Table 1
Individual lipid abundances and $\delta^{13}C$ values of selected samples. Sample number and Marker (Kelley et al., 2005) are noted and correspond to locations and samples noted in other reports (Kelley et al., 2005; Brazelton et al., 2006; Ludwig et al., 2006; Proskurowski et al., 2006). $\delta^{13}C_{TOC}$ and information about vent activity (A = active, I = inactive, or F = fissure Ludwig et al., 2006) and temperature is supplied where that information is known. All lipid concentrations are in μg lipid per gram of dry rock. Blank entries indicate that that lipid was not detected in a particular sample.

	Marker	2		2		3		near 7		7		7		7		B		C		C		H		H		X1		X2	
	Sample number	3864-1524		3864-1537		3862-1219		3865-1322		3867-1225		3867-1228		3879-1605		3876-1436		3869-1404		3869-1446		3881-1325		3881-1228		3876-1133		3880-1557	
	Temperature	64		53.5		59		—		34		—		52		90		70		70		46		—		—		—	
	Vent activity	A		A		A		F		A		I		A		A		A		A		I		A		F		F	
	TOC (%)	0.11		0.12		0.15		0.10		0.25		0.36		0.44		0.07		0.20		0.34		0.10		0.09		0.15		0.11	
	δ^{13}Croc (‰, VS. VPDB)	−15.5		−8.8		−12.2		−15.1		−5.2		−7.5		−6.5		−16.2		−7.8		−4.7		−18.8		−16.9		−16.3		−20.0	
	Total lipid (μg/g)	304		253		92		35		235		217		364		6		53		91		3		36		76		105	
		Concentration (μg/g)	$\delta^{13}C$ (‰)	Concentration (μg/g)	$\delta^{13}C$ (‰)	Concentration (μg/g)	$\delta^{13}C$ (‰)	Concentration (μg/g)	$\delta^{13}C$ (‰)	Concentration (μg/g)	$\delta^{13}C$ (‰)	Concentration (μg/g)	$\delta^{13}C$ (‰)	Concentration (μg/g)	$\delta^{13}C$ (‰)	Concentration (μg/g)	$\delta^{13}C$ (‰)	Concentration (μg/g)	$\delta^{13}C$ (‰)	Concentration (μg/g)	$\delta^{13}C$ (‰)	Concentration (μg/g)	$\delta^{13}C$ (‰)	concentration (μg/g)	$\delta^{13}C$ (‰)	concentration (μg/g)	$\delta^{13}C$ (‰)	concentration (μg/g)	$\delta^{13}C$ (‰)
archaeal lipids	Archaeol	0.02	−0.4	0.12	−0.8	0.01	−2.5			0.61	0.7	0.42	6.0	0.16	1.3			0.03	6.7	0.10	5.7			0.01	−4.2			0.01	−77.0
	sn-2 hydroxyarchaeol	0.15	2.4	0.21	0.2	0.07	1.3			5.94	1.3	6.66	4.2	1.80	0.7			0.39	5.1	0.97	4.8	0.01	−2.2	0.18	0.6				
	sn-3 hydroxyarchaeol	0.03	1.9		—	0.01	0.2			1.25	−2.1	0.67	−1.5	0.39	0.5			0.03	0.8	0.12	6.0			0.08	4.8				
	Dihydroxyarchaeol	0.05	3.8	0.09	1.1	0.02	1.2			3.47	−0.4	1.97	3.8	1.09	0.5			0.11	6.6	0.40	5.3			0.09	−2.9				
	PMI																	0.12	7.1	0.22	10.0								
fatty acids	C16:1 fatty acid	0.02	−12.9	0.11	−13.5	0.26	−28.3	0.17	−13.2	0.28	−25.4	0.06	−19.5	0.10	−20.7			0.02	−27.3	0.08	−17.0	0.00		0.24	−14.7	0.39	−21.5		
	C16 fatty acid	0.06	−7.3	1.62	−6.8	0.75	−8.8	0.15	−13.4	1.56	−7.5	0.09	−8.6	0.73	−9.1	0.01	−31.4	0.04	−25.7	0.52	−4.3	0.01		0.33	−12.0	0.12	−27.4		
	C18:1 fatty acid	0.06	−13.3	0.47	−13.4	0.15	−17.6	0.08	−20.1	0.41	−22.5	0.03	−26.5	0.18	−16.8			0.04	−25.4	0.14	−20.3	0.01		0.85	−12.0	0.16	−27.5		
	C18 fatty acid	0.02	−8.7	0.53	−8.9	0.10	−5.4	0.01	−20.4	0.51	−1.1	0.10	−2.2	0.21	−8.7	0.01	−30.2	0.02	−15.3	0.21	−8.0	0.01		0.11	−12.4	0.02	−25.0		
polycyclic triterpenoids	Cholesterol	0.04	−27.7	0.35		0.25	−28.5	0.10	−24.7	0.29	−26.1	0.10	−26.1	0.17	−27.8	0.01	−27.7	0.06	−26.3	0.49	−27.5	0.06	−23.3	0.01	−26.4	0.58	−27.0	0.09	−28.6
	Brassicasterol (C28:2)							0.05										0.03	−20.1	0.09	−25.9	0.02	−21.7			0.12	−28.2	0.01	−28.1
	Stigmasterol (C29:2)							0.03	−20.3			0.13	−24.9					0.04	−27.0	0.20	−24.6	0.01	−25.5						−27.7
	Stigmastanol (C29)							0.10	−25.8			0.09						0.02		0.15	−22.3	0.01	−23.4			0.09	−28.6	0.05	−26.4
	Cycloartenol	0.10	−15.4			0.49	−15.9	0.15	−17.6									0.04	−25.1		–					0.27	−27.5	0.02	−29.8
	Diplopтene							0.08				0.04	−19.2					0.03	−21.4	0.14						0.03			
bacterial ether lipids[a]	Tetrahymanol	0.03	−4.5	0.15	−3.5			0.04	−15.8	Trace		0.04		0.04						0.08		0.01	−15.7	0.14	−4.6	0.06	−16.9	0.04	−26.5
	Diplopterol	0.01	−3.2					0.74	−18.5	Trace		0.07		0.03				0.04		0.23		0.02	−19.3	0.10	−20.4	0.7	−18.2	0.12	−22.0
	C19:1 GME	0.01	−6.0	0.15	−6.0			0.01	−21.4			0.03	−9.3	0.01	−13.5			0.003	−6.1	0.04	−6.7	0.00		0.04	−14.0	0.06	−26.4	0.02	−23.9
	C21 GME	0.02	−10.6	0.14	−8.1			0.02	−19.6	0.03	−11.5	0.07	−19.2	0.01	−12.9			0.004	−10.6	0.06	−3.9	0.00		0.13	−9.7	0.08	−23.3	0.03	−27.7
	C33:1 GDE			0.14	−4.3	0.42	−4.9			0.33	−5.0	2.37	−2.0	0.26	−5.6			0.06	−1.1	0.47	2.6							0.02	−30.3
	C33 GDE			0.16	−6.0					0.25	−6.4	0.12	−5.5	0.08	−6.1			0.05	0.8	0.14	−2.2	0.00	−18.2	0.01	−6.8			0.04	−36.2
	C35:2 GDE	0.03	−4.6	0.17	−2.9			0.07	−19.8	0.93	−6.0	3.50	−3.5					0.05	−5.3	1.03	−1.4	0.02	−25.6			0.19	−22.1	0.20	−41.3
	C36:1 GDE											0.34	−4.6															0.01	−45.0
	C37:2 GDE	0.03	−6.4	0.28	−2.5			0.12	−18.9			0.24	−7.7															0.03	−36.9

[a] Representative structures are shown in the Appendix. GME and GDE refer to glycerol mono- and diethers, respectively. In CX:Y, X refers to the sum of glycerol and substituent (but not derivative) carbon atoms and Y indicates the number of rings or double bonds which must be present.