



## *Shortstak® Telemetry/CCL Tool*

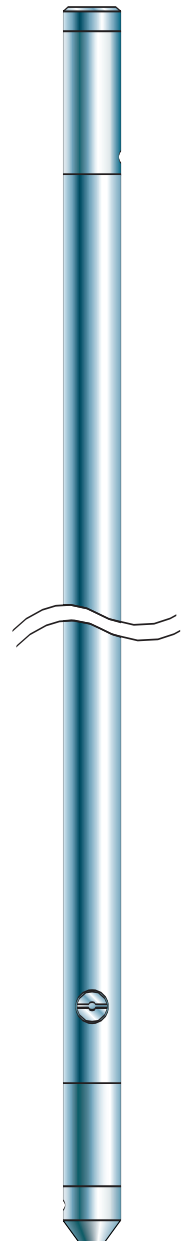
*Shortstak* production logging tools help evaluate reservoir conditions, diagnose problems and manage well performance. These surveys evaluate performance problems, identify mechanical failures, improve well productivity and assist in reservoir management and surveillance for both production and injection 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 digital casing collar locators of the telemetry/CCL tool respond to changes in metal mass (caused by casing collars and packers) while moving inside the well. The tool's telemetry section serves as the downhole interface between wireline and individual sensor cartridges. The telemetry supplies power, commands individual sensors and converts digital data to a wireline-compatible format for transmission to the surface system.





## *Shortstak<sup>®</sup> Telemetry/CCL Tool*

### *Applications*

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

### *Specifications*

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#### **Mechanical**

Diameter .....1 3/8 in. (35 mm)  
Length .....48.4 in. (122.9 cm)  
Weight .....10.8 lb (4.9 kg)

#### **Communication**

Wireline. ....CTS-B @ 6/12 Kbps Std./H2S cable 5K-25 Kft  
Tool bus .....ITB @ 302 Kbps)

#### **Environmental**

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

#### **Measurement**

CCL .....7 in. max csg/32# wt/30 ft/min speed  
Bus voltage .....+/- 2 VDC accuracy  
Wireline voltage .....+/- 2 VDC accuracy

#### **Sensor offset**

CCL .....39.0 in. (99.1 cm)