K_{15}Y2 = 1.99974 Submitted 02 Aug 2019 1 of 2

Water Properties Group Institute of Ocean Sciences, Ocean Sciences Division

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: 2019-007	Cast/Station Name: Various	Analysis Date (dd | mmm | yyyy): 30 | July | 2019
Autosal Model: 8400B	Serial Number: 68572	
Initial Standby Value: 24+6007	Ratio After Standardization: 24+6011	

Cell Standaridization (Daily)	Standardization Values:	Standard Info.	
Conductivity must be ± 0.00001 compared to Standard	Before: 5.12	K_{15} VALUE: 0.999 87	Bath Temperature: 24 °C
	After: 5.16	Batch #: P161	Sample Temperature: 22.3 °C
	Notes:	Batch Date: 03 May 2020	Room Temperature: 22.3 °C
			Analyst: JS

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
P161	Calibration		1.99969	1.999		Not accepted
			↳ Adjusted to 1.99974			
			1.99974	→	→	Accepted
DWR			1.97900	1.97899	1.97899	
DWR			1.97890	1.97891	1.97892	
DWR			1.97891	1.97891	1.97892	

Water Properties Group — Institute of Ocean Sciences, Ocean Sciences Division

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: 2019 - 014	Cast/Station Name: Various	Analysis Date (dd | mmm | yyyy): 31 | Jul | 2019
Autosal Model: 8400B	Serial Number: 68572	
Initial Standby Value: 24 + 6009/10	Ratio After Standardization:	

Cell Standaridization (Daily)	Standardization Values:	Standard Info.	
Conductivity must be ± 0.00001 compared to Standard	Before:	K_{15} VALUE: 0.999	Bath Temperature: 24 °C
	After:	Batch #:	Sample Temperature: 23.0 °C
	Notes:	Batch Date:	Room Temperature: 23.0 °C
			Analyst: JS

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
DWR			1.98261	1.98263	1.98264	
158B	ES15		1.97500	1.97499		
41A	ES06		1.97499	1.97500		4th: 1.97214
7A	ES03		~~1.971~~	1.97205	1.97212	NO stopper! Deleted reading 1 & 2.
139B	ES21		1.96913	1.96911		
42	ES06		1.97204	1.97206		
3	ES03		1.98102	1.98101		
157	ES15		1.97889	1.97889		
6	ES03		1.97196	1.97195		
24	ES01		1.96358	1.96358		4th: 1.97784
5	ES03		1.97784	1.97788	1.97786	Exp No stopper! Deleted 1st 2 readings
40	ES06		1.97919	1.97919		
156	ES15		1.98093	1.98095	1.98095	Deleted 1st reading.
43	ES06		1.96997	1.96997		Extra flush 4 bubble.
1	ES03		1.98233	1.98233		No stopper!
44	ES06		1.96762	1.96762		
38	ES06		1.97973	1.97972		
7B	ES03		1.96974	1.96974		
41B	ES06		1.97503	1.97504		
4	ES03		1.97999	1.97898	1.97898	
158A	ES15		1.97499	1.97498		
8	ES03		1.96802	1.96802		
155	ES15		1.98126	1.98129	1.98126	
2	ES03		1.98205	1.98204	1.98264	Deleted 2nd reading
45	ES06		1.96534	1.96535		Final Standby Value:
DWR			1.98265	1.98266	1.98265	24 + 6009/10

Notes:

Water Properties Group Institute of Ocean Sciences, Ocean Sciences Division

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: 2019-014	Cast/Station Name: Various	Analysis Date (dd | mmm | yyyy): 31 | Jul | 2019
Autosal Model: 8400B	Serial Number: 68572	
Initial Standby Value: 24 + 6009/10	Ratio After Standardization:	

Cell Standaridization (Daily)	Standardization Values:	Standard Info.	
Conductivity must be ± 0.00001 compared to Standard	Before:	K_{15} VALUE: 0.999	Bath Temperature: 24 °C
	After:	Batch #:	Sample Temperature: 23.0 °C
	Notes:	Batch Date:	Room Temperature: 23.0 °C
			Analyst: JS

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
DWR			1.98264	1.98265	1.98265	
234	ES10		1.98213	1.98213		
698	UN06		1.98157	1.98156		
238B	ES10		1.97485	1.97486		
302	SP02		1.96918	1.96817		
237	ES10		1.97880	1.97880		
274	UN06		1.96796	1.96797		Extra flush - bubble
278B	UN06		1.97489	1.97488	1.97489	
270	UN06		1.97912	1.97913		
284	SP01		1.96311	1.96311		
299A	SP02		1.97478	1.97479		
235	ES10		1.98210	1.98209		
256	UN01		1.96297	1.96299	1.96297	Deleted 2nd reading
297	SP02		1.98099	1.98100		
269	UN06		1.98109	1.98109		
239	ES10		1.97163	1.97165	1.97166	Deleted 1st reading.
301	SP02		1.96993	1.96991		
273	UN06		1.97001	1.97002		
300	SP02		1.97237	1.97236		
278A	UN06		1.97494	1.97494		
236	ES10		1.98100	1.98114	1.98113	
272	UN06		1.97209	1.97209		
240	ES10		1.96967	1.96966		
241	ES10		1.96773	1.96774		
238A	ES10		1.97483	1.97483		Final Standby Value:
DWR			1.98265	1.98265	1.98265	24 + 6010

Notes:

K_{15} = 1.99974

Water Properties Group — Institute of Ocean Sciences, Ocean Sciences Division

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: 2019-014	Cast/Station Name: Various	Analysis Date (dd | mmm | yyyy): 1 | Aug | 2019
Autosal Model: 8400B	Serial Number: 68572	
Initial Standby Value: 24 + 6010	Ratio After Standardization: 24 + 6010	

Cell Standaridization (Daily)	Standardization Values:	Standard Info.	
Conductivity must be ± 0.00001 compared to Standard →	Before: 5.16	K_{15} VALUE: 0.999 87	Bath Temperature: 24 °C
	After: 5.16	Batch #: P161	Sample Temperature: 23.0 °C
	Notes:	Batch Date: 3 May 2020	Room Temperature: 23.0 °C
			Analyst: JS

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
Calibration	P161		1.99972	1.99973		Accepted.
DWR			1.98267	1.98268	1.98267	Deleted 1st reading.
DWR			1.98270	1.98267	1.98269	Deleted 2nd reading.
DWR			1.98267	1.98268	1.98267	
DWR			1.98269	1.98269	1.98268	
DWR			1.98266	1.98267	1.98266	
199	ES13		1.97122	1.97122		
197	ES13		1.97902	1.97900		
161	ES15		1.96927	1.96926		No stopper + extra flush
217	VN10		1.97019	1.97019		
215	VN10		1.97765	1.97765		
175A	ES24		1.98193	1.98194		
218B	VN10		1.96857	1.96856		
181	ES24		1.96923	1.96922		
177	ES24		1.98105	1.98106		
160	ES15		1.96983	1.96982		
232	VN10		1.97492	1.97492		
182	ES24		1.96852	1.96853		
196	ES13		1.98023	1.98023		
179	ES24		1.97458	1.97459		
178	ES24		1.97893	1.97894		
198A	ES13		1.97467	1.97467		
216	VN10		1.97201	1.97204	1.97205	Deleted 2nd Read.
159	ES15		1.97233	1.97236	1.97233	" "
180	ES24		1.97244	1.97243		Final Standby Value:
DWR			1.98267	1.98267	1.98268	24 + 6010

Notes: _____

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AUTOSAL ANALYSIS LOGSHEET

Cruise ID: 2019-014	Cast/Station Name: various	Analysis Date (dd | mmm | yyyy): 1 | Aug | 2019
Autosal Model: 8400B	Serial Number: 68572	
Initial Standby Value: 24 + 6010	Ratio After Standardization:	

Cell Standaridization (Daily)	Standardization Values:	Standard Info.	
Conductivity must be ± 0.00001 compared to Standard	Before:	K_{15} VALUE: 0.999	Bath Temperature: 24 °C
	After:	Batch #:	Sample Temperature: 22.8 °C
	Notes:	Batch Date:	Room Temperature: 22.8 °C
			Analyst: JS

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
200	ES13		1.96977	1.96978		
175B	ES24		1.98205	1.98205		
218A	UN10		1.96856	1.96857		
198B	ES13		1.97459	1.97459		Cap loose.
176	ES24		1.98204	1.98207	1.98205	Deleted 1st reading.
116	ES23		1.97901	1.97900		
62	ES07		1.97890	1.97890		
118	ES23		1.97232	1.97233		
140	ES21		1.96757	1.96757		
64	ES07		1.97109	1.97109		
99	ES17		1.96766	1.96767		
84	ES016		1.96802	1.96803		
135	ES21		1.97893	1.97892	1.97895	Deleted 3rd readl.
137	ES21		1.97485	1.97485	1.97488	" "
139A	ES21		1.96913	1.96912		
65	ES07		1.96938	1.96941	1.96941	Deleted 1st read.
58	ES07		1.98188	1.98188		
63B	ES07		1.97455	1.97455		
117	ES23		1.97570	1.97510		
114	ES23		1.98089	1.98090		
119	ES23		1.97015	1.97014		
138	ES21		1.97153	1.97153		
63A	ES07		1.97454	1.97454		
83	ES016		1.97434	1.97434		
120	ES23		1.96839	1.96837		Final Standby Value:
DWR			1.98266	1.98266	1.98266	24 + 6010

Notes: Deleted.

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AUTOSAL ANALYSIS LOGSHEET

Cruise ID: 2014-014	Cast/Station Name: Vortons	Analysis Date (dd | mmm | yyyy): 1 | Aug | 2019
Autosal Model: 8400B	Serial Number: 68572	
Initial Standby Value: 24+6010	Ratio After Standardization:	

Cell Standaridization (Daily)	Standardization Values:	Standard Info.	
Conductivity must be ± 0.00001 compared to Standard	Before:	K_{15} VALUE: 0.999	Bath Temperature: 24 °C
	After:	Batch #:	Sample Temperature: 22.9 °C
	Notes:	Batch Date:	Room Temperature: 22.9 °C
			Analyst: JS

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
99	ES17		1.97730	1.97732	1.97731	
136	ES21		1.97899	1.97898		
61	ES07		1.98122	1.98123		
201	ES13		1.96830	1.96830		
DWR			1.98267	1.98265	1.98265	
Calibration		02 August 2019				K_{15} x 2 = 1.99966
						Lab = 22.6°C
P162	Cal.	B	1.99962 (b rejected)	1.99966 (2 Accepted)		stdby # = 24+6010
						std d.a/- 5.16 → 5.21
P162			1.99965	1.99966	34.9932	stated sal = 34.993
319A	HS03		1.97193	1.97191		stby # to 24+6014
298	SP02	3	1.97878	1.97878		
317	HS03	2	1.97895	1.97894		
296	SP02	1	1.98171	1.98169		
336	HS01	2	1.96576	1.96575		
321	HS03	6	1.96785	1.96786		
319B	HS03	4	1.97185	1.97189		
316	HS03	1	1.98098	1.98098		
299B	SP02	4	1.97494	1.97493		
320	HS03	5	1.97023	1.97021		
318	HS03	3	1.97496	1.97497		end cruise.

320 SAL HS03 2019-014 Bot 5

318 SAL HS03 2019-014 Bot 3

319A SAL HS03 2019-014 Bot 4

298 SAL SP02 2019-014 Bot 3

317 SAL HS03 2019-014 Bot 2

296 SAL SP02 2019-014 Bot 1

336 SAL HS01 2019-014 Bot 2

321 SAL HS03 2019-014 Bot 6

319B SAL HS03 2019-014 Bot 4

316 SAL HS03 2019-014 Bot 1

299B SAL SP02 2019-014 Bot 4

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AUTOSAL ANALYSIS LOGSHEET

Cruise ID: 2019-014 labels | Cast/Station Name: | Analysis Date (dd | mmm | yyyy):

158 B SAL ES15 2019-014 Bot 5	41 A SAL ES06 2019-014 Bot 4	7 SAL ES03 2 A 2019-014 Bot 7	139 B SAL ES21 2019-014 Bot 6	42 SAL ES06 2019-014 Bot 5	3 SAL ES03 2 2019-014 Bot 3	157 SAL ES15 2019-014 Bot 4	6 SAL ES03 2 2019-014 Bot 6	24 SAL ES01 2019-014 Bot 23	5 SAL ES03 2 2019-014 Bot 5
40 SAL ES06 2019-014 Bot 3	156 SAL ES15 2019-014 Bot 3	43 SAL ES06 2019-014 Bot 6	1 SAL ES03 2 2019-014 Bot 1	44 SAL ES06 2019-014 Bot 7	38 SAL ES06 2019-014 Bot 1	7 B SAL ES03 2 2019-014 Bot 7	41 B SAL ES06 2019-014 Bot 4	4 SAL ES03 2 2019-014 Bot 4	158 A SAL ES15 2019-014 Bot 5
8 SAL ES03 2 2019-014 Bot 8	155 SAL ES15 2019-014 Bot 2	2 SAL ES03 2 2019-014 Bot 2	45 SAL ES06 2019-014 Bot 8	234 SAL ES10 2019-014 Bot 1	268 SAL UN06 2019-014 Bot 1	238 B SAL ES10 2019-014 Bot 5	302 SAL SP02 2019-014 Bot 7	237 SAL ES10 2019-014 Bot 4	274 SAL UN06 2019-014 Bot 7
271 B SAL UN06 2019-014 Bot 4	270 SAL UN06 2019-014 Bot 3	284 SAL SP01 2019-014 Bot 2	299 A SAL SP02 2019-014 Bot 4	235 SAL ES10 2019-014 Bot 2	256 SAL UN01 2019-014 Bot 3	297 SAL SP02 2019-014 Bot 2	269 SAL UN06 2019-014 Bot 2	239 SAL ES10 2019-014 Bot 6	301 SAL SP02 2019-014 Bot 6
273 SAL UN06 2019-014 Bot 6	300 SAL SP02 2019-014 Bot 5	271 A SAL UN06 2019-014 Bot 4	236 SAL ES10 2019-014 Bot 3	272 SAL UN06 2019-014 Bot 5	240 SAL ES10 2019-014 Bot 7	241 SAL ES10 2019-014 Bot 8	238 A SAL ES10 2019-014 Bot 5	199 SAL ES13 2019-014 Bot 4	197 SAL ES13 2019-014 Bot 20
161 SAL ES15 2019-014 Bot 8	217 SAL UN10 2019-014 Bot 3	215 SAL UN10 2019-014 Bot 1	175 A SAL ES24 2019-014 Bot 1	218 B SAL UN10 2019-014 Bot 4	181 SAL ES24 2019-014 Bot 7	177 'SAL ES24 2019-014 Bot 3	160 SAL ES15 2019-014 Bot 7	232 Sal UN10 db 2019-014 Bot 8	182 SAL ES24 2019-014 Bot 8
196 SAL ES13 2019-014 Bot 1	179 SAL ES24 2019-014 Bot 5	178 SAL ES24 2019-014 Bot 4	198 A SAL ES13 2019-014 Bot 3	216 SAL UN10 2019-014 Bot 2	159 SAL ES15 2019-014 Bot 6	180 SAL ES24 2019-014 Bot 6	200 SAL ES13 2019-014 Bot 5	175 B SAL ES24 2019-014 Bot 1	A 218 SAL UN10 2019-014 Bot 4

Water Properties Group

Institute of Ocean Sciences, Ocean Sciences Division

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: 2019-014 labels

Cast/Station Name: _____

Analysis Date (dd | mmm | yyyy):

198 D SAL ES13 2019-014 Bot 3	176 SAL ES24 2019-014 Bot 2	116 SAL ES23 2019-014 Bot 3	62 SAL ES07 2019-014 Bot 5	118 SAL ES23 2019-014 Bot 6	140 SAL ES21 2019-014 Bot 7	64 SAL ES07 2019-014 Bot 7	99 SAL ES17 2019-014 Bot 2	84 SAL ES016 2019-014 Bot 2	135 SAL ES21 2019-014 Bot 2
137 SAL ES21 2019-014 Bot 4	139 A SAL ES21 2019-014 Bot 6	65 SAL ES07 2019-014 Bot 8	58 SAL ES07 2019-014 Bot 1	63 B SAL ES07 2019-014 Bot 6	117 SAL ES23 2019-014 Bot 4	114 SAL ES23 2019-014 Bot 2	119 SAL ES23 2019-014 Bot 7	138 SAL ES21 2019-014 Bot 5	63 A SAL ES07 2019-014 Bot 6
83 SAL ES016 2019-014 Bot 1	120 SAL ES23 2019-014 Bot 8	98 SAL ES17 2019-014 Bot 1	136 SAL ES21 2019-014 Bot 3	61 SAL ES07 2019-014 Bot 4	201 SAL ES13 2019-014 Bot 6				
		176 SAL ES13 2019-014 Bot 2	177 A SAL ES13 2019-014 Bot 3						

Final Standby Value: _____

Notes: _____

Version: 20 April 2016

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