

Chlorophyll Data Sheet

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Cruise: Line P

Dates of Cruise: 2019-006

Date acetone added: 25 Jun/19

Date of analysis: 26 Jun/19

Analyst: Julian

Time acetone added: 11:25am

Time out of freezer: 9:29am

Time analysis started: 10:30am

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.011			
STD			LOW	2-	10.663			
			HIGH	4-	58.105			
Blank				6-	0.003		0.003	
627	P4	304ml		1-10ml	70.600	2-	39.571	
626	P4			3-	69.259	4-	39.038	
625	P4			5-	64.908	6-	37.595	
623	P4			7-	16.862	8-	11.654	
622	P4			1-	4.172	2-	3.557	± Did nothing differently
5102B	Loop P4			3-	63.934	4-	35.678	
5106B	Loop 100			5-	7.928	6-	4.401	
5099B	Loop 99			7-	9.693	8-	5.308	
5098B	Loop 98			1-	12.177	2-	6.569	
5097B	Loop 97			3-	24.510	4-	15.508	
549	P26			5-	36.989	6-	20.729	
548	P26			7-	36.934	8-	20.439	
547B	P26			1-	36.206	2-	19.997	
				3-		4-		
				5-		6-		
				7-		8-		
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

646 627 CHL	645 626 CHL	625 644 CHL	623 643 CHL	622 641 CHL	B 5102 CHL	5100 CHL	5099 CHL	5098 CHL	5097 CHL	549 CHL
P4	P4	P4	P4	P4	LoopP4	Loop100	Loop99	Loop98	Loop97	P26
5 m	10 m	25 m	50 m	100 m	LOOP	LOOP	LOOP	LOOP	LOOP	0 m
19-006	19-006	19-006	19-006	19-006	19-006	19-006	19-006	19-006	19-006	19-006
Bot 19	Bot 18	Bot 17	Bot 16	Bot 14	Bot 1	Bot 1	Bot 1	Bot 1	Bot 1	Bot 17

548 CHL	547 CHL
P26	P26
5 m	10 m
19-006	19-006
Bot 14 13	Bot 13 14

Chlorophyll Data Sheet

Cruise: Line P

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Dates of Cruise: 2019-006

Date acetone added: 25 Jun/9

Date of analysis: 26 Jun/9

Analyst: Julian C

Time acetone added: 3:23pm

Time out of freezer: 1:15pm

Time analysis started: 2:16pm

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.010			
STD			LOW	2-	10.599			
			HIGH	4-	58.207			
Blank				6-	0.005		0.003	
395	P20	304ml	10ml	1-	34.334	2-	18.038	
396	P20			3-	52.145	4-	17.145	
397	P20			5-	51.942	6-	16.895	
398	P20			7-	35.074	8-	18.581	
399	P26			1-	32.974	2-	17.582	
400B	P20			3-	30.186	4-	16.159	
420B	P21			5-	30.826	6-	16.060	
5063B	Loop6B			7-	45.873	8-	24.097	
444A	P22			1-	46.886	2-	25.025	
446B	P23			3-	21.773	4-	12.185	
5070B	LoopP23			5-	20.188	6-	11.254	
464B	P24			7-	17.858	8-	9.09	
489B	P25			1-	19.108	2-	10.709	
491B	P35			3-	43.498	4-	24.518	
538	P26			5-	4.681	6-	3.073	
539	P26			7-	11.725	8-	7.012	sample came out fast and
546	P26			1-	17.059	2-	9.759	to filter paper block in V. cuvette
541	P26			3-	19.718	4-	11.780	
542	P26			5-	33.674	6-	19.537	
543	P26			7-	35.496	8-	19.754	
544	P26			1-	36.038	2-	20.169	
545B	P26			3-	35.532	4-	19.951	
546	P26			5-	36.723	6-	20.605	
547A	P26			7-	36.087	8-	20.139	
Blank	Standby			3-	0.011			
Std	Low			5-	10.561			
Std	High			7-	57.753			
Stand-	by Blank			8-	0.008		0.008	

Chlorophyll Data Sheet

Cruise: *Line P*

Page: *3* of

Dates of Cruise: *2019-006*

Date acetone added: *26 Jun/19*

Date of analysis: *27 Jun/19*

Analyst: *Julian*

Time acetone added: *11:58am*

Time out of freezer: *9:58am*

Time analysis started: *10:58am*

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.015			
STD			LOW	2-	10.659			
			HIGH	4-	58.611			
Blank				6-	0.007		0.007	
394	P20	504ml	10ml	1-	32.132	2-	17.045	
393	P20			3-	37.073	4-	19.580	
392	P20			5-	35.059	6-	14.624	
391	P20			7-	13.960	8-	8.174	
390B	P20			1-	10.696	2-	6.802	
389	P20			3-	8.597	4-	5.414	
339B	P19			5-	21.763	6-	11.526	
5059B	Loop P19			7-	18.238	8-	9.608	
5058B	Loop 58			1-	17.785	2-	9.462	
338A	P18			3-	22.210	4-	11.598	
314A	P17			5-	15.262	6-	8.095	
5054B	Loop 54			7-	12.462	8-	6.795	
309	P16			1-	13.756	2-	7.305	
307A	P16			3-	13.651	4-	7.287	
310B	P16			5-	14.509	6-	7.678	
308	P16			7-	13.426	8-	7.194	
301	P16			1-	6.477	2-	4.244	
303	P16			3-	13.093	4-	7.642	
312	P16			5-	13.365	6-	7.117	
302	P16			7-	10.947	8-	6.947	
311	P16			1-	12.572	2-	6.745	
306	P16			3-	12.966	4-	7.006	
305	P16			5-	18.475	6-	10.421	
304	P16	✓	✓	7-	13.557	8-	7.800	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

Chlorophyll Data Sheet

Cruise: *Line P*

Page: *4* of

Dates of Cruise: *2019-006*

Date acetone added: *26 Jun 19*

Date of analysis: *27 Jun 19*

Analyst: *Julian*

Time acetone added: *2:15pm*

Time out of freezer: *12:15pm*

Time analysis started: *1:20pm*

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.008			
STD			LOW	2-	10.559			
			HIGH	4-	58.044			
Blank				6-	0.005		0.004	
251B	P15	304mL	10mL	1-	12.294	2-	6.308	
5044B	P15/loop			3-	12.025	4-	6.311	
5043A	Loop 43			5-	8.047	6-	4.253	
250B	P11			7-	7.238	8-	3.908	
626	P1			1-	20.214	2-	39.733	
623	P4			3-	5.389	4-	4.269	
5102A	Loop P4			5-	67.867	6-	37.122	
5100A	Loop 100			7-	7.854	8-	4.542	
5099A	Loop 99			1-	9.882	2-	5.522	
5098A	Loop 98			3-	13.122	4-	7.058	
5097A	Loop 97			5-	30.472	6-	16.285	
545A	P26			7-	36.331	8-	20.154	
441A	P35			1-	43.935	2-	24.824	
489A	P25			3-	18.964	4-	10.617	
469A	P24			5-	17.990	6-	10.021	
5070A	Loop 23			7-	21.129	8-	11.811	
446A	P23			1-	20.497	2-	11.450	
444B	P22			3-	46.747	4-	24.670	
5068A	Loop 68			5-	41.462	6-	21.983	
420A	P21			7-	28.911	8-	15.194	
400A	P20			1-	29.573	2-	15.922	
390A	P20			3-	10.563	4-	6.373	
339A	P19			5-	22.048	6-	11.755	
5059A	Loop 19			7-	17.928	8-	9.638	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

251 B	5044	5043 A	250 B	645 642	A 5102	5100 A	5099	5098 A	5097
CHL	CHL B	CHL	CHL	CHL	CHL	CHL	CHL A	CHL A	CHL
P15	P15 Loop	Loop43	P14	P4	LoopP4	Loop100	Loop99	Loop98	Loop97
5 m	5 m	LOOP	5 m	10 m	LOOP	LOOP	LOOP	LOOP	LOOP
19-006	19-006	19-006	19-006	19-006	19-006	19-006	19-006	19-006	19-006
Bot 1	Bot 1	Bot 1	Bot 24	Bot 18	Bot 1	Bot 1	Bot 1	Bot 1	Bot 1
545 A	491 A	489 A	469	5070 A	446 A	444 B	5068	420 A	400 A
CHL	CHL	CHL	CHL A	CHL A	CHL	CHL	CHL	CHL	CHL
P26	P35	P25	P24	LoopP23	P23	P22	Loop68	P21	P20
20 m	5 m	5 m	5 m	LOOP	5 m	5 m	LOOP	5 m	0 m
19-006	19-006	19-006	19-006	19-006	19-006	19-006	19-006	19-006	19-006
Bot 1	Bot 1	Bot 19	Bot 23	Bot 1	Bot 1	Bot 23	Bot 1	Bot 19	Bot 15
339 A	5059 A								
CHL	CHL								
P19	LoopP19								
5 m	LOOP								
19-006	19-006								
Bot 1	Bot 1								

Chlorophyll Data Sheet

Cruise: Line P

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Dates of Cruise: 2019-006

Date acetone added: 26 Jun 19

Date of analysis:

Analyst:

Time acetone added: 5:05pm

Time out of freezer: 3:03pm

Time analysis started:

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.009			
STD			LOW	2-	10.491			
			HIGH	4-	57.826			
Blank				6-	0.003		0.005	
250A	P14	304ml	10ml	1-	7.668	2-	4.154	
5041B	Loop			3-	7.176	4-	3.861	
226B	P13			5-	8.733	6-	4.552	
199	P12			7-	7.482	8-	5.928	
198	P12			1-	7.939	2-	4.168	
202	P12			3-	7.461	4-	3.942	
203A	P12			5-	7.735	6-	4.076	
200	P12			7-	7.430	8-	3.961	
201A	P12			1-	7.287	2-	3.827	
197	P12			3-	9.077	4-	4.854	
196	P12			5-	8.150	6-	4.501	
194	P12			7-	9.368	8-	5.222	
193	P12			1-	11.939	2-	6.943	
192	P12			3-	12.945	4-	7.673	
191	P12			5-	11.774	6-	7.836	
144B	P10			7-	8.849	8-	4.830	
5027B	Loop P10			1-	10.353	2-	5.749	
143	P9			3-	5.695	4-	3.036	
139	P8			5-	8.475	6-	4.567	
138B	P3			7-	6.851	8-	3.740	
140	P8			1-	5.132	2-	2.888	
137	P3			3-	8.650	4-	4.661	
136	P8			5-	16.251	6-	8.519	
134	P8			7-	9.602	8-	5.652	
Blank	standby			3-	0.007			Machine's being weird
Std	Low			5-	10.546			w/ these values
Std	High			7-	57.741			
Stand-	by Blank			8-	0.014		0.014	

[illegible]

Chlorophyll Data Sheet

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Cruise: Line P

Dates of Cruise: 2019-006

Date acetone added: 27 Jun 19

Date of analysis: 28 Jun 19

Analyst: Julian

Time acetone added: 10:17am

Time out of freezer: 8:15am

Time analysis started: 9:15am

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.010			
STD			LOW	2-	10.619			
			HIGH	4-	58.137			
Blank				6-	0.007		0.008	
135	P8	304ml	10ml	1-	7.428	2-	4.156	
132A	P8			3-	20.130	4-	11.757	
142	P8			5-	4.774	6-	2.608	
131	P8			7-	6.245	8-	3.952	
133	P8			1-	20.004	2-	11.702	
118B	P7			3-	16.850	4-	10.127	
5022B	Loop P7			5-	15.349	6-	9.001	
117B	P6			7-	29.991	8-	17.992	
5020A	Loop 20			1-	25.795	2-	15.011	
116B	P5			3-	17.701	4-	10.388	4 drops HCl
5019B	Loop P5			5-	19.349	6-	11.505	
69B	P4			7-	153.054	8-	84.376	
68	P4			1-	135.187	2-	77.505	
66B	P4			3-	160.993	4-	92.650	
65	P4			5-	145.453	6-	82.160	4 drops HCl
64	P4			7-	164.880	8-	91.879	
63	P4			1-	195.392	2-	106.558	
62	P4			3-	201.855	4-	110.736	
61	P4			5-	143.639	6-	79.121	
60	P4			7-	73.768	8-	42.248	
59	P4			1-	19.010	2-	12.898	
58	P4			3-	11.590	4-	8.343	
57	P4			5-	10.570	6-	8.397	
53B	P3			7-	147.140	8-	79.170	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

[illegible]

Chlorophyll Data Sheet

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20ml Acetone

Cruise: Line P

Dates of Cruise: 2019-006

Date acetone added: 27 Jun 19

Date of analysis: 28 Jun 19

Analyst: Julian

Time acetone added: 12:16 pm

Time out of freezer: 10:25 am

Time analysis started: 11:14 am

451
425A

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.011			
STD			LOW	2-	10.587			
			HIGH	4-	5.2908			
Blank				6-	0.008		0.007	
53.4	P3	304mL	10mL	1-	146.46	2-	77.501	
52	P2		↓	3-	138.709	4-	72.837	DF=3
51	P2		20mL	5-	209.611	6-	108.230	
50A	P2		10mL	7-	138.296	8-	73.248	DF=3
47	P2			1-	334.538	2-	173.948	
49	P2			3-	134.455	4-	70.257	DF=3
46	P2			5-	352.330	6-	185.491	
45	P2			7-	51.386	8-	33.890	
44B	P2			1-	26.875	2-	14.612	
43	P2			3-	18.956	4-	13.970	
42	P2			5-	13.98	6-	10.787	First Value Not recorded
41	P2			7-	15.264	8-	11.783	
25A	P1		20mL	1-	141.390	2-	72.984	DF=3
23	P1		10mL	3-	25.332	4-	16.698	
21B	Loop JF4			5-	98.269	6-	55.502	
20B	Loop JF3			7-	104.464	8-	60.182	
19B	Loop JF2			1-	66.754	2-	38.395	
18B	Loop JF1			3-	49.761	4-	29.461	
5058A	Loop 58			5-	16.493	6-	8.796	
338B	P18			7-	22.997	8-	11.921	
314B	P17			1-	14.353	2-	7.562	
5054A	Loop 54			3-	12.750	4-	6.786	
307B	P16			5-	13.557	6-	7.201	
310A	P16			7-	13.370	8-	7.056	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

two values taken after HCl to keep plates in order.

Bot 10

Bot 13

Bot 2

Bot 1

Bot i

Bot 1

Bot 1

Bot 1

Bot 24

Bot 1

Bot 2

Bot 1

Chlorophyll Data Sheet

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20mL Acetone

Cruise: Line P

Dates of Cruise: 2019-006

Date acetone added: 27 Jun 19

Date of analysis: 28 Jun 19

Analyst:

Time acetone added: 2:06pm

Time out of freezer: 12:18pm

Time analysis started: 1:13pm

*50B
*25B

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.009			
STD			LOW	2-	10.564			
			HIGH	4-	58.095			
Blank				6-	0.005		0.007	
5041A	Loop	304mL	10mL	1-	7.245	2-	3.899	
226A	P13			3-	9.597	4-	5.011	
203B	P12			5-	6.643	6-	3.500	
201B	P12			7-	8.248	8-	4.332	
144A	P10			1-	11.393	2-	6.169	
5027A	Loop10			3-	10.572	4-	5.794	
143A	P9			5-	6.377	6-	3.406	
138A	P8			7-	7.936	8-	4.290	
132B	P8			1-	20.742	2-	12.289	
5022A	Loop P7			3-	15.075	4-	8.958	
118A	P7			5-	16.320	6-	9.918	
117A	P6			7-	29.734	8-	18.061	
5070B	Loop20			1-	25.406	2-	14.655	
?	?			3-	17.137	4-	10.235	No label!
5019A	Loop P5			5-	19.988	6-	11.719	
69A	P4			7-	143.123	8-	79.716	
66A	P4			1-	159.192	2-	91.783	
*50B	P2		20mL	3-	200.499	4-	106.491	
44A	P2		10mL	5-	29.985	6-	21.264	
*25B	P1		20mL	7-	133.789	8-	69.416	DF=3
21A	Loop JF4		10mL	1-	94.064	2-	53.830	
13020A	Loop JF3			3-	110.503	4-	63.389	
5019A	Loop JF2			5-	66.666	6-	38.533	
14118A	Loop JF1			7-	50.067	8-	29.683	
Blank				3-				
Std	Low			5-				
Std	High			7-				
Stand-	by			8-				

5041 A: CHL Loop LOOP 19-006 Bot 1 19-006	226A CHL P13 5 m 19-006 Bot 1	203B CHL P12 0 m 19-006 Bot 16	201B CHL P12 10 m 19-006 Bot 14	144A CHL P10 5 m 19-006 Bot 1	5027A CHL LoopP10 LOOP 19-006 Bot 1	143 CHL A P9 5 m 19-006 Bot 1	138A CHL P8 20 m 19-006 Bot 20	132B CHL P8 75 m 19-006 Bot 14	5022A CHL LoopP7 LOOP 19-006 Bot 1
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118A CHL P7 5 m 19-006 Bot 1	117A CHL P6 5 m 19-006 Bot 1	118B CHL LoopP2 19-006 5020B	5019A CHL LoopP5 5 m 19-006 Bot 1	69A CHL P4 0 m 19-006 Bot 16	66A CHL P4 10 m 19-006 Bot 13	50B CHL P2 10 m 19-006 Bot 10	44A CHL P2 40 m 19-006 Bot 4	25B CHL: P1 5 m 19-006 Bot 4
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21A CHL LoopJF4 LOOP 19-006 Bot 1	20A CHL LoopJF3 LOOP 19-006 Bot 1	19A CHL LoopJF2 LOOP 19-006 Bot 1	18A CHL LoopJF1 LOOP 19-006 Bot 1
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Chlorophyll Data Sheet

Cruise: *Line P*

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Dates of Cruise: *2019-006*

Date acetone added: *27 Jun 19*

Date of analysis: *28 Jun 19*

Analyst: *J. Miller*

Time acetone added: *2:06pm*

Time out of freezer: *12:18pm*

Time analysis started: *1:15pm*

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-				
STD			LOW	2-	<i>Done at page 8 - continued right of file (8-)</i>			
			HIGH	4-				
Blank				6-				
<i>251A</i>	<i>P15</i>	<i>30ml</i>	<i>10ml</i>	1-	<i>12.095</i>	2-	<i>6.253</i>	
<i>5044</i>	<i>P15 loop</i>	<i>↓</i>	<i>↓</i>	3-	<i>12.399</i>	4-	<i>6.526</i>	
<i>50438</i>	<i>Loop 43</i>	<i>↓</i>	<i>↓</i>	5-	<i>7.627</i>	6-	<i>4.057</i>	
				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-		
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
Blank	<i>standing</i>			3-	<i>0.012</i>			
Std	Low			5-	<i>10.457</i>			
Std	High			7-	<i>57.906</i>			
Stand-	by <i>Blank</i>			8-	<i>0.009</i>		<i>0.005</i>	

25i A	5044	5043 B
CHL	CHL A	CHL
P15	P15 .loop	Loop43
5 m	5 m	LOOP
19-006	19-006	19-006
Bot 1	Bot 1	Bot 1