

PATENT PENDING

Gamma-Density Interface Tool (GDI-2)

The GDI-2 is a multi-receiver density measurement tool capable of detecting fluid interfaces behind 1 or 2 sets of casings. It is specifically designed to detect various types of gas-liquid and liquid-liquid interface in salt caverns. The tool has a vertical resolution of up to 2" (or 5cm), and is approved by the CNSC with no well abandonment requirements if it becomes unrecoverable in a well / cavern.

Applications

This log can be run as a standalone service or as part of a cavern Mechanical Integrity Test (MIT) to detect gas-liquid interfaces such as nitrogen/brine, butane/brine, as well as liquid-liquid interfaces such as diesel/brine and condensate/brine, etc.

Main Features

This tool allows continuous reading of the interface and does not energize the formation.

Real-time downhole pressure & temperature measurements can eliminate assumptions and approximations, which is greatly beneficial for MITs.

No abandonment requirements if tool is lost in hole.

Specifications

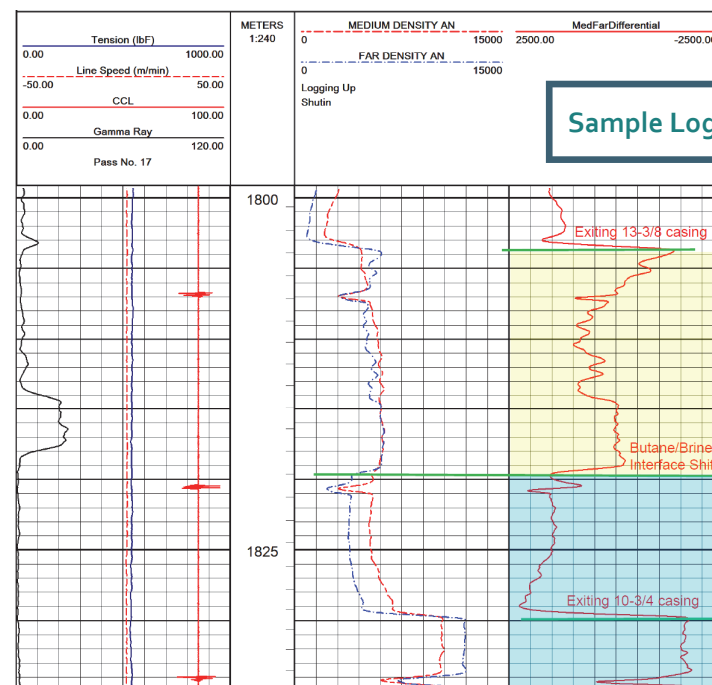
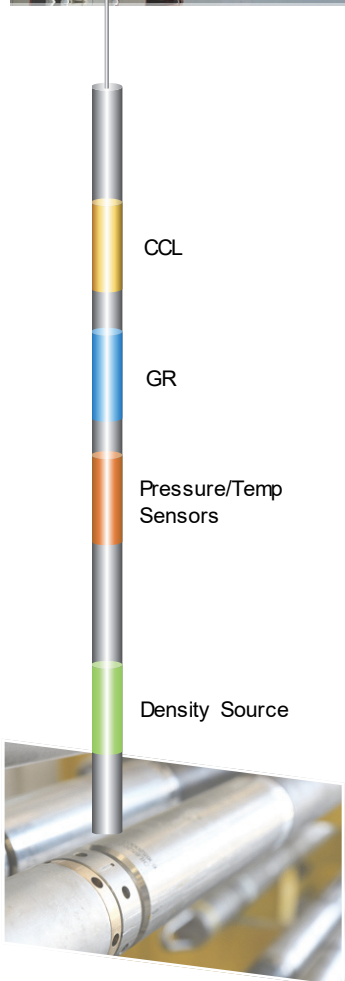
Well	Max. Temperature	160°C
	Max. Pressure	15 kpsi [103.5 MPa]
Measure	Std. Resolution	4.75" [12cm]
	High Resolution	2" [5 cm]

BGES Advantages

Cost advantage – because the operating cost for this tool is low compared to a Pulse Neutron tool, BGES is able to transfer the savings to our clients to reduce their overall costs especially on multi-days projects.

Low financial risks – the replacement cost of the GDI is approx. 25% of that of a typical Pulse Neutron tool. If in a rare case the tool is lost in hole, the cost would be significantly lower.

Low environmental risks – since this tool uses a gamma source with a very short half-life, there is no abandonment required by the CNSC if this tool is irretrievable in a cavern or well.



Sample Log