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Screening of cloud microorganisms isolated at the Puy de Dôme (France) station for the production of biosurfactants

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Table S1. Strains are isolated during 39 cloud events (from 2004 to 2014) gathered in four categories according to the physicochemical characteristics of the cloud waters (Blue: marine, purple: highly marine, green: continental and black: polluted) as described by Deguillaume et al. (2014).

Cloud Event	Composition	Nb of strains	Date	pH	Ions (μM)												
					SO_4^{2-}	NO_3^-	Cl^-	Acetate	Formate	Oxalate	Succinate	Malonate	Na^+	NH_4^+	Mg^{2+}	K^+	Ca^{2+}
21	Marine	2	2004-01	5.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
23	Polluted	2	2004-02	3.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29	Marine	1	2004-07	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30	Marine	3	2004-09	7.6	3.8	6.5	12.0	6.0	6.0	0.5	0.1	0.16	19.4	54.9	4.9	4.1	12.0
32	Continental	1	2004-12	5.5	72.1	95.8	31.5	0.0	0.3	0.3	0.1	0.17	74.4	132.4	7.6	9.0	73.7
42	Continental	25	2007-12	4.7	39.7	198.4	20.2	10.2	5.8	2.9	0.6	0.58	19.1	148.2	3.5	11.9	58.0
43	Highly marine	25	2008-01	5.9	9.4	21.4	81.4	11.4	6.7	1.2	0.2	0.28	315.7	35.9	11.8	13.7	26.0
44	Continental	14	2008-02	5.2	24.6	65.9	17.2	26.8	18.0	1.3	0.5	0.39	15.2	148.5	1.8	5.8	22.3
45	Continental	22	2008-04	4.6	44.7	65.5	31.7	17.7	17.9	2.8	0.9	0.89	33.3	122.5	4.9	9.7	53.6
46	Continental	2	2008-10	5.0	13.2	102.4	28.7	2.7	14.2	1.3	0.4	0.52	10.4	72.7	6.9	5.3	77.7
47	Marine	14	2008-11	5.4	6.5	33.2	15.7	5.3	8.0	0.8	0.2	0.33	8.2	13.7	1.4	6.3	14.4
49	Marine	6	2009-01	6.5	14.7	20.0	113.9	4.8	8.9	1.2	0.3	0.44	70.9	58.2	29.2	12.5	14.5
50	Marine	7	2009-02	4.9	7.1	23.3	72.5	22.2	13.4	0.8	0.2	0.56	NA	NA	NA	NA	NA
53	Polluted	8	2009-03	4.0	73.8	516.5	193.8	41.2	13.7	3.5	1.2	0.62	171.9	363.2	13.5	71.6	52.3
54	Marine	62	2009-11	5.2	2.3	13.3	30.5	4.4	15.0	1.7	0.1	0.34	37.0	6.6	12.1	20.5	0.0
55	Marine	11	2009-11	5.8	9.3	34.8	97.5	6.7	10.1	3.3	0.3	0.36	95.1	31.1	12.6	17.2	0.0
60	Highly marine	32	2010-03	5.5	39.0	9.7	231.5	3.5	4.3	1.2	0.0	0.00	114.1	28.6	12.9	12.8	2.7
61	Marine	2	2010-05	6.2	3.1	6.0	11.6	6.0	6.4	0.1	0.0	0.00	11.8	15.4	0.2	6.2	4.2
62	Marine	1	2010-06	6.1	3.5	4.5	2.3	3.4	6.2	1.4	0.0	0.00	1.8	6.0	0.0	0.0	0.0
66	Marine	1	2010-09	5.7	4.0	17.8	1.5	7.1	8.6	2.6	0.2	0.00	2.3	32.4	0.2	0.7	0.5
71	Marine	2	2011-03	5.9	3.5	6.6	6.2	7.1	4.2	2.2	0.3	0.39	6.9	42.5	0.1	3.6	5.1
72	Marine	5	2011-03	7.0	12.7	26.0	26.4	16.6	12.7	1.8	0.5	0.53	40.2	75.1	0.4	12.5	15.2
75	Marine	9	2011-06	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
76	Continental	4	2011-06	5.9	52.2	126.0	16.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
77	Continental	11	2011-07	6.0	19.6	47.9	12.8	58.3	109.6	12.3	NA	NA	124.8	408.5	26.8	22.8	148
78	Marine	8	2011-07	5.5	7.1	10.4	24.1	3.3	11.3	3.1	NA	NA	22.7	32.7	12.3	9.2	7.1
79	Marine	5	2011-11	4.6	1.3	5.0	0.3	4.3	5.6	1.0	NA	NA	0.6	52.7	0.8	1.6	3.2
80	Marine	2	2012-01	4.9	1.8	2.2	13.4	7.4	5.3	1.1	NA	NA	80.6	39.3	12.0	6.1	5.2
81	Marine	7	2012-01	5.8	4.8	11.2	23.4	15.3	15.6	6.7	NA	NA	145.7	188.6	20.3	6.2	9.3
82	Marine	2	2012-03	5.3	1.6	2.0	0.2	4.2	6.2	3.0	NA	NA	1.0	75.4	1.0	0.1	6.1
83	Continental	10	2012-04	5.6	10.7	49.9	12.2	0.0	39.0	6.5	NA	NA	93.5	531.1	14.3	10.7	34.6
84	Marine	21	2012-04	5.5	1.6	1.9	6.0	3.9	7.7	1.2	NA	NA	36.0	38.1	6.0	1.4	5.2
85	Marine	17	2012-06	5.5	1.2	3.0	0.9	0.0	18.2	3.3	NA	NA	6.0	77.9	2.2	4.0	4.3
86	Marine	42	2012-09	5.9	0.5	1.0	1.0	3.2	3.2	1.0	NA	NA	8.8	16.8	1.4	5.5	4.5
87	Marine	28	2012-10	6.2	5.3	11.0	26.7	4.0	13.6	0.7	NA	NA	21.2	39.3	8.3	7.6	2.3
88	Polluted	2	2012-11	4.6	111.1	346.5	47.6	18.5	13.1	6.5	NA	NA	17.6	59.3	15.8	53.6	6.6
89	Marine	31	2013-01	5.2	32.9	29.5	109.9	19.9	15.6	2.7	NA	NA	77.5	81.2	21.5	4.8	23.5
91	Marine	7	2013-05	5.5	28.5	9.3	16.3	21.8	9.8	3.3	NA	NA	13.3	57.4	6.2	8.0	22.2
97	Marine	26	2014-02	5.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table S2. 480 strains tested for biosurfactant production. Strains are isolated during 39 cloud events (from 2004 to 2014) gathered in four categories according to the physicochemical characteristics of the cloud waters (Blue: Marine, purple: Highly marine, green: Continental and black: Polluted, see table S1) as described by Deguillaume et al. (2014). Strains are differentiated into four main categories, according to the measured surface tension (red: $\sigma \leq 30$, orange: $30 < \sigma \leq 45$, yellow: $45 < \sigma \leq 55$ and green: $\sigma > 55$ mN m⁻¹, see details in text). Phylum colors correspond to those of Figure 1. All surface tension measurements are performed using the pendant drop method with an OCA 15 Pro tensiometer (Data Physics, Germany). A.N, accession number in GenBank.

Cloud Events	Composition	Strain	Phylum (class)	Species	AN	σ (mN m ⁻¹)
76	Continental	49b04	Y-Proteobacteria	<i>Pseudomonas</i> sp.	KR922066	24.4
77	Continental	50b03	Y-Proteobacteria	<i>Pseudomonas</i> sp.	KR922069	25.6
77	Continental	50b08	Y-Proteobacteria	<i>Pseudomonas</i> sp.	KR922074	25.6
77	Continental	50b04	Y-Proteobacteria	<i>Pseudomonas</i> sp.	KR922070	25.9
77	Continental	50b02	Y-Proteobacteria	<i>Pseudomonas</i> sp.	KR922068	26.1
45	Continental	26b18	Basidiomycota	<i>Udeniomyces</i> sp.	JF706566	33
44	Continental	25b01	Basidiomycota	<i>Bullera globispora</i>	HQ260318	36
77	Continental	50b07	Y-Proteobacteria	<i>Pseudomonas syringae</i>	KR922073	36
42	Continental	23b16	Actinobacteria	<i>Leifsonia</i> sp.	HQ256777	39
77	Continental	50b09	Y-Proteobacteria	<i>Pseudomonas syringae</i>	KR922075	39
44	Continental	25b04	Basidiomycota	<i>Udeniomyces</i> sp.	HQ256877	39
76	Continental	49b03	Unidentified yeast	<i>unidentified</i>		42
44	Continental	25b05	Y-Proteobacteria	<i>Pseudomonas</i> sp.	HQ256806	43
45	Continental	26b25	β -Proteobacteria	<i>Variovorax</i> sp.	HQ256810	44
44	Continental	25b07	Y-Proteobacteria	<i>Erwinia billingiae</i>	HQ256807	46
44	Continental	25b11	Y-Proteobacteria	<i>Erwinia billingiae</i>	HQ256802	46
44	Continental	25b13	Y-Proteobacteria	<i>Erwinia billingiae</i>	HQ256804	46
77	Continental	50b05	Y-Proteobacteria	<i>Pseudomonas</i> sp.	KR922071	48
42	Continental	23b26	unidentified bacteria	<i>unidentified</i>		48
44	Continental	25b03	Actinobacteria	<i>Clavibacter michiganensis</i>	HQ256805	49
45	Continental	26b30	Actinobacteria	<i>Clavibacter michiganensis</i>	HQ256811	49
45	Continental	26b21	Actinobacteria	<i>Plantibacter</i> sp.	HQ260322	49
42	Continental	23b05	Actinobacteria	<i>Rhodococcus</i> sp.	HQ256785	49
42	Continental	23b27	Actinobacteria	<i>Rhodococcus</i> sp.	HQ256783	49
83	Continental	56b23	Basidiomycota	<i>Udeniomyces</i> sp.		49
42	Continental	23b28	unidentified bacteria	<i>unidentified</i>		49
45	Continental	26b19	Basidiomycota	<i>Bullera globispora</i>	JF706567	50
45	Continental	26b16	α -Proteobacteria	<i>Sphingomonas</i> sp.	HQ256808	50
46	Continental	27b03	Y-Proteobacteria	<i>Pseudomonas</i> sp.	HQ256813	51
77	Continental	50b10	Y-Proteobacteria	<i>Pseudomonas</i> sp.		51
42	Continental	23b25	Actinobacteria	<i>Rhodococcus</i> sp.	HQ256782	51
83	Continental	56b01	Actinobacteria	<i>Plantibacter</i> sp.		52
83	Continental	56b13	Actinobacteria	<i>Rhodococcus</i> sp.		52
44	Continental	25b09	Basidiomycota	<i>Udeniomyces</i> sp.	HQ256880	52
83	Continental	56b08	Actinobacteria	<i>Clavibacter michiganensis</i>	KR922100	53
83	Continental	56b03	Actinobacteria	<i>Rhodococcus</i> sp.	KR922098	53
44	Continental	25b14	Basidiomycota	<i>Dioszegia fristingensis</i>		54
42	Continental	23b15	Actinobacteria	<i>Microbacterium oxydans</i>	HQ256776	54
42	Continental	23b20	Actinobacteria	<i>Microbacterium</i> sp.	HQ256779	54
45	Continental	26b08	Basidiomycota	<i>Cryptococcus</i> sp.	JF706563	55
77	Continental	50b06	Y-Proteobacteria	<i>Pseudomonas syringae</i>	KR922072	55
42	Continental	23b22	Basidiomycota	<i>Cryptococcus victoriorae</i>	JF706548	56
44	Continental	25b06	Basidiomycota	<i>Dioszegia butyracea</i>	HQ256878	56
83	Continental	56b25	Actinobacteria	<i>Frigoribacterium</i> sp.	KR922104	56
45	Continental	26b32	Ascomycota	<i>Tetracladium</i> sp.	JF706575	56
45	Continental	26b04	Basidiomycota	<i>Dioszegia</i> sp.	JF706560	57
42	Continental	23b29	Actinobacteria	<i>Rhodococcus</i> sp.	HQ256784	57
77	Continental	50b11	α -Proteobacteria	<i>Sphingomonas</i> sp.		57
83	Continental	56b21	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922103	57
45	Continental	26b23	Actinobacteria	<i>Subtercola</i> sp.	HQ256809	57
45	Continental	26b11	Basidiomycota	<i>Cryptococcus</i> sp.	JF706565	58
42	Continental	23b18	Basidiomycota	<i>Cryptococcus victoriorae</i>	JF706547	58
83	Continental	56b14	Actinobacteria	<i>Plantibacter</i> sp.	KR922102	58
83	Continental	56b04	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922099	58
42	Continental	23b21	Actinobacteria	<i>Subtercola boreus</i>	HQ256780	58
45	Continental	26b06	Basidiomycota	<i>Dioszegia</i> sp.	JF706562	59
45	Continental	26b34	Basidiomycota	<i>Dioszegia xingshenensis</i>	JF706577	59
44	Continental	25b12	Actinobacteria	<i>Rhodococcus</i> sp.	HQ256803	59
44	Continental	25b10	Basidiomycota	<i>Dioszegia</i> sp.	HQ256875	60

42	Continental	23b24	α -Proteobacteria	<i>Rhizobium</i> sp.	HQ256781	60
45	Continental	26b03	Basidiomycota	<i>Cryptococcus</i> sp.	JF706559	61
42	Continental	23b07	α -Proteobacteria	<i>Devosia</i> sp.	HQ256787	61
45	Continental	26b09	Basidiomycota	<i>Dioszegia buhagiarii</i>	JF706564	61
45	Continental	26b20	Basidiomycota	<i>Dioszegia</i> sp.	JF706568	62
45	Continental	26b24	Basidiomycota	<i>Dioszegia</i> sp.	JF706570	62
45	Continental	26b26	Basidiomycota	<i>Dioszegia</i> sp.	JF706571	62
45	Continental	26b05	Basidiomycota	<i>Cryptococcus</i> sp.	JF706561	63
42	Continental	23b13	Basidiomycota	<i>Dioszegia</i> sp.	JF706546	63
42	Continental	23b03	Ascomycota	Unidentified	JF706545	63
44	Continental	25b02	Basidiomycota	<i>Udeniomyces</i> sp.	HQ256876	64
44	Continental	25b08	Basidiomycota	<i>Dioszegia butyracea</i>	HQ256879	65
77	Continental	50b01	γ -Proteobacteria	<i>Pseudomonas grimondii</i>	KR922067	65
46	Continental	27b01	α -Proteobacteria	<i>Sphingomonas</i> sp.	HQ256812	65
76	Continental	49b02	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922065	65
76	Continental	49b01	Unidentified yeast	unidentified		65
42	Continental	23b09	Actinobacteria	<i>Streptomyces</i> sp.	HQ256788	66
42	Continental	23b14	α -Proteobacteria	<i>Methylobacterium</i> sp.	HQ256775	67
42	Continental	23b19	α -Proteobacteria	<i>Sphingomonas</i> sp.		67
83	Continental	56b24	unidentified bacteria	unidentified		67
42	Continental	23b12	Actinobacteria	<i>Streptomyces</i> sp.		68
42	Continental	23b02	Ascomycota	Unidentified	JF706544	68
42	Continental	23b06	α -Proteobacteria	<i>Sphingomonas</i> sp.	HQ256786	69
42	Continental	23b17	Bacteroidetes	<i>Hymenobacter</i> sp.	HQ256778	70
45	Continental	26b27	Basidiomycota	<i>Rhodotorula aurantiaca</i>	JF706572	70
42	Continental	23b11	Actinobacteria	<i>Streptomyces</i> sp.	HQ256774	70
45	Continental	26b31	Ascomycota	<i>Taphrina deformans</i>	JF706574	70
45	Continental	26b33	Basidiomycota	<i>Dioszegia</i> sp.	JF706576	71
42	Continental	23b01	α -Proteobacteria	<i>Sphingomonas</i> sp.	HQ256773	71
43	Highly marine	24b16	Ascomycota	<i>Wickerhamomyces anomalus</i>	JF706554	45
43	Highly marine	24b04	Actinobacteria	<i>Streptomyces microflavus</i>	HQ256797	47
43	Highly marine	24b12	γ -Proteobacteria	<i>Pseudomonas</i> sp.	HQ260323	49
43	Highly marine	24b19	Actinobacteria	<i>Clavibacter michiganensis</i>	HQ260320	50
43	Highly marine	24b26	α -Proteobacteria	<i>Sphingomonas</i> sp.		50
43	Highly marine	24b10	Actinobacteria	<i>Streptomyces microflavus</i>	HQ256790	50
43	Highly marine	24b13	Ascomycota	<i>Wickerhamomyces anomalus</i>	JF706551	50
43	Highly marine	24b17	Actinobacteria	<i>Clavibacter michiganensis</i>	HQ256792	51
43	Highly marine	24b24	Actinobacteria	<i>Clavibacter michiganensis</i>	HQ256795	51
43	Highly marine	24b20	Actinobacteria	<i>Frigoribacterium</i> sp.	HQ256793	51
43	Highly marine	24b18	Basidiomycota	<i>Udeniomyces pannonicus</i>	JF706555	51
43	Highly marine	24b21	Basidiomycota	<i>Udeniomyces pannonicus</i>	JF706556	51
43	Highly marine	24b05	Actinobacteria	<i>Clavibacter michiganensis</i>	HQ256798	52
43	Highly marine	24b15	Basidiomycota	<i>Dioszegia fristigensis</i>	JF706553	52
43	Highly marine	24b07	Actinobacteria	<i>Curtobacterium flaccumfaciens</i>	HQ256800	53
43	Highly marine	24b23	Actinobacteria	<i>Curtobacterium flaccumfaciens</i>	HQ256794	53
60	Highly marine	35b43	Actinobacteria	<i>Rhodococcus</i> sp.	JF706519	53
60	Highly marine	35b14	Firmicutes	<i>Bacillus</i> sp.		55
43	Highly marine	24b06	Actinobacteria	<i>Curtobacterium flaccumfaciens</i>	HQ256799	55
43	Highly marine	24b09	Actinobacteria	<i>Aeromicrobium</i> sp.	HQ256801	57
43	Highly marine	24b01	Actinobacteria	<i>Clavibacter michiganensis</i>	HQ256789	58
60	Highly marine	35b15	α -Proteobacteria	<i>Sphingomonas</i> sp.	JF706508	58
60	Highly marine	35b22	unidentified bacteria	unidentified		58
60	Highly marine	35b13	Actinobacteria	<i>Frigoribacterium</i> sp.	JF706507	59
43	Highly marine	24b08	Basidiomycota	<i>Bullera armeniaca</i>	JF706550	60
60	Highly marine	35b18	Actinobacteria	<i>Curtobacterium herbarum</i>	JF706509	60
60	Highly marine	35b40	β -Proteobacteria	<i>Janthinobacterium</i> sp.	JF706518	60
43	Highly marine	24b02	Basidiomycota	<i>Bullera armeniaca</i>	JF706549	61
60	Highly marine	35b26	Basidiomycota	<i>Udeniomyces</i> sp.	JN176601	61
43	Highly marine	24b22	Basidiomycota	<i>Bullera armeniaca</i>	JF706557	62
60	Highly marine	35b45	Basidiomycota	<i>Dioszegia fristigensis</i>	JN176610	63
43	Highly marine	24b25	Basidiomycota	<i>Udeniomyces</i> sp.	JF706558	63
60	Highly marine	35b29	Basidiomycota	<i>Dioszegia butyracea</i>	JN176603	64
60	Highly marine	35b35	Basidiomycota	<i>Dioszegia crocea</i>	JN176606	64
60	Highly marine	35b30	Basidiomycota	<i>Dioszegia crocea</i>	JN176604	65
60	Highly marine	35b02	α -Proteobacteria	<i>Sphingomonas</i> sp.	JF706510	65
60	Highly marine	35b39	Basidiomycota	<i>Dioszegia crocea</i>	JN176607	66
60	Highly marine	35b42	Basidiomycota	<i>Dioszegia fristingensis</i>	JN176608	66
60	Highly marine	35b01	Actinobacteria	<i>Frigoribacterium</i> sp.	JF706506	66
60	Highly marine	35b17	Basidiomycota	<i>Dioszegia crocea</i>	JN176597	67
60	Highly marine	35b44	Basidiomycota	<i>Dioszegia crocea</i>	JN176609	67
43	Highly marine	24b14	Basidiomycota	<i>Dioszegia</i> sp.	JF706552	67

60	Highly marine	35b21	Basidiomycota	<i>Mastigobasidium intermedium</i>	JN176599	67
60	Highly marine	35b23	Basidiomycota	<i>Mastigobasidium intermedium</i>	JN176600	67
60	Highly marine	35b27	α -Proteobacteria	<i>Methylobacterium</i> sp.	JF706512	67
60	Highly marine	35b20	Actinobacteria	<i>Curtopacterium flaccumfaciens</i>	JF706511	68
60	Highly marine	35b33	β -Proteobacteria	<i>Massilia</i> sp.	JF706514	68
60	Highly marine	35b38	α -Proteobacteria	<i>Sphingomonas</i> sp.	JF706517	68
60	Highly marine	35b32	α -Proteobacteria	<i>Sphingomonas</i> sp.	JF706513	69
60	Highly marine	35b12	Basidiomycota	<i>Sporobolomyces roseus</i>	JF706594	69
43	Highly marine	24b03	Actinobacteria	<i>Streptomyces</i> sp.	HQ256796	69
60	Highly marine	35b04	Basidiomycota	<i>Cryptococcus</i> sp.	JN176596	70
60	Highly marine	35b19	Basidiomycota	<i>Dioszegia crocea</i>	JN176598	70
60	Highly marine	35b28	Basidiomycota	<i>Dioszegia fristigensis</i>	JN176602	70
60	Highly marine	35b34	Actinobacteria	<i>Rhodococcus</i> sp.	JF706515	71
60	Highly marine	35b37	Actinobacteria	<i>Rhodococcus</i> sp.	JF706516	71
60	Highly marine	35b31	Basidiomycota	<i>Dioszegia crocea</i>	JN176605	72
78	Marine	51b07	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922082	24.8
78	Marine	51b04	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922079	25.2
87	Marine	60b24	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922197	25.3
54	Marine	32b42	γ -Proteobacteria	<i>Pseudomonas</i> sp.	HQ256842	25.5
75	Marine	48b01	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922057	25.7
78	Marine	51b06	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922081	26
87	Marine	60b01	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922180	26
85	Marine	58b28	γ -Proteobacteria	<i>Pseudomonas syringae</i>	KR922139	26
85	Marine	58b02	γ -Proteobacteria	<i>Pseudomonas syringae</i>	KR922125	26.4
86	Marine	59b12	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922150	26.8
86	Marine	59b10	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922148	27
54	Marine	32b53	γ -Proteobacteria	<i>Pseudomonas trivialis</i>	HQ256851	27
54	Marine	32b52	γ -Proteobacteria	<i>Xanthomonas campestris</i>	HQ256850	27
61	Marine	36b03	γ -Proteobacteria	<i>Pseudomonas fluorescens</i>	JF706525	27.5
86	Marine	59b11	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922149	27.5
91	Marine	66b02	γ -Proteobacteria	<i>Pseudomonas syringae</i>	KR922247	27.5
75	Marine	48b02	γ -Proteobacteria	<i>Pseudomonas reinekei</i>		27.8
30	Marine	14b02	γ -Proteobacteria	<i>Pseudomonas</i> sp.		27.8
72	Marine	47b07	γ -Proteobacteria	<i>Pseudomonas</i> sp.		27.8
78	Marine	51b03	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922078	28
54	Marine	32b32	γ -Proteobacteria	<i>Xanthomonas campestris</i>	JN176586	28.3
86	Marine	59b03	γ -Proteobacteria	<i>Pseudomonas syringae</i>	KR922141	28.4
54	Marine	32b22	γ -Proteobacteria	<i>Xanthomonas campestris</i>	JN176582	29
61	Marine	36b05	γ -Proteobacteria	<i>Pseudomonas fluorescens</i>	JF706526	29.1
54	Marine	32b74	γ -Proteobacteria	<i>Pseudomonas syringae</i>	HQ256872	29.1
84	Marine	57b01	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922105	30
86	Marine	59b37	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922166	30
55	Marine	33b02	γ -Proteobacteria	<i>Pseudomonas syringae</i>	HQ256867	30
54	Marine	32b24	γ -Proteobacteria	<i>Xanthomonas</i> sp.	JN176583	30
91	Marine	66b05	γ -Proteobacteria	<i>Pseudomonas graminis</i>	KR922249	33
78	Marine	51b05	γ -Proteobacteria	<i>Pseudomonas syringae</i>	KR922080	33
82	Marine	55b15	γ -Proteobacteria	<i>Pseudomonas syringae</i>	KR922097	34
86	Marine	59b32	γ -Proteobacteria	<i>Erwinia billingiae</i>	KR922162	35
75	Marine	48b05	γ -Proteobacteria	<i>Pseudomonas syringae</i>	KR922059	35
86	Marine	59b16	γ -Proteobacteria	<i>Pseudomonas syringae</i>	KR922153	36
54	Marine	32b27	Basidiomycota	<i>Dioszegia xingshenensis</i>	JN176593	39
21	Marine	05b01	Firmicutes	<i>Bacillus pumilus</i>		40
86	Marine	59b07	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922145	40
86	Marine	59b25	γ -Proteobacteria	<i>Pseudomonas graminis</i>	KR922157	41
78	Marine	51b01	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922077	41
54	Marine	32b67	γ -Proteobacteria	<i>Pseudomonas syringae</i>	HQ256864	42
47	Marine	28b11	Basidiomycota	<i>Udeniomyces pannonicus</i>	HQ256882	42
86	Marine	59b41	γ -Proteobacteria	<i>Erwinia</i> sp.	KR922170	43
47	Marine	28b12	Basidiomycota	<i>Udeniomyces</i> sp.	HQ256883	43
86	Marine	59b14	γ -Proteobacteria	<i>Pseudomonas syringae</i>	KR922151	44
47	Marine	28b02	Basidiomycota	<i>Bannoa</i> sp.	JN176592	45
85	Marine	58b01	γ -Proteobacteria	<i>Pseudomonas syringae</i>	KR922124	45
91	Marine	66b14	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922251	45
84	Marine	57b26	Actinobacteria	<i>Clavibacter michiganensis</i>	KR922121	46
30	Marine	14b13	Actinobacteria	<i>Frigoribacterium</i> sp.	DQ512796	46
86	Marine	59b02	γ -Proteobacteria	<i>Pseudomonas syringae</i>		46
85	Marine	58b25	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922137	47
86	Marine	59b04	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922142	47
78	Marine	51b10	γ -Proteobacteria	<i>Pseudomonas syringae</i>	KR922084	47
86	Marine	59b05	γ -Proteobacteria	<i>Pseudomonas syringae</i>	KR922143	47
49	Marine	29b06	Basidiomycota	<i>Udeniomyces pannonicus</i>	HQ256895	47

54	Marine	32b64	Basidiomycota	<i>Udeniomyces</i> sp.	JF706586	47
84	Marine	57b22	Actinobacteria	<i>Clavibacter michiganensis</i>	KR922119	48
86	Marine	59b58	Actinobacteria	<i>Clavibacter michiganensis</i>	KR922179	48
54	Marine	32b56	Bacteroidetes	<i>Flavobacterium</i> sp.	HQ256854	48
29	Marine	13b03	Y-Proteobacteria	<i>Pseudomonas graminis</i>	DQ512786	48
54	Marine	32b55	Y-Proteobacteria	<i>Pseudomonas graminis</i>	HQ256853	48
50	Marine	30b02	Actinobacteria	<i>Rhodococcus</i> sp.	HQ256817	48
50	Marine	30b05	Actinobacteria	<i>Rhodococcus</i> sp.	HQ256819	48
84	Marine	57b11	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922112	48
49	Marine	29b04	Basidiomycota	<i>Sporobolomyces roseus</i>	HQ256893	48
49	Marine	29b05	Basidiomycota	<i>Udeniomyces pannonicus</i>	HQ256894	48
21	Marine	05b02	Firmicutes	<i>Bacillus</i> sp.		49
47	Marine	28b04	Basidiomycota	<i>Bensingtonia yucciola</i>	HQ256887	49
54	Marine	32b09	Basidiomycota	<i>Dioszegia hungarica</i>	HQ256898	49
75	Marine	48b10	Y-Proteobacteria	<i>Pseudomonas</i> sp.	KR922063	49
86	Marine	59b15	Y-Proteobacteria	<i>Pseudomonas syringae</i>	KR922152	49
84	Marine	57b16	Actinobacteria	<i>Clavibacter michiganensis</i>	KR922117	50
86	Marine	59b50	Actinobacteria	<i>Clavibacter</i> sp.	KR922173	50
87	Marine	60b04	Actinobacteria	<i>Frigoribacterium</i> sp.	KR922183	50
85	Marine	58b20	Y-Proteobacteria	<i>Pseudomonas graminis</i>	KR922133	50
86	Marine	59b01	Y-Proteobacteria	<i>Pseudomonas</i> sp.	KR922140	50
86	Marine	59b06	Y-Proteobacteria	<i>Pseudomonas</i> sp.	KR922144	50
86	Marine	59b17	Y-Proteobacteria	<i>Pseudomonas</i> sp.	KR922154	50
86	Marine	59b40	Y-Proteobacteria	<i>Pseudomonas</i> sp.	KR922169	50
89	Marine	63b11	Actinobacteria	<i>Clavibacter</i> sp.	KR922218	51
85	Marine	58b05	Actinobacteria	<i>Curtobacterium</i> sp.	KR922127	51
86	Marine	59b26	Y-Proteobacteria	<i>Dyella</i> sp.	KR922158	51
75	Marine	48b07	Actinobacteria	<i>Frigoribacterium</i> sp.	KR922060	51
91	Marine	66b01	Y-Proteobacteria	<i>Pseudomonas syringae</i>	KR922246	51
84	Marine	57b28	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922123	51
47	Marine	28b10	Basidiomycota	<i>Udeniomyces pannonicus</i>	HQ256881	51
84	Marine	57b10	Firmicutes	<i>Bacillus</i> sp.	KR922111	52
86	Marine	59b30	Actinobacteria	<i>Clavibacter michiganensis</i>	KR922161	52
54	Marine	32b35	Actinobacteria	<i>Frigoribacterium</i> sp.	HQ256839	52
86	Marine	59b34	Actinobacteria	<i>Frigoribacterium</i> sp.	KR922164	52
86	Marine	59b57	Bacteroidetes	<i>Pedobacter agri</i>	KR922178	52
85	Marine	58b21	Bacteroidetes	<i>Pedobacter</i> sp.	KR922134	52
91	Marine	66b03	Bacteroidetes	<i>Pedobacter</i> sp.	KR922248	52
86	Marine	59b38	Y-Proteobacteria	<i>Pseudomonas rhizosphaerae</i>	KR922167	52
86	Marine	59b29	Actinobacteria	<i>Rhodococcus</i> sp.		52
84	Marine	57b13	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922114	52
84	Marine	57b07	unidentified bacteria	<i>unidentified</i>		52
89	Marine	63b09	Actinobacteria	<i>Clavibacter michiganensis</i>	KR922216	53
84	Marine	57b12	Actinobacteria	<i>Curtobacterium</i> sp.	KR922113	53
55	Marine	33b11	Basidiomycota	<i>Dioszegia hungarica</i>	JF706591	53
50	Marine	30b01	Actinobacteria	<i>Frigoribacterium</i> sp.	HQ256816	53
82	Marine	55b02	Y-Proteobacteria	<i>Pseudomonas</i> sp.	KR922096	53
86	Marine	59b53	Y-Proteobacteria	<i>Pseudomonas</i> sp.	KR922175	53
47	Marine	28b15	Basidiomycota	<i>Rhodotorula</i> sp.	HQ256885	53
55	Marine	33b12	α-Proteobacteria	<i>Sphingomonas</i> sp.	HQ256874	53
87	Marine	60b31	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922202	53
97	Marine	67b09	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922258	53
97	Marine	67b28	Actinobacteria	<i>Clavibacter michiganensis</i>	KR922268	54
47	Marine	28b03	Basidiomycota	<i>Cryptococcus victoriae</i>	HQ256886	54
85	Marine	58b17	Actinobacteria	<i>Curtobacterium</i> sp.		54
86	Marine	59b28	Y-Proteobacteria	<i>Dyella</i> sp.	KR922160	54
85	Marine	58b04	Actinobacteria	<i>Frigoribacterium</i> sp.	KR922126	54
89	Marine	63b02	Actinobacteria	<i>Frigoribacterium</i> sp.	KR922209	54
86	Marine	59b08	Y-Proteobacteria	<i>Pseudomonas fluorescens</i>	KR922146	54
54	Marine	32b66	Y-Proteobacteria	<i>Pseudomonas graminis</i>	HQ256863	54
75	Marine	48b11	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922064	54
81	Marine	54b07	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922094	54
87	Marine	60b16	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922193	54
87	Marine	60b22	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922195	54
97	Marine	67b22	Basidiomycota	<i>Udeniomyces pannonicus</i>	KR922311	54
54	Marine	32b05	Basidiomycota	<i>Udeniomyces</i> sp.	HQ256897	54
49	Marine	29b03	Firmicutes	<i>Bacillus</i> sp.	JF706502	55
54	Marine	32b13	Actinobacteria	<i>Clavibacter</i> sp.	HQ256832	55
97	Marine	67b30	Actinobacteria	<i>Clavibacter</i> sp.	KR922269	55
86	Marine	59b27	Y-Proteobacteria	<i>Dyella</i> sp.	KR922159	55
75	Marine	48b09	Y-Proteobacteria	<i>Pantoe</i> sp.	KR922062	55

87	Marine	60b12	γ-Proteobacteria	<i>Pseudomonas</i> sp.	KR922190	55
89	Marine	63b30	γ-Proteobacteria	<i>Pseudomonas</i> sp.	KR922230	55
49	Marine	29b02	Actinobacteria	<i>Rhodococcus</i> sp.	HQ256815	55
87	Marine	60b23	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922196	55
54	Marine	32b21	Basidiomycota	<i>Udeniomyces</i> sp.	JF706580	55
97	Marine	67b25	Basidiomycota	<i>Udeniomyces</i> sp.	KR922312	55
49	Marine	29b01	Basidiomycota	<i>Bensingtonia yucciola</i>	HQ256892	56
87	Marine	60b03	α-Proteobacteria	<i>Brevundimonas</i> sp.	KR922182	56
71	Marine	46b09	Actinobacteria	<i>Curtobacterium</i> sp.		56
54	Marine	32b58	γ-Proteobacteria	<i>Ewingella americana</i>	JF706505	56
84	Marine	57b14	Actinobacteria	<i>Frigoribacterium</i> sp.	KR922115	56
86	Marine	59b54	Actinobacteria	<i>Frigoribacterium</i> sp.	KR922176	56
86	Marine	59b44	γ-Proteobacteria	<i>Pantoea agglomerans</i>	KR922172	56
54	Marine	32b60	γ-Proteobacteria	<i>Pseudomonas graminis</i>	HQ256858	56
86	Marine	59b42	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922171	56
54	Marine	32b12	Basidiomycota	<i>Udeniomyces pannonicus</i>	JF706578	56
85	Marine	58b23	Bacteroidetes	<i>Epiltholimonas</i> sp.		57
89	Marine	63b39	Bacteroidetes	<i>Pedobacter</i> sp.	KR922237	57
66	Marine	41b02	Actinobacteria	<i>Rhodococcus</i> sp.	JF706542	57
97	Marine	67b23	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922265	57
89	Marine	63b42	Actinobacteria	<i>Subtercola</i> sp.	KR922240	57
54	Marine	32b02	Actinobacteria	<i>Agreia</i> sp.	HQ256834	58
71	Marine	46b08	Actinobacteria	<i>Curtobacterium</i> sp.	KR922054	58
89	Marine	63b08	Actinobacteria	<i>Fronidhabitans</i> sp.	KR922215	58
85	Marine	58b22	Bacteroidetes	<i>Pedobacter</i> sp.	KR922135	58
50	Marine	30b06	Actinobacteria	<i>Rhodococcus</i> sp.	HQ256820	58
79	Marine	52b02	Actinobacteria	<i>Rhodococcus</i> sp.	KR922085	58
87	Marine	60b06	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922184	58
87	Marine	60b11	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922189	58
89	Marine	63b43	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922241	58
85	Marine	58b06	unidentified bacteria	<i>unidentified</i>		58
87	Marine	60b10	γ-Proteobacteria	<i>Xanthomonas</i> sp.	KR922188	58
50	Marine	30b04	Actinobacteria	<i>Agreia</i> sp.	HQ256818	59
84	Marine	57b27	Actinobacteria	<i>Clavibacter michiganensis</i>	KR922122	59
89	Marine	63b38	Actinobacteria	<i>Clavibacter michiganensis</i>	KR922236	59
84	Marine	57b03	Actinobacteria	<i>Clavibacter</i> sp.	KR922107	59
97	Marine	67b17	Actinobacteria	<i>Nocardioides</i> sp.		59
97	Marine	67b19	γ-Proteobacteria	<i>Pseudomonas</i> sp.		59
97	Marine	67b29	Actinobacteria	<i>Rhodococcus</i> sp.		59
86	Marine	59b39	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922168	59
87	Marine	60b32	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922203	59
54	Marine	32b68	Basidiomycota	<i>Udeniomyces</i> sp.	JF706587	59
97	Marine	67b04	Firmicutes	<i>Bacillus</i> sp.	KR922255	60
86	Marine	59b20	α-Proteobacteria	<i>Brevundimonas</i> sp.	KR922156	60
87	Marine	60b15	α-Proteobacteria	<i>Brevundimonas</i> sp.		60
47	Marine	28b14	β-Proteobacteria	<i>Burkholderia</i> sp.	HQ256814	60
81	Marine	54b02	Actinobacteria	<i>Clavibacter michiganensis</i>	KR922091	60
47	Marine	28b07	Basidiomycota	<i>Cryptococcus</i> sp.	HQ256890	60
89	Marine	63b03	Actinobacteria	<i>Frigoribacterium</i> sp.	KR922210	60
54	Marine	32b61	α-Proteobacteria	<i>Sphingomonas</i> sp.	HQ256859	60
89	Marine	63b40	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922238	60
54	Marine	32b40	Basidiomycota	<i>Udeniomyces</i> sp.	JF706582	60
86	Marine	59b33	Firmicutes	<i>Bacillus</i> sp.	KR922163	61
47	Marine	28b13	Basidiomycota	<i>Cryptococcus</i> sp.	HQ256884	61
85	Marine	58b16	Actinobacteria	<i>Curtobacterium</i> sp.	KR922130	61
54	Marine	32b59	γ-Proteobacteria	<i>Ewingella americana</i>	HQ256856	61
54	Marine	32b63	Actinobacteria	<i>Plantibacter</i> sp.	HQ256861	61
54	Marine	32b03	Actinobacteria	<i>Rathayibacter</i> sp.	JF706503	61
87	Marine	60b07	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922185	61
87	Marine	60b30	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922201	61
89	Marine	63b41	Actinobacteria	<i>Subtercola</i> sp.	KR922239	61
54	Marine	32b65	α-Proteobacteria	<i>Agrobacterium</i> sp.	HQ256862	62
97	Marine	67b21	Basidiomycota	<i>Cryptococcus</i> sp.	KR922310	62
54	Marine	32b36	Actinobacteria	<i>Curtobacterium</i> sp.	HQ256840	62
47	Marine	28b05	Basidiomycota	<i>Dioszegia crocea</i>	HQ256888	62
54	Marine	32b33	γ-Proteobacteria	<i>Pseudoxanthomonas</i> sp.	HQ256838	62
54	Marine	32b45	α-Proteobacteria	<i>Sphingomonas</i> sp.	HQ256844	62
54	Marine	32b50	α-Proteobacteria	<i>Sphingomonas</i> sp.	HQ256848	62
55	Marine	33b06	Basidiomycota	<i>Udeniomyces</i> sp.	JF706589	62
86	Marine	59b55	β-Proteobacteria	<i>Variovorax paradoxus</i>	KR922177	62
89	Marine	63b05	Actinobacteria	<i>Arthrobacter nicotinovorans</i>	KR922212	63

97	Marine	67b08	Basidiomycota	<i>Cryptococcus</i> sp.	KR922308	63
55	Marine	33b07	Basidiomycota	<i>Cryptococcus victoriae</i>	JF706590	63
86	Marine	59b36	Actinobacteria	<i>Curtobacterium</i> sp.	KR922165	63
87	Marine	60b28	Basidiomycota	<i>Dioszegia zlotii</i>		63
89	Marine	63b19	Actinobacteria	<i>Frigoribacterium</i> sp.	KR922223	63
54	Marine	32b31	γ-Proteobacteria	<i>Pseudomonas syringae</i>	JN176585	63
86	Marine	59b51	Actinobacteria	<i>Rathayibacter</i> sp.	KR922174	63
87	Marine	60b29	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922200	63
89	Marine	63b15	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922221	63
91	Marine	66b11	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922250	63
97	Marine	67b20	Basidiomycota	<i>Udeniomyces pannonicus</i>	KR922309	63
85	Marine	58b15	β-Proteobacteria	<i>Variovorax</i> sp.	KR922129	63
75	Marine	48b04	Bacteroidetes	<i>Chryseobacterium</i> sp.	KR922058	64
89	Marine	63b20	Actinobacteria	<i>Clavibacter michiganensis</i>	KR922224	64
89	Marine	63b47	Actinobacteria	<i>Clavibacter michiganensis</i>	KR922244	64
47	Marine	28b06	Basidiomycota	<i>Dioszegia crocea</i>	HQ256889	64
54	Marine	32b15	Basidiomycota	<i>Dioszegia</i> sp.	JF706579	64
54	Marine	32b17	Actinobacteria	<i>Frigoribacterium</i> sp.	HQ256833	64
50	Marine	30b07	γ-Proteobacteria	<i>Psychrobacter</i> sp.	HQ256821	64
54	Marine	32b29	α-Proteobacteria	<i>Rhizobium</i> sp.	HQ256837	64
54	Marine	32b11	α-Proteobacteria	<i>Sphingomonas</i> sp.	HQ256831	64
87	Marine	60b13	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922191	64
89	Marine	63b10	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922217	64
89	Marine	63b27	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922229	64
89	Marine	63b36	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922234	64
54	Marine	32b14	unidentified bacteria	<i>unidentified</i>		64
89	Marine	63b21	β-Proteobacteria	<i>Variovorax</i> sp.	KR922225	64
32	Marine	16b01	Firmicutes	<i>Bacillus</i> sp.		65
97	Marine	67b11	α-Proteobacteria	<i>Brevundimonas</i> sp.	KR922259	65
89	Marine	63b34	Bacteroidetes	<i>Chryseobacterium</i> sp.		65
47	Marine	28b01	Basidiomycota	<i>Dioszegia crocea</i>	HQ260319	65
54	Marine	32b41	Basidiomycota	<i>Dioszegia</i> sp.	JF706583	65
54	Marine	32b28	Actinobacteria	<i>Frondehabitans</i> sp.	HQ256836	65
80	Marine	53b01	γ-Proteobacteria	<i>Moraxella</i> sp.	KR922089	65
97	Marine	67b16	Actinobacteria	<i>Promicromonospora</i> sp.	KR922263	65
84	Marine	57b25	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922120	65
86	Marine	59b19	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922155	65
54	Marine	32b51	Actinobacteria	<i>Subtercola</i> sp.	HQ256849	65
84	Marine	57b19	unidentified bacteria	<i>unidentified</i>		65
84	Marine	57b06	Actinobacteria	<i>Arthrobacter</i> sp.	KR922109	66
54	Marine	32b46	Actinobacteria	<i>Curtobacterium herbarum</i>	HQ256845	66
54	Marine	32b73	Basidiomycota	<i>Dioszegia fristigensis</i>	JN176595	66
54	Marine	32b37	Basidiomycota	<i>Dioszegia</i> sp.	JF706581	66
87	Marine	60b27	β-Proteobacteria	<i>Duganella</i> sp.	KR922199	66
85	Marine	58b27	Bacteroidetes	<i>Flavobacterium</i> sp.	KR922138	66
86	Marine	59b35	Bacteroidetes	<i>Hymenobacter</i> sp.		66
89	Marine	63b13	β-Proteobacteria	<i>Janthinobacterium</i> sp.	KR922220	66
54	Marine	32b20	Actinobacteria	<i>Leifsonia</i> sp.	HQ256835	66
50	Marine	30b03	Actinobacteria	<i>Nocardioides</i> sp.		66
81	Marine	54b03	Actinobacteria	<i>Rhodococcus</i> sp.	KR922092	66
30	Marine	14b06	α-Proteobacteria	<i>Sphingomonas</i> sp.	DQ512790	66
84	Marine	57b15	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922116	66
97	Marine	67b13	Actinobacteria	<i>Streptomyces</i> sp.	KR922260	66
54	Marine	32b44	Basidiomycota	<i>Dioszegia hungarica</i>	JF706584	67
85	Marine	58b07	Bacteroidetes	<i>Epiltholimonas</i> sp.		67
97	Marine	67b15	Actinobacteria	<i>Janibacter</i> sp.	KR922262	67
54	Marine	32b54	Actinobacteria	<i>Rathayibacter</i> sp.	HQ256852	67
97	Marine	67b07	α-Proteobacteria	<i>Rhizobium</i> sp.	KR922257	67
84	Marine	57b04	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922108	67
87	Marine	60b20	α-Proteobacteria	<i>Sphingomonas</i> sp.		67
89	Marine	63b35	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922233	67
89	Marine	63b45	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922242	67
97	Marine	67b24	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922266	67
54	Marine	32b71	Basidiomycota	<i>Udeniomyces puniceus</i>	JN176594	67
97	Marine	67b32	Unidentified yeast	<i>unidentified</i>		67
72	Marine	47b02	β-Proteobacteria	<i>Variovorax</i> sp.	KR922055	67
54	Marine	32b48	Basidiomycota	<i>Bullera globispora</i>	JF706585	68
85	Marine	58b19	Bacteroidetes	<i>Hymenobacter</i> sp.	KR922132	68
72	Marine	47b01	α-Proteobacteria	<i>Sphingomonas</i> sp.		68
79	Marine	52b08	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922088	68
87	Marine	60b08	α-Proteobacteria	<i>Sphingomonas</i> sp.	KR922186	68

87	Marine	60b09	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922187	68
89	Marine	63b04	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922211	68
89	Marine	63b37	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922235	68
54	Marine	32b47	γ -Proteobacteria	<i>Stenotrophomonas</i> sp.	HQ256846	68
55	Marine	33b05	γ -Proteobacteria	<i>Stenotrophomonas</i> sp.	HQ256869	68
55	Marine	33b04	Unidentified yeast	<i>unidentified</i>		68
97	Marine	67b27	Basidiomycota	<i>Cryptococcus aquaticus</i>	KR922313	69
72	Marine	47b05	Bacteroidetes	<i>Hymenobacter</i> sp.	KR922056	69
91	Marine	67b01	β -Proteobacteria	<i>Janthinobacterium</i> sp.	KR922252	69
62	Marine	37b05	γ -Proteobacteria	<i>Pseudomonas fluorescens</i>	JF706535	69
78	Marine	51b08	γ -Proteobacteria	<i>Pseudomonas</i> sp.	KR922083	69
81	Marine	54b04	α -Proteobacteria	<i>Sphingomonas</i> sp.		69
81	Marine	54b06	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922093	69
84	Marine	57b02	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922106	69
84	Marine	57b08	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922110	69
89	Marine	63b07	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922214	69
89	Marine	63b12	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922219	69
89	Marine	63b26	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922228	69
89	Marine	63b33	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922232	69
97	Marine	67b03	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922254	69
97	Marine	67b14	Firmicutes	<i>Staphylococcus xylosus</i>	KR922261	69
79	Marine	52b05	γ -Proteobacteria	<i>Stenotrophomonas</i> sp.	KR922087	69
97	Marine	67b06	Actinobacteria	<i>Cellulomonas cellasea</i>	KR922256	70
87	Marine	60b25	β -Proteobacteria	<i>Massilia</i> sp.		70
80	Marine	53b06	Actinobacteria	<i>Nocardioides</i> sp.	KR922090	70
54	Marine	32b49	α -Proteobacteria	<i>Sphingomonas</i> sp.	HQ256847	70
75	Marine	48b08	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922061	70
79	Marine	52b03	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922086	70
81	Marine	54b05	α -Proteobacteria	<i>Sphingomonas</i> sp.		70
87	Marine	60b19	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922194	70
97	Marine	67b26	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922267	70
54	Marine	32b70	Basidiomycota	<i>Sporobolomyces ruberrimus</i>	JF706588	70
54	Marine	32b43	γ -Proteobacteria	<i>Stenotrophomonas</i> sp.	HQ256843	70
54	Marine	32b72	γ -Proteobacteria	<i>Stenotrophomonas</i> sp.	HQ256871	70
55	Marine	33b03	γ -Proteobacteria	<i>Xanthomonas campestris</i>	HQ256868	70
87	Marine	60b02	γ -Proteobacteria	<i>Xanthomonas</i> sp.	KR922181	70
54	Marine	32b06	Bacteroidetes	<i>Flavobacterium</i> sp.	HQ256857	71
81	Marine	54b11	Bacteroidetes	<i>Hymenobacter</i> sp.	KR922095	71
54	Marine	32b57	α -Proteobacteria	<i>Sphingomonas</i> sp.	HQ256855	71
55	Marine	33b09	α -Proteobacteria	<i>Sphingomonas</i> sp.	HQ256873	71
72	Marine	47b03	α -Proteobacteria	<i>Sphingomonas</i> sp.		71
87	Marine	60b33	α -Proteobacteria	<i>Sphingomonas</i> sp.	KR922204	71
54	Marine	32b69	γ -Proteobacteria	<i>Stenotrophomonas</i> sp.	HQ256865	71
55	Marine	33b01	γ -Proteobacteria	<i>Stenotrophomonas</i> sp.	HQ256866	71
79	Marine	52b07	γ -Proteobacteria	<i>Stenotrophomonas</i> sp.		71
87	Marine	60b14	α -Proteobacteria	<i>Brevundimonas</i> sp.	KR922192	72
97	Marine	67b02	Bacteroidetes	<i>Chryseobacterium</i> sp.	KR922253	72
47	Marine	28b09	Basidiomycota	<i>Dioszegia hungarica</i>	HQ256891	72
84	Marine	57b18	Bacteroidetes	<i>Flavobacterium</i> sp.	KR922118	72
54	Marine	32b04	α -Proteobacteria	<i>Sphingomonas</i> sp.	HQ256841	72
54	Marine	32b39	α -Proteobacteria	<i>Sphingomonas</i> sp.	JF706504	72
54	Marine	32b30	γ -Proteobacteria	<i>Stenotrophomonas</i> sp.	JN176584	72
54	Marine	32b38	γ -Proteobacteria	<i>Stenotrophomonas</i> sp.	JN176587	72
55	Marine	33b08	γ -Proteobacteria	<i>Stenotrophomonas</i> sp.	HQ256870	72
23	Polluted	07b11	Firmicutes	<i>Bacillus</i> sp.		31
53	Polluted	31b07	Actinobacteria	<i>Rhodococcus</i> sp.	HQ256828	50
53	Polluted	31b08	Actinobacteria	<i>Frigoribacterium</i> sp.	HQ256829	52
88	Polluted	61b06	γ -Proteobacteria	<i>Stenotrophomonas</i> sp.	KR922206	54
53	Polluted	31b04	γ -Proteobacteria	<i>Pseudomonas</i> sp.	HQ256826	56
53	Polluted	31b03	Actinobacteria	<i>Kocuria palustris</i>	HQ256825	60
23	Polluted	07b06	Firmicutes	<i>Paenibacillus</i> sp.		60
53	Polluted	31b02	Actinobacteria	<i>Rhodococcus</i> sp.	HQ256824	62
88	Polluted	61b10	Bacteroidetes	<i>Chryseobacterium</i> sp.	KR922207	66
53	Polluted	31b01	Firmicutes	<i>Bacillus megaterium</i>	HQ256822	68
53	Polluted	31b09	Actinobacteria	<i>Streptomyces</i> sp.	HQ256830	68
53	Polluted	31b10	β -Proteobacteria	<i>Massilia</i> sp.	HQ256823	71

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