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Duplicate analysis for samples drawn from a single Niskin bottle:

Event Number	Sample Number	Station	Pressure dbar	pH 1	pH 2	pH 3	Difference	Absolute Difference	Standard deviation	Comments	
5	25	P2	100.1	7.8123	7.8115		-0.0008	0.0008			
5	27	P2	75.1	7.8149	7.8112		-0.0037	0.0037			
5	29	P2	25.7	7.8133	7.8127		-0.0006	0.0006			
5	31	P2	4.6	7.8118	7.8139		0.0021			Unstable analyses	
10	50	P4	801.4	7.2905	7.2926		0.0021	0.0021			
10	51	P4	600.2	7.2982	7.2996		0.0014	0.0014			
10	55	P4	202.0	7.4573	7.4557		-0.0015	0.0015			
10	58	P4	126.2	7.5990	7.5989		-0.0001	0.0001			
10	59	P4	100.8	7.6805	7.6804		0.0000	0.0000			
10	60	P4	75.2	7.7921	7.7899		-0.0022	0.0022			
10	61	P4	51.0	7.8113	7.8125		0.0013	0.0013			
10	62	P4	24.8	7.8136	7.8149		0.0012	0.0012			
10	64	P4	5.1	7.8146	7.8164		0.0018	0.0018			
48	109	P12	2999.9	7.4836	7.4851		0.0015	0.0015			
48	119	P12	249.3	7.4733	7.5260		0.0527			Unstable analysis for A, neither really fits	
48	123	P12	124.8	7.6334	7.6327		-0.0006	0.0006			
48	126	P12	49.0	7.8207	7.8220					Bubbles	
25	221	P16	3496.8	7.5248	7.5277					Unstable analysis	
25	232	P16	302.8	7.4241	7.4280					Lost dye	
25	237	P16	124.8	7.7063	7.7061		-0.0003	0.0003			
25	239	P16	75.8	7.8151	7.8143		-0.0007	0.0007			
32	290	P18	1997.8	7.3970	7.3966	7.3939			0.0017		
32	291	P18	1999.3	7.3922	7.3945	7.3925			0.0012		
32	292	P18	2001.3	7.3921	7.3921	7.3916			0.0003		
32	293	P18	2000.7	7.3947	7.3939	7.3935			0.0006		
32	294	P18	1999.8	7.3941	7.3930	7.3937			0.0006		
34	312	P20	3501.1	7.5340	7.5349		0.0009	0.0009			
34	322	P20	300.3	7.3679	7.3680		0.0000	0.0000			
34	326	P20	150.1	7.6055	7.6063		0.0008	0.0008			
34	329	P20	75.2	7.7814	7.7808		-0.0006	0.0006			
average variability:							0.002	0.00111	0.00106		
standard deviation of variability:							0.011	0.00089	0.00083		

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Duplicate Niskins at the same pressure

Event Number	Sample Number	Station	Nominal Pressure dbar	pH 1	pH 2	pH 3	pH 4	pH 5	Difference	Absolute Difference	Standard deviation	Comments
5	26 / 27	P2	75	7.8133	7.8130				-0.00028	0.00028		
10	47 / 48	P4	1250	7.3263	7.3263				0.00000	0.00000		
48	108 / 109	P12	3000	7.4849	7.4844				-0.00057	0.00057		
25	221 / 222	P16	3500	7.5248	7.5266				0.00178	0.00178		
32	290 - 294	P18	2000	7.3958	7.3931	7.3919	7.3940	7.3936			0.00144	
34	311 / 312	P20	3500	7.5352	7.5345				-0.00075	0.00075		
average variability:									0.00003	0.00068		0.00081
standard deviation of variability:									0.00102	0.00068		0.00068

Precision estimate: 0.0011