



CASE STUDY

SmartStart Frac Valve Hits Milestone with Time and Temperature | Eagle Ford

THE CHALLENGE

Unforeseen delays in the well completion left SmartStart® toe valves sitting dormant at elevated temperatures exceeding 325°F for more than three and a half years. Typical activation periods for toe valves occur within four to eight weeks of placement. GEODynamics' tools are built to perform at elevated temperatures, but this combination of extended time and high temperature marks a milestone.

THE SOLUTION

To conduct a successful operation, the well operator first tested the casing according to the Texas Railroad Commission (RRC) requirements to elevate pressure by 3,000-psi increments and holding at each new pressure for three minutes to 10,700 psi. Once the casing test was performed as required, the operator increased the pressure to 12,500 psi to activate the opening, which occurred as planned, 14 minutes later.

THE RESULTS

GEODynamics' SmartStart toe valve successfully activated and performed reliably even after being exposed to high temperature and pressure conditions over an extended period. The successful activation saved the operator from additional expenses of a TCP toe prep to initiate injectivity.

FEATURES/ BENEFITS

- Time Shift™ technology
- Time delay for reliable multiple actuations
- Port Jetting™ technology
- TORQ Thru™ technology
- Withstands burst pressure in excess of 20,000 psi
- Advance Port Jetting™ technology
- Time delay settings of 15, 30, 45, or 60 minutes

