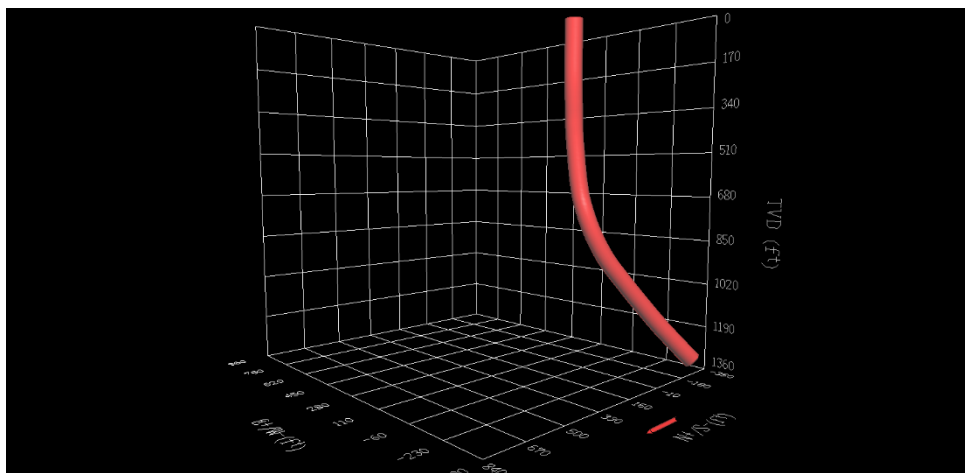


DOWNHOLE
PRODUCTS

EXPAND-O-LIZER® ES (EXTREME SERVICE) UNDERREAMED CENTRALIZER

TECHNOLOGY: Downhole Products Expand-O-Lizer ES utilizes a single integral bi-directional drive collar c/w engineered high holding force set screws (60% improved holding force on traditional set screws). The single drive collar design pulls the centralizer through the intermediate casing reducing start and running forces by 30-40% over traditional stop collars. Non-welded, robust one piece design, suitable for onshore installation reducing rig time costs and HSE exposure.

UPDATE: A major Caspian Sea operator has continued to run the Expand-O-Lizer ES underreamed centralizer at 2 per joint even in these challenging times, as they fully understand the nightmare associated with remedial cementing, required if insufficient bonding is not achieved at the first time of asking. Recovery from failure to secure good circumferential cement placement is seldom satisfactory, the casing integrity is compromised by punching holes to allow for a “squeeze job” and a good flow path to effect the squeeze can be hard to establish. Additional centralization can be seen by some as an expense that is hard to justify but if a squeeze job is required to repair a section with poor bonding due to insufficient centralization, they will have an even harder time convincing their boss that they made the right call when the invoice from the cement company hits his desk!



For further information on this tool and proposed applications, please contact your local DHP representative. Specifications may be liable to change without prior notice.