

Chlorophyll Data Sheet

Cruise: VECTOR

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Dates of Cruise: 2019-050

Time and date acetone added: 19 Jun 19 @ 4:07pm

Analyst: Julian i

Time and date out of freezer: 20 Jun 19 @ 2:08pm

Time analysis started: 3:46pm

20mL Acetone
 A128
 A195A
 A193
 A174A

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.012			
STD			LOW	2-	10.696			
STD			HIGH	4-	58.628			
Blank				6-	0.003	8-	0.003	
153A	42	30mL	10mL	1-	13.766	2-	8.621	8.583
128	56		20mL	3-	18.777	4-	11.439	
176	GE01		10mL	5-	57.829	6-	53.666	
175B	GE01		↓	7-	37.246	8-	23.832	
195A	27		20mL	1-	32.305	2-	18.595	
193	27		20mL	3-	52.846	4-	29.765	
192	27		10mL	5-	113.687	6-	65.124	64.957
191	27		10mL	7-	48.439	8-	30.126	
174A	39		20mL	1-	50.315	2-	26.983	
173	39		10mL	3-	41.428	4-	23.642	
172	39		↓	5-	48.339	6-	28.871	
171	39		↓	7-	39.812	8-	24.160	
178	GE01		↓	1-	57.161	2-	29.180	
177	GE01	↓	↓	3-	62.267	4-	36.033	
				5-		6-		
				7-		8-		
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
				1-		2-		
				3-		4-		
				5-		6-		
				7-		8-		
Stand-by				1-	0.011			
Std	Low			2-	10.632			
Std	High			4-	58.289			
Blank	by			6-	-0.001	8-	-0.001	

153A	128	176	175B	195A	193	192	191	174A	173
Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a
42	56	GEO1	GEO1	27	27	27	27	39	39
2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050
Bot 13	Bot 14	Bot 2	Bot 1	Bot 17	Bot 15	Bot 14	Bot 13	Bot 17	Bot 16

172	171	178	177
Chl_a	Chl_a	Chl_a	Chl_a
39	39	GEO1	GEO1
2019-050	2019-050	2019-050	2019-050
Bot 15	Bot 14	Bot 4	Bot 3

Chlorophyll Data Sheet

Cruise: Vector

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Dates of Cruise: 2019-05-0

Time and date acetone added: 20 Jun 19 @ 11:18 am

Analyst: Julian

Time and date out of freezer: 20 Jun 19 @ 9:16 am

Time analysis started: 10:25 am

20ml Acetone

★126
★163
★182A
★101

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.016 0.015			
STD			LOW	2-	10.733			
STD			HIGH	4-	58.792			
Blank				6-	0.000	8-	0.000 0.000	
154	42	304ml	10m L	1-	37.964	2-	22.764	
157	42			3-	37.944	4-	22.177	
155	42			5-	42.849	6-	24.604	
137	46			7-	16.470	8-	10.347	
138	46			1-	22.893	2-	14.036	
139B	46			3-	38.463	4-	22.975	
140	46			5-	38.565	6-	22.428	
153B	42			7-	14.220	8-	8.836	
115A	62			1-	72.965	2-	41.236	
111	62			3-	68.854	4-	39.206	
112	62			5-	70.030	6-	39.785	
114	62			7-	72.432	8-	41.609	
125A	58			1-	36.844	2-	22.436	
126	56		20ml	3-	18.556	4-	11.361	
127	56		10ml	5-	39.097	6-	25.305	
103	63		20ml	7-	74.670	8-	41.403	
102A	63		20ml	1-	75.575	2-	40.724	
101	63		20ml	3-	74.174	4-	41.049	
106	63		10ml	5-	100.753	6-	59.655	
96	65			7-	40.188	8-	24.931	
97A	65			1-	47.316	2-	28.002	
99	65			3-	48.205	4-	28.582	
98	65			5-	46.693	6-	27.748	
89	adcp			7-	65.874	8-	38.012	
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

154	157	155	137	138	139B	140	153B	113A	111
Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a
42	42	42	46	46	46	46	42	62	62
2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050
Bot 14	Bot 17	Bot 15	Bot 9	Bot 10	Bot 11	Bot 12	Bot 13	Bot 10	Bot 8
112	114	125A	126	127	103	102A	101	100	96
Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a
62	62	56	56	56	63	63	63	63	65
2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050
Bot 9	Bot 11	Bot 11	Bot 12	Bot 13	Bot 4	Bot 3	Bot 2	Bot 1	Bot 7
97A	99	98	89						
Chl_a	Chl_a	Chl_a	CHL						
65	65	65	adcp						
2019-050	2019-050	2019-050	2019-050						
Bot 8	Bot 10	Bot 9	Bot 10						

Chlorophyll Data Sheet

Cruise: *Vector*

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Dates of Cruise: *2014-05-0*

Time and date acetone added: *20 Jun 19 @ 4:50 pm*

Analyst: *Julian*

Time and date out of freezer: *21 Jun 19 @ 2:55 pm*

Time analysis started: *3:59 pm*

20ml Acetone
#313

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.010			
STD			LOW	2-	10.670			
STD			HIGH	4-	58.572			
Blank				6-	0.007	8-	0.007	
21A	59	30mL	10mL	1-	62.791	2-	56.669	
21B	59			3-	61.346	4-	33.850	
22	59			5-	60.507	6-	35.527	
23	59			7-	62.405	8-	36.669	
58	102			1-	125.684	2-	69.845	
36	102			3-	67.870	4-	39.276	
39B	102		20mL	5-	64.344	6-	35.986	
37	102		10mL	7-	134.074	8-	75.340	75.139
50	75			1-	95.021	2-	54.283	
51A	75			3-	94.569	4-	53.991	
51B	75			5-	94.378	6-	54.519	
52	75			7-	85.005	8-	48.606	
53	75			1-	82.768	2-	47.351	
63B	72			3-	66.385	4-	38.017	
64	72			5-	76.556	6-	43.649	
65	72			7-	85.138	8-	48.499	
66	72			1-	86.282	2-	48.248	
76	69			3-	33.022	4-	20.722	
77	69			5-	36.754	6-	22.833	
78B	69			7-	37.567	8-	22.219	
79	69			1-	44.069	2-	26.158	
86	adcp			3-	60.889	4-	35.951	
87B	adcp			5-	61.549	6-	36.067	
88	adcp			7-	63.394	8-	37.056	
Stand-by				1-	0.012			
Std	Low			2-	10.655			
Std	High			4-	58.061			
Blank	by			6-	0.005	8-	0.005	

21A	21B	22	24 ²³	38	36	39B	37	50	51A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
Stb 59	Stb 59	Stb 59	Stb 59	Stn 102	Stn 102	Stn 102	Stn 102	75	75
2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050
Bot 12	Bot 12	Bot 13	Bot 13 ¹⁴	Bot 14	Bot 12	Bot 15	Bot 13	Bot 11	Bot 12

whoops!

51B	52	53	63B	64	65	66	76	77	78B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
75	75	75	72	72	72	72	69	69	69
2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050
Bot 12	Bot 13	Bot 14	Bot 10	Bot 11	Bot 12	Bot 13	Bot 9	Bot 10	Bot 11

79	86	87B	88
CHL	CHL	CHL	CHL
69	adcp	adcp	adcp
2019-050	2019-050	2019-050	2019-050
Bot 12	Bot 7	Bot 8	Bot 9

Chlorophyll Data Sheet

*8's filter paper
was reddish :

Cruise: Vector

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Dates of Cruise: 2019-050

Time and date acetone added: 24 Jun/19 @ 11:00am

Analyst: Julian

Time and date out of freezer: 9:05am 25 Jun/19

Time analysis started: 10:05am

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.014			
STD			LOW	2-	10.687			
STD			HIGH	4-	58.854			
Blank				6-	0.009	8-	0.009	
333	14	304ml	10ml	1-	54.641	2-	33.887	
337B	22			3-	42.308	4-	27.211	
338	22			5-	50.522	6-	29.057	
337A	22			7-	44.599	8-	29.662	
339	22			1-	57.670	2-	32.353	
340	22			3-	53.009	4-	29.925	
39A	102			5-	128.075	6-	71.120	
63A	72			7-	66.875	8-	38.000	
78A	69			1-	39.077	2-	23.301	
87A	60CP			3-	61.673	4-	36.505	
102B	65			5-	146.545	6-	80.758	
97B	65			7-	48.498	8-	29.631	
125B	56			1-	38.390	2-	25.485	
138	62			3-	71.207	4-	40.809	
139A	46			5-	57.914	6-	22.477	
174B	39			7-	100.352	8-	53.181	
195B	27			1-	76.868	2-	43.555	
175A	GE01			3-	34.822	4-	22.268	
8	SI			5-	200.086	6-	106.675	Reddish in color
7	SI			7-	92.693	8-	51.099	
9	SI			1-	142.545	2-	75.879	
6A	SI			3-	33.616	4-	20.215	20.053
6B	SI			5-	30.805	6-	18.606	
20	59			7-	59.054	8-	34.466	
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

333	337B	338	337A	339	340	39A	63A	78A	87A
Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	CHL	CHL	CHL	CHL
stn 14	stn 22	stn 22	stn 22	stn 22	stn 22	Stn 102	72	69	adcp
2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050
Bot 12	Bot 1	Bot 2	Bot 1	Bot 3	Bot 4	Bot 15	Bot 10	Bot 11	Bot 8
102B	97B	125B	113B	139A	174B	195B	175A	8	7
Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	CHL	CHL
63	65	56	62	46	39	27	GEO1	Stn SI	Stn SI
2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050
Bot 3	Bot 8	Bot 11	Bot 10	Bot 11	Bot 17	Bot 17	Bot 1	Bot 8	Bot 7
9	6A	6B	20						
CHL	CHL	CHL	CHL						
Stn SI	Stn SI	Stn SI	Stb 59						
2019-050	2019-050	2019-050	2019-050						
Bot 9	Bot 6	Bot 6	Bot 11						

Chlorophyll Data Sheet

Cruise: Vector

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Dates of Cruise: 2019-05-0

Date acetone added: 24 Jun 19

Date of analysis:

Analyst: JR

Time acetone added: 2:05pm

Time out of freezer: 12:10pm 25 Jun 19

Time analysis started: 1pm 25 Jun 19

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.014			
STD			LOW	2-	10.598			
			HIGH	4-	58.526			
Blank				6-	0.007 +acid	0.006		
268	9	304	10	1-	38.117	2-	24.136	DF - no DF
273	12		10	3-	62.652	4-	36.275	no DF
272	12		10	5-	19.437	6-	12.245	no DF
276A	12		10	7-	32.867	8-	18.148	no DF
274	12		10	1-	33.727	2-	18.781	no DF
285B	Pen 1		10	3-	80.203	4-	47.236	no DF
286	Pen 1		10	5-	40.680	6-	23.479	no DF
287	Pen 1		10	7-5	24.234	8-6	19.839	no DF
288	Pen 1		10	1-	16.919	2-	9.845	no DF
305B	Pen 3		10	3-	24.531	4-	13.401	no DF
304	Pen 3		10	5-	60.865	6-	34.380	no DF
303	Pen 3		10	7-	59.485	8-	35.083	no DF
302	Pen 3		10	1-	111.597	2-	63.868	no DF
307B	QU39		10	3-	69.786	4-	44.581	no DF
308	QU39		10	5-	108.168	6-	60.735	no DF
309	QU39		10	7-	119.931	8-	65.069	no DF
310	QU39		10	1-	119.912	2-	66.064	no DF
319	16		10	3-	33.129	4-	20.948	no DF
318	16		10	5-	31.230	6-	19.853	no DF
320A	16		10	7-	37.983	8-	23.4513	no DF
321	16		10	1-	46.716	2-	27.840	no DF
336A	14		10	3-	38.864	4-	22.499	no DF
335	14		10	5-	63.310	6-	36.491	no DF
334	14		10	7-	77.227	8-	45.909	no DF
Blank	std by			3-	0.012			
Std	Low			5-	10.593			
Std	High			7-	58.343			
Stand-	by			8-	0.005 +acid	0.005		

268	273	272	276A	274	285B	286	287
Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	CHL	CHL	CHL
Stn 9	Stn 12	Stn 12	Stn 12	Stn 12	Pen1	Pen1	Pen1
2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050
Bot 9	Bot 14	Bot 13	Bot 17	Bot 15	Bot 9	Bot 10	Bot 11

288	305B	304	303	302	307B	308	309
CHL	CHL	CHL	CHL	CHL	Chl_a	Chl_a	Chl_a
Pen1	Pen3	Pen3	Pen3	Pen3	QU39	QU39	QU39
2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050
Bot 12	Bot 16	Bot 15	Bot 14	Bot 13	Bot 1	Bot 2	Bot 3

310	319	318	320A	321	336A	335	334
Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a
QU39	stn 16	stn 16	stn 16	stn 16	stn 14	stn 14	stn 14
2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050
Bot 4	Bot 9	Bot 8	Bot 10	Bot 11	Bot 15	Bot 14	Bot 13

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Chlorophyll Data Sheet

Cruise: *vector*

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Dates of Cruise: *2019-05-0*

Date acetone added: *24 Jun 19*

Time acetone added: *4:24pm*

Date of analysis: *25 Jun 19*

Time out of freezer: *2:29pm*

Analyst: *Julian*

Time analysis started: *3:30pm*

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	<i>0.012</i>			
STD			LOW	2-	<i>10.529</i>			
			HIGH	4-	<i>58.329</i>			
Blank				6-	<i>0.006</i>		<i>0.005</i>	
Blank								
<i>270A</i>	<i>9</i>	<i>304ml</i>	<i>10ml</i>	1-	<i>41.831</i>	2-	<i>23.464</i>	
<i>269</i>	<i>9</i>			3-	<i>65.886</i>	4-	<i>39.683</i>	
<i>271</i>	<i>9</i>			5-	<i>44.877</i>	6-	<i>25.325</i>	
<i>245</i>	<i>6</i>			7-	<i>87.165</i>	8-	<i>50.077</i>	
<i>246</i>	<i>6</i>			1-	<i>61.001</i>	2-	<i>36.514</i>	
<i>247</i>	<i>6</i>			3-	<i>58.481</i>	4-	<i>34.549</i>	
<i>244B</i>	<i>6</i>			5-	<i>92.840</i>	6-	<i>52.832</i>	
<i>234</i>	<i>3</i>			7-	<i>71.055</i>	8-	<i>41.350</i>	
<i>235</i>	<i>3</i>			1-	<i>62.324</i>	2-	<i>35.820</i>	
<i>232B</i>	<i>3</i>			3-	<i>72.566</i>	4-	<i>42.919</i>	
<i>231</i>	<i>3</i>			5-	<i>48.646</i>	6-	<i>30.812</i>	
<i>218</i>	<i>CPFI</i>			7-	<i>37.740</i>	8-	<i>21.323</i>	
<i>217</i>	<i>CPFI</i>			1-	<i>38.857</i>	2-	<i>22.002</i>	
<i>216</i>	<i>CPFI</i>			3-	<i>50.267</i>	4-	<i>29.173</i>	
<i>215B</i>	<i>CPFI</i>			5-	<i>34.101</i>	6-	<i>21.655</i>	
<i>214</i>	<i>2</i>			7-	<i>60.033</i>	8-	<i>34.658</i>	
<i>213</i>	<i>2</i>			1-	<i>56.514</i>	2-	<i>32.655</i>	
<i>212B</i>	<i>2</i>			3-	<i>74.856</i>	4-	<i>43.370</i>	
<i>211</i>	<i>2</i>			5-	<i>31.500</i>	6-	<i>19.323</i>	
<i>196</i>	<i>24</i>			7-	<i>39.113</i>	8-	<i>23.517</i>	
<i>197B</i>	<i>24</i>			1-	<i>59.586</i>	2-	<i>34.815</i>	
<i>198</i>	<i>24</i>			3-	<i>118.701</i>	4-	<i>66.267</i>	
<i>199</i>	<i>24</i>			5-	<i>149.309</i>	6-	<i>82.195</i>	
<i>336B</i>	<i>14</i>			7-	<i>38.178</i>	8-	<i>22.161</i>	
Blank	<i>Standby</i>			3-	<i>0.012</i>			
Std	Low			5-	<i>10.614</i>			
Std	High			7-	<i>57.775</i>			
Stand-	by <i>blank</i>			8-	<i>0.006</i>		<i>0.005</i>	

270A	269	271	245	246	247	244B	234	233	232B
Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a
Stn 9	Stn 9	Stn 9	Stn 6	Stn 6	Stn 6	Stn 6	Stn 3	Stn 3	Stn 3
2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050
Bot 11	Bot 10	Bot 12	Bot 11	Bot 12	Bot 13	Bot 10	Bot 16	Bot 15	Bot 14
231	218	217	216	215B	214	213	212B	211	196
Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a
Stn 3	CPF1	CPF1	CPF1	CPF1	Stn 2	Stn 2	Stn 2	Stn 2	24
2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050
Bot 13	Bot 4	Bot 3	Bot 2	Bot 1	Bot 15	Bot 14	Bot 13	Bot 12	Bot 1
197B	198	199	336B						
Chl_a	Chl_a	Chl_a	Chl_a						
24	24	24	stn 14						
2019-050	2019-050	2019-050	2019-050						
Bot 2	Bot 3	Bot 4	Bot 15						

Chlorophyll Data Sheet

Cruise: Vector

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Dates of Cruise: 2019-05-0

Date acetone added: 25 Jun/9

Date of analysis: 26 Jun/9

Analyst: Julian

Time acetone added: 11:25am

Time out of freezer: 9:27am

Time analysis started: 10:30am

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	1.015			
STD			LOW	2-	10.646			
			HIGH	4-	58.564			
Blank				6-	0.006		0.005	
320B	16	30mL	10mL	1-	36.976	2-	23.056	
307A	QU39			3-	70.408	4-	44.859	
305A	Pen3			5-	23.675	6-	15.061	
285A	Pen1			7-	80.167	8-	47.957	
276B	12			1-	33.389	2-	18.784	
270B	9			3-	41.919	4-	24.356	
232A	3			5-	70.145	6-	41.368	
244A	6			7-	92.637	8-	52.826	
215A	LPF1			1-	34.505	2-	21.888	
212A	2			3-	76.681	4-	44.680	
197A	24	↓	↓	5-	61.559	6-	35.618	
				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	standby			3-	0.013			
Std	Low			5-	10.641			
Std	High			7-	58.152			
Stand-	by Blank			8-	0.007		0.007	

320B	307A	305A	285A	276B	270B	232A	244A	215A	212A
Chl_a	Chl_a	CHL	CHL	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a	Chl_a
stn 16	QU39	Pen3	Pen1	Stn 12	Stn 9	Stn 3	Stn 6	CPF1	Stn 2
2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050	2019-050
Bot 10	Bot 1	Bot 16	Bot 9	Bot 17	Bot 11	Bot 14	Bot 10	Bot 1	Bot 13

197A
Chl_a
24
2019-050
Bot 2