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### Nitrate\_plus\_Nitrite:Bottle

#### Precision statement for replicate samples drawn from a single Niskin bottle:

The pooled standard deviation for Nitrate\_plus\_Nitrite:Bottle for the range 7.7 to 47.4  $\mu\text{mol/l}$  was 0.23,  
k = 18 (0 outlier removed) where k is the number of pairs of duplicates.

The pooled standard deviation of pairs of samples ( $S_p$ ) was calculated by:

$$S_p = \text{SQRT}\{\text{sum}(d^2)/2k\}$$

where k is the number of pairs and d is the difference between pairs.

Nitrate data from 1000 to 4000 m agree with results averaged over 16 profiles at P26 from 1995 to 2001 to within 1.16 %

#### Duplicate samples from a single Niskin bottle

Event Number	Sample Number	Station	Pressure dbar	Nitrate 1 $\mu\text{mol/l}$	Nitrate 2 $\mu\text{mol/l}$	Rejected yes / no	Comment
1	9	SI03	25.2	9.6	9.9		
3	14	P2	99.3	35.6	36.4		
7	40	P4	175.2	32.0	32.5		
9	71	P4	50.4	7.7	8.0		
18	129	P8	1000.8	47.4	47.4		
26	207	P12	800.0	46.9	47.3		
28	228	P12	30.5	8.3	8.3		
34	253	P16	600.7	45.3	45.6		
37	271	P16	50.2	12.4	12.4		
45	339	P20	100.2	14.1	14.1		
47	362	P20	1000.2	45.8	45.7		
59	464	P26	2999.4	40.0	39.9		
62	501	P26	14.7	15.3	15.3		
86	586	M4	174.9	31.4	31.4		
87	598	M3	175.0	30.9	30.9		
88	608	M2	150.0	29.7	30.2		
89	627	Ri1	20.0	21.1	21.3		
96	645	Ri4	75.2	28.0	28.5		

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### Phosphate:Bottle

#### Precision statement for replicate samples drawn from a single Niskin bottle:

The pooled standard deviation for Phosphate:Bottle for the range 0.90 to 3.30  $\mu\text{mol/l}$  was 0.006,  
 $k = 18$  (0 outlier removed) where  $k$  is the number of pairs of duplicates.

The pooled standard deviation of pairs of samples ( $S_p$ ) was calculated by:

$$S_p = \text{SQRT}\{\text{sum}(d^2)/2k\}$$

where  $k$  is the number of pairs and  $d$  is the difference between pairs.

Phosphate data from 1000 to 4000 m agree with results averaged over 16 profiles at P26 from 1995 to 2001  
to within 1.32 %.

#### Duplicate samples from a single Niskin bottle

Event Number	Sample Number	Station	Pressure dbar	Phosphate 1 $\mu\text{mol/l}$	Phosphate 2 $\mu\text{mol/l}$	Rejected yes / no	Comment
1	9	SI03	25.2	1.30	1.29		
3	14	P2	99.3	2.61	2.61		
7	40	P4	175.2	2.24	2.24		
9	71	P4	50.4	0.97	0.97		
18	129	P8	1000.8	3.27	3.27		
26	207	P12	800.0	3.25	3.24		
28	228	P12	30.5	0.92	0.93		
34	253	P16	600.7	3.11	3.12		
37	271	P16	50.2	1.14	1.14		
45	339	P20	100.2	1.31	1.29		
47	362	P20	1000.2	3.19	3.19		
59	464	P26	2999.4	2.74	2.73		
62	501	P26	14.7	1.32	1.32		
86	586	M4	174.9	2.29	2.30		
87	598	M3	175.0	2.26	2.26		
88	608	M2	150.0	2.25	2.25		
89	627	Ri1	20.0	1.82	1.83		
96	645	Ri4	75.2	2.33	2.33		

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### Silicate:Bottle

#### Precision statement for replicate samples drawn from a single Niskin bottle:

The pooled standard deviation for Silicate:Bottle for the range 10.1 to 174.1  $\mu\text{mol/l}$  was 0.14,  
 $k = 18$  (0 outliers removed) where  $k$  is the number of pairs of duplicates.

The pooled standard deviation of pairs of samples ( $S_p$ ) was calculated by:

$$S_p = \text{SQRT}\{\text{sum}(d^2)/2k\}$$

where  $k$  is the number of pairs and  $d$  is the difference between pairs.

Silicate data from 1000 to 4000 m agree with results averaged over 16 profiles at P26 from 1995 to 2001 to within 2.02%.

#### Duplicate samples from a single Niskin bottle

Event Number	Sample Number	Station	Pressure dbar	Silicate 1 $\mu\text{mol/l}$	Silicate 2 $\mu\text{mol/l}$	Rejected yes / no	Comment
1	9	SI03	25.2	12.1	12.1		
3	14	P2	99.3	56.5	56.7		
7	40	P4	175.2	44.1	44.1		
9	71	P4	50.4	10.2	10.1		
18	129	P8	1000.8	135.9	135.7		
26	207	P12	800.0	124.3	124.4		
28	228	P12	30.5	10.6	10.7		
34	253	P16	600.7	111.7	112.0		
37	271	P16	50.2	12.9	13.0		
45	339	P20	100.2	19.1	19.1		
47	362	P20	1000.2	139.9	139.6		
59	464	P26	2999.4	174.1	173.6		
62	501	P26	14.7	23.5	23.6		
86	586	M4	174.9	52.4	52.2		
87	598	M3	175.0	50.7	50.5		
88	608	M2	150.0	50.3	50.2		
89	627	Ri1	20.0	34.3	34.4		
96	645	Ri4	75.2	52.4	52.4		