

Table S3. Summary of identity of 16S rRNA clones identified from DNA extracts from a pH neutral (BR), acidic (DU) and very acidic (OB) stream using the universal primers PB36 and PB38. Clones were identified according to the closest match to named genera in the NCBI database.

Genus	BR (Neutral Stream)		DU (Acidic Stream)		OB (Very Acidic Stream)		Phylum
	No. of clones	No. of sequences	No. of clones	No. of sequences	No. of clones	No. of sequences	
<i>Acidiphilium</i>			1	1			Alphaproteobacteria
<i>Acidocella</i>			3	1			Alphaproteobacteria
<i>Acidosphaera</i>					1	1	Alphaproteobacteria
<i>Afipia</i>			1	1			Alphaproteobacteria
<i>Beijerinckia</i>			1	1			Alphaproteobacteria
<i>Bradyrhizobium</i>			4	3			Alphaproteobacteria
<i>Caulobacter</i>			2	2			Alphaproteobacteria
<i>Defluviobacter</i>	1	1					Alphaproteobacteria
<i>Devosia</i>	3	2					Alphaproteobacteria
<i>Hyphomicrobium</i>	11	6	1	1			Alphaproteobacteria
<i>Hyphomonas</i>	1	1					Alphaproteobacteria
<i>Kozakia</i>			1	1			Alphaproteobacteria
<i>Meythlosinus</i>			1	1			Alphaproteobacteria
<i>Nordella</i>	5	2					Alphaproteobacteria
<i>Pedomicrobium</i>	1	1					Alphaproteobacteria
<i>Phenyloacterium</i>			1	1			Alphaproteobacteria
<i>Phyllobacterium</i>	1	1					Alphaproteobacteria
<i>Pseudolabrys</i>			1	1			Alphaproteobacteria
<i>Rhodobacter</i>	6	5					Alphaproteobacteria
<i>Rhodobium</i>	1	1					Alphaproteobacteria
<i>Rhodopila</i>					1	1	Alphaproteobacteria
<i>Rhodovastum</i>			1	1			Alphaproteobacteria
<i>Sphingomonas</i>	4	4	1	1			Alphaproteobacteria
<i>Acidovorax</i>			2	2			Betaproteobacteria
<i>Aquamonas</i>	2	1					Betaproteobacteria
<i>Bordetella</i>	1	1					Betaproteobacteria
<i>Burkholderia</i>	1	1					Betaproteobacteria
<i>Gallionella</i>			20	4	1	1	Betaproteobacteria
<i>Neisseria</i>					1	1	Betaproteobacteria
<i>Polaromonas</i>	2	2	4	3			Betaproteobacteria
<i>Ralstonia</i>	1	1					Betaproteobacteria
<i>Rhodoferax</i>	3	2					Betaproteobacteria
<i>Thiomonas</i>					2	1	Betaproteobacteria
<i>Variovorax</i>			2	2			Betaproteobacteria
<i>Acetivibacterium</i>			2	1	2	1	Gammaproteobacteria

<i>Alkalispirillum</i>					1	1	Gamma
<i>Coxiella</i>	2	1					Gamma
<i>Enterobacter</i>	1	1					Gamma
<i>Gluconobacter</i>			2	1			Gamma
<i>Legionella</i>	1	1					Gamma
<i>Nevskia</i>	1	1					Gamma
<i>Pseudomonas</i>	1	1					Gamma
<i>Rhodanobacter</i>					1	1	Gamma
<i>Serratia</i>			1	1			Gamma
<i>Siderooxidans</i>			2	2			Gamma
<i>Steriodibacter</i>			3	1	1	1	Gamma
<i>Thiodictyon</i>	1	1					Gamma
<i>Bacteriovorax</i>			1	1			Delta
<i>Bdellovibrio</i>			1	1			Delta
<i>Desulfobacca</i>			1	1			Delta
<i>Desulfobacterium</i>	1	1					Delta
<i>Desulfovibrio</i>	1	1					Delta
<i>Geobacter</i>			1	1	1	1	Delta
<i>Syntrophus</i>			2	2			Delta
<i>Acidobacteria</i>			2	2			Acidobacteria
<i>Holophaga</i>			1	1			Acidobacteria
<i>Terriglobus</i>			5	1	1	1	Acidobacteria
<i>Acidimicrobium</i>			1	1			Actinobacteria
<i>Arthrobacter</i>	1	1					Actinobacteria
<i>Edaphobacter</i>	1	1	3	1	2	1	Actinobacteria
<i>Ferrimicrobium</i>					1	1	Actinobacteria
<i>Iamibacter</i>	1	1	1	1			Actinobacteria
<i>Sanguibacter</i>	1	1					Actinobacteria
<i>Solirubrobacter</i>	1	1					Actinobacteria
<i>Cytophaga</i>			1	1			Bacteriodetes
<i>Flavsolibacter</i>	2	2					Bacteriodetes
<i>Niastella</i>			1	1			Bacteriodetes
<i>Deinococcus</i>	3	2					Deinococci
<i>Bacillus</i>	1	1					Firmicutes
<i>Clostridium</i>	3	3					Firmicutes
<i>Exiguobacterium</i>	5	3					Firmicutes
<i>Trigonella</i>					1	1	Firmicutes
<i>Vagococcus</i>	1	1					Firmicutes
<i>Leptospirillum</i>					6	2	Nitrospirae
<i>Thermodesulfovibrio</i>			1	1			Nitrospirae
<i>Gemmata</i>	2	2	1	1	3	2	Planctomycetes
<i>Isosphaera</i>	1	1			1	1	Planctomycetes
<i>Nostocoida</i>	1	1	1	1			Planctomycetes
Uncultured planctomycete	1	1					Planctomycetes
<i>Treponema</i>			1	1			Spirochaetes
<i>Elusimicrobium</i>			1	1			Unclassified bacterium
Uncultured bacterium	3	3	2	2	3	3	Uncultured bacterium
<i>Calothrix</i>	1	1					cyanobacteria
<i>Leptolyngbya</i>	1	1					cyanobacteria
<i>Nostoc</i>			1	1			cyanobacteria
<i>Phormidium</i>	4	2					cyanobacteria
<i>Calypogeia</i>			1	1			eukaryota
<i>Chlamydomonas</i>	1	1					eukaryota
<i>Chlorella</i>					4	3	eukaryota
<i>Euglena</i>					8	3	eukaryota
<i>Klebsormidium</i>	1	1	1	1	14	3	eukaryota
<i>Leptosporoceros</i>					1	1	eukaryota
<i>Navicula</i>			1	1	17	3	eukaryota
<i>Nitzschia</i>					4	1	eukaryota
<i>Thalassiosira</i>					4	2	eukaryota
Total	89	71	89	59	82	38	