Compact™ Well Shuttle Messenger System

Conveys Compact logging tools in the absence of wireline

Applications

- High-angle, high-dogleg-severity, and horizontal wells
- Difficult hole conditions that preclude other conveyance options
- Wells with instability due to lost circulation or underbalanced operations
- Long intervals
- Small-footprint operations in which no space is available for a wireline unit

Features

- The shuttle messenger tool (SMT) pushes the logging tools through the bottomhole assembly (BHA), which enables them to pass through high-dogleg areas.
- The drillpipe can be rotated and circulated at any time during the logging operation.

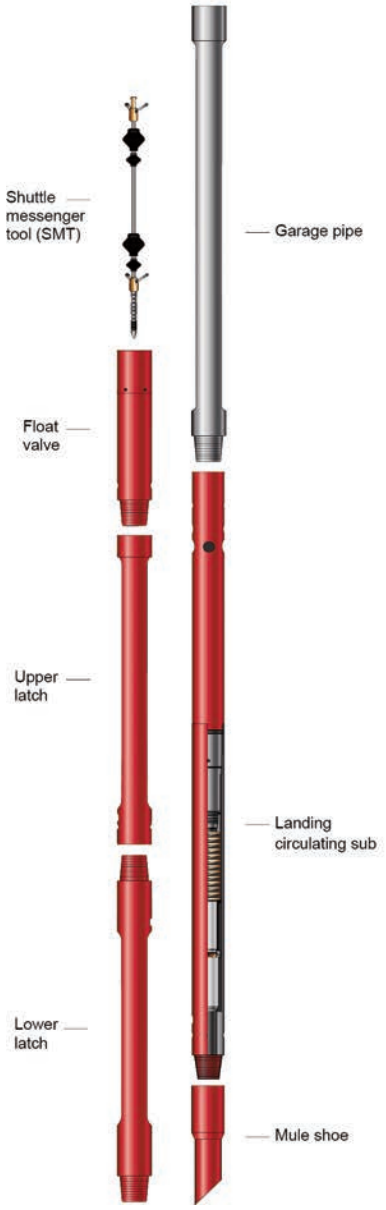
Benefits

- Provides full well control in operations where wireline logging is not feasible
- Enables logging of extended-reach horizontal wells in one trip, which eliminates the need for multiple-latching pipe-conveyed logging operations
- Offers a faster, safer, and more cost-effective method of conveying logging-while-drilling (LWD) tools than pipe-conveyed wireline
- Complements measurement-while-drilling tools by providing continuous, wireline-quality data

Tool Description

The Compact well shuttle (CWS) messenger system conveys Compact logging tools inside the drillpipe, where they are fully protected from the borehole environment. Because Compact tools operate in battery-memory mode, they can be conveyed without wireline. Moreover, because the CWS does not restrict mud circulation or pipe rotation, it is a suitable alternative to pipe-conveyed logging.

When the BHA reaches total depth, the SMT is pumped down from the surface to release the Compact tool string into the open hole, where it lands in a no-go arrangement. The drillpipe is then tripped out of the hole while the logging tools acquire data, which is available for download upon recovery at the surface. A shuttle float valve is normally added to the BHA to enhance well control and to prevent debris from fouling the deployment mechanism.



The CWS messenger system enables the conveyance and control of logging tools in environments where use of wireline is not feasible.

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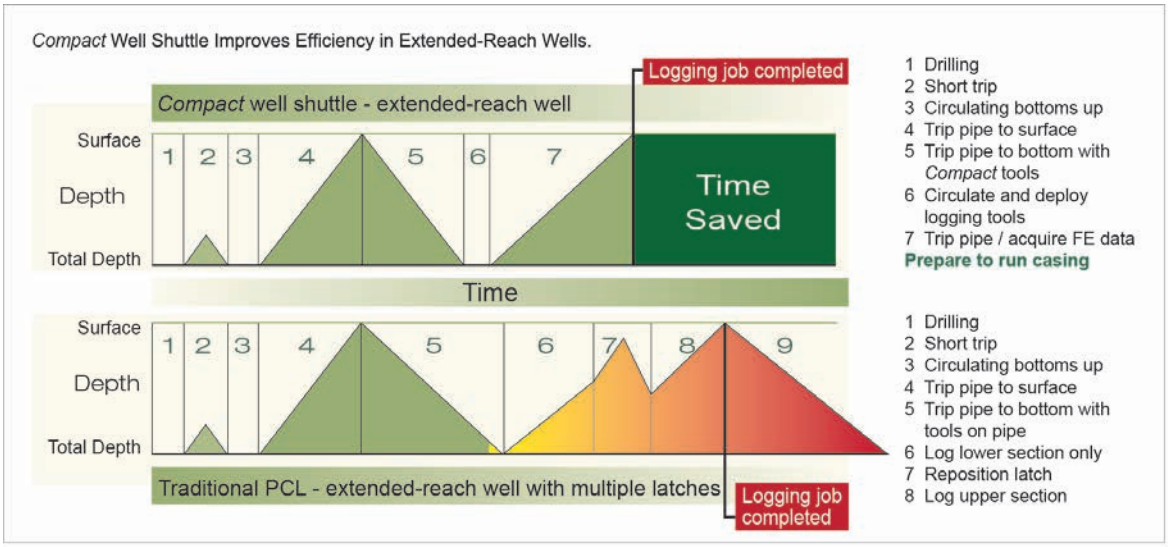
Specifications

Recommended hole size	>6 in. (> 52 mm)
Thread type	3.5 in. IF NC38
Recommended makeup torque	7,200 ft-lb (9,762 N·m)
Maximum flow rate (tools inside pipe)	6 bbl/min (0.16 m^3/min)
Maximum flow rate (tools landed)	40 bbl/min (6.36 m^3/min)
Maximum rotation rate (tools inside pipe)	60 rpm
Maximum rotation rate (tools landed)	30 rpm



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