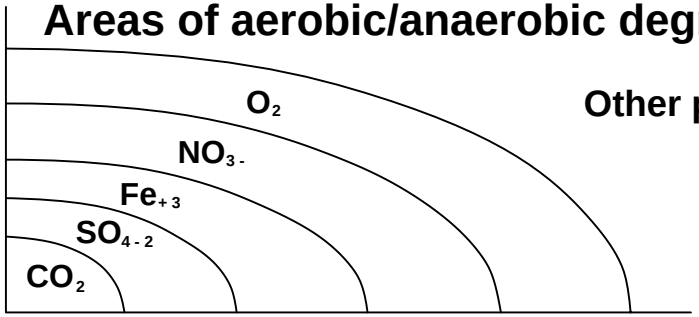
Microbial Degradation of BTEX in Aquifer Microcosms or Soils Enrichments - Update

Electron acceptor	Electron donor	Reaction	Electron acceptor/donor	Eh, mV
Aerobic				
O_2	BTEX	$O_2 + 4H^+ + 4e \gg 2H_2O$	3	+820
Anaerobic				
NO_3^-	TEX	$NO_3^- + 12H^+ + 10e \gg N_2 + 6H_2O$	5	+740
Fe^{+3}	BT	$FeOOH + HCO_3^- + 2H^+ + 2e \gg FeCO_3 + 2H_2O$	22	-50
SO_{4-2}	BTX	$SO_{4-2} + 9H^+ + 8e \gg HS^- + 4H_2O$	4.5	-220
CO_2	ToX (T	$CO_2 + 8H^+ + 8e \gg CH_4 + 2H_2O$ + $5H_2O \gg 2.5CO_2 + 4.5CH_4$)	2(CO_2/T)	-240

Areas of aerobic/anaerobic degradation in a plume



Other products: Phenolic and benzoic acid derivatives of BTEX
- **insufficient electron acceptor**
- **metabolic inhibition**

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