



Shortstak® Fluid Density Tool

Shortstak production logging tools help evaluate reservoir conditions, diagnose problems and manage well performance. These surveys evaluate performance problems, identify mechanical failures, improve well productivity and assist in reservoir management and surveillance for both production and injection wells.

The standard production logging toolstring consists of:

- Flow meters to measure downhole flow rates.
- Fluid identification tools to evaluate flow-stream composition.
- Pressure and temperature surveys to identify areas of inflow and assist in estimating downhole fluid properties.

Other specialty devices can be added to the toolstring to provide additional measurements. When run in the correct sequence these tools provide conclusive solutions to production problems.

The *Shortstak* fluid density tool is a nuclear fluid density device based on gamma ray absorbency of the material between a radioactive source and gamma ray detector. The tool uses a nuclear fluid density design with a collimated high-energy Cs¹³⁷ gamma ray source and detector.





Shortstak[®] Fluid Density Tool

Applications

- Production profiles.
- Injection profiles.
- Diagnose mechanical problems.
- Slim-hole logging.
- Channel location.
- Detect surface casing leaks.

Specifications

Mechanical

Diameter 1 3/8 in. (35 mm)
Length 38.1 in. (96.8 cm)
Weight 10.4 lb (4.7 kg)

Environmental

Pressure 17,000 psi (117 MPa)
Temperature: 350°F (177°C)

Measurement (w/45 mCi Cs¹³⁷ source)

Resolution 0.01 g/cm³ (300 s average)
Accuracy +/-0.04 g/cm³ (300 s average)

Sensor offset

Density 11.0 in. (28.0 cm)