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Title: Corrosion rate estimations of microscale zerovalent iron particles via direct hydrogen production measurements

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Highlights

- The hydrogen gas generated by anaerobic corrosion of different ZVIs was measured.
- In aquifer-free conditions mZVIs have ~10-30 times lower corrosion rate than nZVIs.
- Under natural environment higher corrosion rate of ZVIs was observed.
- Estimated corrosion rates can serve as an indication of ZVIs life-time.
- Inhibitory effects of the ZVI corrosion reaction products were interpreted.

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