

# Supplementary Materials: Arsenopyrite Dissolution and Bi-Oscorodite Precipitation by *Acidithiobacillus ferrivorans* ACH under Mesophilic Condition

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**Table S1.** Sequence of arsenic proteins identified in *A. ferrivorans* ACH genome.

Protein	Sequence
ArsA	MLFLQTPPTFLFFTGGVGGKTSLSCATAIHLVRLGKKVLLVSTDPASNVGQVFSQAIGNKITAI SAVPGLFALEIDPQQAAQEYRERIVGPVRGALPDVAVKGIEEQLSGACTTEIAAFDEFTALLTDA TLTVDYDHIIFDTAPTGHITIRLLQLSGAWSGFIEKNPEGASCLGPLAGLEKQRQRYAEAVKALS PARTRLILVARAQKTTLDEVARTHQELAAATGLTRQNLVINGVLPAAEEAVHDALAAAIQREQ AAIASMPAALRDLVDQLPLKAFNMVGVGVEALCSLLSDQDESAPAGSAAPTERIELPQLLTVEA IAGTGHGLIMMMGGKGVGKTTLAAAVAVALAERGLPVHLTSDPAAHLSDTLAGSLGNLEV SRIDPELETERYRQHVLDTKGQDLDAEGRAMLEEDLRSPCTEIAVFQAFSRVIREAGKQFVVM TAPTGHITLLLLDATGAYHREVTRHLVDPQVHYTTPMMQLQDPERTQVLIVTLPEPTPVLEAAQ LQEDLRRAGIEPWA VINNSLAAAPTASPLLKQRAALEVAQIEAVRTRYAKRVALVPMQTEE PVGIDHLRALLNPAS
ArsD	MTKIRVFDPMCCSTGVCGPTIDPALVRFSADADWAKGQEIDLVRYNLSQEPMAFVNPNV VKQFLDRSGAEALPLILVEGEIALAGRYPTREELVRWAGLAAAPVMESPSGGCCGGSGTC
ArsC	MKTLNIFLCTGNSCRSLAEVTFNALAGPAMHAISAGSHPTGYVHPRALALLQREGFST EGLYSKSWDDLKITPDIVITVCASAAGETCPAYLGPVIRAHWGVEDPAKATGSEAEIEAA FASAYQILRRRIEAFALPWTRWEASGGVALQAEALARIGE
ArsR	MEIRQDHVIRLLEALASPVRLDIYRLLVEHEPDGLVAGDIAARLDIPGNGISFHLKTLQY AGLVSGHREGRYQRYRACLKAAEELIAYLTDNCCGHRPELCAPCVTTDVNPSLSCAPSRT
ArsB	MLAVLIFLATLILVIWQPKGLSIGWSAMGGAALALATGAITWNDIPAVWHIWDATFTFVALII ISLILDEAGFFHW AALHV ARWGGGRGQLLFPLIVVLGAAIAAVFANDGAALLLTPIVMAILQ LEFTAATFAFVIATGFVADTTSLPLMISNLVNIVSANYFNISFDRYALVMIPVDLVALAMTLLV LWIAFRRLVPQHYGTAHLPEPATAIKDHLVFRTSFPVLILLIAYFVTAQWQVPVSVVTVTGAL ILLALAGRWFQGGGGAQISVRKVLQDAPWKIVVFSLGMVLLVYGLRNAGLTDYVQAALLW FGAHGRVAAALGTGFLAALLSSVMNNMPAVLVGALAIHHAPVAADPMIREIMVYANIIGCD LGPKFTPIGSLATLLWLHVLGRKGVTTITWGQYMRIGLLITPPVLLVTLLALAWWLPLT