Armada[®] Fluid Sampling Tool

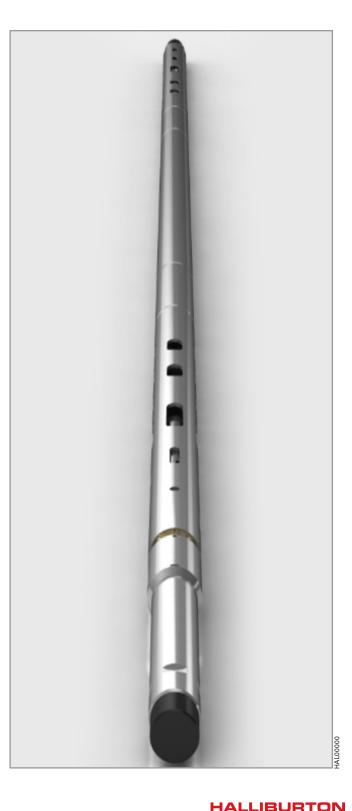
Halliburton's wireline-conveyed Armada* Fluid Sampling Tool (FST) collects pressure, volume and temperature (PVT)-quality downhole fluid samples in a cased hole. The Armada FST can be run in combination with production logging sensors for real-time understanding of downhole conditions prior to activating electronic triggers for on-demand flexibility. Sampling events with large 400-cm³ fluid chambers per sampler allow quality fluid analysis and two independent samples in a single run. The Armada system uses a positive displacement sample chamber and a nitrogen pressure-compensation system to ensure the collected fluid maintains phase during recovery.

Applications

- Analyzing basic fluid composition to improve reservoir simulation
- Identify fluid behavior for waxes, asphaltenes, and hydrates to enhance well performance
- Obtaining PVT data from representative fluid sample to assist in production management

Benefits

- Provides 400 cm³ of samples compared to similar technology in the industry, for reliable sample analysis. When run in tandem, up to 800 cm³ of sample in a single run can be collected
- Cost-effective fluid sampling with minimum production interruption
- · Combinable with production logging services, saving extra runs
- Real-time decision capability for good quality sample
- Capable of taking two separate samples in multizone production due to an independent triggering system
- Two nitrogen sources per chamber accommodates sample shrinkage and maintains PVT properties on surface
- · Provides lower sampling risk compared to openhole sampling



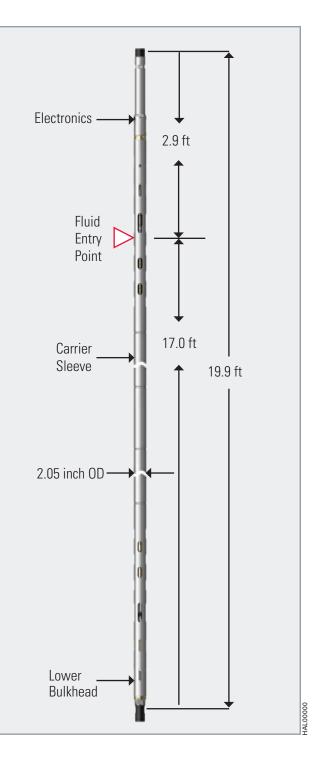


Features

- 2.05-in. (52.1-mm) OD for slim hole operation
- Electronic-controlled trigger system to initiate fluid sample collection
- A nonreactive, ceramic-coated Inconel[®] sampler prevents H₂S absorption and allows accurate chemical concentration measurement
- · Reliability and design based on proven sampler technology
- · Wellsite fluid sample transfer and basic analysis capabilities

Inconel® is a registered trademark of Special Metals Corp

Armada [®] Fluid Sampling Tool	
Part Number	102204528
Maximum Outside Diameter	2.05 in. (52.1 mm)
Minimum Hole Size	2.25 in. (57.2 mm)
Tool Weight	134 lb (60.78 kg)
Tool Length	238 in. (604.5 cm)
Electronic Sec. Maximum Temperature	350°F (177°C)
Maximum Pressure	15,000 psi (103 MPa)
Sample Volume / Sampler	400 cm ³
Maximum Volume Per Run	800 cm ³
Single Phase Source	Nitrogen
Nitrogen Source Maximum Pressure	15,000 psi (103 MPa)
Compatibility	Production Logging Suite



Know your fluid. For more information, contact your Halliburton representative.

© 2013 Halliburton. All rights reserved. Sales of Halliburton products and services will be in accord solely with the terms and conditions contained in the contract between Halliburton and the customer that is applicable to the sale. H010741 9/13

www.halliburton.com



Wireline & Perforating