

File 2016-10

21 Aug - 13 Sept 2016

Chlorophyll Data Sheet

Cruise: ~~2016-10-10~~ 2016-62 Page: 1 of 3

Dates of Cruise:

Time and date acetone added: 9:55am Oct 19

Analyst: JW

Time and date out of freezer: 8:30am Oct 20

Time analysis started: 10:15am (forgot to turn on lamp)

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.007			
STD			LOW	2-	12.412			
STD			HIGH	4-	67.266			
Blank				6-	0.029	8- 0.026		
189A	39	330mL	10mL	1-	149.419	2- 87.400		
189B	39	"	10mL	3-	142.776	4- 83.591		
191A	39	"	10mL	5-	271.851	6- 154.422		
187A	39	"	10mL	7-	19.309	8- 13.122		
187B	39	"	10mL	1-	20.235	2- 13.936		
450B	41	"	10mL	3-	122.529	4- 68.099		
452A	41	"	10mL	5-	135.423	6- 76.367		
452B	41	"	10mL	7-	135.765	8- 76.588		
432A	GEO-1	"	10mL	1-	17.404	2- 13.593		
438A	38	"	10mL	3-	154.540	4- 86.239		
438B	38	"	10mL	5-	154.152	6- 87.497		
437B	38	"	10mL	7-	40.931	8- 26.192		
436B	38	"	10mL	1-	17.175	2- 13.578		
437A	38	"	10mL	3-	42.211	4- 27.046		
436A	38	"	10mL	5-	17.631	6- 14.043		
449A	41	"	10mL	7-	18.423	8- 13.079		
449B	41	"	10mL	1-	18.423	2- 13.244		
450A	41	"	10mL	3-	120.348	4- 68.633		
422B	28	"	10mL	5-	13.446	6- 11.109		
423A	28	"	10mL	7-	24.975	8- 16.673		
423B	28	"	10mL	1-	24.952	2- 16.530		
424A	28	"	10mL	3-	122.729	4- 68.168		
424B	28	"	10mL	5-	118.535	6- 66.263		
435B	GEO1	"	10mL	7-	185.584	8- 102.734		
Stand-by				1-	0.005			
Std	Low			2-	12.291			
Std	High			4-	66.703			
Blank	by			6-	0.025	8- 0.023		

189 A CHL	189 B CHL	191 A CHL	187 A CHL	187 B CHL	450 B CHL	452 A CHL	452 B CHL	432 A CHL	438 A CHL
Stn 39	Stn 39	Stn 39	Stn 39	Stn 39	41	41	41	GEO1	38
2016-10	2016-10	2016-10	2016-10	2016-10	10 m	0 m	0 m	20m	0 m
Bot 19	Bot 19	Bot 21	Bot 17	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
				Bot 12	Bot 14	Bot 14	Bot 8	Bot 3	

438 B CHL	437 B CHL	436 B CHL	437 A CHL	436 A CHL	449 A CHL	449 B CHL	450 A CHL	422 B CHL	423 A CHL
38	38	38	38	38	41	41	41	28	28
0 m	10 m	20 m	10 m	20 m	20 m	20 m	10 m	20 m	10 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 3	Bot 2	Bot 1	Bot 2	Bot 1	Bot 11	Bot 11	Bot 12	Bot 1	Bot 2

423 B CHL	424 A CHL	424 B CHL	435 B CHL
28	28	28	GEO1
10 m	0 m	0 m	0 m
2016-62	2016-62	2016-62	2016-62
Bot 2	Bot 3	Bot 3	Bot 11

424 B

Chlorophyll Data Sheet

Cruise: 2016-62

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Dates of Cruise:

Time and date acetone added: 12:15pm Oct 19

Analyst: JW

Time and date out of freezer: 11AM Oct 20

Time analysis started: 12pm Oct 20

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.005			
STD			LOW	2-	12.299			
STD			HIGH	4-	66.596			
Blank				6-	0.029	8-0.027		
415 A	22	330ml	10ml	1-	15.454	2-13.219		
415 B	22	"	10ml	3-	14.204	4-11.945		
418 A	22	"	10ml	5-	104.613	6-59.783		
407 B	CPE1	"	10ml	7-	158.574	8-90.651		
407 A	CPE1	"	10ml	1-	149.893	2-85.596		
406 B	CPE1	"	10ml	3-	126.156	4-73.105		
406 A	CPE1	"	10ml	5-	118.886	6-69.516		
405 B	CPE1	"	10ml	7-	179.731	8-117.918		
405 A	CPE1	"	10ml	1-	200.340	2-138.052		
404 B	CPE2	"	10ml	3-	152.792	4-90.494		
422 A	28	"	10ml	5-	13.025	6-10.696		
421 A	24	"	10ml	7-	142.195	8-81.600		
421 B	24	"	10ml	1-	148.132	2-94.986		
419 A	24	"	10ml	3-	12.847	4-10.498		
420 B	24	"	10ml	5-	155.052	6-91.128		
419 B	24	"	10ml	7-	12.447	8-10.232		
420 A	24	"	10ml	1-	151.300	2-88.967		
418 B	2	"	10ml	3-	100.625	4-59.341		
416 A	22	"	10ml	5-	73.251	6-44.398		
416 B	22	"	10ml	7-	78.437	8-46.790		
433 B	GE01	"	10ml	1-	58.418	2-35.980		
433 A	GE01	"	10ml	3-	59.092	4-36.371		
432 B	GE01	"	10ml	5-	17.387	6-13.586		
435 A	GE01	"	10ml	7-	180.439	8-99.378		
Stand-by				1-	0.004			
Std	Low			2-	12.249			
Std	High			4-	66.453			
Blank	by			6-	0.029	8-0.026		

415 CHL 22 20 m 2016-62 Bot 8	415 CHL 22 20 2016-62 Bot 8	418 CHL 22 0 m 2016-62 Bot 11	407 CHL CPF1 0 m 2016-62 Bot 3	407 CHL CPF1 0 m 2016-62 Bot 3	406 CHL CPF1 10 m 2016-62 Bot 2	406 CHL CPF1 10 m 2016-62 Bot 2	405 CHL CPF1 20 m 2016-62 Bot 1	405 CHL CPF1 20 m 2016-62 Bot 1	404 CHL CPF2 0 m 2016-62 Bot 3
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422 CHL 28 20 m 2016-62 Bot 1	421 CHL 24 0 m 2016-62 Bot 4	421 CHL 24 0 m 2016-62 Bot 4	419 CHL 24 20 m 2016-62 Bot 1	420 CHL 24 10 m 2016-62 Bot 3	419 CHL 24 20 m 2016-62 Bot 1	420 CHL 24 10 m 2016-62 Bot 3	418 CHL 22 0 m 2016-62 Bot 11	416 CHL 22 10m 2016-62 Bot 9	416 CHL 22 10m 2016-62 Bot 9
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433 CHL GEO1 10m 2016-62 Bot 9	433 CHL GEO1 10m 2016-62 Bot 9	432 CHL GEO1 20m 2016-62 Bot 8	435 CHL GEO1 0 m 2016-62 Bot 11
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Chlorophyll Data Sheet

Cruise: 2016-62

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Dates of Cruise:

Time and date acetone added: 1:50 pm Oct 19

Analyst: JW

Time and date out of freezer: 12:45 pm Oct 20

Time analysis started: 1:35 Oct 20

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.001			
STD			LOW	2-	12.195			
STD			HIGH	4-	66.201			
Blank				6-	0.026	8-0.024		
398 B	11	330ml	10ml	1-	22.383	2-15.872		
399 A	11	"	10ml	3-	90.578	4-53.429		
399 B	11	"	10ml	5-	89.664	6-53.046		
401 A	11	"	10ml	7-	103.542	8-59.907		
401 B	11	"	10ml	1-	104.945	2-60.756		
402 A	CPF2	"	10ml	3-	31.570	4-19.856		
402 B	CPF2	"	10ml	5-	31.013	6-21.772		
403 A	CPF2	"	10ml	7-	130.201	8-78.088		
403 B	CPF2	"	10ml	1-	125.123	2-75.236		
404 A	CPF2	"	10ml	3-	149.095	4-89.392		
156 B	LC06	"	10ml	5-	236.931	6-135.236		
158 A	LC08	"	10ml	7-	13.245	8-7.640		- might have added 2 drops acid
120 A	LC11	"	10ml	1-	13.885	2-8.337		
98 B	LB14	"	10ml	3-	18.603	4-11.293		
79 B	LB12	"	10ml	5-	29.460	6-16.268		
52 A	LB09	"	10ml	7-	66.505	8-40.218		
37 A	LB08	"	10ml	1-	17.633	2-12.063		
19 A	LB05	"	10ml	3-	223.429	4-120.772		
5 A	LB01	"	10ml	5-	84.719	6-50.507		
11 A	LB03	"	10ml	7-	116.355	8-65.416		
164	LC04	"	10ml	1-	22.078	2-13.231		
148 B	LC08	"	10ml	3-	12.241	4-6.836		
120 B	LC11	"	10ml	5-	13.915	6-8.401		
96 B	LB14	"	10ml	7-	20.012	8-11.839		
Stand-by				1-	0.003			
Std	Low			2-	12.193			
Std	High			4-	65.875			
Blank	by			6-	0.021	8-0.020		

398 B	399 A	399 B	401 A	401 B	402 A	402 B	403 A	403 B	404 A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
11	11	11	11	11	CPF2	CPF2	CPF2	CPF2	CPF2
20	10m	10m	0 m	0 m	20 m	20 m	10 m	10 m	0 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 8	Bot 9	Bot 9	Bot 11	Bot 11	Bot 1	Bot 1	Bot 2	Bot 2	Bot 3 lost ~30mL
156 B	148 A	120 A	98 B	79 B	52 A	37 A	19 A	5 A	11
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL A
LC06	LC08	LC11	LB14	LB12	LB09	LB08	LB05	LB01	LB03
5 m	10 m	10 m	5 m	5 m	5 m	20 m	5 m	5 m	5 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 7	Bot 10	Bot 18	Bot 18	Bot 15	Bot 9	Bot 7	Bot 1	Bot 5	Bot 1
164	148 B	120 B	96 B						
CHL	CHL	CHL	CHL						
LC04	LC08	LC11	LB14						
20 m	10 m	10 m	20 m						
2016-62	2016-62	2016-62	2016-62						
Bot 8	Bot 10	Bot 18	Bot 16 pooled - 5 Botatids from filter						

Chlorophyll Data Sheet

Cruise:

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Dates of Cruise: 2016-62

Time and date acetone added: 11:30am Oct 24

Analyst: JW

Time and date out of freezer: 8:50 am. Oct 25

Time analysis started: 9:45am Oct 25

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.007			
STD			LOW	2-	12.494			
STD			HIGH	4-	67.635			
Blank				6-	0.039	8-0.038		
77 B	LB12	330m	10mL	1-	21.231	2-13.077		
52 R	LB09	"	10mL	3-	73.205	4-42.917		
37 B	LB08	"	10mL	5-	16.878	6-11.496		
19 B	LB05	"	10mL	7-	225.717	8-122.532		
5 B	LB01	"	10mL	1-	88.209	2-51.310		
9 A	LB02	"	10mL	3-	101.580	4-58.624		
165	LC04	"	10mL	5-	26.934	6-15.200		
147 A	LC08	"	10mL	7-	10.334	8-7.041		
121 A	LC11	"	10mL	1-	37.279	2-22.177		
80 A	LB13	"	10mL	3-	24.132	4-14.441		
77 A	LB12	"	10mL	5-	20.924	6-12.735		
53 A	LB10	"	10mL	7-	25.443	8-14.609		
38 A	LB08	"	10mL	1-	27.829	2-16.752		
25 A	LB06	"	10mL	3-	51.119	4-31.263		
2 A	LB01	"	10mL	5-	47.225	6-29.766		
10 A	LB02	"	10mL	7-	103.365	8-59.263		
166	LC04	"	10mL	1-	31.525	2-20.985		
147 B	LC08	"	10mL	3-	10.163	4-7.008		
121 B	LC11	"	10mL	5-	36.785	6-22.081		
101 B	LB16	"	10mL	7-	24.731	8-14.313		
78 B	LB12	"	10mL	1-	18.102	2-10.838		
No label		"	10mL	3-	29.970	4-15.002		
38 B	LB08	"	10mL	5-	27.690	6-16.941		
25 B	LB06	"	10mL	7-	51.642	8-31.744		
Stand-by				1-	0.005			
Std	Low			2-	12.403			
Std	High			4-	66.832			
Blank	by			6-	0.028	8-0.026		

77 B	52 B	37 B	19 B	5 B	9 A	165	147 A	121 A	80 A
CHL	CHL	CHL	CHL B	CHL	CHL	CHL	CHL	CHL	CHL
LB12	LB09	LB08	LB05	LB01	LB02	LC04	LC08	LC11	LB13
20 m	5 m	20 m	5 m	5 m	5 m	10 m	20 m	5 m	5 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 13	Bot 9	Bot 7	Bot 1	Bot 5	Bot 4	Bot 9	Bot 9	Bot 19	Bot 1

77 A	53 A	38 A	25 A	2 A	10 A	166	147 B	121 B	101 B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LB12	LB10	LB08	LB06	LB01	LB02	LC04	LC08	LC11	LB16
20 m	5 m	10 m	20 m	20 m	5 m	5 m	20 m	5 m	5 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 13	Bot 8	Bot 8	Bot 6	Bot 2	Bot 5	Bot 10	Bot 9	Bot 19	Bot 1

72 B	38 B	25 B
CHL	CHL	CHL
LB12	LB08	LB06
10 m	10 m	20 m
2016-62	2016-62	2016-62
Bot 14	Bot 8	Bot 6

Chlorophyll Data Sheet

Cruise:

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Dates of Cruise: 2016-62

Time and date acetone added: 2:40pm oct 24

Analyst: JW

Time and date out of freezer: 12:30pm oct 25.

Time analysis started:

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.006			
STD			LOW	2-	12.235			
STD			HIGH	4-	66.465			
Blank				6-	0.028	8-0.026		
2B	LB01	330ml	10ml	1-	46.225	2-29.818		
10B	LB02	"	10ml	3-	100.155	4-57.463		
164	LC04	"	10ml	5-	21.202	6-12.631		
149A	LC08	"	10ml	7-	12.535	8-6.842		
135A	LC09	"	10ml	1-	6.465	2-3.804		
80B	LB13	"	10ml	3-	22.482	4-13.506		
78A	LB12	"	10ml	5-	17.556	6-10.654		
62A	LB11	"	10ml	7-	12.208	8-7.020		
40A	LB08	"	10ml	1-	36.521	2-22.667		
26A	LB06	"	10ml	3-	241.600	4-135.667		
18B	LB04	"	10ml	5-	32.636	6-20.674		
11B	LB03	"	10ml	7-	125.450	8-69.802		
166	LC04	"	10ml	1-	31.865	2-19.052		
154A	LC06	"	10ml	3-	133.755	4-81.607		
138A	LC09	"	10ml	5-	32.658	6-21.402		
101A	LB16	"	10ml	7-	23.897	8-14.062		
79A	LB12	"	10ml	1-	28.815	2-16.017		
62B	LB11	"	10ml	3-	11.698	4-6.831		
40B	LB08	"	10ml	5-	38.411	6-22.182		
26B	LB06	"	10ml	7-	233.562	8-132.119		
17A	LB04	"	10ml	1-	25.103	2-14.274		
9B	LB02	"	10ml	3-	102.243	4-58.649		
165	LC04	"	10ml	5-	25.852	6-14.970		
155B	LC06	"	10ml	7-	229.998	8-132.296		
Stand-by				1-	0.004			
Std	Low			2-	12.189			
Std	High			4-	66.038			
Blank	by			6-	0.031	8-0.028		

2 B CHL LB01 20 m 2016-62 Bot 2	10 B CHL LB02 5 m 2016-62 Bot 5	164 CHL LC04 20 m 2016-62 Bot 8	149 A CHL LC08 5 m 2016-62 Bot 11	135 A CHL LC09 20 m 2016-62 Bot 14	80 C CHL LB13 5 m 2016-62 Bot 1	78 A CHL LB12 10 m 2016-62 Bot 14	62 A CHL LB11 20 m 2016-62 Bot 9	40 A CHL LB08 5 m 2016-62 Bot 10	26 A CHL LB06 10 m 2016-62 Bot 7
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18 B CHL LB04 2016-62 Bot 7	11 CHL LB03 5 m 2016-62 Bot 1	166 CHL LC04 5 m 2016-62 Bot 10	154 A CHL LC06 20 m 2016-62 Bot 5	138 A CHL LC09 5 m 2016-62 Bot 17	101 A CHL LB16 5 m 2016-62 Bot 1	79 A CHL LB12 5 m 2016-62 Bot 15	62 B CHL LB11 20 m 2016-62 Bot 9	40 B CHL LB08 5 m 2016-62 Bot 10	26 B CHL LB06 10 m 2016-62 Bot 7
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17 A CHL LB04 2016-62 Bot 6	9 B CHL LB02 5 m 2016-62 Bot 4	165 CHL LC04 10 m 2016-62 Bot 9	155 B CHL LC06 10 m 2016-62 Bot 6
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Chlorophyll Data Sheet

Volland Lakehouse

Cruise:

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Dates of Cruise: 2016-62

Time and date acetone added: 3:30pm Oct 24 Analyst: JW

Time and date out of freezer: 2:30pm Oct 25

Time analysis started: 3:30pm Oct 25

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.001			
STD			LOW	2-	12.092			
STD			HIGH	4-	65.772			
Blank				6-	0.024	8-	0.020	
64A	LB11	330mL	10mL	1-	18.238	2-	10.088	
97A	LB14	"	10mL	3-	21.095	4-	12.653	
119A	LC11	"	10mL	5-	10.958	6-	6.330	
136A	LC09	"	10mL	7-	9.492	8-	5.379	
155A	LC06	"	10mL	1-	225.541	2-	128.464	
172B	LC02	"	10mL	3-	54.613	4-	32.312	
18B	LB02	"	10mL	5-	47.083	6-	28.537	
17B	LB04	"	10mL	7-	25.447	8-	14.512	
27B	LB06	"	10mL	1-	261.694	2-	144.889	
50B	LB09	"	10mL	3-	32.634	4-	18.313	
63B	LB11	"	10mL	5-	10.828	6-	6.681	
96A	LB14	"	10mL	7-	16.487	8-	9.279	
100B	LB15	"	10mL	1-	20.324	2-	12.773	
136B	LC09	"	10mL	3-	24.590	4-	14.381	
154B	LC06	"	10mL	5-	142.051	6-	88.301	
172A	LC02	"	10mL	7-	54.980	8-	32.705	
8A	LB02	"	10mL	1-	44.547	2-	27.146	
18A	LB04	"	10mL	3-	30.978	4-	17.426	
27A	LB06	"	10mL	5-	255.211	6-	142.733	
50A	LB09	"	10mL	7-	31.862	8-	19.656	
63A	LB11	"	10mL	1-	9.784	2-	6.028	
98A	LB14	"	10mL	3-	18.866	4-	11.315	
100A	LB15	"	10mL	5-	19.669	6-	12.449	
135B	LC09	"	10mL	7-	6.645	8-	3.863	
Stand-by				1-	0.005			
Std	Low			2-	12.198			
Std	High			4-	65.982			
Blank	by			6-	0.021	8-	0.019	

64 A CHL LB11 5 m 2016-62 Bot 11	97 A CHL LB14 10 m 2016-62 Bot 17	119 A CHL LC11 20 m 2016-62 Bot 17	136 A CHL LC09 10 m 2016-62 Bot 15	155 CHL A LC06 10 m 2016-62 Bot 6	172 CHL B LC02 10 m 2016-62 Bot 6	8 B CHL LB02 10 m 2016-62 Bot 3	17 B CHL LB04 5 m 2016-62 Bot 6	27 B CHL LB06 5 m 2016-62 Bot 8	50 B CHL LB09 20 m 2016-62 Bot 7
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63 B CHL LB11 10 m 2016-62 Bot 10	96 A CHL LB14 20 m 2016-62 Bot 16	100 B CHL LB15 5 m 2016-62 Bot 1	136 B CHL LC09 10 m 2016-62 Bot 15	154 CHL B LC06 20 m 2016-62 Bot 3	172 CHL A LC02 10 m 2016-62 Bot 6	8 A CHL LB02 10 m 2016-62 Bot 3	18 A CHL LB04 5 m 2016-62 Bot 7	27 A CHL LB06 5 m 2016-62 Bot 8	50 A CHL LB09 20 m 2016-62 Bot 7
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63 A CHL LB11 10 m 2016-62 Bot 10	98 A CHL LB14 5 m 2016-62 Bot 18	100 A CHL LB15 5 m 2016-62 Bot 1	135 B CHL LC09 20 m 2016-62 Bot 14
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Chlorophyll Data Sheet

Cruise:

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Dates of Cruise: 2016-62

Time and date acetone added: 10:50am Oct 25 Analyst: JW

Time and date out of freezer: 10:10am Oct 26

Time analysis started:

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.006			
STD			LOW	2-	12.443			
STD			HIGH	4-	67.902			
Blank				6-	0.023	8-0.020		
51A	LB09	380mL	10mL	1-	85.339	2-52.382		
29A	LB07	"	10mL	3-	137.787	4-79.021		
16A	LB04	"	10mL	5-	37.275	6-19.886		
3A	LB01	"	10mL	7-	63.101	8-38.311		
171A	LC02	"	10mL	1-	39.444	2-24.449		
156A	LC06	"	10mL	3-	243.313	4-140.123		
138B	LC09	"	10mL	5-	32.664	6-18.602		
119B	LC11	"	10mL	7-	12.307	8-7.150		
97B	LB14	"	10mL	1-	22.722	2-13.621		
64B	LB11	"	10mL	3-	18.984	4-10.773		
51B	LB09	"	10mL	5-	82.977	6-50.494		
29B	LB07	"	10mL	7-	137.268	8-78.364		
16B	LB04	"	10mL	1-	36.100	2-18.998		
3B	LB01	"	10mL	3-	63.991	4-38.211		
398A	"	"	10mL	5-	22.664	6-16.215		
390B	14	"	10mL	7-	106.018	8-61.457		
390A	14	"	10mL	1-	101.101	2-59.749		
389B	14	"	10mL	3-	144.330	4-83.740		
389A	14	"	10mL	5-	145.307	6-84.424		
388B	14	"	10mL	7-	74.246	8-46.221		
388A	14	"	10mL	1-	74.534	2-46.869		
387B	CS09	"	10mL	3-	99.213	4-55.006		
387A	CS09	"	10mL	5-	92.519	6-51.390		
386B	CS09	"	10mL	7-	83.424	8-46.721		
Stand-by				1-	0.007			
Std	Low			2-	12.810			
Std	High			4-	67.342			
Blank	by			6-	0.026	8-0.023		

[illegible]

Chlorophyll Data Sheet

Cruise:

Page: 2 of 3

Dates of Cruise: 2016-62

Time and date acetone added: 2:30pm Oct 25

Analyst: JW

Time and date out of freezer: 12:50pm Oct 26

Time analysis started: 1:45pm Oct 26

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.004			
STD			LOW	2-	12.234			
STD			HIGH	4-	66.281			
Blank				6-	0.027	8-0.026		
386A	CS09	330ml	10ml	1-	81.235	2-47.452		
285B	CS09	"	10ml	3-	27.846	4-21.915		
385A	CS09	"	10ml	5-	26.676	6-16.421		
374A	CS06	"	10ml	7-	132.846	8-69.325		
375A	CS06	"	10ml	1-	118.615	2-61.814		
374B	CS06	"	10ml	3-	135.853	4-71.153		
376B	CS06	"	10ml	5-	116.150	6-60.265		
375B	CS06	"	10ml	7-	119.660	8-62.510		
376A	CS06	"	10ml	1-	128.474	2-66.613		
370B	CS04	"	10ml	3-	45.613	4-25.038		
370A	CS04	"	10ml	5-	48.279	6-26.257		
369B	CS04	"	10ml	7-	44.967	8-24.615		
369A	CS04	"	10ml	1-	41.550	2-23.019		
368B	CS04	"	10ml	3-	39.599	4-22.791		
368A	CS04	"	10ml	5-	38.184	6-21.978		
363B	CS02	"	10ml	7-	74.245	8-41.366		
363A	CS02	"	10ml	1-	76.240	2-42.510		
362B	CS02	"	10ml	3-	59.233	4-33.060		
362A	CS02	"	10ml	5-	57.244	6-32.114		
361B	CS02	"	10ml	7-	50.864	8-29.241		
361A	CS02	"	10ml	1-	48.970	2-27.900		
343B	CS00	"	10ml	3-	9.015	4-5.040		
343A	CS00	"	10ml	5-	8.678	6-4.887		
342B	CS00	"	10ml	7-	9.516	8-5.454		
Stand-by				1-	0.004			
Std	Low			2-	12.307			
Std	High			4-	66.022			
Blank	by			6-	0.021	8-0.021		

386A	385B	384A	374A	375A	374B	376B	375B	376A	370
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
CS09	CS09	CS09	CS06	CS06	CS06	CS06	CS06	CS06	CS04
10 m	10 m	10 m	20 m	10 m	20 m	5 m	10 m	5 m	5 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 12	Bot 9	Bot 9	Bot 4	Bot 5	Bot 4	Bot 6	Bot 5	Bot 6	Bot 7
370A	369B	369A	368B	368A	363B	363A	362B	362A	361B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
CS04	CS04	CS04	CS04	CS04	CS02	CS02	CS02	CS02	CS02
5 m	10 m	10 m	20 m	20 m	5 m	5 m	10 m	10 m	20 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 7	Bot 6	Bot 6	Bot 5	Bot 5	Bot 20	Bot 20	Bot 19	Bot 19	Bot 18
361A	343B	343A	342B						
CHL	CHL	CHL	CHL						
CS02	CS00	CS00	CS00						
20 m	5 m	5 m	10 m						
2016-62	2016-62	2016-62	2016-62						
Bot 18	Bot 20	Bot 20	Bot 19						

Chlorophyll Data Sheet

Cruise:

Page: 3 of 3

Dates of Cruise: 2016-10-26

Time and date acetone added: 4:30pm Oct 25

Analyst: JW

Time and date out of freezer: 2:30pm Oct 26

Time analysis started: 3:35pm Oct 26

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.003			
STD			LOW	2-	12.177			
STD			HIGH	4-	66.039			
Blank				6-	0.025	8-0.024		
265B	LG01	330ul	30ul	1-	253.183	2-136.077		Add 20ul Acetone
266A	LG01	"	20ul	3-	90.896	4-42.764		Add 10ul then 1/4 dil.
266B	LG01	"	20ul	5-	250.892	6-131.180		Add 10ul then 3/4 dil
291A	LPB7	"	10ul	7-	37.969	8-21.750		
291B	LPB7	"	10ul	1-	38.406	2-23.021		
292A	LPB7	"	10ul	3-	119.692	4-68.696		
292B	LPB7	"	10ul	5-	113.317	6-65.311		
293A	LPB7	"	10ul	7-	105.699	8-59.142		
293B	LPB7	"	10ul	1-	107.091	2-60.051		
310A	LPB5	"	10ul	3-	60.630	4-36.017		
310B	LPB5	"	10ul	5-	63.515	6-37.270		
311A	LPB5	"	10ul	7-	155.170	8-87.148		
311B	LPB5	"	10ul	1-	158.016	2-89.112		
312A	LPB5	"	10ul	3-	158.416	4-88.889		
312B	LPB5	"	10ul	5-	153.196	6-86.291		
320A	LPB3	"	10ul	7-	47.817	8-27.022		
320B	LPB3	"	10ul	1-	46.212	2-26.230		
321A	LPB3	"	10ul	3-	49.636	4-28.336		
321B	LPB3	"	10ul	5-	49.362	6-28.118		
322A	LPB3	"	10ul	7-	49.887	8-28.449		
322B	LPB3	"	10ul	1-	48.622	2-27.520		
341A	CS00	"	10ul	3-		4-		← spilled sample...
341B	CS00	"	10ul	5-	45.593	6-25.407		
342A	CS00	"	10ul	7-	9.543	8-5.369		
Stand-by				1-	0.004			
Std	Low			2-	12.215			
Std	High			4-	66.047			
Blank	by			6-	0.025	8-0.021		

265 B CHL LG01 10 m 2016-62 Bot 4	266 A CHL LG01 5 m 2016-62 Bot 5	266 B CHL LG01 5 m 2016-62 Bot 5	291 CHL A LPB7 20 m 2016-62 Bot 19	291 CHL B LPB7 20 m 2016-62 Bot 19	292 CHL A LPB7 10 m 2016-62 Bot 20	292 CHL B LPB7 10 m 2016-62 Bot 20	293 CHL A LPB7 5 m 2016-62 Bot 21	293 CHL B LPB7 5 m 2016-62 Bot 21	310 A CHL LPB5 20 m 2016-62 Bot 17
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310 B CHL LPB5 20 m 2016-62 Bot 17	311 A CHL LPB5 10 m 2016-62 Bot 18	311 B CHL LPB5 10 m 2016-62 Bot 18	312 A CHL LPB5 5 m 2016-62 Bot 19	312 B CHL LPB5 5 m 2016-62 Bot 19	320 CHL A LPB3 20 m 2016-62 Bot 8	320 CHL B LPB3 20 m 2016-62 Bot 8	321 CHL A LPB3 10 m 2016-62 Bot 9	321 CHL B LPB3 10 m 2016-62 Bot 9	322 CHL A LPB3 5 m 2016-62 Bot 10
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322 CHL B LPB3 5 m 2016-62 Bot 10	341 A CHL CS00 20 m 2016-62 Bot 18	341 B CHL CS00 20 m 2016-62 Bot 18	342 A CHL CS00 10 m 2016-62 Bot 19
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Chlorophyll Data Sheet

Cruise:

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Dates of Cruise: 2016-62

Time and date acetone added: 11:07 AM Oct 26

Analyst: J.W.

Time and date out of freezer: 9:40 AM Oct 27

Time analysis started: 10:45 AM Oct 27

missing CT Precision
436-452
- update precision
St. 1

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.007			
STD			LOW	2-	12.255			
STD			HIGH	4-	66.984			
Blank				6-	0.025	8-0.023		
185 B	LD02	330ml	10ml	1-	59.197	2-34.425		
186 A	LD02	"	10ml	3-	269.772	4-143.811		
186 B	LD02	"	10ml	5-	283.506	6-149.575		
206 A	LD08	"	10ml	7-	27.312	8-16.486		
206 B	LD08	"	10ml	1-	26.997	2-16.393		
207 A	LD08	"	10ml	3-	19.710	4-11.628		
207 B	LD08	"	10ml	5-	18.895	6-11.167		
208 A	LD08	"	10ml	7-	18.024	8-9.995		
208 B	LD08	"	10ml	1-	19.243	2-10.526		
245 B	LG06	"	10ml	3-	19.436	4-10.715		
243 A	LG06	"	10ml	5-	11.885	6-7.441		
243 A	LG06	"	10ml	7-	12.883	8-7.968		pushed twice
245 A	LG06	"	10ml	1-	19.724	2-10.876		
244 B	LG06	"	10ml	3-	13.426	4-7.778		
244 A	LG06	"	10ml	5-	14.262	6-8.236		
252 A	LG04	"	10ml	7-	20.966	8-12.795		
252 B	LG04	"	10ml	1-	22.366	2-13.548		
253 A	LG04	"	10ml	3-	19.048	4-11.005		
253 B	LG04	"	10ml	5-	19.901	6-11.652		
254 A	LG04	"	10ml	7-	24.674	8-13.847		
254 B	LG04	"	10ml	1-	25.686	2-14.377		
264 A	LG01	"	10ml	3-	75.262	4-42.972		
264 B	LG01	"	10ml	5-	74.268	6-42.595		
265 A	LG01	"	30ml	7-	256.807	8-138.564		Add 20ml acetone
Stand-by				1-	0.006			
Std	Low			2-	12.305			
Std	High			4-	66.260			
Blank	by			6-	0.031	8-0.023		

185 B	186 A	186 B	206	206	207	207	208	208	245 B	243
CHL	CHL	CHL	CHL A	CHL B	CHL A	CHL B	CHL A	CHL B	CHL B	CHL A
LD02	LD02	LD02	LD08	LD08	LD08	LD08	LD08	LD08	LG06	LG06
10 m	5 m	5 m	20 m	20 m	10 m	10 m	5 m	5 m	5 m	20 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 4	Bot 5	Bot 5	Bot 15	Bot 15	Bot 16	Bot 16	Bot 17	Bot 17	Bot 17	Bot 15

243	245 A	244	244	252	252	253	253	254	254
CHL B	CHL A	CHL B	CHL A	CHL A	CHL B	CHL A	CHL B	CHL A	CHL B
LG06	LG06	LG06	LG06	LG04	LG04	LG04	LG04	LG04	LG04
20 m	5 m	10 m	10 m	20 m	10 m	10 m	10 m	5 m	5 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 15	Bot 17	Bot 16	Bot 16	Bot 7	Bot 7	Bot 8	Bot 8	Bot 9	Bot 9

264 A	264 B	265 A
CHL	CHL	CHL
LG01	LG01	LG01
20 m	20 m	10 m
2016-62	2016-62	2016-62
Bot 3	Bot 3	Bot 4



Chlorophyll Data Sheet

Cruise: 2016-62

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Dates of Cruise:

Time and date acetone added: 3pm oct 26 Analyst:

Time and date out of freezer: 12:45pm oct 27

Time analysis started: 1:30pm Oct 27

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.003			
STD			LOW	2-	12.178			
STD			HIGH	4-	66.216			
Blank				6-	0.028	8-0.025		
185A	LD02	330ml	10ml	1-	59.877	2-34.789		
184B	LD02	"	10ml	3-	188.958	4-106.258		
184A	LD02	"	10ml	5-	182.421	6-102.098		
191B	LD04	"	10ml	7-	235.992	8-127.347		
191A	LD04	"	10ml	1-	240.566	2-128.824		
190A	LD04	"	10ml	3-	179.663	4-97.890		
190B	LD04	"	10ml	5-	172.559	6-93.855		
189B	LD04	"	10ml	7-	42.734	8-26.340		
189A	LD04	"	10ml	1-	43.432	2-26.604		
180B	LC01	"	10ml	3-	82.906	4-50.803		
179B	LC01	"	10ml	5-	76.984	6-47.560		
179A	LC01	"	10ml	7-	79.966	8-49.119		
181B	LC01	"	10ml	1-	91.754	2-54.945		
181A	LC01	"	10ml	3-	91.854	4-54.422		
180A	LC01	"	10ml	5-	81.010	6-49.275		
174B	LC02	"	10ml	7-	51.451	8-29.844		
171B	LC02	"	10ml	1-	39.536	2-24.497		
174A	LC02	"	10ml	3-	49.580	4-28.512		
				5-		6-		
				7-		8-		
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
Stand-by				1-	0.003			
Std	Low			2-	12.123			
Std	High			4-	66.186			
Blank	by			6-	0.035	8-0.034		

185 CHL A	184 CHL B	184 CHL A	191 CHL B	191 CHL A	190 CHL A	190 CHL B	189 CHL B	189 CHL A	180 CHL B	179 CHL B
LD02	LD02	LD02	LD04	LD04	LD04	LD04	LD04	LD04	LC01	LC01
10 m	20 m	20 m	5 m	5 m	10 m	10 m	20 m	20 m	10 m	20 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 4	Bot 3	Bot 3	Bot 5	Bot 5	Bot 4	Bot 4	Bot 3	Bot 3	Bot 6	Bot 5

179 CHL A	181 CHL B	181 CHL A	180 CHL A	174 CHL B	171 CHL B	174 CHL A
LC01	LC01	LC01	LC01	LC02	LC02	LC02
20 m	5 m	5 m	10 m	5 m	20 m	5 m
2016-62	2016-62	2016-62	2016-62	2016-62	2016-62	2016-62
Bot 5	Bot 7	Bot 7	Bot 6	Bot 8	Bot 5	Bot 8