

# EXPLORER G2 2-7/8"

Gamma-Ray - DSCL - Incliner - Optical Fiber Gyro - Pressure/Temperature/Velocimeter Sensors

## MAINS:

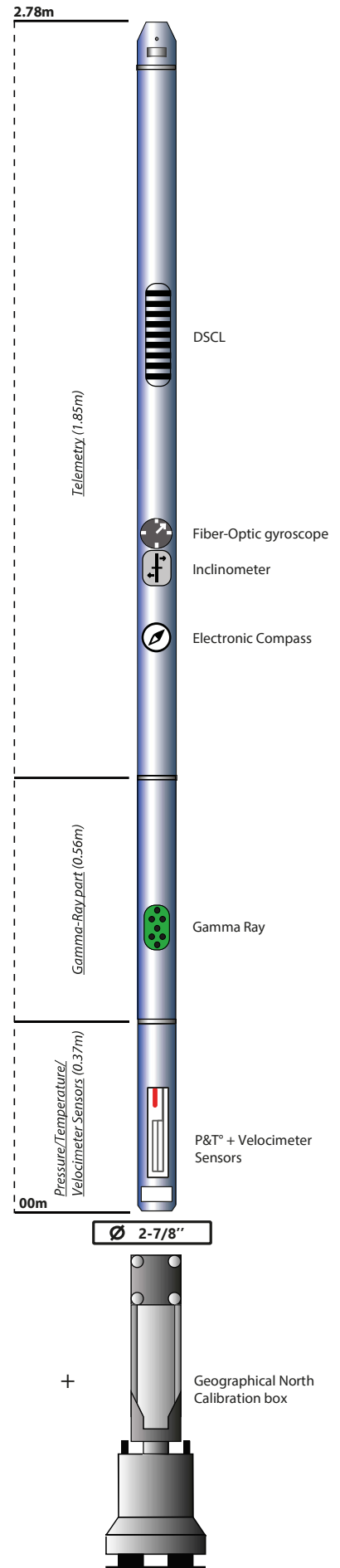
The Explorer instrument version G2 is an instrumented dummy that incorporates the latest technological sensors to become a complete and versatile cavern dedicated instrument.

This instrumented logging tool is the bodyguard of our 'cavity suite' with similar dimensions as the 2-7/8" Sonar or EZ Cutter probes to prevent subsequent operations from dangerous downhole conditions.

It is then highly recommended to run this Explorer G2 instrument prior to any survey or cut as it detects in real time any pipe or cavern neck abnormality, thus it helps avoiding damage to the sensitive lower parts of the cavity suite probes (sonar, EZ cutter) and prevents loss of high cost instruments.

Amongst its main new features, the Explorer G2 instrument is to run:

- Cased Hole precise depth correlation through a dual string collar locator (DSCL) that can detect the casing collars of two concentric strings plus the cemented casing shoe.
- Open Hole precise depth correlation to previous log main elements of lithology through a highly sensitive Gamma-Ray. Determination of the cavern roof elevation.
- Safe access to the cavern thanks to high quality inclinometer sensor and surface tension readout, verticality at the casing shoe position, free cavern neck validation and Z-axis bottom of the cavern determination.
- Up to best standards deviation measurement thanks to the accurate combination of 'Inclinometer' & low drift 'Optical fiber Gyroscope' to best evaluate the casing shoe positions, which is of special interest when connecting caverns or when evaluating the pillars thicknesses. Initial North Seeking Gyro correlation is possible.
- Participation to MIT campaigns, thanks to Temperature, Pressure and Velocimeter sensors to better evaluate downhole fluid composition all the way down from the surface Well-Head to the bottom of the cavern.



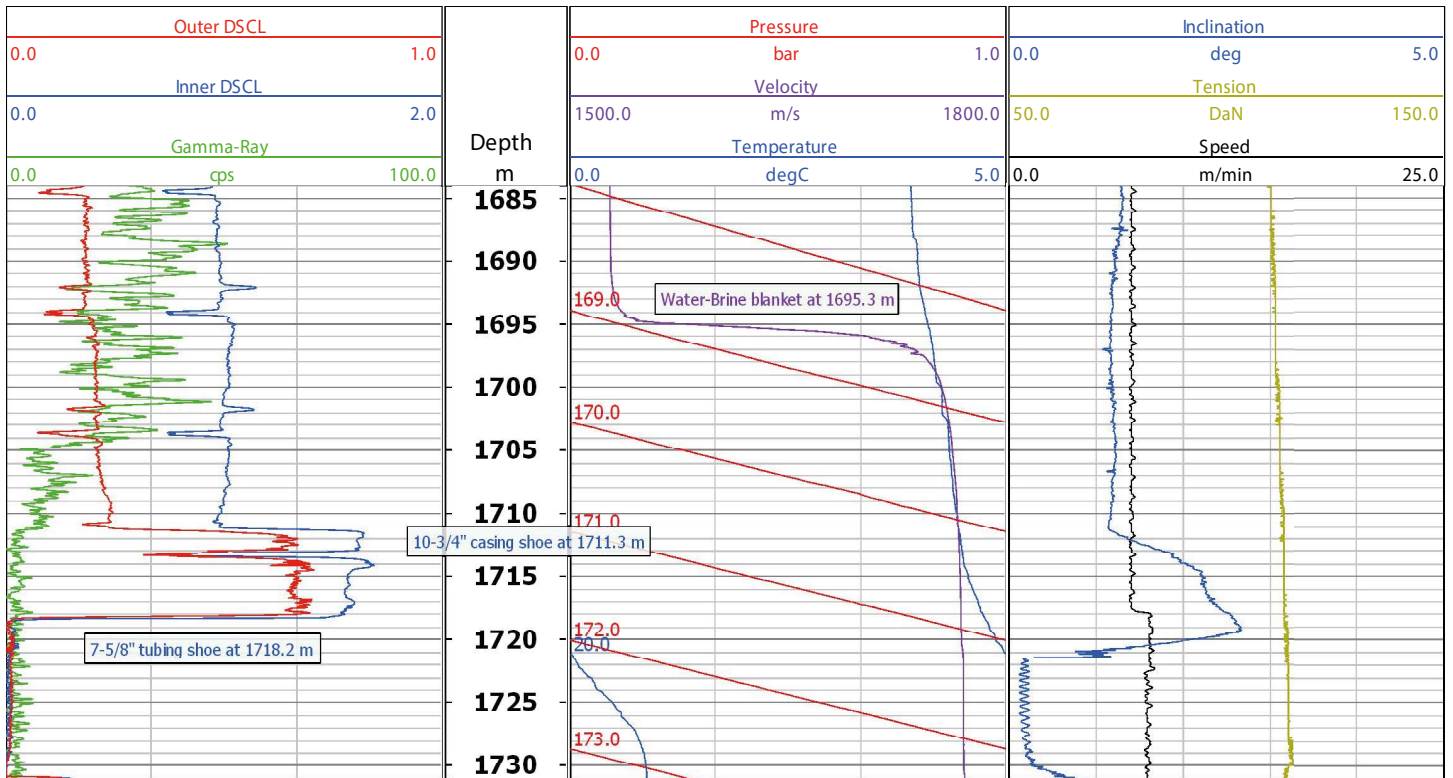
## APPLICATIONS

- / Brine Production caverns
- / Old mines and Quarries
- / Liquid hydrocarbon caverns
- / Mechanical Integrity test
- / Gas / Hydrogen storage caverns
- / Well deviation

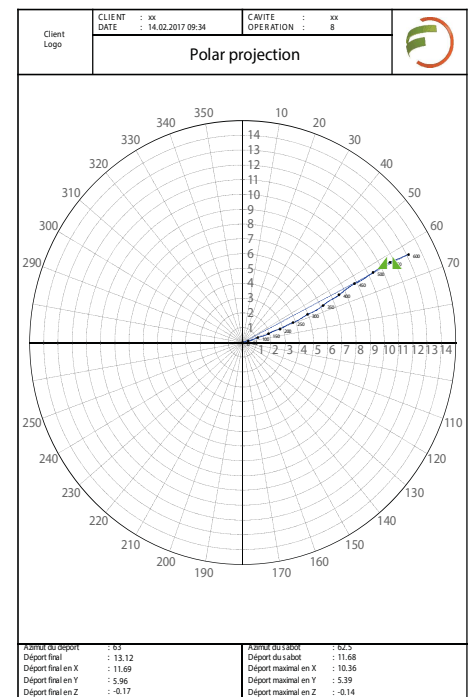
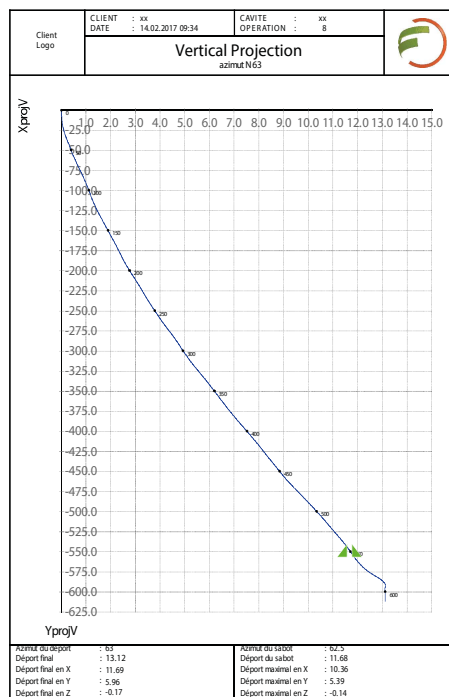
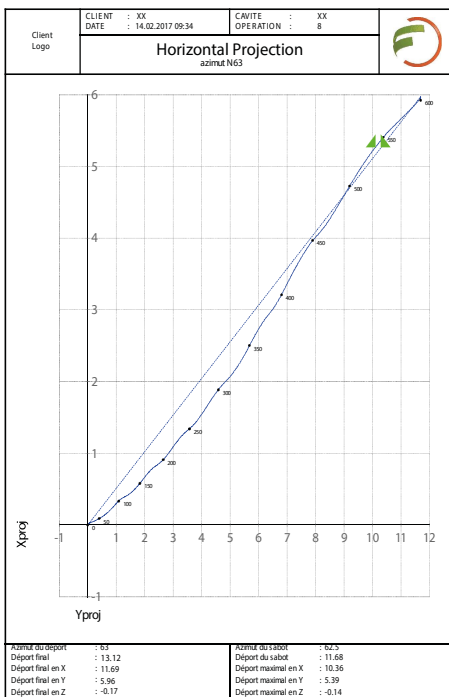
## SPECIAL FEATURES

- / Bodyguard of the cavity suite of instruments
- / No "lost in hole" cost if EXPLORER G2 run first
- / Precise depth correlations to cemented casing shoe
- / Well Integrity Testing
- / Accurate well deviation measurement
- / Smart cost instrument

## WELL LOGGING:



## DEVIATION:



## SPECIFICATIONS:

### Instrument Specifications

O.D.	2-7/8" - 73 mm
Length	2.78 m
Weight	38 Kg
Max. Working T°	105°C
Max. Working P	350 bar

### Sensors Specifications

Pressure	10 000 psi / 700 bar, accuracy 0.01% FS
Temperature	125°C, accuracy 0.001°C
Velocity	600 m/s - 2 000 m/s
DSCL	2 strings + casing shoe of third one
G-Ray	Scintillation crystal
Inclinometer	0-30°, accuracy 0.15° (not guaranty above 30°)
Temperature	125°C, accuracy 0.001°C
Optical Fiber Gyro	Drift 1°/hour
North Seeking gyro	accuracy 0.5° (external)