
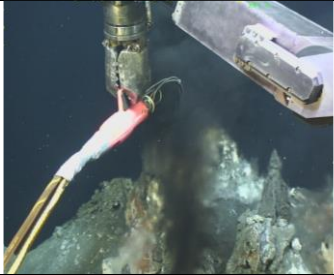






Table S1. Overview of the hydrothermal vent gradients being sampled. The dilution factor range of each examined gradient was determined from the comparison of Mn concentrations in the gradient to Mn end-member concentrations (Table 1).

Vent	location	Sampling date	temperature (°C) range of sampling	dilution factor range of sampling	Picture of the vent sampled	End-member sampling
Aisics main smoker (black smoker)	37°17.34'N 32°16.53'W 1690 m	26 Jul 2014	4-160	3-600		n=4
		14 Apr 2015	5-150	2-50		
		21 Apr 2015	5-140	2-1300		
Y3 main smoker (black smoker)	37°17.51'N 32°16.67'W 1726 m	23 Jul 2014	6-130	3-100		n=2
		25 Apr 2015	5-90	4-500		
Cypress main smoker (clear smoker)	37°17.45'N 32°16.86'W 1737 m	22 Jul 2014	6-120	3-300		n=2
		15 Apr 2015	4-140	2-15		
		23 Apr 2015	5-90	6-500		
White Castle main smoker (black smoker)	37°17.38'N 32°16.87'W 1708 m	28 Jul 2014	6-120	6-125		n=2
		18 Apr 2015	5-130	5-120		
Capelinhos main smoker (black smoker)	37°17.36'N 32°15.83'W 1660 m	20 Apr 2015	4-140	3-80		n=2

Aisics auxiliary smoker (clear smoker)	37°17.34'N 32°16.53'W 1690 m	17 Jul 2014	5-100				
Aisics-Tempo diffuse vent	37°17.33'N 32°16.54'W 1693 m	19 Jul 2014	4-130				
Capelinhos auxiliary smoker (clear smoker)	37°17.36'N 32°15.83'W 1660 m	25 Jul 2014	5-100				
Sapin main smoker (clear smoker)	37°17.43'N 32°16.94'W 1717 m	21 Jul 2014	5-90				
Montségur main smoker (clear smoker)	37°17.29'N 32°16.53'W 1699 m	16 Jul 2014	4-60				
Snakepit auxiliary smoker (black smoker)	23°22.14'N 44°57.06'W 3498 m	24 Jan 2014	4-120				
TAG auxiliary smoker (black smoker)	26°08.24'N 44°49.56'W 3625 m	01 Feb 2014	4-50				