

DOWNHOLE
PRODUCTS

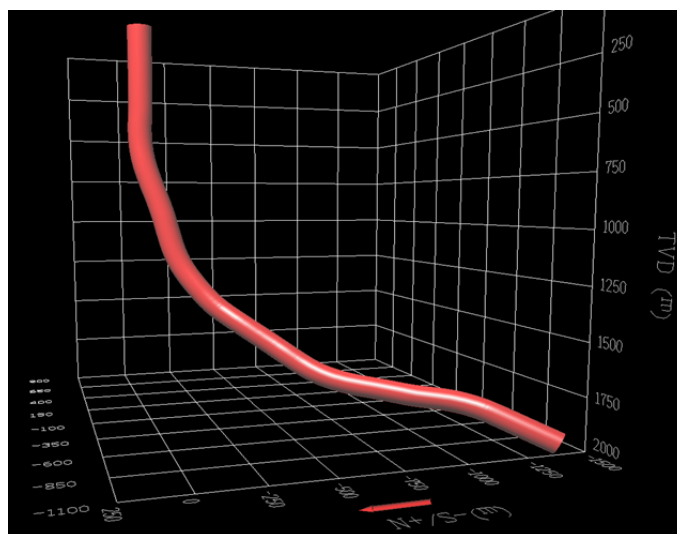
EXPAND-O-LIZER® SS (STANDARD SERVICE) SPRING STEEL GAUGE HOLE CENTRALIZER

TECHNOLOGY: Downhole Products single piece Expand-O-Lizer SS centralizer provides maximum standoff in any gauge hole section yet due to the unique combination of design and manufacture, from a proprietary grade of spring steel, the unit will compress to pass swelling shales and openhole restrictions with minimal weight applied. Restore force on these units is around 2 ½ - 3 times that of API recommended with zero run force to be considered.

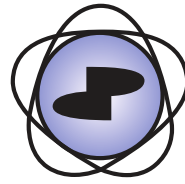
PERFORMANCE: A major operator in the Norwegian sector selected the Downhole Products Expand-O-Lizer SS to centralize a 9 5/8" liner in their challenging 12 ¼" section in near horizontal 85° deviation.



Due to the criticality of the cement job it was decided to centralize at 2 centralizers per joint. Simulation software was run to predict downhole drags to ascertain that the heavily centralized section was physically able to reach TD and standoff was in the required 85-90 percent range.

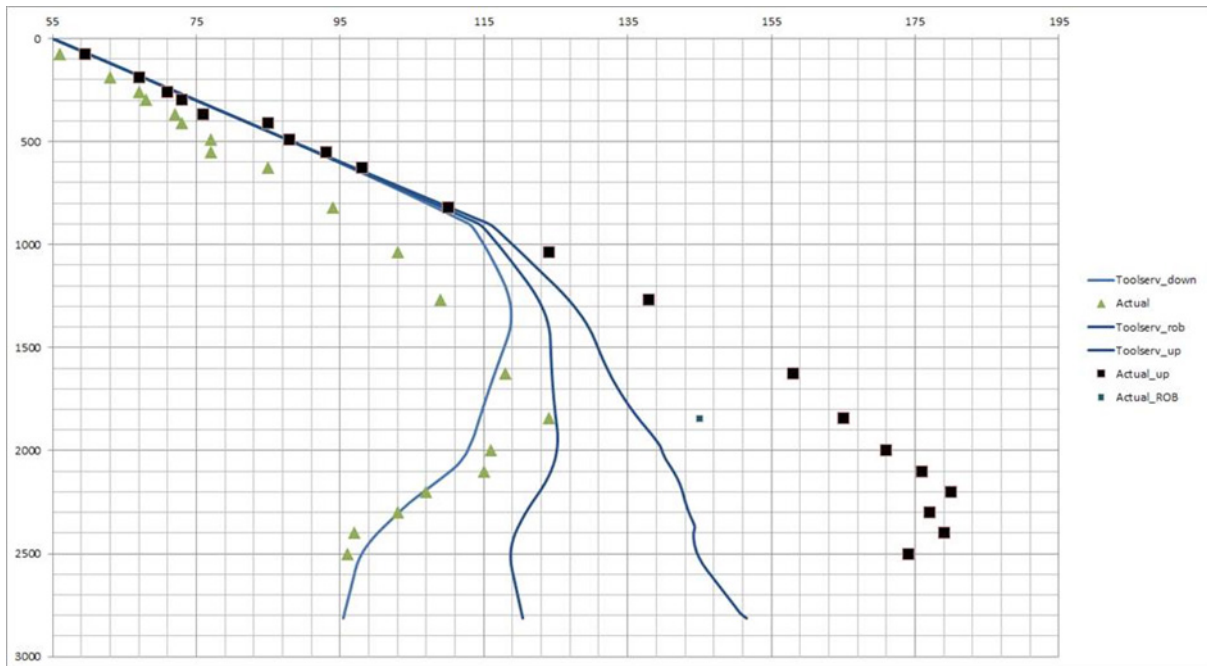


For further information on this tool and proposed applications, please contact your local DHP representative. Specifications may be liable to change without prior notice.



The liner was run to TD at 2841m without event and cemented as per program, the customer was very impressed with the performance and now run SS centralizers as standard on their 9 5/8" liner jobs.

Predicted Hook Load versus Actual Hookload



DHP HD Stop Collars were run in conjunction with the SS to ensure that downhole placement was maintained



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