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Enrichment of sulfate reducing anaerobic methane oxidizing community dominated by ANME-1 from Ginsburg Mud Volcano (Gulf of Cadiz) sediment in a biotrickling filter Susma Bhattarai^{a*}, Chiara Cassarini^{a,b}, Eldon R. Rene^a, Yu Zhang^{c, d}, Giovanni Esposito^e and Piet N. L. Lens^{a, b}

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Abstract

This study was performed to enrich anaerobic methane-oxidizing archaea (ANME) present in sediment from the Ginsburg Mud Volcano (Gulf of Cadiz) in a polyurethane foam packed biotrickling filter (BTF). The BTF was operated at 20 (\pm 2) °C, ambient pressure with continuous supply of methane for 248 days. Sulfate reduction with simultaneous sulfide

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