

Additonal file 1

Supplementary Tables

Sample	DNA concentration	260/280nm
S1	64.5 ng/μl	1.29/0.671 (1.92)
S2	67.5 ng/μl	1.358/0.75 (1.81)
S3	36.2 ng/μl	0.724/0.201 (3.6)
S4	52.2ng/μl	1.044/0.2 (5.2)
S5	11.2ng/μl	0.224/0.056 (4)
S6	75.9ng/μl	1.518/0.474 (3.2)
S7	91.1ng/μl	1.822/0.56 (3.25)
S8	33.3ng/μl	0.666/0.214 (3.1)
S9	67ng/μl	1.34/0.536 (2.5)
S10	67ng/μl	1.34/0.609 (2.2)

Table S1. DNA concentrations and quality controls of ten samples.

<i>Legionella pneumophila</i>	
70F	GTCTAGCTTGCTAGACAGATGGCGA
1251R	CGGCGAAGGGGCGACCTGGAGCAAATC
<i>Chryseobacterium</i>	
66F	AGATCTTTCGGGATCTT
1235R	TACACAGCGATGTGATGCAAATCTCGAAAG
<i>Pseudomonas</i>	
47F	AAGTCGAGCGGATGACGGGAGCTTGCTCCTT
1251R	GAGGTGGAGCTAATCTCACAAAACCG

Table S2. Additional primers for amplifying full-length 16S rDNA of three known bacteria.

Genus	A	B	C	D	E	F
<i>Legionella</i>	10.5%	3.1%	38.3%	21.4%	7.0%	19.7%
<i>Pseudomonas</i>	19.5%	5.1%	18.0%	17.5%	5.7%	34.2%
<i>Chryseobacterium</i>	18.9%	6.5%	34.0%	33.7%	6.7%	0.1%

<i>Bacillus</i>	5.0%	6.5%	34.2%	9.2%	4.1%	41.0%
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Table S3. Percentages of confident reads amplified by six primers (A-F) for four known bacteria in sample S1.

Genus\sample	S4	S5	S6	S7	S8	S9	S10
<i>Candidatus_Nitrosoarchaeum</i>	10.32	1.46	0	0.17	1.32	0	0
<i>Nitrosopumilus</i>	10.32	1.46	0	0.17	1.32	0	0
<i>Nitrososphaera</i>	0	0	0	0	1.75	0	1.28
<i>Methanosarcina</i>	0	0	0	0	0.44	0	0
<i>Methanolobus</i>	0	0	0	0	0.44	0	0
<i>Halolamina</i>	0	0.24	0	0	0	0	0
<i>Halogranum</i>	0.13	0	0	0	0	0	0
<i>Haloferax</i>	0.13	0	0	0	0	0	0
<i>Halopelagius</i>	0.13	0	0	0	0	0	0
<i>Natronomonas</i>	0.13	0	0	0	0	0	0
unclassified	78.84	96.84	100	99.67	94.74	100	98.72

Table S4. Percentages of archaea genera (relative to all archaea reads) in real samples.