

Name:

Signature:

Matriculation No.:

Participation No.: 1, 2 or 3 (circle appropriate)

Prof. Meckenstock / Prof. Siebers

PKZ: 95203 / 95308 / 4511

Part A: Prof. Meckenstock

- 1) What concentration of benzene can be oxidized with a natural background concentration of 0.3 mM nitrate if the nitrate is reduced to nitrogen.

(10P)

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- 2) Why does it not make sense to add hydrocarbon degraders to an aquifer contaminated with BTEX?

(10P)

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3) What can I learn from the detection of benzoate in a petroleum contaminated aquifer?

(5P)

4) A) Why is a batch culture not a very good example for environmental conditions?

(5P)

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5) Explain why a chemostat is better suited to mimic environmental conditions. How does it work?

(10P)

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- 6) How would you prove that biodegradation of chlorinated solvents takes place in a PCE-contaminated aquifer?

(10P)