Release notes

D-Geo Pipeline 20.1.2.31161

24-09-2020

Fixed bugs

MDR-1763, MDR-1769, MDR-1780

Several bugs are solved during the calculation of the maximum allowable drilling fluid pressure:

- An unexpected error message “Invalid floating point operation” was displayed due to negative average soil parameter when the pipe is partly situated in the above undrained layer or in case several layers are present along the top part of the pipeline (between pipe center and pipe top).
- In case an undrained layer is present above the drained layer, an incorrect distance was used for the determination of the average cohesion and friction angle: the distance between the pipe center and the surface level was used instead of the distance between the pipe center and the border undrained/drained layers.
- An incorrect safety factor was applied on cohesion C: the safety factor on undrained shear strength Su was used instead of the safety factor on cohesion C.

MDR-1776

Incorrect text in the *Report*, in section “Check for implosion”: for the comparison of the maximum water pressure with the maximum allowable external pressure, the highest minimum required drilling fluid pressure was used instead of the maximum allowable external pressure.

User manual

MDR-1778

The equation (25.25) giving the calculation of the average soil parameter using the distance depth average method is extended with the case where several layers are present along the top part of the pipeline.

MDR-1783

Equations (26.27) and (26.30) giving the axial stress due to pull-back in load combinations 1A and 1B are corrected by applying the load factor on installation. And equation (26.14) giving the friction due to curved forces (T_{3c}) is corrected with a factor f in the denominator.