

Table 1. Biological Communities at Lost City.

Sample	T (°C)*	Microscopy			Phylogenetic analyses§										
		Cells (gww)†	FISH‡			Archaea			Eubacteria					<i>mcrA</i>	
			A	B	MS	MS	AN-1	MG1	γ	δ	ϵ	Fm	Cx	MS	AN-1
Poseidon															
Marker 2 (IMAX)flange	53–60	0.6×10^8 to 5.2×10^8	33	18	29	+			+		+	+	+		
Marker 3: top	59–75	0.02×10^8 to 1.3×10^8	41	12	33	+			+						
Marker C: flange and spire ^e	54–70	0.1×10^8 to 8.4×10^8	28	23	19	+	+		+	+	+		+	+	+
Beehive	91.4	5.8×10^6	21	8	18										
Other chimneys															
Marker 7: spire	24	<LOD = 4.7×10^8	22	24	17										
Marker H: spire and flange	17–67	0.03×10^8 to 3.1×10^8	19	38	10	+	+		+					+	
Peripheral (diffuse) regions	>7	0.1×10^8 to 4.8×10^8	8	29	5	+			+		+				
Near wall															
Spire on wall	>7	2.3×10^8 to 7.4×10^8	25	13	14										
Carbonate veins	>7	<LOD = 2.2×10^8	19	15	9		+		+		+				+
Extinct samples	Ambient	<LOD = 1.4×10^7	5	17	<1				+	+					

*Temperature (T) measured in situ either with *Alvin's* temperature probe or with a sensor mounted on the hydrothermal fluid particulate sampler. †Number of organisms in gww; limit of detection (LOD) = $\sim 10^4$ cells gww. ‡Fluorescence in situ hybridization (FISH). FISH data are in % of total cell numbers. Abbreviations are as follows: A, Archaea; B, Eubacteria; MS, Lost City methanosarcinal phylotype. §Phylogenetic abbreviations are as follows: MS, Lost City methanosarcinal phylotype; AN-1, ANME-1; MGI, marine group 1 Crenarchaeota; γ , gamma proteobacteria; δ , delta proteobacteria; ϵ , epsilon proteobacteria; Fm, Firmicutes; Cx, Chloroflexi.