

OpenPath Sequence

Diversion stimulation service

APPLICATIONS

- Acid fracturing, matrix, sand control, and damage control treatments
- Conventional and unconventional formations
- Cased hole and openhole completions
- Formations with or without natural fractures
- Production or injection wells
- ACTive* real-time downhole coiled tubing services
- Gas or oil wells

BENEFITS

- Maximizes well productivity and completion efficiency with an innovative well stimulation technique
- Increases recovery by enabling sequential stimulation of multiple zones

FEATURES

- Composite pills designed for specific completion and reservoir properties
- Fiber and particle blend for optimal plugging and diversion
- No residue after composite pill degradation
- Suitability for downhole temperatures ranging from 130 to 300 degF [54 to 149 degC]
- Composite pill ability to withstand differential pressure up to 4,500 psi [31.03 MPa]

The OpenPath Sequence* diversion stimulation service improves well production by diverting stimulation systems to optimize contact across target zones. The engineered service integrates modeling, a proven near-wellbore diversion system, and a fluid system to suit reservoir conditions, type of completion, and treatment requirements. The diversion system uses a composite pill engineered to address specific challenges and may contain a proprietary blend of degradable fibers and multimodal particles to effectively isolate the specified zone.

Sequential stimulation for more uniform reservoir contact

The OpenPath Sequence service enables sequential stimulation of zones and intervals in cased hole and openhole completions. It can be used for selective temporary plugging of a region along the wellbore or for uniform distribution of the fluid along the wellbore to maximize wellbore coverage and reservoir contact.

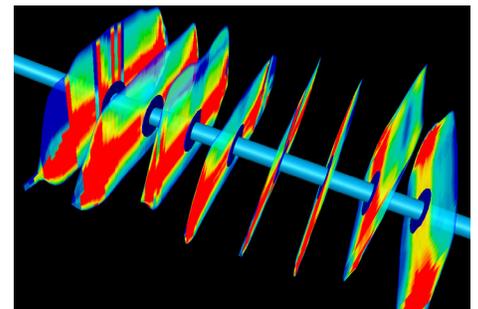
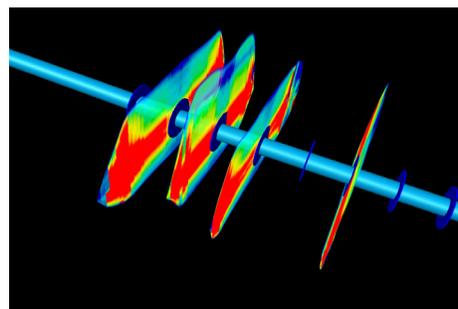
Engineering specific composite pill properties enables extension of the service to sand consolidation, conglomeration treatments, scale control, water and gas conformance, and other treatments.

After treatment, the composite pill fully degrades within hours or days at temperatures ranging from 130 to 300 degF. No intervention is required to ensure degradation, reducing costs and HSE risks.

Compatibility for maximum treatment flexibility

OpenPath Sequence service can be used for stimulation treatments with conventional acid systems, single-phase retarded acid, SXE* emulsified acid, VDA* viscoelastic diverting acid, or MaxCO₃ Acid* degradable diversion acid system; water and gas conformance fluids; scale inhibitors; and sand conglomeration and consolidation fluids.

The service is also compatible with coiled tubing delivery systems such as ACTive services to interpret and optimize treatments in real time and with OpenPath Reach* extended-contact stimulation service to enhance stimulation penetration for maximum reservoir contact.



OpenPath Sequence service uses an innovative well stimulation technique to divert acid systems to target zones. The sequenced stimulation of multiple zones maximizes well productivity (right) in comparison with conventional techniques (left).