Baseline® 9250: Dual Gas Chromatograph (FID)

PRECISE IDENTIFICATION OF RESERVOIR FLUIDS FOR ENHANCED RESERVOIR UNDERSTANDING

OVERVIEW

Being able to characterize hydrocarbons by utilizing extended-range gas chromatography analysis is critical for a complete understanding of reservoir fluids. Historically, chromatographic analysis ended at NC5, limiting the availability to identify heavier critical gases. The Baseline® 9250 dual gas chromatograph with a flame ionization detector (FID) from Halliburton Sperry Drilling extends the range of gas detection through NC8, with efficient separation of ethane/ethylene and propylene to help operators enhance reservoir understanding and maximize asset value.

ACCURATE GAS DETECTION ENHANCES RESERVOIR UNDERSTANDING

As a key component of the GasFact™ gas analysis service, the Baseline® 9250 dual gas chromatograph (with FID) precisely identifies and detects hydrocarbon species to provide a better understanding of formational fluids. The hydrocarbon detection coupled with accurate quantification makes the identification of gas-oil contact and oil-water contact simple and fast. Additionally, the analyzer can discern between bit- generated gas and normally occurring gas, thus avoiding false interpretation of formation fluids. By extending the range of quantified gas detection through C8, reservoir fluids are better understood, allowing for more accurate estimates of API fluid gravity, gas and oil, and oil and water contacts. Utilizing dynamic temperature controls of the two gas chromatography channels allows for more efficient separation between ethane and ethylene, and extends the quantified detection up to C8.



Baseline® 9250 analyzer display

BENEFITS

Enhance Reservoir Understanding

- » Quantify ethylene and propylene species in a 90-second cycle to obtain full understanding of the fluid composition
- » Identify changes in compartmentalization and missed pay by knowing the exact composition of reservoir fluids

Reduce Well Time

» Identify bit wear early by using drill-bit metamorphism to avoid drilling delays and non-productive time (NPT)

FEATURES

- » C1 to C8 detection
- » Configured with two independent gas chromatograph channels that operate in parallel with a single sample stream
 - Channel 1 light hydrocarbon species:
 Methane, ethane, ethylene, propane, propylene, isobutene, n-butane, isopentane, and n-pentane
 - Channel 2 heavy hydrocarbon species: n-hexane, benzene, n-heptane, methylcyclohexane, toluene, and n-octane
- » Integration with InSite® data management system for data acquisition and calibration