Optimizing reservoir development with a solid expandable openhole liner system to enhance drilling efficiency and increase production capacity.

5-1/2 x 7 in.

The Solid Choice.
**MetalSkin® Openhole Solid Expandable Systems**

Solid performance advantages

- **Slim-shoe design.** The cementing valve shoe houses an expansion cone and is engineered to maximize running clearance, which reduces surge and the possibility of differential sticking.

- **Elastomeric seal elements.** Expanding against the previous casing, these elements provide a reliable liner top.

- **Premium, seamless expandable casing.** Thick-wall, high-grade, seamless expandable casing enhances post-expansion performance properties and increases ductility and toughness.

- **Qualifed metal-to-metal expandable connectors.** Performance-tested and field-proven connectors exceed proposed API standards for burst, collapse, compressional, and tensile resistance, which ensures optimal and consistent performance in the field.

- **Reliable hydraulic seal.** A simple gate valve creates a reliable hydraulic seal within the expandable liner—rather than relying on a dart to create and maintain the system’s pressure seal.

- **Hydraulically assisted expansion.** Equalizes expansion pressure across the cone which improves system reliability and reduces the risk of pipe erosion at the interface between the cone and casing.

- **Expandable-liner/running-tool interface.** A connection in the shoe track secures the expandable liner to the running tool. The landing string connects to the liner, not to the cone. This configuration eliminates the risk of premature expansion caused by upward movement of the cone when it works through tight spots during run-in.

- **Downhole formable cone.** Once the segmented cone arrives downhole, a pressure cycle activates its expansion to the full cone shape. This activation feature enables minimizing the run-in OD and achieving a larger post-expansion ID. As a key contingency feature, collapsing the cone facilitates retrieval through the unexpanded liner, if necessary.

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As a leader in solid expandable technology, Weatherford draws on extensive experience to develop the most advanced openhole liner system on the market. The MetalSkin system incorporates several innovative design features to enhance installation reliability and long-term downhole performance.
MetalSkin® Openhole Solid Expandable Systems
Expanding reliability

Drill and underream hole section.
Run in hole with expandable liner and setting tool.
Drop ball and pressure up to form cone.
Pump cement, release setting tool, and pressure up to expand liner.
Cone exits top of liner using rig overpull.
Drill out shoe and drill ahead.