carcinogen and its use revealed that TCE is a Research in the 80s properly dispose of it. regulation measures to metal. There were no to remove grease from government as a solvent businesses and the and 70s by dry-cleaning widely used in the 60s

underground aquifers and TCE still pollutes many was banned, however

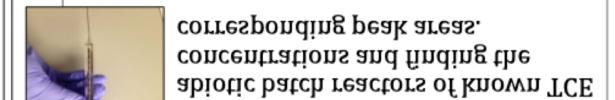
Through bioremediation, groundwater sources.

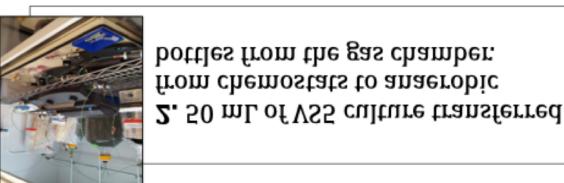
transform TCE into microorganisms (VS5) anaerobic

products until it is finally different toxic daughter

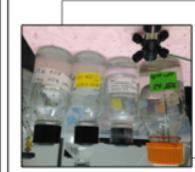
harmless **Ethene**. completely converted into

**Pathway TCE Degradation** 





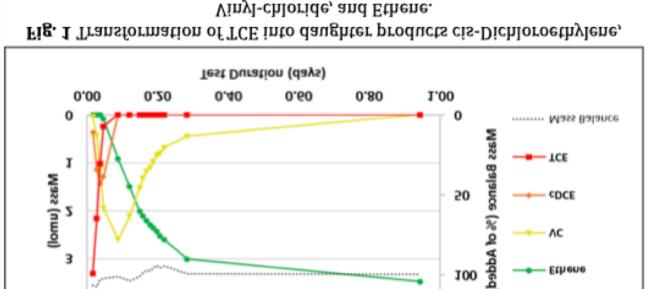
anaerobic. minutes to keep them sterile and CO2 under the fume hood for 15 3. Bottles purged with nitrogen &

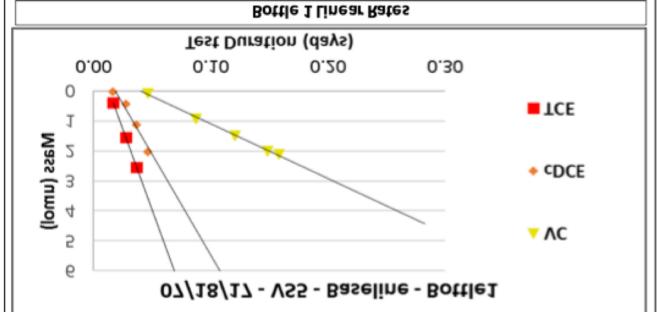


for several minutes. added to each bottle and shaken 0.1 mL of sodium formate were 4. 0.5 mL of saturated TCE and



minutes for each bottle. test was performed every 5 converting to ethane and a rate monitor the process of TCE 5. The GC system was used to





	VC	cDCE	TCE
R Squared	0.9973	0.9600	0.9999
Linear Rate (umol/day)	18.2262	69.9244	107.5342
Fig 2 The rate of transformation measured in micromoles per day			

rig. 2 The rate of transformation measured in micromoies per day.

## References:

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Lovley, Derek R. "Anaerobes to the Rescue." Science. American Association for the Library of Medicine, 2008. Web. 20 July 2017. A Journal of the International Association on Water Pollution Research. U.S. National Contaminated Groundwater Using Anaerobic Process." Water Science and Technology: Chomsurin, C., J. Kajorntraidej, and K. Luangmuang. "Bioremediation of Trichloroethylene Apr. 2017. Web. 20 July 2017. EPA. "Fact Sheet on Trichloroethylene (TCE)." EPA. Environmental Protection Agency, 18

> hours. in approximately 24 the TCE into Ethene

COTTACT COM TOO 10 OT

to remove toxins and eco-friendly way could be a feasible Anaerobic bacteria

water sources.

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from contaminated

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