— Archaea-Euryarchaeota-Halobacteria-Haloferacales-Haloferacaceae-Haloferax_sp._KTX1_WP_148417035.1 Bacteria ukaryota-Ciliophora-NA-Unranked-NA-Platyophrya_macrostoma_MMETSP0127_c61687_g1_i1.p1 Eukaryota-Kinetoplastida-Kinetoplastida-Kinetoplastida-Trypanosomatidae-Leptomonas_pyrrhocoris_XP_015655014.1 hyta-NA-Prymnesiales-NA-Isochrysis_galbana_MMETSP0595_c16117_g1_i1.p1 Bacteria-NA-NA-NA-NA-candidate_division_GN15_bacterium_WP_116457095.1 yota-Apicomplexa-NA-Unranked-NA-Lankesteria_abbottii_MMETSP0372_c13455_g1_i1.p1 — Paulinella_chromatophora_CCAC0185_nuclear___scaffold35010-m150289 —— Viruses-Phycodnaviridae-NA-NA-NA-Emiliania_huxleyi_virus_86_YP_294159.1 -NA-Pyrenomonadales-Geminigeraceae-Guillardia_theta_MMETSP0046_c5386_g1_i1.p1 — Eukaryota-Rhodophyta-Bangiophyceae-NA-NA-Rhodosorus_marinus_MMETSP0011_c10183_g1_i1.p1 ————— MSTRG.7053.1.p1 ——— Paulinella_chromatophora_CCAC0185_nuclear___scaffold7423-m59563 — Paulinella_chromatophora_CCAC0185_nuclear___scaffold17947-m103917 — Bacteria-Verrucomicrobia-Verrucomicrobiae-Verrucomicrobiales-Verrucomicrobiasubdivision3-Pedosphaera_parvula_WP_007416822.1 Bacteria-Chlamydiae-Chlamydiia-Parachlamydiales-Criblamydiaceae-Criblamydia_sequanensis_WP_041018651.1 Bacteria-Chlamydiae-Chlamydiia-Parachlamydiales-Parachlamydiaceae-Candidatus_Protochlamydia_massiliensis_WP_032125724.1 Bacteria-Chlamydiae-Chlamydiia-Parachlamydiales-Parachlamydiaceae-Neochlamydia_sp._EPS4_WP_044882168.1 ae-Gloeochaete_witrockiana_MMETSP0308_c18417_g1_i1.p1 Bacteria-Actinobacteria-Actinobacteria-Corynebacteriales-Nocardiaceae-Rhodococcus_qingshengii_WP_133369420.1 Bacteria-Firmicutes-Bacilli-Bacillales-Bacillaceae-Bacillus_vietnamensis_WP_148940197.1 Bacteria-Firmicutes-Bacilli-Bacillales-Bacillaceae-NA_WP_112180829.1

Bacteria-Firmicutes-Bacilli-Bacillales-Bacillaceae-Paraliobacillus_sp._X1268_WP_117160869.1 —— Bacteria-Tenericutes-Mollicutes-Anaeroplasmatales-Anaeroplasmataceae-Anaeroplasma_bactoclasticum_WP_119015759.1 —— Bacteria-Nitrospirae-Nitrospira-Nitrospirales-Nitrospiraceae-Thermodesulfovibrio_islandicus_WP_051345776.1 Bacteria-Nitrospirae-Nitrospira-Nitrospirales-Nitrospiraceae-Candidatus Nitrospira nitrosa WP 090747581.1 —— Bacteria-Nitrospirae-Nitrospira-Nitrospirales-Nitrospiraceae-Nitrospira_cf._moscoviensis_SBR1015_WP_086426276.1 Bacteria-Firmicutes-Clostridia-Clostridiales-Lachnospiraceae-Anaerotignum_lactatifermentans_WP_087989179.1 Bacteria-NA-NA-NA-NA-bacterium 1XD2170 WP 121708262.1 Bacteria-NA-NA-NA-NA_WP_120434516.1 - Bacteria-Armatimonadetes-Armatimonadia-Capsulimonadales-Capsulimonadaceae-Capsulimonas_corticalis_WP_119321910.1 — Bacteria-Lentisphaerae-Lentisphaeria-Lentisphaerales-Lentisphaeraceae-Lentisphaera_araneosa_WP_007277203.1 ——— Bacteria-Verrucomicrobia-Spartobacteria-Chthoniobacterales-Chthoniobacteraceae-Chthoniobacter_flavus_WP_006977895.1 — Bacteria-Verrucomicrobia-Verrucomicrobiae-Verrucomicrobiales-Akkermansiaceae-Akkermansia_muciniphila_WP_102712197.1 - Bacteria-Verrucomicrobia-Verrucomicrobiae-Verrucomicrobiales-Akkermansiaceae-NA_WP_067570974.1 — Viruses-Phycodnaviridae-NA-NA-NA-Aureococcus_anophagefferens_virus_YP_009052318.1 — Viruses-Phycodnaviridae-NA-NA-NA-Chrysochromulina_ericina_virus_YP_009173471.1 — Viruses-Phycodnaviridae-NA-NA-NA-Phaeocystis_globosa_virus_YP_008052440.1 —— Bacteria-Elusimicrobia-Endomicrobia-Endomicrobiales-Endomicrobiaceae-Candidatus_Endomicrobium_trichonymphae_WP_015423029.1 —— Bacteria-Elusimicrobia-Endomicrobia-Endomicrobiales-Endomicrobiaceae-Endomicrobium_proavitum_WP_052571230.1 Bacteria-NA-NA-NA-NA-Candidatus_Vecturithrix_granuli_WP_045429249.1 —— Bacteria-Nitrospinae-Nitrospinia-Nitrospinales-Nitrospinaceae-Nitrospina_sp._SCGC_AAA799_C22_WP_048493747.1 — Bacteria-Proteobacteria-Deltaproteobacteria-Desulfobacterales-Desulfobacteraceae-Desulfobacter_hydrogenophilus_WP_111956347.1 Bacteria-Proteobacteria-Deltaproteobacteria-Desulfuromonadales-Geobacteraceae-Geobacter_sp._S43_WP_129124522.1 — Bacteria-Proteobacteria-Alphaproteobacteria-Rhizobiales-Aurantimonadaceae-Martelella_sp._BGMRC2036_WP_141147906.1 — Bacteria-Proteobacteria-Alphaproteobacteria-Rhizobiales-NA-Rhizobiales_bacterium_WP_112511405.1 Eukaryota-Amoebozoa-NA-NA-Paramoebidae-Neoparamoeba_aestuarina_MMETSP0161_c35556_g1_i1.p1 ———— Archaea-Euryarchaeota-Halobacteria-Halobacteriales-Halobacteriaceae-Halomarina_oriensis_WP_124954145.1 — Archaea-Euryarchaeota-Halobacteria-Haloferacales-Halorubraceae-Halonotius_sp._F1313_WP_120103682.1 Archaea-Crenarchaeota-Thermoprotei-Sulfolobales-Sulfolobaceae-Acidianus_sulfidivorans_WP_110379548.1 —— Archaea-Crenarchaeota-Thermoprotei-Sulfolobales-Sulfolobaceae-Metallosphaera_hakonensis_WP_054837075.1 — Paulinella_chromatophora_CCAC0185_nuclear___scaffold7732-m61220 — Archaea-Euryarchaeota-Thermococci-Thermococcales-Thermococcaceae-Thermococcus_siculi_WP_088856545.1 —— Archaea-Crenarchaeota-Thermoprotei-Thermoproteales-Thermoproteaceae-Vulcanisaeta_distributa_WP_013336730.1 - Archaea-CandidatusKorarchaeota-NA-NA-NA-Candidatus_Korarchaeum_cryptofilum_WP_012309003.1 — Archaea-Thaumarchaeota-Nitrososphaeria-Nitrososphaerales-Nitrososphaeraceae-Candidatus_Nitrosocosmicus_arcticus_WP_144734839.1