

Supplemental data for

Draft genome sequence of the marine *Rhodobacteraceae* strain O3.65, cultivated from oil-polluted seawater of the Deepwater Horizon oil spill

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Figure S1

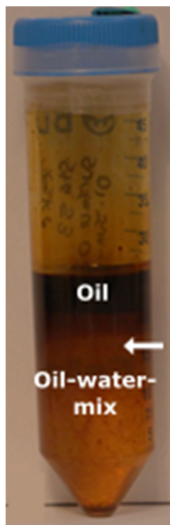


Figure S1. Enrichment culture of surface seawater contaminated with weathered oil (slicks) from the Deepwater Horizon (DWH) oil spill with oil and oil-water phase. From the latter, indicated by an arrow, *Rhodobacteraceae* strain O3.65 was isolated.

29 **Table S1.** Dissimilarity (%) based on 16S rRNA gene sequence comparison and *in silico*
30 DNA-DNA hybridization (DDH) of strain O3.65 using 16S rRNA gene sequences and
31 genomes of (type^T) strains of the genera *Phaeobacter*, *Pseudophaeobacter*, *Leisingera*,
32 *Ruegeria* and other relevant strains. The neighbor-joining distance matrix tool of the ARB
33 software was used for calculation of 16S rRNA gene similarity. DDH was done using the
34 genome to genome distance calculator (GGDC 2.0, DSMZ, <http://ggdc.dsmz.de/distcalc2.php>,
35 [58,59]) and represents values of the recommended formula 2 [60]. Table sorted by increasing
36 dissimilarity.

| Reference strain | GenBank accession number | Dissimilarity (%) | DDH (%) | Reference |
|--|--------------------------|-------------------|-----------|-----------|
| <i>Ruegeria</i> sp. 39RL_GOM-46m | PRJNA213767 ^a | 0 | 100.0±0.1 | - |
| Uncultured <i>alpha proteobacterium</i> clone Oil-BE-016 | KJ475503 | 0.1 | - | [12] |
| <i>Phaeobacter inhibens</i> DSM 17395 | ABIF01000020 | 1.6 | 19.8±2.3 | [71,81] |
| <i>Phaeobacter gallaeciensis</i> DSM 26640 ^T | NC_023137 | 1.7 | 21.8±2.4 | [69] |
| <i>Phaeobacter inhibens</i> T5 ^T | NZ_AXBB00000000 | 1.7 | 20.2±2.3 | [30] |
| <i>Ruegeria scottomollicae</i> LMG 24367 ^T | AM905330 | 1.9 | - | [82] |
| <i>Phaeobacter</i> sp. LSS9 | GQ906799 | 2.0 | 20.8±2.3 | [83] |
| <i>Leisingera aquimarina</i> DSM 24565 ^T | NZ_AXBE01000000 | 2.0 | 20.1±2.3 | [67] |
| <i>Leisingera methylohalidivorans</i> DSM 14336 ^T | NC_023135 | 2.1 | 20.2±2.3 | [68] |
| <i>Roseobacter</i> sp. SK209-2-6 | NZ_AAYC00000000 | 2.2 | 20.1±2.3 | - |
| <i>Phaeobacter inhibens</i> 2.10 | NC_018290 | 2.2 | 20.1±2.3 | [71] |
| <i>Leisingera aquaemixtae</i> SSK6-1 ^T | KF554505 | 2.3 | - | [32,84] |
| <i>Leisingera caerulea</i> DSM 24564 ^T | AXBI00000000 | 2.6 | 20.4±2.3 | [31] |
| <i>Ruegeria</i> sp. R11 | NZ_ABXM01000000 | 2.7 | 20.3±2.3 | - |
| <i>Ruegeria faecimaris</i> HD-28 ^T | GU057915 | 2.8 | - | [85] |
| <i>Leisingera</i> sp. ANG1 | NZ_AFCF00000000 | 3.1 | 19.8±2.3 | [86] |
| <i>Leisingera daeponensis</i> DSM 23529 ^T | NZ_AXBD00000000 | 3.2 | 20.7±2.3 | |
| <i>Rhodobacterales</i> bacterium Y4I | ABXF00000000 | 3.2 | 20.4±2.3 | - |
| <i>Roseobacter</i> sp. MED193 | NZ_AANB01000000 | 3.3 | 21.2±2.3 | - |
| <i>Sedimentitalae nanhaiensis</i> DSM 24252 ^T | NZ_AXBG00000000 | 3.4 | 22.8± 2.4 | [32] |
| <i>Pelagicola litoralis</i> CL-ES2 ^T | EF192392 | 3.4 | - | [87] |
| <i>Ruegeria mobilis</i> 45A6 | PRJNA295947 | 3.5* | 21.5±2.3 | - |
| <i>Ruegeria</i> sp. TrichCH4B | NZ_ACNZ00000000 | 3.5 | 21.7±2.4 | - |
| <i>Pseudophaeobacter arcticus</i> DSM 23566 ^T | NZ_AXBF00000000 | 3.7 | 20.3±2.3 | [32,88] |
| <i>Seohicola saemankumensis</i> SD-15 ^T | EU221274 | 3.8 | - | [89] |
| <i>Ruegeria atlantica</i> DSM 5823 ^T | D88526 | 3.9 | - | [90] |
| <i>Ruegeria pelagia</i> HTCC2662 ^T | DQ916141 | 3.9 | - | [91] |
| <i>Ruegeria conchae</i> TW15 ^T | NZ_AEYW01000000 | 4.2 | 19.2±2.3 | [92] |
| <i>Phaeobacter marinintestinus</i> UB-M7 | KJ461690 | 4.2 | - | [93] |
| <i>Ruegeria pomeroyi</i> DSS-3 ^T | NC_003911.12 | 4.3 | 19.9±2.3 | [94] |
| <i>Rhodobacteraceae</i> bacterium KLH11 | NZ_ACCW01000000 | 4.3 | 19.3±2.3 | - |
| <i>Ruegeria arenilitoris</i> G-M8 ^T | JQ807219 | 4.3 | - | [95] |
| <i>Ruegeria halocynthiae</i> MA1-6 ^T | HQ852038 | 4.3 | - | [96] |

| | | | | |
|--|-----------------|-----|----------|----------|
| <i>Ruegeria marina</i> ZH17 ^T | FJ872535 | 4.4 | 20.4±2.3 | [97] |
| <i>Ruegeria lacuscaerulensis</i> ITI-1157 ^T | NZ_ACNX01000000 | 4.5 | 20.0±2.3 | - |
| <i>Litorimicrobium taeanense</i> G4 ^T | GQ232737 | 4.6 | 22.7±2.4 | [98] |
| <i>Ruegeria</i> sp. TM1040 | NC_008044 | 4.6 | 21.2±2.3 | [99] |
| <i>Ruegeria halocynthiae</i> MOLA R1/13b | NZ_JQEZ00000000 | 4.6 | 19.7±2.3 | [100] |
| <i>Ruegeria</i> sp. ANG-S4 | NZ_JWLK01000000 | 4.7 | 19.9±2.3 | [86] |
| <i>Ruegeria</i> sp. ANG-R | NZ_JWLJ01000000 | 4.7 | 18.6±2.3 | [86] |
| <i>Ruegeria meonggei</i> Ma-E2-3 ^T | KF740534 | 4.9 | - | [101] |
| <i>Pseudophaeobacter leonis</i> 306 ^T | HE661585 | 5.0 | - | [32,102] |
| <i>Ruegeria intermedia</i> CC-GIMAT-2 ^T | FR832879 | 5.8 | - | [103] |

37 ^a bioproject number.

38 * 16S gene sequence identical to *Ruegeria mobilis* NBRC 101030^T (AB255401)

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