



QUASIMEME

Quality assurance of information
for marine environmental monitoring

Certificate of Analysis



Halogenated Organics in seawater

REFERENCE MATERIAL

AQ5 sample 116



Certificate of Analysis AQ5 116

General Information

In this report an overview is given of analytical data for this sample collected in our proficiency testing program. The consensus values are calculated using a robust statistical model. With this NDA model, the mean and standard deviation are calculated using all reported data when at least 4 results are left after removal of reported 'lower than' (<) and 0 (= zero) values. No outliers are removed.

This report is divided into two sections: Consensus Values and Indicative Values. The division is made on the reliability of the data. Consensus Values are based on at least 8 results and a maximum relative uncertainty of 6.25%. Indicative Values are based on a maximum relative uncertainty of 35% and a minimum of 4 and maximum of 7 results, or a relative uncertainty greater than 6.25% when there are at least 8 results.

For each determinand, the following parameters are given: mean, standard deviation, coefficient of variation, number of results, median, MAD (Median of Absolute Deviation), the uncertainty of the mean (consensus or indicative) value and the relative uncertainty.

Please note: Most WEPA-QUASIMEME reference materials are found to be stable over the long term (>10 years) for most determinand/matrix combinations. There are a few exceptions known to us as being less stable over the long term. These are organotins in sediment (MS6), ASP in shellfish (BT7), some PAHs and PCBs in sediment (SETOC) and N-NH₄ (as N) in clay soils (ISE).

Sample information

QUASIMEME reference materials cover a range of natural SeaWater species from contaminated waters from the North Sea and/or Mediterranean.

This AQ5 sample 116 of Seawater with spike solution from North Sea, the Netherlands is prepared for the QUASIMEME proficiency programs. The results on which the values in this report are based were taken from the periods given in the following table.

Year.Round	Program	Sample Round Id
2025.1	AQ5	QOC113SW



Consensus Values AQ5

Method: PCBs&OCP - AQ5

Element

Dieldrin

Unit
ng/l

Mean
11.2

Std.Dev.
1.34

CV %
11.9

N
8

Median
11.1

MAD
0.800

Uncertainty
0.590

Rel.Uncert. %
5.28



Indicative Values AQ5

Method: PCBs&OCP - AQ5

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	Rel.Uncert. %
a-HCH	ng/l	4.93	1.47	29.8	8	4.85	0.895	0.649	13.2
g-HCH	ng/l	10.5	2.99	28.4	8	10.2	1.05	1.32	12.5
pp'-DDE	ng/l	5.82	1.10	19.0	9	5.53	0.874	0.460	7.90
pp'-DDT	ng/l	9.83	2.98	30.3	9	9.49	1.58	1.24	12.6
pp'-DDD	ng/l	3.94	1.36	34.5	8	4.02	0.910	0.602	15.3
HCB	ng/l	3.57	1.12	31.3	8	3.73	0.610	0.493	13.8
Isodrin	ng/l	4.82	1.02	21.2	6	4.81	0.466	0.520	10.8
Endrin	ng/l	5.11	1.03	20.1	8	5.23	0.575	0.453	8.87
Aldrin	ng/l	5.09	1.20	23.5	8	5.21	0.500	0.528	10.4
op'-DDT	ng/l	11.6	2.46	21.2	7	11.5	1.53	1.16	10.0
b-HCH	ng/l	3.67	1.18	32.2	8	3.49	0.570	0.522	14.2
Trifluralin	ng/l	2.91	0.860	29.6	5	2.70	0.500	0.481	16.5
Endosulphan-I	ng/l	4.50	1.48	32.8	4	4.43	0.718	0.924	20.5
d-HCH	ng/l	2.48	0.949	38.3	7	2.80	0.550	0.448	18.1
Pentachlorobenzene	ng/l	9.99	1.92	19.2	5	10.3	0.770	1.07	10.7
PCB28	ng/l	4.03	0.472	11.7	6	3.99	0.215	0.241	5.97
PCB52	ng/l	3.66	1.36	37.2	8	3.40	0.610	0.601	16.4
PCB101	ng/l	4.60	2.22	48.3	7	3.90	1.24	1.05	22.8
PCB105	ng/l	3.55	0.154	4.3	5	3.50	0.100	0.086	2.43
PCB118	ng/l	6.46	1.91	29.5	7	6.50	1.29	0.900	13.9
PCB138	ng/l	5.23	1.23	23.5	8	5.52	0.842	0.544	10.4
PCB153	ng/l	5.32	1.28	24.1	8	5.45	0.850	0.566	10.6
PCB180	ng/l	2.99	1.14	38.2	7	3.10	0.923	0.541	18.1
Heptachlor	ng/l	3.10	1.48	47.7	5	3.39	0.865	0.825	26.7
Heptachlorepoide	ng/l	3.31	1.73	52.3	5	3.09	0.968	0.967	29.3