LocRite® Multilateral Completion System

FOR MULTILATERAL WELLS THAT REQUIRE RE-ENTRY CAPABILITY TO ACCESS THE LATERAL IN ANY CONVENTIONALLY MILLED WINDOW

The LocRite® completion system is specifically designed for existing multilateral wells that require re-entry capability to access the laterals through the completion during the life of the well. This re-entry capability eliminates the requirement to pull the completion should access to the lateral be required for cleaning, stimulation, zonal isolation, or data acquisition. The LocRite completion system utilizes a completion window that is an integral part of the production string, and it is equipped with landing profiles and seal bores to enable setting of deflectors for lateral access or isolation sleeves for lateral control. The LocRite completion system is equipped with a self-locating key that can be mechanically or hydraulically activated and can be used in any conventionally milled, multilateral junction with no depth or orientation reference to enable installation at the optimum azimuth and depth for lateral re-entry operations. A permanent or retrievable packer is installed in the well as a fixed reference.

FEATURES

» Incremental completion system for through-tubing lateral re-entry in Level 2 and 4 multilateral wells
» Self-locating key to locate and orient window correctly with the lateral bore or lateral liner
» Selective lateral re-entry access with wireline, coiled tubing, or work string utilizing the TEW™ Tubing Exit Whipstock
» Selective isolation of lateral using the TPI™ pressure isolation sleeve
» Capability to install flow control devices (intelligent completion interface)
» Mechanical or hydraulic activation of self-locating key

BENEFITS

» Lateral re-entry without need to pull completion
» Applicable to existing (re-entry) multilateral wells
» Incremental modular system can be used to upgrade existing junctions
» Systems can be stacked in series
» Can be used at all inclinations and azimuths

LocRite® Completion System in an existing Level 2 Junction with Through-Tubing Access Capabilities
LocRite® Multilateral Completion System
Technical Specifications

**TAML Levels 2 and 4 Completions**

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<thead>
<tr>
<th></th>
<th>Level 1 Capability</th>
<th>Level 2 Capability (if applicable)</th>
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<tbody>
<tr>
<td><strong>System Casing Size in (mm)</strong></td>
<td>4.5 (114.3)</td>
<td>7.0 (177.8)</td>
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<tr>
<td><strong>Casing Weight lb/ft (kg/m)</strong></td>
<td>9.5 to 13.5 (14.1 to 20.1)</td>
<td>26.0 to 32.0 (38.7 to 47.6)</td>
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<td><strong>Lateral Hole Size in (mm)</strong></td>
<td>3.750 (95.3)</td>
<td>6.000 (152.4)</td>
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<td><strong>Lateral Liner Size in (mm)</strong></td>
<td>N/A</td>
<td>4.5 (114.3)</td>
</tr>
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<td><strong>System and Tubing Sizes in (mm)</strong></td>
<td>4.5 x 2.625 (114.3 x 66.7)</td>
<td>7 x 3.5 (177.8 x 88.9)</td>
</tr>
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<td><strong>Profile Sizes in (mm)</strong></td>
<td>2.250 (57.2)</td>
<td>2.750 (69.9)</td>
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**Re-Entry**
- Through-tubing re-entry to lateral using wireline or coiled tubing (with TEW)
- Through-tubing re-entry to lower main bore using wireline or coiled tubing (with TPI)

**Isolation**
- Full isolation of lateral or main bore using through-tubing, pressure-isolation sleeve (lateral isolation), or tubing plug (main bore isolation)

**TYPICAL LOCRITE SYSTEM INSTALLATION SEQUENCE**

1. Run in hole with lower packer assembly and set.
2. Run in hole with LocRite window and upper packer assembly completed with locator seal assembly.
3. Locate lower packer, mark pipe, pick up one joint. Take pick-up and slack off weights.
4. Rotate and reciprocate LocRite window to allow self-locating key to tag the bottom of the window. Set the upper packer.
5. Install upper completion and seal into upper packer.
6. Run in hole with wireline/coiled tubing and pull isolation sleeve (TPI).
7. Further options to re-enter lateral can be completed by using the TEW or selective flow control can be accomplished using plugs or isolation sleeves.

For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com

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