

11.15 spec on, out of spec

Chlorophyll Data Sheet

Cruise: 2014-18

Page: 1 of 3

Date acetone added: 31 July 2014

Time acetone added: 10:35 a.m.

Date of analysis: 01 Aug 14

Analyst: TF

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.001			
STD			LOW	2-	12.415			
			HIGH	4-	66.412			
Blank				6-	0.000	TF	-0.001	
379	P12	30	10ml	1-	30.917	2-	18.716	
279B	P10			3-	32.960	4-	18.679	
541B	P22			5-	15.609	6-	2.912	
LOOP	P20			7-	11.809	8-	6.959	
479A	P17			1-	17.303	2-	9.225	
453A	P17			3-	19.207	4-	10.929	
*479A	P16			5-	18.801	6-	10.661	
414	P16			7-	7.830	8-	4.881	
388A	P12			1-	28.793	2-	16.232	
380	P12			3-	23.161	4-	19.721	
269A	75			5-	23.368	6-	10.603	
272B	75		20ml	7-	37.59	8-	16.232	
272A	75		20ml	1-	31.303	2-	16.012	
270B	75		20ml	3-	100.201	4-	52.688	
269B	75		10ml	5-	23.257	6-	14.185	
270A	75		20ml	7-	96.875	8-	51.344	
258A	72		20ml	1-	242.019	2-	184.355	DF = 2
258B	72		20ml	3-	245.691	4-	126.249	DF = 2
255B	72		10ml	5-	109.041	6-	57.466	
256C	72		20ml	7-	147.845	8-	76.381	
256A	72		20ml	1-	123.845	2-	64.163	
253A	71		10ml	3-	15.234	4-	61.531	
243B	69		20ml	5-	151.719	6-	78.869	
245B	69		20ml	7-	268.182	8-	138.812	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

2014-18
rect leak
5m
5m
2014-23

off leak

456 band a at 10:00 am

379	279 B	541 B	P200	479 A	453	* 417 A	414
CHL	CHL	CHL	Loop I	CHL	CHL A	CHL	CHL
P12	P10	P22	5	P19	P17	P16	P16
30 m	5 m	5 m	2014-18	5 m	5 m	30 m	75 m
2014-18	2014-18	2014-18	A	2014-18	2014-18	2014-18	2014-18
Bot 8	Bot 2	Bot 2		Bot 2	Bot 2	Bot 8	Bot 5

388 A	380	269 A	272 B	272 A	270 B	269 B	270 A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P12	P12	Stn 75	Stn 75	Stn 75	Stn 75	Stn 75	Stn 75
5 m	25 m	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
2014-18	2014-18	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
Bot 17	Bot 9	Bot 11	Bot 14	Bot 14	Bot 12	Bot 11	Bot 12

258 f	258 B	255 B	256 B	256 A	255 A	243 B	245 B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn 72	Stn 72	Stn 72	Stn 72	Stn 72	Stn 72	Stn 69	Stn 69
2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
Bot 13	Bot 13	Bot 10	Bot 11	Bot 11	Bot 10	Bot 10	Bot 12

out of freezer 10:15
start reading @ 11:20 a.m.

Chlorophyll Data Sheet

Cruise: 2014-23

Page: 1 of 3

Date acetone added: 5 Aug 14

Time acetone added: 10:40 a.m.

Date of analysis: 6 Aug 14

Analyst: TF

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	-0.000			
STD			LOW	2-	12.264			
			HIGH	4-	67.064			
Blank				6-	0.000	-0.000	0.000	
245A	69	35L	20ml	1-	266.803	2-	137.589	
245A	69		10ml	3-	291.936	4-	150.563	
242B	69		10ml	5-	253.531	6-	131.483	
242A	69		20ml	7-	128.183	8-	66.678	
233A	ADCP		20ml	1-	186.692	2-	96.010	DF=2
233B	ADCP		20ml	3-	197.413	4-	102.378	DF=2
231B	ADCP		10ml	5-	101.312	6-	54.519	
231A	ADCP		10ml	7-	101.580	8-	54.623	
230A	ADCP		10ml	1-	99.987	2-	54.315	
230B	ADCP		10ml	3-	101.492	4-	55.164	
221B	65		20ml	5-	231.593	6-	120.422	
223B	65		20ml	7-	120.451	8-	13.965	DF=2
5B	SL		10ml	1-	60.942	2-	33.593	
4A	SL		10ml	3-	28.749	4-	16.239	
4B	SL		10ml	5-	27.224	6-	15.360	
5A	SL		10ml	7-	59.611	8-	32.492	
7A	SI		20ml	1-	197.923	2-	103.702	DF=2
7B	SI		20ml	3-	252.24	4-	131.512	DF=2
19A	56		10ml	5-	245.188	6-	129.156	
18A	56		10ml	7-	217.665	8-	115.049	
18B	56		10ml	1-	239.560	2-	125.432	
19B	56		10ml	3-	262.559	4-	137.254	
21B	56		10ml	5-	271.659	6-	142.176	
21A	56		10ml	7-	265.905	8-	139.788	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

used to enter manually
forgot to capture text

20ml: 245A
242A
233A 4B
221B

223B

7A 2 filters each

245 ^A CHL Stn 69 2014-23 Bot 12	243 ^A CHL Stn 69 2014-23 Bot 10	242 ^B CHL Stn 69 2014-23 Bot 9	242 ^A CHL Stn 69 2014-23 Bot 9	233 ^A CHL Stn ADCP 2014-23 Bot 10	233 ^B CHL Stn ADCP 2014-23 Bot 10	231 ^B CHL Stn ADCP 2014-23 Bot 8	231 ^A CHL Stn ADCP 2014-23 Bot 8
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230 ^A CHL Stn ADCP 2014-23 Bot 7	230 ^B CHL Stn ADCP 2014-23 Bot 7	221 ^B CHL Stn 65 2014-23 Bot 8	223 ^B CHL Stn 65 2014-23 Bot 10	5 ^B CHL Stn SI 2014-23 Bot 5	4 ^A CHL Stn SI 2014-23 Bot 4	4 ^B CHL Stn SI 2014-23 Bot 4	5 ^A CHL Stn SI 2014-23 Bot 5
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7 ^A CHL Stn SI 2014-23 Bot 7	7 ^B CHL Stn SI 2014-23 Bot 7	19 ^A CHL Stn 56 2014-23 Bot 12	18 ^A CHL Stn 56 2014-23 Bot 11	18 ^B CHL Stn 56 2014-23 Bot 11	19 ^B CHL Stn 56 2014-23 Bot 12	21 ^B CHL Stn 56 2014-23 Bot 14	21 ^A CHL Stn 56 2014-23 Bot 14
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out of Acetone @ 12:35 pm
started reading @ 1:50 pm

Chlorophyll Data Sheet

Cruise: 2014-23

Page: 2 of 3

Date acetone added: Aug 14

Time acetone added: 2:20 pm

Date of analysis: Oct 14

Analyst: RF

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.000			
STD			LOW	2-	12.214			
			HIGH	4-	66.184			
Blank				6-	0.000 + acid	0.000		
29A	16	332	10ml	1-	48.493	2-	34.762	
29B	16		10ml	3-	45.019	4-	32.196	
30A	16		10ml	5-	53.172	6-	36.629	
30B	16		10ml	7-	52.380	8-	36.449	
32B	16		10ml	1-	81.845	2-	43.913	
32A	16		10ml	3-	86.652	4-	46.064	
45	14		10ml	5-	44.401	6-	52.247	
47	14		20ml	7-	40.092	8-	37.729	
47	14		20ml	1-	88.909	2-	47.259	
45	14		10ml	3-	96.807	4-	51.568	
44	14		10ml	5-	22.826	6-	14.466	
44	14		10ml	7-	21.637	8-	12.968	
61A	12		10ml	1-	131.296	2-	69.558	
61B	12		20ml	3-	65.469	4-	34.943	
60A	12		20ml	5-	11.578	6-	7.150	
63A	12		20ml	7-	79.734	8-	42.560	
63B	12		20ml	1-	80.344	2-	42.977	
60B	12		10ml	3-	28.175	4-	17.863	
72B	9		10ml	5-	29.263	6-	18.862	
72A	9		10ml	7-	24.431	8-	15.202	
75A	9		10ml	1-	134.717	2-	72.611	
73A	9		10ml	3-	86.638	4-	48.325	
75B	9		20ml	5-	62.403	6-	36.736	
73B	9		20ml	7-	46.808	8-	25.736	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-	1			

20ml : 47 x 2

61B

60A

63A 4B

75B

73B

29 A	29 B	30 A	30 B	32 B	32 A	44 45	43 47
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn 16	Stn 16	Stn 16	Stn 16	Stn 16	Stn 16	STN 14	STN 14
2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
Bot 8	Bot 8	Bot 9	Bot 9	Bot 11	Bot 11	413	415

43 47	41 45	44 44	44 44	61 A	61 B	60 A	63 A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
STN 14	STN 14	STN 14	STN 14	Stn 12	Stn 12	Stn 12	Stn 12
2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
415	413	412	412	Bot 14	Bot 14	Bot 13	Bot 16

63 B	60 B	72 B	72 A	75 A	73 A	75 B	73 B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn 12	Stn 12	Stn 9	Stn 9	Stn 9	Stn 9	Stn 9	Stn 9
2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
Bot 16	Bot 13	Bot 9	Bot 9	Bot 12	Bot 10	Bot 12	Bot 10

out of freezer @ 2:50pm
start reading @ 3:50 p.m.

Chlorophyll Data Sheet

Cruise: 2014-23

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Date acetone added: 05 Aug 14

Time acetone added: 4:28 p.m.

Date of analysis: 06 Aug 14

Analyst: TF

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	-0.000			
STD			LOW	2-	12.164			
			HIGH	4-	66.298			
Blank				6-	0.000 + on d	-0.000		
85B	6	332	10ml	1-	91.957	2-	49.006	
86A	6		10ml	3-	87.228	4-	48.864	
88A	6		20ml	5-	101.473	6-	53.979	
85A	6		10ml	7-	84.764	8-	45.166	
88B	6		20ml	1-	101.035	2-	53.824	
86B	6		10ml	3-	88.056	4-	49.239	
93A	BS17		10ml	5-	47.005	6-	28.282	
93B	BS17		10ml	7-	48.172	8-	29.514	
94A	BS17		10ml	1-	86.501	2-	49.173	
94B	BS17		10ml	3-	86.797	4-	49.425	
96A	BS17		10ml	5-	148.929	6-	82.612	
96B	BS17		20ml	7-	78.918	8-	43.601	
112A	3		20ml	1-	56.518	2-	31.395	
112B	3		20ml	3-	52.950	4-	29.349	
110A	3		20ml	5-	52.953	6-	29.078	
110B	3		20ml	7-	56.333	8-	30.948	
109A	3		10ml	1-	72.859	2-	41.334	
124	2		10ml	3-	103.605	4-	56.314	
124	2		10ml	5-	102.761	6-	55.289	
125	2		10ml	7-	130.135	8-	71.714	
125	2		10ml	1-	130.878	2-	69.838	
127	2		20ml	3-	58.494	4-	33.155	
127	2		20ml	5-	49.051	6-	28.594	
109B	3		10ml	7-	71.786	8-	40.077	
Blank				3-	0.004 + on d	0.003		
Std	Low			5-	12.184			
Std	High			7-	66.085			
Stand-	by			8-	-0.001			

20ml: 88A+B 109A+B

96B
112A+B
110A+B

85 β	86 Λ	88 A	85 Λ	88 β	86 β	A 93	B 93
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn 6	Stn 6	Stn 6	Stn 6	Stn 6	Stn 6	Stn BS17	Stn BS17
2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
Bot 10	Bot 11	Bot 13	Bot 10	Bot 13	Bot 11	Bot 5	Bot 5

A 94	B 94	A 96	B 96	112 A	112 β	110 A	110 β
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn BS17	Stn BS17	Stn BS17	Stn BS17	Stn 3	Stn 3	Stn 3	Stn 3
2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
Bot 6	Bot 6	Bot 8	Bot 8	Bot 16	Bot 16	Bot 14	Bot 14

109 A	124	124	125	125	127	127	109 β
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn 3	Stn 2	Stn 2	Stn 2	Stn 2	Stn 2	Stn 2	Stn 3
2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
Bot 13	Bot 12	Bot 12	Bot 13	Bot 13	Bot 15	Bot 15	Bot 13

exls file

out of freezer @ 9:55 a.m.

Chlorophyll Data Sheet

Cruise: 2014-23

Page: 1 of 3

Date acetone added: 06 Aug 14

Time acetone added: 10:30 a.m.

Date of analysis: 07 Aug 14 @ 10:55

Analyst: ~~JS~~ KS

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.003			
STD			LOW	2-6251	12.5			
			HIGH	4-6252	67.8			
Blank				6-6253	0.006		0.006	3 drops acid
140A	27	330	10	1-6255	77.5	2-	42.1	note on label states that a hic
140B	"		10	3-	70.6	4-	38.4	occurred.
141A	"		20	5-	134	6-	68.1	
141B	"		20	7-	106	8-	54.3	
143A	"		20	1-6263	53.6	2-	32.9	
143B	"		20	3-	63.5	4-	39.6	
158B	39		20	5-	145	6-	74.6	
157B	39		20	7-	91.1	8-	47.7	
157A	"		20	1-6271	74.1	2-	38.8	
158A	"		20	3-	147	4-	76.0	
160A	39		20	5-	161	6-	86.4	
160B	39		20	7-	213	8-	114	
173A	42		10	1-6279	68.2	2-	35.8	
174B	42		10	3-	27.5	4-	15.6	
173B	42		10	5-	72.4	6-	38.0	
174A	42		10	7-	28.1	8-	15.8	
176A	42		20	1-6287	18.7	2-	11.0	
176B	42		20	3-	19.0	4-	11.2	
185B	46		10	5-	98.1	6-	51.9	
186A	46		10	7-	138	8-	72.3	
186B	46		10	1-6295	145	2-	76.1	
185A	46		10	3-	96.3	4-	50.5	
188A	46		20	5-	130	6-	69.1	
188B	46		20	7-	135	8-	71.8	
Blank				3-				
Std	Low			5-6303	12.3			
Std	High			7-6304	66.5			
Stand-	by			8-				

20 ml

141A+B

176A+B

143A+B

188A+B

158B+A

157B+A

160A+B

140A	140B	141A	141B	143A	143B	158B	157B	157A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn 27	Stn 27	Stn 27	Stn 27	Stn 27	Stn 27	Stn 39	Stn 39	Stn 39
2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
Bot 13	Bot 13	Bot 14	Bot 14	Bot 16	Bot 16	Bot 15	Bot 14	Bot 14

158A	160A	160B	173A	174B	173B	174A	176A	176B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn 39	Stn 39	Stn 39	Stn 42	Stn 42	Stn 42	Stn 42	Stn 42	Stn 42
2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
Bot 15	Bot 17	Bot 17	Bot 13	Bot 14	Bot 13	Bot 14	Bot 16	Bot 16

185B	186A	186B	185A	188A	188B
CHL	CHL	CHL	CHL	CHL	CHL
Stn 46	Stn 46	Stn 46	Stn 46	Stn 46	Stn 46
2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
Bot 9	Bot 10	Bot 10	Bot 9	Bot 12	Bot 12

out of freezer @ 11:55 a.m.
started reading @ 1:05 p.m.

Chlorophyll Data Sheet

Cruise: 2014-23 + 2014-36

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Date acetone added: 06 Aug 14

Time acetone added: 12:55 pm

Date of analysis:

Analyst: TF

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	-0.000			
STD			LOW	2-				
			HIGH	4-				
Blank				6-	0.000 + add		-0.002	
199	59	332	20 ml	1-	114.210	2-	59.899	
199	59		20 ml	3-	131.870	4-	68.222	
200	59		20	5-	114.599	6-	60.020	
200	59		20	7-	144.939	8-	75.741	
202	59		20	1-	112.033	2-	58.787	
202	59		20	3-	128.493	4-	67.059	
213A	62		20	5-	305.659	6-	157.841	
213B	62		20	7-	313.901	8-	161.621	
211A	62		20	1-	148.628	2-	77.160	
211B	62		20	3-	161.969	4-	84.686	
210A	62		20	5-	98.342	6-	57.302	
210B	62		20	7-	96.586	8-	50.921	
220A	65		20	1-	117.511	2-	61.704	
221A	65		20	3-	181.395	4-	93.859	
223A	65		20	5-	177.355	6-	92.432	DF=2
220B	65		20	7-	155.013	8-	81.529	
156	16C13		20	1-	208.536	2-	118.529	
156	16C13		20	3-	233.416	4-	134.154	
159	16C14		20	5-	279.876	6-	159.457	
159	16C14		20	7-	251.869	8-	146.800	
162	16C15		10	1-	265.938	2-	143.897	
162	16C15		10	3-	260.860	4-	141.250	
165	16C16		20	5-	254.888	6-	142.496	
165	16C16		20	7-	255.631	8-	142.046	
Blank				3-				
Std	Low			5-	12.226			
Std	High			7-	66.266			
Stand-	by			8-				

2014-23

2014-36

20ml:

199 A+B

211 B+A

1155 156 A+B

200 A+B

210 A+B

159 A+B

202 A+B

220 A+B

165 A+B

213 A+B

221 A

223 A

199	199	200	200	202	202	213 A	213 B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn 59	Stn 59	Stn 59	Stn 59	Stn 59	Stn 59	Stn 62	Stn 62
2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
Bot 11	Bot 11	Bot 12	Bot 12	Bot 14	Bot 14	Bot 11	Bot 11

211 A	211 B	210 A	210 B	220 A	22 A	223 A	220 B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stn 62	Stn 62	Stn 62	Stn 62	Stn 65	Stn 65	Stn 65	Stn 65
2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23	2014-23
Bot 9 9	Bot 9 9	Bot 8 8	Bot 8 8	Bot 7	Bot 8	Bot 10	Bot 7

HS 2014-36	HS 2014-36	HS 2014-36	HS 2014-36
CHL	CHL	CHL	CHL
1EC 13	156	1EC 13	156
		1EC 14	159

HS 2014-36	HS 2014-36	HS 2014-36	HS 2014-36
CHL	CHL	CHL	CHL
1EC 15	162	1EC 15	162
		1EC 16	165
			165