

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: 2021-001 Cast/Station Name: Many Analysis Date (dd | mmm | yyyy): 01 | Mar | 2021
 Autosal Model: 8400B Serial Number: 73274
 Initial Standby Value: 247 6019 Ratio After Standardization: 247 6024
 Cell Standardization (Daily) Standardization Values: Standard Info. Bath Temperature: 24 °C
 Conductivity must be ± 0.00001 compared to Standard Before: 5.24 K₁₅ VALUE: 0.999 83 Sample Temperature: 22 °C
 After: 5.32 Batch #: P162 Room Temperature: 22.3 °C
 Notes: Eq Batch Date: 16 April 2021 Analyst: KS

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
P162	IAPSO	calibration	1.99957	1.99967		Accepted reading 2.
DWR			1.97895	1.97894		
DWR			1.97893	1.97894		
DWR			1.97893	1.97895		
85B	P4	4	1.96752	1.96753		A few salt crystals around
614	DOUG 45	3	1.80594	1.80598		opening
5068	Loop	3	1.86196	1.86197		
125	P8	5	1.96353	1.96358	1.96357	
72	P4	r4	1.91307	1.91308		
5066	P17	2	1.86220	1.86222		
242	P16	3	1.98299	1.98300		
309	P20	3	1.98327	1.98328		
608	DOUG 31	2	1.88686	1.88685		
613	DOUG 45	2	1.89409	1.89411		
100	P4	19	1.85476	1.85477		
331	P21	1	1.86510	1.86511		
83	P4	2	1.97143	1.97141		
5169	Loop	underway	1.81355	1.81354		
85A	P4	4	1.96750	1.96754		
245	P16	6	1.97935	1.97940		screw cap was loose
310	P20	4	1.98249	1.98249		
623	HAKI	7	1.80743	1.80744		
5015	Loop	underway	1.84905	1.84906		
118	P5	2	1.85620	1.85619		
5069	P19	Loop	1.86235	1.86235		Final Standby Value:
DWR			1.97901	1.97906	1.97904	

Notes: _____

Water Properties Group

Institute of Ocean Sciences, Ocean Sciences Division

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2021-001</u>	Cast/Station Name: <u>many</u>	Analysis Date (dd mmm yyyy): <u>01 Mar 2021</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>73274</u>	
Initial Standby Value: <u>24 + 6025</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</u> °C Room Temperature: <u>22.6</u> °C Analyst: <u>KS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
290	P20	r7	1.96365	1.96364		
313	P20	7	1.97443	1.97445		
5008	JF3	Loop	1.871316	1.871317		
610	DOUG31	4	1.80770	1.80769		
124A	P8	4	1.96715	1.96716		
243B	P16	4	1.98253	1.98258	1.98257	
264	P17	1	1.86236	1.86234		
609	DOUG31	3	1.80914	1.80916		
312A	P20	6	1.97874	1.97875		
5009	JF4	Loop	1.875113	1.875114		
246	P16	7	1.97505	1.97507		
121A	P8	1	1.97909	1.97906		
311	P20	5	1.98113	1.98114		
76	P4	r7	1.96241	1.96240		
236	P16	r4	1.86137	1.86138		
630	HAKI	14	1.79144	1.79145		
5077	P21	Loop	1.86500	1.86505		
615	DOUG45	4	1.79271	1.79272		
618	HAKI	14	1.86696	1.86697		missed sample 618.
54B	CCN	7	1.97176	1.97175		
123	P8	3	1.86494	1.86496		
56B	CCN	9	1.86249	1.86249		
289	P19	1	1.86249	1.86250		
59B	CCN	12	1.78890	1.78889		
244	P16	5	1.98102	1.98105		Final Standby Value:
DWR			1.97897	1.97899		

Notes: _____

Water Properties Group

Institute of Ocean Sciences, Ocean Sciences Division

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2021-001</u>	Cast/Station Name: <u>many</u>	Analysis Date (dd mmm yyyy): <u>01 Mar 2021</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>73274</u>	
Initial Standby Value: <u>24 + 6025</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</u> °C Room Temperature: <u>22.2</u> °C Analyst: <u>KS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
84	P4	3	1.97145	1.97146		
50A	CCN	3	1.88125	1.88127		
53B	CCN	6	1.86894	1.86898		
303	P20	14	1.86393	1.86392		
50B	CCN	3	1.88128	1.88127		
57A	CCN	10	1.79182	1.79194	1.79187	
618	HAKI	2	1.87200	1.87198		
55B	CCN	8	1.86608	1.86612		
563	DOUG16	4	1.77155	1.77153		
308	P20	2	1.98326	1.98326		
58B	CCN	11	1.78703	1.78704		
49A	CCN	2	1.88119	1.88122	1.88123	
121B	P8	1	1.97904	1.97906		
53A	CCN	6	1.86906	1.86911	1.86910	
346	DEC26	2	1.82452	1.82450		
241	P16	2	1.98292	1.98292		
5031	Loop	Underway	1.70062	1.70060		
5016	Bussell	Loop	1.67655	1.67657		
57A	CCN	12	1.78896	1.78898		
474	HEC1	13	1.82156	1.82157		
312B	P20	6	1.97887	1.97889		
525	DOUG4	2	1.86664	1.86663		
243A	P16	4	1.98238	1.98237		
56A	CCN	9	1.86503	1.86502		-bottle opening chipped.
51B	CCN	4	1.88129	1.88128		Final Standby Value: Does not seem to be leaking.
DWR			1.97899	1.97899		

Notes: _____

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2021-001</u>	Cast/Station Name: <u>many</u>	Analysis Date (dd mmm yyyy): <u>01 Mar 2021</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>73274</u>	
Initial Standby Value: <u>24+6025</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</u> °C Room Temperature: <u>22.8</u> °C Analyst: <u>KS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
55A	CCN	8	1.86606	1.86607		
541	DOUG11	2	1.88691	1.88692		
5005	JFI	1	1.77365	1.77364		
5039	P5	3	1.85618	1.85617		
553	GC74	4	1.69260	1.69257		
54A	CCN	7	1.86671	1.86670		
542	DOUG11	3	1.82065	1.82067		
543	"	4	1.81113	1.81114		
562	DOUG16	3	1.81681	1.81682		
58A	CCN	11	1.78695	1.78694		
547	DEC26	3	1.80045	1.80045		
5032	Loop	underway	1.85450	1.85449		
48A	CCN	1	1.88126	1.88125		
52A	CCN	5	1.86831	1.86832		
503	SC61	12	1.79784	1.79781		
122	P8	2	1.97512	1.97513		
558	GC44	4	1.76055	1.76058		
5138	Loop	Underway	1.76180	1.76179		
509	SC61	18	1.79693	1.79694		
124B	P8	4	1.96715	1.96712		
52B	CCN	5	1.86826	1.86825		
552	GC74	3	1.81216	1.81217		
468	HEE1	7	1.82260	1.82262		
548	DEC26	4	1.76757	1.76758		
556	GC44	2	1.86125	1.86124		Final Standby Value: _____
DWR			1.97899	1.97900		

Notes: _____

Water Properties Group

Institute of Ocean Sciences, Ocean Sciences Division

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2021-001</u>	Cast/Station Name: <u>Mony</u>	Analysis Date (dd mmm yyyy): <u>01 Mar 2021</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>73274</u>	
Initial Standby Value: <u>2446024</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</u> °C Room Temperature: <u>226</u> °C Analyst: <u>KS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
493	SC61	2	1.89798	1.89797		
57B	CCN	10	1.79177	1.79178		
86	P4	5	1.96166	1.96168		
551	GC74	2	1.82769	1.82770		
51A	CCN	4	1.88115	1.88114		
557	GC44	3	1.80964	1.80965		
532	DOUG4	9	1.82922	1.82921		
49B	CCN	2	1.88125	1.88123		
464	HEC1	3	1.90003	1.90004		
538	DOUG4	15	1.81980	1.81979		
48B	CCN	1	1.88116	1.88118		
561	DOUG16	2	1.89195	1.89192		
DWR			1.97896	1.97898	1.97899	02 March 2021
394A	P25	6	1.94770	1.94773		stdby = 2446024
278	P18	14	1.94126	1.94128		lab T = 22.8°C
276B	P18	3	1.98237	1.98237		no calibration today.
279	"	15	1.93871	1.93872		
64A	CCN	17	1.75658	1.75663	1.75662	
70B	"	23	1.71060	1.71060		
397B	P25	9	1.92663	1.92662		
273	P18	9	1.96753	1.96743	1.96748	1.96743 - Noisy!
392A	P25	4	1.96694	1.96695		measurements
67A	CCN	20	1.72340	1.72341		screw cap jumpy.
333	P22	2	1.98333	1.98331		Final Standby Value: _____
400B	P25	12	1.92655	1.92656		

Notes: _____

DWR

1.97898 1.97899

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2021-001</u>	Cast/Station Name: <u>Many</u>	Analysis Date (dd mmm yyyy): <u>02 March 2021</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>73274</u>	
Initial Standby Value: <u>247 6624</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>22.5</u> °C Room Temperature: <u>22.5</u> °C Analyst: <u>KS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
391A	P25	3	1.96699	1.96701		
61A	CCN	14	1.78752	1.78751		
284	P18	20	1.86249	1.86250		
283	"	19	1.88800	1.88805	1.88803	
396A	P25	8	1.94774	1.94776		
268	P18	4	1.98104	1.98106		
62A	CCN	15	1.75907	1.75906		
68A	"	21	1.71979	1.71978		
71B	"	24	1.70905	1.70923	1.70916	1.70918 - Measurements
393B	P25	5	1.94787	1.94795	1.94799	all over the place
389 B	"	1	1.96703	1.96702		
271	P18	7	1.97438	1.97439		
286	"	22	1.86247	1.86248		
65A	CCN	18	1.75579	1.7600		
398A	P25	10	1.92650	1.92652		
269	P18	5	1.97872	1.97873		
66A	CCN	19	1.75626	1.75626		
287	P18	23	1.86249	1.86252		- sample full to brim.
197	P13	1	1.86071	1.86070		Difficult to mix well.
167A	P12	4	1.98118	1.98117		
200B	P14	3	1.98117	1.98119		
280	P18	16	1.93654	1.93653		
262	P14	5	1.97895	1.97894		
395A	P25	7	1.94787	1.94788		
272	P18	8	1.97113	1.97114		
DWR			1.97903	1.97905	1.97905	Final Standby Value:

Notes: _____

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2021-001</u>	Cast/Station Name: <u>Many</u>	Analysis Date (dd mmm yyyy): <u>02 Mar 2021</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>73274</u>	
Initial Standby Value: <u>24+6024</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: 0.999 _____ Batch #: _____ Batch Date: _____
		Bath Temperature: <u>24</u> °C Sample Temperature: <u>~22.5</u> °C Room Temperature: <u>22.6</u> °C Analyst: <u>KS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
276	P18	12	1.94812	1.94813		
396B	P25	8	1.94790	1.94791		
168	P12	5	1.97913	1.97914		
390A	P25	2	1.96707	1.96706		
399A	P25	11	1.92652	1.92653		
5056	Loop		1.86161	1.86160		
165	P12	2	1.98194	1.98195		
199	P14	2	1.98221	1.98219		
400A	P25	12	1.92659	1.92658		
391	P25	3	1.96698	1.96697		
277	P18	13	1.94340	1.94397	1.948401	1.94397
187	P12	7	1.96256	1.96257		
222	P15	1	1.86149	1.86151		
171	P12	8	1.96821	1.96820		
274	P18	10	1.96297	1.96298		
193	P12	4	1.86043	1.86042		
167B	P12	4	1.98102	1.98103		
266	P18	2	1.98320	1.98321		
170	P12	7	1.97274	1.97278		
288	P18	24	1.86244	1.86245		
65B	CCN	18	1.75591	1.75589		
71A	CCN	24	1.70889	1.70888		
63A	CCN	16	1.75862	1.75863		
270	P18	6	1.97678	1.97679		
69A	CCN	22	1.71472	1.71471		Final Standby Value:
DWR			1.97906	1.97905		

Notes: _____

Water Properties Group

Institute of Ocean Sciences, Ocean Sciences Division

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2021-001</u>	Cast/Station Name: <u>Many</u>	Analysis Date (dd mmm yyyy): <u>02 Mar 2021</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>73274</u>	
Initial Standby Value: <u>24 + 6024</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>22.9</u> °C Analyst: <u>RS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
63B	CCN	16	1.75872	1.75871		
282	P18	18	1.92609	1.92608		
261	P14	4	1.98010	1.98011		
392B	P25	4	1.96703	1.96702		
66B	CCN	19	1.75625	1.75624		
62B	CCN	15	1.75921	1.75922		
437	P26	3	1.98333	1.98334		
5099	Loop	Underway	1.86341	1.86342		
369	P24	5	1.97876	1.97875		
5085	P32	2	1.86499	1.86501		
440	P26	6	1.97834	1.97835		
421	P26	r7	1.93524	1.93526		
5055	P13	2	1.86093	1.86092		
398B	P25	10	1.92648	1.92649		
394B	P25	6	1.94783	1.94784		
335	P22	4	1.98135	1.98134		
5096	Loop	Underway	1.86639	1.86639		
393A	P25	5	1.94792	1.94793		
61B	CCN	14	1.78756	1.78755		
223	P16	r7	1.96343	1.96342		
438	P26	4	1.98232	1.98236		
5058	P15	2	1.86137	1.86144	1.86138	
267A	P18	3	1.98238	1.98238		
68B	CCN	21	1.71985	1.71984		
5101	Loop	Underway	1.83498	1.83501		Final Standby Value:
DWR			1.97900	1.97902		

Notes: _____

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2021-001</u>	Cast/Station Name: <u>many</u>	Analysis Date (dd mmm yyyy): <u>02 Mar 2021</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>73274</u>	
Initial Standby Value: <u>24+6024</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>KS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
436B	P26	2	1.98368	1.98369		
368	P24	4	1.98101	1.98101		
166	P12	3	1.98205	1.98206		
169	P12	6	1.97512	1.97511		
145	P9	1	1.85947	1.85948		
5081	Loop	Underway	1.86711	1.86710		
203	P14	6	1.97728	1.97730		
60B	CCN	13	1.78645	1.78643		
275	P18	11	1.95711	1.95714		
413	P35	1	1.86508	1.86507		
395B	P25	7	1.94782	1.94784		
414	P26	7	1.96548	1.96549		
285	P18	21	1.86230	1.86228		
334	P22	3	1.98262	1.98263		
390B	P25	2	1.96717	1.96720		
67B	CCN	20	1.72342	1.72340		
397A	P25	9	1.92663	1.92666		
60A	CCN	13	1.78645	1.78649		
200A	P14	3	1.98105	1.98106		
441	P26	7	1.97410	1.97412		
5046	P9	2	1.85965	1.85966		
436A	P26	2	1.98348	1.98349		
439	P26	5	1.98088	1.98089		
5097	Loop	Underway	1.86528	1.86529		
64B	CCN	17	1.75668	1.75666		Final Standby Value:
DWR			1.97903	1.97904		

Notes: _____ _____ _____

Water Properties Group

Institute of Ocean Sciences, Ocean Sciences Division

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2021-001</u>	Cast/Station Name: <u>Many</u>	Analysis Date (dd mmm yyyy): <u>03 Mar 2021</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>73274</u>	
Initial Standby Value: <u>24F 6024</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>22.5</u> °C Room Temperature: <u>22.3</u> °C Analyst: <u>KS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
336	P22	5	1.97905	1.97916	1.97915	
69B	CCN	22	1.71483	1.71482		
399B	P25	11	1.92671	1.92669		
5100	Loop	Underway	1.86275	1.86276		
70A	CCN	23	1.71073	1.71076		
389A	P25	1	1.96703	1.96704		
588A	DOUG26	6	1.88012	1.88011		
591A	"	9	1.87973	1.87971		
586A	"	4	1.88814	1.88895		
406B	P25	18	1.90500	1.90501		
603B	DOUG26	21	1.82104	1.82105		
596A	"	14	1.85285	1.85284		
589A	"	7	1.87958	1.87959		
594A	"	12	1.85327	1.85328		
401B	P25	13	1.92665	1.92672	1.92673	
408A	"	20	1.86869	1.86868		
402B	"	14	1.890582	1.890583		
600B	DOUG26	18	1.84597	1.84598		
606B	"	24	1.81925	1.81926		- Screw cap loose.
406A	P25	18	1.90587	1.90555	1.90535	- Signal noisy in all 3 measurements. ↓ trend.
598B	DOUG26	16	1.84582	1.84582		
583B	"	1	1.88884	1.88885		
281	P18	17	1.93447	1.93448		
407B	P25	19	1.86878	1.86880		
411A	"	23	1.86865	1.86872	1.86867	
DWR			1.97901	1.97900		Final Standby Value: _____

Notes: → started today with DWR: 1.97905 1.97906

Water Properties Group

Institute of Ocean Sciences, Ocean Sciences Division

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2021-001</u>	Cast/Station Name: <u>Many</u>	Analysis Date (dd mmm yyyy): <u>03 Mar 2021</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>73274</u>	
Initial Standby Value: <u>24+6024</u>	Ratio After Standardization: _____	
Cell Standardization (Daily)	Standardization Values:	Standard Info.
Conductivity must be ± 0.00001 compared to Standard 	Before: <u>/</u>	K ₁₅ VALUE: <u>0.999</u>
	After: <u>/</u>	Batch #: <u>/</u>
	Notes: <u>/</u>	Batch Date: <u>/</u>
		Bath Temperature: <u>24</u> °C
		Sample Temperature: <u>~22.5</u> °C
		Room Temperature: <u>22.3</u> °C
		Analyst: <u>KS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
407A	P25	19	1.86867	1.86868		
602A	DOUG 26	20	1.82187	1.82189		
605A	"	23	1.81970	1.81969		
599B	"	17	1.84609	1.84610		
590B	"	8	1.87999	1.87999		
411B	P25	23	1.86853	1.86854		
585B	DOUG 26	3	1.88883	1.88882		
600A	"	18	1.84643	1.84642		
605B	"	23	1.81969	1.81970		
604A	"	22	1.82111	1.82112		
592A	"	10	1.85333	1.85381		
409A	P25	21	1.86898	1.86896		
408B	"	20	1.86874	1.86875		
599A	DOUG 26	17	1.84627	1.84628		
595B	"	13	1.85309	1.85308		
586B	"	4	1.88885	1.88886		
589B	"	7	1.87950	1.87951		
595A	"	13	1.85313	1.85314		
603A	"	21	1.82120	1.82121		
405A	P25	17	1.90471	1.90471		- Screw cap loose
402A	"	14	1.90594	1.90592		
404B	"	16	1.90510	1.90509		
403A	"	15	1.90523	1.90524		- Neck badly broken
410B	"	22	1.86866	1.86865		Did not seem to be
593A	DOUG 26	11	1.85346	1.85347		Final Standby Value: leaking.
DWR			1.97905	1.97904		

Notes: _____

Water Properties Group

Institute of Ocean Sciences, Ocean Sciences Division

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2021-001</u>	Cast/Station Name: <u>Many</u>	Analysis Date (dd mmm yyyy): <u>03 Mar 2021</u>
Autosal Model: <u>8400B</u>	Serial Number: <u>73274</u>	
Initial Standby Value: <u>24.6024</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>22.3</u> °C Analyst: <u>KS</u>

Sample	Station Name	Depth/Nisk#	Salinity 1	Salinity 2	Salinity 3	Comments
593B	DOUG26	11	1.85342	1.85340		
601B	"	19	1.84630	1.84629		
410A	P25	22	1.86866	1.86865		
403B	"	15	1.90526	1.90527		
366	P24	2	1.98324	1.98318	1.98325	
405B	P25	17	1.90484	1.90483		
597B	DOUG26	15	1.84600	1.84606	1.84607	
585A	"	3	1.88894	1.88895		
588B	"	6	1.88012	1.88013		
594B	"	12	1.85335	1.85334		
602B	"	20	1.82175	1.82176		Screw cap loose
606A	"	24	1.81944	1.81943		
591A	"	16	1.84621	1.84619		
587B	"	5	1.88022	1.88023		
604B	"	22	1.82104	1.82104		
584A	"	2	1.88887	1.88886		
367	P24	3	1.98249	1.98249		
401A	P25	13	1.92697	1.92700		
601A	DOUG26	19	1.84635	1.84637		
587A	"	5	1.88043	1.88044		
404A	P25	16	1.90509	1.90509		
597A	DOUG26	15	1.84621	1.84622		
596B	"	14	1.85280	1.85281		
584B	"	2	1.88872	1.88874		
409B	P25	21	1.86876	1.86875		Final Standby Value: _____
BWR			1.97903	1.97905		

Notes: _____

AUTOSAL ANALYSIS LOGSHEET

Cruise ID: <u>2021-001</u>		Cast/Station Name: <u>Mary</u>	Analysis Date (dd mmm yyyy):
Autosal Model: <u>8400B</u>		Serial Number: <u>73274</u>	<u>03</u> <u>Mar</u> <u>2021</u>
Initial Standby Value: <u>24 + 6024</u>		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: <u>~22.5</u> °C
	After: _____	Batch #: _____	Room Temperature: <u>22.4</u> °C
	Notes: _____	Batch Date: _____	Analyst: <u>KS</u>

[illegible]

Notes: _____

2021-001 salinity labels

1 of 5

85B SAL P4 2021-001 1000 m bot 4	614 SAL Doug-45 2021-001 50 m bot 3	5068 SAL LOOP 2021-001 Loop m bot 1	125 SAL P8 2021-001 800 m bot 5	72 SAL P4 2021-001 75 m bot r4	5066 SAL P17 2021-001 LOOP m bot 2	242 SAL P16 2021-001 3500 m bot 3	309 SAL P20 2021-001 3500 m bot 3	608 SAL Doug-31 2021-001 Bot-5 m bot 2	613 SAL Doug-45 2021-001 Bot-5 m bot 2
100 SAL P4 2021-001 5 m bot 19	331 SAL P21 2021-001 5 m bot 1	83 SAL P4 2021-001 1250 m bot 2	5169 SAL Underway 2021-001 Loop m bot 1	85A SAL P4 2021-001 1000 m bot 4	245 SAL P16 2021-001 2000 m bot 6	310 SAL P20 2021-001 3000 m bot 4	623 SAL HAK1 2021-001 50 m bot 7	5015 SAL Transit 2021-001 Loop m bot 1	118 SAL P5 2021-001 5 m bot 2
5069 SAL P19 2021-001 LOOP m bot 2	290 Sal P20 2021-001 800 m bot r7	313 SAL P20 2021-001 1500 m bot 7	5008 SAL JF3 2021-001 Loop m bot 1	610 SAL Doug-31 2021-001 0 m bot 4	124A SAL P8 2021-001 1000 m bot 4	243B SAL P16 2021-001 3000 m bot 4	264 SAL P17 2021-001 5 m bot 1	609 SAL Doug-31 2021-001 50 m bot 3	312A SAL P20 2021-001 2000 m bot 6
5009 SAL JF4 2021-001 Loop m bot 1	246 SAL P16 2021-001 1500 m bot 7	121A SAL P8 2021-001 2000 m bot 1	311 SAL P20 2021-001 2500 m bot 5	76 Sal P4 2021-001 800 m bot r7	236 SAL P16 2021-001 75 m bot r4	630 SAL HAK1 2021-001 0 m bot 14	5077 SAL P21 2021-001 LOOP m bot 2	615 SAL Doug-45 2021-001 0 m bot 4	54B SAL CCN 2021-001 75 m bot 7
123 SAL P8 2021-001 1250 m bot 3	56B SAL CCN 2021-001 75 m bot 9	289 SAL P19 2021-001 5 m bot 1	59B SAL CCN 2021-001 40 m bot 12	244 SAL P16 2021-001 2500 m bot 5	84 SAL P4 2021-001 1250 m bot 3	50A SAL CCN 2021-001 100 m bot 3	53B SAL CCN 2021-001 75 m bot 6	303 SAL P20 2021-001 75 m bot r4	50B SAL CCN 2021-001 100 m bot 3
57A SAL CCN 2021-001 40 m bot 10	618 SAL HAK1 2021-001 Bot-5 m bot 2	55B SAL CCN 2021-001 75 m bot 8	563 SAL Doug-16 2021-001 0 m bot 4	308 SAL P20 2021-001 3500 m bot 2	58B SAL CCN 2021-001 40 m bot 11	49A SAL CCN 2021-001 100 m bot 2	121B SAL P8 2021-001 2000 m bot 1	53A SAL CCN 2021-001 75 m bot 6	546 SAL 4536 2021-001 Bot-5 m bot 2
241 SAL P16 2021-001 3500 m bot 2	5031 SAL Underway 2021-001 Loop m bot 1	5016 SAL Bussell 2021-001 Loop m bot 1	59A SAL CCN 2021-001 40 m bot 12	474 SAL HEC1 2021-001 0 m bot 13	312B SAL P20 2021-001 2000 m bot 6	525 SAL Doug04 2021-001 Bot-5 m bot 2	243A SAL P16 2021-001 3000 m bot 4	56A SAL CCN 2021-001 75 m bot 9	51B SAL CCN 2021-001 100 m bot 4

55A SAL CCN 2021-001 75 m bot 8	541 SAL Doug-11 2021-001 Bot-5 m bot 2	5005 SAL JF1 2021-001 Loop m bot 1	5039 SAL P5 2021-001 LOOP m bot 3	553 SAL GC74 2021-001 0 m bot 4	54A SAL CCN 2021-001 75 m bot 7	542 SAL Doug-11 2021-001 50 m bot 3	543 SAL Doug-11 2021-001 0 m bot 4	562 SAL Doug-16 2021-001 50 m bot 3	58A SAL CCN 2021-001 40 m bot 11
547 SAL 44550 2021-001 50 m bot 3	5032 SAL Underway 2021-001 Loop m bot 1	48A SAL CCN 2021-001 100 m bot 1	52A SAL CCN 2021-001 75 m bot 5	503 SAL SC61 2021-001 50 m bot 12	122 SAL P8 2021-001 1500 m bot 2	558 SAL GC44 2021-001 0 m bot 4	5138 SAL Underway 2021-001 Loop m bot 1	509 SAL SC61 2021-001 0 m bot 18	124B SAL P8 2021-001 1000 m bot 4
52B SAL CCN 2021-001 75 m bot 5	552 SAL GC74 2021-001 50 m bot 3	468 SAL HEC1 2021-001 50 m bot 7	548 SAL GC74 2021-001 0 m bot 4	556 SAL GC44 2021-001 Bot-5 m bot 2	493 SAL SC61 2021-001 Bot-5 m bot 2	57B SAL CCN 2021-001 40 m bot 10	86 SAL P4 2021-001 800 m bot 5	551 SAL GC74 2021-001 Bot-5 m bot 2	51A SAL CCN 2021-001 100 m bot 4
557 SAL GC44 2021-001 50 m bot 3	532 SAL Doug04 2021-001 50 m bot 9	49B SAL CCN 2021-001 100 m bot 2	464 SAL HEC1 2021-001 Bot-5 m bot 3	538 SAL Doug04 2021-001 0 m bot 15	48B SAL CCN 2021-001 100 m bot 1	561 SAL Doug-16 2021-001 Bot-5 m bot 2	394A SAL P25 2021-001 400 m bot 6	278 SAL P18 2021-001 250 m bot 14	267B SAL P18 2021-001 3000 m bot 3
279 SAL P18 2021-001 200 m bot 15	64A SAL CCN 2021-001 25 m bot 17	70B SAL CCN 2021-001 10 m bot 23	397B SAL P25 2021-001 150 m bot 9	273 SAL P18 2021-001 1000 m bot 9	392A SAL P25 2021-001 1000 m bot 4	67A SAL CCN 2021-001 10 m bot 20	333 SAL P22 2021-001 3500 m bot 2	400B SAL P25 2021-001 150 m bot 12	391A SAL P25 2021-001 1000 m bot 3
61A SAL CCN 2021-001 40 m bot 14	284 SAL P18 2021-001 75 m bot 20	283 SAL P18 2021-001 100 m bot 19	396A SAL P25 2021-001 400 m bot 8	268 SAL P18 2021-001 2500 m bot 4	62A SAL CCN 2021-001 25 m bot 15	68A SAL CCN 2021-001 10 m bot 21	71B SAL CCN 2021-001 10 m bot 24	393B SAL P25 2021-001 400 m bot 5	389B SAL P25 2021-001 1000 m bot 1
271 SAL P18 2021-001 1500 m bot 7	286 SAL P18 2021-001 25 m bot 22	65A SAL CCN 2021-001 25 m bot 18	398A SAL P25 2021-001 150 m bot 10	269 SAL P18 2021-001 2000 m bot 5	66A SAL CCN 2021-001 25 m bot 19	287 SAL P18 2021-001 10 m bot 23	197 SAL P13 2021-001 5 m bot 1	167A SAL P12 2021-001 2500 m bot 4	200B SAL P14 2021-001 2500 m bot 3

2021-0041

labels

3 of 5

280 SAL P18 2021-001 175 m bot 16	202 SAL P14 2021-001 2000 m bot 5	395A SAL P25 2021-001 400 m bot 7	272 SAL P18 2021-001 1250 m bot 8	276 SAL P18 2021-001 400 m bot 12	396B SAL P25 2021-001 400 m bot 8	168 SAL P12 2021-001 2000 m bot 5	390A SAL P25 2021-001 1000 m bot 2	399A SAL P25 2021-001 150 m bot 11	5056 SAL LOOP 2021-001 Loop m bot 1
165 SAL P12 2021-001 3000 m bot 2	199 SAL P14 2021-001 3000 m bot 2	400A SAL P25 2021-001 150 m bot 12	391B SAL P25 2021-001 1000 m bot 3	277 SAL P18 2021-001 300 m bot 13	187 Sal P12 2021-001 800 m bot r7	222 SAL P15 2021-001 5 m bot 1	171 SAL P12 2021-001 1000 m bot 8	274 SAL P18 2021-001 800 m bot 10	193 SAL P12 2021-001 75 m bot r4
167B SAL P12 2021-001 2500 m bot 4	266 SAL P18 2021-001 3500 m bot 2	170 SAL P12 2021-001 1250 m bot 7	288 SAL P18 2021-001 5 m bot 24	65B SAL CCN 2021-001 25 m bot 18	71A SAL CCN 2021-001 10 m bot 24	63A SAL CCN 2021-001 25 m bot 16	270 SAL P18 2021-001 1750 m bot 6	69A SAL CCN 2021-001 10 m bot 22	63B SAL CCN 2021-001 25 m bot 16
282 SAL P18 2021-001 125 m bot 18	201 SAL P14 2021-001 2250 m bot 4	392B SAL P25 2021-001 1000 m bot 4	66B SAL CCN 2021-001 25 m bot 19	62B SAL CCN 2021-001 25 m bot 15	437 SAL P26 2021-001 3500 m bot 3	5099 SAL Underway 2021-001 Loop m bot 1	369 SAL P24 2021-001 2000 m bot 5	5085 SAL P35 2021-001 LOOP m bot 2	440 SAL P26 2021-001 2000 m bot 6
421 SAL P26 2021-001 200 m bot r7	5055 SAL P13 2021-001 LOOP m bot 2	398B SAL P25 2021-001 150 m bot 10	394B SAL P25 2021-001 400 m bot 6	335 SAL P22 2021-001 2500 m bot 4	5096 SAL Underway 2021-001 Loop m bot 1	393A SAL P25 2021-001 400 m bot 5	61B SAL CCN 2021-001 40 m bot 14	223 Sal P16 2021-001 800 m bot r7	438 SAL P26 2021-001 3000 m bot 4
5058 SAL P15 2021-001 LOOP m bot 2	267A SAL P18 2021-001 3000 m bot 3	68B SAL CCN 2021-001 10 m bot 21	5101 SAL Underway 2021-001 Loop m bot 1	436B SAL P26 2021-001 4000 m bot 2	368 SAL P24 2021-001 2500 m bot 4	166 SAL P12 2021-001 3000 m bot 3	169 SAL P12 2021-001 1500 m bot 6	145 SAL P9 2021-001 5 m bot 1	5081 SAL Underway 2021-001 Loop m bot 1
203 SAL P14 2021-001 1750 m bot 6	60B SAL CCN 2021-001 40 m bot 13	275 SAL P18 2021-001 600 m bot 11	413 SAL P35 2021-001 5 m bot 1	395B SAL P25 2021-001 400 m bot 7	414 Sal P26 2021-001 1500 m bot 7	285 SAL P18 2021-001 50 m bot 21	334 SAL P22 2021-001 3000 m bot 3	390B SAL P25 2021-001 1000 m bot 2	67B SAL CCN 2021-001 10 m bot 20

Final Standby Value:

397A SAL P25 2021-001 150 m bot 9 Initial standby value	60A SAL CCN 2021-001 40 m bot 13	200A SAL P14 2021-001 2500 m bot 3	441 SAL P26 2021-001 1500 m bot 7	5046 SAL P9 2021-001 LOOP m bot 2	436A SAL P26 2021-001 4000 m bot 2	439 SAL P26 2021-001 2500 m bot 5	5097 SAL Underway 2021-001 Loop m bot 1	64B SAL CCN 2021-001 25 m bot 17	336 SAL P22 2021-001 2000 m bot 5
69B SAL CCN 2021-001 10 m bot 22	399B SAL P25 2021-001 150 m bot 11	5100 SAL Underway 2021-001 Loop m bot 1	70A SAL CCN 2021-001 10 m bot 23	389A SAL P25 2021-001 1000 m bot 1	588A SAL Doug-26 2021-001 m bot 6	591A SAL Doug-26 2021-001 m bot 9	586A SAL Doug-26 2021-001 m bot 4	406B SAL P25 2021-001 125 m bot 18	603B SAL Doug-26 2021-001 m bot 21
596A SAL Doug-26 2021-001 m bot 14	589A SAL Doug-26 2021-001 m bot 7	594A SAL Doug-26 2021-001 m bot 12	401B SAL P25 2021-001 150 m bot 13	408A SAL P25 2021-001 100 m bot 20	402B SAL P25 2021-001 125 m bot 14	600B SAL Doug-26 2021-001 m bot 18	606B SAL Doug-26 2021-001 m bot 24	406A SAL P25 2021-001 125 m bot 18	598B SAL Doug-26 2021-001 m bot 16
583B SAL Doug-26 2021-001 m bot 1	281 SAL P18 2021-001 150 m bot 17	407B SAL P25 2021-001 100 m bot 19	411A SAL P25 2021-001 100 m bot 23	407A SAL P25 2021-001 100 m bot 19	602A SAL Doug-26 2021-001 m bot 20	605A SAL Doug-26 2021-001 m bot 23	599B SAL Doug-26 2021-001 m bot 17	590B SAL Doug-26 2021-001 m bot 8	411B SAL P25 2021-001 100 m bot 23
585B SAL Doug-26 2021-001 m bot 3	600A SAL Doug-26 2021-001 m bot 18	605B SAL Doug-26 2021-001 m bot 23	604A SAL Doug-26 2021-001 m bot 22	592A SAL Doug-26 2021-001 m bot 10	409A SAL P25 2021-001 100 m bot 21	408B SAL P25 2021-001 100 m bot 20	599A SAL Doug-26 2021-001 m bot 17	595B SAL Doug-26 2021-001 m bot 13	586B SAL Doug-26 2021-001 m bot 4
589B SAL Doug-26 2021-001 m bot 7	595A SAL Doug-26 2021-001 m bot 13	603A SAL Doug-26 2021-001 m bot 21	405A SAL P25 2021-001 125 m bot 17	402A SAL P25 2021-001 125 m bot 14	404B SAL P25 2021-001 125 m bot 16	403A SAL P25 2021-001 125 m bot 15	410B SAL P25 2021-001 100 m bot 22	593A SAL Doug-26 2021-001 m bot 11	593B SAL Doug-26 2021-001 m bot 11
601B SAL Doug-26 2021-001 m bot 19	410A SAL P25 2021-001 100 m bot 22	403B SAL P25 2021-001 125 m bot 15	366 SAL P24 2021-001 3500 m bot 2	405B SAL P25 2021-001 125 m bot 17	597B SAL Doug-26 2021-001 m bot 15	585A SAL Doug-26 2021-001 m bot 3	588B SAL Doug-26 2021-001 m bot 6	594B SAL Doug-26 2021-001 m bot 12	602B SAL Doug-26 2021-001 m bot 20

606A

SAL

Doug-26

2021-001

m

bot 24

598A

SAL

Doug-26

2021-001

m

bot 16

587B

SAL

Doug-26

2021-001

m

bot 5

604B

SAL

Doug-26

2021-001

m

bot 22

584A

SAL

Doug-26

2021-001

m

bot 2

367

SAL

P24

2021-001

3000 m

bot 3

401A

SAL

P25

2021-001

150 m

bot 13

601A

SAL

Doug-26

2021-001

m

bot 19

587A

SAL

Doug-26

2021-001

m

bot 5

404A

SAL

P25

2021-001

125 m

bot 16

597A

SAL

Doug-26

2021-001

m

bot 15

596B

SAL

Doug-26

2021-001

m

bot 14

584B

SAL

Doug-26

2021-001

m

bot 2

409B

SAL

P25

2021-001

100 m

bot 21

590A

SAL

Doug-26

2021-001

m

bot 8

583A

SAL

Doug-26

2021-001

m

bot 1

591B

SAL

Doug-26

2021-001

m

bot 9

592B

SAL

Doug-26

2021-001

m

bot 10

re: _____ °C

ture: _____ °C

ure: _____ °C

Final Standby Value:

Notes: _____