

## Supplemental material

### **Polysaccharide hydrolysis in the presence of oil and dispersants: Insights into potential degradation pathways of exopolymeric substances (EPS) from oil-degrading bacteria**

Kai Ziervogel <sup>(1\*)</sup>, Samantha B. Joye <sup>(2)</sup>, Sara Kleindienst <sup>(3)</sup>, Sairah Y. Malkin <sup>(4)</sup>, Uta Passow <sup>(5)</sup>, Andrew D. Steen <sup>(6)</sup>, Carol Arnosti <sup>(7)</sup>

(1) University of New Hampshire, Durham, New Hampshire, United States

(2) University of Georgia, Athens, Georgia, United States

(3) University of Tübingen, Tübingen, Germany

(4) University of Maryland, Cambridge, Maryland, United States

(5) Memorial University of Newfoundland, St. John's, Canada

(6) University of Tennessee, Knoxville, Tennessee, United States

(7) University of North Carolina, Chapel Hill, North Carolina, United States

\*corresponding author: [kai.ziervogel@unh.edu](mailto:kai.ziervogel@unh.edu)

**Table S1: Set-up of stock solutions and treatment dilutions**

Sample <sup>a</sup>	WAF			Corexit-only			CEWAF		
	Stock	Roller bottles	Final conc. (% v/v)	Stock	Roller bottles	Final conc. (% v/v)	Stock	Roller bottles	Final conc. (% v/v)
Surface water	SW <sup>b</sup> : 1950 mL	Stock: 400 mL	0.5	SW <sup>b</sup> : 1975 mL	Stock: 1.6 mL	0.001	WAF stock: 2000 mL	Stock: 8.5 mL	0.001
	Oil: 50 mL	SW <sup>c</sup> : 1700 mL		Corexit: 25 mL	SW <sup>c</sup> : 2098 mL		Corexit: 5 mL	SW <sup>c</sup> : 1892 mL	
Deep water	SW <sup>b</sup> : 850 mL	Stock: 400 mL	3.3	SW <sup>b</sup> : 850 mL	Stock: 1.6 mL	0.002	WAF stock: 1000 mL	Stock: 3.3 mL	0.003
	Oil: 150 mL	Oil: 1400 mL		Corexit: 15 mL	SW <sup>c</sup> : 1798 mL		Corexit: 15 mL	SW <sup>c</sup> : 1797 mL	

<sup>a</sup> Surface-water data from Malkin et al. (2019); deep-water data from Kleindienst et al. (2015b)

<sup>b</sup> 0.2- $\mu$ m filtered and pasteurized seawater.

<sup>c</sup> Unfiltered seawater