

Fluorometer: 2012316

Chlorophyll Data Sheet

Acetone batch 'A'
15AUG14

Cruise: 2014-19

Page: 1 of 2

Date acetone added: 31 AUG 14

Time acetone added: 12:35 (local)

Date of analysis: 1 SEP 14

Analyst: MB

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.002			
STD			LOW	2-	12.318			
			HIGH	4-	67.018			
Blank				6-	0.003		0.003	
Loop SF2 ^A	SF2	330	10	1-	43.169	2-	24.226	
Loop SF1 ^B	SF1	1	10	3-	45.211	4-	25.615	
Loop SF1 ^A	SF1		10	5-	43.444	6-	24.794	
27B	SF2		10	7-	33.627	8-	18.912	
27A	SF2		10	1-	37.738	2-	18.149	
Loop SF2 ^B	SF2		10	3-	40.863	4-	73.309	
Loop SF3 ^A	SF3		10	5-	38.535	6-	21.828	
24B	SF2		10	7-	49.951	8-	30.666	
24A	SF2		10	1-	46.468	2-	28.479	
Loop SF4 ^B	SF4		10	3-	85.470	4-	48.773	
Loop SF4 ^A	SF4		10	5-	83.636	6-	47.596	
Loop SF3 ^B	SF3		10	7-	36.933	8-	21.257	
31B	P1		20	1-	238.816	2-	116.350	4x Diluted
31A	P1		20	3-	141.622	4-	105.099	4x Diluted
30A	P1		10	5-	93.644	6-	58.279	
43	P2		10	7-	31.437	8-	26.367	
42	P2		10	1-	17.578	2-	13.863	
41	P2		10	3-	12.446	4-	10.835	
46A	P2		10	5-	48.279	6-	36.154	
45	P2		10	7-	40.440	8-	30.884	
44	P2		10	1-	28.026	2-	21.744	
48	P2		20	3-	188.467	4-	108.560	4x diluted
47	P2		10	5-	103.767	6-	70.483	
46B	P2	↓	10	7-	45.872	8-	33.963	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

4.5m
4.5m

61.3
19.8

Loop
Ch1A
JF2
Loop
2014-19
~~Bot 1~~

Loop
Ch1 B
JF1
Loop
2014-19
~~Bot 1~~

Loop
Ch1 A
JF1
Loop
2014-19
~~Bot 1~~

27 B B 27 B A
CHL
JF2
2014-18
Bot 12
5m

Loop
Ch1 B
JF2
Loop
2014-19
~~Bot 1~~

Loop
Ch1 A
JF3
Loop
2014-19
~~Bot 1~~

24 B B
CHL
JF2
2014-18
Bot 9
30m

24 A
CHL
JF2
2014-18
Bot 9
30m

Loop B
Ch1 B
JF4
Loop
2014-19
~~Bot 1~~

Loop
Ch1 A
JF4
Loop
2014-19
~~Bot 1~~

Loop
Ch1 B
JF3
Loop
2014-19
~~Bot 1~~

31 B
CHL
P1
5 m
2014-19
Bot 3

31 A
CHL
P1
5 m
2014-19
Bot 3

30 A
CHL
P1
30 / Max
2014-19
Bot 2

43
CHL
P2
50 m
2014-19
Bot 3

42
CHL
P2
75 m
2014-19
Bot 2

41
CHL
P2
100 m
2014-19
Bot 1

46 A
CHL
P2
25 m
2014-19
Bot 6

45
CHL
P2
30 m
2014-19
Bot 5

44
CHL
P2
40 m
2014-19
Bot 4

48
CHL
P2
15 m
2014-19
Bot 13

47
CHL
P2
20 m
2014-19
Bot 7

9 Bot 6
2014-19
52 m
2d
THO
46

Chlorophyll Data Sheet

Cruise: 2014-19

Page: 2 of 2

Date acetone added: 31 AUG 19

Time acetone added: 12.35 (local)

Date of analysis: SEP 19

Analyst: MB

Acetone 6664 'A'
15 AUG 19

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-				
STD			LOW	2-				
			HIGH	4-				
Blank				6-				
49	P2	330	20	1-	229.397	2-	131.602	4x Diluted
50	P2		20	3-	194.502	4-	108.374	4x Diluted
51	P2		20	5-	157.705	6-	100.822	4x Diluted
53A	P2		20	7-	205.024	8-	110.948	4x Diluted
52 B	P2		10	1-	144.872	2-	94.305	
52 A	P2		10	3-	135.748	4-	86.2	
54 B	P2		20	5-	176.208	6-	99.589	4x Diluted
54A	P2		20	7-	201.577	8-	109.054	4x Diluted
53A	P2		20	1-	205.207	2-	110.669	4x Diluted
56A	P3		10	3-	76.221	4-	44.751	
55 A	P3		10	5-	126.607	6-	74.583	
55A	P3		10	7-	110.814	8-	66.391	
97	P4		10	1-	6.412	2-	5.141	
96	P4		10	3-	3.827	4-	3.312	
56 B	P3		10	5-	80.242	6-	46.813	
102	P4		10	7-	75.249	8-	45.067	
98 B	P4		10	1-	12.356	2-	8.450	
98A	P4		10	3-	12.714	4-	8.782	
101	P4		10	5-	33.496	6-	21.311	
100	P4		10	7-	22.148	8-	14.734	
99	P4		10	1-	19.009	2-	12.688	
107A	P4		10	3-	24.951	4-	16.040	
106	P4		10	5-	50.809	6-	29.037	
104	P4		10	7-	68.489	8-	39.800	
Blank				3-	0.012		0.008	
Std	Low			5-	12.057			
Std	High			7-	68.653			
Stand-	by			8-	0.000			

49	50	51	53 A	52 B	52 A	54 B	54 A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P2	P2	P2	P2	P2	P2	P2	P2
10 m	5 m	0 m	15/Max	Max*10	Max*10	5 m	5 m
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 9	Bot 10	Bot 11	Bot 8	Bot 12	Bot 12	Bot 14	Bot 14

53 B	56	55	55	97	96	56	102
CHL	CHL A	CHL B	CHL A	CHL	CHL	CHL B	CHL
P2	P3	P3	P3	P4	P4	P3	P4
15/Max	5 m	30 / Max	30 / Max	75 m	100 m	5 m	20 m
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 8	Bot 2	Bot 1	Bot 1	Bot 5	Bot 4	Bot 2	Bot 10

98 B	98 A	101	100	99	107 A	106	104
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P4	P4	P4	P4	P4	P4	P4	P4
50 m	50 m	25 m	30 m	40 m	30 m	0 m	10 m
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 6	Bot 6	Bot 6	Bot 8	Bot 7	Bot 15	Bot 14	Bot 12

Chlorophyll Data Sheet

Cruise: 2014-19

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Date acetone added: 15 Oct 14

Time acetone added: 10:05 a.m.

Date of analysis:

Analyst: Tamara

see on @ 9:10 a.m.
samples out of freezer @ 9:10 a.m.
started reading @ 10:31 a.m.

all 10ml initial volume

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.004			prep 15 Aug 14 TF bt 1A
STD			LOW	2-	12.339			
			HIGH	4-	67.443			
Blank				6-	0.004			
274A	P12	330	10	1-	20.669	2-	12.202	
336	P12			3-	24.266	4-	14.730	
337	P12			5-	10.101	6-	5.998	
447	P16			7-	17.121	8-	10.065	
454B	P16			1-	25.478	2-	15.508	
454A	P16			3-	29.444	4-	18.968 18.606	
LO2PB	P17			5-	4.886	6-	2.781	
462B	P19			7-	5.411	8-	2.962	
513A	P20			1-	28.598	2-	17.405	
521A	P20			3-	23.886	4-	14.293	
281	P12			5-	4.378	6-	2.401	
344B	P13			7-	5.591	8-	3.147	
338	P12			1-	3.794	2-	2.158	
451	P16			3-	9.189	4-	5.415 5.391	
453	P16			5-	5.856	6-	3.390	
455A	P16			7-	33.667	8-	19.753	
460A	P18			1-	6.653	2-	3.673	
463	P20			3-	14.305	4-	8.979	spilled ~1ml acetone @ start of ext.
513B	P20			5-4	28.946	6-	18.502 18.267	17.531
521B	P20			7-	22.774	8-	13.517	
280	P12			1-	4.509	2-	2.488	
344A	P13			3-	6.008	4-	3.466	
339	P12			5-	3.617	6-	2.118	
452	P16			7-	5.744	8-	3.268	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

463 P20 "1%" spilled ~ 1ml acetone

274 <i>A</i>	336	337	447	454	454	<i>P17 loop</i>	462 <i>B</i>	513 <i>A</i>
CHL	CHL	CHL	CHL	CHL	CHL		CHL	CHL
P12	P12	P12	P16	<i>B</i> P16	<i>A</i> P16	<i>P17</i>	P19	P20
40 m	1 %	10 %	30 m	50m/M*10	50m/M*10	<i>CHL B</i>	5 m	30 m
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19		2014-19	2014-19
Bot 7	Bot 1	Bot 2	Bot 8	Bot 15	Bot 15	<i>loop</i>	Bot 2	Bot 8

521 <i>A</i>	281	344 <i>B</i>	338	451	453	455	460 <i>A</i>	463
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P20	P12	P13	P12	P16	P16	<i>A</i> P16	P18	P20
20/Max	0 m	5 m	30 %	10 m	0 m	20/Max	5 m	1 %
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 16	Bot 14	Bot 2	Bot 3	Bot 12	Bot 14	Bot 16	Bot 2	Bot 1

Spilled in lab

513 <i>B</i>	521 <i>B</i>	280	344 <i>A</i>	339	452
CHL	CHL	CHL	CHL	CHL	CHL
P20	P20	P12	P13	P12	P16
30 m	20/Max	5 m	5 m	55 %	5 m
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 8	Bot 16	Bot 13	Bot 2	Bot 4	Bot 13

Chlorophyll Data Sheet

Cruise: 2014-19

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Date acetone added: 15 Oct 14

Time acetone added: 11:25 p.m.
out of freezer @ 10:45 a.m.
Analyst: Tamara started analysis @ 12:45 p.m.

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.005			
STD			LOW	2-	12.323			
			HIGH	4-3	66.973			
Blank				6-	0.003			
		330	10					
450	P16			1-7	6.429	2-8	3.613	}
455B	P16			3-1	33.348	4-2	19.351	
✓ LOOP B	P18			5-3	6.079	6-4	3.419	
464	P20			7-5	10.670	8-6	6.060	
514	P20			1-	21.974	2-	12.712	} check c duplicates yo got to read
522A	P20			3-	7.559	4-	4.453	
284B	A2			5-		6-		
343B	P13			7-	24.131	8-	15.301	
340	P12			1-	3.279	2-	1.830	label had fallen off
413	P16			3-	6.473	4-	4.052	} After fell face down after filtration
449	P16			5-	5.924	6-	3.337	
456A	P16			7-	5.982	8-	3.410	
LOOP A	P18			1-	5.550	2-	3.095	
467	P20			3-	8.255	4-	4.391 4.691	
515	P20			5-	11.982	6-	6.900	
522B	P20			7-	7.179	8-	3.991	
278	P12			1-	4.555	2-	2.589	
343A	P13			3-	23.443	4-	15.084	
345B	P14			5-	23.834	6-	14.418	
412	P16			7-	5.961	8-	3.375	
448	P16			1-	7.184	2-	4.215	
456B	P16			3-	5.934	4-	3.347	
460B	P18			5-	6.369	6-	3.502	
466	P20			7-	7.763	8-	4.331	
forgot to read LOOP B								
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

change nutrient stds before 2

450	455	<i>P19 Loop</i>	464	514	522 <i>A</i>	284	343 <i>B</i>	340
CHL	<i>B</i> CHL	<i>P13</i>	CHL	CHL	CHL	CHL <i>B</i>	CHL	CHL
P16	P16		P20	P20	P20	P12	P13	P12
15 m	20/Max	<i>CH1 B</i>	10 %	25 m	5 m	5 m	50 / Max	100 %
2014-19	2014-19	<i>Loop</i>	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 11	Bot 16		Bot 2	Bot 9	Bot 17	Bot 17	Bot 1	Bot 5

413	<i>(An 3.4)</i> 449	456	<i>P18 Loop</i>	467	515	522 <i>B</i>	278
CHL	CHL	CHL	<i>P13</i>	CHL	CHL	CHL	CHL
P16	P16 <i>vt</i>	<i>A</i> P16	<i>CH1 A</i>	P20	P20	P20	P12
100 %	20 m	5 m	<i>Loop</i>	100 %	20 m	5 m	15 m
2014-19	2014-19	2014-19		2014-19	2014-19	2014-19	2014-19
Bot 5	Bot 10	Bot 17		Bot 5	Bot 10	Bot 17	Bot 11

343 <i>A</i>	345	412	448	456	460 <i>B</i>	466
CHL	<i>B</i> CHL	CHL	CHL	CHL	CHL	CHL
P13	P14	P16	P16	<i>B</i> P16	P18	P20
50 / Max	50 / Max	55 %	25 m	5 m	5 m	55 %
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 1	Bot 1	Bot 4	Bot 9	Bot 17	Bot 2	Bot 4

Loop 138 19-2014
09/01
Loop 138 19-2014

forgot to read

Chlorophyll Data Sheet

Cruise: 2014-19

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plastic rack

Date acetone added: 15 Oct 14

Time acetone added: 1:05 p.m.

Date of analysis:

Analyst: Tamar out of freezer @ 12:40 p.m.
started analysis 2:10 p.m.

1st sample = 516

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.004 0.004			
STD			LOW	2-	12.434			
			HIGH	4-	67.180			
Blank		330	12	6-	0.004			
516	P20			1-	9.099	2-	5.584	
282B	P12			3-	19.221	4-	11.719	
283B	P12			5-	5.196	6-	2.842	
346B	P14			7-	5.231	8-	2.950	
411	P16			1-	6.243	2-	3.486	
446	P16			3-	33.316	4-	19.579	
457B	P17			5-	37.998	6-	22.462	
547B	P21			7-	9.362	8-	5.175	
459A	P18			1-	23.491	2-	13.277	
465	P20			3-	8.252	4-	4.637	
517	P20			5-	7.643	6-	4.301	
547A	P21			7-	9.607	8-	5.209	
277	P12			1-	4.541	2-	2.585	
284A	P12			3-	4.366	4-	2.376	
346A	P14			5-	5.231	6-	2.946	
410	P16			7-	23.158	8-	13.367	
445B	P16			1-	13.883	2-	8.830	
457A	P17			3-	40.004	4-	23.666	
459B	P18			5-	23.713	6-	13.595 13.395	
509	P20			7-	4.175	8-	2.738	
518	P20			1-	7.644	2-	4.263	
546B	P21			3-	32.050	4-	18.339	
272A	P12			5-	17.734	6-	10.886	
283A	P12			7-	4.395	8-	2.394	
Blank				3-	0.004	acid	0.003	
Std	Low			5-	12.480			
Std	High			7-	67.077			
Stand-	by			8-	0.008			

516	282	283	346	411	446	457 B	547 B	459 A
CHL	CHL B	CHL B	BCHL	CHL	CHL	CHL	CHL	CHL
P20	P12	P12	P14	P16	P16	P17	P21	P18
15 m	50m/M*10	20/Max	5 m	30 %	40 m	50 / Max	5 m	50 / Max
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 11	Bot 15	Bot 16	Bot 2	Bot 3	Bot 7	Bot 1	Bot 24	Bot 1

465	517	547 A	277	284	346	410	445 B	457A
CHL	CHL	CHL	CHL	CHL A	A CHL	CHL	CHL	CHL
P20	P20	P21	P12	P12	P14	P16	P16	P17
30 %	10 m	5 m	20 m	5 m	5 m	10 %	50 m	50 / Max
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 3	Bot 12	Bot 24	Bot 10	Bot 17	Bot 2	Bot 2	Bot 6	Bot 1

459 B	509	518	546 B	272 A	283
CHL	CHL	CHL	CHL	CHL	CHL A
P18	P20	P20	P21	P12	P12
50 / Max	100 m	5 m	50 / Max	75 m	20/Max
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 1	Bot 4	Bot 13	Bot 23	Bot 5	Bot 16

Chlorophyll Data Sheet

started using
Acetone batch "B"
15 Aug 14

Cruise: 2014-19
Date acetone added: 16 Oct 14
Date of analysis:

Page: 1 of 2
Time acetone added:
Analyst: Tamar

10:00 a.m.,
out of freezer @ 8:45 a.m.
started reading @ 9:50 a.m.

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.007			
STD			LOW	2-	12.415			
			HIGH	4-	67.457			
Blank				6-	0.007 + acid	0.007		
		330	10					
548B	P22			1-	22.896	2-	12.798	
520B	P20			3-	23.536	4-	14.418	
512	P20			5-	18.377	6-	11.447	
462A	P19			7-	5.834	8-	3.211	
LOOP A	P17			1-	5.179	2-	2.910	
443	P16			3-	3.547	4-	2.270	
347A	P15			5-	27.586	6-	16.216	
348A	P15			7-	6.898	8-	3.787	
275	P12			1-	8.186	2-	4.679	
279	P12			3-	4.319	4-	2.389	
548A	P22			5-	23.672	6-	13.275	
520A	P20			7-	23.363	8-	14.354	
511	P20			1-	14.334	2-	8.912	
461B	P19			3-	26.492	4-	15.566	
458B	P17			5-	5.052	6-	2.819	
444	P16			7-	7.996	8-	5.122	
347B	P15			1-	27.113	2-	15.949	
348B	P15			3-	6.029	4-	3.537	3.417
274B	P12			5-	18.201	6-	10.985	
273	P12			7-	24.006	8-	14.728	14.511
546A	P21			1-	31.761	2-	18.240	
519	P20			3-	7.336	4-	4.020	
510	P20			5-	7.516	6-	4.605	
461A	P19			7-	25.326	8-	14.942	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

548 B	520 B	512	462 A
CHL	CHL	CHL	CHL
P22	P20	P20	P19
50 / Max	50m/M*10	40 m	5 m
2014-19	2014-19	2014-19	2014-19
Bot 1	Bot 15	Bot 7	Bot 2

P17100P
P17
CHL A
600P

443	347 A	348 A
CHL	CHL	CHL
P16	P15	P15
100 m	50 / Max	5 m
2014-19	2014-19	2014-19
Bot 4	Bot 1	Bot 2

275	279	548 A	520 A
CHL	CHL	CHL	CHL
P12	P12	P22	P20
30 m	10 m	50 / Max	50m/M*10
2014-19	2014-19	2014-19	2014-19
Bot 8	Bot 12	Bot 1	Bot 15

511	461 B	458 B	444
CHL	CHL	CHL	CHL
P20	P19	P17	P16
50 m	50 / Max	5 m	75 m
2014-19	2014-19	2014-19	2014-19
Bot 6	Bot 1	Bot 2	Bot 5

347 B	348 B	274 B	273
CHL	CHL	CHL	CHL
P15	P15	P12	P12
50 / Max	5 m	40 m	50 m
2014-19	2014-19	2014-19	2014-19
Bot 1	Bot 2	Bot 7	Bot 6

546 A	519	510	461 A
CHL	CHL	CHL	CHL
P21	P20	P20	P19
50 / Max	0 m	75 m	50 / Max
2014-19	2014-19	2014-19	2014-19
Bot 23	Bot 14	Bot 5	Bot 1

Chlorophyll Data Sheet

Cruise: 2014-19

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Date acetone added: 16 Oct 14

Time acetone added: 12:45 p.m.

Date of analysis:

Analyst: Tamar

out of freezer @ 10:40 a.m.
started reading @ 11:35 a.m.

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.002			
STD			LOW	2-	12.299			
			HIGH	4-	67.014			
Blank				6-	0.000 + acid	0.000		
		330	10					
345A	P14			1-	27.252	2-	15.668	
409	P16			3-	7.532	4-	4.778	
445A	P16			5-	14.711	6-	9.232	
458A	P17			7-	5.108	8-	2.837	
Loop 142				1-	197.905	2-	107.447	Elizabeth Asher
Loop 141				3-	211.446	4-	112.666	
Loop 139				5-	142.976	6-	75.751	75.534
Loop 138				7-	45.598 45.274	8-	24.441	25.512
Loop B 128				1-	8.742	2-	4.924	
Loop 127				3-	8.731	4-	5.080	
Loop 137A				5-	50.299	6-	29.064	
Loop 137B				7-	49.656	8-	28.472	
Loop 136				1-	39.656	2-22.872	23.036	leaked ~ 2ml when extracted
Loop 135B				3-	7.421	4-	4.369	
Loop 135A				5-	7.285	6-	4.265	
Loop 134				7-	7.562	8-	4.260	
Loop 133				1-	7.820	2-	4.517	
Loop 131B				3-	9.697	4-	5.376	
Loop 131A				5-	9.813	6-	5.463	
Loop 130				7-	8.670	8-	4.958	
Loop 128A				1-	7.700	2-	4.443	
Loop 125B				3-	8.847	4-	5.008	
Loop 125A				5-	9.029	6-	5.211	
Loop 124				7-	34.230	8-	18.744	
Blank				3-	0.002			
Std Low				5-	12.285			
Std High				7-	66.869			
Stand- by				8-	0.006			

345	409	445 <i>P</i>	458A	<i>Loop 142</i>	<i>Loop 144</i>	<i>Loop 134</i>	Loop
A CHL	CHL	CHL	CHL	<i>19-2014</i>	<i>19-2014</i>	<i>19-2014</i>	CHL <i>B</i>
P14	P16	P16	P17	<i>09/01</i>	<i>loop 148</i>	<i>09/01</i>	Loop 128
50 / Max	1 %	50 m	5 m	<i>Eliminate Area</i>	<i>19-2014</i>		2014-19
2014-19	2014-19	2014-19	2014-19		<i>09/01</i>		Bot 1
Bot 1	Bot 1	Bot 6	Bot 2				

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<i>Loop 137</i>	<i>Loop 137</i>	<i>Loop 136</i>	2014-19	2014-19	<i>Loop 134</i>	<i>Loop 135</i>
CHL A	CHL B	<i>09/01</i>	CHL B	CHL A	<i>19-2014</i>	<i>08/09/01</i>
Loop 137	Loop 137	<i>19-2014</i>	Loop 135	Loop 135	<i>19-2014</i>	
2014-19	2014-19		01.09.14	01.09.14		
Bot 1	Bot 1					

<i>Loop 131</i>	<i>Loop 131</i>	<i>Loop 130</i>	Loop	2014-19	2014-19
<i>CHL B</i>	<i>CHL A</i>	<i>19-2014</i>	CHL A	CHL B	CHL A
<i>2014-19</i>	<i>2014-19</i>	<i>08/31</i>	Loop 128	Loop 125	Loop 125
<i>Loop</i>	<i>Loop</i>	<i>130 Loop</i>	2014-19	31.08.14	31.08.14
		<i>19-2014</i>	Bot 1		

124 LOOP 19-2014

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Chlorophyll Data Sheet

Cruise: 2014-19

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Date acetone added: 21 Oct 14

Time acetone added: 10:25 a.m.

Date of analysis: 22 Oct 14

Analyst: Tamar
out of freezer @ 10:35 a.m.
starting reading @ 11:45 a.m.

all 10 ml initial volume

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.007			
STD			LOW	2-	12.432			
			HIGH	4-	67.582			
Blank				6-	0.004 + acid		0.003	
		330	10					
Loop 123	B			1-	12.524	2-	6.916	
Loop 123	A			3-	12.482	4-	6.988	
Loop 122				5-	14.353	6-	7.946	
Loop 121	B			7-	19.854	8-	11.054	
Loop 121	A			1-	19.431	2-	10.840	
Loop 120	B			3-	30.170	4-	16.914	
Loop 120	A			5-	30.061	6-	16.755	
747 B	P2b			7-	26.591	8-	15.158	
747 A	P2b			1-	25.371	2-	14.530	
746 B	P2b			3-	26.780	4-	15.213	
746 A	P2b			5-	26.487	6-	15.003	
745 B	P2b			7-	17.583	8-	10.992	
745 A	P2b			1-	16.330	2-	10.078	
632 B	P2b			3-	25.935	4-	14.795	
625	P2b			5-	27.097	6-	15.619	
626	P2b			7-	26.276	8-	15.214	
627	P2b			1-	26.087	2-	15.053	
628	P2b			3-	27.787	4-	16.148	
629	P2b			5-	26.287	6-	15.407	
630 B	P2b			7-	14.505	8-	8.916	
630 A	P2b			1-	15.170	2-	9.492	
631 B	P2b			3-	26.548	4-	15.377	
631 A	P2b			5-	25.851	6-	15.054	
632 A	P2b			7-	26.216	8-	15.101	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

LOOP122 2014-19

LOOP LOOP 2014-19
 CHL B CHL A CHL B
 Loop 121 Loop 121 LOOP120
 2014-19 2014-19 30-08-14
 Bot 1 Bot 1

2014-19 747 B 747 A 746 B 746 A 745 B 745 A 632 B
 CHL A CHL CHL CHL CHL CHL CHL
 LOOP120 P26 P26 P26 P26 P26 P26
 5 5 10 above 10 above 15 below 15 below 5 m
 30-08-14 2014-19 2014-19 2014-19 2014-19 2014-19 2014-19
 Bot 21 Bot 21 Bot 20 Bot 20 Bot 19 Bot 19 Bot 17

625 626 627 628 629 630 B 630 A 631 B
 CHL CHL CHL CHL CHL CHL CHL
 P26 P26 P26 P26 P26 P26 P26
 20 m 15 m 10 m 5 m 0 m 50m/M*10 50m/M*10
 2014-19 2014-19 2014-19 2014-19 2014-19 2014-19 2014-19
 Bot 10 Bot 11 Bot 12 Bot 13 Bot 14 Bot 15 Bot 16

631 A 632 A
 CHL CHL
 P26 P26
 20/Max 5 m
 2014-19 2014-19
 Bot 16 Bot 17

Chlorophyll Data Sheet

Cruise: 2014-19

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Date acetone added: 21 Oct 14

Time acetone added: 11:40 - out of freezer @ 11:50 a.m.
Analyst: Tamarc start reading @ 12:10 pm

Date of analysis: 22 Oct 14

all 10ml initial volume

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.005			
STD			LOW	2-	12.270			
			HIGH	4-	67.243			
Blank				6-	0.002 + acid	0.002		
		330	10					
624	P26			1-	29.289	2-	17.028	
623	P26			3-	28.121	4-	16.137	
622B	P26			5-	31.027	6-	18.289	
622A	P26			7-	31.023	8-	18.614	
621	P26			1-	13.491	2-	8.356	
620	P26			3-	7.413	4-	4.901	
619A	P26			5-	4.348	6-	2.909	
612	P26			7-	27.359	8-	15.676	
611	P26			1-	27.304	2-	15.662	
610	P26			3-	27.823	4-	15.962	
609	P26			5-	27.732	6-	15.973	
608	P26			7-	9.452	8-	6.121	
579A	P35			1-	25.078	2-	13.975	
579B	P35			3-	24.409	4-	13.554	
578A	P35			5-	12.946	6-	8.169	
578B	P35			7-	13.018	8-	8.241	
577A	P25			1-	26.239	2-	14.355	
577B	P25			3-	26.193	4-	14.301	
576B	P25			5-	29.313	6-	16.131	
576A	P25			7-	28.739	8-	15.912	
575B	P24			1-	43.005	2-	23.488	
575A	P24			3-	41.340	4-	22.707	
574B	P24			5-	13.126	6-	8.467	
574A	P24			7-	13.310	8-	8.708	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

624	623	622 ^B	622 ^A	621	620	619 ^A	612	611
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P26	P26	P26	P26	P26	P26	P26	P26	P26
25 m	30 m	40 m	40 m	50 m	75 m	100 m	100 %	55 %
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 9	Bot 8	Bot 7	Bot 7	Bot 6	Bot 5	Bot 4	Bot 5	Bot 4

610	609	608	579 ^A	579 ^B	578 ^A	578 ^B	577 ^A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P26	P26	P26	P35	P35	P35	P35	P25
30 %	10 %	1 %	5 m	5 m	50 / Max	50 / Max	5 m
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 3	Bot 2	Bot 1	Bot 2	Bot 2	Bot 1	Bot 1	Bot 2

577 ^B	576 ^B	576 ^A	575 ^B	575 ^A	574 ^B	574
CHL	CHL	CHL	CHL	CHL	CHL	CHL ^A
P25	P25	P25	P24	P24	P24	P24
5 m	50 / Max	50 / Max	5 m	5 m	50 / Max	50 / Max
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 2	Bot 1	Bot 1	Bot 24	Bot 24	Bot 23	Bot 23

Chlorophyll Data Sheet

Cruise: 2014-19

Page: 3 of 3

Date acetone added: 21 Oct 14

Time acetone added:

Date of analysis:

Analyst: Tamaraz

1:30 p.m.
out of freezer @ 1:15 p.m.
started reading @ 2:20 p.m.

all 10ml initial volume

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.005			
STD			LOW	2-	12.308			
			HIGH	4-	67.713			
Blank				6-	0.005 + acid	0.005		
		330	10					
549A	P22			1-	19.423	2-	10.625	
549B	P22			3-	19.261	4-	10.712	
550B	P23			5-	26.119	6-	14.465	
550A	P23			7-	26.408	8-	14.615	
551A	P23			1-	26.619	2-	14.705	
551B	P23			3-	27.039	4-	15.053	
265A	P10			5-	4.799	6-	2.662	
265B	P10			7-	17.407	8-	10.833	
267B	P11			1-	4.035	2-	2.236	
267A	P11			3-	3.943	4-	2.166	
266A	P11			5-	24.042	6-	14.874	
266B	P11			7-	24.019	8-	14.941	
282A	P12			1-	19.366	2-	11.673	
276	P12			3-	5.983	4-	3.436	
272B	P12			5-	17.605	6-	10.808	
271	P12			7-	5.239	8-	3.566	
238A	P8			1-	25.167	2-	15.279	
238B	P8			3-	26.740	4-	16.315	
239A	P8			5-	4.436	6-	2.534	
239B	P8			7-	4.290	8-	2.435	
240A	P9			1-	21.533	2-	13.061	
240B	P9			3-	21.040	4-	12.798	
241A	P9			5-	6.154	6-	3.494	
241B	P9			7-	6.204	8-	3.495	
Blank				3-	0.004 + acid	0.005		
Std	Low			5-	12.315			
Std	High			7-	66.833			
Stand-	by			8-	0.005			

549 ^A	549 ^B	550 ^B	550 ^A	551 ^A	551 ^B	265 ^A	242 ^B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P22	P22	P23	P23	P23	P23	P10	P10
5 m	5 m	50 / Max	50 / Max	5 m	5 m	5m	50m
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 2	Bot 2	Bot 1	Bot 1	Bot 2	Bot 2	Bot 24	Bot 2

267 ^B	267 ^A	266 ^A	266 ^B	282	276	272	271
CHL	CHL	CHL	CHL	CHL ^A	CHL	P12 ^B	CHL
P11	P11	P11	P11	P12	P12	CHL	P12
5 m	5 m	50 / Max	50 / Max	50m/M*10	25 m	2014-19	100 m
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	Bot C	2014-19
Bot 2	Bot 2	Bot 1	Bot 1	Bot 15	Bot 9		Bot 4

238 ^A	238 ^B	239 ^A	239 ^B	240	240	241	241
CHL	CHL	CHL	CHL	CHL ^A	CHL ^B	CHL ^A	CHL ^B
P8	P8	P8	P8	P9	P9	P9	P9
20/Max	20/Max	5 m	5 m	50 / Max	50 / Max	5 m	5 m
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 23	Bot 23	Bot 22	Bot 22	Bot 1	Bot 1	Bot 2	Bot 2
		24	24				

Chlorophyll Data Sheet

Cruise: 2014-19
 Date acetone added: 23 Oct 14
 Date of analysis: 24 Oct 14

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Time acetone added: noon
 Analyst: Tamer out of freezer @ 11:40 a.m.
 started analysis @ 1:00 pm

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.008			
STD			LOW	2-	12.438			
			HIGH	4-	67.436			
Blank				6-	0.006			
		330	10					
242A	P10			1-	18.433	2-	11.709	
2165B	P10			3-	4.602	4-	2.558	
217A	P7			5-	14.589	6-	8.328	
217B	P7			7-	15.224	8-	8.779	
231	P8			1-	8.339	2-	5.136	
232	P8			3-	15.234	4-	9.591	
233	P8			5-	29.202	6-	18.086	
234	P8			7-	4.904	8-	2.795	
235	P8			1-	4.715	2-	2.678	
236	P8			3-	4.487	4-	2.519	
237A	P8			5-	27.962	6-	17.539	
237B	P8			7-	28.217	8-	17.834	
212A	P5			1-	25.702	2-	16.149	
212B	P5			3-	25.692	4-	16.254	
213A	P5			5-	29.706	6-	17.741	
213B	P5			7-	29.888	8-	17.839	
214A	P6			1-	39.221	2-	23.676	
214B	P6			3-	40.541	4-	24.805	
215A	P6			5-	11.567	6-	6.554	
215B	P6			7-	12.568	8-	7.249	7.221
216A	P7			1-	46.141	2-	28.190	
216B	P7			3-	46.201	4-	28.292	
				5-		6-		
				7-		8-		
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

242A	265B	217A	217B	231	232	233	234	235
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P10	P10	P7	P7	P8	P8	P8	P8	P8
50 m	5 m	5 m	5 m	100 m	75 m	50 m	25 m	10 m
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 2	Bot 24	Bot 2	Bot 2	Bot 16	Bot 17	Bot 18	Bot 19	Bot 20

236	237A	237B	212A	212B	213A	213B	214
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL A
P8	P8	P8	P5	P5	P5	P5	P6
5 m	50 m	50 m	30 / Max	30 / Max	5 m	5 m	30 / Max
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 21	Bot 22	Bot 22	Bot 2	Bot 2	Bot 3	Bot 3	Bot 1

214	215	215	216A	216B
CHL B	CHL A	CHL B	CHL	CHL
P6	P6	P6	P7	P7
30 / Max	5 m	5 m	30 / Max	30 / Max
2014-19	2014-19	2014-19	2014-19	2014-19
Bot 1	Bot 2	Bot 2	Bot 1	Bot 1

Chlorophyll Data Sheet

Cruise: 2014-19

Page: 2 of 2

Date acetone added: 23 Oct 14

Time acetone added: 1:40 p.m.

Date of analysis: 24 Oct 14

Analyst: Durara

out of freezer @ 12:55 p.m.

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.005			
STD			LOW	2-	12.289			
			HIGH	4-	67.240			
Blank				6-	0.005 + acid	0.001		
		330	10					
209	P4			1-	25.354	2-	14.718	
208	P4			3-	22.423	4-	12.903	
207	P4			5-	26.403	6-	15.289	
206	P4			7-	32.020	8-	18.895	
205	P4			1-	31.463	2-	19.611	
109B	P4			3-	36.474	4-	20.653	
108A	P4			5-	64.390	6-	37.470	
108B	P4			7-	65.310	8-	37.570	
107B	P4			1-	15.925	2-	10.168	
105	P4			3-	38.526	4-	21.762	
109A	P4			5-	36.920	6-	20.956	
103	P4			7-	66.005	8-	38.452	
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
Blank				3-	0.003 + acid	0.002		
Std	Low			5-	12.319			
Std	High			7-	66.939			
Stand-	by			8-	0.004			

209	208	207	206	205	109 B	108 A	108 B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P4	P4	P4	P4	P4	P4	P4	P4
100 %	55 %	30 %	10 %	1 %	5 m	15/Max	15/Max
2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19	2014-19
Bot 5	Bot 4	Bot 3	Bot 2	Bot 1	Bot 17	Bot 16	Bot 16

107 B	105	109 A	103
CHL	CHL	CHL	CHL
P4	P4	P4	P4
30 m	5 m	5 m	15 m
2014-19	2014-19	2014-19	2014-19
Bot 15	Bot 13	Bot 17	Bot 11