

PulseEight EAV puts the beat back into the heart of failed wells

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As the world's first re-deployable wireless completion, Tendeka's PulseEight dynamic downhole reservoir management system is the only choice to safely produce wells with failed safety valves and reduce environmental impact.

The PulseEight Electronic Ambient Valve (EAV) has control, power, monitoring and communications built in. It is designed to conduct downhole shut-ins and re-establish lost well control with fewer of the constraints of insert valves and storm chokes.

It operates by sensing changes in flow that signal fluid losses or emergency shutdown and takes immediate remedial action. The self-monitoring device also uses a subset of Tendeka's Fluid Harmonics wireless telemetry to send a daily health-check to surface, thereby removing the uncertainty associated with traditional tooling. With increased functionality, the tool can respond to more trigger events over a broader range of flowing conditions that restricted the functioning of traditional storm chokes.

The self-powered system is simple and quick to install, set and operate with no requirement for additional surface infrastructure. As it can be set at any depth, it can essentially supplement a fully functioning safety valve and be used as a shut-in device below areas of integrity concern across the tubing to the annulus barrier.

Being able to return shut-in wells back to production without the need of a full workover is key to being able to efficiently and economically produce reservoirs. As a more agile and sustainable completions approach, the PulseEight EAV is a re-usable, intervention-based system proven to return several PDNP (Proved Developed Non-Producing) assets back to revenue generation.

