Supplementary information

Anaerobic Bioreduction of Jarosites and Biofilm Formation by a Natural Microbial Consortium

Figure S1. Geographic situation of the sampling site in the mining district of Cartagena-La Unión (Murcia, Spain). Corta Brunita (★).

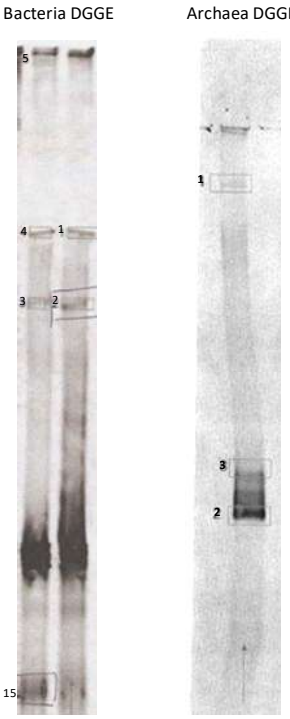

Figure S2. Stained denaturing gradient gel electrophoresis (DGGE) gels of bacterial and archaeal 16S rRNA gene fragments amplified by PCR. Numbered DGGE bands correspond to data presented in Table S1.

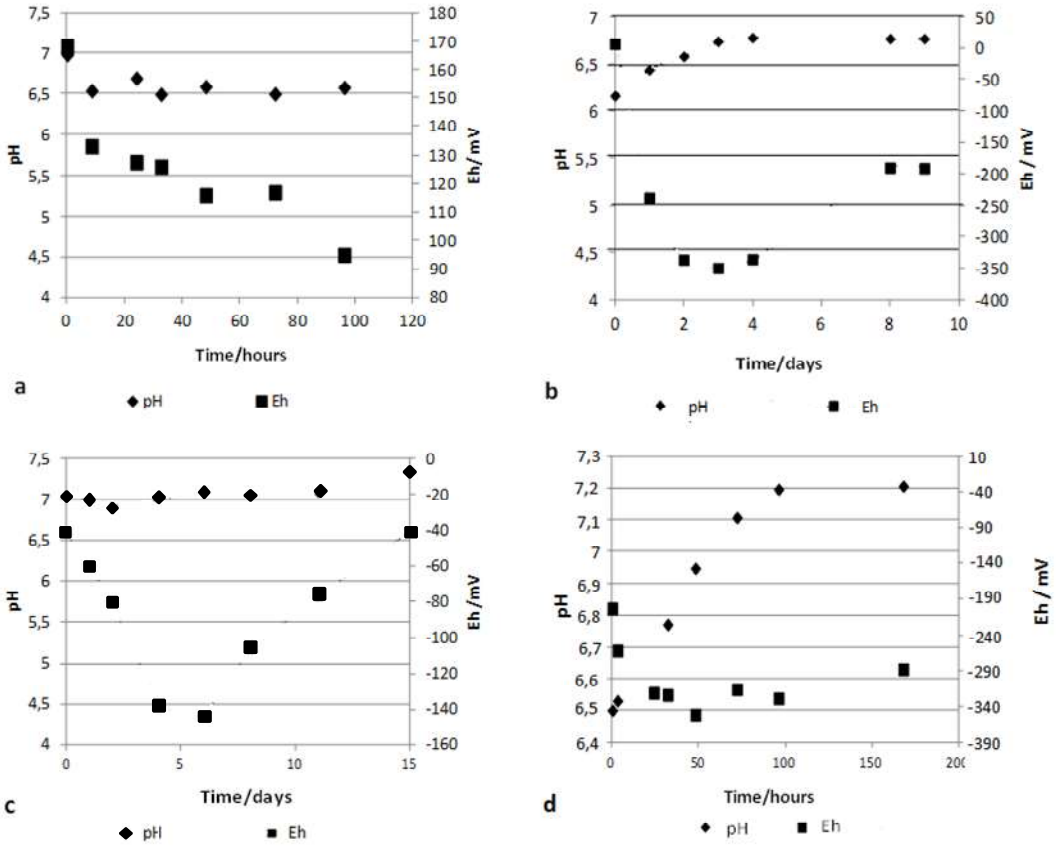

Figure S3. pH and Eh variation during the bioreduction processes: (**a**) Soluble ferric citrate, (**b**) potassium and ammonium jarosites, (**c**) silver jarosite, and (**d**) gossan mineral.

Table S1. DGGE results corresponding to the natural consortium grown on modified Postgate C medium with ferric citrate.

Bacteria		BLAST				
Band	pb	Close sequence	Coverage (%)	Maximum identity (%)	Number of access to NCBI Database	Relative abundance (%)
1	466	Selenomona from anoxic bulk soil 16S rRNA gene (strain SB90)	99	97	AJ229242.1	22.5
3	395	Clostridium from anoxic bulk soil 16S rRNA gene (strain XB90)	99	82	FJ391486.1	13.1
15	473	Clostridium sulfatireducens 16S ribosomal RNA gene, partial sequence	90	99	AY943861.1	28.6
4, 2, 5	-	Not identified bands	-	-	-	-
Archaea Band 3	pb 457	Ferroplasma acidiphilium strain DR1 16S rRNA gene, partial sequence	98	98	AY222042.2	51.6
1, 2	–	Not identified bands	-	-	-	65.2