

## Vertechs SAIF Self-setting Dissolvable Plug System

### Case Study: Field-Proven Efficiency

#### OVERVIEW

The Vertechs SAIF Self-setting Dissolvable Plug System streamlines completion operations by combining a self-setting function with the Wizard dissolvable plug, requiring only a power charge for actuation. By eliminating the need for a traditional Wireline Adapter Kit (WLAK) and conventional setting equipment, the SAIF system significantly reduces non-productive time (NPT) and accelerates pump-down operations.



## KEY OPERATIONAL ADVANTAGES

- **Zero Onsite Maintenance**

The system is shipped fully assembled and ready-to-run. It requires no onsite inspection, servicing, or pressure testing, eliminating a major source of human-error-related NPT.

- **Compact & Agile Design**

By reducing the overall bottom hole assembly (BHA) length by 66.8%, the tool easily navigates extended-reach laterals and challenging well trajectories.

- **Enhanced Pump-Down Efficiency**

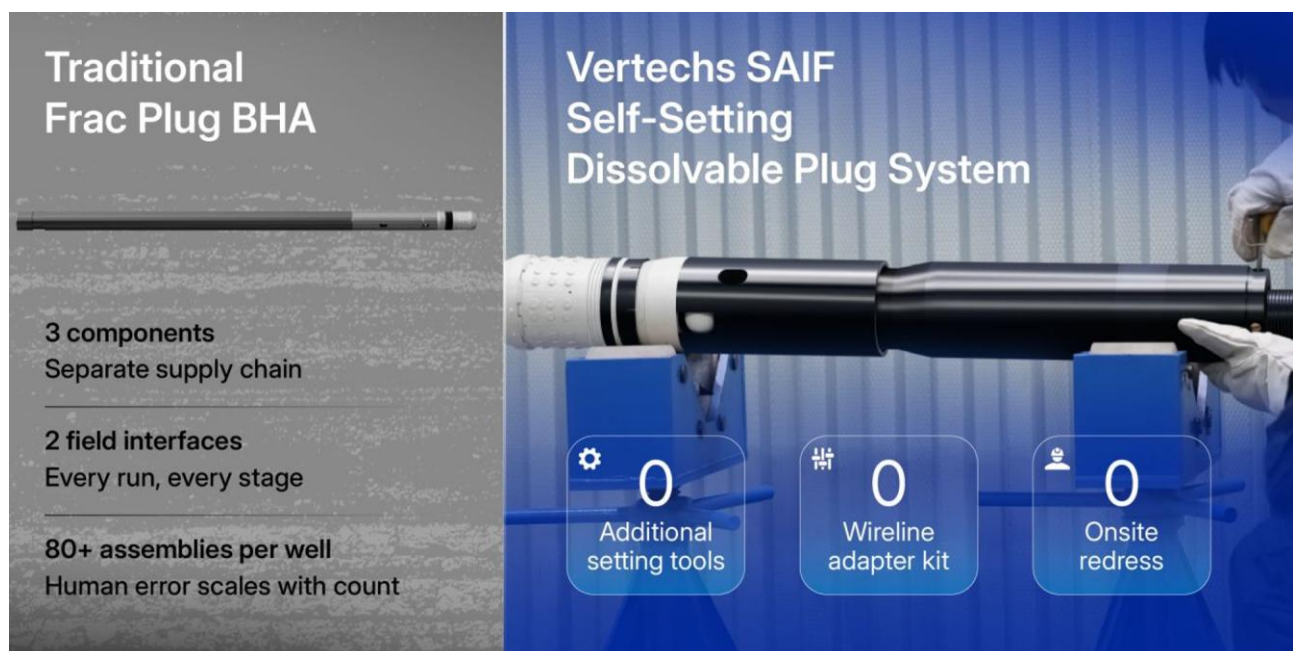
The streamlined design allows for faster stage-to-stage transitions and conserves water during pump-down operations.

- **Autonomous Pressure Relief**

The system can automatically relieve downhole pressure after the plug is set downhole and the wireline string is separated from the plug.

- **Simplified Logistics**

The all-in-one, ready-to-use design reduces both the onsite inventory and lifting, making it ideal for remote operations.



## TECHNICAL SPECIFICATIONS

For the 5.5-inch casing application, the hardware configuration is as follows:

- **SAIF Assembly**

The OD measures 3.858 inches, with a total length of 33.937 inches. The compact profile facilitates passage through wellbore restrictions. It delivers 55,000 lbs of setting force, achieving a secure and reliable set. It is rated for operation at temperatures up to 150°C and is suitable for high-pressure environments up to 17,400 psi.

- **Optional Component**

A SmartFin is available as an optional addition to enhance pump-down fluid efficiency.

## FIELD APPLICATION PERFORMANCE

Field Application Performance		
Number of Wells Applied	Number of Stages Applied	Application Success Rate
1	5	100%
Time Saving: Wireline (WL) BHA Connection & Maintenance		
Routine Operation	SAIF Self-setting Dissolvable Plug System	
10-20min	0min	
Manpower Saving: Wireline (WL) BHA Connection & Maintenance		
Routine Operation	SAIF Self-setting Dissolvable Plug System	
4	2	
Operational Performance		
RIH	Plug Setting	POOH
Smooth	Smooth	Smooth

## Risk Reduction

Eliminating manual pressure bleed on the surface and safety hazards, at least **6 hours** could be saved if pressure trapping occurs by accident.

## DRIVING VALUE THROUGH INNOVATION

The successful deployment of the SAIF system in Saudi Arabia highlights Vertechs' approach to solving real-world completion challenges. By minimizing BHA length and eliminating onsite tool maintenance, Vertechs enables operators to execute faster, safer, and highly predictable fracturing operations.

## Contact Us

[engineering@vertechs.com](mailto:engineering@vertechs.com)

**Chengdu | Damman | Houston | Calgary | Hong Kong**

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