

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2022-001</u>		Cast/Station Name: _____		Analysis Date (dd mmm yyyy): <u>19 APRIL 2022</u>	
Autosal Model: _____		Serial Number: <u>73274</u>		Page 1	
Initial Standby Value: <u>24+5996</u>		Ratio After Standardization: _____			
Cell Standardization (Daily) Conductivity must be ± 0.00001 compared to Standard 		Standardization Values: Before: <u>4.98</u> After: <u>4.95</u> Notes: _____		Standard Info. K ₁₅ VALUE: 0.999 <u>86</u> Batch #: <u>P165</u> Batch Date: <u>exp 15AP/22</u>	
				Bath Temperature: <u>24</u> °C Sample Temperature: <u>21.3</u> °C Room Temperature: <u>23</u> °C Analyst: <u>Hayleigh</u>	

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
P165	Calibration		1.9997	1.99972		Adjustment needed.
P165			1.99972	1.99972		PSU 34.9948
DWR			1.97880	1.97877	1.97879	34.5832
5057	P19 Loop	24	1.86480	1.86484		Salt on Cap Not enough sample to run 3rd.
435	P25	1	1.86900	1.86901		
DWR			1.97875	1.97875	1.97873	PSU 34.5825
393	P21	6	1.86750	1.86751		
372	P20	4	1.86900	1.86900		
353A	P20	6	1.97911	1.97904	1.97907	1.97904 very old, maybe not mixed well?
351	P20	4	1.98230	1.98230		
5074	P23	Loop	1.86830	1.86831		
5077	P25	Loop	1.86889	1.86890		
5068	P21	Loop	1.86744	1.86743		
357	P20	10	1.96373	1.96372		SALT ON CAP
5070	Underway	Loop	1.86735	1.86735		SALT ON CAP
350	P20	3	1.98298	1.98300		
352	P20	5	1.98141	1.98140		SALT ON
342	P20	17	1.96346	1.96348	1.96348	
355	P20	8	1.97153	1.97153		SALT ON CAP
356A	P20	9	1.96794	1.96794		SALT ON CAP
414	P23	1	1.86820	1.86823	1.86824	
5073	Underway	Loop	1.86815	1.86816		Not sealing properly!
DWR			1.7875	1.7874		34.5825
						Final Standby Value:
						<u>24+5993</u>

Notes: _____

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2022-001 LineP</u>	Cast/Station Name: _____	Analysis Date (dd mmm yyyy): <u>20 APRIL 2022</u>
Autosal Model: _____	Serial Number: <u>73274</u>	page 1
Initial Standby Value: <u>24+5992/3</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard	Before: <u>4.95</u> After: <u>4.99</u> Notes: <u>SDRy 24+5996/7</u>	K ₁₅ VALUE: 0.999 <u>86</u> Batch #: <u>P165</u> Batch Date: <u>exp 15AP/2022</u>
		Bath Temperature: <u>24</u> °C Sample Temperature: _____ °C Room Temperature: <u>21.3</u> °C Analyst: <u>Hayleigh Shannon</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
P165	Standardize.		1.99969	1.99972	1.99974	Suppression Adjustment needed.
P165			1.99974	1.99974(3)		PSU 34.9946
DWR			1.97899	1.97899		PSU 34.5866 BAO
P163	K15 099985	PSU 34.9914	1.99966	1.99966	1.99968	PSU 34.9933
DWR			1.97881	1.97881	1.97884	PSU 34.5831 Good
341	P19	22	1.86474	1.86475	1.	
5091	Underway	1	1.86785	1.86785		
3491	P20	2	1.98299	1.98300		
354	P20	7	1.97434	1.97434		SALT ON CAP
140	P12	6	1.97550	1.97546	1.97545	SALT ON CAP
5033	P11	3 Loop	1.85742	1.85741		
138	P12	2	1.98182	1.98181		
93	P8	2	1.97544	1.97545	1.97544	Recheck 2nd read, not stable.
138A	P12	4	1.98080	1.98080		
185	P13	22	1.85910	1.85910		
5030	P9	Loop	1.95008	1.95007		
143	P12	9	1.96363	1.96366	1.96366	
96	P8	5	1.96369	1.96372	1.96371	
158	P12	r7	1.96000	1.96000		SALT ON CAP
141A	P12	7	1.97234	1.97233		SALT ON CAP
131	P12	r4	1.86682	1.86680		
139	P12	5	1.97912	1.97913	1.97913	
142 5029	Underway	Loop	1.84581	1.84581		
142	P12	8	1.96813	1.96813		
97	P8	6	1.95768	1.95770	1.95768	Final Standby Value:
DWR			1.97881	1.97881	PSU 34.5831	24+5996

Notes: Starting @ 138A cell started sticking sometimes between last two cells to fill, would have to flush to make fill, seems to be getting better maybe going away.

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2021-001</u>		Cast/Station Name: _____		Analysis Date (dd mmm yyyy): <u>20 APRIL 2022</u>	
Autosal Model: _____		Serial Number: _____			
Initial Standby Value: _____		Ratio After Standardization: _____		page 2	
Cell Standardization (Daily)		Standardization Values:		Standard Info.	
Conductivity must be ± 0.00001 compared to Standard 	Before: <u>4.99</u>		K ₁₅ VALUE: <u>0.999</u>		Bath Temperature: <u>24</u> °C
	After: _____		Batch #: _____		Sample Temperature: _____ °C
	Notes: _____		Batch Date: _____		Room Temperature: <u>22.2</u> °C <u>21.3</u>
					Analyst: <u>Hauleish Shannon</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
116	P9	1	1.85009	1.85009		
118	P11	1	1.85750	1.85748	1.85748	SALT ON CAP
137	P12	3	1.98174	1.98174	1.98175	
193A	P14	8	1.97158	1.97158	1.97153	1.97153 SALT ON CAP
5040	Dandrway	Loop	1.85538	1.85535	1.85535	
255A	P16	8	1.97097	1.97097		
259A	P16	4	1.98215	1.98216		
5041	P13	24	1.85911	1.85912		
249	P16	2	1.98266	1.98268	1.98270	SALT ON CAP
5045	P15	24	1.86378	1.86378		
257	P16	10	1.96263	1.96262		
272	P16	7	1.95700	1.95700		
5052	Underway	Loop	1.86482	1.86479	1.86481	
DWR			1.97881	1.97883		PSU 34.5833
5055	P17	Loop	1.86403	1.86403	1.86402	SALT ON CAP
254	P16	7	1.97434	1.97434	1.97436	
194	P14	9	1.96750	1.96750	1.96753	SALT ON CAP
253	P16	6	1.97894	1.97894		
250	P16	3	1.98202	1.98283		
231	P15	22	1.86398	1.86395	1.86394	
DWR			1.97880	1.97882		PSU 34.5831
						Final Standby Value: 24+5996

Notes: Calibration on previous sheet.

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2022-001</u>	Cast/Station Name: _____	Analysis Date (dd mmm yyyy): <u>21 APRIL 2022</u>
Autosal Model: _____	Serial Number: <u>73274</u>	
Initial Standby Value: <u>24+5996</u>	Ratio After Standardization: _____	PAGE 1
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard	Before: <u>599 4.99</u>	K ₁₅ VALUE: 0.999
	After: _____	Batch #: _____
	Notes: _____	Batch Date: _____
		Bath Temperature: <u>24</u> °C
		Sample Temperature: _____ °C
		Room Temperature: <u>21.8</u> °C
		Analyst: <u>Hayleigh</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
P163	sample KX2-199970	199970	1.99970	1.99970	1.99970	1.99970 PSU 34.9939 ✓ V. Good
356B	P20	9	1.96778	1.96779	1.96779	
5054	Underway	Loop	1.86472	1.86473		
353B	192 P20 P14	6 7	1.97475	1.97476		SALT ON CAP
353B	P20	6	1.97906	1.97906		
71B	P4	4	1.96865	1.96867	1.96865	SALT ON CAP
302B	P18	3	1.97441	1.97443	FLASH CO! 1.97446	Deleted last, too long
252	P16	5	1.98094	1.98094		
244	P16	14	1.86395	1.86397	1.86375	1.86376
299	P17	22	1.86403	1.86400	1.86404	
DWR			1.97893	1.97898	1.97887	1.97887 PSU 34.584 high
DWR			1.97881	1.97881		34.5829
141B	P12	7	1.97222	1.97224	1.97222	
138B	P12	4	1.98070	1.98070		SALT ON CAP
209	P14	24	1.86348	1.86357	1.86356	1.86352 1.86351 Deleted last 2
310B	P18	11	1.93602	1.93602		
255B	P16	8	1.97098	1.97100		
95B	P8	4	1.96853	1.96853	1.96854	SALT ON CAP lost connection
193B	P14	8	1.97151	1.97150		SALT ON CAP
451B	P26	3	1.98315	1.98315		
251B	P16	4	1.98223	1.98223	1.98223	Flashed because lost connection
455B	P26	7	1.97448	1.97450		
256	P16	9	1.96727	1.96726		
DWR			1.97882	1.97881	1.97892	PSU 34.5833
						Final Standby Value:
						<u>24+5997</u>

Notes: Continued File From 20 APRIL, did not recalibrate, used P163 as a check, v. good.

19 APRIL 2022

5057 SAL P19 2022-001 Loop m bot 24	435 Sal P25 2022-001 5 m bot 1	393 Sal P21 2022-001 5 m bot 6	372 Sal P20 2022-001 75 m bot r4	353A Sal P20 2022-001 2000 m bot 6	351 Sal P20 2022-001 3000 m bot 4	5074 Sal P23 2022-001 Loop m bot 3	5077 Sal P25 2022-001 Loop m bot 3	5068 Sal P21 2022-001 Loop m bot 8
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357 Sal P20 2022-001 800 m bot 10	5070 Sal Underway 2022-001 Loop m bot 1	350 Sal P20 2022-001 3500 m bot 3	352 Sal P20 2022-001 2500 m bot 5	342 Sal P20 2022-001 800 m bot r7	355 Sal P20 2022-001 1250 m bot 8	356A Sal P20 2022-001 1000 m bot 9	414 Sal P23 2022-001 5 m bot 1	5073 Sal Underway 2022-001 Loop m bot 1
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20 APRIL 2022

341 SAL P19 2022-001 5 m bot 22	5091 Sal Underway 2022-001 Loop m bot 1	349 Sal P20 2022-001 3500 m bot 2	354 Sal P20 2022-001 1500 m bot 7	140 SAL P12 2022-001 1500 m bot 6	5033 SAL P11 2022-001 Loop m bot 3	136 SAL P12 2022-001 3000 m bot 2	93 SAL P8 2022-001 1500 m bot 2	138A SAL P12 2022-001 2500 m bot 4
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185 SAL P13 2022-001 5 m bot 22	5030 SAL P9 2022-001 Loop m bot 3	143 SAL P12 2022-001 800 m bot 9	96 SAL P8 2022-001 800 m bot 5	158 Sal P12 2022-001 800 m bot r7	141A SAL P12 2022-001 1250 m bot 7	131 Sal P12 2022-001 75 m bot r4	139 SAL P12 2022-001 2000 m bot 5	5029 Sal Loop25 2022-001 Loop m bot 1
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142 SAL P12 2022-001 1000 m bot 8	97 SAL P8 2022-001 600 m bot 6	116 SAL P9 2022-001 5 m bot 1	118 SAL P11 2022-001 5 m bot 1	137 SAL P12 2022-001 3000 m bot 3	193A SAL P14 2022-001 1250 m bot 8	5040 Sal Underway 2022-001 Loop m bot 1	255A Sal P16 2022-001 1250 m bot 8	251A Sal P16 2022-001 3000 m bot 4
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5041 SAL P13 2022-001 Loop m bot 24	249 Sal P16 2022-001 3500 m bot 2	5045 SAL P15 2022-001 Loop m bot 24	257 Sal P16 2022-001 800 m bot 10	272 Sal P16 2022-001 800 m bot r7	5052 Sal Underway 2022-001 Loop m bot 1	5055 SAL P17 2022-001 Loop m bot 24	254 Sal P16 2022-001 1500 m bot 7	194 SAL P14 2022-001 1000 m bot 9
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AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2022-001</u>	Cast/Station Name: _____	Analysis Date (dd mmm yyyy): <u>30 MAR 2022</u>
Autosal Model: _____	Serial Number: <u>73274</u>	
Initial Standby Value: <u>24+5995</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard	Before: <u>498</u>	K ₁₅ VALUE: 0.999 _____
	After: _____	Batch #: _____
	Notes: _____	Batch Date: _____
		Bath Temperature: <u>24</u> °C
		Sample Temperature: _____ °C
		Room Temperature: <u>22.03</u> °C
		Analyst: <u>Hayleigh</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
DWR			1.97877	1.97877	1.97872	Delete 3rd. 345827 Only took 3rd b/c connection issue
457	P26	9	1.97133	1.97133		
450	P26	2	1.98362	1.98362		
456	P26	8	1.97133	1.97133	1.97135	
5095	underway	Loop	1.85404	1.85405		
455A	P26	7	1.97448	1.97450	1.97450	
473	P26	17	1.93176	1.93178		
5089	underway P35	Loop	1.86778	1.86777		SALT on CAP
5093	underway	Loop	1.86405	1.86406		
451A	P26	3	1.98312	1.98313		
5094	underway	Loop	1.86377	1.86377		
480	P26	7	1.97190	1.97191		
45101	underway	loop	1.83066	1.83065	1.83064	
5079	underway	loop	1.86813	1.86814		
458	P26	10	1.96361	1.96361		
508	underway	Loop	1.83784	1.83785	1.83786	Delete last - incorrect
50915	underway	Loop	1.38809	1.38811	1.38810	
5092	underway	Loop	1.86746	1.86746		
452	P26	4	1.98221			lost Connection
452	P26	4	1.98222	1.98222		Redo.
453	P26	5	1.98081	1.98081		
436	P35	1	1.86779	1.86780		
454	P26	6	1.97836	1.97836		
91	P5	1	1.85283	1.85285	1.85282	SALT on CAP Delete last
92A	P8	1	1.97917	1.97917		Final Standby Value:
DWR			1.97878	1.97876	1.97878	24+5996/5

Notes: Continued From 2022-004 Calibration on same day.
Temp @ end 22.9°C

Cruise ID: <u>2022-001</u>		Cast/Station Name: _____		Analysis Date (dd mmm yyyy): <u>30 MAR 2022</u>	
Autosal Model: _____		Serial Number: <u>73274</u>			
Initial Standby Value: _____		Ratio After Standardization: _____			

Cell Standardization (Daily)	Standardization Values:	Standard Info.	Bath Temperature: <u>24</u> °C
Conductivity must be ± 0.00001 compared to Standard ↗	Before: _____	K ₁₅ VALUE: <u>0.999</u>	Sample Temperature: _____ °C
	After: _____	Batch #: _____	Room Temperature: <u>22.8</u> °C
	Notes: _____	Batch Date: _____	Analyst: _____

Notes: Continue from previous.
in 2022-004 File

30 MAR.

457 Sal P26 2022-001 1000 m bot 9	450 Sal P26 2022-001 4000 m bot 2	456 Sal P26 2022-001 1250 m bot 8	5095 Sal Underway 2022-001 Loop m bot 1	455A Sal P26 2022-001 1500 m bot 7	473 Sal P26 2022-001 150 m bot r7	5089 Sal P35 2022-001 Loop m bot 3	5093 Sal Underway 2022-001 Loop m bot 1	451A Sal P26 2022-001 3500 m bot 3
5094 Sal Underway 2022-001 Loop m bot 1	480 Sal P26 2022-001 1500 m bot 7	5101 Sal Underway 2022-001 Loop m bot 1	5079 Sal Underway 2022-001 Loop m bot 1	458 Sal P26 2022-001 800 m bot 10	5098 Sal Underway 2022-001 Loop m bot 1	5115 Sal Underway 2022-001 Loop m bot 1	5092 Sal Underway 2022-001 Loop m bot 1	452 Sal P26 2022-001 3000 m bot 4
453 Sal P26 2022-001 2500 m bot 5	436 Sal P35 2022-001 5 m bot 1	454 Sal P26 2022-001 2000 m bot 6	91 SAL P5 2022-001 5 m bot 1	92A SAL P8 2022-001 2000 m bot 1	69 Sal P4 2022-001 1250 m bot 2	5010 Sal JF4 2022-001 Loop m bot 1	188 SAL P14 2022-001 2500 m bot 3	62 Sal P4 2022-001 800 m bot r7
187A SAL P14 2022-001 3000 m bot 2	190 SAL P14 2022-001 2000 m bot 5	94 SAL P8 2022-001 1250 m bot 3	5025 Sal Loop25 2022-001 Loop m bot 1	5009 Sal JF3 2022-001 Loop m bot 1	72 Sal P4 2022-001 800 m bot 5	95A SAL P8 2022-001 1000 m bot 4	/// ///	

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2022-004 / 001</u>	Cast/Station Name: <u>LINEP / N20</u>	Analysis Date (dd mmm yyyy): <u>31 MAR 2022</u>
Autosal Model: _____	Serial Number: <u>73274</u>	
Initial Standby Value: <u>24.5995</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard	Before: <u>4.98</u>	K ₁₅ VALUE: 0.999 <u>86</u>
	After: _____	Batch #: <u>P165</u>
	Notes: _____	Batch Date: <u>exp 15 APR / 24</u>
		Bath Temperature: <u>24</u> °C
		Sample Temperature: <u>21.3</u> °C
		Room Temperature: <u>22.1</u> °C
		Analyst: <u>Haleygh Shannon</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
P165			1.99972			10s correction After opening
P165			1.99970	1.99973	1.99971	SAL: 34.9943
DWR			1.97877	1.97879	1.97878	SAL: 34.5825
14B	46	1	1.79314	1.79315		2022-004
10	27	2	1.74884	1.74886		
6B	12	1	1.790067	1.79008		
9B	27	1	1.80085	1.80086		
5024			1.85258	1.8525-	2022-001	10s correction!!
5024	5	3	1.85259	1.85261		2nd maybe high since end of bott.
71A	P4	4	1.96881	1.96881		
70	P4	3	1.97298	1.97302	1.97299	1.97299 delet 182.
5006	JF1	LOOP	1.84252	1.84252		
189	P14	4	1.98006	1.98004		
87	P4	CH	1.90115	1.90114		
DWR			1.97876	1.97874		SAL: 34.5821 ops 1.2 loose galled a little.
DWR			1.97874	1.97874	1.97874	SAL: 34.5819
DWR			1.97875	1.97875		34.5821
5132	Underway	Loop	9778			Disconnected
5132	Underway	Loop	1.59778	1.59778		Repeat reconnected
5121	Underway	Loop	1.12266	1.12262	1.12263	Delet with high sp. SAL: 18.4316!!
191	P14	6	1.97678	1.97680	1.97679	
5137	Underway	1	1.61947	1.61948		
5023	JF4	Loop	1.82666	1.82666		
308	P18	9	1.94205	1.94205		1.87806 SALT on line
314	P18	15	1.87803	1.87807	1.87807	Final Standby Value:
187B	P14	2	1.98210	1.98211		

Notes: _____

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14 4 B Sal 46 2022-004 Bot-5 m bot 1	10B Sal 27 2022-004 0 m bot 2	6B Sal 12 2022-004 Bot-5 m bot 1	9 B Sal 27 2022-004 Bot-5 m bot 1	5024 SAL P5 2022-001 Loop m bot 3	71A Sal P4 2022-001 1000 m bot 4	70 Sal P4 2022-001 1250 m bot 3	5006 Sal JF1 2022-001 Loop m bot 1	189 SAL P14 2022-001 2250 m bot 4
87 Sal P4 2022-001 75 m bot r4	513 Underway 2022-001 Loop m bot 1	5121 Sal Underway 2022-001 Loop m bot 1	191 SAL P14 2022-001 1750 m bot 6	5137 Sal Underway 2022-001 Loop m bot 1	5023 Sal JF4 2022-001 Loop m bot 1	308 Sal P18 2022-001 300 m bot 9	314 Sal P18 2022-001 100 m bot 15	187B SAL P14 2022-001 3000 m bot 2
304 Sal P18 2022-001 1000 m bot 5	309 Sal P18 2022-001 250 m bot 10	301 Sal P18 2022-001 1750 m bot 2	311 Sal P18 2022-001 175 m bot 12	317 Sal P18 2022-001 25 m bot 18	302A Sal P18 2022-001 1500 m bot 3	313 Sal P18 2022-001 125 m bot 14	310A Sal P18 2022-001 200 m bot 11	306 Sal P18 2022-001 600 m bot 7
300 Sal P18 2022-001 2000 m bot 1	318 Sal P18 2022-001 10 m bot 19	316 Sal P18 2022-001 50 m bot 17	307 Sal P18 2022-001 400 m bot 8	305 Sal P18 2022-001 800 m bot 6	303 Sal P18 2022-001 1250 m bot 4	315 Sal P18 2022-001 75 m bot 16	312 Sal P18 2022-001 150 m bot 13	319 Sal P18 2022-001 5 m bot 20
5059 Sal Underway 2022-001 Loop m bot 1	92B SAL P8 2022-001 2000 m bot 1							

