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Autosal Salinity Analysis Log Sheet

Standardization Information	*Standard Information*	*Autosal Model 8400B*	*Cruise Information*
Initial Standby Value	K_{15}	Serial Number	Cruise ID 2010-07
Initial Standard Dial Value	Batch # P151	Bath T (°C)	Date 2010-09-26
Standby Value after Standardization	Batch Date	Lab T (°C)	Analyst MJ
Standard Dial Value after Standardization			
Final Standby Value (end of analysis) 6084			

Sample	Cast	Station	Conductivity #1	Conductivity #2	Conductivity #3	Comments
495	27	CB51	1.99725	1.99727	1.99726	?
496			1.99597	1.99598	1.99600	} ship rolling
497			1.99597	1.99596	1.99595	}
498			1.99433	1.99434		}
499			1.99360	1.99360		}
500			1.99264	1.99265		}
501			1.99235	1.99236	1.99235	}
502			1.99027	1.99029		}
503			1.98884	1.98884	1.98883	} flickering.
504			1.98496	1.98497	1.98501	
505			1.98086	1.98086		
283			1.99374	1.99376	1.99378	2010-07 Deep Water check.

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Autosal Salinity Analysis Log Sheet

Standardization Information	
Initial Standby Value	24+6084
Initial Standard Dial Value	1.99
Standby Value after Standardization	24+6089
Standard Dial Value after Standardization	
Final Standby Value (end of analysis)	

Standard Information	
K_{15}	0.99997
Batch #	P151
Batch Date	use before 2012/05/20

Autosal Model 8400B	
Serial Number	69086
Bath T (°C)	24
Lab T (°C)	22.5

Cruise Information	
Cruise ID	2010-07
Date	2010-09-28
Analyst	MD

Sample	Cast	Station	Conductivity #1	Conductivity #2	Conductivity #3	Comments
P151			1.99988	1.99987	1.998	IAPSO standard P151
						adjusted R_s to 6.085 SBY 6089
						accepted 1.99993.
			2.0001	2.00000		Ran remaining standard
						try new IAPSO bottle
			1.99993			accept 24+6089 no twiddle.
			2.00000	2.00005		??? evaporation
283			1.99378	1.99378	1.99383	2010-07 deep water check. TOK
						rejected
506	27	CB-51	1.99243	1.99243		
507			1.95723	1.95722	1.95723	flickering
508			1.94211	1.94210	1.94211	
509			1.91011	1.91009	1.91010	
510			1.89364	1.89362		
511			1.88677	1.88681	1.88683	
512			1.86502	1.86502		
513			1.84519	1.84521		
514			1.79894	1.79895		
515			1.77636	1.77635		
516			1.69857	1.69855		Door opened
517			1.62369	1.62363	1.62361	
518	28	STA-A	1.99400	1.99402		? Cs cast 4 bottles each depth
519			1.99406	1.99406	4x	
520			1.99396	1.99397		
521			1.99403	1.99400		
522			1.99330	1.99331		
523			1.99333	1.99333	3x	
524			1.99333	1.99332		
525			1.99321	1.99320		
526			1.99224	1.99223		
527			1.99220	1.99221		

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Standardization Information	Standard Information	Autosal Model 8400B	Cruise Information
Initial Standby Value	K_{15}	Serial Number 69086	Cruise ID 2010-07
Initial Standard Dial Value	Batch #	Bath T (°C) 24	Date 2010-09-28
Standby Value after Standardization	Batch Date	Lab T (°C) 22.5	Analyst MD
Standard Dial Value after Standardization			
Final Standby Value (end of analysis)			

Sample	Cast	Station	Conductivity #1	Conductivity #2	Conductivity #3	Comments
528	28	STA-A	1.99226	1.99226		
283			1.99379	1.99380	1.99380	2010-07 Deep water check.
217dup	15	MK3a	1.99042	1.99043		Duplicates
229	15	MK3a	1.86439	1.86436		
239	16	MK-4	1.99293	1.99295	1.99395	
248	16	MK-4	1.95551	1.95553	1.95553	Rinse
257	16	MK-4	1.75678	1.75674	1.75672	1.75672
260	17	MK-6	1.99714	1.99718	1.99728	1.99733 4x5 X
266	17	MK-6	1.77547	1.77547		
305	19	CB-28b	1.99459	1.99464	1.99467	
333	20	CB-29	1.99270	1.99280	1.99276	1.99276
342	20	CB-29	1.91950	1.91947	1.91947	
357	21	MK-7	1.99233	1.99235		
366	21	MK-7	1.90540	1.90540		
381	22	CB-27	1.99238	1.99238		
372	22	CB-27	1.89170	1.89168		
407	23	CB-22	1.99138	1.99140		
410	23	CB-22	1.98095	1.98097		
427	24	CB-23a	1.99413	1.99413		
445	24	CB-23a	1.68418	1.68414	1.68413	
489	26	CB-50	1.85050	1.85050		
501	27	CB-51	1.91975	1.91976		
508	27	CB-51	1.94173	1.94175		
477	26	CB-50	1.99207	1.99209	1.99209	Bottle 8
558	29	STA-A	1.90331	1.90330		Bottle 17
560	29	STA-A	1.86576	1.86576		Bottle 19
283			1.99376	1.99377		2010-07 Deep water check
529	29	STA-A	1.99228	1.99228		
530			1.98995	1.98992	1.98995	
531			1.99003	1.99005		
532			1.99000	1.99002		

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Autosal Salinity Analysis Log Sheet

Standardization Information	*Standard Information*	*Autosal Model 8400B*	*Cruise Information*
Initial Standby Value	K_{15}	Serial Number	Cruise ID 2010-07
Initial Standard Dial Value	Batch #	Bath T (°C)	Date 2010-07-28
Standby Value after Standardization	Batch Date	Lab T (°C)	Analyst MD
Standard Dial Value after Standardization			
Final Standby Value (end of analysis) 24+6089			

Sample	Cast	Station	Conductivity #1	Conductivity #2	Conductivity #3	Comments
533	28	STA-A	1.98991	1.98996	1.98998	
534			1.97825	1.97825		
535			1.97817	1.97820	1.97818	same depth?
536			1.97776	1.97791		
537			1.97820	1.97820		
538			1.45209	1.45160	145150	1.45150
539			1.45147	1.45146		
540			1.45143	1.45148		
541			1.45145	1.45146		

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Standardization Information		Standard Information	Autosal Model 8400B	Cruise Information
Initial Standby Value	247 6090/29	K_{15} 0.99997	Serial Number 69086	Cruise ID 2010-07
Initial Standard Dial Value	6.07	Batch # P151	Bath T (°C) 24	Date Sept 29, 2010
Standby Value after Standardization	247 6090/89	Batch Date 20-May-2010	Lab T (°C) shelf: 22.7	Analyst KS
Standard Dial Value after Standardization	6.07	Salinity: 34.999	bench: 22.6 } @ 02:00 floor: 21.4 } @ 02:00 → SWEET!	
Final Standby Value (end of analysis)				

Sample	Cast	Station	Conductivity #1	Conductivity #2	Conductivity #3	Comments
IAPSO	P151		1.99994	1.99997	1.99995	→ salinity = 34.9993 Calibration Info.
283	dwc	2010-07	~~1.99375~~	1.99375	1.99374	display #1 1.99994 K_{15}: 0.999971
542	29	Stn-A	1.99783	1.99781	1.99783	#2 1.99994 K_{15}: 0.999967
543			1.99785	1.99784		
544			1.99766	1.99767		→ I ran another → 1.99376 1.99377
545			1.99723	~~1.99721~~	1.99722	← deleted reading 2 → fluctuating badly
546			1.99553	1.99554		
547			1.99406	1.99406		
548			1.99345	1.99343	~~1.99343~~	← deleted reading 3 → " "
549			1.99233	1.99232		
550	↓	↓	1.99153	1.99154	1.99152	
551	29	Stn-A	1.99136	1.99135	1.99136	
283	dwc	2010-07	1.99379	1.99378		
552	29	Stn-A	1.99043	1.99041	1.99042	
553			1.98751	1.98752		
554			1.97960	1.97961		
555			1.94645	1.94643	1.94645	
556			1.94186	1.94187		
557			1.91291	1.91292		
558			1.90334	1.90333		
559			1.88270	1.88271	1.88270	
560			1.86575	1.86573	1.86575	
561			1.83252	1.83254		
562			1.79612	1.79613	1.79612	
563			1.72560	1.72560		
564	↓	↓	1.60922	1.60919	1.60921	
565	29	Stn-A	1.45440	1.45436	1.45437	
566	30	CB-2a	1.99764	1.99771		
567			1.99779	1.99780		
568	↓	↓	1.99764	1.99762	1.99761	
569	30	CB-2a	1.99704	1.99704		

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Standardization Information		Standard Information	Autosal Model 8400B	Cruise Information
Initial Standby Value		K_{15}	Serial Number 69086	Cruise ID 2010-07
Initial Standard Dial Value	see pg. 1	Batch #	Bath T (°C) 24	Date Sept 29, 2010
Standby Value after Standardization		Batch Date	Lab T (°C) shelf: 22.9 bench: 22.7 floor: 21.9 @ 04:05	Analyst KS
Standard Dial Value after Standardization				
Final Standby Value (end of analysis)				

Sample	Cast	Station	Conductivity #1	Conductivity #2	Conductivity #3	Comments
570	30	CB-2a	1.99558	1.99556	1.99559	
571			1.99381	1.99380		
572			1.99319	1.99317	1.99320	
573	↓	↓	1.99236	1.99235		
574	30	CB-2a	1.99169	1.99168	1.99169	
283	dwc	2010-07	1.99378	1.99379	1.99378	
575	30	CB-2a	1.99043	1.99042	1.99045	
576			1.98882	1.98882	~~1.98888~~	deleted reading 3 - much too high.
577			1.98587	1.98589	1.98590	
578			1.97189	1.97191	1.97191	
579			1.95929	1.95928		
580			1.94109	1.94110		
581			1.90806	1.90808		
582			1.89684	1.89683	1.89694 ?	1.89689 - Numbers all over the place, fluctuating badly
583			1.88562	1.88565	~~1.88565~~	deleted reading 3 - Fluctating badly
584			1.86336	1.86334	1.86336	
585			1.84694	1.84693		
586			1.75615	1.75614		
587			1.73252	1.73254	1.73253	
588	↓	↓	1.61744	1.61745		
589	30	CB-2a	1.51645	1.51645		
590	31	CB-2	1.99769	1.99774	1.99775	
591			1.99777	1.99776	1.99777	
592			1.99756	1.99755	1.99755	
593			1.99698	1.99697		
594			1.99426	1.99425		MJ
595			1.99459	1.99460		
596	↓	↓	1.99319	1.99319		
597	31	CB-2	1.99220	1.99220		
283	dwc	2010-07	1.99377	1.99376	1.99376	
~~644~~ 644	31	CB-4	1.91142	1.91143		out of order

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Standardization Information	Standard Information	Autosal Model 8400B	Cruise Information
Initial Standby Value	K_{15}	Serial Number 69086	Cruise ID 2010-07
Initial Standard Dial Value	Batch #	Bath T (°C) 24	Date Sept. 29, 2010
Standby Value after Standardization	Batch Date	Lab T (°C)	Analyst MD
Standard Dial Value after Standardization			
Final Standby Value (end of analysis)			

Sample	Cast	Station	Conductivity #1	Conductivity #2	Conductivity #3	Comments
598	31	CB-2	1.99122	1.99124		
599			1.99053	1.99054	1.99058	1.99060
600			1.98927	1.98930	1.98928	
601			1.98564	1.98565	1.98568	
602			1.97278	1.97279		
603			1.94639	1.94643	1.94645	
604			1.93719	1.93722	1.93723	
605			1.90913	1.90912		switched to UPS power for Autosal
606			1.89479	1.89478		
607			1.88046	1.88045		
608			1.86736	1.86734		
609			1.84067	1.83918	1.83918	
610			1.79910	1.79910		
611			1.74609	1.74604	174603	
612			1.62809	1.62809		
613			1.50247	1.50236	1.50232	1.50232 -big range drop.
614		CB-3	1.99776	1.99785	1.99787	
615			1.99786	1.99785		
616			1.99766	1.99766		
617			1.99695	1.99697		
618			1.99938	1.99540		
619			1.99377	1.99379		
620			1.99302	1.99304		
283		—	1.99377	1.99371	1.99378	2010-07 Computer check.
621		CB-3	1.99223	1.99225	1.99224	
622			1.99138	1.99139		
623			1.99116	1.99115		
624			1.98913	1.98914		
625			1.98596	1.98596		
626			1.97222	1.97234	1.97234	
627			1.95532	1.95534		

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Standardization Information		Standard Information	Autosal Model 8400B	Cruise Information
Initial Standby Value	24+6089	K_{15}	Serial Number	Cruise ID 2010-07
Initial Standard Dial Value		Batch #	Bath T (°C)	Date 2010-09-29
Standby Value after Standardization		Batch Date	Lab T (°C)	Analyst MD/CS
Standard Dial Value after Standardization				
Final Standby Value (end of analysis)	24+6089			

Sample	Cast	Station	Conductivity #1	Conductivity #2	Conductivity #3	Comments
628	32	CB-3	1.93760	1.93761		
629			1.91320	1.91322		
630			1.89947	1.89947		
631			1.88216	1.88216		
632			1.86342	1.86344		
633			1.84827	1.84827		
634			1.79174	1.79173		
635			1.71547	1.71547		
636			1.56253	1.56252		
637			1.48594	1.48592		
638	33	CB-4	1.98317	1.98332	1.98340	1.98340 Big change in range
639			1.97846	1.97847		
640			1.97054	1.97054		
641			1.96502	1.96502		
642			1.95458	1.95456		
643			1.92981	1.92981		
283	ref	2010-07	1.95376	1.95378		2010-07 Deep Water check.
283	ref	2010-07	1.99366	1.99375	1.99384	1.99385
645	33	CB-4	1.90430	1.90431		
646			1.89878	1.89878		
647			1.89504	1.89504		
648			1.89059	1.89059		
649			1.88636	1.88636		
650			1.88017	1.88018		
651			1.84038	1.84037		
652			1.85969	1.85970		
653			1.84246	1.84247		
654			1.82592	1.82592		
655			1.81482	1.81483		
656	↓	↓	1.79316	1.79314		

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Standardization Information		Standard Information	Autosal Model 8400B	Cruise Information
Initial Standby Value	2476039	K_{15}	Serial Number 69086	Cruise ID 2010-07
Initial Standard Dial Value		Batch #	Bath T (°C) 24	Date 29-Sept-2010
Standby Value after Standardization		Batch Date	Lab T (°C) 22.9°C	Analyst CS
Standard Dial Value after Standardization				
Final Standby Value (end of analysis)				

Sample	Cast	Station	Conductivity #1	Conductivity #2	Conductivity #3	Comments
657	33	CB-4	1.75884	1.75884		
659	↓	↓	1.64189	1.64175	1.64173	
660	↓	↓	1.46215	1.46210	1.46209	
661	↓	↓	1.45569	1.45570		
662	34	CB-4	1.99777	1.99777		
663	↓	↓	1.99775	1.99775		
664	↓	↓	1.99756	1.99755		
665	↓	↓	1.99701	1.99701		
6666	↓	↓	1.99535	1.99536		
283	ref	2010-07	1.99378	1.99381	1.99380.	
667	34	CB-4	1.99370	1.99369		
668	↓	↓	1.99308	1.99309		
669	↓	↓	1.99196	1.99195		
670	↓	↓	1.99127	1.99128		
671	↓	↓	1.99098	1.99098		
672	↓	↓	1.98920	1.98919		
673	↓	↓	1.98654	1.98658		
674	↓	↓	1.97328	1.97328		
676	↓	↓	1.93498	1.93494	1.93493.	
677	↓	↓	1.90577	1.90577		
678	↓	↓	1.89475	1.89474		
679	↓	↓	1.87900	1.87899		
680	↓	↓	1.86560	1.86560		
681	↓	↓	1.84764	1.84764		
682	↓	↓	1.77306	1.77302	1.77299.	Fluctuating a lot - Deleted 1st reading
683	↓	↓	1.73137	1.73138		
684	↓	↓	1.57090	1.57081	1.57079	
685	↓	↓	1.45665	1.45653	1.45651	
686	35	CB-5	1.99774	1.99774		
687	↓	↓	1.99748	1.99747		
688	↓	↓	1.99763	1.99763		

658?