



Signature Tester

Typical BOP Test Applications

SUBSEA BOP EQUIPMENT	OPERATOR RELATED FAILURE	FAILURE RESULT	IMPORTANCE	SIGNATURE TEST
Wellhead Connector	Cannot or difficult to unlock	Lost rig time, possible lost well due to cutting off wellhead	High	Unlock signature test and back driving test
LMRP Connector	Cannot or difficult to unlock	Lost riser string if can not release during drift off	High	Unlock signature test and back driving test
Locking Mini-Collets	Cannot or difficult to unlock	Severe damage to subsea BOP	Low	Unlock signature test and back driving test
Annular Type Blow Out Preventers	Leak, possible difficulty with annular fully opening subsea	Usually repairs are made after well completion. Sometimes the BOP has to be pulled	Low	Close and open signature test with pressure test; observe annular to make sure it relaxes
Ram Blow Out Preventers	Cannot or difficult to unlock	Can not open the rams resulting in substantial downtime. Potential for well control incident	High	Lock and unlock full-function signature test
Subsea Valves	Broken fail-safe spring	Loss of fail-safe capability	Low	Signature test open port will confirm spring function; test will show spring and gate condition

