

2016-17 SWL Samples.

Monday August 8, 2016 11:00am

Fumehood Temp: 18°C

FSU: 0.002

Removed 84 SWL 2016-17 samples from -20 freezer
-sit $\approx$ 1 hour.

Decant 10 ml 90% Acetone into scint. vial with sample filter.
Place in -20 freezer @ 1:30 pm.

Std. Solid: Low: 12.0 High: 65.6
($\pm$ 3 @ Med for low reading)

Used W.P. Fluorometer
(use 2016 cal. values)
Tamara Frazer

Tuesday Aug 9, 2016 9:30am

Fumehood Temp: 17°C

FSU: 0.002

Solid Std: Low: 12.1 High 65.6 @ 9:45am.

Remove Samples from -20 freezer @ 9:30am

Start Analysis @ 10:30am. (A)

(B)

Blank #1

Fo: -0.0

Fa: -0.0

@ 12:30pm

Solid Std: @ 1:30pm

Low: 12.0 High: 65.4

Blank #2

Fo: -0.0

Fa: -0.0

@ 3pm

Finish Analysis @ 3:00pm

Fumehood Temp: 17°C @ 3pm

Final FSU: .000

Solid Std @ 3:00pm

Low: 12.1

High: 65.6

Finish Analysis @

12:30pm (A)

@

3:00pm (B)

STN	Event #	Sample ID	A or B	Volume filtered(L)	Flag	Analysis Date	Fo	Fa	Analysis Notes	time of analysis
Filter Blank				1.000						
ormula line										
SWL 2016-17										
NP-3	6	53	A	592		Aug 9, 2016	10.7	7.14		
NP-3	6	54	A	592		0	14.2	9.76		
NP-3	6	55	A	592			28.1	16.7		
NP-3	6	56	A	592			51.4	28.6		
NP-3	6	57	A	592			52.9	30.2		
NP-3	6	58	A	592			46.6	26.1		
NP-3	6	53	B	580	3		10.9	7.24		
NP-3	6	54	B	592			14.2	8.76		
NP-3	6	55	B	592	5	NOSAMPLE	36.5	20.6		
NP-3	6	56	B	452			51.5	29.2		
NP-3	6	57	B	592			46.5	26.0	filter 1/2 in Acetone	
NP-3	6	58	B	592			11.7	7.93		
NP-4	11	70	A	592			19.8	12.4		
NP-4	11	71	A	592			28.7	17.9		
NP-4	11	72	A	592			70.4	40.1		
NP-4	11	73	A	592			65.1	37.0		
NP-4	11	74	A	592			62.5	35.8		
NP-4	11	75	A	592			11.7	7.75		
NP-4	11	70	B	592			20.9	13.1		
NP-4	11	71	B	592			31.0	19.2		
NP-4	11	72	B	592			68.6	39.5		
NP-4	11	73	B	592			69.5	39.6		
NP-4	11	74	B	592			58.5	33.6		
NP-4	11	75	B	592	3		24.3	15.2		
NP-5	18	111	A	592			26.5	15.8		
NP-5	18	112	A	592			37.7	21.7		
NP-5	18	113	A	592			29.9	18.1		
NP-5	18	114	A	592			29.3	17.2		
NP-5	18	115	A	592			26.5	15.4		
NP-5	18	116	A	592			24.5	15.4		
NP-5	18	111	B	592			26.6	15.9		
NP-5	18	112	B	592			35.4	20.9		
NP-5	18	113	B	592						

STN	Event #	Sample ID	A or B	Volume filtered(L)	Flag	Analysis Date	Fo	Fa	Analysis Notes	time of analysis
NP-5	18	114	B	592		Aug 9, 2016	27.6.	16.6.		
NP-5	18	115	B	592			28.7	17.2		
NP-5	18	116	B	592			25.6	14.9		
NP-6	21	132	A	592			24.8	16.2	1/2 filtration failure.	
NP-6	21	133	A	592			22.7	13.0		
NP-6	21	134	A	592			19.4	10.9		
NP-6	21	135	A	592			19.2	10.6		
NP-6	21	136	A	592			18.2	9.94		
NP-6	21	137	A	592			18.5	10.2		
NP-6	21	132	B	592			25.1	16.5		
NP-6	21	133	B	592			23.2	13.5		
NP-6	21	134	B	592			21.9	12.4		
NP-6	21	135	B	592			18.8	10.6		
NP-6	21	136	B	592			17.0	9.42		
NP-6	21	137	B	592			18.0	10.0		
NP-8	24	147	A	592			5.37	3.45		
NP-8	24	148	A	592			13.3	8.38		
NP-8	24	149	A	592			25.9	16.0		
NP-8	24	150	A	592			24.2	13.6		
NP-8	24	151	A	592			15.8	9.65		
NP-8	24	153	A	592			13.5	7.45		
NP-8	24	147	B	592			5.24	3.42		
NP-8	24	148	B	592			13.3	8.36		
NP-8	24	149	B	592			25.7	15.9		
NP-8	24	150	B	592			24.9	14.2		
NP-8	24	151	B	592			17.2	9.46		
NP-8	24	153	B	592			14.4	7.92		
NP-10	32	189	A	380			6.17	3.65		
NP-10	32	190	A	190			8.61	5.03		
NP-10	32	191	A	340			15.7	8.91		
NP-10	32	192	A	325			9.39	5.24		
NP-10	32	193	A	270			12.9	7.15	1/2 filtration failure	
NP-10	32	195	A	318			16.8	9.28		
NP-10	32	189	B	592			8.48	4.95		
NP-10	32	190	B	592			25.1	14.8		
NP-10	32	191	B	592			25.2	14.3		

Using W.P. 10 AU Fluorometer
calibrated May/2016 - Tamara Frazer

STN	Event #	Sample ID	A or B	Volume filtered(L)	Flag	Analysis Date	Fo	Fa	Analysis Notes	time of analysis
NP-10	32	192	B	592			15.6	8.71		
NP-10	32	193	B	592			27.4	15.1		
NP-10	32	195	B	592			33.0	18.3		
NP-12	39	230	A	592			12.5	8.91		
NP-12	39	231	A	592			14.6	10.4		
NP-12	39	232	A	592			15.3	10.7		
NP-12	39	233	A	592			38.4	23.1		
NP-12	39	234	A	592			58.6	36.2		
NP-12	39	235	A	592			101.	59.9		
NP-12	39	230	B	592			11.7	8.40		
NP-12	39	231	B	592			14.1	9.70		
NP-12	39	232	B	592			16.2	10.9		
NP-12	39	233	B	592			41.1	25.3		
NP-12	39	234	B	592			58.6	35.9		
NP-12	39	235	B	592			102	60.4		

August 2, 2016
11:00 - remove sample from -20 freeze + place in fumehood.
12:00 - decant 10ml 90% acetone in scint. sample vials - both sets A + B.
13:00 - place samples in -20 Freeze.

- check -FSU = 0.002
Solid std = low: 12.0 High: 65.6
(Circ: Med.) for low reading.

Chlorophyll Analysis Log

Dates: 2-21 July 2016

Cruise ID: 2016-17

Program: C30/DBO

Ship: SWL

Analysts for sample collection and filtration at sea:

Analysts for extraction and fluorescence reading at IOS.

Local time

Date of Collection and Filtration	Station	EVENT East #	Sample #	Replicate	V FILTERED m(L)	V Subtracted (L)	Notes
4 Jul 2016	NP-3	6	57	A	590		Filtering 230-320 nm so 5 1/2 hrs after on deck
			57	B	593		
			56	A	593		
			55	A	592		
			53	A	592		
			52	B	592	5-20ml	Spilled 5-20ml
			56	B	593	140ml	Accidentally didn't empty
			54	B	594		
			54	A	593		
			58	B	594		
			55				
			55	B	X	X	Spilled. No sample
4 Jul 2016	NP-4	11	70	A	594		
Local			71	A	593		
4 Jul 2016			72	A	592		
			73	A	594		
			74	A	593		
			75	A	592		
			70	B	593		
			71	B	593		
			72	B	592		
			73	B	593		
			74	B	592		
			75	B	592		tiny leak during filtering
5 July	NP-6	18	111-116	A	592		
			111-116	B	592		

Chlorophyll Analysis Log

Dates: 2 -21 July 2016

Cruise ID: 2016-17

Diagram: C30/DBO

Ship: SWL

Analysts for sample collection and filtration at sea:

Analysts for extraction and fluorescence reading at IOS

Date of Collection and Filtration	Station	Cast #	Sample #	Replicate	V FILTERED m(L)	V Subtracted (L)	Notes
6 July	NP-7	21	134	A	592		no final rinse for the
			135	A			steril 2 hours BATH
			137-139		592		after sampling
		22	132-139	B	592		
6 July	NP-8	24	147-150	A	592		
			151, 153	A	"		
"	"	"	147-150	B	592		
			151, 153	B	"		
7 July	NP-10	32	195	A	318		
			193	A	270		only some of the
			192	A	325		bottle filtered due
			191	A	340		to mix up
			190	A	190 rem		thinking filter
			189	A	380		was clogged too
			188-195	B	592		slow when in fact
			(skip 194)				it was that the
8 July	NP-12	39	230-235	A	592		vacuum line was
			230-235	B	592		open

(A)

Start - 10:45 am

12:30 pm finish

53	54	55	56	57	58
CHL IOS	CHL IOS	CHL IOS	CHL IOS	CHL IOS	CHL IOS
NP-3	NP-3	NP-3	NP-3	NP-3	NP-3
592 6	593 6	594 6	595 6	596 6	597 6
2016-17	2016-17	2016-17	2016-17	2016-17	2016-17
Bot 12	Bot 13	Bot 14	Bot 15	Bot 16	Bot 17
A	A	A	A	A	A

Blank #1

Fo: -0.0

@ 12:30

Fa: -0.0

70	71	72	73	74	75
CHL IOS	CHL IOS	CHL IOS	CHL IOS	CHL IOS	CHL IOS
NP-4	NP-4	NP-4	NP-4	NP-4	NP-4
A 11	A 11	A 11	A 11	A 11	A 11
2016-17	2016-17	2016-17	2016-17	2016-17	2016-17
Bot 12	Bot 13	Bot 14	Bot 15	Bot 16	Bot 17
594ml	593ml	592ml	594	593ml	592ml

111	112	113	114	115	116
CHL IOS	CHL IOS	CHL IOS	CHL IOS	CHL IOS	CHL IOS
NP-6	NP-6	NP-6	NP-6	NP-6	NP-6
18	18	18	18	18	18
2016-17	2016-17	2016-17	2016-17	2016-17	2016-17
Bot 12	Bot 13	Bot 14	Bot 15	Bot 16	Bot 17
A	A	A	A	A	A

235 CHL IOS
NP-12 39
2016-17 Bot 16 A

132	133	134	135	136	137
CHL IOS	CHL IOS	CHL IOS	CHL IOS	CHL IOS	CHL IOS
NP-7	NP-7	NP-7	NP-7	NP-7	NP-7
21	21	21	21	21	21
2016-17	2016-17	2016-17	2016-17	2016-17	2016-17
Bot 16	Bot 17	Bot 18	Bot 19	Bot 20	Bot 21
A	A	A	A	A	A

234 CHL IOS
NP-12 39
2016-17 Bot 15 A
233 CHL IOS
NP-12 39
2016-17 Bot 14 A

153	154	149	150	152	154
CHL IOS	CHL IOS	CHL IOS	CHL IOS	CHL IOS	CHL IOS
NP-8	NP-8	NP-8	NP-8	NP-8	NP-8
24	24	24	24	24	24
2016-17	2016-17	2016-17	2016-17	2016-17	2016-17
Bot 16	Bot 17	Bot 12	Bot 13	Bot 15	Bot 17
10A	11A	A	A	A	A

232 CHL IOS
NP-12 39
2016-17 Bot 13 A

189	190	191	192	193	195
CHL IOS	CHL IOS	CHL IOS	CHL IOS	CHL IOS	CHL IOS
NP-10	NP-10	NP-10	NP-10	NP-10	NP-10
32	32	32	32	32	32
2016-17	2016-17	2016-17	2016-17	2016-17	2016-17
Bot 11	Bot 12	Bot 13	Bot 14	Bot 15	Bot 17
A	A	A	A	A	A

231 CHL IOS
NP-12 39
2016-17 Bot 12 A

230 CHL IOS
NP-12 39
2016-17 Bot 11 A

1/2 in acetone

(B)

Start: 1:30

3:00pm *Final*

Blank #2

Fo: -0.0

Fa: -0.0

@ 3pm

53
CHL IOS
NP-3
6
2016-17
Bot 12
B

54
CHL IOS
NP-3
6
2016-17
Bot 13
B

56
CHL IOS
NP-3
6
2016-17
Bot 15
B

57
CHL IOS
NP-3
6
2016-17
Bot 16
B

58
CHL IOS
NP-3
6
2016-17
Bot 17
B

70
CHL IOS
NP-4
11
2016-17
Bot 12
593ml

71
CHL IOS
NP-4
11
2016-17
Bot 13
593ml

72
CHL IOS
NP-4
11
2016-17
Bot 14
592ml

73
CHL IOS
NP-4
11
2016-17
Bot 15
593ml

74
CHL IOS
NP-4
11
2016-17
Bot 16
592ml

75
CHL IOS
NP-4
11
2016-17
Bot 17
590ml

111
CHL IOS
NP-6
18
2016-17
Bot 12
B

112
CHL IOS
NP-6
18
2016-17
Bot 13
B

113
CHL IOS
NP-6
18
2016-17
Bot 14
B

114
CHL IOS
NP-6
18
2016-17
Bot 15
B

115
CHL IOS
NP-6
18
2016-17
Bot 16
B

116
CHL IOS
NP-6
18
2016-17
Bot 17
B

235
CHL IOS
NP-12
39
2016-17
Bot 16
B

132
CHL IOS
NP-7
21
2016-17
Bot 16
B

133
CHL IOS
NP-7
21
2016-17
Bot 17
B

134
CHL IOS
NP-7
21
2016-17
Bot 18
B

135
CHL IOS
NP-7
21
2016-17
Bot 19
B

136
CHL IOS
NP-7
21
2016-17
Bot 20
B

137
CHL IOS
NP-7
21
2016-17
Bot 21
B

234
CHL IOS
NP-12
39
2016-17
Bot 15
B

153
CHL IOS
NP-8
24
2016-17
Bot 16
B

151
CHL IOS
NP-8
24
2016-17
Bot 14
B

149
CHL IOS
NP-8
24
2016-17
Bot 12
B

150
CHL IOS
NP-8
24
2016-17
Bot 13
B

152
CHL IOS
NP-8
24
2016-17
Bot 15
B

154
CHL IOS
NP-8
24
2016-17
Bot 17
B

233
CHL IOS
NP-12
39
2016-17
Bot 14
B

189
CHL IOS
NP-10
32
2016-17
Bot 11
B

190
CHL IOS
NP-10
32
2016-17
Bot 12
B

191
CHL IOS
NP-10
32
2016-17
Bot 13
B

192
CHL IOS
NP-10
32
2016-17
Bot 14
B

193
CHL IOS
NP-10
32
2016-17
Bot 15
B

195
CHL IOS
NP-10
32
2016-17
Bot 17
B

231
CHL IOS
NP-12
39
2016-17
Bot 11
B

230
CHL IOS
NP-12
39
2016-17
Bot 11
B