

DYNAFLOW reservoir drill-in fluid

Drill high pressure reservoirs with an effective, non-damaging drill-in fluid

Applications

- Reservoir drilling where divalent brine systems are required
- Open-hole completions

Features and Benefits

- High-density drill-in fluid
 - Densities from 10.5 to 17.5 lb/gal (1.3 to 2.1 sg)
- Minimal impact on rheological profile
 - Sustains the fluid's hydraulic performance
- Low-shear rate viscosity with minimal ECD
- Simple formulation
 - System components compatible with divalent brines
- Filtration control up to 275°F (135°C)
 - Reduced leak-off
- Biopolymer-free
 - Easily dispersed, acid-soluble filter cake
- Environmentally preferred system components

The Baker Hughes **DYNAFLOW™ reservoir drill-in fluid** is a biopolymer-free system designed for use in divalent brine applications that present challenges for conventional drill-in fluids. The DYNAFLOW fluid increases low-shear-rate viscosity (LSRV) without significantly impacting the overall fluid viscosity profile, providing better equivalent circulating density (ECD) control and improved drilling performance.

The DYNAFLOW system is free of xanthan gum or other biopolymers, and as such, the protective filter cake produced by DYNAFLOW is easily dispersed and readily dissolved by organic acids.

Recommended treatment

The DYNAFLOW system is customized to match a specific reservoir, but is generally composed of the following key components:

- Divalent brines such as calcium chloride, calcium bromide, and zinc bromide to provide density
- The **D-PAQ™ fluid loss control additive** to improve filtration control in divalent brine systems
- The **D-PLEX™ additive**, which works synergistically with D-PAQ to build LSRV
- **FLOW-CARB™ calcium carbonates** or other sized marble for custom bridging and supplemental density

Depending on a reservoir's specific needs, other products (e.g., scale inhibitors, emulsion preventers, lubricants, oxygen scavengers, and internal filter cake breakers) and alternative bridging materials may be added to the system.

Environmental information

For information concerning environmental regulations applicable to this product, contact the Health, Safety, and Environmental department of Baker Hughes.

Safety and handling

Use normal precautions for employee protection when handling chemical products. See Safety Data Sheet (SDS) prior to use.

Packaging

DYNAFLOW drill-in fluid is usually blended at the liquid mud plant but may also be prepared at the rig site using individual products. D-PAQ and D-PLEX additives are packaged in 55-lb (25-kg) multi-walled bags.