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6 **Figure S2:** Ureolytic bacterial culture mixed with sand in a portable soil mixer before being
7 transferred to polystyrene mould for biocementation treatment process.

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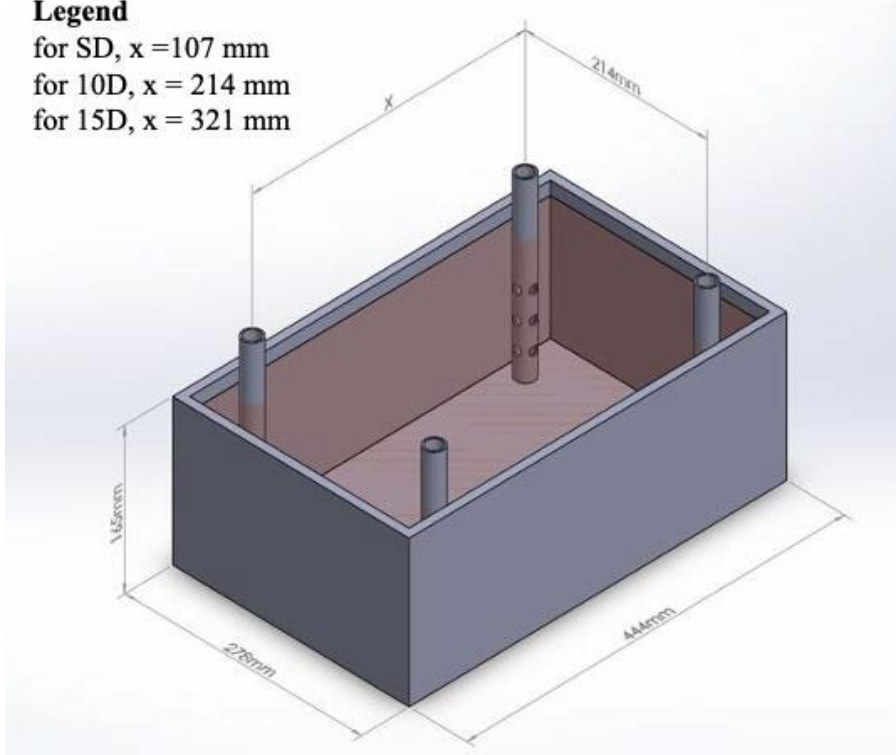
9

10 **Figure S3:** Conceptual image of the polystyrene box containing four inserted PVC pipes.

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Legend

- for SD, $x = 107$ mm
- for 10D, $x = 214$ mm
- for 15D, $x = 321$ mm



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13 **Figure S4:** Compacted soil specimen containing rubber pipe insulators around the PVC
14 injection pipes to prevent up-flow of cementation treatment solution and bacterial cultures.

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17 **Figure S5:** A digital image displaying the two-stage soil biocement injection treatment under
18 laboratory-condition.



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20 **Figure S6:** Careful trimming of the core from the biocemented sand specimen for UCS tests.

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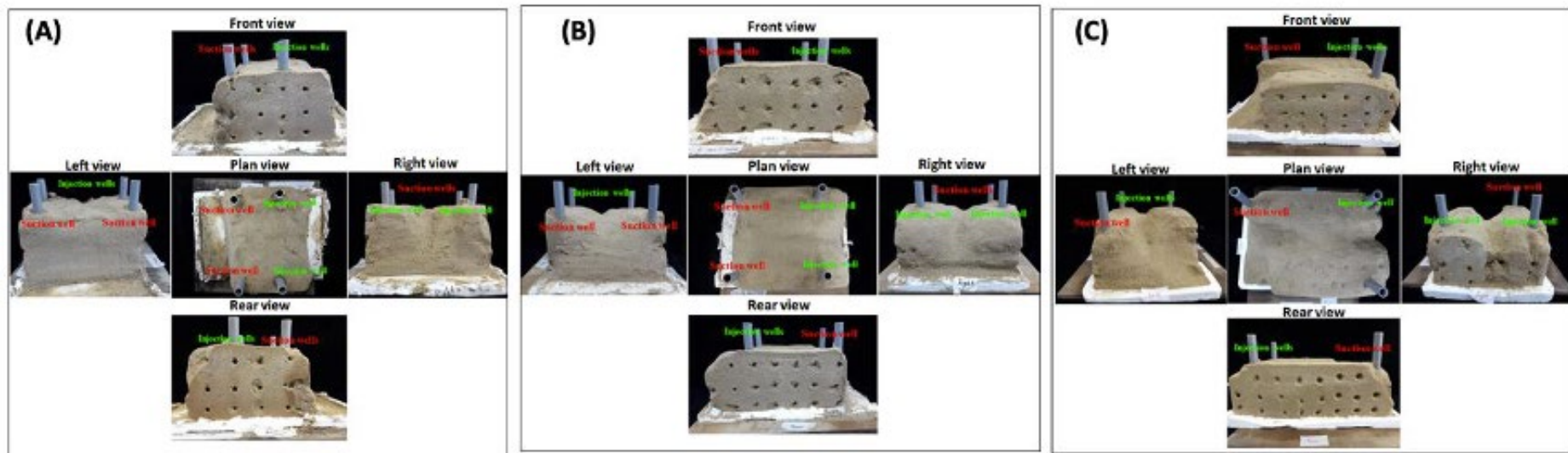


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24 **Figure S7:** Acid wash test of biocemented soil specimens performed in a fume hood.

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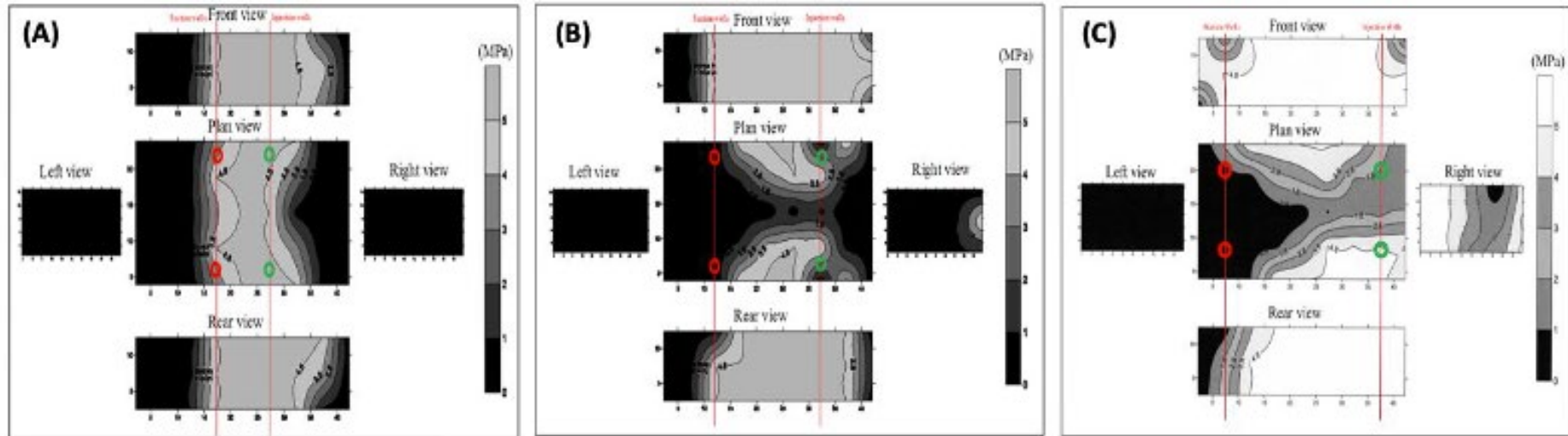


26

27 **Figure S8:** Digital images showing (A) 5D, (B) 10D and (C) 15D biocemented sand specimens that were subjected to surface percolation test.

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31 **Figure S9:** Contour images of surface strength overview for (A) 5D, (B) 10D and (C) 15D biocemented soil specimens after surface percolation

32 test