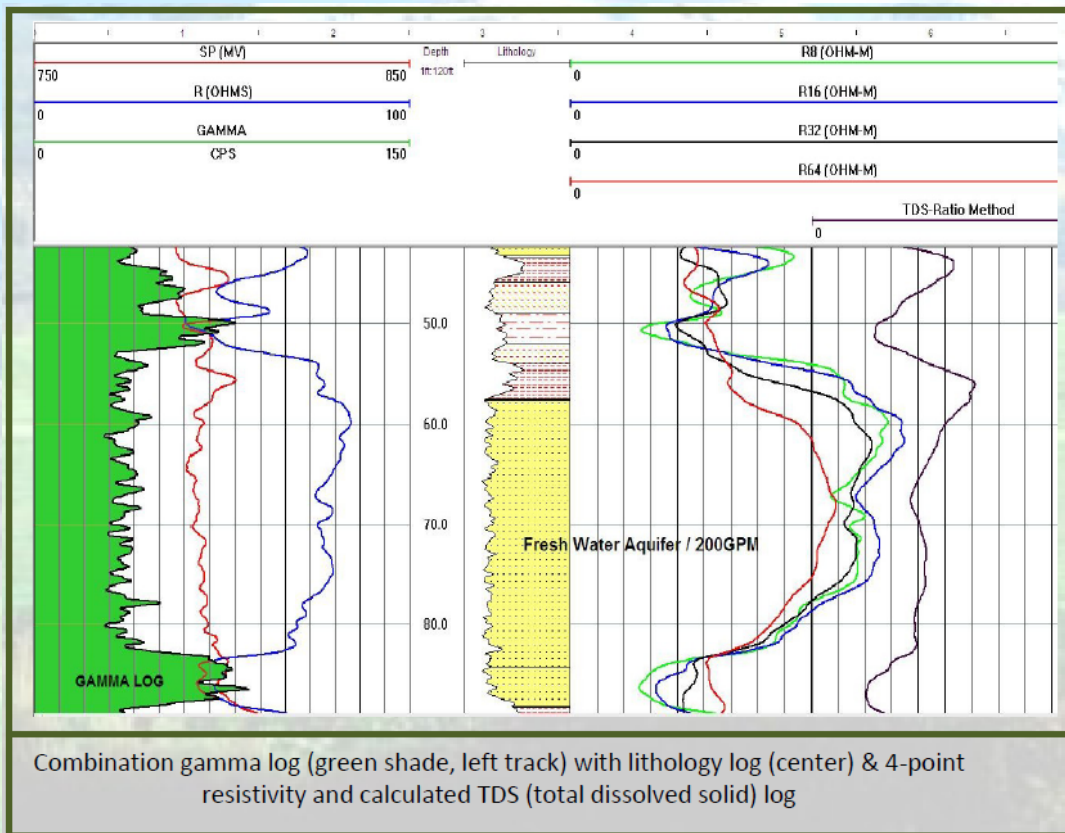


QL40GRA, NATURAL GAMMA PROBE

The **QL40GRA** natural gamma probe sub can be run stand-alone, or with other QL tools in a custom stack. The natural gamma crystal is a proven 22mm diameter x 76mm long Na(Th)I scintillation crystal, suitable for general lithology applications and uranium exploration. Other QL probes commonly stacked with the QL40GRA include the QL40RES (8-16-32-64" normal resistivity), QL40FTC-B (temperature / fluid resistivity), and the QL40CAL (3-arm caliper), but many possibilities exist owing to the flexibility of the QL (Quick Link) family of geophysical logging probe functions. Natural gamma logs can be run in any borehole environment, cased, uncased, fluid or air.



Y crystal 25 cm from bottom



QL40GRA, NATURAL GAMMA PROBE

Specifications

Length:	103 cm (40.5")
Diameter:	40 mm (1.6")
Weight:	5 Kg (11 lbs)
Pressure Rating:	200 Bar (3000 PSI)
Temp. Rating:	70 °C
Sensor (s):	22 x 76mm dia Na(Th)I Scintillation Crystal & PMT
Measurement Range:	0 – 100,000 CPS
Accuracy:	1% full scale
Resolution:	0.1 CPS

Features

Gamma probes are versatile, ubiquitous probe functions with a wide range of applications. Matrix .sub files can be modified to output gamma in API units and / or % wt. U₃O₈. Typical k-factor for QLGR probes is $1^{-3} \times 10^{-6}$ in 4.5" water-filled open borehole.

Advantages

Gamma probes with other scintillation materials and sizes can be custom made for your application

QL Stack Possibilities

- QL40GRA** (gamma) + QL40RES + QL40MGS (Magnetic susceptibility): mining, exploration
- QL40GRA** (gamma) + QL40RES + QLOBI (optical televiewer): exploration, bedding Planes, fractures
- QL40GRA** (gamma) + QL40RES + QLABI (optical televiewer): exploration, bedding Planes, fractures
- QL40GRA** (gamma) + QL40RES + QL40FTC-B (hydrogeologists probe): ground water exploration & exploitation
- QL40GRA** (gamma) + QL40DEV (deviation): lithology, hole location

Recommended Spares

QL40-GO4, or QL40-MS1, Four-Conductor or Single Conductor Probe Top Assembly
QL40-BOT, Bottom Sub
Probe O' rings
Spanner wrenches