Chlorophyll a Data Sheet

Chlorophyll a analysis log sheet				Date:		
Cruise ID 2005 - ~~16~~ 04 Arctic				Analyst:	R.N.	
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution Feb. 17, 2005						
Sample ID	Volume filtered mls	Volume acetone mls	Fo	Fa (7hr)	Fo/Fa	Comments
FILTER BLANK	~~0~~	10	0.022			Aug. 3/05
FILTER BL	~~0~~	10	-0.0			Aug. 4/05
105 BOT 14	2000	10	2.49	1.96	Aug 5/05 RN	IN FREEZER AUG 5, 2005 17:30
Calibrate: 107 Bot 16	CAL. 2100	10	3.65	2.18	RN	
111 BOT 20	2140	10	20.6	11.9	RN	
112 BOT 21	2140	10	32.6	17.5	RN	
108 BOT 17	2110	10	9.21	5.10	RN	
108 BOT 17	2100	10	7.64	3.86	RN	dropped filter landed right side up
109 BOT 18	2000	10	14.3	8.20	RN	
110 BOT 19	2120	10	37.5	23.5	RN	IN FREEZER 17:30
132 BOT 20	CALIBRATED ~~2000~~ 1890	10	44.4	20.8	CB28A	Filter 111 not secured, leaked threw out filter, marked new water level, restarted, not much water lost
133 BOT 21	2140	10	51.8	23.9	CB28A	CB28A
134 BOT 22	2180	10	81.1	41.8	pale yellow	IN FREEZER AUG 5, 2005 18:55
135 BOT 23	2140	10	25.5	13.5	CB28A	
136 BOT 24	2000	10	25.1	13.9	CB28A	IN FREEZER 19:35
115 BOT 3	2000	10	1.91	1.34	CB28A	CB28A
131 BOT 19	2140	10	6.51	3.57	CB28A	CB28A
132 BOT 20	2140	10	48.1	22.8	CB28A	CB28A
Solid std	LOW 12.8	HIGH 72.6				
Chl a extracts in 90% acetone + 10% deionized water						

Chlorophyll a Data Sheet

SOLID STANDARD L = 13.5 H = 76.5

Chlorophyll a analysis log sheet				Date:		
Cruise ID 2005 - ~~16~~ 04 Arctic				Analyst:		
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution Feb. 17, 2005						
Sample ID	Volume filtered mls	Volume acetone mls	no acid Fo	with acid Fa	Fo/Fa	Comments
138 BOT 2	2000		33.2	25.7		Aug 6/05 STN BS3
141 BOT 5	2140		20.4	15.5		• Frozen
141 BOT 5	2100		21.8	16.6		
142 BOT 6	2110		201	105		
143 BOT 7	2000		175	84.0		
144 BOT 8	2140		284	142		1:1 Dilution
145 BOT 9	2120		196	102		1:1 Dilution
146 BOT 10	2000		294	155		
Acetone			0.00	0.00		
207 BOT 20	2140		22.3	13.4		Aug 7/05 filtered, STN BS3-C
208 BOT 21	2140		291	141		• FROZEN
209 BOT 22	2000		218	105		
210 BOT 23	2120		128	62.0		
204 BOT 17	2110		6.28	4.36		
205 BOT 18	2000		10.7	7.25		
206 BOT 19	2000		18.3	10.9		
207 BOT 20	2100		21.6	12.7		
~~182~~						Aug 7/05 filtered, STN BS3-b
182 BOT 16	2180		8.44	6.41		• frozen
133 17	2000		4.58	5.48		
184 18	2140		14.1	8.99		
185 19	2140		21.9	14.0		

Chlorophyll a Data Sheet

Chlorophyll a analysis log sheet				Date:		
Cruise ID 2005 - ~~10~~ 04 Arctic				Analyst:		
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution Feb. 17, 2005						
Sample ID	Volume filtered mls	Volume acetone mls	Fo	Fa	Fo/Fa	Comments
186 Bot 20	*neglected to write down		70.4	38.5		filt'd 8/7/05, STN BS3-b
186 Bot 20	Volume filtered approx 2000		75.2	44.1		↓ frozen
187 Bot 21	to 2140	mL	194	94.2		↓
231 Bot 21			61.5	38.0		filt'd 8/7/05, STN BS3-d ⊛
232 Bot 22			96.0	60.4		frozen
233 Bot 23			66.5	40.5		
234 Bot 24			39.1	20.8		filter did not seal properly, lost ~5ml, new filter, both in vial ⊛
219 Bot 10			1.48	1.31		
228 Bot 18			6.26	3.86		
229 Bot 19			26.7	17.0		⊛
230 Bot 20			26.6	16.9		⊛
232 Bot 22	▽		91.2	56.5		⊛
Station CB2						Aug 8, 2005 ↓ Jeff C.
252 Bot 18	2140		12.5	10.8		⊛
253 Bot 19	2110		15.3	13.0		⊛
254 Bot 20	2130		23.5	15.8		⊛
255 Bot 21	2120		71.3	49.6		⊛
255 Bot 21	2026 ⊛		71.2	48.8		not full, volume = 1000+250+250+250+250+26 graduated cylinder used
256 Bot 22	2120		173	104		⊛
258 Bot 24	1727		6.72	3.36		1000+250+250+227 grad. cylinder used.
257 Bot 23	2000		17.9	9.85		

Chlorophyll a Data Sheet

Chlorophyll a analysis log sheet				Date:	Aug 9, 2005	
Cruise ID 2005 - ~~18~~ 04 Arctic				Analyst:	Jeff	
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution Feb. 17, 2005						
Sample ID	Volume filtered mls	Volume acetone mls	Fo	Fa	Fo/Fa	Comments
297 Bot#19	2140		7.40	6.10		Station CB3 ③ ⊛
297 Bot#19 (Dup)	2140		2.13	1.87		
298 Bot#20	2100		7.52	6.20		⊛
296 Bot#18	2180		11.3	9.61		⊛
299 Bot#21	2000		6.31	3.94		drop on counter in some water.
300 Bot#22	2140		103	59.1		
301 Bot#23	2000		22.7	15.0		⊛
302 Bot#24	2000		14.3	8.28		⊛
Solid Std. L13.9	H=77.5	acetone = 0	, 0			Aug 10, 2005 (Jeff)
320 Bot#18	2000		2.81	2.40		F_o=6.20, F_a=5.74
321 Bot#19	2140		3.21	2.85		F_o=6.88, F_a=6.24
323 Bot#21	2140		11.1	6.40		F_o=15.1, F_a=9.06
324 Bot#22	2000		59.8	34.6		F_o=80.2, F_a=48.0
322 Bot#20	2120		4.62	3.41		F_o=12.5, F_a=12.1
325 Bot#23	2000		17.8	9.54		F_o=24.7, F_a=14.3
326 Bot#24	2140		8.20	4.17		F_o=16.0, F_a=11.2 R, an
						Aug 10, 2005 (~~Jeff~~ H) CB5a
335 Bot#9	2000		4.53	3.50		F_o=8.70, F_a=7.15
334 Bot#8	2140		3.18	2.87		F_o=11.0, F_a=10.8
337 Bot#11	2140		7.52	3.86		F_o=10.1, F_a=6.53
336 Bot#10	2000		190	115		F_o=205, F_a=125
335 Bot#9 (R)	2180		5.04	3.82		F_o=25.1, F_a=18.7

Chlorophyll a Data Sheet

Chlorophyll a analysis log sheet				Date:		
Cruise ID 2005 - ~~10~~ 04 Arctic				Analyst:		
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution Feb. 17, 2005						
Sample ID	Volume filtered mls	Volume acetone mls	Fo	Fa	Fo/Fa	Comments
359 Bot #22	2110		103	57.3		Aug 10, 2005 (Ryan) · STN CB5a
360 Bot #23	2110		14.9	8.11		
360 Bot #23(R)	2140		14.9	8.36		F_o = 22.2, F_a = 13.8
361 Bot #24	2140		6.73	3.52		F_o = 12.6, F_a = 7.63
358 Bot #21	2000		8.12	5.52		F_o = 12.3, F_a = 9.13
355 Bot #18	2130		4.05	3.60		F_o = 13.8, 13.3 = F_o
356 Bot #19	2120		4.13	3.49		F_o = 15.2, F_a = 13.1
357 Bot #20	2000		4.31	3.47		F_o = 14.3 F_a = 13.3
Acetone	—		0.0	0.0		Aug 11, 2005 (RYAN) · STN CB6
382 Bot #21	2140		7.33	4.67		
383 Bot #22	2000		73.3	42.7		
384 Bot #23	2180		22.2	12.4		
385 Bot #24	2000		6.82	3.33		
379 Bot #18	2140		2.70	2.37		
380 Bot #19	2000		4.52	3.20		
381 Bot #20	2000		2.40	1.77		
381(R) Bot #20	2100		3.31	2.52		
Solid Std	Low =	12.8	High =	73.4	✓	DATE ??
Blank	—		0.0	0.0		

F_o = 111
F_a = 63.1

(5)

Chlorophyll a Data Sheet

Chlorophyll a analysis log sheet				Date:		
Cruise ID 2005 - ~~16~~ 04 Arctic				Analyst:		Jeff reads Chla
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution Feb. 17, 2005						
Sample ID	Volume filtered mls	Volume acetone mls	Fo	Fa	Fo/Fa	Comments
427 Bot #18	2120		3.57	3.17		Jeff filters 8 Aug 13
428 Bot #19	2130		2.55	2.15		
429 Bot #20	2140		4.50	3.50		
430 Bot #21	2110		13.2	7.84		
431 Bot #22	2140		103	57.5		
432 #23	2120		20.4	10.5		
432(D) #23	2140		21.4	11.0		
433 #24	2140		10.3	5.28		
Acetone			0.0	0.0		RYAN AUG 13
457 Bot #24	2180		8.05	3.84		STN CB8
456 Bot #23	2110		42.2	22.6		
455 Bot #22	2140		42.6	25.0		
454 Bot #21	2000		6.42	4.51		
454 Bot #21(R)	2000		5.45	3.38		
451 Bot #18	2000		3.50	2.92		
452 #19	2120		2.86	2.37		
453 #20	2000		6.40	4.44		
475 Bot #18	2110		3.94	3.29		Jeff Aug 14 CB9
476 #19	2140		3.94	3.23		
477 #20	2140		5.25	3.91		
478 #21	NOT DONE		∵ not enough in N skin.			

Chlorophyll a analysis log sheet				**Date:**		
Cruise ID 2004 - 16 Arctic				**Analyst:**		
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution June 9, 2004						
Sample ID	**Volume filtered mls**	**Volume acetone mls**	**Fo**	**Fa**	**Fo/Fa**	**Comments**
479 Bot #22	2140		121	63.8		
480 #23	2140		137	70.0		
480 #23D	2120		140	71.4		
481 #24	2120		14.6	7.23		
510 #18	2140		2.73	2.86		Will, Aug 15th station CB11
511 #19	2180		2.85	2.18		
512 #20	2140		6.35	3.54		
513 #21	2000		20.4	10.6		
514 #22	2000		116	68.5		
514 #22D	2110		116	69.1		a little water leak from funnel (10 mL), not 2120, now 2110
515 #23	2140		53.2	28.1		
516 #24	2110		15.2	8.05		
549 Bot #21	2000		10.6	6.04		Ryan Aug 16 Stn. CB10
550 Bot #22	2100		88.9	47.5		
551 Bot #23	2000		55.2	29.0		
552 Bot #24	2140		15.2	7.12		
547 Bot #19	2000		3.43	2.62		
548 Bot #20	2000		3.70	2.71		
550 Bot #22 (2)	2120		88.2	45.8		

Chlorophyll a analysis log sheet				**Date:**		
Cruise ID 2004 ~~5~~ - ~~16~~ 05 Arctic				**Analyst:**		
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution June 9, 2004						
Sample ID	**Volume filtered mls**	**Volume acetone mls**	**Fo**	**Fa**	**Fo/Fa**	**Comments**
596 Bot #24	2140+15		23.5	12.2		RYAN Aug 18/04 CB12
595 Bot #23	2140-75		176	91.5		poured ~75mL into Bot #24
595 Bot #23(R)	2140		187	97.3	Read 24hrs after adding Acetone	
594 Bot #22	2000		9.88	5.90		
593 Bot #23	2120		4.29	3.19		Add Acetone 2:50pm Aug 19
592 Bot #20	2180		3.93	3.03		
						RYAN Aug 19/04 CB13
616 Bot #20	2110		24.2	16.4		
617 Bot #21	2000-10mL		23.0	12.3		spill ~ 10mL
618 Bot #22	2110		110	63.7		
619 Bot #23	2140		24.1	12.9		
619 Bot #23	2140		23.5	12.9		
620 Bot #24	2120		14.9	7.66		
Melt 1	1780		14.1	6.38		250+250+250+250+=1L +250+250+250+30
Melt 2	2110		17.2	8.61		~~R7~~
Drill Site I	1800		33.8	14.8		250+250+250+250+250 250+250+50
Drill Site II	1881		33.2	14.4		250+250+250+250+250 +250+250+131
Acetone	~~800~~		0.0	0.0		
Auger Hole	1150		4.39	2.10		Aug 23/05 Auger Hole 1&2
" "	990		2.69	1.36		Aug 23/05 2&2
Melt pond edge	250		1.84	1.14		Melt pond edge Aug 23/05

Chlorophyll a analysis log sheet				**Date:**	4. Aug 23/2005	
Cruise ID 2004 5 - ~~13~~ 07 Arctic				**Analyst:**	Jeff	
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution June 9, 2004						
Sample ID	**Volume filtered mls**	**Volume acetone mls**	**Fo**	**Fa**	**Fo/Fa**	**Comments**
Acetone			0	0		
CHLR Lower ice	1300		0.657	0.439		
Snow 1 Gilligan	1240		0.073	0.038		
Snow 2 Gilligan	1670		0.304	0.177		
Ice surface	1350		0.412	0.364		
Melt pond 5 Aug 23	1000		14.4	6.91		
Ice/Slush Aug 23	1066		0.057	0.053		250+250+250+250+65
Slush Aug 23	1000		1.72	0.874		
Acetone			0.0	0.0		
#650 Bor #23	2130		21.2	11.6		CB 15
650 DUP Bor #23	2140		20.8	11.4		
651 Bor #24	2140		14.8	8.05		
647 Bor 20	2140		11.2	6.95		
648 Bor 21	2110		19.7	—		poured out before acid!
649 Bor 22	2110		48.5	27.9		
- Acetone			0.0	0.0		Kyle Aug 27/05
710 Bor #19	2000		5.16	3.93		CB 17
711 20	2000		8.32	5.79		
712 21	2110		16.8	11.5		
713 22	2100		77.9	45.1		
714 23	2110		42.3	22.7		
715 24	2140		21.2	10.8		

Chlorophyll a analysis log sheet			**Date:**			
Cruise ID 2004 - ~~16~~ Arctic			**Analyst:**			
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution June 9, 2004						
Sample ID	**Volume filtered mls**	**Volume acetone mls**	**Fo**	**Fa**	**Fo/Fa**	**Comments**
735 Bot #20	2000		8.07	5.50		RYAN Aug 28/05 CB 18
736 #21	(2000 - 100)		12.5	8.05		~100 mL spilt
737 #22	2110		88.6	53.5		
737 #22(2)	2110		85.3	50.4		
738 #23	2100		28.4	15.5		
739 #24	2140		16.0	8.11		
Acetone			0.0	0.0		
~~Acetone~~ Acetone			0.0	0.0		
763 #24	2140		16.4	8.37		
762 #23	2000		26.1	14.6		
761 #22	2110		82.3	47.6		a little critter in this one.
761 DUP #22	2180		89.0	54.0		
760 #21	2120		21.8	12.8		
759 #20	2120		5.68	3.55		
781 #18	2140		22.6	14.0		Mary Stel Jan 17 2006
782 #19	2000		49.2	30.7		
784 #21	2120		21.5	14.2		
784 DUP #21	2140		24.0	15.8		
785 #22	2000		10.2	6.30		
787 #24	2000		6.76	3.98		

Chlorophyll a analysis log sheet				Date:		
Cruise ID 2004 - 16 Arctic				Analyst:		
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution June 9, 2004						
Sample ID	Volume filtered mls	Volume acetone mls	Before acid Fo	After acid Fa	Fo/Fa	Comments
						Wilf, Aug 30, CB-29
# 810 Bot 23	2120		19.7	11.7		Mary Steel Jan 17, 2006
# 810 Bot 23 (D)	2000		17.1	10.1		
# 811 Bot 24	2140		12.0	6.92		
# 807 Bot 20	2120		10.9	6.18		
# 808 Bot 21	2140		17.1	9.99		
# 809 Bot 22	2110		75.0	48.4		
Sunshine Beer	300mls	1 2 3	34.8 32.6 35.8	20.0 18.6 20.2		Reference Sample
Fluorometer Calibration Check.						Jan. 6/06
Solid STANDARDS						
Low	7.6% low	low 2/05	13.3	13.2		Post Arctic (at JOS)
High	6.3% low	low 2/05	76.0	75.6	75.7 75.8	" "
				jumping about a bit		
Fluorometer Samples + Calibration						Jan 17, 2006
Solid standard						Mary Steel
Low			13.4			
High			77.4			
90% Acetone	0.0	10 ml	0.0	0.0	0.0	
Blank #1			0.0	0.0		GF/F
Blank #2			0.0	0.0		GF/F

Chlorophyll a analysis log sheet				Date:		
Cruise ID 2004 - 16 Arctic				Analyst:		
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution June 9, 2004						
Sample ID	Volume filtered mls	Volume ~~acetone~~ mls	Fo	Fa	Fo/Fa	Comments
Standard 0.5 mg/L		10 ml	0.414	0.138		Prep'd Jan 17/06
" 2.0 mg/L			1.85	0.748		
" 10.0 mg/L			9.61	4.0		
" 30.0 mg/L			29.0	12.1		
" 100.0 mg/L		▽	95.0	40.2		

Chlorophyll a analysis log sheet				Date:		
Cruise ID 2004 - 16 Arctic				Analyst:		
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution June 9, 2004						
Sample ID	Volume filtered mls	Volume acetone mls	Fo	Fa	Fo/Fa	Comments

Chlorophyll a analysis log sheet				Date:		
Cruise ID 2004 - 16 Arctic				Analyst:		
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution June 9, 2004						
Sample ID	Volume filtered mls	Volume acetone mls	Fo	Fa	Fo/Fa	Comments

Chlorophyll a analysis log sheet				Date:		
Cruise ID 2004 - 16 Arctic				Analyst:		
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution June 9, 2004						
Sample ID	Volume filtered mls	Volume acetone mls	Fo	Fa	Fo/Fa	Comments

Chlorophyll a Data Sheet

Chlorophyll a analysis log sheet				Date:		
Cruise ID 2004 - 16 Arctic				Analyst:		
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution June 9, 2004						
Sample ID	Volume filtered mls	Volume acetone mls	Fo	Fa	Fo/Fa	Comments

Chlorophyll a analysis log sheet				Date:		
Cruise ID 2004 - 16 Arctic				Analyst:		
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution June 9, 2004						
Sample ID	Volume filtered mls	Volume acetone mls	Fo	Fa	Fo/Fa	Comments

300 m/s
[redacted]05-21
Sunshine Beach 3

800 m/s
02-05-25
Sunshine Beach 1

[redacted] m/s
02-05-23
Sunshine Beach 2

2004-09
GYRO1-B
BALNK
GF75
(2)

2004-09
GYRO1-B
BLANK
GF75
(1)

781
CHLa
CB-27
C#45
2005-04
Bot 18

782
CHLa
CB-27
C#45
2005-04
Bot 19

784
CHLa
CB-27
C#45
2005-04
Bot 21

784
DUP CHLa
CB-27
C#45
2005-04
Bot 21

785
CHLa
CB-27
C#45
2005-04
Bot 22

787
CHLa
CB-27
C#45
2005-04
Bot 24

807
CHLa
CB-29
C#46
2005-04
Bot 20

808
CHLa
CB-29
C#46
2005-04
Bot 21

809
CHLa
CB-29
C#46
2005-04
Bot 22

810
CHLa
CB-29
C#46
2005-04
Bot 23

810
CHLa
CB-29
dup C#46
2005-04
Bot 23

811
CHLa
CB-29
C#46
2005-04
Bot 24

	761 CHLa CB-21 C#44 2005-04 Bot 22		762 CHLa CB-21 C#44 2005-04 Bot 23		760 CHLa CB-21 C#44 2005-04 Bot 21 / D4 761 CHLa CB-21 C#44 2005-04 Bot 22	759 CHLa CB-21 C#44 2005-04 Bot 20 / Date 9 Aug SK F113 L		RT	SK CT
						2310	3621	16.37	17537
std1	11.65	100	12.11	[illegible]	[illegible]	1078	1522		11302
blank 0911		–	12.46	1559	13.07	158		16.34	254
→ 0911		–	12.46	155					
(STD6) 0912	11.27	16715	12.44	123970	13.10	6841	10157	16.36	62039
(015-274) 0913	[illegible]	[illegible]	12.42	136110	13.06	2129	2847	16.33	62438
(018-32) 0914	11.26	12155	12.43	83677	13.12	897	1216	16.34	49573
(018-266) 0915	11.26	16134	12.43	117925	13.09	217	1214	16.35	59767
(013-58) 0916	11.26	28257	12.42	233626	13.07	2685	10170	16.34	63698
0917	11.26	18994	12.42	150662	13.07	1302	1762	16.34	76776
0918	11.24	12	12.42	1492	13.02	66		16.31	1274
0919	11.26	16639	12.43	133738	13.08	9130	13545	16.34	70805
0920	11.25	24510	12.41	[illegible]	13.08	2480	3778	16.32	75164
0921		–	12.40	3180	13.00	66	cont	16.30	1501
0922	11.27	28739	12.44	252673	13.08	1498	5905	16.35	71685
0923	11.26	[illegible]	12.41	330779	13.06	6385	8869	16.33	96[illegible]
0924	11.27	[illegible]	12.44	[illegible]	13.08	4952	6724	16.35	75163
0925	11.27	22105	12.43	[illegible]	13.07	3796	5211	16.35	108982
0926	11.29	15680	12.46	[illegible]	13.10	[illegible]	4095	16.36	94438
0927	11.29	[illegible]	12.4[illegible]	[illegible]	13.10	50[illegible]	6591	16.37	115906
0928		–	12.45	1628	13.0[illegible]	127	cont	16.34	285
[illegible]	11.28	1618[illegible]	12.45	[illegible]	13.10	6650	10799	16.36	54013
0930		–	12.45	2103	13.06	3159		16.35	605
0931	11.27	13697	12.44	90915	13.08	612	712	16.35	44315
0932	11.27	[illegible]	12.44	258024	13.08	3287	4406	16.35	49963
0933	11.28	25009	12.44	192876	13.09	2302	3136	16.35	46592
0934	11.29	5269	12.46	34495	13.10	514	–	16.38	22775
0935	11.26	31650	12.42	235661	13.07	3267	4522	16.33	45318

... cont

477 CHLa CB9 C#028 2005-04 Bot 20

479 CHLa CB9 C#028 2005-04 Bot 22

476 CHLa CB9 C#028 2005-04 Bot 19

475 CHLa CB9 C#028 2005-04 Bot 18

510 CHLa CB11 C#030 2005-04 Bot 18

480 CHLa CB9 C#028 2005-04 Bot 23

480 CHLa CB9 C#028 2005-04 Bot 23D

512 CHLa CB11 C#030 2005-04 Bot 20

511 CHLa CB11 C#030 2005-04 Bot 19

481 CHLa CB9 C#028 2005-04 Bot 24

513 CHLa CB11 C#030 2005-04 Bot 21

514 CHLa CB11 C#030 2005-04 Bot 22

514 CHLa CB11 C#030 2005-04 Bot 22

515 CHLa CB11 C#030 2005-04 Bot 23

RYAN AUG 17/05

549 CHLa CB10 C#033 2005-04 Bot 21

550 CHLa CB10 C#033 2005-04 Bot 22

551 CHLa CB10 C#033 2005-04 Bot 23

552 CHLa CB10 C#033 2005-04 Bot 24

547 CHLa CB10 C#033 2005-04 Bot 19

548 CHLa CB10 C#033 2005-04 Bot 20

550 (R) CHLa CB10 C#033 2005-04 Bot 22

572 CHLa CB12 C#37 2005-04 Bot 20

595

(R)

573 CHLa CB12 C#37 Bot 21

596

595

619 CHLa CB 13 C#38 (R) Bot 23

574 CHLa CB13 Bot 22

619 CHLa CB 13 C#38 Bot 23

620 CHLa CB 13 C#38 Bot 24

617 CHLa CB 13 C#38 Bot 21

616 CHLa CB 13 C#38 Bot 20

618 CHLa CB 13 C#38 Bot 22

Port Bow Drill site II

chl-a Gilligan Melt 1

chla Gilligan Melt 2

Port Bow Drill site II

2005-04 CHLR 1300mL Lower Ice

2005-04 Chlr 1240mL Snow 1 GILLGRN

2005-04 Chlr 1670mL Snow 2 GILLGW

2005-04 Chlr 1350mL Surface Ice

MELT POND 5 AUG 23 CHL

SLUSH ICE/SW AUG 23 CHL

651 Chl-a CB15 C#39 Bot 24

650 Chl-a CB15 C#39 Bot 23

649 Chl-a CB15 C#39 Bot 22

648 Chl-a CB15 C#39 Bot 21

647 Chl-a CB15 C#39 Bot 20

650 Chl-a CB15 C#39 DUP Bot 23

CHLa 710 CB 17 C#42 2005-04 Bot 19

CHLa 713 CB 17 C#42 2005-04 Bot 22

CHLa 711 CB 17 C#42 2005-04 20

CHLa 714 CB 17 C#42 2005-04 23

CHLa 715 CB 17 C#42 2005-04 Bot 24

CHLa 712 CB 17 C#42 2005-04 Bot 21

737 (D) CHLa CB18 C#042 2005-04 Bot 22

735 CHLa CB18 C#042 2005-04 Bot 20

738 CHLa CB19 C#042 2005-04 Bot 23

736 CHLa CB18 C#042 2005-04 Bot 21

739 CHLa CB18 C#042 2005-04 Bot 24

737 CHLa CB18 C#042 2005-04 Bot 22

763 CHLa CB-21 C#44 2005-04 Bot 24

other side as well

#105
Chla
158db
cb28b
2005-04
Bot 14

107
CHLa
cb28b
C#009
2005-04
Bot 16

111
CHLa
cb28b
C#009
2005-04
Bot 20

112
CHLa
Cb28b
C#009
2005-04
Bot 21

108
CHLa
cb28b
C#009
2005-04
Bot 17

108
CHLa
cb28b
C#009
2005-04
Bot 17

109
CHLa
cb28b
C#009
2005-04
Bot 18

110
CHLa
cb28b
C#009
2005-04
Bot 19

Reen Aug 6/05

132
CHLa
cb-28A
C#010
2005-04
Bot 20

133
CHLa
cb-28A
C#010
2005-04
Bot 21

134
CHLa
cb-28A
C#010
2005-04
Bot 22

135
CHLa
cb-28A
C#010
2005-04
Bot 23

136
CHLa
cb-28A
C#010
2005-04
Bot 24

115
CHLa
cb-28A
C#010
2005-04
Bot 3

131
CHLa
cb-28A
C#010
2005-04
Bot 19

132
CHLa
cb-28A
C#010
2005-04
Bot 20

Jeff starts ~8:50

CHLa labels

232
CHLa
BS3-d
C#016
2005-04
Bot 22

253
CHLa
CB2
C#017
2005-04
Bot 19

231
CHLa
BS3-d
C#016
2005-04
Bot 21

254
CHLa
CB2
C#017
2005-04
Bot 20

232
CHLa
BS3-d
C#016
2005-04
Bot 22

255
CHLa
CB2
C#017
2005-04
Bot 21

230
CHLa
BS3-d
C#016
2005-04
Bot 20

298
CHLa
CB3
C#019
2005-04
Bot 20

Read Aug 10/05

256
CHLa
CB2
C#017
2005-04
Bot 22

252
CHLa
CB2
C#017
2005-04
Bot 18

229
CHLa
BS3-d
C#016
2005-04
Bot 19

301
CHLa
CB3
C#019
2005-04
Bot 23

296
CHLa
CB3
C#019
2005-04
Bot 18

255
CHLa
CB2
C#017
2005-04
Bot 21

302
CHLa
CB3
C#019
2005-04
Bot 24

297
CHLa
CB3
C#019
2005-04
Bot 19

234
CHLa
BS3-d
C#016
2005-04
Bot 24

Jeff stops 12:00

RYAN STARTS 12:00

258
CHLa
CB2
C#017
2005-04
Bot 24

228
CHLa
BS3-d
C#016
2005-04
Bot 18

299
CHLa
CB3
C#019
2005-04
Bot 21

233
CHLa
BS3-d
C#016
2005-04
Bot 23

297
CHLa
CB3
C#019
2005-04
Bot 19

257
CHLa
CB2
C#017
2005-04
Bot 23

300
CHLa
CB3
C#019
2005-04
Bot 22

219
Chl-A
BS3-d
2005-04
Bot 10

187
CHLa
BS3-b
C#014
2005-04
Bot 21

186
CHLa
BS3-b
C#014
2005-04
Bot 20

186
CHLa
BS3-b
C#014
2005-04
Bot 20

185
CHLa
BS3-b
C#014
2005-04
Bot 19

183
CHLa
BS3-b
C#014
2005-04
Bot 17

182
CHLa
BS3-b
C#014
2005-04
Bot 16

(21)

210
CHLa
BS3-c
C#015
2005-04
Bot 23

207
CHLa
BS3-c
C#015
2005-04
Bot 20

206
CHLa
BS3-c
C#015
2005-04
Bot 19

146
CHLa
BS3
C#012
2005-04
Bot 10

144
CHLa
BS3
C#012
2005-04
Bot 8

145
CHLa
BS3
C#012
2005-04
Bot 9

205
CHLa
BS3-c
C#015
2005-04
Bot 18

142
CHLa
BS3
C#012
2005-04
Bot 6

208
CHLa
BS3-c
C#015
2005-04
Bot 21

cont

WhiteLi@pac.dfo-mpo.gc.ca

21/04/2005 23:27

To: Customer.Service@osil.co.uk
cc:
Subject: Salinity bottle order

Hi Chris,

I have a salinity bottle plus accessories order for you:

10 X Bottle crates(cages)---------- $115.00/each (U.S.)
240 X salinity sample bottles(200ml)- $2.59/each
1000 inserts---------- $0.10/each
1000 screw caps---------- $0.10/each

Please charge to this Master Card number [redacted]

Ship to: Attention: Linda White
Institute of Ocean Sciences
9860 West Saanich Road
Sidney, British Columbia
Canada
V8L 4B2

It is a repeat of the our order from March 26, 2004.
If you have any questions about the order please contact me.
Can you let me know approximately when you will ship these items?

Many thanks,
Linda White

Institute of Ocean Sciences
9860 West Saanich Road
Sidney, B.C.
Canada
V8L 4B2
250-363-6738

(22)

... cont.

141 CHLa BS3 C#011 2005-04 Bot 5

204 CHLa BS3-c C#015 2005-04 Bot 17

207 CHLa BS3-c C#015 2005-04 Bot 20

184 CHLa BS3-b C#014 2005-04 Bot 18

209 CHLa BS3-c C#015 2005-04 Bot 22

143 CHLa BS3 C#012 2005-04 Bot 7

141 CHLa BS3 C#012 2005-04 Bot 5

138 CHLa BS3 C#012 2005-04 Bot 2

END Right 14.00

12-8 8-4 4-12 12-12 | 12-6 6-12 12-12 12-12

Start Jeff Aug 12/05

324 CHLa CB4 C#020 2005-04 Bot 22

320 CHLa CB4 C#020 2005-04 Bot 18

326 CHLa CB4 C#020 2005-04 Bot 24

358 CHLa CB5a C#022 2005-04 Bot 21

360 CHLa CB5a C#022 2005-04 Bot 23 (R)

325 CHLa CB4 C#020 2005-04 Bot 23

321 CHLa CB4 C#020 2005-04 Bot 19

322 CHLa CB4 C#020 2005-04 Bot 20

334 CHLa CB5 C#21 2005-04 Bot 8

323 CHLa CB4 C#020 2005-04 Bot 21

335 (R) CHLa CB5 C#21 2005-04 Bot 9

361 CHLa CB5a C#022 2005-04 Bot 24

335 CHLa CB5 C#21 2005-04 Bot 9

360 CHLa CB5a C#022 2005-04 Bot 23

357 CHLa CB5a C#022 2005-04 Bot 20

359 CHLa CB5a C#022 2005-04 Bot 22

337 CHLa CB5 C#21 2005-04 Bot 11

356 CHLa CB5a C#022 2005-04 Bot 19

336 CHLa CB5 C#21 2005-04 Bot 10

355 CHLa CB5a C#022 2005-04 Bot 18

Jeff start Aug 13 →

381 (R) CHLa CB6 C#024 2005-04 Bot 20

382 CHLa CB6 C#024 2005-04 Bot 21

383 CHLa CB6 C#024 2005-04 Bot 22

380 CHLa CB6 C#024 2005-04 Bot 19

381 CHLa CB6 C#024 2005-04 Bot 20

385 CHLa CB6 C#024 2005-04 Bot 24

384 CHLa CB6 C#024 2005-04 Bot 23

379 CHLa CB6 C#024 2005-04 Bot 18

Jeff stop Aug 13

Jeff start → Aug 16

516 CHLa CB11 C#030 2005-04 Bot 24

429 CHLa CB7 C#026 2005-04 Bot 20

431 CHLa CB7 C#026 2005-04 Bot 22

432 (D) CHLa CB7 C#026 2005-04 Bot 23

432 CHLa CB7 C#026 2005-04 Bot 23

428 CHLa CB7 C#026 2005-04 Bot 19

427 CHLa CB7 C#026 2005-04 Bot 18

430 CHLa CB7 C#026 2005-04 Bot 21

433 CHLa CB7 C#026 2005-04 Bot 24

451 CHLa CB8 C#027 2005-04 Bot 18

452 CHLa CB8 C#027 2005-04 Bot 19

453 CHLa CB8 C#027 2005-04 Bot 20

454 CHLa CB8 (R) C#027 2005-04 Bot 21

Jeff stops, Ryan starts 12:00 Aug 16

456 CHLa CB8 C#027 2005-04 Bot 23

455 CHLa CB8 C#027 2005-04 Bot 22

454 CHLa CB8 C#027 2005-04 Bot 21

457 CHLa CB8 C#027 2005-04 Bot 24

23

cont...

Chlorophyll a Data Sheet

Chlorophyll a analysis log sheet				Date:		
Cruise ID 2005 - 16 Arctic				Analyst:		
10 AU Turner Field Fluorometer calibrated against Sigma Chl a standard solution Feb. 17, 2005						
Sample ID	Volume filtered mls	Volume acetone mls	Fo	Fa	Fo/Fa	Comments