

Chlorophyll Data Sheet

Cruise: 2013-58

Page: 1 of 2

Date acetone added: Sept. 11, 2013

Time acetone added: 3:00

Date of analysis: Sept. 12, 2013

Analyst: Mcl

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	-0.056			
STD			LOW	2-	12.175			
			HIGH	4-	66.214			
Blank				6-	-0.039			
	LB04		63B	1-	295.443	2-	160.974	
	LB04		62B	3-	79.657	4-	46.115	
	LB01		47A	5-	52.494	6-	30.704	
	LB01		46A	7-	56.502	8-	34.630	
	LB01		48B	1-	234.535	2-	126.973	
	LB02		52A	3-	67.631	4-	38.203	
	LB02		54B	5-	213.474	6-	114.510	
	LB02		53B	7-	205.595	8-	112.124	
			65	1-	296.006	2-	158.891	
	LB02		53A	3-	201.523	4-	112.243	
	LB03		57B	5-	148.798	6-	81.916	
	LB04		63A	7-	285.608	8-	153.803	
	LB03		57A	1-	142.384	2-	78.084	
	LB03		56B	3-	143.648	4-	79.993	
	LB03		56A	5-	142.549	6-	80.557	
	LB04		62A	7-	69.368	8-	39.756	
	LB06		73A	1-	37.861	2-	22.370	
	LB05		67	3-	181.625	4-	95.639	20ml acetone
	LB05		67	5-	196.532	6-	98.435	20ml acetone
	LB04		64B	7-	297	8-	160.445	copy & forgot top sh' bottle 7
	LB04		64A	1-	291.462	2-	156.624	
	LB05		66B	3-	137.101	4-	73.671	
			65	5-	279.841	6-	152.341	
	LB05		66A	7-	137.693	8-	74.462	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

63 CHL B	62 CHL B	47 CHL A	46 CHL A	48 CHL B	52 A CHL	54 B CHL	53 B CHL
LB04	LB04	LB01	LB01	LB01	LB02	LB02	LB02
10 m	20 m	10 m	Bot-10	5 m	20 m	5 m	10 m
2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58
Bot 6	Bot 5	Bot 2	Bot 1	Bot 3	Bot 3	Bot 5	Bot 4

65 CHL MAX	53 A CHL	57 B CHL	63 CHL A	57 A CHL	56 B CHL	56 A CHL	62 CHL A
2013-58	LB02	LB03	LB04	LB03	LB03	LB03	LB04
CHL	10 m	CHL-MAX	10 m	CHL-MAX	5 m	5 m	20 m
2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58
Bot 8	Bot 4	Bot 2	Bot 6	Bot 2	Bot 1	Bot 1	Bot 5

73 A CHL	67 CHL	67 CHL	64 CHL B	64 CHL A	66 B CHL	65 CHL MAX	66 A CHL
LB06	LB05	LB05	LB04	LB04	1805	2013-58	LB05
10 m	Max	Max	5 m	5 m	5 m	CHL	5 m
2012-59	2013-38	2013-38	2013-58	2013-58	2013-38	2013-38	2013-38
Bot 6	Bot 2	Bot 2	Bot 7	Bot 7	Bot 1	Bot 8	Bot 1

Chlorophyll Data Sheet

Cruise: 2013-58

Page: 2 of 2

Date acetone added: Sept. 11, '13

Time acetone added: 3:00

Date of analysis: Sept. 12

Analyst: Wle

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-				
STD			LOW	2-				
			HIGH	4-				
Blank				6-				
395B	LBP7			1-	33.591	2-	21.209	
393B	LBP7			3-	16.999	4-	10.056	
394A	LBP7			5-	15.717	6-	9.086	
413B	LBP5			7-	13.133	8-	8.510	
46B	LB01			1-	56.424	2-	31.305	
47B	LB01			3-	53.488	4-	30.896	
54A	LB02			5-	208.157	6-	111.774	
413A	LBP5			7-	14.097	8-	9.538	
394B	LBP7			1-	15.029	2-	8.761	
423A	LBP3			3-	27.934	4-	17.521	
414B	LBP5			5-	63.411	6-	36.364	
423B	LBP3			7-	27.265	8-	16.973	
425A	LBP3			1-	108.593	2-	61.060	
52B	LB02			3-	69.851	4-	39.168	
395A	LBP7			5-	32.596	6-	20.920	
392B	LBP7			7-	17.230	8-	10.196	
424B	LBP3			1-	70.688	2-	40.902	
424A	LBP3			3-		4-		ops broken vid 1 bad sample
425B	LBP3			5-	157.100	6-	86.248	
412B	LBP5			7-	12.289	8-	8.471	
48A	LB01			1-	230.115	2-	123.454	
				3-		4-		
				5-		6-		
				7-		8-		
Blank				3-	-0.022			
Std	Low			5-	11.924			
Std	High			7-	64.510			
Stand-	by			8-	-0.062			

395 <i>B</i>	393 <i>B</i>	394 <i>A</i>	413 <i>B</i>	46 <i>B</i>	47 <i>B</i>	54 <i>A</i>	413 <i>A</i>
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LBP7	LBP7	LBP7	LBP5	LB01	LB01	LB02	LBP5
Max	10 m	5 m	10 m	Bot-10	10 m	5 m	10 m
2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58
Bot 22	Bot 20	Bot 21	Bot 18	Bot 1	Bot 2	Bot 5	Bot 18

423 <i>A</i>	414 <i>B</i>	423 <i>B</i>	425 <i>A</i>	52 <i>B</i>	395 <i>A</i>	392 <i>B</i>	424 <i>B</i>
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LBP3	LBP5	LBP3	LBP3	LB02	LBP7	LBP7	LBP3
20 m	5 m	20 m	5 m	20 m	Max	20 m	10 m
2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58
Bot 8	Bot 19	Bot 8	Bot 10	Bot 3	Bot 22	Bot 19	Bot 9

424 <i>A</i>	425 <i>B</i>	412 <i>B</i>	48 <i>A</i>
CHL	CHL	CHL	CHL
LBP3	LBP3	LBP5	LB01
10 m	5 m	20 m	5 m
2013-58	2013-58	2013-58	2013-58
Bot 9	Bot 10	Bot 17	Bot 3

2325

Chlorophyll Data Sheet

Cruise: 2013-58

Page: 1 of

Date acetone added: 12 Sept 13

Time acetone added: 3:00

Date of analysis: 13 Sept 13

Analyst: Melissa + Tamara

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-1399	-0.060			
STD			LOW	2-	12.143			
			HIGH	4-	65.923			
Blank				6-	-0.048			
233B	LC04	20	1-	161.216	2-	86.462		
233A	LC04	20	3-	173.471	4-	91.478		
263A	LD01	10	5-	303.956	6-	166.223		
244B	LC02		7-	235.286	8-	126.458		
242A	LC02		1-	119.111	2-	63.829		
241B	LC02		3-1413	71.110	4-	39.319		
241A	LC02		5-	72.525	6-	39.987		
242B	LC02		7-	165.929	8-	87.704		
212A	LC08		1-1419	35.334	2-	21.264		
215A	LC08		3-	85.163	4-	49.347		
221B	LC06		5-	34.250	6-	21.852		
223B	LC06		7-	42.597	8-	23.307		
222B	LC06		1-1427	44.817	2-	24.871		
222A	LC06		3-	43.906	4-	24.184		
224B	LC04		5-	301.795	6-	162.204		
224A	LC04		7-	308.864	8-	165.015		
195B	LC09		1-1435	69.514	2-	40.956		
195A	LC09		3-	67.495	4-	40.031		
213A	LC08		5-	84.888	6-	49.538		
215B	LC08		7-	85.575	8-	49.765		
213B	LC08		1-1443	83.764	2-	48.876		
212B	LC08		3-	35.108	4-	21.332		
223A	LC06		5-	42.470	6-	23.213		
221A	LC06		7-	34.376	8-	20.083		
Blank				3-1451	-0.051			
Std	Low			5-	12.021			
Std	High			7-	65.356			
Stand-	by			8-				

233
CHL B
LC04
10 m
2013-58
Bot 9

233
CHL A
LC04
10 m
2013-58
Bot 9

263
CHL A
LD01
Chl Max
2013-58
Bot 5

244 B
CHL
LC02
5 m
2013-58
Bot 8

242 A
CHL
LC02
10 m
2013-58
Bot 6

241 B
CHL
LC02
20 m
2013-58
Bot 5

241 A
CHL
LC02
20 m
2013-58
Bot 5

242 B
CHL
LC02
10 m
2013-58
Bot 6

212
CHL
LC08
20 m
2013-58
Bot 9

215
CHL
LC08
5 m
2013-58
Bot 12

221
CHL B
LC06
20 m
2013-58
Bot 5

223
CHL B
LC06
5 m
2013-58
Bot 7

222
CHL B
LC06
10 m
2013-58
Bot 6

222
CHL A
LC06
10 m
2013-58
Bot 6

234
CHL B
LC04
5 m
2013-58
Bot 10

234
CHL A
LC04
5 m
2013-58
Bot 10

195
CHL B
LC09
20 m
2013-58
Bot 14

195
CHL A
LC09
20 m
2013-58
Bot 14

213
CHL
LC08
10 m
2013-58
Bot 10

215
CHL
LC08
5 m
2013-58
Bot 12

213
CHL
LC08
10 m
2013-58
Bot 10

212
CHL
LC08
20 m
2013-58
Bot 9

223
CHL A
LC06
5 m
2013-58
Bot 7

221
CHL A
LC06
20 m
2013-58
Bot 5

244 A	303 A	301 B	301 A	302 B	302 A	283 B	283 A	284 A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LC02	LD08	LD08	LD08	LD08	LD08	LD06	LD06	LD06
5 m	5 m	20 m	20 m	10 m	10 m	20 m	20 m	10 m
2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58
Bot 8	Bot 17	Bot 15	Bot 15	Bot 16	Bot 16	Bot 6	Bot 6	Bot 7

284 B	285 B	285 A	274 L	274 A	255 A	254 A	260	260
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL B	CHL A
LD06	LD06	LD06	LD04	LD04	LC01	LC01	LD01	LD01
10 m	5 m	5 m	20 m	20 m	10 m	20 m	20 m	20 m
2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58
Bot 7	Bot 8	Bot 8	Bot 3	Bot 3	Bot 6	Bot 5	Bot 2	Bot 2

263	232	232
CHL E	CHL B	CHL A
LD01	LC04	LC04
Chl Max	20 m	20 m
2013-58	2013-58	2013-58
Bot 5	Bot 8	Bot 8

Chlorophyll Data Sheet

L325

Cruise: 203-58

Page: 2 of 2

Date acetone added: 12 Sept 13

Time acetone added: 3:00

Date of analysis: 13 Sept 13

Analyst: Tanara

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	① 1454 std by		-0.059	1455.1 blc ② -0.053
STD		1456	LOW	2-	12.072			
			HIGH	4-	65.347			
Blank				6-	-0.052			
244A	LC02		10	1-1459	202.047	2-	111.233	
303A	LD08			3-	40.174	4-	22.471	
301B	LD08			5-	44.560	6-	27.356	
301A	LD08			7-	44.599	8-	27.332	
302B	LD08			1-	53.802	2-	30.678	
302A	LD08			3-1469	52.350	4-	29.665	
283B	LD06			5-	24.145	6-	15.386	
283A	LD06			7-	29.318	8-	18.223	
284A	LD06			1-1475	29.114	2-	17.757	
284B	LD06			3-	24.001	4-	15.519	
285B	LD06			5-	49.653	6-	27.919	
285A	LD06			7-	52.066	8-	28.664	
274B	LD04			1-	182.326	2-	98.927	
274A	LD04			3-1485	203.196	4-	108.834	
255A	LC01		20	5-	242.826	6-	131.509	
294A	LC01		20	7-	210.832	8-	116.366	
260B	LD01		10	1-1491	78.873	2-	43.611	
260A	LD01		"	3-	86.968	4-	48.168	
263B	LD01		"	5-	317.745	6-	173.058	
232B	LC04		"	7-	293.107	8-	156.524	
232A	LC04		"	1-1499	295.524	2-	156.894	
				3-		4-		
				5-		6-		
				7-		8-		
Blank				3-	-0.055	ignore Ind #3		
Std	Low			5-	12.001			
Std	High			7-	65.596			
Stand-	by			8-	-0.060			

2325

Chlorophyll Data Sheet

Cruise: 2013-58

Page: 1 of 2

Date acetone added: 13 Sept 13

Time acetone added: 6 pm

Date of analysis: 14 Sept 13

Analyst: Tamara

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by		1507	1-	-0.057			
STD			LOW	2-	12.270			
			HIGH	4-	66.651			
Blank				6-	-0.051			
325A	LD11	10	1511	1-	50.229	2-	30.018	
303B	LD08	10		3-	40.571	4-	20.635	
325B	LD11	10		5-	50.021	6-	29.817	
324A	LD11	10		7-	10.336	8-	5.829	
323B	LD11	10		1-1519	9.278	2-	5.258	
324B	LD11	10		3-	9.236	4-	5.255	
254B	LC01	20		5-	215.282	6-	118.116	
356A	LG04	20		7-	245.714	8-	133.277	
357A	LG04	20		1-1527	287.794	2-	156.856	
255B	LC01	20		3-	242.452	4-	130.968	
268A	LD02	20		5-	301.452	6-	162.220	
271A	LD02	20		7-	302.074	8-	159.220	
271B	LD02	20		1-	280.987	2-	149.929	
267A	LD02	2040		3-	173.339	4-	93.997	
267B	LD02	40		5-	164.601	6-	91.636	
275B	LD04	20		7-	228.729	8-	120.789	
275A	LD04	20		1-1543	224.858	2-	118.899	
262B	LD01	20		3-	216.408	4-	117.589	
256A	LC01	20		5-	210.067	6-	112.630	
261A	LD01	2040		7-	249.942	8-	136.240	
261B	LD01	40		1-1551	259.440	2-	139.632	
256B	LC01	20		3-	207.386	4-	112.137	
262A	LD01	20		5-	223.675	6-	119.999	
268B	LD02	20		7-	270.968	8-	150.773	
Blank				3-1557	-0.051			
Std	Low			5-	11.941			
Std	High			7-	64.968			
Stand-	by			8-1562	-0.060			

325 ^A	303 ^B	325 ^B	324 ^A	323	324 ^B	254 ^B	356 ^A	357 ^A
CHL	CHL	CHL	CHL	CHL ^D	CHL	CHL	CHL	CHL
LD11	LD08	LD11	LD11	LD11	LD11	LC01	LG04	LG04
Max	5 m	Max	5 m	10 m	5 m	20 m	10 m	5 m
2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58
Bot 21	Bot 17	Bot 21	Bot 20	Bot 19	Bot 20	Bot 5	Bot 8	Bot 9

255 ^B	268	271	271	267	267	275 ^B	275 ^A	262
CHL	CHL ^A	CHL ^A	CHL ^B	CHL ^A	CHL ^B	CHL	CHL	CHL ^B
LC01	LD02	LD02	LD02	LD02	LD02	LD04	LD04	LD01
10 m	5 m	Max	Max	10 m	10 m	10 m	10 m	5 m
2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58
Bot 6	Bot 5	Bot 8	Bot 8	Bot 4	Bot 4	Bot 4	Bot 4	Bot 4

256 ^A	261	261	256 ^B	262	268
CHL	CHL ^A	CHL ^B	CHL	CHL ^A	CHL ^B
LC01	LD01	LD01	LC01	LD01	LD02
5 m	10 m	10 m	5 m	5 m	5 m
2013-58	2013-58	2013-58	2013-58	2013-58	2013-58
Bot 7	Bot 3	Bot 3	Bot 7	Bot 4	Bot 5

Chlorophyll Data Sheet

Cruise: 2013-58

Page: 2 of 2

Date acetone added: 13 Sept 13

Time acetone added: 6pm

Date of analysis: 14 Sept 13

Analyst: Tamara

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-1563	-0.059			
STD			LOW	2-	11.985			
			HIGH	4-	64.858			
Blank				6-	-0.052			
355A	LG04	10	1-	128.411	2-	74.962		
355B	LG04	10	3-	125.595	4-	71.991		
363B	LG02	10	5-	242.588	6-	137.477		
363A	LG02	10	7-	252.322	8-	142.844		
368A	LG02	10	1-575	272.950	2-	159.032		
368B	LG02	10	3-	268.347	4-	155.624		
372A	LG01	10	5-	127.615	6-	69.966		
372B	LG01	10	7-	99.196	8-	54.944		
345A	LG06	10	1-	55.979	2-	33.672		
345B	LG06	10	3-	57.790	4-	35.589		
371B	LG01	10	5-	126.018	6-	82.717		
371A	LG01	10	7-	92.208	8-	52.780		
322A	LD11	10	1-	8.965	2-	5.120		
322B	LD11	10	3-	9.465	4-	5.349		
502B	CS09	10	5-	53.547	6-	31.675		
502A	CS09	10	7-	57.835	8-	30.069		
393A	LBP7	10	1-1599	15.582	2-	9.310		
392A	LBP7	10	3-	18.997	4-	11.472		
364B	LG02	20	5-	189.102	6-	102.474		
500A	CS09	10	7-	17.364	8-	11.324		
323A	LD11	10	1-	9.458	2-	5.367		
				3-		4-		
				5-		6-		
				7-		8-		
Blank				3-11609	-0.052			
Std	Low			5-	12.010			
Std	High			7-	64.835			
Stand-	by			8-	-0.061			

355 A	355 B	363 B	363 A	368 A	368 B	372 A	372 B	345 A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LG04	LG04	LG02	LG02	LG02	LG02	LG01	LG01	LG06
20 m	20 m	20 m	20 m	Max	Max	10 m	10 m	20 m
2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58
Bot 7	Bot 7	Bot 5	Bot 5	Bot 10	Bot 10	Bot 4	Bot 4	Bot 15

345 B	371 B	371 A	322	322	502 B	502 A	393 A	392 A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LG06	LG01	LG01	LD11	LD11	CS09	CS09	LBP7	LBP7
20 m	20 m	20 m	20 m	20 m	5 m	5 m	10 m	20 m
2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58	2013-58
Bot 15	Bot 3	Bot 3	Bot 18	Bot 18	Bot 11	Bot 11	Bot 20	Bot 19

364 B	500 A	323
CHL	CHL	CHL
LG02	CS09	LD11
10 m	20 m	10 m
2013-58	2013-58	2013-58
Bot 6	Bot 9	Bot 19