

AUTOSAL ANALYSIS LOGSHEET

① Frosti 9:30am

Cruise ID: <u>2017-20</u>	Cast/Station Name: _____	Analysis Date (dd mmm yyyy): <u>27 11 2017</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>WP 68572</u>	
Initial Standby Value: <u>24+6093</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard <u>Rs. 6.42</u>	Before: <u>1.99940</u> After: <u>1.99941</u> Notes: _____	K ₁₅ VALUE: <u>0.99970</u> Batch #: <u>P158</u> Batch Date: <u>March 25/18</u>
		Bath Temperature: <u>24</u> °C Sample Temperature: <u>21.99</u> °C Room Temperature: <u>22.31</u> °C Analyst: <u>Mary Steel</u>

Sample	Station Name	Depth (Nisk#)	Salinity 1	Salinity 2	Salinity 3	Comments
1	Kug 1	1	1.75715	1.75716		4x fl.
2	↓	2	1.64569	1.64568		
4	↓	4	1.36344	1.36344		
6	Kug 2	2	1.82135	1.82135		4 fl.
8	↓	4	1.78647	1.78648		
10	↓	6	1.72482	1.72482		
13	↓	9	1.53560	1.53561		
14	Kug 3	1	1.91682	1.91681		4 f.
15	↓	2	1.90006	1.90007		
A16	↓	1	1.88188	1.88189		
B16	↓	1	1.88188	1.88189		
17	↓	2	1.85410	1.85406	1.85407	
20	↓	5	1.81096	1.81097		
24	↓	9	1.69606	1.69604		
27	↓	12	1.56466	1.56465		
29	Kug 4	2	1.98504	1.98504		4 f.
30	↓	3	1.92382	1.92381		
31	↓	4	1.90739	1.90740		
33	↓	1	1.85542	1.85543		
34	↓	2	1.84127	1.84127		
35	↓	3	1.82447	1.82448		
36	↓	4	1.81243	1.81243		
38	↓	6	1.78581	1.78580		
39	↓	7	1.75111	1.75112		
40	↓	8	1.70151	1.70151		Final Standby Value:
41	↓	9	1.68929	1.68926		

Notes: _____

(2)

Water Properties Group

Institute of Ocean Sciences, Ocean Sciences Division

Frosti

AUTOSAL ANALYSIS LOGSHEET

10:25am

Cruise ID: <u>2017-20</u>	Cast/Station Name: <u>Frosti</u>	Analysis Date (dd mmm yyyy):
Autosal Model: <u>8400B</u>	Serial Number: <u>68572</u>	<u>27</u> <u>11</u> <u>2017</u>
Initial Standby Value: <u>24 + 6094</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard	Before: _____ After: _____ Notes: _____	K ₁₅ VALUE: <u>0.99970</u> Batch #: <u>P158</u> Batch Date: _____
	Bath Temperature: <u>24</u> °C	Sample Temperature: <u>21.99</u> °C
	Room Temperature: <u>22.6</u> °C	Analyst: <u>Mary Steel</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
42	Kug4	10	1.62169	1.62169		
B43		11	1.56962	1.56962		
A43		11	1.56956	1.56956		
44	Kug5	1	1.99183	1.99183		48
45		2	1.98188	1.98189		
46		3	1.93738	1.93738		
47		4	1.90437	1.90438		
48		5	1.89584	1.89584		
49		1	1.86130	1.86130		
50		2	1.84365	1.84366		
51		3	1.83058	1.83062	1.83066	
52		4	1.81425	1.81425		
54		6	1.77993	1.77993		
55		7	1.74189	1.74189		
56		8	1.70361	1.70362		
A57		9	1.67499	1.67499		
B57		9	1.67504	1.67504		
58		10	1.57292	1.57291		
59		11	1.57139	1.57139		
60	Kug6	1	1.99315	1.99317		48
a61		2	1.99205	1.99205		
b61		2	1.99206	1.99209	1.99212	
62		3	1.98622	1.98624		
63		4	1.96486	1.96486		
64		5	1.92734	1.92734		Final Standby Value:
65		6	1.90079	1.90077		

Notes: _____

(3)

Water Properties Group

Institute of Ocean Sciences, Ocean Sciences Division

Frosti

AUTOSAL ANALYSIS LOGSHEET

11:30 am

Cruise ID: <u>2017-20</u>	Cast/Station Name: _____	Analysis Date (dd mmm yyyy): <u>27 11 2017</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>WP 68572</u>	
Initial Standby Value: <u>24.6094</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard 	Before: _____ After: _____ Notes: _____	K ₁₅ VALUE: <u>0.99970</u> Batch #: <u>P158</u> Batch Date: _____
		Bath Temperature: <u>24</u> °C Sample Temperature: <u>22.06</u> °C Room Temperature: <u>22.67</u> °C Analyst: <u>Mary Steel</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
66	Kug 6	1	1.85022	1.85023		4f
69		4	1.77933	1.77932		
71		6	1.76534	1.76535		
72		7	1.74545	1.74550	1.74550	
74		9	1.69079	1.69078		
76	↓	11	1.57095	1.57094		
77	Kug 7	1	1.99404	1.99406		4f
79		3	1.99189	1.99194	1.99193	
81		5	1.96395	1.96396		
83		7	1.90768	1.90772	1.90769	
A84		1	1.85130	1.85128		4f
B84		1	1.85126	1.85126		
85		2	1.83009	1.83008		
88		5	1.77895	1.77899		
89		6	1.75591	1.75591		
92		9	1.67966	1.67966		Bubbles in cell
94	↓	11	1.57382	1.57382		
95	CPB-01	1	1.76654	1.76655		4f
96		2	1.71607	1.71607		
99	↓	5	1.64354	1.64358	1.64359	
100	CPB-02	1	1.85938	1.85937		4f
101		2	1.84160	1.84160		
a 102		3	1.82112	1.82113		
b 102		3	1.82114	1.82115		
103		4	1.81575	1.81575		Final Standby Value:
104	↓	5	1.80779	1.80779		

Notes: _____

(4)

DWR

Water Properties Group

Institute of Ocean Sciences, Ocean Sciences Division

Frosti

AUTOSAL ANALYSIS LOGSHEET

12:25 pm

Cruise ID: <u>2017-20</u>	Cast/Station Name: _____	Analysis Date (dd mmm yyyy): <u>27 11 2017</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>WP 68572</u>	
Initial Standby Value: <u>24 + 6094</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard	Before: _____ After: _____ Notes: _____	K ₁₅ VALUE: <u>0.99970</u> Batch #: <u>P158</u> Batch Date: _____
		Bath Temperature: <u>24</u> °C Sample Temperature: <u>21.81</u> °C Room Temperature: <u>22.5</u> °C Analyst: <u>Mary Steel</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
105	CPB-02	6	1.78830	1.78831		
107		8	1.75846	1.75846		
108		9	1.72284	1.72286		
109		10	1.69898	1.69898		
110		11	1.66244	1.66244		
111		12	1.63184	1.63184		
112	CPB-03	1	1.95486	1.95485		4f
113		2	1.92831	1.92832		
114		3	1.90403	1.90405		
a 116		5	1.85845	1.85845		
b 116		5	1.85813	1.85813		
117		1	1.84044	1.84045		4f
119		3	1.80242	1.80242		
122		6	1.77979	1.77979		
125		9	1.70377	1.70378		
127		11	1.57784	1.57784		
128	CPB-06	1	1.98939	1.98940		4f
129		2	1.93774	1.93774		
130		3	1.90659	1.90659		
132		5	1.85884	1.85885		
a 133		1	1.83374	1.83374		4f
b 133		1	1.83380	1.83381		
135		3	1.80540	1.80540		
138		6	1.77688	1.77689		
141		9	1.69932	1.69932		Final Standby Value:
143		11	1.60159	1.60158		

Notes: _____

(5)

Water Properties Group

Institute of Ocean Sciences, Ocean Sciences Division

Frosti

AUTOSAL ANALYSIS LOGSHEET

1:23 pm.

Cruise ID: <u>2017-20</u>		Cast/Station Name: _____		Analysis Date (dd mmm yyyy):	
Autosal Model: <u>8400B</u>		Serial Number: <u>WP 68572</u>		<u>27 11 2017</u>	
Initial Standby Value: <u>24+6094</u>		Ratio After Standardization: _____			
Cell Standardization (Daily)		Standardization Values:		Standard Info.	
Conductivity must be ± 0.00001 compared to Standard 		Before: _____		K ₁₅ VALUE: <u>0.999</u>	
		After: <u>Same</u>		Batch #: <u>Same</u>	
		Notes: _____		Batch Date: _____	
				Bath Temperature: <u>24</u> °C	
				Sample Temperature: <u>22.10</u> °C	
				Room Temperature: <u>22.64</u> °C	
				Analyst: <u>Mary Steel</u>	

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
144	CPB-07	1	1.99087	1.99087		45
a145		2	1.98588	1.98588		
b145		2	1.98596	1.98597		
146		3	1.93871	1.93871		
147		4	1.90584	1.90583		
149		6	1.86047	1.86048		
150		1	1.83348	1.83346		45
152		3	1.78746	1.78745		
155		6	1.75401	1.75400		
158		9	1.70761	1.70761		
160		11	1.62434	1.62434		
161	CPB-08	1	1.98825	1.98825		45
162		2	1.98385	1.98385		
163		3	1.94012	1.94012		
164		4	1.90446	1.90447		
165		5	1.89766	1.89767		
166		6	1.86117	1.86116		
167	CPB-08	1	1.83870	1.83872		45 Break Time
168		2	1.82626	1.82627		
169		3	1.81445	1.81443		
170		4	1.79167	1.79167		
173		7	1.74738	1.74738		
174		8	1.72006	1.72006		
175		9	1.69252	1.69251		
a176		10	1.61289	1.61289		Final Standby Value:
b176		10	1.61280	1.61280		

Notes: _____

Frosti

AUTOSAL ANALYSIS LOGSHEET

2:30 pm

Cruise ID: <u>2017-20</u>		Cast/Station Name: _____		Analysis Date (dd mmm yyyy): <u>27 11 2017</u>	
Autosal Model: <u>8400B</u>		Serial Number: <u>WP 68572</u>			
Initial Standby Value: _____		Ratio After Standardization: _____			
Cell Standardization (Daily)		Standardization Values:		Standard Info.	
Conductivity must be ± 0.00001 compared to Standard		Before: _____		K ₁₅ VALUE: <u>0.999</u>	
		After: <u>SW</u>		Batch #: <u>SW</u>	
		Notes: _____		Batch Date: _____	
				Bath Temperature: <u>24</u> °C	
				Sample Temperature: <u>22.5</u> °C	
				Room Temperature: <u>22.8</u> °C	
				Analyst: <u>Mary Steel</u>	

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
177	CPB-8	11	1.58022	1.58022		
178	CPB-9	1	1.98332	1.98334		4f
180		3	1.96072	1.96072		
182		5	1.90221	1.90222		
183		6	1.87923	1.87922		
184		1	1.98081	1.98081		4f
185		2	1.86211	1.86211		
188		5	1.81340	1.81340		
193		10	1.70345	1.70345		
195		12	1.54555	1.54558	1.54557	
196	CPB-10	1	1.93427	1.93426		4f
197		2	1.92476	1.92477		
197		2	1.92476	1.92476		
198		3	1.90294	1.90292		
199		4	1.87108	1.87109		
200		1	1.85728	1.85729		4f
203		4	1.80390	1.80390		
207		8	1.71549	1.71549		
209		10	1.66856	1.66856		
210	CPB-11	1	1.92556	1.92557		4f (Bubbles sticking to inside Bottle)
211		2	1.90435	1.90434		
212		3	1.87062	1.87062		
213	CPB-11	2	1.85570	1.85571		
216		5	1.83162	1.83168	1.83168	
218		7	1.78454	1.78455		Final Standby Value:
218		7	1.78454	1.78455		

Notes:

① DWR = 1.99782 1.99782 = 34.9572 SD.0002 4 flushes

② DWR = 1.99781 1.99782 = 34.9572 SD.0001 4 flushes

AUTOSAL ANALYSIS LOGSHEET

332 pm

Cruise ID: <u>2017-20</u>		Cast/Station Name: _____	Analysis Date (dd mmm yyyy): <u>27</u> <u>11</u> <u>2017</u>
Autosal Model: <u>8400B</u>		Serial Number: <u>68572</u>	
Initial Standby Value: <u>24 + 6094</u>		Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.	Bath Temperature: <u>24</u> °C
Conductivity must be ± 0.00001	Before: _____	K ₁₅ VALUE: <u>0.999</u>	Sample Temperature: <u>22.8</u> °C
compared to Standard	After: _____	Batch #: _____	Room Temperature: <u>22.9</u> °C
	Notes: _____	Batch Date: _____	Analyst: <u>Mary Stee O.</u>

[illegible]

Notes: Zero = -0.00001 RS: 6.42

①

AUTOSAL ANALYSIS LOGSHEET

Start:
9:25am

Cruise ID: <u>2017-20</u>	Cast/Station-Name: <u>Frosti</u>	Analysis Date (dd mmm yyyy): <u>28 11 2017</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>68572</u>	
Initial Standby Value: <u>24+6093</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard	Before: <u>1.99940</u> After: <u>1.99941</u> Notes: <u>+0.00001</u>	K ₁₅ VALUE: <u>0.999 70</u> Batch #: <u>9158</u> Batch Date: <u>March 25/18</u>
RS = 6.42		Bath Temperature: <u>24</u> °C Sample Temperature: <u>22.06</u> °C Room Temperature: <u>22.8</u> °C Analyst: <u>Mary Steel</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
236	FKN 05	4	1.75997	1.75998		4f.
239		7	1.73259	1.73259		
239		7	1.73277	1.73276		
240		8	1.71507	1.71508		
241		9	1.64191	1.64191		
242		10	1.64161	1.64161		
243	FKN-04	1	1.92423	1.92424		4f.
244		2	1.90501	1.90500		
245		3	1.85424	1.85425		
247		2	1.83185	1.83185		4f.
247		2	1.83181	1.83182		
250		5	1.78595	1.78596		
252		7	1.73778	1.73779		
255		10	1.72550	1.72550		
257		12	1.63982	1.63982		
260	FKN-03	1	1.97233	1.97233		4f.
261		2	1.90375	1.90374		
263		4	1.86535	1.86535		
264		1	1.84631	1.84631		4f.
267		4	1.80958	1.80959		
269		6	1.75391	1.75390		
272		9	1.73140	1.73140		
274		11	1.63773	1.63773		
276	FKN-02	1	1.90896	1.90896		4f.
277		2	1.90180	1.90179		Final Standby Value:
277		2	1.90181	1.90182		

Notes: _____

AUTOSAL ANALYSIS LOGSHEET

10:19am

Cruise ID: <u>2017-20</u>	Cast/Station Name: <u>Frosti</u>	Analysis Date (dd mmm yyyy): <u>28 11 2017</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>68572</u>	

② Initial Standby Value: 24+6094 Ratio After Standardization: same

Cell Standardization (Daily)	Standardization Values:	Standard Info.	Bath Temperature: <u>24</u> °C
Conductivity must be ± 0.00001 compared to Standard	Before: _____ After: <u>same</u> Notes: _____	K ₁₅ VALUE: 0.999 Batch #: <u>same</u> Batch Date: _____	Sample Temperature: <u>22.3</u> °C Room Temperature: <u>22.9</u> °C Analyst: <u>Mary Steel</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
278	FKN-02	3	1.88084	1.88084		
279		1	1.87796	1.87795		4f
280		2	1.87665	1.87666		
281		3	1.86835	1.86836		
282		4	1.84440	1.84440		
283		5	1.82380	1.82381		
284		6	1.81310	1.81309		
285		7	1.79254	1.79255		
286		8	1.75508	1.75507		
287		9	1.64268	1.64269		
291	FKN-01	1	1.86127	1.86126		4f
292		2	1.86009	1.86009		
292		2	1.86012	1.86011		
293		3	1.85069	1.85069		
294		4	1.82630	1.82630		
295		5	1.80008	1.80008		
296		6	1.71634	1.71633		
299	AMG-03	1	1.98800	1.98800		4f
300		2	1.98777	1.98776		
301		3	1.98425	1.98426		
302		4	1.96172	1.96173		
304		6	1.90496	1.90495		
305		7	1.88276	1.88276		
306		1	1.86605	1.86605		4f
308		3	1.85163	1.85164		
309		4	1.83912	1.83912		Final Standby Value: <u>6094</u>

Notes: DWR: 1.99768 1.99769 34.9543 sd 0.0001 4 flushes

AUTOSAL ANALYSIS LOGSHEET

11:25 am

Cruise ID: <u>2017-20</u>	Cast/Station Name: <u>Frosti</u>	Analysis Date (dd mmm yyyy): <u>28 11 2017</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>68572 WP</u>	
Initial Standby Value: <u>24+6094</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard	Before: _____ After: _____ Notes: _____	K ₁₅ VALUE: <u>0.999</u> Batch #: _____ Batch Date: _____
		Bath Temperature: <u>24</u> °C Sample Temperature: <u>22.5</u> °C Room Temperature: <u>23.0</u> °C Analyst: <u>Mary Steel</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
310	AMG-03	5	1.66536	1.66536		
314		9	1.81774	1.81775		
316		11	1.64245	1.64245		
316		11	1.64241	1.64242		
318	AMG-02	1	1.98683	1.98685		4f
319		2	1.98466	1.98466		
319		2	1.98463	1.98465		
320		3	1.95515	1.95516		
321		4	1.90206	1.90205		
322		5	1.87814	1.87815		
323		1	1.85882	1.85882		4f
324		2	1.85086	1.85087		
326		4	1.82138	1.82137		
328		6	1.77761	1.77761		
331		9	1.73240	1.73241		
333		11	1.63918	1.63918		
335	AMG-01	1	1.94825	1.94825		4f
336		2	1.90306	1.90306		
336		2	1.90307	1.90307		
337		3	1.86726	1.86724		
338		1	1.84945	1.84946		
341		4	1.82532	1.82532		
342		5	1.77723	1.77723		
346		9	1.71936	1.71935		
348		11	1.64229	1.64231	1.64232	Final Standby Value:
350	BPT-01	1	1.84444	1.84447	4f	

Notes: stable machine smooth sailing

AUTOSAL ANALYSIS LOGSHEET

12:14 pm

Cruise ID: <u>2017-20</u>	Cast/Station Name: <u>Frosti</u>	Analysis Date (dd mmm yyyy): <u>28 11 2017</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>68572 WP</u>	
Initial Standby Value: <u>24+6094</u>	Ratio After Standardization: _____	
Cell Standardization (Daily) Conductivity must be ± 0.00001 compared to Standard	Standardization Values: Before: _____ After: _____ Notes: _____	Standard Info. K ₁₅ VALUE: <u>0.999</u> Batch #: _____ Batch Date: _____
		Bath Temperature: <u>24</u> °C Sample Temperature: <u>22.3</u> °C Room Temperature: <u>22.89</u> °C Analyst: <u>Mary Steel</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
352	BPT-01	3	1.83447	1.83449		
353		4	1.81999	1.81999		
355		6	1.75960	1.75961		
358		9	1.74034	1.74041	1.74041	
360		11	1.65169	1.65170		
362	BPT-02	1	1.88405	1.88404		4f. insert not in all the way
363		2	1.87532	1.87533		
364		1	1.85375	1.85375		4f.
367		4	1.82627	1.82627		
369		6	1.80200	1.80202		
372		9	1.75444	1.75443		
374		11	1.65866	1.65866		
376	BPT-03	1	1.77474	1.77475		4f
377		2	1.75888	1.75888		
378		3	1.73051	1.73055	1.73057	
379		4	1.66221	1.66221		
380		5	1.63212	1.63212		
381		6	1.63294	1.63294		
383	DUS-10	1	1.86944	1.86944		4f.
384		2	1.86186	1.86186		
387		5	1.84517	1.84518		
388		6	1.82835	1.82835		
391		9	1.75854	1.75855		
393		11	1.63867	1.63866		
395	DUS-09	1	1.93088	1.93087		4f Final Standby Value:
396		2	1.90212	1.90213		6094 @ 1:08 pm

Notes: PWR 1.99779 1.99779 34.9568 SD 0.0001 4 flushes

AUTOSAL ANALYSIS LOGSHEET

1:57 pm

Cruise ID: <u>2017-20</u>	Cast/Station Name: <u>Frosti</u>	Analysis Date (dd mmm yyyy): <u>28 11 2017</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>68572 WP</u>	
Initial Standby Value: <u>6094</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard	Before: _____ After: _____ Notes: _____	K ₁₅ VALUE: 0.999 _____ Batch #: _____ Batch Date: _____
	Bath Temperature: <u>24</u> °C Sample Temperature: <u>22.97</u> °C Room Temperature: <u>23.12</u> °C Analyst: <u>Mary Sted</u>	

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
397	DUS-09	3	1.87772	1.87772		
398		1	1.86388	1.86388		4f
401		4	1.81800	1.81800		
406		8	1.73409	1.73409		
409		11	1.68452	1.68451		
410	DUS-08	1	1.98476	1.98476		4f
411		2	1.98222	1.98222		
411		2	1.98227	1.98227		
412		3	1.95341	1.95340		
414		5	1.90425	1.90426		
415		6	1.87550	1.87551		
416		1	1.86383	1.86383		4f
419*		4	1.83334	1.83334		
420		5	1.81376	1.81376		
424		9	1.73418	1.73419		
426*		11	1.66565	1.66566		
417	DUS-07	1	1.98768	1.98769		4f
417		1	1.98773	1.98776	1.98775	
418		2	1.98262	1.98263		
419*		3	1.94768	1.94767		
421		5	1.90503	1.90503		
422		6	1.87393	1.87392		
423		1	1.86104	1.86104		4f
426**		4	1.83459	1.83459		
427		5	1.81083	1.81084		Final Standby Value:
431		9	1.74330	1.74330		

Notes: * 419 used twice DUS-08 + DUS-07
 * 426 " " DUS-08 + DUS-07

6

AUTOSAL ANALYSIS LOGSHEET

2:50pm

Cruise ID: <u>2017-20</u>	Cast/Station Name: <u>Frosti</u>	Analysis Date (dd mmm yyyy): <u>28 11 2017</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>68572 WP.</u>	
Initial Standby Value: <u>24+6094</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard	Before: _____	K ₁₅ VALUE: <u>0.999</u>
	After: _____	Batch #: _____
	Notes: _____	Batch Date: _____
		Bath Temperature: <u>24</u> °C
		Sample Temperature: <u>22.97</u> °C
		Room Temperature: <u>23.12</u> °C
		Analyst: <u>Mary Steel</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
433	DUS-07	11	1.65887	1.65888		
435	DUS-06	1	1.98038	1.98039		4f
436		2	1.94841	1.94842		
437		3	1.90392	1.90393		
438		4	1.87225	1.87226		
442	DUS-06	4	1.81885	1.81884		4f
447		9	1.74129	1.74130		
449		11	1.66131	1.66131		
450	DUS-05	1	1.98776	1.98776		4f
451		2	1.98425	1.98425		
451		2	1.98425	1.98425		
452		3	1.95543	1.95543		
453		4	1.90288	1.90291	1.90291	HM bottles
454		5	1.86920	1.86921		
455		1	1.85164	1.85164		4f
458		4	1.81704	1.81702		
459		5	1.79609	1.79609		
463		9	1.72848	1.72859	1.72850	forgot to shake
465	✓	11	1.66163	1.66163		
467	DUS-04	1	1.98721	1.98720		4f
468		2	1.98555	1.98556		
469		3	1.95970	1.95971		
469		3	1.95875	1.95875		
470		4	1.90634	1.90634		
471		5	1.87693	1.87694		
472		1	1.86325	1.86325		

Notes: DWR 1.99779 1.99780

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2017-20</u>	Cast/Station Name: <u>Frosti</u>	Analysis Date (dd mmm yyyy): <u>28 11 2017</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>68572 WP</u>	
Initial Standby Value: <u>6094</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard	Before: _____ After: _____ Notes: _____	K ₁₅ VALUE: 0.999 _____ Batch #: _____ Batch Date: _____
		Bath Temperature: <u>24</u> °C Sample Temperature: <u>21.95</u> °C Room Temperature: <u>22.74</u> °C Analyst: <u>Mary Steel</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
475	DUS-04	4	1.83396	1.83396		* HM bottles
476		5	1.81278	1.81279		
480		9	1.74536	1.74536		
482		11	1.67316	1.67317		
483	DUS-03	1	1.97229	1.97228		4f.
484		2	1.93286	1.93287		
485		3	1.90281	1.90282		
486		4	1.88394	1.88395		
487		1	1.86874	1.86873		4f.
490		4	1.84588	1.84588		
492		6	1.81484	1.81484		
495		9	1.75823	1.75823		
497		11	1.69205	1.69206		
499	MTI-03	1	1.88240	1.88239		4f.
501		3	1.85920	1.85920		
502		1	1.83490	1.83491		
505		4	1.79536	1.79536		
506		5	1.76866	1.76868		
510		9	1.63454	1.63453		
512		11	1.62622	1.62623		
514	MTI-04	1	1.90716	1.90716		4f.
515		2	1.90515	1.90513		
516		3	1.86895	1.86895		
520		4	1.78443	1.78443		
525		9	1.63525	1.63524		Final Standby Value:
527		11	1.62240	1.62240		<u>6094</u>

Notes: _____

(8)

AUTOSAL ANALYSIS LOGSHEET

4:37 pm

Cruise ID: <u>2017-20</u>	Cast/Station Name: <u>Frosti</u>	Analysis Date (dd mmm yyyy):
Autosal Model: <u>8400B</u>	Serial Number: <u>68572 WP</u>	<u>28</u> <u>11</u> <u>2017</u>
Initial Standby Value: <u>24+6094</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard	Before: _____ After: _____ Notes: _____	K ₁₅ VALUE: <u>0.999</u> Batch #: _____ Batch Date: _____
		Bath Temperature: <u>24</u> °C Sample Temperature: <u>22.0</u> °C * Room Temperature: <u>22.93</u> °C Analyst: <u>Mary Steel</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
529	MT1-06	1	1.96991	1.96991		4f * HM bottle
530		2	1.90921	1.90921		
532		3	1.86434	1.86436		
533		1	1.83325	1.83325		
536		4	1.76396	1.76406	1.76406	
541		9	1.64595	1.64602	1.64603	
543		11	1.61587	1.61587		
545	MT1-05	1	1.97096	1.97095		4f
546		2	1.95937	1.95937		
547		3	1.90599	1.90600		
548		4	1.87777	1.87778		
552		4	1.78894	1.78896		
557		9	1.61756	1.61756		
559		11	1.61581	1.61582		
561	MT1-02	1	1.96374	1.96376		4f
562		2	1.95977	1.95976		
563		3	1.90382	1.90382		
564		4	1.87248	1.87249		
568		4	1.78293	1.78294		
573		9	1.63849	1.63859	1.63860	
575		11	1.62228	1.62227		
577	MT1-01	1	1.90997	1.90999		4f
578		2	1.90276	1.90276		
578		2	1.90279	1.90278		
579		3	1.88002	1.88003		
580		1	1.86799	1.86801		Final Standby Value: 4f 6094 @ 5:40 pm
583		4	1.82601	1.82608		
588		9	1.70908	1.70907		
DWR			1.99778	1.99778	1.99780	4 flushes