Carbon 49 taxonomic groups and 418 distinct MAGs Formaldehyde oxidation Formaldehyde Methylamine particulate methane oxidation methane production Formate oxidation methanol oxidation soluble methane oxidation Reverse TCA Wood Ljundahl pathway Oxidation cycle cycle 3HP/ 4HB 8 Thaumarchaeota -CP Bathyarchaeota -Verstratearchaeota -Euryarchaeota -Archaea CP Parvarchaeota -CP Altiarchaeota -Aenigmarchaeota -Woesearchaeota -CP Pacearchaeota -CP **DPANN** Archaea CP Handelsmanbacteria
CP Aminicemantes (OP8)
Sericytochromatia, Tanganyikabacteria
Cyanobacteria
Eirmicutes
Chloroflexi
Armatimonadetes
Actinobacteria
Gemmatimonadetes
CP WOR-3
CP Zixibacteria Nb.of.genes Gemmatimonagetes 1
CP WOR-3
CP Zixibacteria 1
Ignavibacteria 2
Ignavibacteria 3
CP Zixibacteria 4
Ignavibacteria 4
CP Eisenbacteria 1
CP Ziwabacteria 1
CP Ziwabacteria 1
CP Ziwabacteria 1
Racteroidetes 1
Racteroidetes 2
Ririmatiellaeota 2
Verrucomicrobia 2
Verrucomicrobia 1
Planctomycetes 2
Ianctomycetes (Phycisphaerae 2
Verrucomicrobia 1
CP Poribacteria 2
Lentisphaerae 3
Acidobacteria 4
CP Tectomicrobia 2
CP Rokubacteria 2
CP Rokubacteria 3
CP Rokubacteria 4
CP Rokubacteria 3
CP Rokubacteria 3
CP Rokubacteria 3
CP Rokubacteria 4
CP Rokubacteria 4
CP Rokubacteria 3
CP Rokubacteria 4
CP Rokubacteria 4
CP Rokubacteria 5
CP Staskawiczbacteria 5 30 Taxonomy 20 Bacteria 10 Planctomycetes CP Staskawiczbacteria -CP Peribacteria -CP Moranbacteria -CP Kaiserbacteria -**CPR** Bacteria fdh_thiofag mtm spadh catalytic codhC codhD carbon_monoxide_dehydrogenase_coxL carbon_monoxide_dehydrogenase_coxM carbon_monoxide_dehydrogenase_coxS fdhA fdhB fdhC mcrA mcrB madB pmoA pmoB pmoC madA mmoB Four.hydroxybutyryl.CoA.synthetase ndma_methanol_dehydrogenase acetate_citrate_lyase_aclA Four.hydroxybutyryl.CoA.dehydratase acetate_citrate_lyase_aclB codh

Genes