

Chlorophyll Data Sheet

Cruise: 2017-01

Page: 1 of 2

Dates of Cruise:

Time and date acetone added: 22 Feb 2017 @ 11:50am Analyst: Jasmine

Time and date out of freezer: 11:30am 23 Feb 2017.

Time analysis started: 12:35pm 23 FEB 2017

Sample #	Station	Vol filt	Vol acet		Rb		Ra ^{Acetone}	Comments
Stand-	by			1-	0.010			
STD			LOW	2-	11.096			
STD			HIGH	4-	67.008			
Blank				6-	0.010	8-0.007		
	Actual	Blank		1	0.008			
680A	42	304 ^{300ml}	10ml	1-	11.085	2-6.909		
667A	46	"	10ml	3-	51.208	4-28.978		
786B	14	"	10ml	5-	33.829	6-19.147		
698A	39	"	10ml	7-	45.439	8-25.992		
769A	12	"	10ml	1-	28.300	2-16.344		May have added 4 dro.
784A	14	"	10ml	3-	25.303	4-15.093		
783B	14	"	10ml	5-	19.392	6-12.086		
769B	12	"	10ml	7-	28.910	8-17.108		
698B	39	"	10ml	1-	45.423	2-25.955		
725A	27	"	10ml	3-	38.991	4-23.277		
793B	BS17	"	10ml	5-	21.626	6-13.979		
724A	27	"	10ml	7-	16.364	8-10.001		
665B	46	"	10ml	1-	28.032	2-16.838		
711B	GE01	"	10ml	3-	41.046	4-23.921		
697	39	"	10ml	5-	31.531	6-23.112		↪ no A/B
697	39	"	10ml	7-	30.515	8-17.754		
768A	12	"	10ml	1-	18.541	2-11.511		
724B	27	"	10ml	3-	15.989	4-9.778		
783A	14	"	10ml	5-	18.300	6-11.343		
768B	12	"	10ml	7-	18.375	8-10.984		
667B	46	"	10ml	1-	49.355	2-27.693		
771A	12	"	10ml	3-	33.487	4-17.581		
711A	GE01	"	10ml	5-	42.526	6-24.759		
788A	14	"	10ml	7-	31.811	8-18.167		
Stand-by				1-	0.007			
Std	Low			2-	12.255			
Std	High			4-	66.682			
Blank	by			6-	0.013	8-0.012		

680 Chl A 42 20 m 2017-01 Bot 13	667 Chl A 46 0 m 2017-01 Bot 12	786 Chl B 14 0 m 2017-01 Bot 15	769A Chl 12 10 m 2017-01 Bot 14	784 A Chl 14 10 m 2017-01 Bot 13	783 B Chl 14 20 m 2017-01 Bot 12	769B Chl 12 10 m 2017-01 Bot 14	698B Chl 39 10 m 2017-01 Bot 15	725A Chl 27 10 m 2017-01 Bot 14	793 B Chl BS11 0 m 2017-01 Bot 7
724A Chl 27 20 m 2017-01 Bot 13	665 B Chl 46 10 m 2017-01 Bot 10	711 B Chl GE01 0 m 2017-01 Bot 11	697 Chl 39 20 m 2017-01 Bot 14	697 Chl 39 20 m 2017-01 Bot 14	768A Chl 12 20 m 2017-01 Bot 13	724 B Chl 27 20 m 2017-01 Bot 13	80 A Chl 14 20 m 2017-01 Bot 12	768 B Chl 12 20 m 2017-01 Bot 13	667 B Chl 46 0 m 2017-01 Bot 12
771 Chl A 12 0 m 2017-01 Bot 16	711 A Chl GE01 0 m 2017-01 Bot 11	786 A Chl 14 0 m 2017-01 Bot 15							

Chlorophyll Data Sheet

Cruise: 2017-01

Page: 2 of 2

Dates of Cruise:

Time and date acetone added: 2:15pm @ 22 Feb 2017 Analyst: Jasmine

Time and date out of freezer: 1:35pm - 23 Feb 2017

Time analysis started: 2:39pm 23 Feb 2017

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.007			
STD			LOW	2-	12.146			
STD			HIGH	4-	66.111			
Blank				6-	0.006	8-0.007		
		304ml						
709 B	GEO1	306.1	10ml	1-	45.817	2-26.188		
		"	10ml	3-	21.811	4-13.070		No label.
727 A	27	"	10ml	5-	46.975	6-26.584		
725 B	27	"	10ml	7-	41.049	8-24.178		
753 B	CPF2	"	10ml	1-	26.803	2-15.834		
755 B	CPF2	"	10ml	3-	36.008	4-20.771		
790 A	BS11	"	10ml	5-	17.986	6-11.296		
790 B	BS11	"	10ml	7-	19.206	8-12.466		
700 B	39	"	10ml	1-	58.532	2-32.837		
680 B	42	"	10ml	3-	11.517	4-7.398		
752 A	CPF2	"	10ml	5-	18.960	6-11.489		
727 B	27	"	10ml	7-	45.837	8-25.972		
771 B	12	"	10ml	1-	33.718	2-17.265		
753 A	CPF2	"	10ml	3-	27.647	4-16.291		
791 A	BS11	"	10ml	5-	24.198	6-15.127		
791 B	BS11	"	10ml	7-	23.207	8-14.163		
708 A	GEO1	"	10ml	1-	21.104	2-12.988		
700 A	39	"	10ml	3-	58.730	4-33.300		
740 B	2	"	10ml	5-	35.462	6-20.065		
709 A	GEO1	"	10ml	7-	41.729	8-24.088		
752 B	CPF2	"	10ml	1-	19.197	2-11.857		
755 A	CPF2	"	10ml	3-	34.321	4-20.174		
793 A	BS11	"	10ml	5-	22.240	6-14.312		
784 B	14	"	10ml	7-	23.970	8-13.957		
Stand-by				1-	0.008			
Std	Low			2-	12.170			
Std	High			4-	66.204			
Blank	by			6-	0.009	8-0.007		

709 Chl GE01 10 m 2017-01 Bot 9	72 Chl 27 0 m 2017-01 Bot 16	725 Chl 27 10 m 2017-01 Bot 14	753 Chl CPF2 10 m 2017-01 Bot 11	755 Chl CPF2 0 m 2017-01 Bot 13	790 Chl BS11 20 m 2017-01 Bot 4	790 Chl BS11 20 m 2017-01 Bot 4	680 Chl 42 20 m 2017-01 Bot 13	752 Chl CPF2 20 m 2017-01 Bot 10	727 Chl 27 0 m 2017-01 Bot 16
771 Chl 12 0 m 2017-01 Bot 16	753 Chl CPF2 10 m 2017-01 Bot 11	791 Chl BS11 10 m 2017-01 Bot 5	791 Chl GE01 20 m 2017-01 Bot 8	708 Chl 39 0 m 2017-01 Bot 1	700 Chl 39 0 m 2017-01 Bot 13	740 Chl 2 10 m 2017-01 Bot 9	709 Chl 1 10 m 2017-01 Bot 10	752 Chl CPF2 20 m 2017-01 Bot 10	755 Chl CPF2 0 m 2017-01 Bot 13
793 Chl BS11 0 m 2017-01 Bot 7	724 Chl 14 10 m 2017-01 Bot 13								

608
 chl
 39
 10 m
 2017-01
 Bot 15

Chlorophyll Data Sheet

Cruise: 2017-01

Page: 1 of 1

Dates of Cruise: Feb 2017

Time and date acetone added: 23 Feb @ 3:41 pm Analyst: Jasmine

Time and date out of freezer: 12:45 pm 24 Feb 2017

Time analysis started: 1:48 pm 24 Feb 2017

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.009			
STD			LOW	2-	12.290			
STD			HIGH	4-	66.975			
Blank				6-	0.007	8- 0.006		
		34ml						
641A	Harv59	306ml	10mL	1-	26.099	2- 15.117		
641B	"	"	10mL	3-	25.472	4- 14.810		
639A	"	"	10mL	5-	21.525	6- 13.340		
639B	"	"	10mL	7-	21.529	8- 12.802		
638A	"	"	10mL	1-	18.472	2- 11.157		
638B	"	"	10mL	3-	18.528	4- 11.379		
624A	JF2	"	10mL	5-	28.316	6- 16.962		
627B	JF2	"	10mL	7-	38.495	8- 22.730		
740A	2	"	10mL	1-	36.633	2- 21.518		
652A	56	"	10mL	3-	22.681	4- 13.398		
652B	56	"	10mL	5-	22.884	6- 13.488		
653A	56	"	10mL	7-	25.101	8- 14.844		
653B	56	"	10mL	1-	25.101	2- 14.870		
655A	56	"	10mL	3-	54.589	4- 30.578		
655B	56	"	10mL	5-	54.380	6- 30.583		
664A	46	"	10mL	7-	18.617	8- 11.187		
681B	42	"	10mL	1-	48.216	2- 27.655		
681A	42	"	10mL	3-	48.758	4- 27.546		
683A	42	"	10mL	5-	56.698	6- 32.154		
683B	42	"	10mL	7-	58.327	8- 35.072		
739B	2	"	10mL	1-	28.128	2- 16.635		
739A	2	"	10mL	3-	26.331	4- 15.529		
664B	46	"	10mL	5-	20.407	6- 12.429		
665A	46	"	10mL	7-	29.086	8- 17.406		
Stand-by				1-	0.008			
Std	Low			2-	12.244			
Std	High			4-	66.469			
Blank	by			6-	0.008	8- 0.007		

641 A Chl Haro59 0 m 2017-01 Bot 14	641 B Chl Haro59 0 m 2017-01 Bot 14	639 A Chl Haro59 10 m 2017-01 Bot 12	639 B Chl Haro59 10 m 2017-01 Bot 12	638 A Chl Haro59 20 m 2017-01 Bot 11	638 B Chl Haro59 20 m 2017-01 Bot 11	624 A Chl JFC 20 m 2017-01 Bot 9	627 B Chl JFC 0 m 2017-01 Bot 12	740 A Chl 2 10 m 2017-01 Bot 13	652 A Chl 56 20 m 2017-01 Bot 11
652 B Chl 56 20 m 2017-01 Bot 11	653 A Chl 56 10 m 2017-01 Bot 12	653 B Chl 56 10 m 2017-01 Bot 12	655 A Chl 56 6 m 2017-01 Bot 14	655 B Chl 56 2 m 2017-01 Bot 14	664 A Chl 46 20 m 2017-01 Bot 9	681 B Chl 42 10 m 2017-01 Bot 14	681 A Chl 42 10 m 2017-01 Bot 14	683 A Chl 42 0 m 2017-01 Bot 16	683 B Chl 42 0 m 2017-01 Bot 16
739 E Chl 2 20 m 2017-01 Bot 12	739 A Chl 2 20 m 2017-01 Bot 12	664 B Chl 46 20 m 2017-01 Bot 9	665 A Chl 46 10 m 2017-01 Bot 10						

Chlorophyll Data Sheet

Cruise: 2017-01

Page: 1 of 3

Dates of Cruise: Feb 2017

Time and date acetone added: 27 Feb 2017 @ 11 AM Analyst: Jasmine

Time and date out of freezer: 28 Feb 2017 @ 9:15 AM

Time analysis started: 28 Feb 2017 @ 10:19 AM

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.011			
STD			LOW	2-	12.402			
STD			HIGH	4-	67.279			
Blank				6-	0.009	8-0.005		pressed 8 twice
615 B	102	304ml	10mL	1-	40.413	2-22.914		
587 B	P2	"	10mL	3-	30.060	4-17.063		
625 B	JF2	"	10mL	5-	35.233	6-21.640		
589	P2	"	10mL	7-	27.377	8-15.337		
624 B	JF2	"	10mL	1-	28.186	2-16.266		
661 A	P1	"	10mL	3-	24.883	4-14.139		
742 A	2	"	10mL	5-	37.352	6-19.260		may have put 4 drops
601 B	P1	"	10mL	7-	24.593	8-13.900		
612 A	102	"	10mL	1-	24.762	2-14.980		
584 B	P2	"	10mL	3-	27.092	4-15.546		← more accurate
613 A	102	"	10mL	5-	35.679	6-21.315		
585 A	P2	"	10mL	7-	28.039	8-16.108		
615 A	102	"	10mL	1-	39.741	2-23.482		
585 B	P2	"	10mL	3-	26.353	4-15.171		
612 B	102	"	10mL	5-	24.031	6-14.406		potentially 2 drops HCl
587 A	P2	"	10mL	7-	36.181	8-20.847		
582 B	P2	"	10mL	1-	27.564	2-16.072		
583 A	P2	"	10mL	3-	13.334	4-8.119		
583 B	P2	"	10mL	5-	11.409	6-6.842		
613 B	102	"	10mL	7-	19.664	8-10.383		
584 A	P2	"	10mL	1-	11.590	2-8.079		← not sure whether good w/this duplicate
625 A	JF2	"	10mL	3-	16.391	4-9.587		
742 B	2	"	10mL	5-	18.639	6-10.207		
627 A	JF2	"	10mL	7-	17.966	8-9.523		
Stand-by				1-	0.11			
Std	Low			2-	12.330			
Std	High			4-	54.777			
Blank	by			6-	0.008	8-0.008		

615 E Chl 102 0 m 2017-01 Bot 14	587 CHL B P2 5 m 2017-01 Bot 13	625 B Chl JF2 10 m 2017-01 Bot 10	589 CHL P2 0 m 2017-01 Bot 15	624 B Chl JF2 20 m 2017-01 Bot 9	601 A Chl 2 0 m 2017-01 Bot 15	742 Chl A 2 0 m 2017-01 Bot 15	601 E Chl P1 5 m 2017-01 Bot 4	612 A Chl 102 20 m 2017-01 Bot 11	584 CHL B P2 15 m 2017-01 Bot 10
613 A Chl 102 10 m 2017-01 Bot 12	585 A CHL A P2 10 m 2017-01 Bot 11	615 A Chl 102 0 m 2017-01 Bot 14	585 B CHL B P2 10 m 2017-01 Bot 11	612 B Chl 102 20 m 2017-01 Bot 11	587 A CHL A P2 5 m 2017-01 Bot 13	582 B CHL B P2 25 m 2017-01 Bot 8	583 A CHL A P2 20 m 2017-01 Bot 9	583 B CHL B P2 20 m 2017-01 Bot 9	613 B Chl 102 10 m 2017-01 Bot 12
584 CHL A P2 15 m 2017-01 Bot 10	625 A Chl JF2 10 m 2017-01 Bot 10	742 B Chl B 2 0 m 2017-01 Bot 15	627 A Chl A JF2 0 m 2017-01 Bot 12						

Chlorophyll Data Sheet

Cruise: 2017-01

Page: 2 of 3

Dates of Cruise: 2017 Feb.

Time and date acetone added: 27 Feb 2017 @ 1:05pm Analyst: Jasmine

Time and date out of freezer: 28 Feb 2017 @ 11:11am

Time analysis started: 28 Feb 2017 @ 12:15pm

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.007			
STD			LOW	2-	12.196			
STD			HIGH	3	66.220			
Blank				6-	0.009	8- 0.006		
		306ml						
5101	P2	306ml	10ml	1-	28.077	2- 5.846		
576	P2	"	"	3-	6.115	4- 4.168		
577	P2	"	"	5-	11.648	6- 7.368		
578	P2	"	"	7-	19.959	8- 12.033		
580	P2	"	"	1-	20.721	2- 12.578		
581A	P2	"	"	3-	23.709	4- 13.921		may have been 4 drops
581B	P2	"	"	5-	24.442	6- 14.808		
582A	P2	"	"	7-	25.059	8- 14.709		
571A	P4	"	"	1-	19.027	2- 11.276		
571B	P4	"	"	3-	19.521	4- 11.707		
572	P4	"	"	5-	20.339	6- 11.995		
573B	P4	"	"	7-	21.124	8- 12.361		
573A	P4	"	"	1-	19.855	2- 11.519		
574A	P3	"	"	3-	30.818	4- 17.468		
574B	P3	"	"	5-	29.714	6- 17.005		
5101	P2	"	"	7-	27.143	8- 15.360		
557A	P8	"	"	1-	19.605	2- 11.523		
557B	P8	"	"	3-	18.016	4- 10.620		
558A	P7	"	"	5-	16.320	6- 9.717		
558B	P7	"	"	7-	15.870	8- 9.467		maybe 4 drops
559A	P6	"	"	1-	21.976	2- 12.829		
559B	P6	"	"	3-	22.095	4- 12.899		
560A	P5	"	"	5-	23.332	6- 13.530		
560B	P5	"	"	7-	25.943	8- 15.259		
Stand-by				1-	0.006			
Std	Low			2-	12.113			
Std	High			4-	65.803			
Blank	by			6-	0.031	8- 0.028		tried 3 diff test tubes of acetone & all had high readings (dispenser is about 1/4 full so maybe needs to be changed...?)

5101 2017-01 CHI B P2 LOOP	576 CHL P2 100 m 2017-01 Bot 2	577 CHL P2 75 m 2017-01 Bot 3	578 CHL P2 50 m 2017-01 Bot 4	580 CHL P2 40 m 2017-01 Bot 6	581 A CHL P2 30 m 2017-01 Bot 7	581 B CHL P2 30 m 2017-01 Bot 7	582 A CHL P2 25 m 2017-01 Bot 8	571 A CHL P4 50 m 2017-01 Bot 11	571 B CHL P4 50 m 2017-01 Bot 11
--	---	--	--	--	--	--	--	---	---

572 CHL P4 25 m 2017-01 Bot 12	573 B CHL P4 5 m 2017-01 Bot 13	573 A CHL P4 5 m 2017-01 Bot 13	574 A CHL P3 5 m 2017-01 Bot 1	574 B CHL P3 5 m 2017-01 Bot 1	5101 2017-01 CHI A P2 LOOP	583 A CHL P8 5 m 2017-01 Bot 24	587 B CHL P8 5 m 2017-01 Bot 24	553 A CHL P7 5 m 2017-01 Bot 1	558 B CHL P7 5 m 2017-01 Bot 1
---	--	--	---	---	--	--	--	---	---

559 A CHL P6 5 m 2017-01 Bot 1	559 B CHL P6 5 m 2017-01 Bot 1	560 A CHL P5 5 m 2017-01 Bot 1	560 B CHL P5 5 m 2017-01 Bot 1
---	---	---	---

1

Chlorophyll Data Sheet

Cruise: 2017-01

Page: 3 of 3

Dates of Cruise: 2017-01

Time and date acetone added: 4pm Feb 27, 2017 Analyst: Jasmine

Time and date out of freezer: 2:05pm Feb 28, 2017

Time analysis started: 2:56pm Feb 28, 2017

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.005			
STD			LOW	2-	12.120			
STD			HIGH	4-	65.756			
Blank				6-	0.028	8-0.026		
		30ml						
550B	P8	30ml	10ml	1-	17.124	2-10.091		may have gotten slightly
5090	P8	"	"	3-	19.392	4-11.443		less than 10ml
533B	P9	"	"	5-	17.384	6-10.030		(9.9...?)
533A	P9	"	"	7-	17.368	8-9.997		
532A	P10	"	"	1-	17.199	2-10.110		
532B	"	"	"	3-	17.449	4-10.249		
484B	P11	"	"	5-	17.629	6-9.990		
484A	P11	"	"	7-	18.641	8-10.571		
444	P12	"	"	1-	35.892	2-20.822		
550A	P8	"	"	3-	16.633	4-9.791		
549B	P8	"	"	5-	15.302	6-9.170		
549A	P8	"	"	7-	16.379	8-9.807		
548B	P8	"	"	1-	15.168	2-9.935		
548A	P8	"	"	3-	14.700	4-8.862		
547	P8	"	"	5-	5.998	6-4.072		
546	P8	"	"	7-	1.132	8-0.995		
5090	P8 LOOP	"	"	1-	19.164	2-11.202		
555	P8	"	"	3-	17.076	4-10.136		
554B	P8	"	"	5-	18.018	6-10.549		
554A	P8	"	"	7-	19.917	8-11.606		
553B	P8	"	"	1-	16.202	2-9.599		
552A	P8	"	"	3-	16.324	4-9.671		
551B	P8	"	"	5-	15.731	6-9.458		
551	P8	"	"	7-	15.716	8-9.273		
Stand-by				1-	0.006			
Std	Low			2-	12.129			
Std	High			4-	65.453			
Blank	by			6-	0.033	8-0.029		

532 CHL B P8 40 m 2017-01 Bot 17	533 CHL P9 5 m 2017-01 Bot 1	533 CHL P9 5 m 2017-01 Bot 1	532 CHL P10 5 m 2017-01 Bot 24	532 CHL P10 5 m 2017-01 Bot 24	484 CHL B P11 5 m 2017-01 Bot 1	484 CHL A P11 5 m 2017-01 Bot 1	444 CHL P12 0 m 2017-01 Bot 16	550 CHL A P8 40 m 2017-01 Bot 17	549 CHL B P8 50 m 2017-01 Bot 16
549 CHL A P8 50 m 2017-01 Bot 16	548 CHL B P8 60 m 2017-01 Bot 15	547 CHL P8 75 m 2017-01 Bot 14	546 CHL P8 100 m 2017-01 Bot 13	555 CHL P8 10 m 2017-01 Bot 22	554 CHL B P8 15 m 2017-01 Bot 21	554 CHL P8 15 m 2017-01 Bot 21	553 CHL P8 20 m 2017-01 Bot 20	552 CHL P8 25 m 2017-01 Bot 19	551 CHL B P8 30 m 2017-01 Bot 18

2017-01 Cruise 330m?

Chlorophyll Data Sheet

Cruise: 2017-01

Page: 1 of 1

Dates of Cruise: Feb 2017

Time and date acetone added: March 1 @ 10:40am

Analyst: Jasmine

Time and date out of freezer: (2 month) @ 8:40am

Time analysis started: 9:44am (2 march)

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.009			
STD			LOW	2-	12.121			
STD			HIGH	4-	66.420			
Blank				6-	0.056	8-	0.052	tried a couple tubes of acetone but went 90 lower than 0.056
438B	P12	306ml	10ml	1-	25.891	2-	14.487	
439	P12	"	"	3-	21.832	4-	12.353	
440	P12	"	"	5-	21.987	6-	12.398	
441A	P12	"	"	7-	20.038	8-	11.271	
441B	P12	"	"	1-	20.120	2-	11.350	
442	P12	"	"	3-	26.210	4-	14.619	- hit 4 twice (take 2nd reading)
443A	P12	"	"	5-	20.374	6-	11.595	
443B	P12	"	"	7-	19.388	8-	11.037	
434	P12	"	"	1-	1.971	2-	1.249	
435A	P12	"	"	3-	17.541	4-	10.121	
435B	P12	"	"	5-	16.944	6-	9.707	
436A	P12	"	"	7-	17.312	8-	9.935	
436B	P12	"	"	1-	17.285	2-	9.943	
437A	P12	"	"	3-	18.542	4-	10.599	
437B	P12	"	"	5-	18.682	6-	10.684	
438A	P12	"	"	7-	22.146	8-	12.535	
426B	P15	"	"	1-	22.720	2-	12.881	
427A	P14	"	"	3-	16.687	4-	9.661	
427B	P14	"	"	5-	15.810	6-	9.147	
428A	P13	"	"	7-	14.262	8-	8.394	
428B	P13	"	"	1-	14.770	2-	8.535	
5075	P12	"	"	3-	23.028	4-	13.065	
5075	P12	"	"	5-	23.041	6-	12.999	
433	P12	"	"	7-	3.780	8-	2.609	
Stand-by				1-	0.009			
Std	Low			2-	12.170			
Std	High			4-	65.529			
Blank	by			6-	0.037	8-	0.035	

438 CHL P12 30 m 2017-01 Bot 10	439 CHL P12 25 m 2017-01 Bot 11	440 CHL P12 20 m 2017-01 Bot 12	441 CHL P12 15 m 2017-01 Bot 13	441 CHL P12 15 m 2017-01 Bot 13	442 CHL P12 10 m 2017-01 Bot 14	443 CHL P12 5 m 2017-01 Bot 15	443 CHL P12 5 m 2017-01 Bot 15	434 CHL P12 75 m 2017-01 Bot 6	435 CHL P12 60 m 2017-01 Bot 7	435 CHL P12 60 m 2017-01 Bot 7
--	--	--	--	--	--	---	---	---	---	---

436 CHL P12 50 m 2017-01 Bot 8	436 CHL P12 50 m 2017-01 Bot 8	437 CHL P12 40 m 2017-01 Bot 9	437 CHL P12 40 m 2017-01 Bot 9	438 CHL P12 30 m 2017-01 Bot 10	426 CHL P15 5 m 2017-01 Bot 1	427 CHL P14 5 m 2017-01 Bot 1	427 CHL P14 5 m 2017-01 Bot 1	428 CHL P13 5 m 2017-01 Bot 1	428 CHL P13 5 m 2017-01 Bot 1	5075 P12 CHL A 2017-01 LOOP
---	---	---	---	--	--	--	--	--	--	--

5075
P12
CHL
B
2017-01
LOOP

433
CHL
P12
100 m
2017-01
Bot 5

Chlorophyll Data Sheet

Cruise: 2017-01

Page: 1 of 1

Dates of Cruise: Feb 2017

Time and date acetone added: 11:10 am March 2

Analyst: Jasmine

Time and date out of freezer: 9:10 am March 3.

Time analysis started: 10:15 am March 3

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.005			
STD			LOW	2-	12.190			
STD			HIGH	4-	66.499			
Blank				6-	0.039	8- 0.036		tube only (2/3)
		304 ml						full (spit)
336 B	P18	304 ml	10 mL	1-	27.678	2- 15.409		
337 B	P17	"	"	3-	21.903	4- 12.111		
337 A	P17	"	"	5-	25.115	6- 13.931		
343	P16	"	"	7-	6.442	8- 3.908		
344 A	P16	"	"	1-	20.652	2- 11.618		
344 B	P16	"	"	3-	21.264	4- 11.876		
345 A	P16	"	"	5-	21.270	6- 12.072		
345 B	P16	"	"	7-	20.949	8- 11.851		
346 A	P16	"	"	1-	22.480	2- 12.655		
346 B	P16	"	"	3-	22.366	4- 12.577		
347 A	P16	"	"	5-	22.363	6- 12.561		
347 B	P16	"	"	7-	22.315	8- 12.572		
348	P16	"	"	1-	23.875	2- 13.698		
349	P16	"	"	3-	22.477	4- 12.759		
350 A	P16	"	"	5-	24.208	6- 13.659		
350 B	P16	"	"	7-	24.550	8- 13.756		
351	P16	"	"	1-	29.001	2- 16.222		
352 A	P16	"	"	3-	24.584	4- 13.800		
352 B	P16	"	"	5-	24.554	6- 13.773		
353	P16	"	"	7-	23.275	8- 13.190		
5064 A	P16	"	"	1-	24.485	2- 13.787		
5064 B	P16	"	"	3-	24.560	4- 13.788		
426 A	P15	"	"	5-	23.120	6- 13.153		
				7-		8-		
Stand- by				1-	0.006			
Std	Low			2-	12.166			
Std	High			4-	65.426			
Blank	by			6-	0.028	8- 0.024		

336 CHL P18 5 m 2017-01 Bot 3	337 <i>B</i> CHL P17 5 m 2017-01 Bot 1	337 <i>A</i> CHL P17 5 m 2017-01 Bot 1	342 CHL P16 100 m 2017-01 Bot 5	343 CHL P16 75 m 2017-01 Bot 6	344 <i>A</i> CHL P16 60 m 2017-01 Bot 7	344 <i>B</i> CHL P16 60 m 2017-01 Bot 7	345 <i>A</i> CHL P16 30 m 2017-01 Bot 8	345 <i>B</i> CHL P16 50 m 2017-01 Bot 8	346 <i>A</i> CHL P16 40 m 2017-01 Bot 9	346 <i>B</i> CHL P16 40 m 2017-01 Bot 9
--	---	---	--	---	--	--	--	--	--	--

347 <i>A</i> CHL P16 30 m 2017-01 Bot 10	347 <i>B</i> CHL P16 30 m 2017-01 Bot 10	348 CHL P16 25 m 2017-01 Bot 11	349 CHL P16 20 m 2017-01 Bot 12	350 <i>A</i> CHL P16 15 m 2017-01 Bot 13	350 <i>B</i> CHL P16 15 m 2017-01 Bot 13	351 CHL P16 10 m 2017-01 Bot 14	352 <i>A</i> CHL P16 5 m 2017-01 Bot 15	352 <i>B</i> CHL P16 5 m 2017-01 Bot 15	353 CHL P16 0 m 2017-01 Bot 16	506 <i>A</i> P16 CHL 2017-01 Loop
---	---	--	--	---	---	--	--	--	---	---

506 *B*
P16
CHL
2017-01
Loop

426 *A*
P16
CHL
2017-01
Loop



Chlorophyll Data Sheet

open text Doc.
highlight & copy

Cruise:

2017-01

Page:

of

2

Dates of Cruise:

Feb 2017

Time and date acetone added:

March 7 2017 1:25pm

Analyst:

Josmine

Time and date out of freezer:

March 8 @ 11AM

Time analysis started:

March 8 @ 12:10 pm

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.008			
STD			LOW	2-	12.154			
STD			HIGH	4-	66.269			
Blank				6-	0.037	8- 0.033		
68-A	P4	30ml	10mL	1-	19.255	2- 11.304		
76	P4	"	"	3-	29.365	4- 16.198		
136	P20	"	"	5-	17.180	6- 9.719		
142	P20	"	"	7-	16.584	8- 9.849		
194B	P21	"	"	1-	17.643	2- 10.037		
223B	P25	"	"	3-	11.274	4- 6.478		
326	P26	"	"	5-	9.498	6- 5.501		
325A	P26	"	"	7-	10.150	8- 5.937		
135	P20	"	"	1-	12.479	2- 7.488		
141	P20	"	"	3-	17.169	4- 9.702		
194A	P21	"	"	5-	17.662	6- 10.090		
223A	P25	"	"	7-	11.309	8- 6.571		
323	P26	"	"	1-	10.350	2- 6.056		
317	P26	"	"	3-	9.152	4- 5.558		
336A	P18	"	"	5-	26.180	6- 14.670		
5022 B	P4 Loop	"	"	7-	25.458	8- 14.274		
5033 B	P20 Loop	"	"	1-	17.040	2- 9.688		
222 B	P24	"	"	3-	14.405	4- 8.355		
5051 B	P26 Loop	"	"	5-	10.510	6- 6.330		
324	P26	"	"	7-	10.051	8- 5.831		
333 B	P19	"	"	1-	16.501	2- 9.422		
5022 A	P4 Loop	"	"	3-	26.193	4- 14.971		
67B	P4	"	"	5-	10.226	6- 6.300		
74B	P4	"	"	7-	27.109	8- 15.400		
Stand-by				1-	0.008			
Std	Low			2-	12.159			
Std	High			4-	65.910			
Blank	by			6-	0.039	8- 0.035		

[illegible]

Chlorophyll Data Sheet

Cruise: ~~Feb~~ 2017-01

Page: 2 of 2

Dates of Cruise: Feb 2017.

Time and date acetone added: March 7 @ 3:45pm

Analyst: Jasmine Wietzke

Time and date out of freezer: March 8 @ 1:45pm

Time analysis started: 2:55

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.006			
STD			LOW	2-	12.038			
STD			HIGH	4-	65.443			
Blank				6-	0.032	8-0.031		
		304ml						
5051 A	P26 Loop		10mL	1-	10.347	2-6.219		
319 A	P26	"	"	3-	9.540	4-5.629		
333 A	P19	"	"	5-	16.623	6-9.444		
5015 B	JF4 Loop	"	"	7-	41.818	8-23.485		
67A	P4	"	"	1-	10.458	2-6.745		
74A	P4	"	"	3-	24.024	4-13.589		
5031 B	P17-P20 Loop	"	"	5-	17.286	6-9.812		
140 B	P20	"	"	7-	17.085	8-9.699		
66A	P4	"	"	1-	7.228	2-5.141		
5015 A	JF4 Loop	"	"	3-	41.729	4-21.263		
66B	P4	"	"	5-	7.287	6-5.258		
73	P4	"	"	7-	28.100	8-15.796		
5031 A	P17-P20 Loop	"	"	1-	17.472	2-9.963		
140A	P20	"	"	3-	17.169	4-7.725		
5033 A	P20 Loop	"	"	5-	16.563	6-9.395		
222A	P24	"	"	7-	14.502	8-8.419		
72B	P4	"	"	1-	23.291	2-13.258		
5029 B	P16-P17 Loop	"	"	3-	19.657	4-8.881		
139 B	P20	"	"	5-	17.295	6-9.909		
146	P20	"	"	7-	16.329	8-9.346		
221 B	P23	"	"	1-	13.482	2-7.859		
322 B	P26	"	"	3-	9.327	4-5.457		
319 B	P26	"	"	5-	9.371	6-5.569		
5058 B	P22 Loop	"	"	7-	13.288	8-7.855		
Stand-by				1-	0.007			← Pressed twice
Std	Low			2-	12.134			
Std	High			4-	65.388			
Blank	by			6-	0.033	8-0.030		

2017-01 5051 CHI A P26 Loop	319 A CHL P26 60 m 2017-01 Bot 7	333 CHL P19 A 5 m 2017-01 Bot 1	5015 B CHL JF4 loop 2017-01 Bot 1	67 A CHL P4 50 m 2017-01 Bot 8	74 A CHL P4 5 m 2017-01 Bot 15	5031 B P17-P20 CHI Loop	140 CHL P20 30 m 2017-01 Bot 10	66 A CHL P4 60 m 2017-01 Bot 7	5015 A / 65 B CHL JF4 loop 2017-01 Bot 1	2017-01 Bot 7
73 CHL P4 10 m 2017-01 Bot 14	5031 A P19-P20 CHI Loop	140 CHL P20 30 m 2017-01 Bot 10 A	5033 2017-01 P20 CHI A Loop	222 A CHL P24 5 m 2017-01 Bot 1	72 B CHL P4 15 m 2017-01 Bot 13	5029 B P16-P17 CHI Loop	139 CHL P20 40 m 2017-01 Bot 9	146 CHL P20 0 m 2017-01 Bot 16	221 B CHL P23 5 m 2017-01 Bot 24	322 B CHL P26 30 m 2017-01 Bot 10
319 B CHL P26 60 m 2017-01 Bot 7	5058 B P22 South CHI Loop									

Chlorophyll Data Sheet

Cruise: 2017-01

Page: 1 of 1

Dates of Cruise: Feb 2017

Time and date acetone added: 8 March @ 10:45 am Analyst: Jasmine

Time and date out of freezer: 9 March @ 9:00 am

Time analysis started: 9 March @ 10:00 am

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.008			
STD			LOW	2-	12.306			
STD			HIGH	4-	66.262			
Blank				6-	0.034	8- 0.031		
		30ml						
145 A	P20	30ml	10ml	1-	17.108	2- 9.593		
5039 A	P22-P23 Loop	"	"	3-	14.253	4- 8.333		
327 A	P26	"	"	5-	10.015	6- 5.834		
327 B	P26	"	"	7-	9.923	8- 5.752		
5056 B	P25 Loop	"	"	1-	11.419	2- 6.613		
5010 A	Loop JF2	"	"	3-	24.194	4- 14.682		
70	P4	"	"	5-	20.256	6- 11.604		
72 A	P4	"	"	7-	25.251	8- 14.200		
325 B	P26	"	"	1-	9.980	2- 5.727		
321 B	P26	"	"	3-	9.325	4- 5.406		
5058 A	P22 Loop	"	"	5-	13.312	6- 7.736		
5010 B	JF2 Loop	"	"	7-	22.923	8- 13.646		
64	P4	"	"	1-	6.068	2- 4.758		
71	P4	"	"	3-	19.680	4- 11.202		
5027 B	P12-P13 Loop	"	"	5-	13.435	6- 7.927		
138 B	P20	"	"	7-	17.447	8- 9.845		
5013 B	JF3 Loop	"	"	1-	28.157	2- 16.128		
5013 A	JF3 Loop	"	"	3-	30.458	4- 17.461		
65	P4	"	"	5-	7.036	6- 4.975		
69 B	P4	"	"	7-	21.696	8- 12.302		
5029 A	P16-P17 Loop	"	"	1-	15.510	2- 8.702		
139 A	P20	"	"	3-	16.321	4- 9.232		
145 B	P20	"	"	5-	17.188	6- 9.749		
221 A	P23	"	"	7-	13.190	8- 7.632		
Stand-by				1-	0.008			
Std	Low			2-	12.297			
Std	High			4-	66.262			
Blank	by			6-	0.039	8- 0.037		

145	327	227	5010	70	72	325	321	5013	65	69	139
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P20	P26	P26	JF2	P4	P4	P26	P26	JF3	P4	P4	P20
5 m	5 m	5 m	loop	25 m	15 m	15 m	40 m	loop	75 m	30 m	40 m
2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01
Bot 15	Bot 15	Bot 15	Bot 1	Bot 11	Bot 13	Bot 13	Bot 9	Bot 1	Bot 6	Bot 10	Bot 9
A	A	B	A	B	A	B	B	A	A	B	A
5010	71	138	5013	5013	65	69	139	5013	65	69	139
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
JF2	P4	P4	JF3	JF3	P4	P4	P4	JF3	P4	P4	P4
loop	20 m	20 m	loop	loop	75 m	30 m	40 m	loop	75 m	30 m	40 m
2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01
Bot 1	Bot 5	Bot 12	Bot 1	Bot 1	Bot 1	Bot 10	Bot 9	Bot 1	Bot 6	Bot 10	Bot 9
B	B	B	B	B	A	B	B	A	A	B	A
145	221	221	5013	70	72	325	321	5013	65	69	139
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
P20	P23	P23	JF2	P4	P4	P26	P26	JF3	P4	P4	P20
5 m	5 m	5 m	loop	25 m	15 m	15 m	40 m	loop	75 m	30 m	40 m
2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01	2017-01
Bot 15	Bot 24	Bot 15	Bot 1	Bot 11	Bot 13	Bot 13	Bot 9	Bot 1	Bot 6	Bot 10	Bot 9
B	B	B	B	B	A	B	B	A	A	B	A

Chlorophyll Data Sheet

Cruise: 2017-01

Page: 1 of 2

Dates of Cruise: Feb 2017

Time and date acetone added: 9 March @ 12:36pm Analyst: Jasmine

Time and date out of freezer: 10 March @ 10:05am

Time analysis started: 10 March 11:23am

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.007			
STD			LOW	2-	12.146			
STD			HIGH	4-	65.925			
Blank				6-	0.030	8-0.029		
		30mL						
5007 B	JF1 Loop	30mL	10mL	1-	12.525	2-12.241		Pressed 2 twice
5055 A	P26-7° Loop	"	"	3-	14.682	4-8.843		
318	P26	"	"	5-	9.873	6-6.058		
320 A	P26	"	"	7-	9.169	8-5.527		
197 B	P22	"	"	1-	15.090	2-8.911		
143 A	P20	"	"	3-	17.349	4-10.046		
137 A	P20	"	"	5-	16.789	6-9.590		
5026 A	P8 und 200	"	"	7-	26.575	8-15.716		
322 A	P26	"	"	1-	9.500	2-5.548		
320 B	P26	"	"	3-	9.800	4-5.947		
197 A	P22	"	"	5-	16.051	6-9.409		
143 B	P20	"	"	7-	17.153	8-9.786		
137 B	P20	"	"	1-	17.186	2-9.732		
5026 B	P8 Loop	"	"	3-	29.258	4-17.450		
69 A	P4	"	"	5-	20.861	6-11.941		
106 B	P3	"	"	7-	20.787	8-12.196		
5027 A	P12-7P13 Loop	"	"	1-	13.007	2-7.753		
138 A	P20	"	"	3-	17.621	4-10.256		
144	P20	"	"	5-	16.616	6-9.711		
5039 B	P22-7P23 Loop	"	"	7-	13.240	8-8.017		
329	P26	"	"	1-	9.478	2-5.543		
321 A	P26	"	"	3-	9.626	4-5.658		
5056 A	P25-loop	"	"	5-	11.562	6-7.072		
5055 B	P26-7° Loop	"	"	7-	14.139	8-8.653		
Stand-by				1-	0.005			
Std	Low			2-	12.206			
Std	High			4-	65.824			
Blank	by			6-	0.036	8-0.033		

5007 CHL JP1 loop 2017-01 Bot 1 B 143 CHL P20 15 m 2017-01 Bot 13	S055A P26-205 CHI Loop 137 CHL P20 60 m 2017-01 Bot 7 B S056A P25 South CHI Loop	318 CHI P26 75 m 2017-01 Bot 6 S026B PE UNDERWAY CHI B Loop	320 A CHL P26 50 m 2017-01 Bot 8 *69 A CHL P4 30 m 2017-01 Bot 10	197 B CHL P22 5 m 2017-01 Bot 3 106 B CHL P3 5 m 2017-01 Bot 3 S027A CHI PR-P3 Loop	143 CHL P29 15 m 2017-01 Bot 13 A S027A CHI PR-P3 Loop	137 CHL P29 60 m 2017-01 Bot 7 A 138 CHL P20 50 m 2017-01 Bot 8 A	S026A P8 UNDERWAY CHI A Loop 144 CHL P20 10 m 2017-01 Bot 14 Loop	322 A CHL P26 30 m 2017-01 Bot 10 S039B CHI P22-P3 Loop	320 B CHL P26 50 m 2017-01 Bot 8 329 CHL P26 0 m 2017-01 Bot 17	197 A CHL P22 5 m 2017-01 Bot 3 321 A CHL P26 40 m 2017-01 Bot 9
---	---	---	--	--	--	--	--	--	--	---



Chlorophyll Data Sheet

Cruise: 2017-01

Page: 2 of 2

Dates of Cruise: Feb 2017

Time and date acetone added: 9 March @ 2:15pm Analyst: Jasmine

Time and date out of freezer: 10 March @ 12:15pm

Time analysis started: 10 March @ 1:15pm

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.006			
STD			LOW	2-	12.106			
STD			HIGH	4-	65.697			
Blank				6-	0.067	8-0.050 →		May have 4 drops
				6-	0.036 →	8-0.032		Redid
68 B	P4	304ml	10ml	1-	16.790	2-9.745		
106 A	P3	"	"	3-	20.970	4-12.360		
5007A	JF1-L00P	"	"	5-	16.085	6-11.148		
				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-		
Stand-by				1-	0.005			
Std	Low			2-	12.166			
Std	High			4-	65.481			
Blank	by			6-	0.035	8-0.033		

used values:

1 - 0.003
2 - 12.106
4 - 65.697
6 - 0.036 8 - 0.032

68	106	5007
CHL	CHL	CHL
P4	P3	JF1
40 m	5 m	loop
2017-01	2017-01	2017-01
Bot 9	Bot 3	Bot 1
		A