— Archaea-Euryarchaeota-Halobacteria-Haloferacales-Haloferacaceae-Halobellus_sp._Atlit31R_WP_121561407.1 - Bacteria-Actinobacteria-Actinobacteria-Micrococcales-Microbacteriaceae-Chitinimonas_sp._R344_WP_144277833.1 — Bacteria-Proteobacteria-Gammaproteobacteria-Cellvibrionales-Cellvibrionaceae-Umboniibacter_marinipuniceus_WP_121876976.1 ———— Eukarvota-Chordata-Mammalia-Cetacea-Lipotidae-Lipotes vexillifer XP 007472074.1 —— Bacteria-Proteobacteria-Gammaproteobacteria-Pseudomonadales-Moraxellaceae-Paraperlucidibaca_baekdonensis_WP_116207729.1 Bacteria-NA-NA-NA-NA-Bathymodiolus_brooksi_thiotrophic_gill_symbiont_WP_139476022.1 —— Bacteria-NA-NA-NA-NA-thiotrophic endosymbiont of Bathymodiolus puteoserpentis Logatchev WP 139682071.1 Paulinella — Bacteria-Acidobacteria-Thermoanaerobaculia-Thermoanaerobaculales-Thermoanaerobaculaceae-Thermoanaerobaculum_aquaticum_WP_038046650.1 Archaea — Bacteria-Nitrospirae-Nitrospira-Nitrospirales-Nitrospiraceae-Candidatus_Sulfobium_mesophilum_WP_109135797.1 Bacteria Bacteria-Nitrospirae-Nitrospira-Nitrospirales-Nitrospiraceae-NA_WP_012546354.1 ———— Bacteria-Nitrospirae-Nitrospira-Nitrospirales-Nitrospiraceae-Thermodesulfovibrio_sp._N1_WP_068861183.1 Racteria-candidatedivisionNC10-NA-NA-NA-candidate_division_NC10_bacterium_WP_116477718.1 Bacteria-candidatedivisionNC10-NA-NA-NA-Candidatus_Methylomirabilis_limnetica_WP_107562510.1 — Eukaryota-Rhodophyta-Bangiophyceae-Cyanidiales-Cyanidiaceae-Galdieria_sulphuraria_GsulpMS1_G1059.1 —— Eukaryota-Rhodophyta-Florideophyceae-Gracilariales-Gracilariaceae-Gracilariopsis chorda PXF42776.1 Eukaryota-Palpitomonas-NA-NA-NA-Palpitomonas_bilix_MMETSP0780_c12715_g1_i1.p1 — Bacteria-Actinobacteria-Nitriliruptoria-Egicoccales-Egicoccaceae-Egicoccus_halophilus_WP_130650952.1 - Bacteria-CandidatusMelainabacteria-NA-NA-Candidatus Melainabacteria bacterium WP 144105923.1 — Bacteria-Cyanobacteria-NA-NA-NA-NA_WP_044151451.1 — Bacteria-Cyanobacteria-NA-Synechococcales-Synechococcaceae-Synechococcus_sp._PCC_7335_WP_038016056.1 Eukaryota-Chlorophyta-Chlorophyceae-Chlamydomonadales-Chlamydomonadaceae-Polytomella_parva_MMETSP0052_c26500_g1_i1.p1 Eukaryota-Streptophyta-NA-Amborellales-Amborellaceae-Amborella_trichopoda_XP_011625436.1 Eukaryota-Streptophyta-NA-Solanales-Convolvulaceae-Ipomoea nil XP 019190918.1 Eukaryota-Glaucophyta-Glaucophyta-NA-Cyanophoraceae-Cyanophora_paradoxa_tig00020909_g15327.t1 Bacteria-Armatimonadetes-Chthonomonadetes-Chthonomonadales-Chthonomonadaceae-Chthonomonas_calidirosea_WP_016483603.1 ———100 Bacteria-Armatimonadetes-Chthonomonadetes-Chthonomonadales-Chthonomonadaceae-Chthonomonas_calidirosea_WP_075163130.1 — Bacteria-Synergistetes-Synergistia-Synergistales-Synergistaceae-Aminivibrio_pyruvatiphilus_WP_133958126.1 — Bacteria-Synergistetes-Synergistia-Synergistales-Synergistaceae-Aminomonas_paucivorans_WP_006300910.1 - Bacteria-Synergistetes-Synergistia-Synergistales-Synergistaceae-Thermovirga_lienii_WP_014162920.1 — Bacteria-Bacteroidetes-Flavobacteriia-Flavobacteriales-Flavobacteriaceae-Capnocytophaga_cynodegmi_WP_041989769.1 — Bacteria-Bacteroidetes-Flavobacteriia-Flavobacteriales-Flavobacteriaceae-Flavobacterium_frigoris_WP_074719990.1 ______Eukaryota-Diplomonadida-Diplomonadida-Diplomonadida-Hexamitidae-Giardia_intestinalis_XP_001709152.1 — Bacteria-Rhodothermaeota-Rhodothermia-Rhodothermales-Rubricoccaceae-Rubricoccus_marinus_WP_094551306.1 - Bacteria-Firmicutes-Clostridia-Clostridiales-Clostridiaceae-Clostridium sp. CL2 WP 032116927.1 — Bacteria-Firmicutes-Negativicutes-Veillonellales-Veillonellaceae-Megasphaera_elsdenii_WP_014015235.1 - Bacteria-Firmicutes-Clostridia-Halanaerobiales-Halobacteroidaceae-Orenia_marismortui_WP_134116826.1 —— Bacteria-Firmicutes-Clostridia-Halanaerobiales-NA-Anoxybacter fermentans WP 127017921.1 — Bacteria-Thermodesulfobacteria-Thermodesulfobacteria-Thermodesulfobacteriales-Thermodesulfobacteriaceae-Thermodesulfatator_atlanticus_WP_022853111.1 - Bacteria-Thermodesulfobacteria-Thermodesulfobacteria-Thermodesulfobacteriales-Thermodesulfobacteriaceae-Thermosulfurimonas_dismutans_WP_068670602.1 Bacteria-CandidatusTectomicrobia-NA-NA-NA-Candidatus_Entotheonella_palauensis_WP_089721663.1 Bacteria-CandidatusTectomicrobia-NA-NA-NA-Candidatus_Entotheonella_palauensis_WP_089943156.1 Bacteria-Aquificae-Aquificae-Aquificales-NA-Thermosulfidibacter_takaii_WP_068550558.1 ———— Bacteria-Chrysiogenetes-Chrysiogenetes-Chrysiogenales-Chrysiogenaceae-Chrysiogenes_arsenatis_WP_027388926.1 Bacteria-Proteobacteria-Epsilonproteobacteria-Campylobacterales-Helicobacteraceae-Helicobacter_cetorum_WP_104748669.1 Bacteria-Proteobacteria-Epsilonproteobacteria-Nautiliales-Nautiliaceae-NA_WP_024789317.1 ——— Bacteria-Spirochaetes-Spirochaetia-Leptospirales-Leptospiraceae-Leptospira_wolffii_WP_016545874.1 — 100 Bacteria-Spirochaetes-Spirochaetia-Leptospirales-Leptospiraceae-NA_WP_004751269.1 Eukaryota-Acytosteliales-Acytosteliales-Acytosteliales-Acytosteliaceae-Acytostelium_subglobosum_XP_012758108.1 The Line of the Control of the Contr _______Eukaryota-Acytosteliales-Acytosteliales-Acytosteliales-Cavenderiaceae-Cavenderia_fasciculata_XP_004359601.1 Eukaryota-Dictyosteliales-Dictyosteliales-Dictyosteliales-Dictyosteliaceae-Dictyostelium discoideum XP 638466.1 Eukaryota-Annelida-Clitellata-Hirudinida-Glossiphoniidae-Helobdella_robusta_jgi154625 ______ ——— Eukaryota-Mollusca-Bivalvia-Ostreoida-Ostreidae-Crassostrea_gigas_XP_011429614.1 Eukaryota-Mollusca-Gastropoda-NA-Lottiidae-Lottia gigantea jgi223903 Eukaryota-Mollusca-Bivalvia-Pectinoida-Pectinidae-Mizuhopecten_yessoensis_XP_021345472.1 Eukaryota-Mollusca-Cephalopoda-Octopoda-Octopodidae-Octopus bimaculoides XP 014779282.1 Eukaryota-Nematoda-Chromadorea-Rhabditida-Onchocercidae-Loa loa XP 020302503.1 Eukaryota-Nematoda-Chromadorea-Rhabditida-Strongyloididae-Strongyloides_ratti_XP_024506258.1 — Eukaryota-Priapulida-Priapulimorpha-Priapulimorphida-Priapulidae-Priapulus caudatus XP 014667652.1 ukaryota-Choanoflagellata-Choanoflagellata-Choanoflagellata-NA-Acanthoeca_sp_MMETSP0105_c27239_g1_i1.p1 Eukaryota-Choanoflagellata-Choanoflagellata-Choanoflagellata-Salpingoecidae-Salpingoeca rosetta XP 004991331.1 Eukaryota-Ascomycota-Saccharomycetes-Saccharomycetales-Debaryomycetaceae-Meyerozyma_guilliermondii_XP_001482213.1 Eukaryota-Microsporidia-NA-NA-NA-Mitosporidium_daphniae_XP_013236993.1 Eukarvota-Basidiomycota-Exobasidiomycetes-Georgefischeriales-Tilletiariaceae-Tilletiaria_anomala_XP_013246231. Eukaryota-Cryptophyta-NA-Goniomondales-NA-Goniomonas_pacifica_MMETSP0107_c43902_g1_i1.p1 Eukaryota-Cercozoa-NA-Euglyphida-Paulinellidae-Paulinella_chromatophora_scaffold7663-size1518_m.60872 ----- MSTRG.19143.1.p1 Eukaryota-Alveolata-Dinophyceae-NA-Unranked-Oxyrrhis_marina_MMETSP0469_c15554_g1_i1.p1 Eukaryota-Alveolata-Dinophyceae-Peridiniales-Kryptoperidiniaceae-Kryptoperidinium_foliaceum_MMETSP0120_c33597_g1_i1.p1 Libukaryota-Ciliophora-NA-Unranked-NA-Tiarina_fusus_MMETSP0472_c7639_g1_i1.p1 ———— Eukaryota-Alveolata-Dinophyceae-Peridiniales-Kryptoperidiniaceae-Durinskia_baltica_MMETSP0117_c36017_g1_i1.p1 Eukaryota-Ciliophora-NA-Unranked-NA-Pseudokeronopsis sp MMETSP1396 c3844 g1 i1.p1 Eukaryota-Stramenopiles-NA-NA-NA-Dinobryon_sp_MMETSP0020_c4797_g1_i2.p1 ——————— Eukaryota-Stramenopiles-Labyrinthista-NA-NA-Aplanochytrium_sp_MMETSP0954_c15163_g1_i1.p1 Eukaryota-Cercozoa-Chlorarachniophyceae-NA-NA-Bigelowiella_natans_CCMP2755_jgi92837 Eukaryota-Cercozoa-Chlorarachniophyceae-NA-NA-Partenskyella_glossopodia_MMETSP1318_c25469_g1_i1.p1 Eukaryota-Cercozoa-NA-Euglyphida-Paulinellidae-Paulinella_chromatophora_scaffold4683-size1925_m.43421 Eukaryota-Ciliophora-NA-Unranked-NA-Euplotes_focardii_MMETSP0206_TR636-c0_g1_i1.p1 Eukaryota-Retaria-NA-NA-NA-Ammonia_sp_MMETSP1384_c15811_g1_i1.p1 ——— 98 Eukaryota-Retaria-NA-NA-Rosalina_sp_MMETSP0190_c16294_g1_i1.p1 Eukaryota-Retaria-NA-NA-NA-Elphidium_margaritaceum_MMETSP1385_c194_g1_i1.p1 Eukaryota-Apicomplexa-Aconoidasida-Haemosporida-Plasmodiidae-Plasmodium_gallinaceum_XP_028527786.1 ——— Eukaryota-Arthropoda-Arachnida-Sarcoptiformes-Pyroglyphidae-Dermatophagoides_pteronyssinus_XP_027193969.1 Eukaryota-Apusomonadidae-NA-NA-NA-Thecamonas trahens XP 013753676.1 Eukaryota-Cryptophyta-NA-Pyrenomonadales-Chroomonadaceae-Chroomonas_mesostigmaticacf_MMETSP0047_c4103_g1_i2.p1 Eukaryota-Cryptophyta-NA-Pyrenomonadales-NA-Geminigera_cryophila_MMETSP0799_c8436_g1_i1.p1 Eukaryota-Cryptophyta-NA-Pyrenomonadales-Pyrenomonadaceae-Rhodomonas_abbreviata_MMETSP1101_c49001_g1_i1.p1 yota-Haptophyta-NA-Pavlovales-Pavlovaceae-Pavlova_sp_MMETSP1139_c5766_g1_i1.p1 ptophyta-NA-Pavlovales-Pavlovaceae-Pavlova_sp_MMETSP1381_TR13527-c0_g1_i1.p1 Eukaryota-Haptophyta-NA-Unranked-NA-Exanthemachrysis gayraliae MMETSP1464 c3469 g1 i1.p2 — Eukaryota-Haptophyta-NA-Prymnesiales-NA-Chrysochromulina_polylepis_MMETSP0146_c7252_g1_i1.p1 Eukaryota-Chlorophyta-NA-NA-NA-Crustomastix stigmata MMETSP0803 c8045 g1 i1.p2 Eukaryota-Chlorophyta-NA-NA-NA-Dolichomastix tenuilepis MMETSP0033 c517 g1 i1.p1 ukaryota-Amoebozoa-NA-NA-Paramoebidae-Neoparamoeba_aestuarina_MMETSP0161_c3602_g1_i1.p1 - Eukaryota-Amoebozoa-NA-NA-Paramoebidae-Paramoeba atlantica MMETSP0151 c5011 g1 i1.p1 Eukaryota-Amoebozoa-NA-NA-Paramoebidae-Sexangularia sp MMETSP0437 c4540 g1 i1.p1 - Eukaryota-Rhodophyta-Compsopogonophyceae-NA-NA-Madagascaria erythrocladiodes MMETSP1450 c27594 g1 i1.p3 - Eukaryota-Glaucophyta-Glaucophyta-Gloeochaetales-Gloeochaetaceae-Gloeochaete wittrockiana MMETSP1089 c5785 g1 i1.p1 Eukaryota-Longamoebia-Longamoebia-Longamoebia-Acanthamoebidae-Acanthamoeba_castellanii_XP_004344749.1 Eukaryota-Euglenida-NA-Eutreptiales-NA-Eutreptiella_gymnastica-like_MMETSP0809_c47188_g1_i1.p1 ———— Eukaryota-Euglenida-NA-Eutreptiales-NA-Eutreptiella gymnastica MMETSP0039 c16469 g2 i1.p1 Eukaryota-Euglenida-NA-NA-Unranked-Neobodo_designis_MMETSP1114_c41377_g1_i1.p1 Eukaryota-Kinetoplastida-Kinetoplastida-Kinetoplastida-Trypanosomatidae-Leishmania_braziliensis_XP_001569179.1 Eukaryota-Kinetoplastida-Kinetoplastida-Kinetoplastida-Trypanosomatidae-Trypanosoma_brucei_XP_011778322.1 Eukaryota-Kinetoplastida-Kinetoplastida-Kinetoplastida-Trypanosomatidae-Trypanosoma_cruzi_XP_812198.1 Eukaryota-Euglenida-NA-NA-Unranked-Neobodo_designis_MMETSP1114_c7355_g1_i1.p3 Eukaryota-Kinetoplastida-Kinetoplastida-Kinetoplastida-Trypanosomatidae-Leishmania_braziliensis_XP_001562146.1 —— Eukaryota-Heterolobosea-NA-NA-NA-Percolomonas_cosmopolitus_MMETSP0759_c8437_g1_i1.p1 — Eukaryota-Heterolobosea-NA-NA-Vahlkampfiidae-Naegleria_gruberi_jgi60335 — Eukaryota-Heterolobosea-NA-NA-Vahlkampfiidae-Naegleria gruberi igi34278 — Archaea-Thaumarchaeota-NA-NA-NA-Candidatus_Nitrosotalea_bavarica_WP_101477840.1 —— Archaea-Thaumarchaeota-NA-Nitrosopumilales-Nitrosopumilaceae-Candidatus_Nitrosopumilus_sp._NM25_WP_109877557.1 —— Archaea-Thaumarchaeota-NA-Nitrosopumilales-Nitrosopumilaceae-Nitrosopumilus piranensis WP 148702460.1 Archaea-Euryarchaeota-Thermoplasmata-Methanomassiliicoccales-CandidatusMethanomethylophilaceae-Candidatus_Methanomethylophilus_alvus_WP_015504046.1 Archaea-CandidatusBathyarchaeota-NA-NA-NA-Candidatus Bathyarchaeota archaeon WP 119815698.1 — Archaea-Crenarchaeota-Thermoprotei-Desulfurococcales-Desulfurococcaceae-Thermogladius_calderae_WP_083830002.1 Archaea-NA-NA-NA-NA-anaerobic_archaeon_MKD1_WP_147662882.1 —— Archaea-Crenarchaeota-Thermoprotei-Desulfurococcales-Pyrodictiaceae-Pyrolobus_fumarii_WP_014026251.1 — Archaea-Euryarchaeota-Thermococci-Thermococcales-Thermococcaceae-Pyrococcus kukulkanii WP 068320228.1 —— Archaea-Euryarchaeota-Thermococci-Thermococcales-Thermococcaceae-Thermococcus_litoralis_WP_004067721.1