

2008-01 Oxygen duplicates

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

The pooled standard deviation for Oxygen:Dissolved:Bottle for the range 0.076 to 6.837 ml/l was 0.013,
k = 12 (0 outlier removed) where k is the number of pairs of duplicates.

Precision calculation for duplicate samples:

Precision was determined by analyzing replicate samples drawn from one Niskin.

Pooled standard deviation of pairs of samples (Sp) was calculated by:

$$Sp = \sqrt{\sum (d^2) / 2k}$$

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

Duplicate analysis for samples drawn from a single Niskin bottle:

Event Number	Sample Number	Station	Pressure dbar	Oxy:Dis 1 ml/l	Oxy:Dis 2 ml/l	Rejected yes / no	Comments
1	5	Si03	125.3	0.087	0.076		
3	18	P2	25.5	6.586	6.591		
12	69	P4	253.2	1.638	1.625		
18	95	P8	175.6	2.319	2.310		
24	137	P12	401.4	1.302	1.335		
40	283	P20	126.2	1.240	1.259		
46	345	P26	124.1	4.406	4.401		
56	419	M2	25.2	6.800	6.837		
57	429	M3	75.0	5.739	5.760		
58	439	M4	201.7	3.817	3.827		
61	461	Ri1	125.5	5.038	5.030		
74	498	Ri4	10.4	6.189	6.204		