

[illegible]

Notes: _____

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2019-005</u>	Cast/Station Name: <u>Various</u>	Analysis Date (dd mmm yyyy): <u>23</u> <u>Jul</u> <u>2019</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>68572</u>	
Initial Standby Value: <u>24 + 6005</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>22.9</u> °C Room Temperature: <u>22.9</u> °C Analyst: <u>SS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
BWR			1.97879	1.97879		
444	LB16		1.85738	1.85738		
443	LC11		1.85890	1.85893		
412	LC09		1.84631	1.84656	1.84635	deleted 1 st read.
5172	LoopLD8		1.83472	1.83473		
5146	LoopLC06		1.83296	1.83297		
5134	LoopLD01		1.81871	1.81871		
5136	LoopLC01		1.81752	1.81752		
447B	LB14		1.97041	1.97043		
5161	LB16		1.85720	1.85717		
427B	LC11		1.96913	1.96916	1.96918	Deleted 1 st read
338	LD06		1.83285	1.83283		
447A	LB14		1.97033	1.97042	1.97046	Deleted 1 st read.
496	LC08		1.84204	1.84204		
449	LB14		1.95431	1.95433		
398	LC09		1.95348	1.95345		
428	LC11		1.96553	1.96552		
463	LB14		1.86188	1.86186		
429	LC11		1.95448	1.95448		
426	LC11		1.97332	1.97332		
385	LC06		1.83439	1.83437		
359	LC09		1.81827	1.81829		
490	LB11		1.84965	1.84968		
427A	LC11		1.96909	1.96908		
448	LB14		1.96564	1.96565		
DWR			1.97879	1.97879		
			Final Standby Value: _____			

Notes: _____

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2019-005</u>	Cast/Station Name: <u>Various</u>	Analysis Date (dd mmm yyyy): <u>23 Jul 2019</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>68572</u>	
Initial Standby Value: <u>24+6005</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>22.6</u> °C Room Temperature: <u>22.6</u> °C Analyst: <u>JS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
5118	Loop 5118		1.85169	1.85177	1.85180	Flushed & Deleted 1st read
207	LBP7		1.95455	1.95459	1.95459	Deleted 1st read.
210	LBP7		1.94601	1.94600		
217	LBP7		1.86705	1.86705		
202B	LBP7		1.97939	1.97943	1.97944	
221	LBP7		1.86303	1.86303		
509	LB08		1.83344	1.83343		
204A	LBP7		1.97296	1.97299	1.97302	Deleted 1st Read.
531	LB05		1.82667	1.82665		
213	LBP7		1.93485	1.93488		
209	LBP7		1.94677	1.94676		
202A	LBP7		1.97946	1.97948		
203A	LBP7		1.97507	1.97506		
218	LBP7		1.86469	1.86469		
219	LBP7		1.86272	1.86270		
215	LBP7		1.89321	1.89321		
211	LBP7		1.94511	1.94510		
205	LBP7		1.96841	1.96845	1.96845	Deleted 1st
204B	LBP7		1.97308	1.97308		
212	LBP7		1.94236	1.94256		
203B	LBP7		1.97570	1.97578	1.97579	Deleted 1st
216	LBP7		1.87453	1.87452		
214	LBP7		1.91762	1.91763		
208	LBP7		1.95065	1.95068		
206	LBP7		1.96215	1.96216		Final Standby Value:
BWR			1.97879	1.97880		

Notes: _____

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2019-005</u>	Cast/Station Name: <u>Various</u>	Analysis Date (dd mmm yyyy): <u>23 Jul 2019</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>68572</u>	
Initial Standby Value: <u>24 + 6005</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>22.7</u> °C Room Temperature: <u>22.7</u> °C Analyst: <u>JS + KS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
21	42		1.59906	1.59908	1.59906	Deleted 3 rd read due to sal. #
106	CS02		1.96778	1.96780		
5097	Loop		1.86825	1.86825		
5096	Loop L504		1.86891	1.86891		
201	LBP5		1.86915	1.86914		
104B	CS02		1.97509	1.97511		flushed x2 between reads
184	LBP5		1.97206	1.97206		
220	LBP7		1.86296	1.86295		
105	CS02		1.97189	1.97188		
266	LG06		1.96409	1.96408		
56	22		1.61697	1.61691	1.61691	deleted 1 st reading
5102	Loop		1.85059	1.85058		
122	CS02		1.85601	1.85603		Screw cap was loose
5091	Loop 91		1.86292	1.86293		
281	LG06		1.86631	1.86629	1.86629	2 nd reading unstable so delete
104A	CS02		1.97525	1.97524		
185	LBP5		1.96819	1.96818		
94	CS06		1.82146	1.82142	1.82140	deleted 1 st reading
10	59		1.77384	1.77384		
32	GE01		1.57999	1.57998		
5117	Loop LG01		1.86612	1.86612		
75	JS		1.79852	1.79851		
283	LG09		1.86593	1.86593		
			1.	1.		
			1.	1.		
DWR			1.97882	1.97881		Final Standby Value: _____

Notes: _____

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2019-005</u>	Cast/Station Name: <u>Various</u>	Analysis Date (dd mmm yyyy): <u>24 July 2019</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>68572</u>	
Initial Standby Value: <u>24 + 6006</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>22.5</u> °C Room Temperature: <u>22.3</u> °C Analyst: <u>SS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
DWR			1.97875	1.97879	1.97878	Deleted 1st read
146	C500		1.96230	1.96230		
151	C500		1.94392	1.94392		
DWR			1.97878	1.97878		
DWR			1.97878	1.97878		
DWR			1.97878	1.97878		
156	C500		1.89749	1.89750		Calc. Sal. lower than yesterday
166	C500		1.85884	1.85884		
148	C500		1.94846	1.94845		
150	C500		1.94657	1.94656		
153	C500		1.93783	1.93784	1.93785	Deleted 1st (unstable)
144A	C500		1.97164	1.97164		
143A	C500		1.97484	1.97485		
158	C500		1.86905	1.86906		
144B	C500		1.97166	1.97165		
160	C500		1.86072	1.86072		Flushed x4
145B	C500		1.96802	1.96804	1.96804	
157	C500		1.87145	1.87146		
171	LBP3		1.87631	1.87630		
155	C500		1.91898	1.91897		
147	C500		1.95250	1.95272	1.95273	1.95272 / 4 reads, forgot to rinse after cleaning in DWR
152	C500		1.94376	1.94377		
149	C500		1.94639	1.94639		
154	C500		1.93141	1.93143		
143B	C500		1.97486	1.97486		
159	C500		1.86675	1.86676	1.86675	Final Standby Value: 24 + 6006

Notes: _____

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2019-005</u>	Cast/Station Name: <u>Various</u>	Analysis Date (dd mmm yyyy): <u>24 Jul 2019</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>68572</u>	
Initial Standby Value: <u>24 + 6006</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>22.9</u> °C Room Temperature: <u>22.8</u> °C Analyst: _____

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
145A	C500		1.96803	1.96803		
142	C500					labelled, but not sampled
DWR			1.97781	1.97782		
290	LD11		1.94994	1.94994		
297	LD11		1.91942	1.91942		
294	LD11		1.94371	1.94372		
5725	LD08		1.86280	1.86281		
301	LD11		1.85330	1.85330		
296	LD11		1.93371	1.93373		
285B	LD11		1.97553	1.97555		Bubble formed → rid by flush
288	LD11		1.96347	1.96347		
291	LD11		1.94741	1.94745	1.94745	Deleted first read
293	LD11		1.94575	1.94577		
298	LD11		1.88593	1.88592		
315	LD08		1.96316	1.96316		
297	LD11		1.96946	1.96945		
330	LD08		1.86292	1.86292		Flushed x4 due to bubble
302	LD11		1.85543	1.85545	1.85546	Deleted 1st read.
292	LD11		1.94714	1.94714		
289	LD11		1.95479	1.95483	1.95483	Deleted 3rd read → Calc. Sal.
316	LD08		1.95391	1.95391		
286	LD11		1.97298	1.97298		
303	LD11		1.85596	1.85597		
299	LD11		1.86953	1.86955		
285A	LD11		1.97546	1.97546		
DWR			1.97879	1.97879	1.97880	Final Standby Value: _____

Notes: _____

Cruise ID: <u>2019-065</u>		Cast/Station Name: <u>Various</u>		Analysis Date (dd mmm yyyy):	
Autosal Model: <u>8400B</u>		Serial Number: <u>68572</u>		<u>24</u> <u>Jul</u> <u>2019</u>	
Initial Standby Value: <u>24 + 6006</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>22.9</u> °C	
		Room Temperature: <u>22.9</u> °C		Analyst: <u>JS</u>	

Notes: _____

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: 2019-005 Labels 3				Cast/Station Name:				Analysis Date (dd mmm yyyy):		
444 Sal LB16 5 m 19-005 Bot 1	443 Sal LC11 5 m 19-005 Bot 19	412 Sal LC09 5 m 19-005 Bot 16	5172 Sal LoopLB8 5 m 19-005 Bot 1	5146 Sal LoopLC06 5 m 19-005 Bot 1	5134 Sal LoopLD01 5 m 19-005 Bot 1	5136 Sal LoopLC01 5 m 19-005 Bot 1	447 Sal LB14 1000 m 19-005 Bot 2	5161 Sal LB16 19-005 Loop	427 Sal LC11 1000 m 19-005 Bot 3	338 Sal LD06 5 m 19-005 Bot 8
447 Sal LB14 1000 m 19-005 Bot 2	396 Sal LC08 5 m 19-005 Bot 11	449 Sal LB14 500m 19-005 Bot 4	398 Sal LC09 500 m 19-005 Bot 2	428 Sal LC11 750 m 19-005 Bot 4	453 Sal LB14 5 m 19-005 Bot 18	429 Sal LC11 500 m 19-005 Bot 5	426 Sal LC11 1250 m 19-005 Bot 2	385 Sal LC06 5 m 19-005 Bot 7	359 Sal LC01 5 m 19-005 Bot 7	490 Sal LB11 5 m 19-005 Bot 11
427A Sal LC11 1000 m 19-005 Bot 3	448 Sal LB14 750 m 19-005 Bot 3	5118 Sal Loop5118 19-005 Bot 1	207 Sal LBP7 500 m 19-005 Bot 6	210 Sal LBP7 250 m 19-005 Bot 9	217 Sal LBP7 50 m 19-005 Bot 16	202 B Sal LBP7 2000 m 19-005 Bot 1	221 Sal LBP7 5 m 19-005 Bot 20	509 Sal LB08 5 m 19-005 Bot 9	204 A Sal LBP7 1250 m 19-005 Bot 3	531 Sal LB05 5 m 19-005 Bot 1
213 Sal LBP7 150 m 19-005 Bot 12	209 Sal LBP7 300 m 19-005 Bot 8	202 A Sal LBP7 2000 m 19-005 Bot 1	203 A Sal LBP7 1500 m 19-005 Bot 2	218 Sal LBP7 30 m 19-005 Bot 17	219 Sal LBP7 20 m 19-005 Bot 18	215 Sal LBP7 100 m 19-005 Bot 14	211 Sal LBP7 200 m 19-005 Bot 10	205 Sal LBP7 1000 m 19-005 Bot 4	204 B Sal LBP7 1250 m 19-005 Bot 3	212 Sal LBP7 175 m 19-005 Bot 11
203 B Sal LBP7 1500 m 19-005 Bot 2	216 Sal LBP7 75 m 19-005 Bot 15	214 Sal LBP7 125 m 19-005 Bot 13	208 Sal LBP7 400 m 19-005 Bot 7	206 Sal LBP7 750 m 19-005 Bot 5	21 Sal 42 5 m 19-005 Bot 10	106 Sal CS02 1000 m 19-005 Bot 4	5097 Sal Loop 19-005 Bot 1	5096 Sal LoopLB04 5 m 19-005 Bot 1	201 Sal LBP5 5 m 19-005 Bot 19	104 B Sal CS02 1500 m 19-005 Bot 2
184 Sal LBP5 1250 m 19-005 Bot 2	220 Sal LBP7 10 m 19-005 Bot 19	105 Sal CS02 1250 m 19-005 Bot 3	266 Sal LG06 750 m 19-005 Bot 2	56 Sal 22 19-005 Bot 10	5102 Sal Loop 19-005 Bot 1	122 Sal CS02 5 m 19-005 Bot 20	5091 Sal loop91 5 m 19-005 Bot 1	281 Sal LG06 5 m 19-005 Bot 17	104 A Sal CS02 1500 m 19-005 Bot 2	

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: 2019-005 labels				Cast/Station Name:				Analysis Date (dd mmm yyyy):			
185	94	10	32	E117	75	283	146	151	156		
Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal		
LBPS	CS06	59	GEO1	LoopLG09	JS	LG09	CS00	CS00	CS00		
1000 m	5 m	5 m	5 m	Off-Base	5 m	Chl Max	750 m	200 m	75 m		
19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005		
Bot 3	Bot 6	Bot 10	Bot 10	Bot 11	Bot 10	Bot 11	Bot 5	Bot 10	Bot 15		
161	148	150	153	144 A	143 A	153	144 B	160	145 B	Not sampled.	
Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal		
CS00	CS00	CS00	CS00	CS00	CS00	CS00	CS00	CS00	CS00		
5 m	400 m	250 m	150 m	1250 m	1500 m	30 m	1250 m	10 m	1000 m		
19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005		
Bot 20	Bot 7	Bot 9	Bot 12	Bot 3	Bot 2	Bot 17	Bot 3	Bot 19	Bot 4		
157	171	155	147	152	149	154	143 B	159	145 A	142 *	
Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal		
CS00	LBPS	CS00	CS00	CS00	CS00	CS00	CS00	CS00	CS00		
50 m	5 m	100 m	500 m	175 m	300 m	125 m	1500 m	20 m	1000 m		
19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005		
Bot 16	Bot 10	Bot 14	Bot 6	Bot 11	Bot 8	Bot 13	Bot 2	Bot 18	Bot 4		
290	297	294	5125	201	296	285 B	288	291	293	298	
Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal		
LD11	LD11	LD11	LD08	LD11	LD11	LD11	LD11	LD11	LD11		
400 m	100 m	175 m	LOOP	20 m	125 m	1500 m	750 m	300 m	200 m		
19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005		
Bot 7	Bot 14	Bot 11	Bot 1	Bot 18	Bot 13	Bot 2	Bot 5	Bot 8	Bot 10		
315	287	330	302	292	289	316	286	303	299	285 A	
Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal	Sal		
LD08	LD11	LD08	LD11	LD11	LD11	LD08	LD11	LD11	LD11		
750 m	1000 m	5 m	10 m	250 m	500 m	500 m	1250 m	5 m	50 m		
19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005	19-005		
Bot 2	Bot 4	Bot 17	Bot 19	Bot 9	Bot 6	Bot 3	Bot 3	Bot 20	Bot 16		
295	300										
Sal	Sal										
LD11	LD11										
150 m	30 m										
19-005	19-005										
Bot 12	Bot 17										
										Final Standby Value:	