Interpretation of permeability and cement take of consolidation grouting operation in Cheraghvays dam using the geological view beneath the dam

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Abstract
The Cheraghvays dam is located in 17Km away from the west of Saqez in Kurdistan province. Basically, the arrangement of grout holes was based on the quality of bedrock, so the grout holes were arranged at 2 m intervals and 10.5m final depth. Also, the consolidation grouting process was conducted from the bottom to the top of the grout holes. Particular attention to the geological structures in the initial studies and construction of dams is important which locking of it can be caused some problems. Therefore, in this paper, permeability and cement take of 1438 grouted holes were studied and interpreted by using geological view of the beneath clay core of Cheraghvays dam. Finally two parameters, permeability and cement take of mentioned grouted holes were compared and their nonconformity is interpreted by geological view and imperfection of Lugeon test.

Key words: consolidation grouting, permeability, cement takes, geological view, Cheraghvays dam.