

20 May 2011

Quasimeme Database

Q756A Limnologisches Institut Dr. Nowak
 Dr. Thomas Brandsch
 Germany

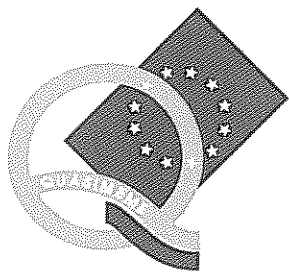
Exercise 922 – R64 Organotins in Biota: Jan – May 2011

Matrix	Determinand	Mean	Units	Assigned Value	Total Error	Z Score	z	Total Dupl.
QSP036BT	Tributyltin (TBT)	15.00	µg Sn/kg	16.27	2.084	-0.6	S	1
QSP036BT	Dibutyltin (DBT)	2.280	µg Sn/kg	2.003	0.300	0.9	S	1
QSP036BT	Monobutyltin (MBT)	0.490	µg Sn/kg	0.618	0.127	-1.0	S	1
QSP036BT	Triphenyltin (TPT)	<0.200	µg Sn/kg				B	1
QSP036BT	Diphenyltin (DPT)	<0.200	µg Sn/kg				B	1
QSP036BT	Monophenyltin (MPT)	<0.200	µg Sn/kg				B	1
QSP037BT	Tributyltin (TBT)	1.560	µg Sn/kg	1.651	0.256	-0.4	S	1
QSP037BT	Dibutyltin (DBT)	1.450	µg Sn/kg	1.274	0.209	0.8	S	1
QSP037BT	Monobutyltin (MBT)	0.870	µg Sn/kg	0.942	0.168	-0.4	S	1
QSP037BT	Triphenyltin (TPT)	<0.200	µg Sn/kg				B	1
QSP037BT	Diphenyltin (DPT)	<0.200	µg Sn/kg				B	1
QSP037BT	Monophenyltin (MPT)	<0.200	µg Sn/kg				B	1

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24 May 2011

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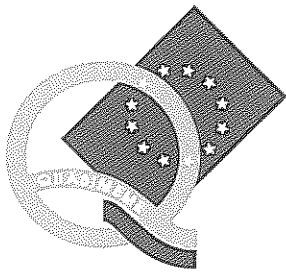
Exercise 918 – R64 Trace metals in Biota: Jan – May 2011

Matrix	Determinand	Mean	Units	Assigned Value	Total Error	Z Score	z	Total Dupl.
QTM089BT	Arsenic	1.910	mg/kg	1.953	0.254	-0.2	S	1
QTM089BT	Cadmium	43.00	µg/kg	39.28	14.91	0.2	S	1
QTM089BT	Chromium	272.0	µg/kg	97.49	22.19	7.9	U	1
QTM089BT	Copper	8410	µg/kg	7616	1002	0.8	S	1
QTM089BT	Lead	64.00	µg/kg	57.74	9.717	0.7	S	1
QTM089BT	Mercury	48.00	µg/kg	29.31	13.66	1.4	S	1
QTM089BT	Nickel	192.0	µg/kg	141.7	27.72	1.8	S	1
QTM089BT	Selenium	480.0	µg/kg	495.4	66.93	-0.2	S	1
QTM089BT	Zinc	21.60	mg/kg	20.29	3.536	0.4	S	1
QTM089BT	Ash-Weight	6.930	%	6.525	0.866	0.5	S	1
QTM089BT	Dry-weight	28.90	%	26.11	3.314	0.9	S	1
QTM089BT	Lipid-Extractable	0.690	%				B	1
QTM090BT	Arsenic	2.400	mg/kg	2.473	0.319	-0.2	S	1
QTM090BT	Cadmium	163.0	µg/kg	162.7	30.34	0.0	S	1
QTM090BT	Chromium	165.0	µg/kg	143.0	27.87	0.9	S	1
QTM090BT	Copper	1070	µg/kg	1147	193.4	-0.4	S	1
QTM090BT	Lead	138.0	µg/kg	140.1	20.01	-0.1	S	1
QTM090BT	Mercury	16.00	µg/kg				B	1
QTM090BT	Nickel	124.0	µg/kg	120.9	25.12	0.1	S	1
QTM090BT	Selenium	690.0	µg/kg	490.5	66.32	3.0	U	1
QTM090BT	Zinc	35.70	mg/kg	36.75	5.594	-0.2	S	1
QTM090BT	Ash-Weight	2.100	%	2.125	0.316	-0.1	S	1
QTM090BT	Dry-weight	24.80	%	25.15	3.194	-0.1	S	1
QTM090BT	Lipid-Extractable	1.700	%				B	1

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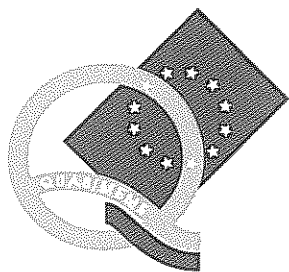
Exercise 917 – R64 Organotins in Sediment: Jan – May 2011

Matrix	Determinand	Mean	Units	Assigned Value	Total Error	Z Score	z	Total Dupl.
QSP035MS	Tributyltin (TBT)	19.00	µg Sn/kg	19.53	2.491	-0.2	S	1
QSP035MS	Dibutyltin (DBT)	37.20	µg Sn/kg	49.06	6.183	-1.9	S	1
QSP035MS	Monobutyltin (MBT)	111.0	µg Sn/kg	102.4	12.85	0.7	S	1
QSP035MS	Triphenyltin (TPT)	<1.000	µg Sn/kg				B	1
QSP035MS	Diphenyltin (DPT)	<1.000	µg Sn/kg				B	1
QSP035MS	Monophenyltin (MPT)	<1.000	µg Sn/kg				B	1
QSP036MS	Tributyltin (TBT)	9.570	µg Sn/kg	8.805	1.151	0.7	S	1
QSP036MS	Dibutyltin (DBT)	7.590	µg Sn/kg	7.646	1.006	-0.1	S	1
QSP036MS	Monobutyltin (MBT)	7.050	µg Sn/kg	6.049	0.806	1.2	S	1
QSP036MS	Triphenyltin (TPT)	<1.000	µg Sn/kg				B	1
QSP036MS	Diphenyltin (DPT)	<1.000	µg Sn/kg	1.320	0.215		I	1
QSP036MS	Monophenyltin (MPT)	<1.000	µg Sn/kg				B	1

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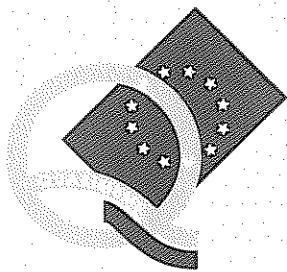
Exercise 914 – R64 Trace metals in Sediment: Jan – May 2011

Matrix	Determinand	Mean	Units	Assigned Value	Total Error	Z Score	z	Total Dupl.
QTM094MS	Aluminium	0.390	%	1.043	0.180	-3.6	U	1
QTM094MS	Arsenic	1.600	mg/kg	1.590	0.699	0.0	S	1
QTM094MS	Cadmium	28.00	µg/kg	19.04	12.38	0.7	S	1
QTM094MS	Chromium	23.80	mg/kg	21.63	3.703	0.6	S	1
QTM094MS	Copper	1.300	mg/kg				B	1
QTM094MS	Iron	0.600	%	0.637	0.130	-0.3	S	1
QTM094MS	Lithium	1.400	mg/kg				B	1
QTM094MS	Lead	4.400	mg/kg	5.326	1.666	-0.6	S	1
QTM094MS	Manganese	281.0	mg/kg				B	1
QTM094MS	Mercury	12.00	µg/kg	9.435	6.179	0.4	S	1
QTM094MS	Nickel	1.700	mg/kg	1.799	0.725	-0.1	S	1
QTM094MS	Zinc	5.800	mg/kg	7.327	2.166	-0.7	S	1
QTM094MS	TOC	0.100	%	0.092	0.061	0.1	S	1
QTM094MS	Carbonate	<0.050	%	0.056	0.032		C	1
QTM095MS	Aluminium	5.750	%	5.669	0.759	0.1	S	1
QTM095MS	Arsenic	14.00	mg/kg	13.60	2.200	0.2	S	1
QTM095MS	Cadmium	1090	µg/kg	1113	149.2	-0.2	S	1
QTM095MS	Chromium	134.0	mg/kg	132.1	17.52	0.1	S	1
QTM095MS	Copper	68.60	mg/kg	64.03	8.503	0.5	S	1
QTM095MS	Iron	3.760	%	3.804	0.526	-0.1	S	1
QTM095MS	Lithium	45.20	mg/kg	44.21	5.576	0.2	S	1
QTM095MS	Lead	120.0	mg/kg	124.4	16.56	-0.3	S	1
QTM095MS	Manganese	455.0	mg/kg	457.4	57.23	0.0	S	1
QTM095MS	Mercury	1140	µg/kg	1073	139.1	0.5	S	1
QTM095MS	Nickel	65.70	mg/kg	64.93	8.616	0.1	S	1
QTM095MS	Zinc	226.0	mg/kg	228.0	29.75	-0.1	S	1
QTM095MS	TOC	6.510	%	5.192	0.699	1.9	S	1
QTM095MS	Carbonate	2.900	%	0.614	0.102	22.5	U	1

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Exercise 915 – R64 Chlorinated Organics in Sediment: Jan – May 2011

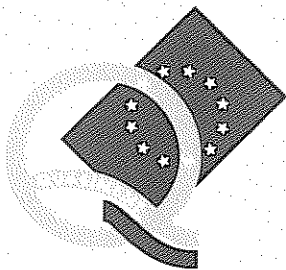
Matrix	Determinand	Mean	Units	Assigned Value	Total Error	Z Score	z	Total Dupl.
QOR106MS	CB28	1.200	µg/kg	0.947	0.131	1.9	S	1
QOR106MS	CB52	0.700	µg/kg	0.485	0.073	2.9	Q	1
QOR106MS	CB101	1.010	µg/kg	1.010	0.139	0.0	S	1
QOR106MS	CB118	0.960	µg/kg	1.000	0.137	-0.3	S	1
QOR106MS	CB153	2.400	µg/kg	2.230	0.291	0.6	S	1
QOR106MS	CB180	0.990	µg/kg	1.173	0.159	-1.1	S	1
QOR106MS	pp'-DDD	0.960	µg/kg	0.434	0.067	7.9	U	1
QOR106MS	pp'-DDE	0.560	µg/kg	0.462	0.070	1.4	S	1
QOR106MS	op'-DDT	<0.050	µg/kg	0.050	0.019		C	1
QOR106MS	pp'-DDT	0.180	µg/kg	0.140	0.030	1.3	S	1
QOR106MS	HCB	0.700	µg/kg	0.855	0.119	-1.3	S	1
QOR106MS	HCBd	0.120	µg/kg	0.114	0.027	0.2	S	1
QOR106MS	a-HCH	0.110	µg/kg	0.073	0.019	2.0	S	1
QOR106MS	b-HCH	0.300	µg/kg	0.174	0.034	3.7	U	1
QOR106MS	g-HCH	0.230	µg/kg	0.193	0.037	1.0	S	1
QOR106MS	d-HCH	0.220	µg/kg				B	1
QOR106MS	TOC	2.320	%	2.636	0.340	-0.9	S	1
QOR106MS	CB138	2.110	µg/kg	2.044	0.268	0.2	S	1
QOR107MS	CB28	0.940	µg/kg	0.698	0.100	2.4	Q	1
QOR107MS	CB52	9.060	µg/kg	9.660	1.220	-0.5	S	1
QOR107MS	CB101	21.20	µg/kg	27.94	3.505	-1.9	S	1
QOR107MS	CB118	20.00	µg/kg	25.63	3.217	-1.8	S	1
QOR107MS	CB153	38.10	µg/kg	41.15	5.157	-0.6	S	1
QOR107MS	CB180	41.40	µg/kg	38.91	4.877	0.5	S	1
QOR107MS	pp'-DDD	1.890	µg/kg	1.536	0.205	1.7	S	1
QOR107MS	pp'-DDE	0.860	µg/kg	0.909	0.126	-0.4	S	1
QOR107MS	op'-DDT	0.180	µg/kg	0.206	0.038	-0.7	S	1
QOR107MS	pp'-DDT	0.910	µg/kg	0.953	0.132	-0.3	S	1
QOR107MS	HCB	0.200	µg/kg	0.193	0.037	0.2	S	1
QOR107MS	HCBd	0.070	µg/kg				B	1
QOR107MS	a-HCH	<0.050	µg/kg				B	1
QOR107MS	b-HCH	0.050	µg/kg	0.024	0.016	1.7	S	1
QOR107MS	g-HCH	0.120	µg/kg	0.040	0.017	4.6	U	1
QOR107MS	d-HCH	0.120	µg/kg				B	1
QOR107MS	TOC	0.310	%	0.285	0.046	0.5	S	1

<i>Matrix</i>	<i>Determinand</i>	<i>Mean</i>	<i>Units</i>	<i>Assigned Value</i>	<i>Total Error</i>	<i>Z Score</i>	<i>z</i>	<i>Total Dupl.</i>
QOR107MS	CB138	34.80	µg/kg	37.01	4.639	-0.5	S	1

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Exercise 916 – R64 Polycyclic Aromatic Hydrocarbons in Sediment:
Jan – May 2011

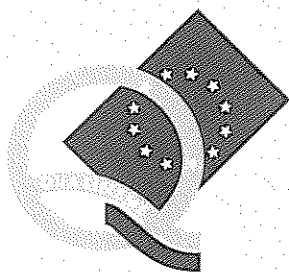
<i>Matrix</i>	<i>Determinand</i>	<i>Mean</i>	<i>Units</i>	<i>Assigned Value</i>	<i>Total Error</i>	<i>Z Score</i>	<i>z</i>	<i>Total Dupl.</i>
QPH069MS	Benzo[g,h,i]perylene	109.0	µg/kg	65.00	8.225	5.4	U	1
QPH069MS	Acenaphthene	14.00	µg/kg	5.903	0.788	10.3	U	1
QPH069MS	Acenaphthylene	12.00	µg/kg	5.233	0.754	9.0	U	1
QPH069MS	Anthracene	30.00	µg/kg	17.69	2.262	5.4	U	1
QPH069MS	Benzo[a]anthracene	65.00	µg/kg	50.56	6.370	2.3	Q	1
QPH069MS	Benzo[a]pyrene	75.00	µg/kg	44.47	5.609	5.4	U	1
QPH069MS	Benzo[b]fluoranthene	150.0	µg/kg	119.9	15.24	2.0	S	1
QPH069MS	Benzo[k]fluoranthene	69.00	µg/kg	54.98	6.922	2.0	Q	1
QPH069MS	Dibenz[ah]anthracene	11.00	µg/kg	14.16	1.795	-1.8	S	1
QPH069MS	Fluorene	19.00	µg/kg	14.66	1.883	2.3	Q	1
QPH069MS	Fluoranthene	150.0	µg/kg	141.1	17.74	0.5	S	1
QPH069MS	Indeno[1,2,3-cd]pyrene	121.0	µg/kg	76.99	9.724	4.5	U	1
QPH069MS	Naphthalene	59.00	µg/kg	51.08	6.635	1.2	S	1
QPH069MS	Phenanthrene	100.0	µg/kg	101.3	12.91	-0.1	S	1
QPH069MS	Pyrene	112.0	µg/kg	96.68	12.19	1.3	S	1
QPH069MS	TOC	2.320	%	2.603	0.335	-0.8	S	1
QPH069MS	Chrysene	85.00	µg/kg	72.04	9.105	1.4	S	1
QPH070MS	Benzo[g,h,i]perylene	190.0	µg/kg	113.2	14.25	5.4	U	1
QPH070MS	Acenaphthene	<5.000	µg/kg	2.559	0.370		C	1
QPH070MS	Acenaphthylene	<5.000	µg/kg	3.400	0.525		C	1
QPH070MS	Anthracene	10.00	µg/kg	9.855	1.282	0.1	S	1
QPH070MS	Benzo[a]anthracene	55.00	µg/kg	47.17	5.946	1.3	S	1
QPH070MS	Benzo[a]pyrene	97.00	µg/kg	67.75	8.519	3.4	U	1
QPH070MS	Benzo[b]fluoranthene	141.0	µg/kg	116.8	14.85	1.6	S	1
QPH070MS	Benzo[k]fluoranthene	71.00	µg/kg	53.73	6.766	2.6	Q	1
QPH070MS	Dibenz[ah]anthracene	26.00	µg/kg	17.98	2.272	3.5	U	1
QPH070MS	Fluorene	12.00	µg/kg	8.866	1.158	2.7	Q	1
QPH070MS	Fluoranthene	74.00	µg/kg	80.64	10.18	-0.7	S	1
QPH070MS	Indeno[1,2,3-cd]pyrene	192.0	µg/kg	108.5	13.67	6.1	U	1
QPH070MS	Naphthalene	27.00	µg/kg	24.65	3.331	0.7	S	1
QPH070MS	Phenanthrene	49.00	µg/kg	49.35	6.419	-0.1	S	1
QPH070MS	Pyrene	75.00	µg/kg	76.60	9.675	-0.2	S	1
QPH070MS	TOC	1.310	%	1.248	0.166	0.4	S	1

<i>Matrix</i>	<i>Determinand</i>	<i>Mean</i>	<i>Units</i>	<i>Assigned Value</i>	<i>Total Error</i>	<i>Z Score</i>	<i>z</i>	<i>Total Dupl.</i>
QPH070MS	Chrysene	38.00	µg/kg	39.62	5.053	-0.3	S	1

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Exercise 919 – R64 Chlorinated Organics in Biota: Jan – May 2011

Matrix	Determinand	Mean	Units	Assigned Value	Total Error	Z Score	z	Total Dupl.
QOR106BT	CB28	0.390	µg/kg	0.275	0.047	2.5	Q	1
QOR106BT	CB52	0.410	µg/kg	0.572	0.084	-1.9	S	1
QOR106BT	CB101	0.530	µg/kg	0.568	0.083	-0.5	S	1
QOR106BT	CB118	0.530	µg/kg	0.486	0.073	0.6	S	1
QOR106BT	CB153	0.780	µg/kg	0.849	0.119	-0.6	S	1
QOR106BT	CB180	0.120	µg/kg	0.132	0.029	-0.4	S	1
QOR106BT	pp'-DDD	1.310	µg/kg	1.006	0.138	2.2	Q	1
QOR106BT	pp'-DDE	3.090	µg/kg	2.342	0.305	2.5	Q	1
QOR106BT	op'-DDT	0.520	µg/kg	0.457	0.070	0.9	S	1
QOR106BT	pp'-DDT	0.480	µg/kg	0.536	0.079	-0.7	S	1
QOR106BT	HCB	1.270	µg/kg	1.944	0.255	-2.6	Q	1
QOR106BT	HCBD	<0.100	µg/kg				B	1
QOR106BT	a-HCH	0.570	µg/kg	0.691	0.096	-1.3	S	1
QOR106BT	b-HCH	0.300	µg/kg	0.183	0.035	3.3	U	1
QOR106BT	g-HCH	0.330	µg/kg	0.226	0.041	2.6	Q	1
QOR106BT	d-HCH	<0.100	µg/kg				B	1
QOR106BT	Lipid-Extractable	12.20	%	11.82	1.527	0.2	S	1
QOR106BT	CB138	0.500	µg/kg	0.462	0.070	0.5	S	1
QOR107BT	CB28	4.880	µg/kg	3.756	0.482	2.3	Q	1
QOR107BT	CB52	27.70	µg/kg	18.66	2.345	3.9	U	1
QOR107BT	CB101	54.40	µg/kg	51.41	6.438	0.5	S	1
QOR107BT	CB118	26.30	µg/kg	27.13	3.403	-0.2	S	1
QOR107BT	CB153	103.0	µg/kg	105.1	13.15	-0.2	S	1
QOR107BT	CB180	16.10	µg/kg	19.41	2.439	-1.4	S	1
QOR107BT	pp'-DDD	4.080	µg/kg	3.584	0.460	1.1	S	1
QOR107BT	pp'-DDE	21.00	µg/kg	16.02	2.015	2.5	Q	1
QOR107BT	op'-DDT	<0.100	µg/kg				B	1
QOR107BT	pp'-DDT	<0.100	µg/kg				B	1
QOR107BT	HCB	3.070	µg/kg	3.742	0.480	-1.4	S	1
QOR107BT	HCBD	1.000	µg/kg				B	1
QOR107BT	a-HCH	<0.100	µg/kg	0.063	0.018		C	1
QOR107BT	b-HCH	0.130	µg/kg	0.149	0.031	-0.6	S	1
QOR107BT	g-HCH	0.080	µg/kg	0.070	0.021	0.5	S	1
QOR107BT	d-HCH	<0.100	µg/kg				B	1
QOR107BT	Lipid-Extractable	2.750	%	3.220	0.453	-1.0	S	1

<i>Matrix</i>	<i>Determinand</i>	<i>Mean</i>	<i>Units</i>	<i>Assigned Value</i>	<i>Total Error</i>	<i>Z Score</i>	<i>z</i>	<i>Total Dupl.</i>
QOR107BT	CB138	56.80	µg/kg	53.32	6.678	0.5	S	1

The letters in the z column indicate: S – Satisfactory, Q – Questionable,

U – Unsatisfactory, C – Consistent, I – Inconsistent, B - Blanc.

If the analytical value looks like this, then the Assigned value is indicative only.