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Title: The effect of poor pipeline bedding/padding and rocky terrain on pipeline Cathodic Protection (CP)

Abstract: EN 12954 Clause 8.4.1 states that “*-there is no isolating shielding between the anodes and the structure to be protected*”. The latter would imply no shielding by the protective coating and no other “external shielding”. However, in cases where the pipeline has been backfilled with “rocky” material and/or is located on-top of bedrock or surrounded by rocky terrain, the flow of adequate Cathodic Protection (CP) would arguably be affected. This paper will hopefully demonstrate that Cathodic Protection cannot always be achieved in specific cases where there is poor pipeline padding/bedding, or in specific rocky terrains, and this is verified using both EN 13509 “surface potential measurements” which are then coupled to specific defect excavations.

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