

11 Sept - 18 Sept

Chlorophyll Data Sheet

Cruise: 2018-40 Line P

Page: 1 of

Dates of Cruise: Sept

Time and date acetone added: 17 OCT 10:32

Analyst: Hayleigh.

Time and date out of freezer: 18 OCT 8:20

Time analysis started: 9:25

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.013			
STD			LOW	2-	10.372			
STD			HIGH	4-	56.749			
Blank				6-	-0.000	8-	-0.000	
942	EX-E	304	10	1-	11.130	2-	7.255	NDF 1
5120 A	LOOP	304	10	3-	15.035	4-	8.625	
993A	P4		10	5-	22.775	6-	14.444	
799	EX-C		10	7-	16.674	8-	9.430	
844	EX-W		10	1-	8.495	2-9-	4.987	
944	EX-P		10	3-	14.800	4-	8.962	
800	EX-C		10	5-	16.548	6-	9.324	
846	EX-W		10	7-	20.019	8-	11.352	
946	EX-S		10	1-	18.303	2-	10.189	
5121 A	LOOP		10	3-	21.547	4-	12.430	
801	EX-C		10	5-	16.707	6-	9.369	
847	EX-W		10	7-	19.802	8-	11.163	
947	EX-E		10	1-	18.087	2-	10.124	
802	EX-C		10	3-	15.487	4-	8.697	
897	EX-N		10	5-	7.846	6-	5.063	
5117 B	LOOP 117		10	7-	9.476	8-	5.531	
987	P4		10	1-	1.740	2-	1.395	
803A	EX-C		10	3-	16	4-	8.977	
894	EX-N		10	5-	7.047	6-	4.409	
896	EX-N		10	7-	16.242	8-	9.080	
5117 A	LOOP 117		10	1-	9.078	2-x	5.30	← Add value manually
988	P4		10	3-	3.818	4-	2.630	
5118 A	LOOP		10	5-	8.856	6-	5.073	
989A	P4		10	7-	7.541	8-	4.987	
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

20 mL Acetone: Added to NO samples

942	5120	993 A	799	844	944	800	846	946	5121	801
Chl	CHL	CHL	Chl	Chl	Chl	Chl	Chl	Chl	Chl A	Chl
EX-E	120	P4	EX-C	EX-W	EX-E	EX-C	EX-W	EX-E	2018-040	EX-C
75 m	LOOP	5 m	30 m	50 m	50 m	25 m	20 m	20 m	2018-040	20 m
2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	LOOP	2018-040
Bot 7	Bot 1	Bot 26	Bot 11	Bot 9	Bot 9	Bot 12	Bot 11	Bot 11		Bot 13

847	947	802	892	5117	987	803 A	894	896	5117 A	988
Chl	Chl	Chl	Chl	CHL	CHL	Chl	Chl	Chl	CHL	CHL
EX-W	EX-E	EX-C	EX-N	loop 117	P4	EX-C	EX-N	EX-N	loop 117	P4
5 m	5 m	15 m	75 m	LOOP	100 m	15 m	50 m	20 m	LOOP	75 m
2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040
Bot 12	Bot 12	Bot 14	Bot 7	Bot 1	Bot 14	Bot 15	Bot 9	Bot 11	Bot 1	Bot 15

2018-040
LOOP
CHL A
5118
2018-040
Bot 16

989 A
CHL
P4
50 m
2018-040
Bot 16

Chlorophyll Data Sheet

Cruise: 2018-40 Line P

Page: 2 of

Dates of Cruise: Sept

Time and date acetone added: 17 OCT 2:25

Analyst: Haylyn

Time and date out of freezer: 18 OCT 12:25

Time analysis started: 1:25

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.010			
STD			LOW	2-	10.320			
STD			HIGH	4-	56.067			
Blank				6-	0.001	8-	0.000	
449	P20	304	10	1-	9.541	2-	5.488	
794	EX-C		10	3-	7.956	4-	4.802	
498	P20		10	5-	8.669	6-	4.912	
339	P16		10	7-	12.773	8-	8.770	
796A	EX-C		10	1-	11.456	2-	6.800	
806	EX-C		10	3-	15.490	4-	8.744	
5119 A	LOOP		10	5-	9.672	6-	5.573	
991	P4		10	7-	24.458	8-	15.582	
340	P16		10	1-	13.464	2-	8.977	
5077A	LOOP		10	3-	14.271	4-	8.165	
5063A	LOOP		10	5-	9.797	6-	5.751	
330A	P14		10	7-	9.773	8-	5.692	
797	EX-C		10	1-	13.687	2-	8.231	
897	EX-N		10	3-	16.672	4-	9.235	
990	P4		10	5-	13.931	6-	8.580	
798	EX-C		10	7-	15.900	8-	9.464	
285	P12		10	1-	5.669	2-	3.235	
504A	P21		10	3-	11.337	4-	6.800	
349A	P16		10	5-	5.367	6-	3.208	
283	P12		10	7-	6.108	8-	3.492	
804	EX-C		10	1-	10.573	2-	8.737	
5113 A	LOOP		10	3-	12.109	4-	6.786	
807	EX-C		10	5-	16.693	6-	9.268	
842	EX-W		10	7-	6.027	8-	3.900	
Stand-by				1-	0.007			
Std	Low			2-	10.34			
Std	High			4-	56.146			
Blank	by			6-	0.001	8-	0.001	

No Sample had 20 ml Acetone added

Chlorophyll Data Sheet

Cruise: 2018-040 Line P

Page: 3 of

Dates of Cruise: Sept

Time and date acetone added: 18 OCT 10:40

Analyst: Hayleigh

Time and date out of freezer: 19 OCT 8:40

Time analysis started: 9:40

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.014			
STD			LOW	2-	10.437			
STD			HIGH	4-	56.738			
Blank				6-	0.000	8-	-0.000	✓
504 B	P21	304	10	1-	11.622	2-	7.093	No DF
5077 B	LOOP		10	3-	14.379	4-	8.134	
793	EX-C		10	5-	6.933	6-	4.708	
5049 A	LOOP		10	7- ^{del 7-10}	10.201	8-	5.912	
341	P16		10	1-	15.239	2-	9.768	
492 B	P20		10	3-	6.298	4-	4.298	
672	P26		10	5-	9.456	6-	5.596	
792	EX-C		10	7-	5.374	8-	3.571	
708	EX-F1		10	1-	16.120	2-	9.019	
670	P26		10	3-	7.131	4-	4.349	
554 B	P25		10	5-	15.473	6-	8.710	
528 B	P22		10	7-	10.369	8-9	6.317	
500 B	P20		10	1-	8.734	2-	4.958	
493	P20		10	3-	14.385	4-	9.944	
405 B	P17		10	5-	9.013	6-	5.477	
342	P16		10	7-	10.9	8-	7.110	
5049 B	LOOP		10	1-	10.362	2-	6.027	
286 B	P12		10	3-	11.418	4-	6.304	
5050	LOOP		10	5-	9.090	6-	5.346	lid was missing seal
494	P20		10	7-	12.912	8-	9.438	
502	P20		10	1-	8.996	2-	5.159	
674	P26		10	3-	10.101	4-	9.144	
707	EX-F1		10	5-	16.666	6-	9.591	
5046 A	LOOP		10	7- *	3.74	8-	3.483	7 Type Inhibitor
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

[illegible]

Chlorophyll Data Sheet

Cruise: 2018-040

Page: 4 of

Dates of Cruise: 11/18/18

Time and date acetone added: 1800 2:40

Analyst: Hayleygh

Time and date out of freezer: 1900 12:40

Time analysis started: 1:40

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.008			
STD			LOW	2-	10.254			
STD			HIGH	4-	56.562			
Blank				6-	0.004	8-		
803B	EX-C	304	10	1-	16.374	2-	9.15	NOBF
5121	LOOP		10	3-	21.787	4-	12.571	
993B	P4		10	5-	22.698	6-	14.350	
5119 B	LOOP		10	7-	9.714	8-	5.480	
5113 B	LOOP		10	1-	12.206	2-	6.983	
5050	LOOP		10	3-	9.085	4-	5.267	
343B	P16		10	5-	9.929	6-	6.401	
5060 B	LOOP		10	7-+miser	9.001	8-	5.570	TYR27
678	P26		10	1-	15.841	2-	8.943	
796 B	EX-C		10	3-	11.435	4-	6.967	
5120 B	LOOP		10	5-	15.140	6-	8.663	
9890	P4		10	7-	0.894	8-	0.606	
5118B	LOOP		10	1-	7.718	2-	4.426	
5073B	LOOP		10	3-	11.163	4-	6.335	
503	P20		10	5-	8.175	6-	4.613	
495	P20		10	7-	13.251	8-	8.898	
555B	P35		10	1-	18.542	2-	10.477	
331 B	P15		10	3-	10.967	4-	6.254	
344	P13		10	5-	8.849	6-x	3.814	-typical
496	P20		10	7-	11.099	8-	6.637	
5078B	LOOP		10	1-	16.983	2-	9.568	
705	EX-F1		10	3-	7.167	4-	4.292	
703 B	EX-F1		10	5-	6.874	6-	4.512	
675 B	P26		10	7-	16.551	8-	9.285	
Stand-by				1-	0.008			
Std	Low			2-	10.337			
Std	High			4-	56.094			
Blank	by			6-	0.004	8-		

803 chl EX-C 15 m 2018-040 Bot 15	5121 chl • B 2018-040 LOOP	993 B CHL P4 5 m 2018-040 Bot 20	2018-040 LOOP CHL B 5119 B	2018-040 LOOP CHL A B	5050 CHL Loop LOOP 2018-040 Bot 1	343 B CHL P16 25 m 2018-040 Bot 12	678 CHL P26 10 m 2018-040 Bot 16	796 B chl EX-C 50 m 2018-040 Bot 8	5120 CHL B 120 LOOP 2018-040 Bot 1	989 B CHL P4 50 m 2018-040 Bot 16
2018-040 LOOP CHL B 5118	5075 CHL B P23 LOOP 2018-040 Bot 1	503 CHL P20 0 m 2018-040 Bot 18	495 CHL P20 40 m 2018-040 Bot 10	555 B CHL B P35 5 m 2018-040 Bot 1	331 CHL B P15 5 m 2018-040 Bot 1	496 CHL P20 30 m 2018-040 Bot 11	5073 B CHL under LOOP 2018-040 Bot 1	705 chl EX-F1 50 m 2018-040 Bot 9	703 B chl EX-F1 75 m 2018-040 Bot 7	675 B CHL B P26 25 m 2018-040 Bot 13

5060 B
CHL
5069
LOOP
2018-040
Bot 1

344
CHL
P16
20 m
2018-040
Bot 13

Two labels out of order.

Chlorophyll Data Sheet

Cruise: 2018-040 LNEP

Page: 5 of

Dates of Cruise: Sept

Time and date acetone added: OCT 22 10:50

Analyst: Hayleigh

Time and date out of freezer: OCT 23 8:50

Time analysis started: 9:50

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.012			
STD			LOW	2-	10.185			
STD			HIGH	4-	55.743			
Blank				6-	0.003	8-	0.003	
405 A	P17	304	10	1-	9.242	2-	5.528	NDF
500 A	P20	304	10	3-	7.877	4-	5.121	
528 A	P22		10	5-	10.136	6-	6.144	
554 A	P25		10	7-	15.837	8-	8.864	cap seal missing
306 B	P13		10	1-	11.514	2-	6.393	
338	P16		10	3-	6.753	4-	4.391	
348	P16		10	5-	5.828	6-	3.530	
430 B	P19		10	7-	11.213	8-	6.345	
667	P26		10	1- ^{x 1000}	2.676	2-	1.713	
676	P26		10	3-	16.227	4-	9.156	
679	P26		10	5-	15.846	6-	8.844	
683	P26		10	7-	16.853	8-	9.198	
677	P26		10	1-	16.408	2-	9.203	
669	P26		10	3-	6.322	4-	4.155	
553 B	P24		10	5-	15.470	6-	8.066	
5073 B	LOOP		10	7-	9.577	8-	5.792	
346	P16		10	1-	5.783	2-	3.507	
337	P16		10	3-	2.743	4-	2.002	
5047 B	LOOP		16	5- 9-	9.398	6-	5.327	
345	P16		10	7-	5.805	8-	3.428	
429 B	P18		10	1-	5.187	2-	3.054	
497	P20		10	3-	10.976	4-	6.287	
491	P20		10	5-	1.581	6-	1.157	
529 B	P23	✓	10	7-	13.109	8-	7.558	
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

NO DFS.

NO 20 ml Acetone extraction.

405 A	500 A	528 A	554 A	306 B	338	348	430	667	676	679
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL B	CHL	CHL	CHL
P17	P20	P22	P25	P13	P16	P16	P19	P26	P26	P26
5 m	10 m	5 m	5 m	5 m	75 m	5 m	5 m	100 m	20 m	5 m
2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040
Bot 1	Bot 15	Bot 24	Bot 1	Bot 7	Bot 7	Bot 17	Bot 2	Bot 5	Bot 14	Bot 11

683	677	669	553 B	5073	346	337	5047 B	345	429 B	497
CHL	CHL	CHL	CHL	CHL B	CHL	CHL	CHL B	CHL	CHL B	CHL
P26	P26	P26	P24	P21	P16	P16	P13	P16	P18	P20
0 m	15 m	75 m	5 m	LOOP	10 m	100 m	LOOP	15 m	5 m	25 m
2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040
Bot 21	Bot 15	Bot 7	Bot 24	Bot 1	Bot 15	Bot 6	Bot 1	Bot 14	Bot 24	Bot 12

491	529
CHL	CHL
P20	P23
100 m	5 m
2018-040	2018-040
Bot 6	Bot 1

Chlorophyll Data Sheet

Cruise: 2018 040

Page: 6 of

Bottom
Shelf

Dates of Cruise:

Time and date acetone added: OCT 22 1:30

Analyst: Hayleigh

Time and date out of freezer: 11:40 OCT 23

Time analysis started: 12:40

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.011			
STD			LOW	2-	10.132			
STD			HIGH	4-	55.592			
Blank				6-	-0.000	8-	-0.000	
282	P12.	304	10	1-	6.681	2-	3.795	NDF
210 B	P11	304	10	3-	7.937	4-	4.677	
183 A	P7		10	5-	18.087	6-	10.434	
114 B	P4		10	7-	47.368	8-	28.741	
83	P2		10	1-	24.724	2-	19.469	
5008 B	JF3		10	3-	21.385	4-	12.397	
280	P12		10	5-	7.524	6-	4.329	
208 B	P9		10	7-	12.652	8-	7.362	
113	P4		10	1-	33.787	2-	20.974	
91	P2		10	3-	102.417	4-	57.222	
80	P2		10	5-	8.303	6-	6.812	
68	JF2		10	7-	12.319	8-	8.603	
14 B	59		10	1-	97.85	2-	50.128	
81	P2		10	3-	16.620	4-	13.2	low
182 B	P6		10	5-	24.347	6-	14.526	
201	P8		10	7-	31.970	8-	19.507	
89	P2		10	1-	98.369	2-	54.534	
112 B	P4		10	3-	20.223	4-	13.343	
199	P8		10	5-	14.698	6-	9.848	
181 A	P5		10	7-	22.223	8-	13.194	
278	P12		10	1-	27.990	2-	16.917	lid missing seal
0	LOOP		10	3-	8.597	4-	5.342	
5032 B	LOOP		10	5-	15.759	6-	9.463	
200	P8		10	7-	18.279	8-	11.745	
Stand-by				1-	0.011			
Std	Low			2-	10.100			
Std	High			4-	54.925			
Blank	by			6-	0.000	8-	0.000	

282 CHL P12 15 m 2018-040 Bot 13	210 ^B CHL P11 5 m 2018-040 Bot 1	183 CHL P7 ^A 5 m 2018-040 Bot 1	114 ^B CHL P4 25 m 2018-040 Bot 13	83 CHL P2 40 m 2018-040 Bot 6	5008 CHL ^B JF3 LOOP 2018-040 Bot 1	280 CHL P12 25 m 2018-04 Bot 11	208 CHL P9 ^B 5 m 2018-040 Bot 1	113 CHL P4 30 m 2018-040 Bot 12	91 CHL P2 0 m 2018-040 Bot 14	80 CHL P2 75 m 2018-040 Bot 3
---	--	---	---	--	--	--	---	--	--	--

68 CHL JF2 50 m 2018-040 Bot 6	14 ^B CHL 59 0 m 2018-040 Bot 14	81 CHL P2 50 m 2018-040 Bot 4	182 CHL P6 ^B 5 m 2018-040 Bot 1	201 CHL P8 30 m 2018-040 Bot 18	89 CHL P2 5 m 2018-040 Bot 12	112 ^B CHL P4 40 m 2018-040 Bot 11	199 CHL P8 50 m 2018-040 Bot 16	181 CHL P5 ^A 5 m 2018-040 Bot 1	278 CHL P12 40 m 2018-04 Bot 9	0 CHL P11 LOOP 2018-040 Bot 1
---	---	--	---	--	--	---	--	---	---	--

5032 CHL P8/P9 LOOP 2018-040 Bot 1	200 CHL P8 40 m 2018-040 Bot 17
---	--

Chlorophyll Data Sheet

Cruise: 2018-040 LINEP

Page: 7 of

Dates of Cruise: Sept

Time and date acetone added: OCT 23 11:00

Analyst: Hayleigh

Time and date out of freezer: OCT 24 9:00

Time analysis started: 10:00

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.011			
STD			LOW	2-	10.232			
STD			HIGH	4-	56.392			
Blank				6-	-0.000	8-	-0.001	
111	P4	304	10	1-	11.084	2-	7.504	
73	JF2		10	3-	15.325	4-	9.183	
11 B	59		10	5-	85.742	6-	49.366	
277 B	P12		10	7-	28.465	8-	17.365	
5034 B	LOOP		10	1-	19.295	2-	11.299	
204	P8		10	3-	23.293	4-	13.469	
196	P8		10	5-	219	6-	1.868	
118	P4		10	7-	45.561	8-	26.590	
121	P4		10	1-	43.244	2-	25.156	
197	P8		10	3-	6.178	4-	4.489	
205	P8		10	5-	19.014	6-	11.044	
209 B	P10		10	7-	27.395	8-	15.952	
276	P12		10	1-	20.563	2-	12.577	
281	P12		10	3-	7.644	4-	4.535	
207	P8		10	5-	18.002	6-	10.388	
198	P8		10	7-	9.329	8-	6.181	
79	P2		10	1-	12.214	2-	10.401	
71	JF2		10	3-	14.284	4-	8.661	
13	59		10	5-	95.528	6-	55.224	
12	59		10	7-	99.384	8-	57.725	
72	JF2		10	1-	13.518	2-	8.169	
77 B	P1		10	3-	146.355	4-	84.415	
88	P2		10	5-	91.600	6-	51.027	
101 B	P5		10	7-	23.002	8-	13.532	
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

111 CHL P4 50 m 2018-040 Bot 10	73 CHL JF2 0 m 2018-040 Bot 11	11 B CHL 59 20 m 2018-040 Bot 11	277 B CHL P12 50 m 2018-040 Bot 8	5034 CHL B P10 LOOP 2018-040 Bot 1	204 CHL P8 15 m 2018-040 Bot 21	196 CHL P8 100 m 2018-040 Bot 13	118 CHL P4 5 m 2018-040 Bot 17	121 CHL P4 0 m 2018-040 Bot 20	197 CHL P8 75 m 2018-040 Bot 14	203 CHL P8 10 m 2018-040 Bot 22
--	---	---	--	--	--	---	---	---	--	--

209 B CHL P10 5 m 2018-040 Bot 1	276 CHL P12 60 m 2018-040 Bot 7	281 CHL P12 20 m 2018-040 Bot 12	207 CHL P8 5 m 2018-040 Bot 24	198 CHL P8 60 m 2018-040 Bot 15	79 CHL P2 100 m 2018-040 Bot 2	71 CHL JF2 10 m 2018-040 Bot 9	13 CHL 59 5 m 2018-040 Bot 13	12 CHL 59 10 m 2018-040 Bot 12	72 CHL JF2 5 m 2018-040 Bot 10	77 CHL B P1 5 2018-040 Bot 4
---	--	---	---	--	---	---	--	---	---	---

88 CHL P2 10 m 2018-040 Bot 11	181 CHL P5 B 5 m 2018-040 Bot 1
---	--

Chlorophyll Data Sheet

Cruise: 2018-040

Page: 8 of

Dates of Cruise: Line P Sept

Time and date acetone added: 23 Oct 2:00

Analyst: Hayleigh

Time and date out of freezer: 24 Oct 12:00

Time analysis started: 1:00

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.008			
STD			LOW	2-	10.153			
STD			HIGH	4-	55.317			
Blank				6-	-0.000	8-	-0.001	
87 B	P2	804	10	1-	109.484	2-	61.846	
75 B	P1		10	3-	33.574	4-9	23.171	
109	P4		10	5-	5.658	6-	3.934	
10	S9		10	7-	90.159	8-	51.365	
69	JF2		10	1-	14.610	2-	8.993	
86	P2		10	3-	161.777	4-	91.240	
108	P4		10	5-	3.144	6-	2.385	
117	P4		10	7-	60.125	8-	35.567	
5027B	LOUP		10	1-	25.968	2-	15.874	
203B	P8		10	3-	27.443	4-	16.128	
279	P12		10	5-	10.111	6-	5.779	
274	P12		10	7-	2.421	8-	1.792	
5033B	P9		10	1-	12.184	2-	7.203	
202 B	P8		10	3-	32.140	4-	19.342	
106	P4		10	5-	2.024	6-	1.718	
85	P2		10	7-	67.004	8-	41.897	
183 B	P7		10	1-	18.5	2-	10.759	
101 B	P3		10	3-	33.134	4-	20.178	
84 B	P2		10	5-	52.505	6-	36.350	
5003B	JF1		10	7-	28.611	8-	17.626	
8	S9		10	1-	76.855	2-	43.769	
9	S9		10	3-	87.890	4-	50.327	
708	JF2		10	5-	14.181	6-	8.710	
5009B	JF4		10	7-	75.421	8-	41.913	
Stand-by				1-	0.010			
Std	Low			2-	10.173			
Std	High			4-	55.261			
Blank	by			6-		8-		

87 B	75	109	10	59	86	108	117	5027	203 B	279
CHL	CHL B	CHL	CHL	CHL	CHL	CHL	CHL	B CHL	CHL	CHL
P2	P1	P4	59	JF2	P2	P4	P4	P8	P8	P12
15 m	30	60 m	30 m	30 m	20 m	75 m	10 m	LOOP	20 m	30 m
2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040
Bot 10	Bot 2	Bot 8	Bot 10	Bot 7	Bot 9	Bot 7	Bot 16	Bot 1	Bot 20	Bot 10

274	5033 B	202 B	106	85	183	101 B	84 B	5003 B	8	9
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P12	P9	P8	P4	P2	P7 B	P3	P2	JF1	59	59
100 m	LOOP	25 m	100 m	25 m	5 m	5 m	30 m	0 m	50 m	40 m
2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040
Bot 5	Bot 1	Bot 19	Bot 5	Bot 8	Bot 1	Bot 1	Bot 7	Bot 1	Bot 8	Bot 9

70 B	5009 B
CHL	CHL
JF2	JF4
20 m	LOOP
2018-040	2018-040
Bot 8	Bot 1

Chlorophyll Data Sheet

Cruise: 2012-0410

Page: 9 of

Dates of Cruise:

Time and date acetone added: 2400r 11:00

Analyst: Haylyn

Time and date out of freezer: 25 7:00

Time analysis started: 10:00

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.012			
STD			LOW	2-	10.310			
STD			HIGH	4-	56.405			
Blank				6-	-0.000	8-	0.000	
5032 A	LOOP	304	10	1-	15.266	2-	9.139	NO DF
715	P4		10	3-	60.920	4-	36.814	
202 A	P8		10	5-	29.663	6-	17.960	
11A	59		10	7-	93.689	8-	53.983	
0-P11	LOOP		10	1-	8.607	2-	5.320	
208 A	P9		10	3-	13.603	4-	7.912	
203 A	P8		10	5-	25.833	6-	15.194	
5034 A	LOOP		10	7-	18.482	8-	10.981	
75 A	P1		10	4-9	33.555	2-	24.232	
275	P12		10	3-	4.414	4-	2.967	
5033 A	LOOP		10	5-	11.590	6-	7.244	
116	P4		10	7-	63.513	8-	38.583	
5027 A	LOOP		10	1-	26.611	2-	16.400	
210 A	P13		10	3-	8.166	4-	4.786	
114 A	P4		10	5-	50.183	6-	31.091	
112 A	P4		10	7-	20.863	8-	13.339	
101 A	P3		10	1-	35.241	2-	21.454	
5003 A	JF1 Loop		10	3-	31.412	4-	18.799	New Glass Bait
5009 A	JF4 Loop		10	5-	74.928	6-	41.832	
70A	JF2		10	7-	14.997	8-	9.188	
277 A	P12		10	1-	28.954	2-	17.904	
207 A	P10		10	3-	25.821	4- *T12	15.2	
87 A	P2		10	5-	103.792	6-	59.387	
77 A	P1		10	7-	136.136	8-	79.510	
Stand-by				1-	0.010			
Std	Low			2-	10.714			
Std	High			4-	55.411			
Blank	by			6-	0.001	8-	-0.000	

5032	115	202	11	0	208	203	5034	75	275	5033
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P8/P9	P4	P8	59	P11	P9	P8	P10	P1	P12	P9
LOOP	20 m	25 m	20 m	LOOP	5 m	20 m	LOOP	30	75 m	LOOP
2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040
Bot 1	Bot 14	Bot 19	Bot 11	Bot 1	Bot 1	Bot 20	Bot 1	Bot 2	Bot 6	Bot 1

116	5027	210	114	112	101	5003	5009	70	277
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P4	P8	P11	P4	P4	P3	JF1	JF4	JF2	P12
15 m	LOOP	5 m	25 m	40 m	5 m	0 m	LOOP	20 m	50 m
2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040
Bot 15	Bot 1	Bot 1	Bot 13	Bot 11	Bot 1	Bot 1	Bot 1	Bot 8	Bot 8

209	37	77
CHL	CHL	CHL
P10	P2	P1
5 m	15 m	5
2018-040	2018-040	2018-040
Bot 1	Bot 10	Bot 4

Chlorophyll Data Sheet

Cruise: 2018-010

Page: 10 of 11

Dates of Cruise:

Time and date acetone added: 25 OCT 11:45

Analyst: Hayyeh

Time and date out of freezer: 26 OCT 9:50

Time analysis started: 10:50

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.611			
STD			LOW	2-	10.194			
STD			HIGH	4-	55.621			
Blank				6-	-0.000	8-	-0.000	
84A	PZ	304	10	1-	51.987	2-	33.684	Mo DE
5046A	LOOP		10	3-	5.426	4-	3.119	
553A	P24		10	5-	14.027	6-9	7.887	
5073A	LOOP		10	7-	9.512	8-	5.717	
430A	P19		10	1-	11.410	2-	6.433	
306A	P13		10	3-	11.003	4-	6.064	
331A	P15		10	5-	10.819	6-	6.163	
703A	EX-F1		10	7-	6.634	8-	4.251	
5047A	LOOP		10	1-	10.281	2-	5.736	
492A	P20		10	3-	6.344	4-	4.140	
429A	P18		10	5-	5.961	6-	3.434	
529A	P23		10	7-	12.743	8-	7.333	
555A	P35		10	1-	18.237	2-	10.265	
675A	P26		10	3-	16.618	4-	9.807	
5078A	LOOP		10	5-	16.667	6-	9.400	
5075A	LOOP		10	7-	11.092	8-9	6.392	
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

84 A	A 5046	553 A	5073	430	306 A	331	703 A	5047 A	492A	429 A
CHL	CHL	CHL	CHL A	CHL A	CHL	CHL A	Chl	CHL	CHL	CHL A
P2	P12/P1	CHL	P21	P19	P13	P15	EX-F1	P13	P20	P18
30 m	Loop	P24	LOOP	5 m	5 m	5 m	75 m	LOOP	75 m	5 m
2018-040	2018-040	5 m	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040
Bot 7	Bot 1	2018-040	Bot 1	Bot 2	2018-040	Bot 1	Bot 7	Bot 1	Bot 7	Bot 24
	Bot 24				Bot 7					

A 529	555 A	675 A	5078	5075
CHL	CHL	CHL	CHL A	CHL A
P23	P35	P26	under way	P23
5 m	5 m	25 m	LOOP	LOOP
2018-040	2018-040	2018-040	2018-040	2018-040
Bot 1	Bot 1	Bot 13	Bot 1	Bot 1

7

Chlorophyll Data Sheet

Cruise: 2018-040

Page: 11 of 11

Dates of Cruise: LineP Sept

Time and date acetone added: 25 OCT 2:45

Analyst: Haylygh

Time and date out of freezer: 12:45

Time analysis started:

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.008			
STD			LOW	2-	10.090			
STD			HIGH	4-	55.297			
Blank				6-	0.000	8-	0.000	
330B	P14	304	10	1-	9.171	2-	5.319	NO DF
673B	P26	1	10	3-	10.767	4-	6.394	
349B	P16		10	5-	5.571	6-	3.334	
673A	P26		10	7-	10.858	8-	6.451	
5063B	LOOP		10	1-	9.746	2-	5.603	
14A	59		10	3-	87.774	4-	49.775	
286A	P12		10	5-	8.798	6-	4.868	
5008A	LOOP		10	7-	21.577	8-	12.437	
343A	P16		10	1-	10.187	2-	6.489	
5060A	LOOP		10	3-	9.065	4-	5.600	
182A	P16	1	10	5-	24.551	6-	14.466	
				7-		8-		
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
Stand-by				1-	0.012			
Std	Low			2-	10.179			
Std	High			4-	55.685			
Blank	by			6-	0.000	8-	0.000	

330	673 b	349 B	673 A	5063	14 A	286	5008	343 A	5060 A	182
CHL B	CHL	CHL	CHL	CHL B	CHL	CHL	CHL A	CHL	CHL	CHL
P14	P26	P16	P26	P19	59	P12	JF3	P16	CHL	P6 A
5 m	40 m	0 m	40 m	LOOP	0 m	0 m	LOOP	25 m	5060	5 m
2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040	2018-040
Bot 24	Bot 11	Bot 18	Bot 11	Bot 1	Bot 14	Bot 17	Bot 1	Bot 12	Bot 1	Bot 1