

Mud Logging  
Field Surveillance  
Well Intervention



# Reserval™ CF-L

## The New Generation Advanced Gas Service

*Reserval™ CF-L offers efficient gas detection and is especially suitable for challenging situations such as deepwater environments, cold mud returns and/or harsh drilling fluid conditions. Due to its unique extraction process and its unique anti-contamination system, the Reserval™ CF-L provides superior gas readings from C<sub>1</sub> to nC<sub>5</sub> for all drilling conditions and mud types.*

### REServal™ CF-L FEATURES

#### ► For Deepwater Environments

The Reserval CF-L is uniquely efficient for consistently extracting components up to nC<sub>5</sub> from the drilling mud in deepwater operations and in all situations, where cold mud returns are encountered. Reserval CF-L goes far beyond existing conventional gas equipment.

#### ► For New Drilling Fluids

As a new generation of drilling fluids is used for overcoming challenging wells, Reserval CF-L eliminates their contaminating effect on the C<sub>4</sub> and C<sub>5</sub> gas readings. This anti-contaminant feature is unique in today's market.

#### ► For Best Quality Gas Data

Due to its superior C<sub>1</sub>-C<sub>5</sub> extraction process from the drilling fluid, the Reserval CF-L is an efficient tool for well gas-logging. Parameters such as mud level and temperature are controlled, and the overall quality of the gas data is improved.

## Applications

Reserval CF-L provides a more efficient way to gas-log wells in deepwater environments, where conventional gas equipment does not have the required efficiency to consistently extract components up to nC<sub>5</sub> from the cold drilling mud. Under these severe conditions, Reserval CF-L brings valuable and advanced information to our clients.

Reserval CF-L counteracts the presence of contaminants, such as complex amines and alcohols, which are found in the new generation of drilling fluids. These contaminants corrupt the C<sub>4</sub> and C<sub>5</sub> gas data, making their interpretation impossible. This problem is well known and is expected to worsen with the increased complexity of new formulations of drilling fluids, which are being used more and more for challenging wells. Reserval CF-L includes a unique, fully on-line, anti-contaminant system, a Geoservices patent.

The FLEX (FLuid EXtractor), the Reserval CF-L gas trap, heats the drilling mud to a constant temperature, and maintains a constant air-to-mud ratio inside the extraction chamber (Geoservices patent). All this contributes to very efficient extraction, especially of the heavier components (C<sub>3</sub>+), and offers the possibility of reproducing the same extraction conditions for different wells. All the parameters are monitored by sensors (mud level, temperature) to better control the quality of the extraction process.

Reserval CF-L is installed inside the Mud Logging unit, and is operated as part of our Mud Logging service, without extra personnel.

## Benefits

- Superior C<sub>1</sub>-C<sub>5</sub> extraction from the drilling fluids with regulated thermodynamic conditions, providing high stability of the gas data.
- Efficient extraction of all measurable hydrocarbons in cold mud environments.
- Unique anti-contaminant feature for eliminating the contaminating effect of the new generation of drilling fluids on the C<sub>4</sub> and C<sub>5</sub> gas readings.

**HEAD OFFICE**  
formation-evaluation@geoservices.com

### DISTRICT OFFICES

north-europe@geoservices.com • west-africa@geoservices.com • mediterranean@geoservices.com • latin-america@geoservices.com  
north-america@geoservices.com • middle-east@geoservices.com • north-asia@geoservices.com • south-asia@geoservices.com