

**Supplementary Table 7. Frequency that each archaeal sequence or OTU was retrieved by cultivation or by culture-independent methods.**

Phylum	Sequences			OTUs		
	Cultured	Uncultured	Total	Cultured	Uncultured	Total
Euryarchaeota	3352	25058	28410	522	2404	2926
Thaumarchaeota	46	17837	17883	25	896	921
Miscellaneous Crenarchaeotic Group	0	3738	3738	0	355	355
Crenarchaeota	215	965	1180	49	26	75
Woesearchaeota	0	618	618	0	70	70
Aenigmarchaeota	0	339	339	0	51	51
Korarchaeota	2	212	214	2	35	37
Aigarchaeota	0	302	302	0	31	31
Nanoarchaeota	1	137	138	1	24	25
Marine Hydrothermal Vent Group	0	267	267	0	22	22
Ancient Archaeal Group	0	191	191	0	15	15
Nanohaloarchaeota	2	77	79	2	8	10
Diapherotrites	0	39	39	0	8	8
Miscellaneous Euryarchaeotic Group	0	85	85	0	8	8
SM1K20	0	33	33	0	7	7
Marine Hydrothermal Vent Group 1	0	13	13	0	5	5
Marine Hydrothermal Vent Group 2	0	3	3	0	2	2
Parvarchaeota	0	9	9	0	2	2
TVG8AR30	0	2	2	0	2	2
Unclassified	0	3	3	0	2	2
Total	3618	49928	53546	601	3973	4574