



Project Knowledge Product: Mitigating the Damage to Arctic Copepods from Surface Oil Spills: When to Apply Dispersants

Appendix

A Project of the Arctic Domain Awareness Center (ADAC)

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Table of Contents - Appendix

A. Appendix	4
A.A. Supplemental Information	4
A.A.A. Literature References for Table 3.3.1	4
A.B. Copepod Tower Experiments: Oil Data	4
A.B.A. Unstratified Column, Non-Dispersed Oil	4
A.B.A.A. Replicate 1	4
A.B.A.A.A. Sampling Scheme:	4
A.B.A.A.B. Fluorometry	5
A.B.A.A.C. GCxGC SPME Results:	6
A.B.A.B. Replicate 2	8
A.B.A.B.A. Sampling Scheme:	8
A.B.A.B.B. Fluorometry	9
A.B.A.B.C. GCxGC SPME Results:	9
A.B.A.C. Replicate 3	12
A.B.A.C.A. Sampling Scheme:	12
A.B.A.C.B. Fluorometry:	12
A.B.A.C.C. GCxGC SPME Results:	13
A.B.A.D. Replicate 4	15
A.B.A.D.A. Sampling Scheme:	15
A.B.A.D.B. Fluorometry:	16
A.B.A.D.C. GCxGC:GCxGC SPME Results:	16
A.B.B. Unstratified Watercolumn, Dispersed Oil	19
A.B.B.A. Replicate 1	19
A.B.B.A.A. Sampling Scheme:	19
A.B.B.A.B. Fluorometry:	20
A.B.B.A.C. GCMS data:	21
A.B.B.A.D. Relationship between Fluorometry and GCMS data:	31
A.B.B.A.E. GCxGC SPME Measurements:	32
A.B.B.B. Replicate 2	32
A.B.B.B.A. Sampling Scheme:	32
A.B.B.B.B. Fluorometry:	33
A.B.B.B.C. GCMS data:	34
A.B.B.B.D. Relationship between Fluorometry and GCMS data:	44
A.B.B.B.E. GCxGC SPME Results:	44
A.B.B.C. Replicate 3	47

A.B.B.C.A. Sampling Scheme:	47
A.B.B.C.B. GCMS Results:	47
A.B.B.C.C. GCxGC SPME Results:	58
A.B.B.D. Replicate 4	60
A.B.B.D.A. Sampling Scheme:	60
A.B.B.D.B. GCMS Results:	61
A.B.B.D.C. GCxGC SPME Results:	71
A.B.B.E. Replicate 5	73
A.B.B.E.A. Sampling Scheme:	73
A.B.B.E.B. GCMS Results:	74
A.B.B.E.C. GCxGC Results:	84
A.B.C. Stratified Column, Non Dispersed Oil	86
A.B.C.A. Replicate 1	86
A.B.C.A.A. Sampling Scheme:	86
A.B.C.A.B. GCMS Results:	87
A.B.C.A.C. GCxGC SPME Results:	92
A.B.D. Stratified Column, Dispersed Oil	95
A.B.D.A. Replicate 1	95
A.B.D.A.A. Sampling Scheme:	95
A.B.D.A.B. GCMS Results:	96
A.B.D.A.C. GCxGC Results:	106
A.B.D.B. Replicate 2	108
A.B.D.B.A. Sampling Scheme:	108
A.B.D.B.B. GCMS Results	109
A.B.D.B.C. GCxGC Results:	120
A.B.D.C. Replicate 3	122
A.B.D.C.A. Sampling Scheme:	122
A.B.D.C.B. GCMS Results:	123
A.B.D.C.C. GCxGC Results:	134

A. Appendix

A.A. Supplemental Information

A.A.A. Literature References for Table 3.3.1

- Papers published in 2002-2010: (Duesterloh et al. 2002; Shirley 2004; Bellas and Thor 2007; Hansen et al. 2008b, 2009; Jensen et al. 2008b; Hjorth and Dahllöf 2008)
- Papers published 2010-2014:(Hansen et al. 2011b, 2012b, 2013b; Hjorth and Nielsen 2011b; Olsen et al. 2013b; Gardiner et al. 2013; Nørregaard et al. 2013; Almeda et al. 2014b)
- Papers published 2015-2016: (Hansen et al. 2015, 2016; Nordtug et al. 2015b; Nørregaard et al. 2015; Jensen et al. 2016b)
- Papers published 2017-2018:(Jager et al. 2017b; Krause et al. 2017; Agersted et al. 2018; Toxværd et al. 2018)
- Papers published 2019-2021:(Skottene et al. 2019; Van Dinh et al. 2019; Toxværd et al. 2019; Hansen et al. 2020; Hafez et al. 2021)

A.B. Copepod Tower Experiments: Oil Data

A.B.A. Unstratified Column, Non-Dispersed Oil

A.B.A.A. Replicate 1

A.B.A.A.A. Sampling Scheme:

Experiment Name: **Oil-Rep1_20200609**

Description: copepods, oil, NO dispersant, NOT stratified

Oil added on 6/9/20 at 12:00pm; **5.02 g** of oil added

Video Data	Date Started	Time Started	Date Stopped	Time Stopped	Hours capture d	frame capture rate
Control	20200608	11:20	20200609	11:00is h	23.5	1 f/s
Oil	20200609	11:11	20200610	13:11	26	1 f/s
	Time	Port 1	Port 2	Port 3	Port 4	Port 5
Control	11:53	S/F	-	-	-	-

0.5 hr	12:28-12:38pm	F	F	F	F	F
1 hr	12:57-1:13pm	S/F	S/F	S/F	S/F	S/F
2hr	1:58-2:07pm	F	F	F	F	F
4hr	3:58-4:13pm	S/F	S/F	S/F	S/F	S/F
24hr	11:50am-12:00pm	F	F	F	F	F

*100uL of concentrated phosphoric acid was added to each sample (both SPME and fluorescence) after it was sampled

S= sample taken for SPME measurement (taken in a 40mL vial)

F= sample taken for fluorescence measurement; to be run as aqueous sample and maybe L/LE in hexane (taken in a 50mL centrifuge tube)

Glass syringes were cleaned between samples with hexane then methanol then water.

5mL of water was pulled out of the sampling tubes and discarded before samples were taken at each time point.

A.B.A.A.B. Fluorometry

Units are micrograms dissolved oil compounds per liter aqueous sample (ug/L). The relationship between fluorescence and concentration was made by measuring a five-point dilution series of a WAF (water-accommodated fraction) made with evaporated Alaska North Slope oil on both a spectrophotometer and on the GCxGC using SPME. Samples that returned a concentration of dissolved oil compounds were assigned a value of 0 ug/L.

Rep 1	Depth (cm)	0.5hr	1hr	2hr	4hr	24hr
Control	10.16	0.00	-	-	-	-
Port 1	10.16	0.68	4.92	0.87	5.71	55.11
Port 2	45.72	0.42	3.81	8.71	8.67	56.53
Port 3	81.28	0.00	3.75	2.26	10.49	51.08
Port 4	116.84	0.00	6.25	1.51	6.72	47.19

Port 5	152.4	0.00	2.07	0.91	5.26	45.54
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A.B.A.A.C. GCxGC SPME Results:

[illegible]

[illegible]

chrC2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
chrC3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
chrC4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs (ug/L)	0.02	0.58	0.96	2.37	0.36	0.00	2.53	5.11	6.87	3.45	2.24

A.B.A.B. Replicate 2

A.B.A.B.A. Sampling Scheme:

Experiment Name: **Oil-Rep2_20200617**

Description: copepods, oil, NO dispersant, NOT stratified

Oil added on 6/17/20 at 11:58am; **5.17 g** of oil added

Video Data	Date Started	Time Started	Date Stopped	Time Stopped	Hours captured	frame capture rate
Control	20200616	17:38	20200617	~900	~15.47	1 f/s
Oil	20200617	11:27	20200618	13:27	26	1 f/s
	Time	Port 1	Port 2	Port 3	Port 4	Port 5
Control	11:48-11:51am	F/S	-	-	-	-
0.5 hr	12:30-12:37pm	F	F	F	F	F/L
1 hr	1:00-1:19pm	F/S/L	F/S/L	F/S/L	F/S/L	F/S/L
2hr	2:03-2:10pm	F	F	F	F	F
4hr	3:56-4:02pm	F	F	F	F	F
24hr	12:02-12:14pm	F/S	F/S	F/S	F/S	F/S

*100uL of concentrated phosphoric acid was added to each sample (both SPME and fluorescence) after it was sampled.

S= sample taken for SPME measurement (2-SPME vials, 18mL in each).

F= sample taken for fluorescence measurement to be run as aqueous sample (1-20mL vial).

L= sample taken for liquid-liquid extraction (1-50mL centrifuge tube with 40mL of sample).

Glass syringes were cleaned between samples with hexane then methanol then water.

5mL of water was pulled out of the sampling tubes and discarded before samples were taken at each time point.

A.B.A.B.B. Fluorometry

Rep 2	Depth (cm)	0.5hr	1hr	2hr	4hr	24hr
Control	10.16	0.00	-	-	-	-
Port 1	10.16	0.00	0.30	1.50	2.48	12.42
Port 2	45.72	0.00	0.94	5.53	7.43	10.35
Port 3	81.28	0.00	0.39	4.05	7.53	10.35
Port 4	116.84	0.00	0.82	0.56	4.35	9.09
Port 5	152.4	0.00	0.00	0.23	2.21	10.41

Units are micrograms dissolved oil compounds per liter aqueous sample (ug/L). The relationship between fluorescence and concentration was made by measuring a five-point dilution series of a WAF (water-accomodated fraction) made with evaporated Alaska North Slope oil on both a spectrophotometer and on the GCxGC using SPME. Samples that returned a concentration of dissolved oil compounds were assigned a value of 0 ug/L.

A.B.A.B.C. GCxGC SPME Results:

	24hr - Port 3	24hr - Port 4	24hr - Port 5
napC0	0.98	1.26	1.93
napC1	2.30	2.84	4.25
napC2	1.11	1.91	2.38

napC3	0.71	0.63	0.71
napC4	0.03	0.01	0.02
fluC0	0.07	0.05	0.07
fluC1	0.07	0.05	0.05
fluC2	0.02	0.01	0.01
fluC3	0.00	0.00	0.00
fluC4	0.00	0.00	0.00
oxFluC0	0.00	0.00	0.00
oxFluC1	0.00	0.00	0.00
oxFluC2	0.00	0.00	0.00
oxFluC3	0.00	0.00	0.00
pheC0	0.15	0.11	0.14
pheC1	0.06	0.06	0.06
pheC2	0.02	0.01	0.01
pheC3	0.00	0.00	0.00
pheC4	0.00	0.00	0.00
dbtC0	0.10	0.09	0.10

dbtC1	0.04	0.02	0.02
dbtC2	0.00	0.00	0.00
dbtC3	0.00	0.00	0.00
dbtC4	0.00	0.00	0.00
pyrC0	0.00	0.00	0.00
pyrC1	0.00	0.00	0.00
pyrC2	0.00	0.00	0.00
pyrC3	0.00	0.00	0.00
pyrC4	0.00	0.00	0.00
chrC0	0.00	0.00	0.00
chrC1	0.00	0.00	0.00
chrC2	0.00	0.00	0.00
chrC3	0.00	0.00	0.00
chrC4	0.00	0.00	0.00
oxBzA	0.00	0.00	0.00
Total PAHs (ug/L)	5.65	7.03	9.75

A.B.A.C. Replicate 3

A.B.A.C.A. Sampling Scheme:

Experiment Name: **Oil-Rep3_20200623**

Description: copepods, oil, NO dispersant, NOT stratified

Oil added on 6/23/20 at 12:01pm; **5.09g** of oil added

Video Data	Date Started	Time Started	Date Stopped	Time Stopped	Hours captured	frame capture rate
Control	20200622	1733	20200623	10:51	17.3	1 f/s
Oil	20200623	11:13	20200624	13:13	26	1 f/s
	Time	Port 1	Port 2	Port 3	Port 4	Port 5
Control	11:58-12:00	F/S/L	-	-	-	-
0.5 hr	12:30-12:36	F	F	F	F	F
1 hr	1:00-1:19pm	F/S/L	F/S/L	F/S/L	F/S/L	F/S/L
2hr	2:03-2:10pm	F	F	F	F	F
4hr	3:59-4:03pm	F	F	F	F	F
24hr	11:45-11:55 am	F/S	F/S	F/S	F/S	F/S

*100uL of concentrated phosphoric acid was added to each sample (both SPME and fluorescence) after it was sampled.

S= sample taken for SPME measurement (2-SPME vials, 18mL in each).

F= sample taken for fluorescence measurement to be run as aqueous sample (1-20mL vial).

L= sample taken for liquid-liquid extraction (1-50mL centrifuge tube with 40mL of sample).

Glass syringes were cleaned between samples with hexane then methanol then water.

5mL of water was pulled out of the sampling tubes and discarded before samples were taken at each time point.

A.B.A.C.B. Fluorometry:

Rep 3	Depth (cm)	30 min	1hr	2hr	4hr	24hr
Control	10.16	0.74	-	-	-	-

Port 1	10.16	16.11	27.03	27.54	32.95	57.57
Port 2	45.72	0.64	0.26	4.13	9.41	38.82
Port 3	81.28	0.00	0.09	0.56	1.29	4.53
Port 4	116.84	0.00	0.27	0.00	0.00	3.02
Port 5	152.4	1.29	0.00	0.00	0.28	3.32

A.B.A.C.C. GCxGC SPME Results:

	Control - Port 1	1hr - Port 1	1hr - Port 2	1hr - Port 3	1hr - Port 4	1h - Port 5	24h - Port 1	24h - Port 2	24h - Port 3	24h - Port 4	24h - Port 5
napC0	0.00	7.42	0.28	0.04	0.12	0.00	2.49	6.71	2.85	1.40	0.84
napC1	0.00	5.20	0.00	0.04	0.29	0.02	11.68	13.41	2.06	1.53	0.83
napC2	0.00	2.16	0.00	0.07	0.25	0.00	11.76	8.23	0.87	0.89	0.46
napC3	0.00	0.82	0.00	0.03	0.09	0.00	6.98	2.61	0.17	0.21	0.12
napC4	0.00	0.20	0.00	0.00	0.00	0.00	1.94	0.20	0.00	0.01	0.00
fluC0	0.00	0.04	0.00	0.00	0.01	0.01	0.46	0.39	0.02	0.03	0.00
fluC1	0.00	0.07	0.00	0.00	0.01	0.00	0.54	0.37	0.02	0.02	0.01
fluC2	0.00	0.04	0.00	0.00	0.00	0.00	0.43	0.08	0.00	0.00	0.00
fluC3	0.00	0.01	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00
fluC4	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00

oxFluC0	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.23	0.00	0.00	0.00
oxFluC1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.00
oxFluC2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxFluC3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pheC0	0.00	0.09	0.00	0.01	0.02	0.05	0.67	0.46	0.04	0.04	0.02
pheC1	0.00	0.08	0.00	0.00	0.01	0.00	0.50	0.18	0.01	0.01	0.01
pheC2	0.00	0.04	0.00	0.00	0.00	0.00	0.32	0.04	0.00	0.00	0.00
pheC3	0.00	0.01	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00
pheC4	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
dbtC0	0.00	0.07	0.00	0.00	0.02	0.00	0.61	0.47	0.03	0.03	0.02
dbtC1	0.00	0.05	0.00	0.00	0.01	0.00	0.37	0.13	0.01	0.01	0.01
dbtC2	0.00	0.03	0.00	0.00	0.00	0.00	0.28	0.02	0.00	0.00	0.00
dbtC3	0.00	0.01	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00
dbtC4	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
pyrC0	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
pyrC1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
pyrC2	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00

pyrC3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyrC4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
chrC0	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
chrC1	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
chrC2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
chrC3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
chrC4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxBzA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs (ug/L)	0.00	16.33	0.28	0.19	0.83	0.09	39.55	33.55	6.08	4.18	2.31

A.B.A.D. Replicate 4

A.B.A.D.A. Sampling Scheme:

Experiment name: **Oil-Rep4_20200708**

Description: copepods, oil, NO dispersant, NO temp gradient

Oil added on 7/8/20 at 12:48pm; **5.09 g** of oil added

Video Data	Date Started	Time Started	Date Stopped	Time Stopped	Hours captured	frame capture rate
Control	20200707	1648	20200708	957	17	1 f/s
Oil	20200708	1020	20200709	1220	26	1 f/s
	Time	Port 1	Port 2	Port 3	Port 4	Port 5
Control	12:46 PM	F/S/L	-	-	-	-
0.5 hr	1:20-1:30pm	F	F	F	F	F

1 hr	1:52-2:10pm	F/S/L	F/S/L	F/S/L	F/S/L	F/S/L
2hr	2:43-2:47pm	F	F	F	F	F
4hr	4:40-4:48pm	F	F	F	F	F
24hr	12:25-12:35pm	F/S	F/S	F/S	F/S	F/S

*100uL of concentrated phosphoric acid was added to each sample (both SPME and fluorescence) after it was sampled.

S= sample taken for SPME measurement (2-SPME vials, 18mL in each).

F= sample taken for fluorescence measurement to be run as aqueous sample (1-40mL vial containing 20mL).

L= sample taken for liquid-liquid extraction (1-50mL centrifuge tube with 40mL of sample).

Glass syringes were cleaned between samples with hexane then methanol then water.

5mL of water was pulled out of the sampling tubes and discarded before samples were taken at each time point.

A.B.A.D.B. Fluorometry:

Rep 4	Depth (cm)	30 min	1hr	2hr	4hr	24hr
Control	10.16	0.00	-	-	-	-
Port 1	10.16	0.00	1.64	2.93	3.25	8.76
Port 2	45.72	0.54	2.05	2.15	2.36	7.03
Port 3	81.28	1.08	1.20	2.53	1.99	4.74
Port 4	116.84	0.09	0.42	1.49	1.51	4.47
Port 5	152.4	0.03	0.83	2.21	2.45	6.74

A.B.A.D.C. GCxGC:GCxGC SPME Results:

	Control - Port 1	1hr - Port 1	1hr - Port 2	1hr - Port 3	1hr - Port 4	1hr - Port 5	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 4	24hr - Port 5
napC0	0.00	2.23	3.35	1.24	0.57	0.77	1.46	1.09	0.76	2.71	1.12
napC1	0.00	1.21	2.25	1.06	0.21	0.49	3.67	2.97	1.81	3.41	1.74
napC2	0.00	0.22	0.59	0.45	0.00	0.11	2.36	1.97	0.88	1.47	0.93
napC3	0.00	0.00	0.05	0.15	0.00	0.00	0.90	0.69	0.27	0.36	0.27
napC4	0.00	0.00	0.00	0.01	0.00	0.00	0.09	0.05	0.01	0.00	0.00
fluC0	0.00	0.00	0.00	0.01	0.00	0.00	0.07	0.05	0.04	0.03	0.03
fluC1	0.00	0.00	0.00	0.01	0.00	0.00	0.08	0.06	0.02	0.02	0.02
fluC2	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.02	0.01	0.00	0.00
fluC3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
fluC4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxFluC 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxFluC 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxFluC 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxFluC 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pheC0	0.00	0.00	0.01	0.04	0.00	0.00	0.18	0.13	0.06	0.04	0.05
pheC1	0.00	0.00	0.00	0.02	0.00	0.00	0.08	0.06	0.03	0.02	0.02

[illegible]

chrC4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxBzA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs (ug/L)	0.00	3.66	6.24	3.05	0.78	1.37	9.19	7.31	3.99	8.11	4.27

A.B.B. Unstratified Watercolumn, Dispersed Oil

A.B.B.A. Replicate 1

A.B.B.A.A. Sampling Scheme:

Experiment name: **Oil and Disp-Rep1 20200708**

Description: copepods, oil, dispersant, NOT stratified

Oil added on 7/8/20 at 11:01am; **5.39 g** of oil+dispersant added (6.5mL of evaporated Alaska North Slope oil, and 310uL of Corexit 9500 dispersant)

Video Data	Date Started	Time Started	Date Stopped	Time Stopped	Hours captured	frame capture rate
Control	20200707	1648	20200708	957	17	1 f/s
Oil	20200708	1018	20200709	1218	26	1 f/s
	Time	Port 1	Port 2	Port 3	Port 4	Port 5
Control	10:58-11:00am	S/F/L/D	D	D	D	D
0.5 hr	11:33-11:42am	F/L/D	F/L/D	F/L/D	F/L/D	F/L/D
1 hr	12:04-12:20pm	S/F/L/D	S/F/L/D	S/F/L/D	S/F/L/D	S/F/L/D
2hr	1:05-1:13pm	F/L/D	F/L/D	F/L/D	F/L/D	F/L/D
4hr	3:05-3:14pm	F/L/D	F/L/D	F/L/D	F/L/D	F/L/D
24hr	11:18-11:31am	S/F/L/D	S/F/L/D	S/F/L/D	S/F/L/D	S/F/L/D

*50uL of concentrated phosphoric acid was added to samples for SPME, fluorescence and liquid-liquid extraction after they were sampled

S= sample taken for SPME measurement (2x - SPME vial with 18mL of sample)

F= sample taken for fluorescence measurement; to be run as aqueous sample (1x - 12mL in a 12mL vial).

L= sample take for liquid-liquid extraction in hexane to be run on fluorometer and GCMS (1x - 40mL vial with 30mL of sample).

D= sample taken for droplet size distribution on a hemocytometer under a fluorescent microscope (1x - 1.8mL vial with ~1mL sample).

Glass syringes were cleaned between samples with hexane then methanol then water.

5mL of water was pulled out of the sampling tubes and discarded before samples were taken at each time point.

A.B.B.A.B. Fluorometry:

Corrected by multiplying by 100 (to account for dilution) and dividing by 6 (to account for extraction factor), then multiplied by 1000 to convert to liters.

Corrected conc. (ug oil compounds/L sample)	0.5hr	1hr	2hr	4hr	24hr
Port 1	205437.3	57730.3	40003.0	25185.7	11294.6
Port 2	78724.2	52296.8	36696.5	24719.2	11418.6
Port 3	2628.1	57956.9	37549.3	25000.1	11310.2
Port 4	1804.8	38983.7	34848.3	23098.0	11024.5
Port 5	575.6	11576.5	31797.6	21763.7	10857.3

Then multiplied by 0.02396 (avg. ug PAHs per ug oil in ANS) to convert to PAHs/L.

Corrected conc. (ug PAHs/L sample)	0.5hr	1hr	2hr	4hr	24hr
Port 1	4922.3	1383.2	958.5	603.4	270.6

Port 2	1886.2	1253.0	879.2	592.3	273.6
Port 3	63.0	1388.6	899.7	599.0	271.0
Port 4	43.2	934.0	835.0	553.4	264.1
Port 5	13.8	277.4	761.9	521.5	260.1

A.B.B.A.C. GCMS data:

	Control_ Port 1	30min_ Port 1	30min_ Port 2	30min_ Port 3	30min_ Port 4	30min_ Port 5	1hr_ Port 1	1hr_ Port 2	1hr_ Port 3	1hr_ Port 4	1hr_ Port 5
anthracene	NA	0.02	0.01	0.00	0.00	NA	0.00	0.00	0.01	0.00	0.00
biphenyl	NA	0.19	0.06	NA	NA	NA	0.05	0.04	0.05	0.03	NA
chrys/triphen/ bz(a)a	0.00	0.13	0.07	0.00	0.00	NA	0.06	0.05	0.05	0.04	0.00
chrys-C1 (6me)	NA	0.17	0.08	NA	NA	NA	0.05	0.05	0.06	0.04	0.01
chrys-C2 (6et)	NA	0.38	0.18	NA	NA	NA	0.13	0.12	0.13	0.08	0.02
chrys-C3 (noStd)	0.00	0.41	0.22	0.00	0.00	0.00	0.17	0.15	0.14	0.09	0.00
chrys-C4 (noStd)	0.00	0.22	0.09	0.00	0.00	0.00	0.03	0.05	0.04	0.00	0.00
DBT	0.71	0.34	0.15	0.00	0.00	0.00	0.10	0.09	0.10	0.06	0.02
DBT-C1 (noStd)	NA	0.85	0.39	NA	NA	NA	0.27	0.25	0.28	0.17	0.05
DBT-C2 (4,6meDBT)	NA	1.43	0.68	NA	NA	NA	0.47	0.44	0.50	0.31	0.10
DBT-C3 (noStd)	NA	1.31	0.61	NA	NA	NA	0.44	0.39	0.47	0.29	0.09

DBT-C4 (noStd)	0.00	0.72	0.34	0.00	0.00	0.00	0.24	0.22	0.27	0.16	0.05
fluo	0.00	0.17	0.08	0.00	0.00	0.00	0.05	0.05	0.06	0.04	0.01
fluo-C1 (1me)	NA	0.55	0.26	0.01	0.00	NA	0.17	0.16	0.18	0.12	0.04
fluo-C2 (noStd)	0.00	0.98	0.45	0.00	0.00	0.00	0.31	0.29	0.31	0.20	0.05
fluo-C3 (noStd)	NA	0.90	0.42	NA	NA	NA	0.30	0.28	0.32	0.19	0.07
fluo-C4 (noStd)	0.00	0.75	0.30	0.00	0.00	0.00	0.23	0.20	0.20	0.16	0.04
hopane	NA	0.33	0.15	0.01	0.00	NA	0.11	0.10	0.11	0.07	0.02
naph	NA	1.08	0.53	0.03	0.02	0.01	0.32	0.29	0.33	0.23	0.08
naph-1me	NA	1.66	0.72	0.03	0.02	0.01	0.48	0.41	0.45	0.29	0.00
naph-2me	NA	2.00	0.78	0.02	0.01	0.00	0.49	0.41	0.49	0.25	0.00
naph-C2 (1,2me)	NA	6.78	2.95	0.09	0.07	0.02	1.93	1.71	1.97	1.18	0.33
naph-C3 (3,5,5)	NA	4.52	1.98	0.06	0.04	NA	1.32	1.16	1.33	0.82	0.24
naph-C4 (noStd)	NA	3.15	1.43	NA	NA	NA	0.98	0.87	1.00	0.62	0.19
nC10	NA	2.42	0.57	NA	NA	NA	0.39	0.26	0.35	0.09	0.03
nC11	NA	4.84	1.73	0.01	NA	NA	1.15	0.93	1.19	0.35	0.05
nC12	0.00	5.51	2.32	0.02	0.00	0.00	1.61	1.40	1.68	0.76	0.13
nC13	NA	5.49	2.50	0.03	0.02	0.02	1.75	1.57	1.82	1.04	0.20

nC14	NA	5.65	2.57	0.00	NA	NA	1.75	1.56	1.82	1.06	0.20
nC15	NA	5.08	2.25	0.04	NA	NA	1.52	1.37	1.58	1.01	0.24
nC16	NA	4.89	2.23	0.06	0.03	NA	1.54	1.41	1.64	1.02	0.28
nC17pris	NA	8.32	4.02	0.09	0.06	NA	2.77	2.60	2.88	1.89	0.52
nC18phyt	NA	3.65	1.68	0.04	0.03	NA	1.18	1.07	1.23	0.78	0.21
nC19	NA	4.05	1.82	NA	NA	NA	1.24	1.11	1.29	0.78	0.20
nC20	NA	3.64	1.62	0.00	0.00	NA	1.13	1.00	1.15	0.71	0.15
nC21	NA	3.44	1.54	0.00	0.00	NA	1.05	0.97	1.11	0.66	0.14
nC22	NA	3.36	1.57	0.00	0.00	NA	1.06	0.95	1.09	0.66	0.12
nC23	NA	3.01	1.43	0.02	0.01	NA	0.95	0.86	1.00	0.60	0.12
nC24	NA	2.69	1.20	0.01	0.01	NA	0.79	0.74	0.86	0.52	0.10
nC25	NA	2.31	1.02	0.01	NA	NA	0.67	0.60	0.71	0.42	0.07
nC26	NA	2.08	0.89	0.00	NA	NA	0.57	0.53	0.48	0.36	0.05
nC27	NA	1.63	0.69	NA	NA	NA	0.42	0.39	0.46	0.26	0.04
nC28	NA	1.34	0.56	NA	NA	NA	0.33	0.30	0.36	0.21	0.03
nC29	NA	1.18	0.48	NA	NA	NA	0.28	0.25	0.31	0.17	0.02
nC30	NA	0.78	0.31	NA	NA	NA	0.16	0.15	0.19	0.10	NA

nC31	NA	0.62	0.24	NA	NA	NA	0.12	0.11	0.14	0.08	NA
nC32	NA	0.59	0.16	NA	NA	NA	0.08	0.07	0.09	0.04	NA
nC33	NA	0.36	0.13	NA	NA	NA	0.06	0.05	0.06	0.04	NA
nC34	NA	0.28	0.09	NA	NA	NA	0.03	0.04	0.04	0.02	NA
nC35	NA	0.23	0.08	NA	NA	NA	0.03	0.03	0.03	0.02	NA
nC36	0.00	0.19	0.06	NA	0.00	NA	0.02	0.02	0.03	0.01	0.00
nC37	0.00	0.18	0.05	0.00	NA	NA	0.02	0.02	0.02	0.01	NA
nC38	0.00	0.19	0.05	0.00	NA	NA	0.02	0.02	0.02	0.01	NA
nC39	0.00	0.14	0.04	0.00	NA	NA	0.01	0.01	0.01	0.01	NA
nC40	0.00	0.12	0.04	NA	NA	0.00	0.01	0.01	0.01	0.01	0.00
o-terphenyl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phen	NA	0.47	0.20	0.01	0.01	NA	0.14	0.12	0.15	0.09	0.03
phen-C1 (1me)	0.00	1.35	0.61	0.00	0.00	0.00	0.42	0.37	0.45	0.26	0.10
phen-C2 (3,6me)	NA	1.89	0.90	0.00	NA	NA	0.63	0.58	0.68	0.42	0.14
phen-C3 (9et10me)	NA	2.78	1.35	NA	NA	NA	0.93	0.85	1.01	0.62	0.19
phen-C4 (noStd)	0.00	1.51	0.75	0.00	0.00	0.00	0.51	0.47	0.57	0.35	0.11
pyr-C1 (1me)	0.00	0.16	0.07	0.00	0.00	0.00	0.05	0.04	0.04	0.03	0.01

pyr-C2 (noStd)	0.00	0.33	0.15	0.00	0.00	0.00	0.10	0.09	0.11	0.07	0.02
pyr-C3 (noStd)	0.00	0.29	0.13	0.00	0.00	0.00	0.09	0.08	0.09	0.06	0.02
pyr-C4 (noStd)	0.00	0.35	0.16	0.00	0.00	0.00	0.10	0.10	0.11	0.07	0.02
pyrene	0.00	0.01	0.00	0.00	0.00	NA	0.00	0.00	0.00	0.00	0.00
Total PAHs	0.71	38.17	17.22	0.25	0.18	0.04	11.67	10.51	12.08	7.42	2.06
Total Alkanes	0.00	78.28	33.92	0.33	0.16	0.02	22.67	20.40	23.66	13.70	2.91
Total oil cmpds	0.71	116.46	51.15	0.58	0.34	0.06	34.34	30.91	35.74	21.12	4.97

(Table continued)

[illegible]

(noSt d)															
DBT	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02
DBT- C1 (noSt d)	0.17	0.16	0.16	0.14	0.13	0.11	0.10	0.11	0.10	0.09	0.05	0.05	0.05	0.05	0.00
DBT- C2 (4,6m eDBT)	0.30	0.29	0.29	0.26	0.24	0.20	0.18	0.21	0.18	0.18	0.09	0.09	0.09	0.09	0.09
DBT- C3 (noSt d)	0.27	0.27	0.26	0.24	0.21	0.18	0.16	0.18	0.16	0.15	0.07	0.08	0.08	0.08	0.07
DBT- C4 (noSt d)	0.16	0.15	0.15	0.13	0.12	0.11	0.10	0.11	0.10	0.09	0.04	0.05	0.05	0.04	0.05
fluo	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01
fluo- C1 (1me)	0.11	0.10	0.10	0.09	0.08	0.07	0.06	0.07	0.06	0.06	0.03	0.03	0.03	0.03	0.03
fluo- C2 (noSt d)	0.14	0.18	0.14	0.15	0.15	0.11	0.10	0.12	0.11	0.08	0.04	0.04	0.04	0.04	0.04
fluo- C3 (noSt d)	0.19	0.18	0.18	0.18	0.16	0.12	0.12	0.13	0.12	0.11	0.04	0.04	0.04	0.05	0.04
fluo- C4 (noSt d)	0.15	0.13	0.17	0.16	0.14	0.08	0.11	0.10	0.10	0.08	0.03	0.03	0.04	0.05	0.04
hopa ne	0.07	0.06	0.07	0.06	0.05	0.04	0.04	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02
naph	0.19	0.19	0.20	0.18	0.18	0.16	0.15	0.17	0.16	0.15	0.12	0.13	0.14	0.14	0.13
naph- 1me	0.24	0.23	0.25	0.22	0.21	0.18	0.16	0.19	0.17	0.17	0.00	0.00	0.00	0.00	0.00
naph- 2me	0.22	0.21	0.23	0.19	0.19	0.14	0.13	0.16	0.14	0.13	0.00	0.00	0.00	0.00	0.00

naph-C2 (1,2me)	1.02	0.99	1.04	0.91	0.89	0.73	0.64	0.78	0.67	0.65	0.38	0.42	0.44	0.44	0.41
naph-C3 (3,5,5)	0.72	0.70	0.72	0.63	0.60	0.49	0.44	0.53	0.45	0.42	0.23	0.25	0.26	0.25	0.24
naph-C4 (noStd)	0.56	0.55	0.56	0.50	0.47	0.38	0.35	0.41	0.35	0.33	0.17	0.18	0.18	0.17	0.17
nC10	0.06	0.07	0.08	0.07	0.08	0.06	0.05	0.09	0.09	0.12	0.03	0.04	0.03	0.03	0.03
nC11	0.30	0.27	0.37	0.29	0.31	0.22	0.13	0.24	0.21	0.24	0.05	0.06	0.06	0.10	0.08
nC12	0.64	0.58	0.70	0.58	0.58	0.44	0.29	0.48	0.39	0.42	0.12	0.14	0.15	0.16	0.14
nC13	0.88	0.82	0.92	0.78	0.75	0.61	0.47	0.67	0.55	0.54	0.16	0.17	0.19	0.20	0.20
nC14	0.90	0.82	0.91	0.83	0.69	0.48	0.44	0.55	0.42	0.51	0.08	0.08	0.09	0.09	0.09
nC15	0.89	0.81	0.88	0.79	0.71	0.58	0.53	0.63	0.52	0.50	0.15	0.15	0.16	0.16	0.16
nC16	0.92	0.90	0.92	0.83	0.75	0.61	0.57	0.63	0.56	0.53	0.18	0.18	0.18	0.18	0.19
nC17 pris	1.73	1.71	1.72	1.57	1.41	1.16	1.08	1.17	1.04	0.98	0.38	0.38	0.39	0.37	0.37
nC18 phyt	0.71	0.70	0.70	0.64	0.58	0.45	0.44	0.48	0.42	0.39	0.15	0.15	0.15	0.14	0.14
nC19	0.71	0.69	0.70	0.63	0.56	0.46	0.42	0.46	0.40	0.41	0.13	0.13	0.13	0.12	0.12
nC20	0.65	0.63	0.63	0.58	0.52	0.45	0.39	0.41	0.36	0.34	0.10	0.09	0.11	0.10	0.09
nC21	0.61	0.58	0.60	0.53	0.48	0.37	0.36	0.37	0.32	0.30	0.09	0.09	0.09	0.08	0.07
nC22	0.60	0.58	0.59	0.50	0.46	0.35	0.35	0.38	0.33	0.30	0.08	0.08	0.08	0.07	0.07

nC23	0.54	0.51	0.54	0.48	0.42	0.34	0.31	0.34	0.29	0.27	0.07	0.08	0.08	0.08	0.06
nC24	0.45	0.43	0.45	0.40	0.35	0.26	0.27	0.28	0.25	0.23	0.06	0.06	0.06	0.06	0.05
nC25	0.36	0.36	0.37	0.33	0.28	0.21	0.22	0.23	0.20	0.18	0.04	0.04	0.04	0.04	0.04
nC26	0.31	0.30	0.31	0.27	0.24	0.17	0.18	0.13	0.16	0.14	0.03	0.03	0.03	0.03	0.03
nC27	0.22	0.21	0.22	0.20	0.17	0.12	0.13	0.13	0.12	0.10	0.02	0.02	0.02	0.02	0.02
nC28	0.17	0.16	0.17	0.15	0.13	0.09	0.10	0.10	0.09	0.07	0.02	0.02	0.02	0.01	0.01
nC29	0.14	0.13	0.14	0.13	0.10	0.08	0.08	0.08	0.07	0.06	0.01	0.01	0.01	0.01	0.01
nC30	0.08	0.08	0.08	0.07	0.06	0.04	0.04	0.04	0.04	0.03	NA	NA	NA	NA	NA
nC31	0.06	0.06	0.06	0.05	0.04	0.03	0.03	0.03	0.03	0.02	NA	NA	NA	NA	NA
nC32	0.03	0.04	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	NA	NA	NA	NA	NA
nC33	0.02	0.02	0.03	0.02	0.02	0.01	0.01	0.01	0.01	NA	NA	NA	NA	NA	NA
nC34	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	NA	NA	NA	NA	NA	NA
nC35	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	NA	NA	NA	NA	NA	NA
nC36	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	NA
nC37	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA	NA	NA
nC38	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	NA	0.00	NA	0.00	NA
nC39	0.01	0.00	0.01	0.00	0.00	NA	0.00	NA	NA	NA	NA	NA	0.00	NA	0.00

nC40	0.01	0.00	0.00	0.00	NA	NA	0.00	NA	NA	0.00	0.00	0.00	0.00	NA	NA
o-terphenyl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phen	0.09	0.08	0.08	0.08	0.07	0.06	0.05	0.06	0.05	0.05	0.03	0.03	0.03	0.03	0.03
phen-C1 (1me)	0.24	0.24	0.24	0.22	0.20	0.16	0.16	0.17	0.16	0.15	0.07	0.07	0.07	0.09	0.08
phen-C2 (3,6me)	0.39	0.39	0.39	0.35	0.32	0.27	0.24	0.28	0.24	0.23	0.12	0.12	0.12	0.12	0.11
phen-C3 (9et10me)	0.57	0.57	0.56	0.52	0.46	0.38	0.34	0.40	0.35	0.33	0.17	0.17	0.18	0.18	0.16
phen-C4 (noStd)	0.32	0.31	0.32	0.29	0.26	0.22	0.19	0.23	0.20	0.18	0.09	0.10	0.09	0.09	0.08
pyr-C1 (1me)	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
pyr-C2 (noStd)	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02	0.02
pyr-C3 (noStd)	0.05	0.05	0.05	0.05	0.05	0.04	0.03	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.01
pyr-C4 (noStd)	0.06	0.06	0.06	0.06	0.05	0.04	0.04	0.04	0.04	0.02	0.01	0.01	0.01	0.01	0.01
pyrene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs	6.68	6.54	6.67	5.99	5.60	4.55	4.20	4.81	4.21	3.96	1.89	2.02	2.09	2.10	1.90
Total Alkanes	12.04	11.50	12.22	10.83	9.76	7.63	6.94	8.00	6.90	6.73	1.96	2.01	2.09	2.06	1.97

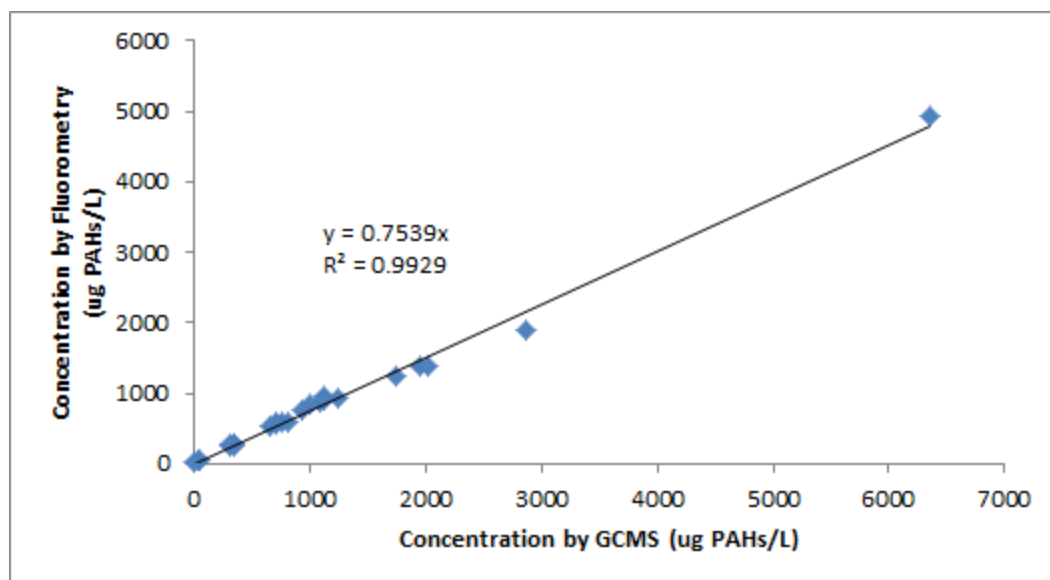
Total oil cmpd s	18.73	18.04	18.90	16.83	15.35	12.18	11.14	12.82	11.12	10.69	3.85	4.03	4.18	4.17	3.86
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The total PAH values from the table above were then divided by 6, to account for the concentration factor (30mL seawater sample was extracted with 5mL of hexane, concentrating the sample by a factor of 6), then multiplied by 1000 to scale from concentration per mL to L of sample in the following table.

Sample name	ug PAHs/mL aqueous sample	ug PAH/L aqueous sample
ADAC_OD-Rep1-Control_P1	0.118	117.893
ADAC_OD-Rep1-30min_P1	6.362	6362.166
ADAC_OD-Rep1-30min_P2	2.871	2870.539
ADAC_OD-Rep1-30min_P3	0.042	42.293
ADAC_OD-Rep1-30min_P4	0.030	30.293
ADAC_OD-Rep1-30min_P5	0.007	6.542
ADAC_OD-Rep1-1hr_P1	1.945	1944.713
ADAC_OD-Rep1-1hr_P2	1.751	1751.350
ADAC_OD-Rep1-1hr_P3	2.014	2013.545
ADAC_OD-Rep1-1hr_P4	1.236	1236.063
ADAC_OD-Rep1-1hr_P5	0.343	342.563
ADAC_OD-Rep1-2hr_P1	1.114	1114.000

ADAC_OD-Rep1-2hr_P2	1.090	1089.903
ADAC_OD-Rep1-2hr_P3	1.112	1112.225
ADAC_OD-Rep1-2hr_P4	0.999	999.120
ADAC_OD-Rep1-2hr_P5	0.933	932.514
ADAC_OD-Rep1-4hr_P1	0.758	757.849
ADAC_OD-Rep1-4hr_P2	0.700	699.868
ADAC_OD-Rep1-4hr_P3	0.802	802.380
ADAC_OD-Rep1-4hr_P4	0.702	702.490
ADAC_OD-Rep1-4hr_P5	0.660	660.151
ADAC_OD-Rep1-24hr_P1	0.316	315.774
ADAC_OD-Rep1-24hr_P2	0.336	336.093
ADAC_OD-Rep1-24hr_P3	0.348	348.129
ADAC_OD-Rep1-24hr_P4	0.351	350.641
ADAC_OD-Rep1-24hr_P5	0.316	316.099

A.B.B.A.D. Relationship between Fluorometry and GCMS data:



A.B.B.A.E. GCxGC SPME Measurements:

No successful SPME measurements were recorded for this replicate of samples due to technical difficulties.

A.B.B.B. Replicate 2

A.B.B.B.A. Sampling Scheme:

Experiment name: **Oil_and_Dis-Rep2_20200716**

Description: copepods, oil, dispersant, NO stratification

Oil added on 7/16/20 at 9:11am; **5.31 g** of oil+dispersant added (6.5mL of evaporated Alaska North Slope oil, and 310uL of Corexit 9500 dispersant)

	Time	Port 1	Port 2	Port 3	Port 4	Port 5
Control	9:05-9:10am	S/L/D	D	D	D	D
0.5 hr	9:40-9:46am	L/D	L/D	L/D	L/D	L/D
1 hr	10:08-10:20am	S/L/D	S/L/D	S/L/D	S/L/D	S/L/D
2hr	11:14-11:20am	L/D	L/D	L/D	L/D	L/D
4hr	1:22-1:29pm	L/D	L/D	L/D	L/D	L/D
24hr	9:03-9:13am	S/L/D	S/L/D	S/L/D	S/L/D	S/L/D

*50uL of concentrated phosphoric acid was added to samples for SPME, fluorescence and

liquid-liquid extraction after they were sampled .

S= sample taken for SPME measurement (2x - SPME vial with 18mL of sample).

L=sample take for liquid-liquid extraction in hexane to be run on fluorometer and GCMS (1x - 40mL vial with 30mL of sample).

D=sample taken for droplet size distribution on a hemocytometer under a fluorescent microscope (1x - 1.8mL vial with ~1mL sample).

Glass syringes were cleaned between samples with hexane then methanol then water.

5mL of water was pulled out of the sampling tubes and discarded before samples were taken at each time point.

A.B.B.B.B. Fluorometry:

Corrected by multiplying by 100 (to account for dilution) and dividing by 6 (to account for extraction factor), then multiplied by 1000 to convert to liters.

Corrected conc (ug oil/L smp)	0.5hr	1hr	2hr	4hr	24hr
Port 1	150449.49	136290.60	50246.66	24190.53	8211.43
Port 2	2310.46	10137.74	45870.47	30376.14	7721.31
Port 3	0.00	0.00	4186.62	8773.34	7992.68
Port 4	0.00	0.00	0.00	5397.03	7647.93
Port 5	0.00	0.00	0.00	1994.87	7724.40

Then multiplied by 0.02396 (avg. ug PAHs per ug oil in ANS) to convert to PAHs/L.

Corrected conc (ug PAHs/L smp)	0.5hr	1hr	2hr	4hr	24hr
Port 1	3604.77	3265.52	1203.91	579.61	196.75
Port 2	55.36	242.90	1099.06	727.81	185.00
Port 3	0.00	0.00	100.31	210.21	191.50

Port 4	0.00	0.00	0.00	129.31	183.24
Port 5	0.00	0.00	0.00	47.80	185.08

A.B.B.B.C. GCMS data:

	Contr ol - Port 1	0.5hr - Port 1	0.5hr - Port 2	0.5hr - Port 3	0.5hr - Port 4	0.5hr - Port 5	1hr - Port 1	1hr - Port 2	1hr - Port 3	1hr - Port 4	1hr - Port 5
anthracene	NA	0.01	0.00	NA	NA	NA	0.01	0.00	NA	NA	NA
biphenyl	NA	0.10	NA	NA	NA	NA	0.09	NA	NA	NA	NA
chrys/triphen/b z(a)a	NA	0.08	0.00	NA	NA	NA	0.10	0.00	0.00	0.00	NA
chrys-C1 (6me)	NA	0.10	NA	NA	NA	NA	0.11	0.01	NA	NA	NA
chrys-C2 (6et)	NA	0.25	NA	NA	NA	NA	0.26	NA	NA	NA	NA
chrys-C3 (noStd)	0.00	0.27	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00
chrys-C4 (noStd)	0.00	0.17	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00
DBT	0.00	0.20	0.00	0.00	0.00	0.00	0.23	0.02	0.00	0.00	0.00
DBT-C1 (noStd)	NA	0.52	NA	NA	NA	NA	0.60	0.05	NA	NA	NA
DBT-C2 (4,6meDBT)	NA	0.89	NA	NA	NA	NA	0.96	0.09	NA	NA	NA
DBT-C3 (noStd)	NA	0.80	NA	NA	NA	NA	0.89	0.08	NA	NA	NA
DBT-C4 (noStd)	0.00	0.46	0.00	0.00	0.00	0.00	0.49	0.05	0.00	0.00	0.00
fluo	0.00	0.11	0.00	0.00	0.00	0.00	0.09	0.01	0.01	0.01	0.01

fluo-C1 (1me)	NA	0.34	0.01	NA	NA	NA	0.35	0.03	NA	NA	NA
fluo-C2 (noStd)	0.00	0.59	0.00	0.00	0.00	0.00	0.64	0.05	0.00	0.00	0.00
fluo-C3 (noStd)	NA	0.58	NA	NA	NA	NA	0.61	0.07	NA	NA	NA
fluo-C4 (noStd)	0.00	0.40	0.00	0.00	0.00	0.00	0.43	0.05	0.00	0.00	0.00
hopane	NA	0.22	0.00	NA	0.00	NA	0.19	0.02	NA	NA	NA
naph	0.00	0.69	0.03	0.00	0.00	0.00	0.59	0.12	0.00	NA	NA
naph-1me	NA	1.05	0.03	NA	NA	NA	0.95	0.13	NA	NA	NA
naph-2me	NA	1.24	0.02	NA	NA	NA	1.11	0.09	NA	NA	NA
naph-C2 (1,2me)	NA	4.34	0.09	NA	NA	NA	4.01	0.34	NA	NA	NA
naph-C3 (3,5,5)	NA	2.88	0.06	NA	NA	NA	2.65	0.22	NA	NA	NA
naph-C4 (noStd)	NA	2.06	NA	NA	NA	NA	1.92	0.17	NA	NA	NA
nC10	NA	1.32	NA	NA	NA	NA	0.79	0.05	NA	NA	NA
nC11	0.00	2.93	0.03	NA	NA	NA	2.31	0.09	NA	NA	NA
nC12	0.05	3.46	0.04	0.02	0.02	0.02	3.14	0.12	NA	NA	NA
nC13	0.05	3.51	0.06	0.02	0.02	0.03	3.33	0.19	0.00	NA	NA
nC14	NA	3.64	0.04	NA	NA	NA	3.52	0.21	NA	NA	NA
nC15	NA	3.21	0.04	NA	NA	NA	3.08	0.22	NA	NA	NA

nC16	NA	3.12	0.05	NA	NA	NA	3.02	0.24	NA	NA	NA
nC17pris	NA	5.67	0.00	NA	NA	NA	5.32	0.42	NA	NA	NA
nC18phyt	NA	2.36	0.00	NA	NA	NA	4.21	0.34	NA	NA	NA
nC19	NA	2.61	NA	NA	NA	NA	2.47	0.18	NA	NA	NA
nC20	NA	2.29	0.00	NA	NA	NA	2.20	0.12	NA	NA	NA
nC21	NA	2.20	0.00	NA	NA	NA	2.15	0.12	NA	NA	NA
nC22	NA	2.21	NA	NA	NA	NA	2.11	0.12	NA	NA	NA
nC23	NA	2.07	0.00	NA	NA	NA	1.82	0.11	NA	NA	NA
nC24	NA	1.69	NA	NA	NA	NA	1.65	0.09	NA	NA	NA
nC25	NA	1.44	NA	NA	NA	NA	1.40	0.07	NA	NA	NA
nC26	NA	1.28	NA	NA	NA	NA	1.23	0.06	NA	NA	NA
nC27	NA	0.98	NA	NA	NA	NA	0.98	0.04	NA	NA	NA
nC28	NA	0.78	NA	NA	NA	NA	0.82	0.03	NA	NA	NA
nC29	NA	0.67	NA	NA	NA	NA	0.73	0.03	NA	NA	NA
nC30	NA	0.43	NA	NA	NA	NA	0.47	0.02	NA	NA	NA
nC31	NA	0.34	NA	NA	NA	NA	0.39	NA	NA	NA	NA
nC32	NA	0.23	NA	NA	NA	NA	0.28	NA	NA	NA	NA

nC33	NA	0.17	NA	NA	NA	NA	0.25	NA	NA	NA	NA
nC34	NA	0.12	NA	NA	NA	NA	0.20	NA	NA	NA	NA
nC35	NA	0.10	NA	NA	NA	NA	0.17	NA	NA	NA	NA
nC36	NA	0.09	0.00	NA	0.00	NA	0.14	0.00	0.00	0.00	0.00
nC37	0.00	0.06	0.00	0.00	0.00	NA	0.15	NA	0.00	NA	0.00
nC38	NA	0.10	NA	NA	NA	NA	0.18	0.00	NA	NA	NA
nC39	NA	0.05	NA	NA	NA	NA	0.12	NA	0.00	NA	NA
nC40	0.00	0.05	NA	NA	NA	NA	0.13	NA	0.00	0.00	NA
o-terphenyl	0.00	0.00	0.00	0.00	NA	NA	0.01	0.00	0.00	0.00	0.00
phen	NA	0.29	0.01	NA	NA	NA	0.30	0.03	NA	NA	NA
phen-C1 (1me)	0.00	0.85	0.00	0.00	0.00	0.00	0.90	0.07	0.00	0.00	0.00
phen-C2 (3,6me)	NA	1.23	NA	NA	NA	NA	1.26	0.13	NA	NA	NA
phen-C3 (9et10me)	NA	1.79	NA	NA	NA	NA	1.76	0.17	NA	NA	NA
phen-C4 (noStd)	0.00	0.99	0.00	0.00	0.00	0.00	0.76	0.08	0.00	0.00	0.00
pyr-C1 (1me)	0.00	0.09	0.00	0.00	0.00	0.00	0.11	0.01	0.00	0.00	0.00
pyr-C2 (noStd)	0.00	0.21	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00
pyr-C3 (noStd)	0.00	0.18	0.00	0.00	0.00	0.00	0.19	0.02	0.00	0.00	0.00

pyr-C4 (noStd)	0.00	0.21	0.00	0.00	0.00	0.00	0.23	0.02	0.00	0.00	0.00
pyrene	NA	0.01	0.00	NA	NA	NA	0.01	0.00	NA	NA	NA
Total PAHs	0.00	24.21	0.24	0.00	0.00	0.00	23.43	2.13	0.01	0.01	0.01
Total alkanes	0.10	49.20	0.26	0.04	0.03	0.04	48.77	2.89	0.00	0.00	0.00
Total oil cmpds	0.10	73.41	0.50	0.04	0.03	0.04	72.20	5.02	0.01	0.01	0.01

(Table continued)

	2hr - Port 1	2hr - Port 2	2hr - Port 3	2hr - Port 4	2hr - Port 5	4hr - Port 1	4hr - Port 2	4hr - Port 3	4hr - Port 4	4hr - Port 5	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 4	24hr - Port 5
anthracene	0.00	0.01	0.00	NA	NA	0.00	0.00	0.00	0.00	NA	0.00	0.00	0.00	0.00	0.00
biphenyl	0.04	0.04	NA	NA	NA	0.02	0.02	NA	NA	NA	NA	NA	NA	NA	NA
chrys/triphen/bz(a)a	0.04	0.04	NA	NA	NA	0.00	0.03	0.00	NA	NA	0.00	NA	NA	NA	NA
chrys-C1 (6me)	0.04	0.04	NA	NA	NA	0.02	0.03	NA	NA	NA	NA	NA	NA	NA	NA
chrys-C2 (6et)	0.10	0.10	NA	NA	NA	0.05	0.06	NA	NA	NA	NA	NA	NA	NA	NA
chrys-C3 (noStd)	0.15	0.12	0.00	0.00	0.00	0.07	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
chrys-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBT	0.08	0.08	0.01	0.00	0.00	0.04	0.05	0.02	0.01	0.00	0.02	0.02	0.02	0.01	0.01
DBT-C1 (noStd)	0.23	0.22	0.00	NA	NA	0.12	0.14	0.00	0.00	NA	0.00	0.00	0.00	0.00	0.00

DBT-C2 (4,6meDBT)	0.38	0.37	0.04	NA	NA	0.20	0.24	0.08	0.05	NA	0.06	0.08	0.07	0.06	0.06
DBT-C3 (noStd)	0.35	0.33	0.03	NA	NA	0.18	0.22	0.07	0.04	0.01	0.05	0.06	0.06	0.05	0.05
DBT-C4 (noStd)	0.21	0.19	0.02	0.00	0.00	0.10	0.14	0.04	0.03	0.00	0.04	0.04	0.04	0.03	0.04
fluo	0.04	0.04	0.00	0.01	0.01	0.02	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
fluo-C1 (1me)	0.14	0.14	0.01	NA	NA	0.07	0.08	0.03	0.01	NA	0.02	0.03	0.03	0.02	0.02
fluo-C2 (noStd)	0.26	0.25	0.00	0.00	0.00	0.14	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
fluo-C3 (noStd)	0.25	0.25	0.02	NA	NA	0.16	0.17	0.05	0.03	NA	0.03	0.04	0.03	0.02	0.03
fluo-C4 (noStd)	0.16	0.21	0.00	0.00	0.00	0.12	0.11	0.03	0.00	0.00	0.03	0.03	0.00	0.00	0.00
hopane	0.08	0.07	0.01	NA	NA	0.04	0.05	0.02	0.01	0.00	0.01	0.02	0.01	0.01	0.01
naph	0.29	0.30	0.04	NA	NA	0.18	0.21	0.10	0.06	0.02	0.06	0.08	0.08	0.07	0.08
naph-1me	0.35	0.38	0.06	NA	NA	0.20	0.24	0.14	0.00	0.04	0.00	0.00	0.00	0.00	0.00
naph-2me	0.34	0.38	0.03	NA	NA	0.16	0.21	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00
naph-C2 (1,2me)	1.43	1.41	0.15	NA	NA	0.77	0.89	0.33	0.19	0.08	0.26	0.32	0.29	0.26	0.27
naph-C3 (3,5,5)	0.94	0.92	0.10	NA	NA	0.49	0.57	0.21	0.12	0.05	0.16	0.20	0.18	0.16	0.17
naph-C4 (noStd)	0.71	0.69	0.08	NA	NA	0.37	0.44	0.15	0.09	NA	0.12	0.14	0.13	0.12	0.12
nC10	0.33	0.38	0.04	NA	NA	0.19	0.21	0.08	0.04	NA	NA	NA	0.02	NA	NA
nC11	0.92	1.03	0.06	NA	NA	0.57	0.62	0.21	0.12	0.04	0.05	0.08	0.06	0.03	0.04

nC12	1.22	1.27	0.07	NA	NA	0.72	0.82	0.28	0.15	0.06	0.07	0.12	0.12	0.09	0.09
nC13	1.35	1.35	0.07	NA	NA	0.78	0.88	0.26	0.14	0.05	0.07	0.10	0.13	0.10	0.10
nC14	1.25	1.29	0.06	NA	NA	0.61	0.77	0.19	0.10	NA	0.07	0.09	0.10	0.08	0.07
nC15	1.08	1.16	0.07	NA	NA	0.60	0.72	0.19	0.10	NA	0.07	0.07	0.07	0.07	0.07
nC16	1.12	1.10	0.09	NA	NA	0.58	0.72	0.21	0.12	0.04	0.08	0.08	0.08	0.08	0.08
nC17pris	2.23	2.03	0.16	NA	NA	1.07	1.32	0.38	0.19	NA	0.29	0.23	0.23	0.20	0.22
nC18phyt	1.63	1.58	0.11	NA	NA	0.83	0.99	0.26	0.14	0.05	0.14	0.14	0.16	0.13	0.15
nC19	0.85	0.83	NA	NA	NA	0.39	0.49	0.12	0.06	NA	NA	NA	NA	NA	NA
nC20	0.78	0.75	0.03	NA	NA	0.35	0.42	0.10	0.04	NA	0.03	0.03	0.03	0.02	0.03
nC21	0.74	0.72	0.02	NA	NA	0.33	0.42	0.07	0.03	NA	0.02	0.02	0.02	0.02	0.02
nC22	0.71	0.69	0.03	NA	NA	0.31	0.41	0.07	0.03	NA	0.03	0.02	0.02	0.02	0.02
nC23	0.67	0.66	0.02	NA	NA	0.29	0.37	0.06	0.03	NA	0.03	0.03	0.02	0.02	0.02
nC24	0.56	0.55	0.01	NA	NA	0.23	0.30	0.05	0.02	NA	0.02	0.02	0.02	0.02	0.02
nC25	0.45	0.46	0.01	NA	NA	0.18	0.24	0.03	0.01	NA	0.01	0.01	0.01	0.01	NA
nC26	0.39	0.37	0.01	NA	NA	0.14	0.20	0.02	NA	NA	0.01	NA	NA	NA	NA
nC27	0.29	0.28	NA	NA	NA	0.10	0.15	0.01	NA	NA	0.01	NA	NA	NA	NA
nC28	0.24	0.23	NA	NA	NA	0.08	0.11	0.01	NA	NA	0.01	NA	NA	NA	NA

nC29	0.20	0.20	NA	NA	NA	0.07	0.10	0.01	NA	NA	0.01	NA	NA	NA	NA
nC30	0.13	0.12	NA	NA	NA	0.04	0.06	NA	NA	NA	NA	NA	NA	NA	NA
nC31	0.09	0.09	NA	NA	NA	0.03	0.04	NA	NA	NA	NA	NA	NA	NA	NA
nC32	0.07	0.07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC33	0.06	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC34	0.04	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC35	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC36	0.04	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00	NA	0.00	0.00	0.00	0.00	0.00
nC37	0.00	0.01	0.00	0.00	NA	0.00	0.00	NA	0.00	0.00	0.00	NA	NA	NA	NA
nC38	0.04	0.02	NA	NA	NA	0.00	0.01	NA	NA	0.00	0.00	0.00	NA	NA	NA
nC39	0.02	0.01	0.00	NA	NA	NA	0.00	NA	0.00	NA	0.00	NA	NA	0.00	NA
nC40	0.03	0.01	NA	NA	0.00	NA	NA	NA	NA	NA	0.00	0.00	0.00	NA	0.00
o-terphenyl	0.00	0.00	0.00	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phen	0.11	0.11	0.01	NA	NA	0.06	0.07	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02
phen-C1 (1me)	0.33	0.31	0.00	0.00	0.00	0.17	0.20	0.07	0.03	0.00	0.05	0.05	0.06	0.04	0.04
phen-C2 (3,6me)	0.51	0.50	0.06	NA	NA	0.29	0.33	0.11	0.06	NA	0.09	0.11	0.10	0.09	0.09
phen-C3 (9et10me)	0.74	0.68	0.07	NA	NA	0.40	0.47	0.15	0.09	NA	0.12	0.14	0.13	0.12	0.12

phen-C4 (noStd)	0.42	0.28	0.03	0.00	0.00	0.19	0.23	0.05	0.03	0.01	0.04	0.05	0.06	0.05	0.05
pyr-C1 (1me)	0.04	0.04	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyr-C2 (noStd)	0.08	0.08	0.00	0.00	0.00	0.04	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyr-C3 (noStd)	0.08	0.07	0.00	0.00	0.00	0.04	0.05	0.01	0.00	0.00	0.01	0.02	0.01	0.01	0.02
pyr-C4 (noStd)	0.08	0.08	0.00	0.00	0.00	0.04	0.05	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.01
pyrene	0.00	0.00	0.00	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs	9.01	8.73	0.78	0.01	0.01	4.79	5.66	1.75	0.87	0.25	1.22	1.49	1.34	1.18	1.23
Total alkanes	17.71	17.33	0.87	0.00	0.00	8.49	10.37	2.62	1.32	0.24	1.01	1.05	1.10	0.90	0.92
Total oil cmpds	26.72	26.06	1.65	0.01	0.01	13.28	16.03	4.37	2.19	0.49	2.23	2.53	2.44	2.07	2.16

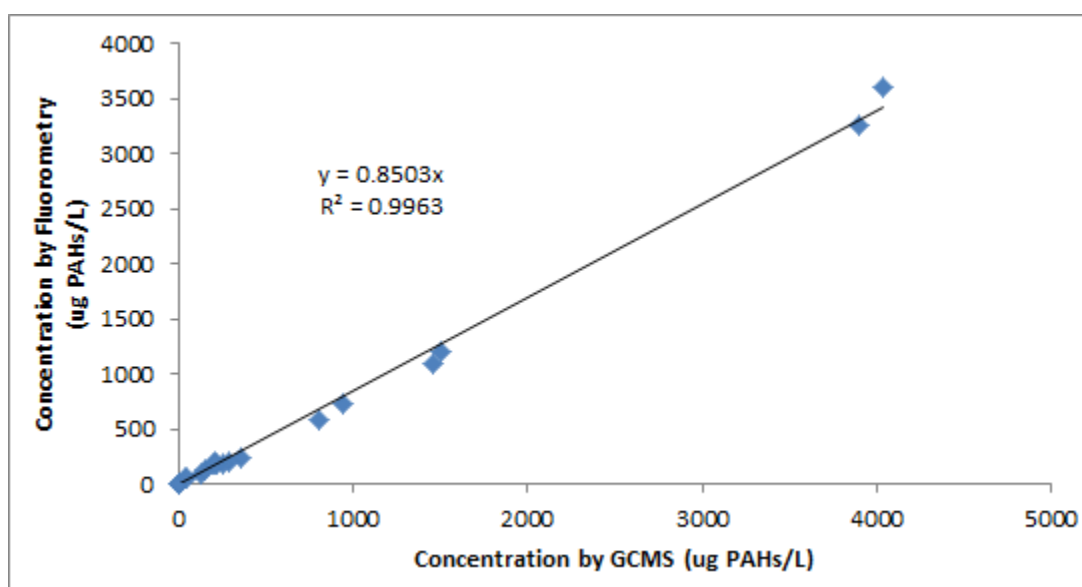
The total PAH values from the tables above were then divided by 6, to account for the concentration factor (30mL seawater sample was extracted with 5mL of hexane, concentrating the sample by a factor of 6), then multiplied by 1000 to scale from concentration per mL to L of sample in the following table.

Sample name	ug PAHs/mL aqueous sample	ug PAHs/L aqueous sample
ADAC_OD-Rep2-Control-P1	0.00	0.00
ADAC_OD-Rep2-30min-P1	4.03	4034.77
ADAC_OD-Rep2-30min-P2	0.04	39.91
ADAC_OD-Rep2-30min-P3	0.00	0.13

ADAC_OD-Rep2-30min-P4	0.00	0.07
ADAC_OD-Rep2-30min-P5	0.00	0.07
ADAC_OD-Rep2-1hr_P1	3.90	3904.92
ADAC_OD-Rep2-1hr_P2	0.35	354.42
ADAC_OD-Rep2-1hr_P3	0.00	1.93
ADAC_OD-Rep2-1hr_P4	0.00	1.50
ADAC_OD-Rep2-1hr_P5	0.00	1.44
ADAC_OD-Rep2-2hr_P1	1.50	1502.29
ADAC_OD-Rep2-2hr_P2	1.45	1454.45
ADAC_OD-Rep2-2hr_P3	0.13	130.61
ADAC_OD-Rep2-2hr_P4	0.00	1.61
ADAC_OD-Rep2-2hr_P5	0.00	1.20
ADAC_OD-Rep2-4hr_P1	0.80	799.13
ADAC_OD-Rep2-4hr_P2	0.94	943.99
ADAC_OD-Rep2-4hr_P3	0.29	292.50
ADAC_OD-Rep2-4hr_P4	0.15	145.08
ADAC_OD-Rep2-4hr_P5	0.04	42.01
ADAC_OD-Rep2-24hr_P1	0.20	203.13

ADAC_OD-Rep2-24hr_P2	0.25	248.06
ADAC_OD-Rep2-24hr_P3	0.22	224.09
ADAC_OD-Rep2-24hr_P4	0.20	196.13
ADAC_OD-Rep2-24hr_P5	0.21	205.79

A.B.B.B.D. Relationship between Fluorometry and GCMS data:



The relationship between fluorometry and GCMS measurements proved to be linear over all liquid-liquid extracted samples from several different Oil and Dispersant replicates. Therefore, in the following Oil and Dispersant replicates, we relied entirely upon the GCMS data, which provides information on both alkanes and PAHs.

A.B.B.B.E. GCxGC SPME Results:

	1hr - Port 1	1hr - Port 2	1hr - Port 3	1hr - Port 4	1hr - Port 5	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 5
napC0	26.07	17.69	0.33	0.01	0.00	8.75	15.92	12.42	9.25
napC1	107.24	35.23	0.94	0.07	0.03	30.65	40.61	32.41	21.97

napC2	164.32	32.49	1.08	0.05	0.02	29.46	42.67	37.55	5.94
napC3	269.28	47.03	0.92	0.00	0.00	35.34	32.65	32.91	37.15
napC4	160.97	16.85	0.37	0.00	0.00	13.09	9.75	10.63	14.93
fluC0	11.04	1.11	0.01	0.00	0.00	0.95	1.02	0.92	0.78
fluC1	28.91	3.09	0.05	0.00	0.00	2.33	2.35	2.27	2.39
fluC2	33.87	3.59	0.11	0.00	0.01	2.69	2.62	2.58	3.38
fluC3	23.55	1.83	0.05	0.00	0.00	1.50	1.67	1.33	2.13
fluC4	7.71	0.45	0.00	0.00	0.00	0.36	0.68	0.39	0.77
oxFluC 0	0.07	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01
oxFluC 1	0.92	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03
oxFluC 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxFluC 3	11.10	0.30	0.00	0.00	0.00	0.25	0.05	0.08	0.30
pheC0	25.90	3.02	0.06	0.00	0.00	2.17	2.58	2.46	2.19
pheC1	29.18	4.47	0.13	0.01	0.01	3.42	3.78	3.74	4.30
pheC2	38.27	3.61	0.12	0.03	0.02	2.56	4.01	2.88	3.71
pheC3	18.78	1.34	0.04	0.01	0.01	1.06	1.73	1.27	1.72
pheC4	8.08	0.50	0.00	0.00	0.00	0.39	0.64	0.45	0.47

dbtC0	24.95	2.78	0.04	0.00	0.00	2.00	2.13	2.05	1.98
dbtC1	29.50	3.61	0.08	0.00	0.00	2.69	2.57	2.68	3.35
dbtC2	38.78	3.26	0.12	0.02	0.02	2.64	2.84	2.61	3.67
dbtC3	20.14	1.60	0.04	0.00	0.00	1.35	1.98	1.37	2.18
dbtC4	8.14	0.60	0.00	0.00	0.00	0.48	0.81	0.51	0.73
pyrC0	0.84	0.07	0.00	0.00	0.00	0.06	0.07	0.06	0.08
pyrC1	3.71	0.24	0.00	0.00	0.00	0.22	0.24	0.25	0.29
pyrC2	4.05	0.33	0.00	0.00	0.00	0.27	0.40	0.38	0.27
pyrC3	5.29	0.25	0.00	0.00	0.00	0.20	0.31	0.25	0.32
pyrC4	2.79	0.11	0.00	0.00	0.00	0.08	0.16	0.11	0.15
chrC0	5.59	0.36	0.01	0.00	0.00	0.30	0.33	0.35	0.40
chrC1	6.40	0.36	0.00	0.00	0.00	0.30	0.36	0.36	0.41
chrC2	6.22	0.30	0.00	0.00	0.00	0.26	0.32	0.27	0.37
chrC3	3.31	0.15	0.00	0.00	0.00	0.12	0.16	0.11	0.18
chrC4	1.21	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03
oxBzA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs (ug/L)	1126.15	186.67	4.53	0.20	0.12	145.95	175.42	155.66	125.80

A.B.B.C. Replicate 3

A.B.B.C.A. Sampling Scheme:

Experiment name: **Oil and Disp-Rep3 20200716**

Description: copepods, oil, dispersant, NO stratification

Oil added on 7/16/20 at 12:01pm; **5.36 g** of oil+dispersant added (6.5mL of evaporated Alaska North Slope oil, and 310uL of Corexit 9500 dispersant)

	Time	Port 1	Port 2	Port 3	Port 4	Port 5
Control	11:55-12:00	S/L/D	D	D	D	D
0.5 hr	12:30-12:36pm	L/D	L/D	L/D	L/D	L/D
1 hr	12:56-1:10pm	S/L/D	S/L/D	S/L/D	S/L/D	S/L/D
2hr	2:01-2:10pm	L/D	L/D	L/D	L/D	L/D
4hr	3:55-4:04pm	L/D	L/D	L/D	L/D	L/D
24hr	12:02-12:14pm	S/L/D	S/L/D	S/L/D	S/L/D	S/L/D

*50uL of concentrated phosphoric acid was added to samples for SPME, fluorescence and liquid-liquid extraction after they were sampled.

S= sample taken for SPME measurement (2x - SPME vial with 18mL of sample).

L=sample take for liquid-liquid extraction in hexane to be run on fluorometer and GCMS (1x - 40mL vial with 30mL of sample).

D=sample taken for droplet size distribution on a hemocytometer under a fluorescent microscope (1x - 1.8mL vial with ~1mL sample).

Glass syringes were cleaned between samples with hexane then methanol then water.

5mL of water was pulled out of the sampling tubes and discarded before samples were taken at each time point.

A.B.B.C.B. GCMS Results:

	Control - Port 1	0.5hr - Port 1	0.5hr - Port 2	0.5hr - Port 3	0.5hr - Port 4	0.5hr - Port 5	1hr - Port 1	1hr - Port 2	1hr - Port 3	1hr - Port 4	1hr - Port 5
anthracene	NA	0.01	NA	NA	NA	NA	0.01	NA	NA	NA	NA

biphenyl	NA	0.05	NA	NA	NA	NA	0.09	NA	NA	NA	NA
chrys/triphen/b z(a)a	NA	0.05	NA	NA	NA	NA	0.08	NA	NA	NA	NA
chrys-C1 (6me)	NA	0.06	NA	NA	NA	NA	0.10	NA	NA	NA	NA
chrys-C2 (6et)	NA	0.13	NA	NA	NA	NA	0.23	NA	NA	NA	NA
chrys-C3 (noStd)	0.00	0.16	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00
chrys-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00
DBT	0.00	0.11	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00
DBT-C1 (noStd)	NA	0.30	NA	NA	NA	NA	0.51	NA	NA	NA	NA
DBT-C2 (4,6meDBT)	NA	0.49	NA	NA	NA	NA	0.82	NA	NA	NA	NA
DBT-C3 (noStd)	NA	0.46	NA	NA	NA	NA	0.77	NA	NA	NA	NA
DBT-C4 (noStd)	0.00	0.27	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00
fluo	0.01	0.06	0.01	0.01	0.01	0.01	0.10	0.01	0.01	0.01	0.01
fluo-C1 (1me)	NA	0.18	NA	NA	NA	NA	0.32	NA	NA	NA	NA
fluo-C2 (noStd)	0.00	0.34	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00	0.00
fluo-C3 (noStd)	NA	0.33	NA	NA	NA	NA	0.60	NA	NA	NA	NA
fluo-C4 (noStd)	0.00	0.27	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00
hopane	NA	0.11	NA	0.00	0.00	NA	0.20	NA	NA	NA	NA

naph	NA	0.42	NA	NA	NA	NA	0.67	0.00	NA	NA	NA
naph-1me	NA	0.55	NA	NA	NA	NA	0.96	NA	NA	NA	NA
naph-2me	NA	0.54	NA	NA	NA	NA	1.12	NA	NA	NA	NA
naph-C2 (1,2me)	NA	2.04	NA	NA	NA	NA	3.84	NA	NA	NA	NA
naph-C3 (3,5,5)	NA	1.30	NA	NA	NA	NA	2.49	NA	NA	NA	NA
naph-C4 (noStd)	NA	1.00	NA	NA	NA	NA	1.83	NA	NA	NA	NA
nC10	NA	1.10	NA	NA	NA	NA	1.60	NA	NA	NA	NA
nC11	NA	1.84	NA	NA	NA	NA	2.78	0.00	0.00	NA	NA
nC12	0.03	1.96	NA	NA	NA	NA	3.14	0.02	0.02	0.02	NA
nC13	0.03	1.95	NA	NA	NA	0.03	3.23	0.02	0.02	0.03	0.02
nC14	NA	1.92	NA	NA	NA	NA	3.37	NA	NA	NA	NA
nC15	NA	1.60	NA	NA	NA	NA	2.92	NA	NA	NA	NA
nC16	NA	1.58	NA	NA	NA	NA	2.83	NA	NA	NA	NA
nC17pris	NA	3.10	NA	NA	NA	NA	4.84	NA	NA	NA	NA
nC18phyt	NA	2.27	NA	NA	NA	NA	3.93	NA	NA	NA	NA
nC19	NA	1.22	NA	NA	NA	NA	0.20	NA	NA	NA	NA
nC20	NA	1.09	NA	NA	NA	NA	2.06	NA	NA	NA	NA

nC21	NA	1.03	NA	NA	NA	NA	1.97	NA	NA	NA	NA
nC22	NA	1.03	NA	NA	NA	NA	1.93	NA	NA	NA	NA
nC23	NA	0.94	NA	NA	NA	NA	1.79	NA	NA	NA	NA
nC24	NA	0.77	NA	NA	NA	NA	1.56	NA	NA	NA	NA
nC25	NA	0.65	NA	NA	NA	NA	1.29	NA	NA	NA	NA
nC26	NA	0.57	NA	NA	NA	NA	1.14	NA	NA	NA	NA
nC27	NA	0.43	NA	NA	NA	NA	0.86	NA	NA	NA	NA
nC28	NA	0.35	NA	NA	NA	NA	0.71	NA	NA	NA	NA
nC29	NA	0.30	NA	NA	NA	NA	0.62	NA	NA	NA	NA
nC30	NA	0.20	NA	NA	NA	NA	0.40	NA	NA	NA	NA
nC31	NA	0.15	NA	NA	NA	NA	0.33	NA	NA	NA	NA
nC32	NA	0.12	NA	NA	NA	NA	0.23	NA	NA	NA	NA
nC33	NA	0.09	NA	NA	NA	NA	0.18	NA	NA	NA	NA
nC34	NA	0.06	NA	NA	NA	NA	0.14	NA	NA	NA	NA
nC35	NA	0.06	NA	NA	NA	NA	0.11	NA	NA	NA	NA
nC36	NA	0.06	NA	NA	NA	0.00	0.09	NA	0.00	NA	NA
nC37	NA	0.04	NA	0.00	NA	0.00	0.08	NA	0.00	NA	NA

nC38	NA	0.05	0.00	NA	NA	NA	0.09	0.00	NA	NA	NA
nC39	NA	0.03	0.00	0.00	0.00	0.00	0.07	0.00	NA	NA	NA
nC40	NA	0.04	NA	NA	NA	0.00	0.07	0.00	NA	NA	NA
o-terphenyl	NA	0.00	0.00	NA	NA	NA	0.00	NA	NA	NA	NA
phen	NA	0.15	NA	NA	NA	NA	0.29	0.00	NA	NA	NA
phen-C1 (1me)	0.00	0.43	0.00	0.00	0.00	0.00	0.81	0.00	0.00	0.00	0.00
phen-C2 (3,6me)	NA	0.68	NA	NA	NA	NA	1.17	NA	NA	NA	NA
phen-C3 (9et10me)	NA	0.94	NA	NA	NA	NA	1.68	NA	NA	NA	NA
phen-C4 (noStd)	0.00	0.54	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.00
pyr-C1 (1me)	0.00	0.05	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00
pyr-C2 (noStd)	0.00	0.12	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00
pyr-C3 (noStd)	0.00	0.09	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
pyr-C4 (noStd)	0.00	0.12	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00
pyrene	NA	0.00	NA	NA	NA	NA	0.01	NA	NA	NA	NA
Total PAHs	0.01	12.36	0.01	0.01	0.01	0.01	22.33	0.01	0.01	0.01	0.01
Total alkanes	0.07	26.60	0.00	0.00	0.00	0.03	44.54	0.04	0.04	0.04	0.02

Total oil cmpds	0.07	38.97	0.01	0.01	0.01	0.04	66.87	0.05	0.05	0.05	0.03
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(Table continued)

	2hr - Port 1	2hr - Port 2	2hr - Port 3	2hr - Port 4	2hr - Port 5	4hr - Port 1	4hr - Port 2	4hr - Port 3	4hr - Port 4	4hr - Port 5	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 4	24hr - Port 5
anthracene	0.00	NA	NA	NA	NA	0.00	0.00	NA	NA	NA	0.00	0.00	0.00	0.00	0.00
biphenyl	0.03	NA	NA	NA	NA	0.02	0.01	NA	NA	NA	0.00	NA	NA	NA	NA
chrys/triphen/ bz(a)a	0.04	NA	NA	NA	NA	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA
chrys-C1 (6me)	0.04	NA	NA	NA	NA	0.02	0.01	NA	NA	NA	NA	NA	NA	NA	NA
chrys-C2 (6et)	0.09	NA	NA	NA	NA	0.05	0.03	NA	NA	NA	NA	NA	NA	NA	NA
chrys-C3 (noStd)	0.12	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
chrys-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBT	0.07	0.00	0.00	0.00	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
DBT-C1 (noStd)	0.19	NA	NA	NA	NA	0.13	0.07	0.00	NA	NA	0.01	0.03	0.02	0.02	0.02
DBT-C2 (4,6meDBT)	0.32	NA	NA	NA	NA	0.21	0.12	NA	NA	NA	NA	0.04	0.04	0.04	0.04
DBT-C3 (noStd)	0.29	NA	NA	NA	NA	0.19	0.10	NA	NA	NA	NA	NA	NA	NA	NA
DBT-C4 (noStd)	0.17	0.00	0.00	0.00	0.00	0.13	0.06	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02
fluo	0.03	0.01	0.01	0.00	NA	0.02	0.01	0.00	NA	NA	0.00	0.01	0.01	0.01	0.01
fluo-C1 (1me)	0.11	NA	NA	NA	NA	0.07	0.04	NA	NA	NA	0.00	0.02	0.02	0.02	0.02

fluo-C2 (noStd)	0.21	0.00	0.00	0.00	0.00	0.11	0.06	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.02
fluo-C3 (noStd)	0.23	NA	NA	NA	NA	0.15	0.08	NA	NA	NA	NA	0.03	0.03	0.02	0.03
fluo-C4 (noStd)	0.16	0.00	0.00	0.00	0.00	0.14	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
hopane	0.07	NA	NA	NA	NA	0.05	0.02	NA	NA	NA	NA	0.01	0.01	0.01	0.01
naph	0.28	0.03	0.00	0.00	0.00	0.19	0.13	0.01	0.00	0.00	0.06	0.06	0.06	0.06	0.06
naph-1me	0.33	0.04	NA	NA	NA	0.21	0.15	0.01	NA	NA	0.07	0.11	0.10	0.07	0.07
naph-2me	0.31	0.01	NA	NA	NA	0.18	0.10	0.01	NA	NA	0.04	0.03	0.02	0.03	0.03
naph-C2 (1,2me)	1.25	0.08	NA	NA	NA	0.76	0.44	0.04	NA	NA	0.11	0.22	0.20	0.18	0.19
naph-C3 (3,5,5)	0.80	0.05	NA	NA	NA	0.49	0.27	NA	NA	NA	0.04	0.14	0.13	0.11	0.12
naph-C4 (noStd)	0.62	NA	NA	NA	NA	0.39	0.22	0.01	NA	NA	0.01	0.10	NA	NA	0.09
nC10	0.53	NA	NA	NA	NA	0.23	0.10	NA	NA	NA	0.05	0.04	0.04	NA	NA
nC11	1.07	0.03	NA	NA	NA	0.58	0.29	0.00	NA	NA	0.09	0.06	0.04	0.04	0.07
nC12	1.22	0.06	NA	0.01	0.01	0.68	0.36	0.03	NA	NA	0.15	0.10	0.10	0.07	0.09
nC13	1.24	0.05	0.02	0.02	0.02	0.71	0.38	0.03	0.02	NA	0.11	0.10	0.09	0.07	0.09
nC14	1.03	NA	NA	NA	NA	0.68	0.31	NA	NA	NA	0.06	0.08	0.06	0.06	0.07
nC15	1.12	NA	NA	NA	NA	0.59	0.30	NA	NA	NA	0.03	0.06	0.06	0.05	0.06
nC16	0.93	NA	NA	NA	NA	0.58	0.31	NA	NA	NA	0.03	0.08	0.06	0.06	0.06

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pyrene	0.00	NA	NA	NA	NA	0.00	0.00	0.00	NA	NA	NA	0.00	0.00	0.00	0.00
Total PAHs	7.74	0.23	0.01	0.00	0.00	4.83	2.67	0.11	0.00	0.00	0.37	0.95	0.82	0.73	0.84
Total alkanes	15.17	0.14	0.02	0.03	0.03	8.65	4.11	0.06	0.02	0.00	0.54	0.82	0.71	0.60	0.69
Total oil cmpds	22.91	0.37	0.03	0.03	0.03	13.48	6.78	0.18	0.02	0.00	0.91	1.77	1.53	1.32	1.53

The total PAH values from the tables above were then divided by 6, to account for the concentration factor (30mL seawater sample was extracted with 5mL of hexane, concentrating the sample by a factor of 6), then multiplied by 1000 to scale from concentration per mL to L of sample in the following table.

sample name	ug PAHs/mL aqueous sample	ug PAHs/L aqueous sample
ADAC_OD-Rep3-Control_P1	0.00	1.32
ADAC_OD-Rep3-30min_P1	2.06	2060.47
ADAC_OD-Rep3-30min_P2	0.00	1.38
ADAC_OD-Rep3-30min_P3	0.00	1.32
ADAC_OD-Rep3-30min_P4	0.00	1.32
ADAC_OD-Rep3-30min_P5	0.00	1.20
ADAC_OD-Rep3-1hr_P1	3.72	3721.54
ADAC_OD-Rep3-1hr_P2	0.00	2.17
ADAC_OD-Rep3-1hr_P3	0.00	1.62

ADAC_OD-Rep3-1hr_P4	0.00	1.26
ADAC_OD-Rep3-1hr_P5	0.00	1.38
ADAC_OD-Rep3-2hr_P1	1.29	1290.11
ADAC_OD-Rep3-2hr_P2	0.04	37.98
ADAC_OD-Rep3-2hr_P3	0.00	1.63
ADAC_OD-Rep3-2hr_P4	0.00	0.31
ADAC_OD-Rep3-2hr_P5	0.00	0.12
ADAC_OD-Rep3-4hr_P1	0.81	805.42
ADAC_OD-Rep3-4hr_P2	0.45	445.34
ADAC_OD-Rep3-4hr_P3	0.02	18.71
ADAC_OD-Rep3-4hr_P4	0.00	0.12
ADAC_OD-Rep3-4hr_P5	0.00	0.12
ADAC_OD-Rep3-24hr_P1	0.06	62.17
ADAC_OD-Rep3-24hr_P2	0.16	158.58
ADAC_OD-Rep3-24hr_P3	0.14	137.19
ADAC_OD-Rep3-24hr_P4	0.12	120.97
ADAC_OD-Rep3-24hr_P5	0.14	140.26

A.B.B.C.C. GCxGC SPME Results:

	Control - Port 1	1hr - Port 1	1hr - Port 2	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 4	24hr - Port 5
napC0	0.03	67.50	0.64	7.26	7.13	9.73	8.97	8.33
napC1	0.27	127.20	1.90	19.47	27.72	22.41	21.98	16.96
napC2	0.52	121.22	1.97	23.04	12.73	25.65	29.48	22.69
napC3	0.51	194.23	2.09	33.49	37.73	34.34	32.81	28.50
napC4	0.09	185.16	1.15	16.06	18.55	15.38	12.13	15.43
fluC0	0.00	8.46	0.03	0.93	0.90	0.83	0.77	0.66
fluC1	0.02	25.11	0.14	2.53	2.73	2.33	2.01	2.19
fluC2	0.02	33.12	0.28	3.54	3.17	3.13	2.43	3.44
fluC3	0.00	25.76	0.25	2.08	1.61	1.66	1.31	2.02
fluC4	0.00	10.11	0.08	0.73	0.42	0.44	0.40	0.65
oxFluC0	0.00	0.27	0.00	0.03	0.02	0.02	0.02	0.02
oxFluC1	0.00	0.57	0.00	0.05	0.04	0.03	0.03	0.03
oxFluC2	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
oxFluC3	0.00	7.42	0.01	0.56	0.34	0.18	0.22	0.26
pheC0	0.03	13.06	0.16	2.20	2.03	2.03	2.08	2.01

pheC1	0.03	23.63	0.36	3.82	3.43	3.27	3.37	3.53
pheC2	0.01	28.16	0.43	3.31	2.72	2.70	2.80	2.99
pheC3	0.00	7.29	0.25	1.40	0.89	1.08	1.05	1.35
pheC4	0.00	6.89	0.09	0.44	0.24	0.33	0.27	0.43
dbtC0	0.01	13.05	0.10	2.04	1.99	1.84	1.80	1.89
dbtC1	0.02	22.13	0.25	3.06	2.79	2.60	2.61	2.98
dbtC2	0.01	33.05	0.37	3.19	2.65	2.47	2.54	3.11
dbtC3	0.00	17.89	0.27	1.66	1.06	1.19	1.27	1.48
dbtC4	0.00	6.94	0.13	0.67	0.37	0.40	0.45	0.50
pyrC0	0.00	0.62	0.01	0.06	0.04	0.04	0.06	0.05
pyrC1	0.00	2.55	0.02	0.19	0.14	0.14	0.21	0.15
pyrC2	0.00	2.39	0.03	0.17	0.12	0.12	0.21	0.19
pyrC3	0.00	3.32	0.04	0.19	0.12	0.16	0.20	0.16
pyrC4	0.00	1.69	0.01	0.12	0.05	0.07	0.10	0.07
chrC0	0.00	2.46	0.04	0.21	0.16	0.15	0.26	0.15
chrC1	0.00	2.96	0.05	0.22	0.15	0.16	0.27	0.16
chrC2	0.00	2.92	0.04	0.22	0.13	0.17	0.24	0.15

chrC3	0.00	2.00	0.02	0.11	0.06	0.08	0.13	0.07
chrC4	0.00	0.69	0.00	0.03	0.00	0.01	0.01	0.01
oxBzA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs (ug/L)	1.58	999.84	11.18	133.08	132.22	135.16	132.46	122.62

A.B.B.D. Replicate 4

*A.B.B.D.A. Sampling Scheme:*Experiment name: **Oil_and_Disp-Rep4_20200730**

Description: copepods, oil, dispersant, NO stratification

Oil added on 7/30/20 at 11:00; **5.6 g** of oil+dispersant added (6.5mL of evaporated Alaska North Slope oil, and 310uL of Corexit 9500 dispersant)

	Time	Port 1	Port 2	Port 3	Port 4	Port 5
Control	10:50-10:56	S/L/D	D	D	D	D
0.5 hr	11:30-11:38	L/D	L/D	L/D	L/D	L/D
1 hr	12:00-12:12	S/L/D	S/L/D	S/L/D	S/L/D	S/L/D
2hr	13:01-13:08	L/D	L/D	L/D	L/D	L/D
4hr	15:00-15:07	L/D	L/D	L/D	L/D	L/D
24hr	10:30 AM	S/L/D	S/L/D	S/L/D	S/L/D	S/L/D

*50uL of concentrated phosphoric acid was added to samples for SPME, fluorescence and liquid-liquid extraction after they were sampled.

S= sample taken for SPME measurement (2x - SPME vial with 18mL of sample).

L=sample take for liquid-liquid extraction in hexane to be run on fluorometer and GCMS (1x - 40mL vial with 30mL of sample).

D=sample taken for droplet size distribution on a hemocytometer under a fluorescent microscope (1x - 1.8mL vial with ~1mL sample).

Glass syringes were cleaned between samples with hexane then methanol then water. 5mL of water was pulled out of the sampling tubes and discarded before samples were taken at each time point.

A.B.B.D.B. GCMS Results:

	Control - Port 1	0.5hr - Port 1	0.5hr - Port 2	0.5hr - Port 3	0.5hr - Port 4	0.5hr - Port 5	1hr - Port 1	1hr - Port 2	1hr - Port 3	1hr - Port 4	1hr - Port 5
anthracene	NA	0.06	NA	NA	NA	NA	0.03	NA	NA	NA	NA
biphenyl	NA	0.46	NA	NA	NA	NA	0.19	NA	NA	NA	NA
chrys/triphen/bz(a)a	NA	0.27	NA	NA	NA	NA	0.15	NA	NA	0.00	NA
chrys-C1 (6me)	NA	0.33	NA	NA	NA	NA	0.19	NA	NA	NA	NA
chrys-C2 (6et)	NA	0.76	NA	NA	NA	NA	0.42	NA	NA	NA	NA
chrys-C3 (noStd)	0.00	0.88	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00
chrys-C4 (noStd)	0.00	0.53	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00
DBT	0.00	0.69	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00
DBT-C1 (noStd)	NA	1.64	NA	NA	NA	NA	0.92	0.01	NA	NA	NA
DBT-C2 (4,6meDBT)	NA	2.67	NA	NA	NA	NA	1.54	NA	NA	NA	NA
DBT-C3 (noStd)	NA	2.59	NA	NA	NA	NA	1.57	NA	NA	NA	NA
DBT-C4 (noStd)	0.00	1.48	0.00	0.00	0.00	0.00	0.88	0.00	0.00	0.00	0.00
fluo	NA	0.36	NA	0.00	NA	NA	0.19	0.00	NA	0.00	NA

fluo-C1 (1me)	NA	1.07	NA	NA	NA	NA	0.61	NA	NA	NA	NA
fluo-C2 (noStd)	0.00	2.16	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.00	0.00
fluo-C3 (noStd)	NA	1.94	NA	NA	NA	NA	1.14	NA	NA	NA	NA
fluo-C4 (noStd)	0.00	1.53	0.00	0.00	0.00	0.00	0.95	0.00	0.00	0.00	0.00
hopane	NA	0.73	NA	0.00	0.00	NA	0.42	NA	NA	NA	NA
naph	NA	2.31	0.01	0.01	0.00	0.00	1.20	0.03	0.00	NA	NA
naph-1me	NA	3.44	NA	NA	NA	NA	1.76	0.03	NA	NA	NA
naph-2me	NA	4.31	0.00	NA	NA	NA	2.02	0.01	NA	NA	NA
naph-C2 (1,2me)	NA	13.64	0.02	NA	NA	NA	7.08	0.07	NA	NA	NA
naph-C3 (3,5,5)	NA	9.07	NA	NA	NA	NA	4.74	0.04	NA	NA	NA
naph-C4 (noStd)	NA	6.50	NA	NA	NA	NA	3.49	0.03	NA	NA	NA
nC10	NA	6.30	NA	NA	NA	NA	3.11	0.03	NA	NA	NA
nC11	NA	10.36	NA	NA	NA	NA	5.56	0.06	NA	NA	NA
nC12	NA	11.07	0.04	0.03	0.02	0.02	6.04	0.07	NA	NA	NA
nC13	0.02	10.97	0.03	0.02	0.04	0.02	5.92	0.06	0.03	NA	NA
nC14	NA	10.79	NA	NA	NA	NA	5.85	NA	NA	NA	NA
nC15	NA	9.83	NA	NA	NA	NA	5.37	NA	NA	NA	NA

nC16	NA	9.43	NA	NA	NA	NA	5.24	NA	NA	NA	NA
nC17pris	NA	15.82	NA	NA	NA	NA	8.40	NA	NA	NA	NA
nC18phyt	NA	12.88	NA	NA	NA	NA	7.33	NA	NA	NA	NA
nC19	NA	7.57	NA	NA	NA	NA	4.22	NA	NA	NA	NA
nC20	NA	6.97	NA	NA	NA	NA	3.83	NA	NA	NA	NA
nC21	NA	6.83	NA	NA	NA	NA	3.60	NA	NA	NA	NA
nC22	NA	6.68	NA	NA	NA	NA	3.55	NA	NA	NA	NA
nC23	NA	6.08	NA	NA	NA	NA	3.21	NA	NA	NA	NA
nC24	NA	5.25	NA	NA	NA	NA	2.95	NA	NA	NA	NA
nC25	NA	4.65	NA	NA	NA	NA	2.47	NA	NA	NA	NA
nC26	NA	4.03	NA	NA	NA	NA	2.20	NA	NA	NA	NA
nC27	NA	3.25	NA	NA	NA	NA	1.71	NA	NA	NA	NA
nC28	NA	2.76	NA	NA	NA	NA	1.39	NA	NA	NA	NA
nC29	NA	2.48	NA	NA	NA	NA	1.28	NA	NA	NA	NA
nC30	NA	1.61	NA	NA	NA	NA	0.85	NA	NA	NA	NA
nC31	NA	1.34	NA	NA	NA	NA	0.66	NA	NA	NA	NA
nC32	NA	0.98	NA	NA	NA	NA	0.48	NA	NA	NA	NA

nC33	NA	0.78	NA	NA	NA	NA	0.39	NA	NA	NA	NA
nC34	NA	0.70	NA	NA	NA	NA	0.33	NA	NA	NA	NA
nC35	NA	0.55	NA	NA	NA	NA	0.26	NA	NA	NA	NA
nC36	0.00	0.48	0.00	0.00	NA	NA	0.22	NA	0.00	0.00	NA
nC37	0.00	0.45	0.00	0.00	NA	0.00	0.20	0.00	0.00	0.00	NA
nC38	0.07	0.49	0.00	NA	NA	NA	0.21	0.00	NA	NA	NA
nC39	0.00	0.41	0.00	NA	NA	NA	0.18	0.00	NA	NA	NA
nC40	0.00	0.43	0.00	NA	NA	0.00	0.15	0.00	NA	NA	0.00
o-terphenyl	0.00	0.00	NA	0.00	NA	NA	0.00	0.00	0.00	0.00	NA
phen	NA	0.94	NA	NA	NA	NA	0.51	0.00	NA	0.00	NA
phen-C1 (1me)	0.00	2.69	0.00	0.00	0.00	0.00	1.51	0.00	0.00	0.00	0.00
phen-C2 (3,6me)	NA	3.76	NA	NA	NA	NA	2.18	NA	NA	NA	NA
phen-C3 (9et10me)	NA	5.51	NA	NA	NA	NA	3.16	0.03	NA	NA	NA
phen-C4 (noStd)	0.00	3.17	0.00	0.00	0.00	0.00	1.83	0.00	0.00	0.00	0.00
pyr-C1 (1me)	0.00	0.35	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00
pyr-C2 (noStd)	0.00	0.71	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00
pyr-C3 (noStd)	0.00	0.62	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.00

pyr-C4 (noStd)	0.00	0.61	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00
pyrene	NA	0.01	NA	NA	NA	NA	0.00	NA	NA	NA	NA
Total PAHs	0.00	77.80	0.03	0.01	0.00	0.00	42.40	0.24	0.00	0.00	0.00
Total alkanes	0.08	162.20	0.07	0.05	0.06	0.05	87.17	0.22	0.03	0.00	0.00
Total oil cmpds	0.08	240.00	0.11	0.05	0.07	0.05	129.57	0.46	0.03	0.00	0.00

	2hr - Port 1	2hr - Port 2	2hr - Port 3	2hr - Port 4	2hr - Port 5	4hr - Port 1	4hr - Port 2	4hr - Port 3	4hr - Port 4	4hr - Port 5	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 4	24hr - Port 5
anthracene	0.01	0.00	NA	NA	NA	0.00	0.00	0.00	NA	NA	0.00	0.00	0.00	0.00	0.00
biphenyl	0.04	NA	NA	NA	NA	0.03	0.02	NA	NA	NA	NA	NA	NA	NA	NA
chrys/triphen/bz(a)a	0.05	0.00	NA	NA	NA	0.04	0.03	0.00	NA	NA	0.00	0.00	0.00	0.00	0.00
chrys-C1 (6me)	0.05	0.02	NA	NA	NA	0.03	0.03	0.02	NA	NA	0.00	NA	NA	NA	NA
chrys-C2 (6et)	0.11	0.03	NA	NA	NA	0.08	0.06	0.04	NA	NA	0.01	0.01	0.01	0.01	0.01
chrys-C3 (noStd)	0.15	0.00	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
chrys-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBT	0.09	0.03	0.00	0.00	0.00	0.06	0.04	0.02	0.00	0.00	0.02	0.02	0.01	0.02	0.01
DBT-C1 (noStd)	0.24	0.10	NA	NA	NA	0.14	0.12	0.06	NA	NA	0.04	0.04	0.03	0.04	0.03
DBT-C2 (4,6meDBT)	0.41	0.17	NA	NA	NA	0.31	0.23	0.14	NA	NA	0.08	0.08	0.05	0.08	0.06

DBT-C3 (noStd)	0.39	0.14	NA	NA	NA	0.28	0.20	0.12	NA	NA	0.07	0.07	0.05	0.07	0.05
DBT-C4 (noStd)	0.22	0.09	0.00	0.00	0.00	0.17	0.12	0.09	0.00	0.00	0.05	0.05	0.03	0.05	0.04
fluo	0.05	0.02	NA	NA	NA	0.04	0.03	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
fluo-C1 (1me)	0.15	0.06	NA	NA	NA	0.11	0.08	0.04	NA	NA	0.03	0.03	0.02	0.03	0.02
fluo-C2 (noStd)	0.29	0.09	0.00	0.00	0.00	0.20	0.16	0.07	0.00	0.00	0.05	0.05	0.00	0.05	0.04
fluo-C3 (noStd)	0.25	0.11	NA	NA	NA	0.20	0.17	0.12	NA	NA	0.07	0.05	0.07	0.06	NA
fluo-C4 (noStd)	0.23	0.09	0.00	0.00	0.00	0.19	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
hopane	0.11	0.04	NA	NA	NA	0.06	0.04	0.02	0.00	NA	0.01	0.01	0.01	0.01	0.01
naph	0.35	0.14	0.01	NA	NA	0.27	0.20	0.03	0.01	0.00	0.10	0.09	0.03	0.10	0.08
naph-1me	0.43	0.17	NA	NA	NA	0.33	0.22	0.03	NA	NA	0.14	0.14	0.02	0.16	0.13
naph-2me	0.44	0.10	NA	NA	NA	0.31	0.20	0.02	NA	NA	0.06	0.06	0.01	0.07	0.05
naph-C2 (1,2me)	1.61	0.57	0.02	NA	NA	1.29	0.96	0.11	NA	NA	0.37	0.35	0.06	0.37	0.29
naph-C3 (3,5,5)	1.05	0.37	NA	NA	NA	0.85	0.64	0.13	NA	NA	0.22	0.22	0.06	0.23	0.17
naph-C4 (noStd)	0.82	0.30	NA	NA	NA	0.65	0.49	0.19	NA	NA	0.17	0.17	0.08	0.18	0.14
nC10	0.90	0.27	NA	NA	NA	0.39	0.34	0.06	NA	NA	0.06	0.06	0.05	0.08	0.07
nC11	1.60	0.62	NA	NA	NA	0.90	0.74	0.11	NA	NA	0.18	0.19	0.06	0.20	0.19
nC12	1.69	0.66	0.05	NA	NA	1.01	0.80	0.11	NA	NA	0.21	0.22	0.06	0.22	0.21

nC13	1.62	0.64	0.03	0.03	0.02	1.03	0.81	0.10	0.01	NA	0.18	0.18	0.05	0.20	0.19
nC14	1.46	0.50	NA	NA	NA	0.92	0.64	0.09	NA	NA	0.15	0.17	0.04	0.16	0.15
nC15	1.29	0.47	NA	NA	NA	0.98	0.69	0.13	NA	NA	0.15	0.16	0.04	0.16	0.15
nC16	1.32	0.47	NA	NA	NA	0.88	0.67	0.28	NA	NA	0.17	0.18	0.09	0.18	0.16
nC17pris	2.39	0.86	NA	NA	NA	1.61	1.20	0.61	NA	NA	0.33	0.32	0.20	0.34	0.26
nC18phyt	1.92	0.65	NA	NA	NA	1.24	0.92	0.50	NA	NA	0.23	0.23	0.16	0.23	0.20
nC19	1.11	0.34	NA	NA	NA	0.70	0.49	0.27	NA	NA	0.11	0.11	0.07	0.10	0.09
nC20	0.90	0.25	NA	NA	NA	0.61	0.43	0.22	NA	NA	0.08	0.07	0.05	0.08	0.05
nC21	0.86	0.24	NA	NA	NA	0.57	0.39	0.20	NA	NA	0.06	0.06	0.03	0.07	0.05
nC22	0.82	0.23	NA	NA	NA	0.55	0.39	0.20	NA	NA	0.06	0.06	0.04	0.06	0.05
nC23	0.79	0.22	NA	NA	NA	0.52	0.35	0.17	NA	NA	0.06	0.06	0.03	0.05	0.05
nC24	0.62	0.17	NA	NA	NA	0.43	0.30	0.15	NA	NA	0.05	0.05	0.03	0.04	0.03
nC25	0.53	0.13	NA	NA	NA	0.36	0.26	0.13	NA	NA	0.03	0.03	0.04	0.02	0.02
nC26	0.46	0.11	NA	NA	NA	0.31	0.21	0.11	NA	NA	0.04	0.02	0.03	0.02	0.02
nC27	0.34	0.08	NA	NA	NA	0.23	0.15	0.06	NA	NA	0.02	0.01	0.01	0.02	0.01
nC28	0.28	0.06	NA	NA	NA	0.19	0.12	0.05	NA	NA	0.02	0.01	0.01	0.01	0.01
nC29	0.24	0.05	NA	NA	NA	0.16	0.10	0.04	NA	NA	0.01	0.01	NA	0.01	0.01

nC30	0.15	0.03	NA	NA	NA	0.10	0.06	0.02	NA	NA	NA	NA	NA	NA	NA
nC31	0.11	0.02	NA	NA	NA	0.07	0.04	0.02	NA	NA	NA	NA	NA	NA	NA
nC32	0.09	NA	NA	NA	NA	0.07	0.05	0.02	NA	NA	NA	NA	NA	NA	NA
nC33	0.06	NA	NA	NA	NA	0.04	0.02	NA	NA	NA	NA	NA	NA	NA	NA
nC34	0.06	NA	NA	NA	NA	0.02	0.02	NA	NA	NA	NA	NA	NA	NA	NA
nC35	NA	NA	NA	NA	NA	0.02	0.02	NA	NA	NA	NA	NA	NA	NA	NA
nC36	0.02	0.00	NA	NA	NA	0.02	0.01	0.00	0.00	NA	0.00	0.00	0.00	0.00	NA
nC37	0.02	0.00	NA	NA	NA	0.01	0.01	0.00	NA	0.00	0.00	0.00	0.00	NA	0.00
nC38	0.02	NA	0.00	NA	NA	0.03	0.01	0.00	NA	0.00	NA	NA	NA	NA	0.00
nC39	0.02	NA	0.00	NA	NA	0.01	0.00	NA	NA	0.00	0.00	0.00	0.00	NA	NA
nC40	0.02	NA	0.00	NA	NA	0.02	0.00	NA	NA	0.00	0.00	NA	0.00	0.00	0.00
o-terphenyl	0.00	0.00	NA	NA	NA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phen	0.12	0.04	NA	NA	NA	0.09	0.06	0.03	NA	NA	0.03	0.02	0.02	0.02	0.02
phen-C1 (1me)	0.36	0.14	0.00	0.00	0.00	0.26	0.21	0.13	0.00	0.00	0.07	0.06	0.00	0.06	0.04
phen-C2 (3,6me)	0.57	0.22	NA	NA	NA	0.42	0.32	0.19	NA	NA	0.11	0.11	0.09	0.11	0.08
phen-C3 (9et10me)	0.81	0.32	NA	NA	NA	0.57	0.43	0.26	NA	NA	0.15	0.15	0.13	0.15	0.11
phen-C4 (noStd)	0.40	0.16	0.00	0.00	0.00	0.26	0.24	0.14	0.00	0.00	0.09	0.09	0.08	0.09	0.00

pyr-C1 (1me)	0.04	0.02	0.00	0.00	0.00	0.03	0.03	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
pyr-C2 (noStd)	0.09	0.04	0.00	0.00	0.00	0.08	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyr-C3 (noStd)	0.08	0.03	0.00	0.00	0.00	0.06	0.05	0.03	0.00	0.00	0.02	0.02	0.02	0.02	0.02
pyr-C4 (noStd)	0.07	0.02	0.00	0.00	0.00	0.06	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyrene	0.00	0.00	NA	NA	NA	0.00	0.00	0.00	NA	NA	0.00	0.00	0.00	0.00	0.00
Total PAHs	10.07	3.62	0.03	0.00	0.00	7.53	5.73	2.11	0.01	0.00	2.01	1.93	0.89	2.00	1.42
Total alkanes	21.73	7.05	0.08	0.03	0.02	14.00	10.25	3.65	0.01	0.00	2.21	2.19	1.08	2.24	1.96
Total oil cmpds	31.79	10.68	0.10	0.03	0.02	21.53	15.98	5.76	0.02	0.00	4.22	4.11	1.97	4.23	3.38

The total PAH values from the tables above were then divided by 6, to account for the concentration factor (30mL seawater sample was extracted with 5mL of hexane, concentrating the sample by a factor of 6), then multiplied by 1000 to scale from concentration per mL to L of sample in the following table.

sample name	ug PAHs/mL aqueous sample	ug PAHs/L aqueous sample
ADAC_OD-Rep4-Control_P1	0.00	0.00
ADAC_OD-Rep4-30min_P1	13.00	12995.31
ADAC_OD-Rep4-30min_P2	0.01	5.57
ADAC_OD-Rep4-30min_P3	0.00	1.23
ADAC_OD-Rep4-30min_P4	0.00	0.12
ADAC_OD-Rep4-30min_P5	0.00	0.12

ADAC_OD-Rep4-1hr_P1	7.07	7067.27
ADAC_OD-Rep4-1hr_P2	0.04	40.83
ADAC_OD-Rep4-1hr_P3	0.00	0.49
ADAC_OD-Rep4-1hr_P4	0.00	0.24
ADAC_OD-Rep4-1hr_P5	0.00	0.00
ADAC_OD-Rep4-2hr_P1	1.68	1677.67
ADAC_OD-Rep4-2hr_P2	0.60	603.65
ADAC_OD-Rep4-2hr_P3	0.00	4.55
ADAC_OD-Rep4-2hr_P4	0.00	0.00
ADAC_OD-Rep4-2hr_P5	0.00	0.00
ADAC_OD-Rep4-4hr_P1	1.25	1254.29
ADAC_OD-Rep4-4hr_P2	0.96	955.13
ADAC_OD-Rep4-4hr_P3	0.35	351.80
ADAC_OD-Rep4-4hr_P4	0.00	1.33
ADAC_OD-Rep4-4hr_P5	0.00	0.35
ADAC_OD-Rep4-24hr_P1	0.33	334.89
ADAC_OD-Rep4-24hr_P2	0.32	320.85

ADAC_OD-Rep4-24hr_P3	0.15	148.83
ADAC_OD-Rep4-24hr_P4	0.33	332.60
ADAC_OD-Rep4-24hr_P5	0.24	237.17

A.B.B.D.C. GCxGC SPME Results:

	Control - Port 1	1hr - Port 1	1hr - Port 2	1hr - Port 3	1hr - Port 4	1hr - Port 5	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 4	24hr - Port 5
napC0	0.11	175.08	1.26	0.20	0.09	0.11	9.08	9.80	9.09	16.15	7.28
napC1	0.54	118.56	3.43	0.58	0.35	0.43	19.88	21.16	23.61	35.22	20.77
napC2	0.98	111.10	4.75	0.71	0.50	0.67	24.94	24.04	20.70	37.51	21.29
napC3	1.56	327.60	7.48	0.93	0.49	0.98	35.67	40.06	34.21	45.94	33.05
napC4	0.97	120.49	4.41	0.50	0.25	0.52	17.24	15.40	16.96	16.57	17.89
fluC0	0.04	25.80	0.10	0.01	0.01	0.01	1.07	0.98	1.34	1.22	0.90
fluC1	0.13	38.71	0.44	0.05	0.03	0.05	2.67	2.62	2.61	2.96	2.47
fluC2	0.21	50.50	1.00	0.10	0.04	0.08	3.53	3.39	3.57	3.26	3.67
fluC3	0.12	31.32	0.84	0.07	0.01	0.03	2.15	1.93	2.09	1.72	2.07
fluC4	0.01	11.44	0.37	0.00	0.00	0.00	0.60	0.53	0.68	0.67	0.69
oxFlu C0	0.00	0.45	0.00	0.00	0.00	0.00	0.03	0.02	0.01	0.00	0.00
oxFlu C1	0.01	0.62	0.01	0.00	0.00	0.00	0.04	0.03	0.02	0.02	0.08

oxFlu C2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxFlu C3	0.00	6.26	0.09	0.00	0.00	0.00	0.36	0.32	0.39	0.18	0.44
pheC0	0.09	25.37	0.39	0.05	0.02	0.05	4.07	2.22	2.28	2.69	2.05
pheC1	0.19	36.77	0.99	0.09	0.04	0.07	4.15	3.97	1.78	3.83	3.62
pheC2	0.20	44.48	1.25	0.10	0.03	0.06	3.47	4.00	4.49	2.75	4.06
pheC3	0.09	15.06	0.65	0.05	0.02	0.03	1.66	1.35	1.62	1.22	1.53
pheC4	0.03	7.68	0.20	0.00	0.00	0.00	0.57	0.38	0.61	0.41	0.48
dbtC0	0.08	24.72	0.31	0.03	0.01	0.03	2.61	2.45	2.42	2.48	2.17
dbtC1	0.17	32.41	0.80	0.07	0.02	0.06	3.71	3.46	3.52	2.96	3.18
dbtC2	0.22	53.83	1.29	0.10	0.04	0.07	3.76	3.53	3.71	2.75	3.64
dbtC3	0.11	32.02	0.91	0.05	0.02	0.03	2.18	1.51	1.91	1.52	2.01
dbtC4	0.04	11.10	0.28	0.00	0.00	0.00	0.66	0.56	0.76	0.62	0.71
pyrC0	0.00	1.09	0.02	0.00	0.00	0.00	0.07	0.06	0.07	0.05	0.07
pyrC1	0.01	3.64	0.09	0.00	0.00	0.00	0.28	0.23	0.26	0.17	0.29
pyrC2	0.01	3.96	0.10	0.00	0.00	0.00	0.23	0.30	0.23	0.15	0.32
pyrC3	0.01	4.51	0.12	0.00	0.00	0.00	0.26	0.24	0.28	0.21	0.29
pyrC4	0.00	2.35	0.05	0.00	0.00	0.00	0.14	0.11	0.14	0.11	0.13

chrC0	0.02	4.98	0.11	0.01	0.00	0.01	0.32	0.27	0.29	0.17	0.31
chrC1	0.02	5.51	0.12	0.00	0.00	0.00	0.31	0.28	0.31	0.19	0.34
chrC2	0.01	4.95	0.12	0.00	0.00	0.00	0.29	0.24	0.28	0.20	0.31
chrC3	0.00	3.44	0.05	0.00	0.00	0.00	0.14	0.13	0.17	0.12	0.19
chrC4	0.00	1.38	0.01	0.00	0.00	0.00	0.04	0.03	0.04	0.02	0.05
oxBzA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs (ug/L)	5.98	1337.20	32.03	3.72	1.97	3.30	146.21	145.58	140.47	184.03	136.34

A.B.B.E. Replicate 5

*A.B.B.E.A. Sampling Scheme:*Experiment name: **Oil_and_Disp-Rep5_20200730**

Copepod Tower: copepods, oil, dispersant, NO stratification

Oil added on 7/30/20 at 1:32pm, **5.6 g** of oil+dispersant added (6.5mL of evaporated Alaska North Slope oil, and 310uL of Corexit 9500 dispersant)

	Time	Port 1	Port 2	Port 3	Port 4	Port 5
Control	13:28	S/L/D	D	D	D	D
0.5 hr	14:00-14:10	L/D	L/D	L/D	L/D	L/D
1 hr	14:30-14:43	S/L/D	S/L/D	S/L/D	S/L/D	S/L/D
2hr	15:30-15:36	L/D	L/D	L/D	L/D	L/D
4hr	17:30-17:37	L/D	L/D	L/D	L/D	L/D
24hr	13:31	S/L/D	S/L/D	S/L/D	S/L/D	S/L/D

*50uL of concentrated phosphoric acid was added to samples for SPME, fluorescence and liquid-liquid extraction after they were sampled.

S= sample taken for SPME measurement (2x - SPME vial with 18mL of sample).

L=sample take for liquid-liquid extraction in hexane to be run on fluorometer and GCMS (1x - 40mL vial with 30mL of sample).

D=sample taken for droplet size distribution on a hemocytometer under a fluorescent microscope (1x - 1.8mL vial with ~1mL sample).

Glass syringes were cleaned between samples with hexane then methanol then water.

5mL of water was pulled out of the sampling tubes and discarded before samples were taken at each time point.

A.B.B.E.B. GCMS Results:

	Control - Port 1	0.5hr - Port 1	0.5hr - Port 2	0.5hr - Port 3	0.5hr - Port 4	0.5hr - Port 5	1hr - Port 1	1hr - Port 2	1hr - Port 3	1hr - Port 4	1hr - Port 5
anthracene	NA	0.00	NA	NA	NA	NA	0.01	NA	NA	NA	NA
biphenyl	NA	NA	NA	NA	NA	NA	0.03	NA	NA	NA	NA
chrys/triphen/b z(a)a	NA	0.00	NA	NA	NA	NA	0.08	NA	NA	NA	NA
chrys-C1 (6me)	NA	0.01	NA	NA	NA	NA	0.08	NA	NA	NA	NA
chrys-C2 (6et)	NA	0.03	NA	NA	NA	NA	0.19	NA	NA	NA	NA
chrys-C3 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00
chrys-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00	0.00
DBT	0.00	0.02	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00
DBT-C1 (noStd)	NA	0.06	NA	NA	NA	NA	0.36	NA	NA	NA	NA
DBT-C2 (4,6meDBT)	NA	0.12	NA	NA	NA	NA	0.74	NA	NA	NA	NA

DBT-C3 (noStd)	NA	0.10	NA	NA	NA	NA	0.72	NA	NA	NA	NA
DBT-C4 (noStd)	0.00	0.07	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00
fluo	0.00	0.01	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
fluo-C1 (1me)	NA	0.03	NA	NA	NA	NA	0.26	NA	NA	NA	NA
fluo-C2 (noStd)	0.00	0.07	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00
fluo-C3 (noStd)	NA	0.07	NA	NA	NA	NA	0.52	NA	NA	NA	NA
fluo-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00
hopane	0.00	0.02	0.00	NA	NA	NA	0.17	NA	0.03	NA	NA
naph	0.00	0.01	NA	0.00	0.00	NA	0.21	NA	0.01	NA	NA
naph-1me	NA	0.02	NA	NA	NA	NA	0.26	NA	NA	NA	NA
naph-2me	NA	0.01	NA	NA	NA	NA	0.23	NA	NA	NA	NA
naph-C2 (1,2me)	NA	0.08	NA	NA	NA	NA	1.84	NA	NA	NA	NA
naph-C3 (3,5,5)	NA	0.12	NA	NA	NA	NA	1.76	NA	NA	NA	NA
naph-C4 (noStd)	NA	0.18	NA	NA	NA	NA	1.49	NA	NA	NA	NA
nC10	NA	0.05	NA	NA	NA	NA	0.46	NA	NA	NA	NA
nC11	NA	0.09	NA	NA	NA	NA	0.86	NA	NA	NA	NA
nC12	NA	0.10	NA	NA	NA	NA	1.03	NA	NA	NA	NA

nC13	NA	0.09	NA	NA	NA	NA	1.34	NA	NA	NA	NA
nC14	NA	0.09	NA	NA	NA	NA	1.83	NA	NA	NA	NA
nC15	NA	0.13	NA	NA	NA	NA	2.03	NA	NA	NA	NA
nC16	NA	0.25	NA	NA	NA	NA	2.22	NA	NA	NA	NA
nC17pris	NA	0.52	NA	NA	NA	NA	3.92	NA	NA	NA	NA
nC18phyt	NA	0.41	NA	NA	NA	NA	3.31	NA	NA	NA	NA
nC19	NA	0.22	NA	NA	NA	NA	1.88	NA	NA	NA	NA
nC20	NA	0.17	NA	NA	NA	NA	1.63	NA	NA	NA	NA
nC21	NA	0.15	NA	NA	0.00	NA	1.58	NA	NA	NA	NA
nC22	NA	0.14	NA	NA	NA	NA	1.54	NA	NA	NA	NA
nC23	NA	0.13	NA	NA	NA	NA	1.49	NA	NA	NA	NA
nC24	NA	0.10	NA	NA	NA	NA	1.22	NA	NA	NA	NA
nC25	NA	0.07	NA	NA	NA	NA	1.00	NA	NA	NA	NA
nC26	NA	0.06	NA	NA	NA	NA	0.86	NA	NA	NA	NA
nC27	NA	0.04	NA	NA	NA	NA	0.67	NA	NA	NA	NA
nC28	NA	0.03	NA	NA	NA	NA	0.55	NA	NA	NA	NA
nC29	NA	0.03	NA	NA	NA	NA	0.48	NA	NA	NA	NA

nC30	NA	0.01	NA	NA	NA	NA	0.31	NA	NA	NA	NA
nC31	NA	0.01	NA	NA	NA	NA	0.23	NA	NA	NA	NA
nC32	NA	NA	NA	NA	NA	NA	0.15	NA	NA	NA	NA
nC33	NA	NA	NA	NA	NA	NA	0.10	NA	NA	NA	NA
nC34	NA	NA	NA	NA	NA	NA	0.09	NA	NA	NA	NA
nC35	NA	NA	NA	NA	NA	NA	0.06	NA	NA	NA	NA
nC36	0.00	0.00	0.00	0.00	0.00	NA	0.04	0.00	0.00	NA	NA
nC37	0.00	NA	NA	NA	NA	0.00	0.03	0.00	0.00	0.00	NA
nC38	0.00	NA	NA	NA	NA	NA	0.04	NA	NA	0.00	NA
nC39	0.00	NA	NA	NA	NA	NA	0.01	NA	NA	NA	NA
nC40	NA	0.00	NA	NA	NA	0.00	0.02	0.00	NA	NA	NA
o-terphenyl	NA	NA	0.00	0.00	NA	0.00	0.00	NA	0.00	NA	NA
phen	NA	0.03	NA	NA	NA	NA	0.21	NA	NA	NA	NA
phen-C1 (1me)	0.00	0.11	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00
phen-C2 (3,6me)	NA	0.16	NA	NA	NA	NA	1.00	NA	NA	NA	NA
phen-C3 (9et10me)	NA	0.22	NA	NA	NA	NA	1.36	NA	NA	NA	NA
phen-C4 (noStd)	0.00	0.14	0.00	0.00	0.00	0.00	0.82	0.00	0.00	0.00	0.00

pyr-C1 (1me)	0.00	0.01	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
pyr-C2 (noStd)	0.00	0.03	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00
pyr-C3 (noStd)	0.00	0.03	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00
pyr-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00
pyrene	NA	0.00	NA	NA	NA	NA	0.00	NA	NA	NA	NA
Total PAHs	0.00	1.74	0.00	0.00	0.00	0.50	15.45	0.00	0.03	0.00	0.00
Total alkanes	0.00	2.88	0.00	0.00	0.00	0.00	30.98	0.00	0.00	0.00	0.00
Total oil cmpds	0.00	4.62	0.00	0.00	0.00	0.50	46.43	0.00	0.03	0.00	0.00

(Table continued)

	2hr - Port 1	2hr - Port 2	2hr - Port 3	2hr - Port 4	2hr - Port 5	4hr - Port 1	4hr - Port 2	4hr - Port 3	4hr - Port 4	4hr - Port 5	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 4	24hr - Port 5
anthracene	0.01	0.00	NA	NA	NA	0.00	0.00	NA	NA	NA	0.00	0.00	0.00	NA	0.03
biphenyl	0.06	NA	NA	NA	NA	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA
chrys/triphen/bz(a)a	0.06	0.00	NA	NA	NA	0.00	0.00	NA	NA	NA	0.00	0.00	0.00	NA	0.02
chrys-C1 (6me)	0.07	NA	NA	NA	NA	0.03	0.01	NA	NA	NA	NA	NA	NA	NA	NA
chrys-C2 (6et)	0.15	0.03	NA	NA	NA	0.07	0.03	NA	NA	NA	NA	NA	NA	NA	0.01
chrys-C3 (noStd)	0.20	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
chrys-C4 (noStd)	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBT	0.12	0.02	0.00	0.00	0.00	0.06	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01

DBT-C1 (noStd)	0.28	0.05	NA	NA	NA	0.13	0.07	NA	NA	NA	0.04	0.03	0.03	NA	0.04
DBT-C2 (4,6meDBT)	0.57	0.09	NA	NA	NA	0.29	0.15	NA	NA	NA	0.06	0.05	0.05	NA	0.06
DBT-C3 (noStd)	0.53	0.08	NA	NA	NA	0.27	0.14	NA	NA	NA	0.06	0.05	0.05	NA	0.06
DBT-C4 (noStd)	0.29	0.06	0.00	0.00	0.00	0.14	0.10	0.00	0.00	0.00	0.04	0.04	0.04	0.00	0.05
fluo	0.07	0.01	0.00	NA	0.00	0.03	0.01	0.00	0.00	NA	0.01	0.01	0.01	0.00	0.01
fluo-C1 (1me)	0.22	0.03	NA	NA	NA	0.10	0.04	NA	NA	NA	0.02	0.02	0.02	NA	0.03
fluo-C2 (noStd)	0.40	0.07	0.00	0.00	0.00	0.21	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
fluo-C3 (noStd)	0.42	0.09	NA	NA	NA	0.20	0.10	NA	NA	NA	0.04	0.04	0.04	NA	NA
fluo-C4 (noStd)	0.32	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
hopane	0.13	0.02	0.00	NA	NA	0.06	0.03	NA	NA	0.00	0.01	0.01	0.01	NA	0.01
naph	0.48	0.03	NA	NA	NA	0.25	0.02	0.00	0.00	NA	0.08	0.08	0.09	0.00	0.09
naph-1me	0.63	0.03	NA	NA	NA	0.29	0.02	NA	NA	NA	0.12	0.14	0.15	NA	0.16
naph-2me	0.71	0.02	NA	NA	NA	0.25	0.01	NA	NA	NA	0.06	0.04	0.05	NA	0.05
naph-C2 (1,2me)	2.59	0.10	NA	NA	NA	1.19	0.08	NA	NA	NA	0.30	0.31	0.32	NA	0.34
naph-C3 (3,5,5)	1.73	0.10	NA	NA	NA	0.79	0.11	NA	NA	NA	0.17	0.18	0.19	NA	0.20
naph-C4 (noStd)	1.32	0.14	NA	NA	NA	0.63	0.20	NA	NA	NA	0.14	0.14	0.15	NA	0.17
nC10	1.31	0.06	NA	NA	NA	0.59	NA	NA	NA	NA	0.06	0.08	0.08	NA	0.05

nC11	2.13	0.09	NA	NA	NA	1.00	NA	NA	NA	NA	0.17	0.19	0.18	NA	0.20
nC12	2.18	0.09	NA	NA	NA	1.03	NA	NA	NA	NA	0.18	0.20	0.20	NA	0.21
nC13	2.13	0.07	NA	NA	NA	1.02	0.02	NA	NA	0.02	0.16	0.17	0.17	NA	0.21
nC14	2.00	0.07	NA	NA	NA	0.90	0.04	NA	NA	NA	0.15	0.14	0.16	NA	0.16
nC15	1.86	0.09	NA	NA	NA	0.89	0.12	NA	NA	NA	0.15	0.15	0.15	NA	0.14
nC16	1.87	0.20	NA	NA	NA	0.88	0.30	NA	NA	NA	0.16	0.16	0.16	NA	0.16
nC17pris	3.35	0.42	NA	NA	NA	1.59	0.68	NA	NA	NA	0.27	0.25	0.25	NA	0.29
nC18phyt	2.71	0.35	NA	NA	NA	1.26	0.54	NA	NA	NA	0.20	0.19	0.19	NA	0.20
nC19	1.50	0.14	NA	NA	NA	0.65	0.30	NA	NA	NA	0.09	0.08	0.08	NA	0.08
nC20	1.33	0.15	NA	NA	NA	0.57	0.23	NA	NA	NA	0.06	0.04	0.04	NA	0.06
nC21	1.27	0.11	NA	NA	NA	0.54	0.20	NA	NA	NA	0.05	0.04	0.03	0.00	0.03
nC22	1.22	0.11	NA	NA	NA	0.52	0.20	NA	NA	NA	0.04	0.04	0.04	NA	0.04
nC23	1.23	0.10	NA	NA	NA	0.49	0.19	NA	NA	NA	0.05	0.03	0.03	0.00	0.04
nC24	0.96	0.08	NA	NA	NA	0.40	0.15	NA	0.00	NA	0.04	0.02	0.03	NA	0.04
nC25	0.84	0.08	NA	NA	NA	0.32	0.14	NA	NA	NA	0.02	0.02	0.02	NA	0.02
nC26	0.75	0.08	NA	NA	NA	0.28	0.11	NA	NA	0.00	0.02	NA	0.01	NA	0.01
nC27	0.57	0.03	NA	NA	NA	0.21	0.07	NA	NA	NA	0.01	NA	NA	NA	NA

nC28	0.46	0.03	NA	NA	NA	0.16	0.05	NA	NA	NA	0.01	NA	NA	NA	NA
nC29	0.40	0.02	NA	NA	NA	0.14	0.04	NA	NA	NA	NA	NA	NA	NA	NA
nC30	0.26	0.01	NA	NA	NA	0.08	0.03	NA	NA	NA	NA	NA	NA	NA	NA
nC31	0.19	0.01	NA	NA	NA	0.05	0.02	NA	NA	NA	NA	NA	NA	NA	NA
nC32	0.13	NA	NA	NA	NA	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC33	0.10	NA	NA	NA	NA	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC34	0.08	NA	NA	NA	NA	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC35	0.06	NA	NA	NA	NA	0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC36	0.05	0.00	NA	NA	NA	0.01	0.00	0.00	0.00	0.00	0.00	0.00	NA	NA	NA
nC37	0.04	0.00	0.00	NA	NA	0.00	NA	0.00	NA	NA	NA	NA	NA	0.00	NA
nC38	0.04	NA	NA	NA	NA	0.00	NA	NA	NA	NA	0.00	0.00	NA	0.00	NA
nC39	0.03	NA	NA	NA	NA	0.00	NA	0.00	NA	NA	0.00	0.00	0.00	NA	0.00
nC40	0.03	0.00	NA	NA	NA	0.00	0.00	0.00	NA	NA	0.00	0.00	0.00	0.00	0.00
o-terphenyl	0.00	0.00	NA	0.00	NA	0.00	0.00	NA	NA	NA	0.00	NA	NA	NA	0.00
phen	0.17	0.02	NA	NA	NA	0.08	0.03	NA	NA	NA	0.02	0.02	0.02	0.01	0.02
phen-C1 (1me)	0.51	0.12	0.00	0.00	0.00	0.24	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phen-C2 (3,6me)	0.80	0.14	NA	NA	NA	0.42	0.21	NA	NA	NA	0.08	0.09	0.08	0.03	0.10

phen-C3 (9et10me)	1.09	0.19	NA	NA	NA	0.54	0.29	NA	NA	NA	0.11	0.12	0.12	0.06	0.15
phen-C4 (noStd)	0.68	0.12	0.00	0.00	0.00	0.35	0.19	0.00	0.00	0.00	0.06	0.07	0.06	0.00	0.07
pyr-C1 (1me)	0.06	0.01	0.00	0.00	0.00	0.03	0.02	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01
pyr-C2 (noStd)	0.14	0.02	0.00	0.00	0.00	0.06	0.03	0.00	0.00	0.00	0.02	0.01	0.02	0.00	0.02
pyr-C3 (noStd)	0.12	0.02	0.00	0.00	0.00	0.06	0.03	0.00	0.00	0.00	0.02	0.02	0.02	0.00	0.02
pyr-C4 (noStd)	0.16	0.02	0.00	0.00	0.00	0.07	0.04	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01
pyrene	0.00	0.00	NA	NA	NA	0.00	0.00	NA	0.00	NA	0.00	0.00	0.00	0.00	0.00
Total PAHs	15.22	1.62	0.00	0.00	0.00	7.13	2.20	0.00	0.00	0.00	1.50	1.53	1.54	0.10	1.74
Total alkanes	31.06	2.41	0.00	0.00	0.00	13.71	3.42	0.00	0.00	0.02	1.89	1.80	1.83	0.00	1.93
Total oil cmpds	46.28	4.03	0.00	0.00	0.00	20.85	5.62	0.00	0.00	0.02	3.39	3.33	3.38	0.10	3.67

The total PAH values from the tables above were then divided by 6, to account for the concentration factor (30mL seawater sample was extracted with 5mL of hexane, concentrating the sample by a factor of 6), then multiplied by 1000 to scale from concentration per mL to L of sample in the following table.

sample name	ug PAHs/mL aqueous sample	ug PAHs/L aqueous sample
ADAC_OD-Rep5-Control_P1	0.00	0.28
ADAC_OD-Rep5-30min_P1	0.29	290.79
ADAC_OD-Rep5-30min_P2	0.00	0.00
ADAC_OD-Rep5-30min_P3	0.00	0.35

ADAC_OD-Rep5-30min_P4	0.00	0.42
ADAC_OD-Rep5-30min_P5	0.08	83.24
ADAC_OD-Rep5-1hr_P1	2.58	2575.71
ADAC_OD-Rep5-1hr_P2	0.00	0.00
ADAC_OD-Rep5-1hr_P3	0.01	5.39
ADAC_OD-Rep5-1hr_P4	0.00	0.00
ADAC_OD-Rep5-1hr_P5	0.00	0.00
ADAC_OD-Rep5-2hr_P1	2.54	2537.00
ADAC_OD-Rep5-2hr_P2	0.27	269.99
ADAC_OD-Rep5-2hr_P3	0.00	0.56
ADAC_OD-Rep5-2hr_P4	0.00	0.00
ADAC_OD-Rep5-2hr_P5	0.00	0.00
ADAC_OD-Rep5-4hr_P1	1.19	1188.74
ADAC_OD-Rep5-4hr_P2	0.37	366.62
ADAC_OD-Rep5-4hr_P3	0.00	0.49
ADAC_OD-Rep5-4hr_P4	0.00	0.42
ADAC_OD-Rep5-4hr_P5	0.00	0.00

ADAC_OD-Rep5-24hr_P1	0.25	249.26
ADAC_OD-Rep5-24hr_P2	0.25	254.24
ADAC_OD-Rep5-24hr_P3	0.26	257.39
ADAC_OD-Rep5-24hr_P4	0.02	17.11
ADAC_OD-Rep5-24hr_P5	0.29	289.67

A.B.B.E.C. GCxGC Results:

	Control - Port 1	1hr - Port 1	1hr - Port 2	1hr - Port 3	1hr - Port 4	1hr - Port 5	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 4	24hr - Port 5
napC0	0.01	72.29	0.00	0.00	0.00	0.00	10.00	5.65	8.14	8.33	5.73
napC1	0.03	81.10	0.00	0.00	0.00	0.00	27.29	16.52	21.94	22.80	16.28
napC2	0.03	94.47	0.00	0.00	0.00	0.00	29.68	23.63	23.74	23.01	14.95
napC3	0.01	150.49	0.00	0.00	0.00	0.00	25.71	27.07	22.52	22.80	15.94
napC4	0.00	70.49	0.00	0.00	0.00	0.00	9.63	10.86	8.43	6.56	4.52
fluC0	0.00	7.41	0.00	0.00	0.00	0.00	1.05	0.73	0.72	0.65	0.52
fluC1	0.00	21.12	0.00	0.00	0.00	0.00	2.31	2.36	2.08	1.90	1.27
fluC2	0.00	19.25	0.00	0.00	0.00	0.00	2.52	2.69	2.37	1.95	1.28
fluC3	0.00	9.97	0.00	0.00	0.00	0.00	1.56	1.52	1.29	1.13	0.68
fluC4	0.00	3.34	0.00	0.00	0.00	0.00	0.27	0.35	0.24	0.23	0.16

oxFluC 0	0.00	0.15	0.00	0.00	0.00	0.00	0.05	0.02	0.03	0.00	0.00
oxFluC 1	0.00	0.15	0.00	0.00	0.00	0.00	0.06	0.06	0.05	0.04	0.03
oxFluC 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
oxFluC 3	0.00	3.39	0.00	0.00	0.00	0.00	0.59	0.32	0.76	0.46	0.46
pheC0	0.00	12.41	0.00	0.00	0.00	0.01	3.05	2.81	2.97	2.56	1.70
pheC1	0.00	21.64	0.00	0.00	0.00	0.00	4.06	4.52	4.26	3.50	2.25
pheC2	0.00	19.88	0.00	0.00	0.00	0.00	3.46	4.02	3.97	2.60	2.23
pheC3	0.00	6.83	0.00	0.00	0.00	0.00	1.20	1.43	0.83	0.85	0.59
pheC4	0.00	2.10	0.00	0.00	0.00	0.00	0.36	0.38	0.33	0.22	0.18
dbtC0	0.00	12.56	0.00	0.00	0.00	0.00	3.09	2.48	2.57	2.27	1.46
dbtC1	0.00	18.02	0.00	0.00	0.00	0.00	3.66	4.06	3.83	3.19	2.06
dbtC2	0.00	19.74	0.00	0.00	0.00	0.00	2.74	3.80	3.03	2.29	1.49
dbtC3	0.00	11.04	0.00	0.00	0.00	0.00	1.50	1.63	1.49	1.17	0.95
dbtC4	0.00	3.24	0.00	0.00	0.00	0.00	0.66	0.71	0.56	0.40	0.26
pyrC0	0.00	0.53	0.00	0.00	0.00	0.00	0.08	0.10	0.09	0.07	0.05
pyrC1	0.00	2.10	0.00	0.00	0.00	0.00	0.25	0.39	0.31	0.23	0.17
pyrC2	0.00	2.21	0.00	0.00	0.00	0.00	0.30	0.32	0.37	0.19	0.13

pyrC3	0.00	1.90	0.00	0.00	0.00	0.00	0.18	0.32	0.19	0.16	0.12
pyrC4	0.00	0.63	0.00	0.00	0.00	0.00	0.10	0.13	0.07	0.06	0.05
chrC0	0.00	2.76	0.00	0.00	0.00	0.00	0.42	0.76	0.55	0.41	0.30
chrC1	0.00	2.62	0.00	0.00	0.00	0.00	0.37	0.70	0.51	0.35	0.27
chrC2	0.00	1.76	0.00	0.00	0.00	0.00	0.31	0.55	0.35	0.24	0.17
chrC3	0.00	0.92	0.00	0.00	0.00	0.00	0.14	0.20	0.11	0.08	0.05
chrC4	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
oxBzA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs (ug/L)	0.07	676.60	0.00	0.00	0.00	0.01	136.65	121.12	118.71	110.70	76.49

A.B.C. Stratified Column, Non Dispersed Oil

A.B.C.A. Replicate 1

A.B.C.A.A. Sampling Scheme:

Experiment name: **Stratified_Oil-Rep1_2020930**

Description: NO copepods, oil, NO dispersant, Stratified

Oil added on 9/30/20 at 10:45am, **5.00 g** of oil added

	Time	Port 1	Port 2	Port 3	Port 4	Port 5
Control	10:40-10:44am	S/L/F/D	-	-	-	-
0.5 hr	11:14-11:22am	F/D	F/D	F/D	F/D	F/D

1 hr	11:42-12:01	S/L/F/D	S/L/F/D	S/L/F/D	S/L/F/D	S/L/F/D
2hr	12:43-12:48pm	F	F	F	F	F
4hr	3:00-3:07 pm	F	F	F	F	F
24hr	11:20-11:50am	S/L/F/D	S/L/F/D	S/L/F/D	S/L/F/D	S/L/F/D

*50uL of concentrated phosphoric acid was added to samples for SPME, fluorescence and liquid-liquid extraction after they were sampled.

S= sample taken for SPME measurement (2x - SPME vial with 18mL of sample).

F= sample taken for fluorescence measurement; to be run as aqueous sample (1x - 20mL in a 20mL vial).

L=sample take for liquid-liquid extraction in hexane to be run on GCMS (1x - 40mL vial with 40mL of sample, to be extracted with 4 mL of hexane).

D=sample taken for droplet size distribution on a hemocytometer under a fluorescent microscope (1x - 1.8mL vial with ~1mL sample).

Glass syringes were cleaned between samples with hexane then methanol then water.

5mL of water was pulled out of the sampling tubes and discarded before samples were taken at each time point.

A.B.C.A.B. GCMS Results:

[illegible]

chrys-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBT-C1 (noStd)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DBT-C2 (4,6meDBT)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DBT-C3 (noStd)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DBT-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
fluo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
fluo-C1 (1me)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
fluo-C2 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
fluo-C3 (noStd)	NA	NA	NA	NA	NA	NA	NA	0.00	NA	NA	0.00
fluo-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
hopane	NA	0.00	NA	NA	NA	NA	NA	0.00	NA	NA	0.00
naph	NA	0.01	NA	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00
naph-1me	NA	0.00	NA	0.00	NA	NA	0.01	NA	0.02	NA	NA
naph-2me	NA	0.00	NA	0.00	NA	NA	0.01	NA	0.01	NA	NA
naph-C2 (1,2me)	NA	NA	NA	NA	NA	NA	0.02	NA	0.02	0.01	NA
naph-C3 (3,5,5)	NA	NA	NA	NA	NA	NA	NA	NA	0.00	NA	NA

[illegible]

nC24	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC25	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC27	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC28	0.01	NA	NA	0.00	NA	NA	NA	NA	NA	NA	NA
nC29	0.01	NA	NA	0.00	NA	NA	NA	NA	NA	NA	NA
nC30	0.01	NA	NA	0.01	NA	NA	NA	NA	NA	NA	NA
nC31	0.01	NA	NA	0.01	NA	NA	NA	NA	NA	NA	NA
nC32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC33	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC35	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA	0.00
nC37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA	0.00	NA	NA
nC38	0.00	0.00	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA
nC39	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA
nC40	0.00	0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA

o-terphenyl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phen-C1 (1me)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phen-C2 (3,6me)	NA	NA	NA	NA	NA	NA	NA	0.00	NA	NA	0.00
phen-C3 (9et10me)	NA	NA	NA	NA	NA	NA	NA	0.00	NA	NA	0.00
phen-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phytane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA	0.00
pristane	0.09	0.03	0.03	0.03	0.02	0.03	0.00	0.00	NA	0.00	0.00
pyr-C1 (1me)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyr-C2 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyr-C3 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyr-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyrene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total PAHs	0.00	0.01	0.00	0.01	0.00	0.00	0.05	0.00	0.06	0.02	0.00
total alkanes	0.19	0.07	0.07	0.09	0.06	0.04	0.03	0.04	0.03	0.02	0.04
total PAHs+alkanes	0.29	0.11	0.10	0.13	0.08	0.07	0.08	0.04	0.09	0.04	0.05

The total PAH values from the tables above were then divided by 10, to account for the concentration factor (40mL seawater sample was extracted with 4mL of hexane, concentrating the sample by a factor of 10), then multiplied by 1000 to scale from concentration per mL to L of sample in the following table.

Sample Name	ug PAHs/mL aqueous sample	ug PAHs/L aqueous sample
ADAC_TG-Oil_Rep1_Control_P1	0.00218	0.218
ADAC_TG-Oil_Rep1_1hr_P1	0.014259	1.4259
ADAC_TG-Oil_Rep1_1hr_P2	0.00174	0.174
ADAC_TG-Oil_Rep1_1hr_P3	0.011554	1.1554
ADAC_TG-Oil_Rep1_1hr_P4	0.002615	0.2615
ADAC_TG-Oil_Rep1_1hr_P5	0.003052	0.3052
ADAC_TG-Oil_Rep1_24hr_P1	0.052688	5.2688
ADAC_TG-Oil_Rep1_24hr_P2	0.004365	0.4365
ADAC_TG-Oil_Rep1_24hr_P3	0.062313	6.2313
ADAC_TG-Oil_Rep1_24hr_P4	0.020556	2.0556
ADAC_TG-Oil_Rep1_24hr_P5	0.00349	0.349

A.B.C.A.C. GCxGC SPME Results:

	Control - Port 1	1hr - Port 1	1hr - Port 2	1hr - Port 3	1hr - Port 4	1hr - Port 5	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 4	24hr - Port 5
napC0	0.00	0.43	0.00	0.00	0.00	0.00	1.11	1.12	0.71	0.54	0.42

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Total PAHs (ug/L)	0.01	0.97	0.00	0.00	0.00	0.00	4.32	4.64	4.44	1.85	1.64
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A.B.D. Stratified Column, Dispersed Oil

A.B.D.A. Replicate 1

A.B.D.A.A. Sampling Scheme:

Experiment name: **Stratified_Oil_and_Disb-Rep1_20201007**

Description: copepods, oil, dispersant, Temp gradient

Oil added on 10/07/20 at 11:18am; **5.30 g** of oil+dispersant added (6.5mL of evaporated Alaska North Slope oil, and 310uL of Corexit 9500 dispersant)

	Time	Port 1	Port 2	Port 3	Port 4	Port 5
Control	11:12-11:17am	S/L/D	D	D	D	D
0.5 hr	11:49-11:58am	L/D	L/D	L/D	L/D	L/D
1 hr	12:18-12:32pm	S/L/D	S/L/D	S/L/D	S/L/D	S/L/D
2hr	1:17-1:23pm	L/D	L/D	L/D	L/D	L/D
4hr	3:15-3:23pm	L/D	L/D	L/D	L/D	L/D
24hr	11:33-11:45am	S/L/D	S/L/D	S/L/D	S/L/D	S/L/D

*50uL of concentrated phosphoric acid was added to samples for SPME, fluorescence and liquid-liquid extraction after they were sampled.

S= sample taken for SPME measurement (2x - SPME vial with 18mL of sample).

L=sample take for liquid-liquid extraction in hexane to be run on fluorometer and GCMS (1x - 40mL vial with 30mL of sample, to be extracted with 5mL of hexane).

D=sample taken for droplet size distribution on a hemocytometer under a fluorescent microscope (1x - 1.8mL vial with ~1mL sample).

Glass syringes were cleaned between samples with hexane then methanol then water.

5mL of water was pulled out of the sampling tubes and discarded before samples were taken at each time point.

A.B.D.A.B. GCMS Results:

	Control - Port 1	0.5hr - Port 1	0.5hr - Port 2	0.5hr - Port 3	0.5hr - Port 4	0.5hr - Port 5	1hr - Port 1	1hr - Port 2	1hr - Port 3	1hr - Port 4	1hr - Port 5
anthracene	NA	NA	NA	NA	NA	NA	NA	NA	0.00	NA	NA
biphenyl	NA	NA	NA	NA	NA	NA	NA	NA	0.01	NA	NA
chrys/triphen/ bz(a)a	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
chrys-C1 (6me)	NA	NA	NA	NA	NA	NA	NA	NA	0.01	NA	NA
chrys-C2 (6et)	NA	NA	NA	NA	NA	NA	NA	NA	0.03	NA	NA
chrys-C3 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
chrys-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
DBT-C1 (noStd)	NA	NA	NA	NA	NA	NA	NA	NA	0.06	NA	NA
DBT-C2 (4,6meDBT)	NA	NA	NA	NA	NA	NA	NA	NA	0.10	NA	NA
DBT-C3 (noStd)	NA	NA	NA	NA	NA	NA	NA	NA	0.08	NA	NA
DBT-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00
fluo	NA	0.00	0.00	0.00	0.00	0.00	NA	NA	0.01	NA	NA
fluo-C1 (1me)	NA	NA	NA	NA	NA	NA	NA	NA	0.03	NA	NA

fluo-C2 (noStd)	0.00	NA	NA	0.00	NA	NA	NA	NA	0.05	NA	NA
fluo-C3 (noStd)	NA	NA	NA	NA	NA	NA	NA	NA	0.09	NA	NA
fluo-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00
hopane	0.00	NA	NA	NA	NA	NA	NA	NA	0.02	NA	NA
naph	0.00	0.02	0.00	0.00	0.00	NA	0.01	NA	0.09	0.01	0.01
naph-1me	NA	0.02	NA	NA	NA	NA	0.02	NA	0.13	NA	NA
naph-2me	NA	0.00	NA	NA	NA	NA	0.01	NA	0.06	NA	NA
naph-C2 (1,2me)	NA	0.03	NA	NA	NA	NA	0.02	NA	0.37	NA	NA
naph-C3 (3,5,5)	NA	0.01	NA	NA	NA	NA	NA	NA	0.29	NA	NA
naph-C4 (noStd)	NA	NA	NA	NA	NA	NA	NA	NA	0.23	NA	NA
nC10	NA	NA	NA	NA	NA	NA	NA	NA	0.03	NA	NA
nC11	NA	NA	NA	NA	NA	NA	NA	NA	0.11	0.00	0.01
nC12	NA	NA	NA	NA	NA	NA	NA	NA	0.16	NA	NA
nC13	NA	NA	NA	NA	NA	NA	NA	NA	0.20	NA	NA
nC14	NA	NA	NA	NA	NA	NA	NA	NA	0.26	NA	NA
nC15	NA	NA	NA	NA	NA	NA	NA	NA	0.24	NA	NA
nC16	NA	NA	NA	NA	NA	NA	NA	NA	0.29	NA	NA

nC17	0.00	NA	NA	0.00	NA	NA	NA	NA	0.18	0.00	NA
nC17pris	NA	NA	NA	NA	NA	NA	NA	NA	0.58	NA	NA
nC18	NA	NA	NA	NA	NA	NA	NA	NA	0.19	NA	NA
nC18phyt	NA	NA	NA	NA	NA	NA	NA	NA	0.43	NA	NA
nC19	NA	NA	NA	NA	NA	NA	NA	NA	0.24	NA	NA
nC20	NA	NA	NA	NA	NA	NA	NA	NA	0.20	NA	NA
nC21	NA	NA	NA	NA	NA	NA	NA	NA	0.17	NA	NA
nC22	NA	NA	NA	NA	NA	NA	NA	NA	0.16	NA	NA
nC23	NA	NA	NA	NA	NA	NA	NA	NA	0.16	NA	NA
nC24	NA	NA	NA	NA	NA	NA	NA	NA	0.12	NA	NA
nC25	NA	NA	NA	NA	NA	NA	NA	NA	0.08	NA	NA
nC26	NA	NA	NA	NA	NA	NA	NA	NA	0.08	NA	NA
nC27	NA	NA	NA	NA	NA	NA	NA	NA	0.06	NA	NA
nC28	NA	NA	NA	NA	NA	NA	NA	NA	0.05	NA	NA
nC29	NA	NA	NA	NA	NA	NA	NA	NA	0.04	NA	NA
nC30	NA	NA	NA	NA	NA	NA	NA	NA	0.02	NA	NA
nC31	NA	NA	NA	NA	NA	NA	NA	NA	0.02	NA	NA

nC32	NA	NA	NA	NA	NA	NA	NA	NA	0.02	NA	NA
nC33	NA	NA	NA	NA	NA	NA	NA	NA	0.02	NA	NA
nC34	NA	NA	NA	NA	NA	NA	NA	NA	0.01	NA	NA
nC35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA
nC37	0.00	0.00	0.00	NA	0.00	0.00	0.00	0.00	0.00	NA	NA
nC38	0.00	0.00	NA	NA	0.00	NA	0.00	0.00	0.00	NA	NA
nC39	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA
nC40	0.00	0.00	NA	NA	0.00	NA	NA	NA	NA	NA	NA
o-terphenyl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
phen	0.00	0.00	NA	NA	NA	NA	0.00	NA	0.03	0.00	0.00
phen-C1 (1me)	0.00	NA	NA	0.00	0.00	NA	NA	NA	0.08	0.00	0.00
phen-C2 (3,6me)	NA	NA	NA	NA	NA	NA	NA	NA	0.15	NA	NA
phen-C3 (9et10me)	NA	NA	NA	NA	NA	NA	NA	NA	0.17	NA	NA
phen-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00
phytane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA	0.00	0.00	0.00
pristane	NA	0.00	NA	NA	NA	NA	NA	NA	0.24	NA	NA

pyr-C1 (1me)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyr-C2 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
pyr-C3 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
pyr-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
pyrene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total PAHs	0.00	0.09	0.00	0.00	0.00	0.00	0.06	0.00	2.47	0.01	0.01
total alkanes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.35	0.00	0.01

	2hr - Port 1	2hr - Port 2	2hr - Port 3	2hr - Port 4	2hr - Port 5	4hr - Port 1	4hr - Port 2	4hr - Port 3	4hr - Port 4	4hr - Port 5	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 4	24hr - Port 5
anthracene	NA	NA	0.01	NA	NA	0.00	NA	0.01	NA	NA	NA	0.00	NA	NA	NA
biphenyl	NA	NA	0.02	NA	NA	0.02	NA	0.02	NA	NA	NA	NA	NA	NA	NA
chrys/triphen/bz(a)a	NA	NA	0.03	NA	NA	0.03	NA	0.03	NA	NA	NA	NA	NA	NA	NA
chrys-C1 (6me)	NA	NA	0.03	NA	NA	0.02	NA	0.02	NA	NA	NA	NA	NA	NA	NA
chrys-C2 (6et)	NA	NA	0.05	NA	NA	0.05	NA	0.06	NA	NA	NA	NA	NA	NA	NA
chrys-C3 (noStd)	0.00	0.00	0.04	0.00	0.00	0.04	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
chrys-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBT	0.00	0.00	0.05	0.00	0.00	0.03	0.01	0.04	0.00	0.01	0.01	0.01	0.01	0.01	0.01
DBT-C1 (noStd)	NA	NA	0.14	NA	NA	0.10	0.02	0.12	0.01	0.01	0.03	0.03	0.03	0.01	0.01

DBT-C2 (4,6meDBT)	NA	NA	0.23	NA	NA	0.16	0.04	0.19	NA	NA	0.05	0.06	0.05	0.02	0.03
DBT-C3 (noStd)	NA	NA	0.19	NA	NA	0.14	0.04	0.17	NA	NA	0.05	0.05	0.06	0.03	0.03
DBT-C4 (noStd)	0.00	0.00	0.11	0.00	0.00	0.07	0.02	0.09	0.00	0.00	0.04	0.02	0.03	0.00	0.02
fluo	NA	NA	0.03	NA	NA	0.02	0.01	0.02	NA	0.00	0.01	0.01	0.01	0.01	0.01
fluo-C1 (1me)	NA	NA	0.08	NA	NA	0.06	NA	0.08	NA	NA	NA	NA	NA	NA	NA
fluo-C2 (noStd)	NA	NA	0.15	NA	NA	0.13	NA	0.15	NA	NA	NA	NA	NA	NA	NA
fluo-C3 (noStd)	NA	NA	0.17	NA	NA	0.14	NA	0.15	NA	NA	NA	NA	NA	NA	NA
fluo-C4 (noStd)	0.00	0.00	0.18	0.00	0.00	0.13	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
hopane	NA	NA	0.05	NA	NA	0.03	0.01	0.04	NA	0.00	0.01	0.02	0.01	0.01	0.01
naph	0.01	0.01	0.20	0.02	0.01	0.15	0.01	0.21	0.03	0.03	0.07	0.08	0.08	0.06	0.06
naph-1me	NA	NA	0.24	0.02	0.03	0.21	0.03	0.20	0.04	0.04	0.13	0.14	0.14	0.11	0.10
naph-2me	NA	NA	0.18	0.01	0.01	0.12	0.01	0.17	0.01	0.01	0.02	0.02	0.02	0.01	0.01
naph-C2 (1,2me)	NA	NA	0.92	0.05	0.05	0.65	0.14	0.82	0.10	0.08	0.23	0.24	0.28	0.16	0.18
naph-C3 (3,5,5)	NA	NA	0.71	0.02	0.02	0.49	0.14	0.61	0.04	0.05	0.17	0.19	0.19	0.10	0.11
naph-C4 (noStd)	NA	NA	0.54	NA	NA	0.38	0.11	0.47	NA	NA	NA	NA	NA	NA	NA
nC10	NA	NA	0.22	NA	NA	0.10	NA	0.14	NA	NA	NA	NA	NA	NA	NA
nC11	0.00	NA	0.60	NA	NA	0.40	0.06	0.49	NA	NA	0.05	0.05	0.05	0.01	0.01

nC12	NA	NA	0.68	0.01	0.01	0.46	0.08	0.57	0.03	0.04	0.09	0.09	0.10	0.04	0.04
nC13	NA	NA	0.79	NA	NA	0.52	0.07	0.67	0.03	0.02	0.09	0.10	0.11	0.04	0.03
nC14	NA	NA	0.80	NA	NA	0.54	0.11	0.69	NA	NA	0.13	0.15	0.15	0.06	0.08
nC15	NA	NA	0.67	NA	NA	0.45	0.09	0.55	0.04	0.04	0.11	0.11	0.10	0.06	0.06
nC16	NA	NA	0.76	NA	NA	0.52	0.17	0.65	0.05	0.06	0.13	0.14	0.15	0.08	0.08
nC17	NA	NA	0.66	NA	NA	0.40	0.09	0.51	NA	NA	0.07	0.11	0.07	NA	NA
nC17pris	NA	NA	1.45	0.05	0.08	0.98	0.33	1.19	0.11	0.11	0.32	0.35	0.35	0.15	0.16
nC18	NA	NA	0.48	NA	NA	0.31	0.10	0.36	NA	NA	0.05	0.05	0.05	NA	NA
nC18phyt	NA	NA	1.12	0.03	0.05	0.73	0.22	0.90	0.07	0.07	0.19	0.22	0.22	0.12	0.10
nC19	NA	NA	0.64	NA	NA	0.40	0.11	0.51	NA	NA	0.10	0.11	0.11	NA	NA
nC20	NA	NA	0.50	NA	NA	0.31	0.07	0.40	NA	NA	0.06	0.11	0.08	NA	NA
nC21	NA	NA	0.49	NA	NA	0.32	0.06	0.39	NA	NA	0.08	0.10	0.08	NA	NA
nC22	NA	NA	0.45	NA	NA	0.28	0.06	0.36	NA	NA	0.05	0.07	0.07	NA	NA
nC23	NA	NA	0.43	NA	NA	0.27	0.07	0.35	NA	NA	0.06	0.07	0.06	0.03	0.04
nC24	NA	NA	0.35	NA	NA	0.21	0.05	0.26	NA	NA	0.05	0.05	0.04	NA	NA
nC25	NA	NA	0.26	NA	NA	0.16	0.03	0.21	NA	NA	0.02	0.03	0.03	NA	NA
nC26	NA	NA	0.24	NA	NA	0.15	0.02	0.20	NA	NA	0.03	0.03	0.03	NA	NA

nC27	NA	NA	0.19	NA	NA	0.10	0.04	0.15	NA	NA	0.03	0.02	0.04	NA	NA
nC28	NA	NA	0.15	NA	NA	0.08	0.02	0.12	NA	NA	0.03	0.03	0.02	NA	NA
nC29	NA	NA	0.13	NA	NA	0.07	0.02	0.10	NA	NA	0.02	0.02	0.02	NA	NA
nC30	NA	NA	0.08	NA	NA	0.05	0.01	0.06	NA	NA	0.01	0.01	0.01	NA	NA
nC31	NA	NA	0.06	NA	NA	0.03	0.01	0.05	NA	NA	NA	NA	NA	NA	NA
nC32	NA	NA	0.06	NA	NA	0.04	0.01	0.05	NA	NA	NA	NA	NA	NA	NA
nC33	NA	NA	0.06	NA	NA	0.04	0.01	0.06	NA	NA	NA	NA	NA	NA	NA
nC34	NA	NA	0.02	NA	NA	0.01	NA	0.02	NA	NA	NA	NA	NA	NA	NA
nC35	NA	NA	0.02	NA	NA	0.01	NA	0.01	NA	NA	NA	NA	NA	NA	NA
nC36	0.00	NA	0.01	NA	0.00	0.01	NA	0.01	0.00	0.00	NA	NA	0.00	NA	NA
nC37	NA	NA	0.01	NA	0.00	0.01	NA	0.00	0.00	0.00	0.00	NA	NA	NA	0.00
nC38	NA	NA	0.01	NA	NA	0.00	NA	0.00	0.00	NA	NA	NA	NA	0.00	0.00
nC39	0.00	NA	0.01	NA	NA	0.00	NA	0.01	0.00	0.00	NA	NA	NA	NA	0.00
nC40	NA	NA	0.01	NA	NA	NA	0.00	NA	0.00	NA	NA	0.00	NA	NA	0.00
o-terphenyl	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phen	0.00	0.00	0.07	0.01	0.01	0.05	0.01	0.06	0.01	0.01	0.01	0.02	0.02	0.01	0.01
phen-C1 (1me)	0.00	0.00	0.21	NA	NA	0.13	0.05	0.19	NA	NA	0.00	0.00	0.00	NA	NA

phen-C2 (3,6me)	NA	NA	0.36	NA	NA	0.23	0.05	0.31	NA	NA	0.09	0.10	0.10	0.04	0.04
phen-C3 (9et10me)	NA	NA	0.39	NA	NA	0.27	0.09	0.35	0.03	0.03	0.08	0.09	0.10	0.05	0.05
phen-C4 (noStd)	0.00	0.00	0.21	0.00	0.00	0.13	0.04	0.19	0.00	0.00	0.05	0.04	0.06	0.00	0.00
phytane	0.00	NA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pristane	NA	NA	0.59	0.00	0.00	0.38	0.11	0.47	0.03	0.02	0.11	0.15	0.14	0.08	0.06
pyr-C1 (1me)	0.00	0.00	0.03	0.00	0.00	0.02	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyr-C2 (noStd)	0.00	0.00	0.06	0.00	0.00	0.04	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyr-C3 (noStd)	0.00	0.00	0.05	0.00	0.00	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyr-C4 (noStd)	0.00	0.00	0.05	0.00	0.00	0.04	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyrene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
total PAHs	0.01	0.01	5.77	0.12	0.12	4.13	0.85	5.12	0.26	0.26	1.06	1.12	1.18	0.62	0.67
total alkanes	0.00	0.00	13.00	0.09	0.14	8.33	2.01	10.52	0.35	0.37	1.87	2.16	2.08	0.66	0.65

The total PAH values from the tables above were then divided by 6, to account for the concentration factor (30mL seawater sample was extracted with 5mL of hexane, concentrating the sample by a factor of 6), then multiplied by 1000 to scale from concentration per mL to L of sample in the following table.

sample name	ug PAHs/mL aqueous sample	ug PAHs/L aqueous sample
ADAC_TG-OD-Rep1-Control_P1	0.00	0.43
ADAC_TG-OD-Rep1-30min_P1	0.01	14.20

ADAC_TG-OD-Rep1-30min_P2	0.00	0.30
ADAC_TG-OD-Rep1-30min_P3	0.00	0.24
ADAC_TG-OD-Rep1-30min_P4	0.00	0.30
ADAC_TG-OD-Rep1-30min_P5	0.00	0.00
ADAC_TG-OD-Rep1-1hr_P1	0.01	10.22
ADAC_TG-OD-Rep1-1hr_P2	0.00	0.00
ADAC_TG-OD-Rep1-1hr_P3	0.41	412.11
ADAC_TG-OD-Rep1-1hr_P4	0.00	1.09
ADAC_TG-OD-Rep1-1hr_P5	0.00	0.97
ADAC_TG-OD-Rep1-2hr_P1	0.00	0.91
ADAC_TG-OD-Rep1-2hr_P2	0.00	1.51
ADAC_TG-OD-Rep1-2hr_P3	0.96	961.94
ADAC_TG-OD-Rep1-2hr_P4	0.02	20.76
ADAC_TG-OD-Rep1-2hr_P5	0.02	20.76
ADAC_TG-OD-Rep1-4hr_P1	0.69	688.76
ADAC_TG-OD-Rep1-4hr_P2	0.14	142.40
ADAC_TG-OD-Rep1-4hr_P3	0.85	853.13
ADAC_TG-OD-Rep1-4hr_P4	0.04	43.82

ADAC_TG-OD-Rep1-4hr_P5	0.04	43.87
ADAC_TG-OD-Rep1-24hr_P1	0.18	177.32
ADAC_TG-OD-Rep1-24hr_P2	0.19	186.38
ADAC_TG-OD-Rep1-24hr_P3	0.20	196.54
ADAC_TG-OD-Rep1-24hr_P4	0.10	104.12
ADAC_TG-OD-Rep1-24hr_P5	0.11	111.78

A.B.D.A.C. GCxGC Results:

	Control - Port 1	1hr - Port 1	1hr - Port 2	1hr - Port 3	1hr - Port 4	1hr - Port 5	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 4	24hr - Port 5
napC0	0.00	1.93	0.00	13.66	0.74	0.41	26.15	36.41	36.06	13.13	24.09
napC1	0.00	3.31	0.00	35.15	1.81	1.30	60.61	82.08	80.17	32.23	58.51
napC2	0.01	2.85	0.03	53.18	2.14	1.92	70.37	91.12	89.25	37.97	58.83
napC3	0.00	2.17	0.01	50.60	2.27	1.99	55.53	77.28	61.45	33.63	42.95
napC4	0.00	0.63	0.00	18.28	0.88	0.51	15.93	20.71	21.14	11.35	12.32
fluC0	0.00	0.05	0.00	1.47	0.03	0.01	1.42	2.23	2.10	0.77	1.17
fluC1	0.00	0.14	0.00	4.21	0.13	0.10	3.97	5.13	4.60	2.39	2.87
fluC2	0.00	0.14	0.00	4.39	0.21	0.16	3.92	4.97	4.77	2.61	2.81
fluC3	0.00	0.09	0.00	2.28	0.14	0.08	1.80	2.36	2.65	1.43	1.29

fluC4	0.00	0.00	0.00	0.46	0.01	0.00	0.31	0.49	0.80	0.32	0.27
oxFluC0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxFluC1	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.04	0.06	0.00	0.00
oxFluC2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxFluC3	0.00	0.00	0.00	1.96	0.02	0.00	0.96	0.68	0.53	0.67	0.35
pheC0	0.00	0.17	0.00	5.61	0.14	0.10	4.91	6.44	5.23	2.72	3.30
pheC1	0.00	0.24	0.01	7.72	0.31	0.27	7.20	8.67	7.34	4.45	4.43
pheC2	0.00	0.19	0.01	5.51	0.30	0.22	5.29	7.73	6.73	4.01	3.36
pheC3	0.00	0.07	0.00	1.83	0.11	0.07	1.62	1.94	2.39	1.10	0.72
pheC4	0.00	0.00	0.00	0.60	0.01	0.00	0.38	0.41	0.80	0.26	0.19
dbtC0	0.00	0.13	0.00	4.78	0.11	0.07	4.56	5.80	4.93	2.36	3.09
dbtC1	0.00	0.20	0.00	7.10	0.24	0.17	6.52	7.90	6.39	3.87	3.98
dbtC2	0.00	0.20	0.00	6.00	0.32	0.22	5.73	6.99	5.87	3.77	3.22
dbtC3	0.00	0.12	0.00	3.10	0.19	0.09	2.82	3.47	4.03	1.93	1.57
dbtC4	0.00	0.00	0.00	0.77	0.03	0.00	0.69	0.94	0.99	0.58	0.42
pyrC0	0.00	0.00	0.00	0.12	0.00	0.00	0.10	0.15	0.11	0.07	0.07
pyrC1	0.00	0.00	0.00	0.42	0.01	0.00	0.35	0.38	0.25	0.26	0.17

pyrC2	0.00	0.00	0.00	0.44	0.00	0.00	0.37	0.45	0.48	0.28	0.12
pyrC3	0.00	0.00	0.00	0.26	0.00	0.00	0.20	0.27	0.36	0.16	0.10
pyrC4	0.00	0.00	0.00	0.10	0.00	0.00	0.05	0.07	0.14	0.05	0.03
chrC0	0.00	0.01	0.00	0.78	0.02	0.02	0.62	0.70	0.58	0.45	0.26
chrC1	0.00	0.01	0.00	0.85	0.01	0.00	0.54	0.64	0.47	0.42	0.16
chrC2	0.00	0.00	0.00	0.41	0.01	0.00	0.34	0.40	0.36	0.28	0.11
chrC3	0.00	0.00	0.00	0.08	0.00	0.00	0.01	0.04	0.13	0.07	0.02
chrC4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxBzA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs (ug/L)	0.01	12.68	0.06	232.11	10.19	7.71	283.51	376.89	351.15	163.59	230.79

A.B.D.B. Replicate 2

A.B.D.B.A. Sampling Scheme:

Experiment name: **Stratified_Oil_and_Disp-Rep2_20201106**

Description: copepods, oil, dispersant, stratified

Oil added on 11/06/20 at 10:15am; **5.38 g** of oil+dispersant added (6.5mL of evaporated Alaska North Slope oil, and 310uL of Corexit 9500 dispersant)

	Time	Port 1	Port 2	Port 3	Port 4	Port 5
Control	10:08-10:14am	S/L/D	D	D	D	D
0.5 hr	10:46-10:54am	L/D	L/D	L/D	L/D	L/D
1 hr	11:13-12:28	S/L/D	S/L/D	S/L/D	S/L/D	S/L/D

DBT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00
DBT-C1 (noStd)	NA	NA	NA	0.01	NA	NA	NA	NA	0.14	0.01	0.00
DBT-C2 (4,6meDBT)	NA	NA	NA	0.02	NA	NA	NA	NA	0.26	0.02	0.01
DBT-C3 (noStd)	NA	NA	NA	0.01	NA	NA	NA	NA	0.22	0.02	0.01
DBT-C4 (noStd)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.13	0.01	0.01
fluo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.00	0.00
fluo-C1 (1me)	NA	NA	NA	0.01	NA	NA	NA	NA	0.11	0.01	0.00
fluo-C2 (noStd)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.21	0.01	0.00
fluo-C3 (noStd)	0.00	0.00	NA	0.00	NA	NA	NA	NA	0.24	0.03	NA
fluo-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
hopane	0.00	NA	NA	0.00	0.00	0.00	0.00	NA	0.07	0.01	0.00
naph	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.20	0.02	0.01
naph-1me	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.30	0.02	0.01
naph-2me	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.34	0.02	0.01
naph-C2 (1,2me)	NA	NA	NA	0.08	0.00	0.01	0.00	0.01	1.17	0.09	0.03
naph-C3 (3,5,5)	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.01	0.74	0.05	0.02
naph-C4 (noStd)	NA	NA	NA	0.07	NA	NA	NA	NA	0.72	0.07	NA

nC10	NA	NA	NA	0.01	NA	NA	NA	NA	0.23	0.01	0.01
nC11	NA	NA	NA	0.01	NA	NA	NA	NA	0.65	0.02	0.00
nC12	0.00	0.01	0.00	0.04	0.00	0.01	0.01	NA	0.85	0.03	0.02
nC13	NA	NA	NA	0.04	NA	NA	NA	NA	0.96	0.04	0.01
nC14	0.00	0.01	0.00	0.05	NA	NA	NA	NA	0.97	0.05	0.02
nC15	NA	NA	NA	0.05	NA	NA	NA	NA	0.92	0.04	0.01
nC16	NA	NA	NA	0.05	NA	NA	NA	NA	0.90	0.06	0.02
nC17	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.87	0.04	0.01
nC17pris	0.02	0.01	0.01	0.12	0.01	0.01	0.01	0.01	1.87	0.13	0.05
nC18	NA	NA	0.00	0.03	NA	NA	NA	NA	0.69	0.03	0.00
nC18phyt	NA	NA	NA	0.10	NA	NA	NA	NA	1.43	0.11	0.04
nC19	0.00	0.00	NA	0.05	NA	NA	NA	NA	0.65	0.05	0.04
nC20	NA	NA	NA	0.04	NA	NA	NA	NA	0.66	0.05	0.02
nC21	NA	NA	NA	0.03	NA	NA	NA	NA	0.64	0.05	0.02
nC22	0.00	NA	0.00	0.04	NA	NA	NA	0.00	0.62	0.06	0.01
nC23	NA	NA	NA	0.04	NA	NA	NA	NA	0.58	0.04	0.01
nC24	NA	NA	NA	0.03	NA	NA	NA	NA	0.50	0.03	0.01

[illegible]

phen	0.00	0.00	NA	0.01	NA	NA	0.00	0.00	0.08	0.01	0.00
phen-C1 (1me)	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.27	0.02	0.00
phen-C2 (3,6me)	NA	NA	NA	0.03	NA	NA	NA	NA	0.42	0.04	0.01
phen-C3 (9et10me)	NA	NA	NA	0.05	NA	NA	NA	NA	0.59	0.06	0.02
phen-C4 (noStd)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.24	0.02	0.00
phytane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pristane	0.01	0.00	0.00	0.05	0.01	0.01	0.01	0.00	0.77	0.06	0.02
pyr-C1 (1me)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
pyr-C2 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00
pyr-C3 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
pyr-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00
pyrene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs	0.01	0.00	0.00	0.50	0.01	0.01	0.01	0.03	6.98	0.56	0.14
Total alkanes	0.02	0.02	0.02	0.81	0.03	0.02	0.02	0.01	14.47	0.83	0.29
Total PAHs+alkane s	0.03	0.02	0.02	1.30	0.03	0.03	0.03	0.04	21.45	1.39	0.43

	2hr - Port 1	2hr - Port 2	2hr - Port 3	2hr - Port 4	2hr - Port 5	4hr - Port 1	4hr - Port 2	4hr - Port 3	4hr - Port 4	4hr - Port 5	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 4	24hr - Port 5
anthracene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
biphenyl	0.01	0.01	0.04	NA	NA	0.02	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
chrys/triphen/ bz(a)a	0.00	0.02	0.03	0.00	0.00	0.02	0.02	0.02	0.00	0.00	0.01	0.01	0.02	0.00	0.00
chrys-C1 (6me)	0.01	0.01	0.04	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.00
chrys-C2 (6et)	0.01	0.03	0.07	0.00	0.00	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.01
chrys-C3 (noStd)	0.00	0.03	0.07	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
chrys-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBT	0.01	0.02	0.06	0.00	0.00	0.02	0.02	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
DBT-C1 (noStd)	0.03	0.05	0.15	0.01	0.01	0.05	0.05	0.04	0.01	0.01	0.02	0.03	0.03	0.02	0.02
DBT-C2 (4,6meDBT)	0.06	0.10	0.27	0.02	0.01	0.09	0.09	0.07	0.02	0.02	0.05	0.06	0.05	0.03	0.04
DBT-C3 (noStd)	0.05	0.08	0.22	0.01	0.01	0.08	0.08	0.06	0.02	0.02	0.04	0.05	0.06	0.03	0.04
DBT-C4 (noStd)	0.03	0.05	0.13	0.01	0.01	0.04	0.05	0.04	0.01	0.01	0.02	0.03	0.03	0.02	0.02
fluo	0.01	0.01	0.03	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.00
fluo-C1 (1me)	0.02	0.04	0.11	0.01	0.01	0.04	0.04	0.03	0.01	0.01	0.02	0.03	0.03	0.01	0.02
fluo-C2 (noStd)	0.04	0.09	0.22	0.00	0.00	0.09	0.10	0.06	0.00	0.00	0.03	0.04	0.04	0.03	0.02
fluo-C3 (noStd)	0.06	0.10	0.23	0.01	0.01	0.08	0.08	0.07	0.03	0.01	0.04	0.06	0.06	0.04	0.04

fluor-C4 (noStd)	0.00	0.07	0.19	0.00	0.00	0.07	0.05	0.05	0.00	0.00	0.00	0.00	0.04	0.00	0.00
hopane	0.01	0.03	0.07	0.01	0.00	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.02	0.01	0.01
naph	0.06	0.09	0.29	0.02	0.01	0.12	0.10	0.09	0.03	0.02	0.06	0.07	0.07	0.06	0.05
naph-1me	0.07	0.12	0.38	0.02	0.01	0.13	0.12	0.10	0.03	0.02	0.07	0.08	0.07	0.06	0.05
naph-2me	0.07	0.13	0.42	0.02	0.01	0.14	0.13	0.11	0.02	0.02	0.06	0.07	0.07	0.06	0.05
naph-C2 (1,2me)	0.25	0.46	1.37	0.08	0.06	0.46	0.44	0.36	0.11	0.10	0.24	0.27	0.28	0.19	0.19
naph-C3 (3,5,5)	0.13	0.29	0.91	0.05	0.04	0.27	0.28	0.22	0.06	0.06	0.14	0.16	0.17	0.11	0.07
naph-C4 (noStd)	0.16	0.29	0.80	NA	NA	0.28	0.26	0.22	0.07	0.07	0.15	0.17	0.17	0.12	0.12
nC10	0.06	0.09	0.54	0.01	0.02	0.08	0.09	0.08	0.02	0.02	0.03	0.04	0.05	0.03	0.03
nC11	0.13	0.26	1.07	0.02	0.02	0.16	0.20	0.17	0.03	0.04	0.07	0.09	0.13	0.05	0.07
nC12	0.18	0.37	1.19	0.05	0.05	0.28	0.33	0.29	0.07	0.07	0.16	0.19	0.19	0.13	0.13
nC13	0.20	0.40	1.15	0.04	0.04	0.35	0.38	0.32	0.07	0.06	0.18	0.21	0.21	0.13	0.13
nC14	0.22	0.39	1.16	0.05	0.04	0.40	0.41	0.34	0.08	0.08	0.19	0.22	0.22	0.15	0.15
nC15	0.18	0.36	1.04	0.04	0.04	0.33	0.34	0.27	0.07	0.05	0.16	0.19	0.17	0.12	0.12
nC16	0.19	0.36	1.00	0.05	0.05	0.33	0.35	0.27	0.08	0.07	0.16	0.20	0.20	0.13	0.13
nC17	0.17	0.33	0.92	0.06	0.04	0.30	0.32	0.24	0.07	0.06	0.14	0.16	0.17	0.11	0.11
nC17pris	0.40	1.10	2.00	0.10	0.09	0.66	0.66	0.55	0.16	0.15	0.35	0.43	0.40	0.28	0.25

nC18	0.14	0.27	0.75	0.03	0.03	0.23	0.24	0.18	0.05	0.05	0.12	0.14	0.14	0.08	0.08
nC18phyt	0.31	0.56	1.52	0.09	0.08	0.52	0.54	0.43	0.12	0.12	0.27	0.32	0.31	0.20	0.20
nC19	0.15	0.30	0.72	0.05	0.05	0.27	0.27	0.22	0.07	0.06	0.13	0.15	0.14	0.10	0.10
nC20	0.14	0.25	0.73	0.03	0.03	0.22	0.22	0.18	0.05	0.05	0.11	0.13	0.13	0.08	0.08
nC21	0.12	0.24	0.69	0.03	0.03	0.22	0.21	0.17	0.05	0.04	0.11	0.13	0.12	0.07	0.07
nC22	0.13	0.23	0.72	0.03	0.03	0.22	0.23	0.18	0.04	0.04	0.12	0.13	0.13	0.09	0.08
nC23	0.11	0.22	0.61	0.03	0.02	0.19	0.20	0.16	0.04	0.04	0.09	0.11	0.11	0.07	0.06
nC24	0.09	0.19	0.51	0.02	0.02	0.17	0.16	0.13	0.03	0.03	0.08	0.09	0.09	0.06	0.05
nC25	0.08	0.16	0.47	0.02	0.02	0.13	0.14	0.11	0.02	0.02	0.07	0.08	0.07	0.05	0.04
nC26	0.07	0.15	0.40	0.02	0.02	0.12	0.13	0.10	0.03	0.03	0.06	0.07	0.07	0.05	0.04
nC27	0.05	0.11	0.32	0.01	0.01	0.09	0.09	0.07	0.02	0.02	0.04	0.05	0.05	0.03	0.03
nC28	0.04	0.09	0.26	0.01	0.01	0.07	0.07	0.05	0.01	0.01	0.04	0.04	0.04	0.03	0.02
nC29	0.03	0.08	0.22	0.01	0.01	0.06	0.06	0.05	0.01	0.01	0.03	0.03	0.03	0.02	0.02
nC30	0.02	0.05	0.14	NA	NA	0.03	0.04	0.03	0.01	0.01	0.02	0.02	0.02	0.01	0.01
nC31	0.02	0.04	0.11	NA	NA	0.02	0.03	0.02	0.01	0.01	0.02	0.02	0.01	0.01	0.01
nC32	0.01	0.03	0.07	NA	NA	0.01	0.01	0.01	NA	NA	0.01	0.01	0.01	0.01	0.00
nC33	0.01	0.02	0.05	NA	NA	0.01	0.01	0.01	NA	NA	0.00	0.00	0.01	0.00	0.00

nC34	0.01	0.02	0.04	NA	NA	0.01	0.01	0.01	NA	NA	0.00	0.00	0.00	0.00	NA
nC35	0.00	0.01	0.03	NA	NA	0.01	0.01	0.01	NA	NA	0.00	0.00	0.00	0.00	NA
nC36	0.00	0.01	0.03	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
nC37	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	NA	0.00	0.00	0.00	0.00	0.00	0.00
nC38	0.00	0.01	0.02	NA	NA	0.00	0.00	0.00	NA	0.00	0.00	0.00	0.00	0.00	0.00
nC39	NA	0.01	0.02	0.00	NA	0.00	0.00	NA	NA	NA	NA	NA	0.00	0.00	0.00
nC40	0.00	0.01	0.01	NA	NA	NA	0.00	0.00	0.00	NA	0.00	NA	NA	0.00	0.00
o-terphenyl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
phen	0.02	0.03	0.09	0.01	0.00	0.03	0.03	0.03	0.01	0.01	0.02	0.02	0.02	0.01	0.01
phen-C1 (1me)	0.07	0.11	0.29	0.01	0.01	0.10	0.10	0.09	0.02	0.02	0.05	0.06	0.05	0.04	0.04
phen-C2 (3,6me)	0.09	0.16	0.43	0.03	0.03	0.15	0.15	0.12	0.04	0.04	0.09	0.10	0.09	0.06	0.06
phen-C3 (9et10me)	0.14	0.25	0.60	0.03	0.03	0.23	0.24	0.19	0.06	0.06	0.12	0.14	0.14	0.09	0.09
phen-C4 (noStd)	0.10	0.16	0.39	0.02	0.02	0.15	0.15	0.12	0.03	0.03	0.07	0.07	0.07	0.05	0.05
phytane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pristane	0.17	0.57	0.79	0.04	0.04	0.28	0.29	0.22	0.07	0.06	0.14	0.17	0.17	0.13	0.11
pyr-C1 (1me)	0.01	0.01	0.04	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00
pyr-C2 (noStd)	0.02	0.03	0.08	0.00	0.00	0.03	0.03	0.02	0.00	0.00	0.01	0.02	0.02	0.01	0.01

pyr-C3 (noStd)	0.02	0.03	0.06	0.00	0.00	0.03	0.03	0.02	0.00	0.00	0.02	0.02	0.02	0.02	0.01
pyr-C4 (noStd)	0.01	0.02	0.07	0.00	0.00	0.02	0.03	0.02	0.00	0.00	0.01	0.01	0.01	0.01	0.01
pyrene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs	1.56	2.94	8.15	0.37	0.32	2.82	2.77	2.24	0.62	0.55	1.41	1.63	1.67	1.13	1.05
Total alkanes	2.95	6.12	16.85	0.72	0.65	4.98	5.21	4.23	1.11	1.01	2.51	2.96	2.91	1.89	1.84
Total PAHs+alkanes	4.51	9.06	25.00	1.08	0.98	7.80	7.98	6.47	1.72	1.56	3.92	4.59	4.58	3.03	2.88

The total PAH values from the tables above were then divided by 6, to account for the concentration factor (30mL seawater sample was extracted with 5mL of hexane, concentrating the sample by a factor of 6), then multiplied by 1000 to scale from concentration per mL to L of sample in the following table.

sample name	ug PAHs/mL aqueous sample	ug PAH/L aqueous sample
ADAC_TG-OD-Rep2-Control_P1	0.00	1.17
ADAC_TG-OD-Rep2-30min_P1	0.00	0.69
ADAC_TG-OD-Rep2-30min_P2	0.00	0.48
ADAC_TG-OD-Rep2-30min_P3	0.08	82.93
ADAC_TG-OD-Rep2-30min_P4	0.00	1.44
ADAC_TG-OD-Rep2-30min_P5	0.00	1.71

ADAC_TG-OD-Rep2-1hr_P1	0.00	2.23
ADAC_TG-OD-Rep2-1hr_P2	0.00	4.71
ADAC_TG-OD-Rep2-1hr_P3	1.16	1163.66
ADAC_TG-OD-Rep2-1hr_P4	0.09	93.33
ADAC_TG-OD-Rep2-1hr_P5	0.02	23.87
ADAC_TG-OD-Rep2-2hr_P1	0.26	259.71
ADAC_TG-OD-Rep2-2hr_P2	0.49	489.66
ADAC_TG-OD-Rep2-2hr_P3	1.36	1358.20
ADAC_TG-OD-Rep2-2hr_P4	0.06	61.26
ADAC_TG-OD-Rep2-2hr_P5	0.05	53.79
ADAC_TG-OD-Rep2-4hr_P1	0.47	470.01
ADAC_TG-OD-Rep2-4hr_P2	0.46	461.10
ADAC_TG-OD-Rep2-4hr_P3	0.37	373.86
ADAC_TG-OD-Rep2-4hr_P4	0.10	102.73
ADAC_TG-OD-Rep2-4hr_P5	0.09	92.34
ADAC_TG-OD-Rep2-24hr_P1	0.23	234.39
ADAC_TG-OD-Rep2-24hr_P2	0.27	271.72

ADAC_TG-OD-Rep2-24hr_P3	0.28	278.32
ADAC_TG-OD-Rep2-24hr_P4	0.19	188.85
ADAC_TG-OD-Rep2-24hr_P5	0.17	174.74

A.B.D.B.C. GCxGC Results:

[illegible]

oxFluC 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxFluC 2	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxFluC 3	0.00	0.00	0.00	0.98	0.05	0.06	3.47	1.43	3.35	0.82	2.31
pheC0	0.00	0.01	0.01	14.23	0.09	0.13	4.01	4.47	3.73	2.82	2.24
pheC1	0.00	0.04	0.03	18.62	0.29	0.39	6.72	7.21	5.97	4.06	3.22
pheC2	0.00	0.05	0.03	16.47	0.41	0.47	6.16	5.62	5.32	3.98	2.52
pheC3	0.00	0.01	0.00	2.86	0.18	0.19	1.54	1.73	1.86	0.85	0.89
pheC4	0.00	0.00	0.00	0.95	0.04	0.05	0.46	0.48	0.66	0.20	0.14
dbtC0	0.00	0.01	0.00	17.70	0.08	0.13	4.28	4.66	4.07	2.91	2.11
dbtC1	0.00	0.04	0.01	20.83	0.31	0.39	7.31	7.83	7.72	4.54	3.47
dbtC2	0.00	0.05	0.04	15.66	0.48	0.60	6.74	6.71	6.04	3.82	3.29
dbtC3	0.00	0.02	0.01	7.47	0.34	0.44	3.37	3.49	3.43	1.91	2.00
dbtC4	0.00	0.00	0.00	1.91	0.08	0.09	0.78	0.87	1.03	0.36	0.48
pyrC0	0.00	0.00	0.00	0.27	0.00	0.00	0.12	0.12	0.10	0.06	0.05
pyrC1	0.00	0.00	0.00	0.68	0.02	0.01	0.37	0.37	0.26	0.12	0.11
pyrC2	0.00	0.00	0.00	0.87	0.02	0.02	0.40	0.41	0.35	0.12	0.09
pyrC3	0.00	0.00	0.00	0.55	0.02	0.01	0.24	0.29	0.30	0.10	0.07

pyrC4	0.00	0.00	0.00	0.20	0.00	0.00	0.09	0.08	0.10	0.02	0.03
chrC0	0.00	0.00	0.00	1.66	0.03	0.08	0.77	0.84	0.54	0.29	0.22
chrC1	0.00	0.00	0.00	1.62	0.04	0.06	0.62	0.71	0.48	0.21	0.23
chrC2	0.00	0.00	0.00	1.05	0.01	0.04	0.43	0.48	0.37	0.13	0.11
chrC3	0.00	0.00	0.00	0.14	0.00	0.00	0.10	0.05	0.11	0.01	0.02
chrC4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxBzA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs	0.00	3.04	0.68	1201.06	9.87	13.07	328.65	343.56	350.35	252.88	202.26

A.B.D.C. Replicate 3

A.B.D.C.A. Sampling Scheme:

Experiment name: **Stratified_Oil_and_Disb-Rep3_20201124**

Description: copepods, oil, dispersant, stratified

Oil added on 11/24/20 at 10:45am, **5.36 g** of oil+dispersant added (6.5mL of evaporated Alaska North Slope oil, and 310uL of Corexit 9500 dispersant)

	Time	Port 1	Port 2	Port 3	Port 4	Port 5
Control	10:37-10:45am	S/L/D	D	D	D	D
0.5 hr	11:15-11:20am	L/D	L/D	L/D	L/D	L/D
1 hr	11:45-11:57am	S/L/D	S/L/D	S/L/D	S/L/D	S/L/D
2hr	12:44-12:51pm	L/D	L/D	L/D	L/D	L/D

4hr	2:42-2:49pm	L/D	L/D	L/D	L/D	L/D
24hr	10:45-10:58am	S/L/D	S/L/D	S/L/D	S/L/D	S/L/D

*50uL of concentrated phosphoric acid was added to samples for SPME, fluorescence and liquid-liquid extraction after they were sampled.

S= sample taken for SPME measurement (2x - SPME vial with 18mL of sample).

L=sample take for liquid-liquid extraction in hexane to be run on fluorometer and GCMS (1x - 40mL vial with 30mL of sample, to be extracted with 5mL of hexane).

D=sample taken for droplet size distribution on a hemocytometer under a fluorescent microscope (1x - 1.8mL vial with ~1mL sample).

Glass syringes were cleaned between samples with hexane then methanol then water.

5mL of water was pulled out of the sampling tubes and discarded before samples were taken at each time point.

A.B.D.C.B. GCMS Results:

	Control - Port 1	0.5hr - Port 1	0.5hr - Port 2	0.5hr - Port 3	0.5hr - Port 4	0.5hr - Port 5	1hr - Port 1	1hr - Port 2	1hr - Port 3	1hr - Port 4	1hr - Port 5
anthracene	NA	0.00	NA	NA	NA	NA	0.00	NA	0.00	0.00	NA
biphenyl	NA	0.02	NA	NA	NA	NA	0.02	NA	0.02	NA	NA
chrys/triphen/bz(a)a	0.00	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.00	0.00
chrys-C1 (6me)	NA	0.02	NA	NA	NA	NA	0.02	NA	0.02	NA	NA
chrys-C2 (6et)	NA	0.03	NA	NA	NA	NA	0.03	NA	0.03	NA	NA
chrys-C3 (noStd)	0.00	0.03	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.00
chrys-C4 (noStd)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DBT	0.00	0.03	0.00	0.00	0.00	0.00	0.03	0.00	0.02	0.00	0.00

DBT-C1 (noStd)	NA	0.07	NA	NA	NA	NA	0.07	NA	0.06	0.00	NA
DBT-C2 (4,6meDBT)	NA	0.13	NA	NA	NA	NA	0.14	NA	0.12	0.01	NA
DBT-C3 (noStd)	NA	0.11	NA	NA	NA	NA	0.13	NA	0.10	0.01	NA
DBT-C4 (noStd)	0.00	0.06	0.00	0.00	0.00	0.00	0.07	0.00	0.05	0.00	0.00
fluo	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00
fluo-C1 (1me)	NA	0.06	NA	NA	NA	NA	0.06	NA	0.05	0.00	NA
fluo-C2 (noStd)	0.00	0.11	0.00	0.00	0.00	0.00	0.12	0.00	0.10	0.00	0.00
fluo-C3 (noStd)	NA	0.13	NA	NA	NA	NA	0.13	NA	0.10	NA	NA
fluo-C4 (noStd)	0.00	0.09	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00
hopane	NA	0.04	NA	NA	0.00	NA	0.04	0.00	0.03	0.00	NA
naph	0.00	0.15	0.00	0.00	0.00	0.00	0.16	0.00	0.11	0.01	0.00
naph-1me	NA	0.18	NA	0.00	0.00	0.00	0.18	NA	0.14	0.01	0.00
naph-2me	NA	0.20	NA	0.00	0.00	0.00	0.20	NA	0.14	0.01	0.00
naph-C2 (1,2me)	NA	0.66	NA	NA	NA	NA	0.66	NA	0.52	0.04	NA
naph-C3 (3,5,5)	0.00	0.42	0.00	0.00	0.00	0.00	0.43	0.00	0.35	0.01	0.00
naph-C4 (noStd)	NA	0.40	NA	NA	NA	NA	0.39	NA	0.33	0.02	NA
nC10	NA	0.12	NA	NA	NA	NA	0.07	NA	0.05	NA	NA

nC11	0.00	0.35	0.00	NA	0.00	0.00	0.29	NA	0.21	0.00	NA
nC12	0.01	0.50	0.01	0.01	0.01	0.01	0.46	0.01	0.33	0.01	0.01
nC13	0.00	0.54	0.01	0.01	0.00	0.00	0.52	NA	0.41	0.01	0.00
nC14	0.02	0.52	0.02	0.01	0.01	0.01	0.58	NA	0.47	0.02	0.00
nC15	NA	0.48	NA	NA	NA	NA	0.51	NA	0.41	0.01	NA
nC16	NA	0.47	NA	NA	NA	NA	0.50	NA	0.42	0.02	NA
nC17	0.00	0.46	0.00	0.00	0.00	0.00	0.46	0.00	0.36	0.00	0.00
nC17pris	0.08	0.98	NA	0.06	NA	NA	1.03	NA	0.85	0.04	NA
nC18	NA	0.36	NA	0.00	NA	NA	0.36	NA	0.29	0.02	NA
nC18phyt	NA	0.83	NA	NA	NA	NA	0.80	NA	0.67	0.04	NA
nC19	NA	0.41	NA	NA	NA	NA	0.43	NA	0.33	0.02	NA
nC20	NA	0.34	NA	NA	NA	NA	0.35	0.00	0.29	0.01	NA
nC21	NA	0.33	NA	NA	NA	NA	0.34	0.00	0.28	0.01	NA
nC22	0.00	0.34	NA	NA	NA	NA	0.32	NA	0.30	0.00	NA
nC23	NA	0.30	NA	NA	NA	NA	0.31	0.00	0.25	0.01	NA
nC24	NA	0.25	NA	NA	NA	NA	0.26	NA	0.22	0.01	NA
nC25	NA	0.21	NA	NA	NA	NA	0.22	NA	0.18	0.01	NA

nC26	NA	0.20	NA	NA	NA	NA	0.20	0.00	0.17	0.01	0.00
nC27	NA	0.14	NA	NA	NA	NA	0.15	NA	0.12	0.01	NA
nC28	NA	0.11	NA	NA	NA	NA	0.12	NA	0.10	0.01	NA
nC29	NA	0.10	NA	NA	NA	NA	0.10	NA	0.09	0.01	NA
nC30	NA	0.06	NA	NA	NA	NA	0.06	NA	0.05	0.01	NA
nC31	NA	0.05	NA	NA	NA	NA	0.04	NA	0.04	0.01	NA
nC32	NA	0.03	NA	NA	NA	NA	0.03	NA	0.03	NA	NA
nC33	NA	0.02	NA	NA	NA	NA	0.02	NA	0.02	NA	NA
nC34	NA	0.02	NA	NA	NA	NA	0.02	NA	0.01	NA	NA
nC35	NA	0.02	NA	NA	NA	NA	0.01	NA	0.01	NA	NA
nC36	0.00	0.01	0.00	0.00	0.00	NA	0.01	NA	0.01	0.00	NA
nC37	0.00	0.01	NA	0.00	0.00	NA	0.01	0.00	0.01	0.00	NA
nC38	0.00	0.01	0.00	0.00	NA	NA	0.01	0.00	0.01	0.00	NA
nC39	0.00	0.01	0.00	0.00	NA	NA	0.00	0.00	0.01	NA	NA
nC40	0.00	0.00	NA	0.00	NA	NA	0.01	0.00	0.00	NA	NA
o-terphenyl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA	0.00	0.00	0.00
phen	NA	0.05	NA	0.00	0.00	NA	0.05	NA	0.04	0.00	0.00

phen-C1 (1me)	0.00	0.15	0.00	0.00	0.00	0.00	0.15	0.00	0.13	0.00	0.00
phen-C2 (3,6me)	NA	0.22	NA	NA	NA	NA	0.23	NA	0.19	0.02	NA
phen-C3 (9et10me)	NA	0.31	NA	NA	NA	NA	0.33	NA	0.28	0.02	NA
phen-C4 (noStd)	0.00	0.17	0.00	0.00	0.00	0.00	0.17	0.00	0.18	0.00	0.00
phytane	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pristane	0.06	0.40	NA	0.04	0.00	NA	0.42	NA	0.36	0.02	0.01
pyr-C1 (1me)	0.00	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.00	0.00
pyr-C2 (noStd)	0.00	0.04	0.00	0.00	0.00	0.00	0.04	0.00	0.03	0.00	0.00
pyr-C3 (noStd)	0.00	0.04	0.00	0.00	0.00	0.00	0.04	0.00	0.03	0.00	0.00
pyr-C4 (noStd)	0.00	0.03	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.00
pyrene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs	0.00	3.99	0.00	0.01	0.01	0.00	4.14	0.00	3.25	0.19	0.01
Total alkanes	0.11	7.75	0.03	0.08	0.03	0.03	7.75	0.01	6.32	0.29	0.01
Total PAHs+alkanes	0.11	11.74	0.03	0.09	0.04	0.03	11.89	0.01	9.57	0.48	0.02

	2hr - Port 1	2hr - Port 2	2hr - Port 3	2hr - Port 4	2hr - Port 5	4hr - Port 1	4hr - Port 2	4hr - Port 3	4hr - Port 4	4hr - Port 5	24hr - Port 1	24hr - Port 2	24hr - Port 3	24hr - Port 4	24hr - Port 5
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hopane	0.02	0.02	0.02	0.00	0.00	0.01	0.01	0.01	0.00	NA	0.01	0.01	0.01	0.01	0.00
naph	0.08	0.06	0.10	0.02	0.01	0.06	0.05	0.06	0.02	0.01	0.04	0.04	0.04	0.04	0.03
naph-1me	0.08	0.08	0.11	0.02	0.01	0.05	0.05	0.07	0.02	0.01	0.03	0.04	0.04	0.03	0.03
naph-2me	0.07	0.07	0.12	0.02	0.01	0.04	0.04	0.06	0.02	0.01	0.02	0.04	0.03	0.03	0.03
naph-C2 (1,2me)	0.27	0.27	0.44	0.06	0.03	0.16	0.14	0.21	0.08	0.04	0.11	0.15	0.12	0.13	0.10
naph-C3 (3,5,5)	0.20	0.20	0.32	0.03	0.02	0.10	0.10	0.13	0.04	0.03	0.08	0.09	0.07	0.06	0.07
naph-C4 (noStd)	0.17	0.18	0.29	0.04	0.01	0.12	0.10	0.13	0.04	0.03	0.07	0.08	0.08	NA	NA
nC10	0.02	0.02	0.03	NA	NA	0.01	0.01	0.02	NA	NA	NA	NA	NA	NA	NA
nC11	0.08	0.07	0.15	0.00	NA	0.02	0.02	0.02	0.00	NA	0.01	0.01	0.02	0.01	0.01
nC12	0.15	0.14	0.28	0.01	0.01	0.04	0.05	0.05	0.02	0.02	0.04	0.06	0.06	0.03	0.04
nC13	0.19	0.18	0.32	0.01	0.01	0.06	0.09	0.10	0.02	0.02	0.04	0.09	0.06	0.04	0.04
nC14	0.20	0.21	0.38	0.02	0.01	0.08	0.14	0.14	0.02	0.01	0.05	0.07	0.07	0.05	0.05
nC15	0.18	0.19	0.29	0.02	NA	0.09	0.11	0.10	0.03	0.01	0.06	0.06	0.06	0.05	0.04
nC16	0.19	0.21	0.30	0.02	NA	0.11	0.13	0.13	0.03	0.01	0.06	0.08	0.08	0.05	0.04
nC17	0.17	0.19	0.29	0.03	0.01	0.10	0.13	0.14	0.03	0.01	0.09	0.07	0.13	0.06	0.03
nC17pris	0.38	0.45	0.67	0.07	0.03	0.22	0.28	0.49	0.08	0.05	0.17	0.18	0.23	0.11	0.09
nC18	0.14	0.15	0.23	0.02	NA	0.08	0.09	0.09	0.02	0.00	0.05	0.06	0.05	0.03	0.03

[illegible]

pyr-C4 (noStd)	0.01	0.01	0.02	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pyrene	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs	1.71	1.81	2.71	0.29	0.13	1.01	1.09	1.25	0.34	0.18	0.65	0.82	0.72	0.51	0.44
Total alkanes	2.74	3.05	4.74	0.31	0.08	1.43	1.68	2.15	0.39	0.20	0.83	1.11	1.06	0.65	0.58
Total PAHs+alkanes	4.45	4.86	7.46	0.60	0.21	2.44	2.76	3.40	0.73	0.39	1.48	1.93	1.78	1.16	1.02

The total PAH values from the tables above were then divided by 6, to account for the concentration factor (30mL seawater sample was extracted with 5mL of hexane, concentrating the sample by a factor of 6), then multiplied by 1000 to scale from concentration per mL to L of sample in the following table.

sample name	ug PAHs/mL aqueous sample	ug PAH/L aqueous sample
ADAC_TG-OD-Rep3-Control_P1	0.00	0.14
ADAC_TG-OD-Rep3-30min_P1	0.66	664.27
ADAC_TG-OD-Rep3-30min_P2	0.00	0.14
ADAC_TG-OD-Rep3-30min_P3	0.00	1.11
ADAC_TG-OD-Rep3-30min_P4	0.00	2.05
ADAC_TG-OD-Rep3-30min_P5	0.00	0.41
ADAC_TG-OD-Rep3-1hr_P1	0.69	690.83

ADAC_TG-OD-Rep3-1hr_P2	0.00	0.20
ADAC_TG-OD-Rep3-1hr_P3	0.54	541.47
ADAC_TG-OD-Rep3-1hr_P4	0.03	31.37
ADAC_TG-OD-Rep3-1hr_P5	0.00	1.70
ADAC_TG-OD-Rep3-2hr_P1	0.28	284.81
ADAC_TG-OD-Rep3-2hr_P2	0.30	301.30
ADAC_TG-OD-Rep3-2hr_P3	0.45	452.22
ADAC_TG-OD-Rep3-2hr_P4	0.05	47.51
ADAC_TG-OD-Rep3-2hr_P5	0.02	20.97
ADAC_TG-OD-Rep3-4hr_P1	0.17	168.43
ADAC_TG-OD-Rep3-4hr_P2	0.18	180.85
ADAC_TG-OD-Rep3-4hr_P3	0.21	207.85
ADAC_TG-OD-Rep3-4hr_P4	0.06	55.95
ADAC_TG-OD-Rep3-4hr_P5	0.03	30.69
ADAC_TG-OD-Rep3-24hr_P1	0.11	108.35
ADAC_TG-OD-Rep3-24hr_P2	0.14	136.20
ADAC_TG-OD-Rep3-24hr_P3	0.12	119.34

ADAC_TG-OD-Rep3-24hr_P4	0.08	84.68
ADAC_TG-OD-Rep3-24hr_P5	0.07	73.20

A.B.D.C.C. GCxGC Results:

[illegible]

oxFluC 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.11	0.00	0.00
oxFluC 3	0.00	6.46	0.00	4.08	0.17	0.00	1.10	1.24	0.93	0.69	0.81
pheC0	0.00	12.02	0.01	7.87	0.36	0.04	1.64	1.59	1.52	1.24	1.07
pheC1	0.00	18.72	0.04	11.75	0.73	0.11	2.91	3.13	2.97	1.92	1.74
pheC2	0.00	15.98	0.04	9.39	0.77	0.16	2.87	2.81	3.44	1.83	1.37
pheC3	0.00	5.73	0.02	3.63	0.20	0.06	1.01	1.09	0.96	0.53	0.44
pheC4	0.00	1.63	0.00	1.29	0.04	0.00	0.33	0.33	0.23	0.10	0.09
dbtC0	0.00	13.83	0.01	9.07	0.28	0.02	1.66	1.57	1.43	1.20	1.12
dbtC1	0.00	20.74	0.03	12.54	0.86	0.10	2.95	3.33	2.96	2.07	1.74
dbtC2	0.00	21.35	0.06	11.42	0.98	0.15	3.28	3.47	3.35	2.00	1.76
dbtC3	0.00	10.98	0.03	6.73	0.50	0.11	1.82	2.04	1.91	1.16	0.94
dbtC4	0.00	3.33	0.00	2.36	0.12	0.01	0.61	0.56	0.49	0.23	0.22
pyrC0	0.00	0.32	0.00	0.20	0.01	0.00	0.05	0.06	0.05	0.03	0.03
pyrC1	0.00	1.09	0.00	0.54	0.02	0.00	0.11	0.20	0.17	0.04	0.05
pyrC2	0.00	1.03	0.00	0.54	0.02	0.00	0.14	0.17	0.16	0.04	0.05
pyrC3	0.00	1.13	0.00	0.62	0.02	0.00	0.14	0.19	0.14	0.06	0.03
pyrC4	0.00	0.41	0.00	0.16	0.00	0.00	0.04	0.05	0.05	0.01	0.01

chrC0	0.00	2.35	0.00	1.16	0.09	0.00	0.33	0.50	0.42	0.16	0.13
chrC1	0.00	2.22	0.00	1.10	0.06	0.00	0.25	0.44	0.37	0.15	0.10
chrC2	0.00	1.74	0.00	0.61	0.01	0.00	0.25	0.35	0.21	0.05	0.04
chrC3	0.00	0.89	0.00	0.30	0.00	0.00	0.06	0.08	0.08	0.00	0.00
chrC4	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
oxBzA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PAHs	0.13	1080.12	1.21	688.91	31.23	6.92	128.65	121.69	93.08	98.22	97.51