



# NMBAQC

NE Atlantic Marine Biological Analytical Quality Control Scheme

## Own Sample Module Summary Report

Benthic Invertebrate Component - 2020/21

OS74, 75 and 76

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## **MODULE / EXERCISE DETAILS**

Module:	Own Sample (OS)
Exercises:	OS74, 75 and 76
Data/Sample Request Circulated:	29 October 2020
Sample Submission Deadline (2 batches):	11 December 2020    16 April 2021
Number of Subscribing Laboratories:	28
Number of Own Samples Received:	69

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Table 1. Summary of the performance of participating laboratories in the Own Sample (OS) exercises with respect to the NMBAQC standards.

1	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26																									
	Estimation of Taxa							Taxonomic errors			No. Individuals							Estimation of Biomass				Similarity Index			Sample Flag	
	OD	AD	Target	Pass / Fail	Missed Taxa	% Missed	Remedial Action	OD	%	Remedial Action	OD	AD	Target	Pass / Fail	Missed Ind.	% Missed	Remedial Action	OD	AD	Target	Pass / Fail	BCSI %	Target	Pass / Fail	NMBAQC Sample Flag	
BI_2701 OS74	84	84	75.6 - 92.4	PASS	0	0.00	-	2	2.38	-	254	257	231.3 - 282.7	PASS	1	0.39	-	1.3187	1.1429	0.91432 - 1.37148	PASS	95.18	90	PASS	PASS - GOOD	
BI_2701 OS75	131	131	117.9 - 144.1	PASS	0	0.00	-	0	0.00	-	1222	1204	1083.6 - 1324.4	PASS	10	0.83	-	7.4875	5.88542	4.708336 - 7.062504	FAIL	97.75	90	PASS	PASS - GOOD	
BI_2701 OS76	207	208	187.2 - 228.8	PASS	2	0.96	-	2	0.96	-	1757	1739	1565.1 - 1912.9	PASS	5	0.29	-	15.8033	14.6842	11.74736 - 17.62104	PASS	99.08	90	PASS	PASS - GOOD	
BI_2702 OS74	8	8	7.2 - 8.8	PASS	0	0.00	-	0	0.00	-	12	12	10.8 - 13.2	PASS	0	0.00	-	-	-	-	-	100	90	PASS	PASS - EXCELLENT	
BI_2702 OS75	5	5	4.5 - 5.5	PASS	0	0.00	-	1	20.00	-	16	16	14.4 - 17.6	PASS	0	0.00	-	-	-	-	-	93.75	90	PASS	PASS - ACCEPTABLE	
BI_2702 OS76	26	28	25.2 - 30.8	PASS	1	3.57	-	3	10.71	-	114	119	107.1 - 130.9	PASS	5	4.20	-	-	-	-	-	95.279	90	PASS	PASS - GOOD	
BI_2703 OS74	12	12	10.8 - 13.2	PASS	0	0.00	-	0	0.00	-	23	23	20.7 - 25.3	PASS	0	0.00	-	-	-	-	-	100	90	PASS	PASS - EXCELLENT	
BI_2703 OS75	23	23	20.7 - 25.3	PASS	0	0.00	-	1	4.35	-	97	98	88.2 - 107.8	PASS	1	1.02	-	-	-	-	-	98.462	90	PASS	PASS - GOOD	
BI_2703 OS76	30	31	27.9 - 34.1	PASS	0	0.00	-	2	6.45	-	198	206	185.4 - 226.6	PASS	8	3.88	-	-	-	-	-	97.03	90	PASS	PASS - GOOD	
BI_2704 OS74	17	17	15.3 - 18.7	PASS	0	0.00	-	1	5.88	-	30	30	27 - 33	PASS	0	0.00	-	-	-	-	-	96.667	90	PASS	PASS - GOOD	
BI_2704 OS75	27	28	25.2 - 30.8	PASS	1	3.57	-	1	3.57	-	40	41	36.9 - 45.1	PASS	1	2.44	-	-	-	-	-	93.976	90	PASS	PASS - ACCEPTABLE	
BI_2704 OS76	28	28	25.2 - 30.8	PASS	0	0.00	-	0	0.00	-	64	64	57.6 - 70.4	PASS	0	0.00	-	-	-	-	-	98.507	90	PASS	PASS - GOOD	
BI_2708 OS74	36	39	35.1 - 42.9	PASS	3	7.69	-	1	2.56	-	96	101	90.9 - 111.1	PASS	4	3.96	-	1.0302	0.9715	0.7772 - 1.1658	PASS	96.552	90	PASS	PASS - GOOD	
BI_2708 OS75	23	23	20.7 - 25.3	PASS	0	0.00	-	1	4.35	-	213	216	194.4 - 237.6	PASS	2	0.93	-	-	-	-	-	97.436	90	PASS	PASS - GOOD	
BI_2708 OS76	13	16	14.4 - 17.6	FAIL	3	18.75	-	0	0.00	-	74	78	70.2 - 85.8	PASS	6	7.69	-	1.6685	1.6257	1.30056 - 1.95084	PASS	96.732	90	PASS	PASS - GOOD	
BI_2710 OS74	18	20	18 - 22	PASS	2	10.00	-	0	0.00	-	755	770	693 - 847	PASS	3	0.39	-	3.82389	3.0619	2.44952 - 3.67428	FAIL	98.885	90	PASS	PASS - GOOD	
BI_2710 OS75	20	21	18.9 - 23.1	PASS	1	4.76	-	0	0.00	-	167	169	152.1 - 185.9	PASS	1	0.59	-	1.68462	1.0801	0.86408 - 1.29612	FAIL	99.115	90	PASS	PASS - GOOD	
BI_2710 OS76	22	22	19.8 - 24.2	PASS	0	0.00	-	0	0.00	-	1444	1516	1364.4 - 1667.6	PASS	16	1.06	-	66.0306	36.4926	29.19408 - 43.79112	FAIL	96.962	90	PASS	PASS - GOOD	
BI_2712 OS74	66	66	59.4 - 72.6	PASS	0	0.00	-	1	1.52	-	299	299	269.1 - 328.9	PASS	0	0.00	-	-	-	-	-	99.666	90	PASS	PASS - GOOD	
BI_2712 OS75	35	35	31.5 - 38.5	PASS	0	0.00	-	0	0.00	-	115	116	104.4 - 127.6	PASS	0	0.00	-	-	-	-	-	99.567	90	PASS	PASS - GOOD	
BI_2712 OS76	31	32	28.8 - 35.2	PASS	0	0.00	-	0	0.00	-	106	106	95.4 - 116.6	PASS	0	0.00	-	-	-	-	-	99.531	90	PASS	PASS - GOOD	
BI_2729 OS74	33	32	28.8 - 35.2	PASS	0	0.00	-	1	3.13	-	93	95	85.5 - 104.5	PASS	3	3.16	-	-	-	-	-	98.462	90	PASS	PASS - GOOD	
BI_2729 OS75	34	35	31.5 - 38.5	PASS	1	2.86	-	0	0.00	-	200	201	180.9 - 221.1	PASS	2	1.00	-	-	-	-	-	98.759	90	PASS	PASS - GOOD	
BI_2729 OS76	9	9	8.1 - 9.9	PASS	0	0.00	-	0	0.00	-	11	11	9.9 - 12.1	PASS	0	0.00	-	-	-	-	-	100	90	PASS	PASS - EXCELLENT	
BI_2730 OS74	12	13	11.7 - 14.3	PASS	0	0.00	-	1	7.69	-	1797	1770	1593 - 1947	PASS	0	0.00	-	-	-	-	-	99.075	90	PASS	PASS - GOOD	
BI_2730 OS75	13	13	11.7 - 14.3	PASS	1	7.69	-	2	15.38	-	55	54	48.6 - 59.4	PASS	0	0.00	-	-	-	-	-	90.909	90	PASS	PASS - ACCEPTABLE	
BI_2730 OS76	14	16	14.4 - 17.6	FAIL	2	12.50	-	0	0.00	-	441	444	399.6 - 488.4	PASS	7	1.58	-	-	-	-	-	98.531	90	PASS	PASS - GOOD	
BI_2731 OS74	24	25	22.5 - 27.5	PASS	1	4.00	-	1	4.00	-	78	79	71.1 - 86.9	PASS	1	1.27	-	-	-	-	-	95.541	90	PASS	PASS - GOOD	
BI_2731 OS75	36	36	32.4 - 39.6	PASS	0	0.00	-	1	2.78	-	175	175	157.5 - 192.5	PASS	0	0.00	-	-	-	-	-	95.702	90	PASS	PASS - GOOD	
BI_2731 OS76	40	40	36 - 44	PASS	0	0.00	-	0	0.00	-	350	349	314.1 - 383.9	PASS	0	0.00	-	-	-	-	-	99.857	90	PASS	PASS - GOOD	
BI_2732 OS74	13	14	12.6 - 15.4	PASS	1	7.14	-	1	7.14	-	523	522	469.8 - 574.2	PASS	0	0.00	-	-	-	-	-	93.893	90	PASS	PASS - ACCEPTABLE	
BI_2732 OS75	26	27	24.3 - 29.7	PASS	1	3.70	-	1	3.70	-	116	121	108.9 - 133.1	PASS	5	4.13	-	-	-	-	-	93.004	90	PASS	PASS - ACCEPTABLE	
BI_2732 OS76	7	8	7.2 - 8.8	FAIL	1	12.50	-	1	12.50	-	982	956	860.4 - 1051.6	PASS	1	0.10	-	-	-	-	-	97.991	90	PASS	PASS - GOOD	

NB. This table details the findings of the audit only. For details of Own Sample remedial action please refer to NMBAQCS Year 27 Annual report, section 2.4.

Table 1. Summary of the performance of participating laboratories in the Own Sample (OS) exercises with respect to the NMBAQC standards.

1	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26																									
	Estimation of Taxa							Taxonomic errors			No. Individuals							Estimation of Biomass				Similarity Index			Sample Flag	
	OD	AD	Target	Pass / Fail	Missed Taxa	% Missed	Remedial Action	OD	%	Remedial Action	OD	AD	Target	Pass / Fail	Missed Ind.	% Missed	Remedial Action	OD	AD	Target	Pass / Fail	BCSI %	Target	Pass / Fail	NMBAQC Sample Flag	
BI_2734 OS74	4	4	3.6 - 4.4	PASS	0	0.00	-	0	0.00	-	242	247	222.3 - 271.7	PASS	1	0.40	-	-	-	-	-	98.982	90	PASS	PASS - GOOD	
BI_2734 OS75	25	25	22.5 - 27.5	PASS	0	0.00	-	0	0.00	-	365	362	325.8 - 398.2	PASS	1	0.28	-	-	-	-	-	99.318	90	PASS	PASS - GOOD	
BI_2734 OS76	21	21	18.9 - 23.1	PASS	0	0.00	-	0	0.00	-	47	47	42.3 - 51.7	PASS	0	0.00	-	-	-	-	-	100	90	PASS	PASS - EXCELLENT	
BI_2735 OS74	41	41	36.9 - 45.1	PASS	0	0.00	-	3	7.32	Review	157	156	140.4 - 171.6	PASS	0	0.00	-	-	-	-	-	88.959	90	FAIL	FAIL - POOR	
BI_2735 OS75	58	58	52.2 - 63.8	PASS	0	0.00	-	1	1.72	-	354	352	316.8 - 387.2	PASS	0	0.00	-	-	-	-	-	99.155	90	PASS	PASS - GOOD	
BI_2735 OS76	37	38	34.2 - 41.8	PASS	1	2.63	-	0	0.00	-	151	152	136.8 - 167.2	PASS	2	1.32	-	-	-	-	-	99.01	90	PASS	PASS - GOOD	
BI_2736 OS74	38	38	34.2 - 41.8	PASS	0	0.00	-	0	0.00	-	251	249	224.1 - 273.9	PASS	1	0.40	-	-	-	-	-	99.203	90	PASS	PASS - GOOD	
BI_2736 OS75	56	56	50.4 - 61.6	PASS	0	0.00	-	0	0.00	-	340	344	309.6 - 378.4	PASS	4	1.16	-	-	-	-	-	99.42	90	PASS	PASS - GOOD	
BI_2736 OS76	87	88	79.2 - 96.8	PASS	0	0.00	-	2	2.27	-	594	605	544.5 - 665.5	PASS	9	1.49	-	-	-	-	-	98.599	90	PASS	PASS - GOOD	
BI_2737 OS74	9	9	8.1 - 9.9	PASS	0	0.00	-	0	0.00	-	94	95	85.5 - 104.5	PASS	0	0.00	-	0.5737	0.4738	0.37904 - 0.56856	FAIL	98.413	90	PASS	PASS - GOOD	
BI_2737 OS75	6	8	7.2 - 8.8	FAIL	2	25.00	-	0	0.00	-	14	17	15.3 - 18.7	FAIL	3	17.65	-	0.2332	0.1721	0.13768 - 0.20652	FAIL	90.323	90	PASS	PASS - ACCEPTABLE	
BI_2737 OS76	33	36	32.4 - 39.6	PASS	2	5.56	-	1	2.78	-	204	205	184.5 - 225.5	PASS	1	0.49	-	0.2153	0.1649	0.13192 - 0.19788	FAIL	97.285	90	PASS	PASS - GOOD	
BI_2738 OS74	13	14	12.6 - 15.4	PASS	0	0.00	-	1	7.14	-	332	327	294.3 - 359.7	PASS	6	1.83	-	-	-	-	-	98.34	90	PASS	PASS - GOOD	
BI_2738 OS75	14	14	12.6 - 15.4	PASS	0	0.00	-	0	0.00	-	1786	1801	1620.9 - 1981.1	PASS	9	0.50	-	-	-	-	-	99.25	90	PASS	PASS - GOOD	
BI_2738 OS76	11	15	13.5 - 16.5	FAIL	4	26.67	-	1	6.67	-	161	179	161.1 - 196.9	FAIL	19	10.61	-	-	-	-	-	93.57	90	PASS	PASS - ACCEPTABLE	
BI_2539 OS68	6	6	5.4 - 6.6	PASS	0	0.00	-	0	0.00	-	42	44	39.6 - 48.4	PASS	2	4.55	-	-	-	-	-	97.674	90	PASS	PASS - GOOD	
BI_2539 OS69	11	12	10.8 - 13.2	PASS	1	8.33	Review	1	8.33	Review	185	187	168.3 - 205.7	PASS	8	4.28	-	-	-	-	-	81.72	90	FAIL	FAIL - BAD	
BI_2539 OS70	11	11	9.9 - 12.1	PASS	1	9.09	-	0	0.00	-	340	336	302.4 - 369.6	PASS	1	0.30	-	0.5643	0.3819	0.30552 - 0.45828	FAIL	98.966	90	PASS	PASS - GOOD	
BI_2740 OS74	9	10	9 - 11	PASS	1	10.00	-	0	0.00	-	299	298	268.2 - 327.8	PASS	6	2.01	-	0.3193	0.2477	0.19816 - 0.29724	FAIL	98.662	90	PASS	PASS - GOOD	
BI_2740 OS75	8	8	7.2 - 8.8	PASS	0	0.00	-	0	0.00	-	20	20	18 - 22	PASS	0	0.00	-	0.2516	0.1121	0.08968 - 0.13452	FAIL	100	90	PASS	PASS - EXCELLENT	
BI_2740 OS76	22	20	18 - 22	PASS	0	0.00	-	2	10.00	-	97	98	88.2 - 107.8	PASS	4	4.08	-	2.6741	2.2869	1.82952 - 2.74428	PASS	95.385	90	PASS	PASS - GOOD	
BI_2741 OS74	30	33	29.7 - 36.3	PASS	2	6.06	-	4	12.12	-	1068	1262	1135.8 - 1388.2	FAIL	213	16.88	-	6.9421	6.1442	4.91536 - 7.37304	PASS	90.262	90	PASS	PASS - ACCEPTABLE	
BI_2741 OS75	13	14	12.6 - 15.4	PASS	1	7.14	-	0	0.00	-	317	325	292.5 - 357.5	PASS	8	2.46	-	22.41	18.2352	14.58816 - 21.88224	FAIL	98.605	90	PASS	PASS - GOOD	
BI_2741 OS76	12	13	11.7 - 14.3	PASS	1	7.69	-	0	0.00	-	44	48	43.2 - 52.8	PASS	2	4.17	-	8.9323	7.48	5.984 - 8.976	PASS	97.917	90	PASS	PASS - GOOD	
BI_2742 OS74	7	10	9 - 11	FAIL	2	20.00	-	0	0.00	-	245	262	235.8 - 288.2	PASS	16	6.11	-	0.602	0.2325	0.186 - 0.279	FAIL	96.647	90	PASS	PASS - GOOD	
BI_2742 OS75	11	12	10.8 - 13.2	PASS	1	8.33	-	0	0.00	-	973	1066	959.4 - 1172.6	PASS	117	10.98	-	5.258	4.1796	3.34368 - 5.01552	FAIL	95.341	90	PASS	PASS - GOOD	
BI_2742 OS76	13	13	11.7 - 14.3	PASS	0	0.00	-	0	0.00	-	211	211	189.9 - 232.1	PASS	1	0.47	-	0.1552	0.3091	0.24728 - 0.37092	FAIL	99.531	90	PASS	PASS - GOOD	
BI_2743 OS74	20	20	18 - 22	PASS	0	0.00	-	1	5.00	-	249	247	222.3 - 271.7	PASS	1	0.40	-	1.1697	0.6986	0.55888 - 0.83832	FAIL	98.024	90	PASS	PASS - GOOD	
BI_2743 OS75	8	8	7.2 - 8.8	PASS	0	0.00	-	0	0.00	-	220	220	198 - 242	PASS	0	0.00	-	1.0746	0.5612	0.44896 - 0.67344	FAIL	100	90	PASS	PASS - EXCELLENT	
BI_2743 OS76	15	16	14.4 - 17.6	PASS	1	6.25	-	1	6.25	-	404	406	365.4 - 446.6	PASS	1	0.25	-	1.3705	0.84362	0.674896 - 1.012344	FAIL	99.509	90	PASS	PASS - GOOD	

NB. This table details the findings of the audit only. For details of Own Sample remedial action please refer to NMBAQCS Year 27 Annual report, section 2.4.

Table 1. Summary of the performance of participating laboratories in the Own Sample (OS) exercises with respect to the NMBAQC standards.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Estimation of Taxa							Taxonomic errors			No. Individuals							Estimation of Biomass				Similarity Index			Sample Flag
	OD	AD	Target	Pass / Fail	Missed Taxa	% Missed	Remedial Action	OD	%	Remedial Action	OD	AD	Target	Pass / Fail	Missed Ind.	% Missed	Remedial Action	OD	AD	Target	Pass / Fail	BCSI %	Target	Pass / Fail	NMBAQC Sample Flag
BI_2744 OS74	21	22	19.8 - 24.2	PASS	0	0.00	-	1	4.55	-	477	481	432.9 - 529.1	PASS	0	0.00	-	14.99	14.5035	11.6028 - 17.4042	PASS	99.586	90	PASS	PASS - GOOD
BI_2744 OS75	102	102	91.8 - 112.2	PASS	0	0.00	-	3	2.94	-	597	580	522 - 638	PASS	1	0.17	-	0.7040	0.6193	0.49544 - 0.74316	PASS	97.41	90	PASS	PASS - GOOD
BI_2744 OS76	183	185	166.5 - 203.5	PASS	0	0.00	-	6	3.24	-	1041	1066	959.4 - 1172.6	PASS	19	1.78	-	7.605	7.0954	5.67632 - 8.51448	PASS	97.127	90	PASS	PASS - GOOD
BI_2746 OS74	11	30	27 - 33	FAIL	18	60.00	Reprocess	2	6.67	Review	15	35	31.5 - 38.5	FAIL	20	57.14	Reprocess	-	-	-	-	50	90	FAIL	FAIL - BAD
BI_2746 OS75	10	30	27 - 33	FAIL	20	66.67	Reprocess	1	3.33	-	11	65	58.5 - 71.5	FAIL	54	83.08	Reprocess	-	-	-	-	25.974	90	FAIL	FAIL - BAD
BI_2746 OS76	32	77	69.3 - 84.7	FAIL	40	51.95	Reprocess	10	12.99	Reprocess	64	197	177.3 - 216.7	FAIL	128	64.97	Reprocess	-	-	-	-	38.931	90	FAIL	FAIL - BAD

Key:

OD = Original Data (participant), AD = Auditor Data, Target for Estimation of Taxa and No. Individuals is +/- 10% AD, Target for Estimation of Biomass is +/- 20% AD, BCSI = Bray Curtis Similarity Index.

Table 2. Comparison of the extraction efficiency by the participating laboratories for the major taxonomic groups present in Own Samples (OS74-76).

LabCode			Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2701	OS74	AD count	-	41	-	-	44	90	75	7	257
		Missed	-	0	-	-	0	1	0	0	1
		%missed	-	0.0	-	-	0.0	1.1	0.0	0.0	0.4
	OS75	AD count	-	327	-	4	250	615	5	3	1204
		Missed	-	0	-	0	1	9	0	0	10
		%missed	-	0.0	-	0.0	0.4	1.5	0.0	0.0	0.8
	OS76	AD count	6	518	4	2	576	280	17	336	1739
		Missed	0	0	0	0	0	4	0	1	5
		%missed	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.3	0.3
BI_2702	OS74	AD count	-	-	-	-	6	5	1	-	12
		Missed	-	-	-	-	0	0	0	-	0
		%missed	-	-	-	-	0.0	0.0	0.0	-	0.0
	OS75	AD count	-	1	-	-	9	5	1	-	16
		Missed	-	0	-	-	0	0	0	-	0
		%missed	-	0.0	-	-	0.0	0.0	0.0	-	0.0
	OS76	AD count	-	85	-	-	13	19	2	-	119
		Missed	-	2	-	-	0	3	-	-	5
		%missed	-	2.4	-	-	0.0	15.8	-	-	4.2
BI_2703	OS74	AD count	-	8	-	-	8	6	-	1	23
		Missed	-	0	-	-	0	0	-	0	0
		%missed	-	0.0	-	-	0.0	0.0	-	0.0	0.0
	OS75	AD count	3	50	-	-	25	18	2	-	98
		Missed	0	0	-	-	0	1	0	-	1
		%missed	0.0	0.0	-	-	0.0	5.6	0.0	-	1.0
	OS76	AD count	2	58	-	-	4	142	-	-	206
		Missed	0	0	-	-	0	8	-	-	8
		%missed	0.0	0.0	-	-	0.0	5.6	-	-	3.9
BI_2704	OS74	AD count	2	22	-	-	4	2	-	-	30
		Missed	0	0	-	-	0	0	-	-	0
		%missed	0.0	0.0	-	-	0.0	0.0	-	-	0.0
	OS75	AD count	2	23	-	-	1	6	5	4	41
		Missed	0	0	-	-	0	1	0	0	1
		%missed	0.0	0.0	-	-	0.0	16.7	0.0	0.0	2.4
	OS76	AD count	-	13	-	-	11	18	21	1	64
		Missed	-	0	-	-	0	0	0	0	0
		%missed	-	0.0	-	-	0.0	0.0	0.0	0.0	0.0

Table 2. Comparison of the extraction efficiency by the participating laboratories for the major taxonomic groups present in Own Samples (OS74-76).

LabCode			Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2708	OS74	AD count	1	23	-	-	46	29	-	2	101
		Missed	0.0	0.0	-	-	0	2	-	2	4
		%missed	0.0	0.0	-	-	0.0	6.9	-	100.0	4.0
	OS75	AD count	7	27	2	-	44	69	8	59	216
		Missed	0	0	0	-	1	1	0	0	2
		%missed	0.0	0.0	0.0	-	2.3	1.4	0.0	0.0	0.9
	OS76	AD count	-	10	-	-	1	64	-	3	78
		Missed	-	1	-	-	0	5	-	0	6
		%missed	-	10.0	-	-	0.0	7.8	-	0.0	7.7
BI_2710	OS74	AD count	-	722	-	-	18	24	6	-	770
		Missed	-	2	-	-	1	0	0	-	3
		%missed	-	0.3	-	-	5.6	0.0	0.0	-	0.4
	OS75	AD count	-	103	-	-	5	42	19	-	169
		Missed	-	0	-	-	0	1	0	-	1
		%missed	-	0.0	-	-	0.0	2.4	0.0	-	0.6
	OS76	AD count	-	1392	-	-	7	109	8	-	1516
		Missed	-	6	-	-	0	10	0	-	16
		%missed	-	0.4	-	-	0.0	9.2	0.0	-	1.1
BI_2712	OS74	AD count	1	131	-	-	27	65	60	15	299
		Missed	0	0	-	-	0	0	0	0	0
		%missed	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0
	OS75	AD count	-	48	-	-	8	5	52	3	116
		Missed	-	0	-	-	0	0	0	0	0
		%missed	-	0.0	-	-	0.0	0.0	0.0	0.0	0.0
	OS76	AD count	-	73	-	-	3	13	10	7	106
		Missed	-	0	-	-	0	0	0	0	0
		%missed	-	0.0	-	-	0.0	0.0	0.0	0.0	0.0
BI_2729	OS74	AD count	14	47	-	-	3	8	11	12	95
		Missed	3	0	-	-	0	0	0	0	3
		%missed	21.4	0.0	-	-	0.0	0.0	0.0	0.0	3.2
	OS75	AD count	26	89	-	-	4	43	33	4	199
		Missed	0	1	-	-	0	0	0	1	2
		%missed	0.0	1.1	-	-	0.0	0.0	0.0	25.0	1.0
	OS76	AD count	-	4	-	-	-	2	4	1	11
		Missed	-	0	-	-	-	0	0	0	0
		%missed	-	0.0	-	-	-	0.0	0.0	0.0	0.0

Table 2. Comparison of the extraction efficiency by the participating laboratories for the major taxonomic groups present in Own Samples (OS74-76).

LabCode			Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2730	OS74	AD count	-	42	291	-	1360	77	-	-	1770
		Missed	-	0	0	-	0	0	-	-	0
		%missed	-	0.0	0.0	-	0.0	0.0	-	-	0.0
	OS75	AD count	-	30	-	-	23	1	-	-	54
		Missed	-	0	-	-	0	0	-	-	0
		%missed	-	0.0	-	-	0.0	0.0	-	-	0.0
	OS76	AD count	-	381	12	-	1	49	-	1	444
		Missed	-	2	0	-	0	4	-	1	7
		%missed	-	0.5	0.0	-	0.0	8.2	-	100.0	1.6
BI_2731	OS74	AD count	3	40	-	-	5	28	-	3	79
		Missed	0	0	-	-	0	0	-	1	1
		%missed	0.0	0.0	-	-	0.0	0.0	-	33.3	1.3
	OS75	AD count	3	71	-	-	12	82	3	4	175
		Missed	0	0	-	-	0	0	0	0	0
		%missed	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0
	OS76	AD count	6	119	-	-	1	184	24	15	349
		Missed	0	0	-	-	0	0	0	0	0
		%missed	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0
BI_2732	OS74	AD count	-	397	74	-	1	1	-	49	522
		Missed	-	0	0	-	0	0	-	0	0
		%missed	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0
	OS75	AD count	-	79	5	-	4	33	-	-	121
		Missed	-	3	0	-	1	1	-	-	5
		%missed	-	3.8	-	-	25.0	3.0	-	-	4.1
	OS76	AD count	-	352	547	-	-	-	-	57	956
		Missed	-	0	1	-	-	-	-	0	1
		%missed	-	0.0	0.2	-	-	-	-	0.0	0.1
BI_2734	OS74	AD count	-	72	-	-	-	-	-	175	247
		Missed	-	0	-	-	-	-	-	1	1
		%missed	-	0.0	-	-	-	-	-	0.6	0.4
	OS75	AD count	-	342	-	-	5	13	-	2	362
		Missed	-	1	-	-	0	0	-	0	1
		%missed	-	0.3	-	-	0.0	0.0	-	0.0	0.3
	OS76	AD count	-	23	13	-	3	7	-	1	47
		Missed	-	0	0	-	0	0	-	0	0
		%missed	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0



Table 2. Comparison of the extraction efficiency by the participating laboratories for the major taxonomic groups present in Own Samples (OS74-76).

LabCode			Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2735	OS74	AD count	2	78	-	-	24	49	-	3	156
		Missed	0	0	-	-	0	0	-	0	0
		%missed	0.0	0.0	-	-	0.0	0.0	-	0.0	0.0
	OS75	AD count	2	92	-	-	13	84	155	6	352
		Missed	0	0	-	-	0	0	0	0	0
		%missed	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0
	OS76	AD count	2	82	-	-	8	21	37	2	152
		Missed	0	2	-	-	0	0	0	0	2
		%missed	0.0	2.4	-	-	0.0	0.0	0.0	0.0	1.3
BI_2736	OS74	AD count	2	30	-	-	20	42	155	-	249
		Missed	0	1	-	-	0	0	0	-	1
		%missed	0.0	3.3	-	-	0.0	0.0	0.0	-	0.4
	OS75	AD count	19	181	-	-	22	38	84	-	344
		Missed	2	1	-	-	0	0	1	-	4
		%missed	10.5	0.6	-	-	0.0	0.0	1.2	-	1.2
	OS76	AD count	6	331	-	-	72	72	114	10	605
		Missed	0	9	-	-	0	0	0	0	9
		%missed	0.0	2.7	-	-	0.0	0.0	0.0	0.0	1.5
BI_2737	OS74	AD count	-	57	30	-	3	2	-	3	95
		Missed	-	0	0	-	0	0	-	0	0
		%missed	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0
	OS75	AD count	-	4	-	-	8	5	-	-	17
		Missed	-	0	-	-	0	3	-	-	3
		%missed	-	0.0	-	-	0.0	60.0	-	-	17.6
	OS76	AD count	1	2	-	1	86	111	1	3	205
		Missed	0	0	-	0	0	1	0	0	1
		%missed	0.0	0.0	-	0.0	0.0	0.9	0.0	0.0	0.5
BI_2738	OS74	AD count	-	179	142	-	2	4	-	-	327
		Missed	-	1	5	-	0	0	-	-	6
		%missed	-	0.6	3.5	-	0.0	0.0	-	-	1.8
	OS75	AD count	1	94	1667	-	-	34	-	5	1801
		Missed	0	0	9	-	-	0	-	0	9
		%missed	0.0	0.0	0.5	-	-	0.0	-	0.0	0.5
	OS76	AD count	-	82	25	-	2	2	-	68	179
		Missed	-	1	3	-	2	0	-	13	19
		%missed	-	1.2	12.0	-	100.0	0.0	-	19.1	10.6

Table 2. Comparison of the extraction efficiency by the participating laboratories for the major taxonomic groups present in Own Samples (OS74-76).

LabCode			Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2739	OS74	AD count	2	155	-	-	71	136	23	4	391
		Missed	0	1	-	-	0	0	0	0	1
		%missed	0.0	0.6	-	-	0.0	0.0	0.0	0.0	0.3
	OS75	AD count	10	346	-	-	75	216	15	20	682
		Missed	0	0	-	-	0	2	0	0	2
		%missed	-	0.0	-	-	0.0	0.9	0.0	0.0	0.3
	OS76	AD count	5	39	-	-	56	21	1	2	124
		Missed	0	0	-	-	0	0	0	0	0
		%missed	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0
BI_2740	OS74	AD count	-	74	9	-	120	75	-	20	298
		Missed	-	0	1	-	0	2	-	3	6
		%missed	-	0.0	11.1	-	0.0	2.7	-	15.0	2.0
	OS75	AD count	-	12	-	-	7	1	-	-	20
		Missed	-	0	-	-	0	0	-	-	0
		%missed	-	0.0	-	-	0.0	0.0	-	-	0.0
	OS76	AD count	-	53	-	-	24	21	-	-	98
		Missed	-	2	-	-	1	1	-	-	4
		%missed	-	3.8	-	-	4.2	4.8	-	-	4.1
BI_2741	OS74	AD count	-	203	67	-	263	722	-	7	1262
		Missed	-	4	2	-	19	181	-	7	213
		%missed	-	2.0	-	-	7.2	25.1	-	100.0	16.9
	OS75	AD count	-	64	10	-	6	245	-	-	325
		Missed	-	0	0	-	0	8	-	-	8
		%missed	-	0.0	0.0	-	0.0	3.3	-	-	2.5
	OS76	AD count	1	19	-	-	3	25	-	-	48
		Missed	0	0	-	-	0	2	-	-	2
		%missed	0.0	0.0	-	-	0.0	8.0	-	-	4.2
BI_2742	OS74	AD count	-	2	1	-	238	7	-	14	262
		Missed	-	1	1	-	3	4	-	7	16
		%missed	-	50.0	100.0	-	1.3	57.1	-	50.0	6.1
	OS75	AD count	-	3	1	-	46	1012	-	4	1066
		Missed	-	0	0	-	2	115	-	0	117
		%missed	-	0.0	0.0	-	4.3	11.4	-	0.0	11.0
	OS76	AD count	-	139	3	-	67	1	-	1	211
		Missed	-	1	0	-	0	0	-	0	1
		%missed	-	0.7	0.0	-	0.0	0.0	-	0.0	0.5

Table 2. Comparison of the extraction efficiency by the participating laboratories for the major taxonomic groups present in Own Samples (OS74-76).

LabCode			Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall	
BI_2743	OS74	AD count	-	59	66	-	77	41	-	4	247	
		Missed	-	0	0.0	-	0	0	-	1	1	
		%missed	-	0.0	-	-	0.0	0.0	-	25.0	0.4	
	OS75	AD count	-	161	1	-	40	-	-	-	18	220
		Missed	-	0	0.0	-	0	-	-	-	0	0
		%missed	-	0.0	0.0	-	0.0	-	-	-	0.0	0.0
	OS76	AD count	-	340	23	-	37	2	-	-	4	406
		Missed	-	0	0	-	0	0	-	-	1	1
		%missed	-	0.0	0.0	-	0.0	0.0	-	-	25.0	0.2
BI_2744	OS74	AD count	-	221	43	-	191	25	-	1	481	
		Missed	-	0	0	-	0	0	-	0	0	
		%missed	-	0.0	0.0	-	0.0	0.0	-	-	0.0	0.0
	OS75	AD count	5	253	-	-	110	162	32	18	18	580
		Missed	0	1	-	-	0	0	0	0	0	1
		%missed	0.0	0.4	-	-	0.0	0.0	0.0	0.0	0.0	0.2
	OS76	AD count	29	544	2	-	228	146	68	49	49	1066
		Missed	0	7	0	-	0	3	1	8	8	19
		%missed	0.0	1.3	0.0	-	0.0	2.1	1.5	16.3	16.3	1.8
BI_2746	OS74	AD count	-	13	-	-	10	4	5	3	35	
		Missed	-	9	-	-	3	3	2	3	20	
		%missed	-	69.2	-	-	30.0	75.0	40.0	100.0	100.0	57.1
	OS75	AD count	-	45	-	-	7	-	1	12	12	65
		Missed	-	39	-	-	3	-	0	12	12	54
		%missed	-	86.7	-	-	42.9	-	0.0	100.0	100.0	83.1
	OS76	AD count	1	65	-	-	50	19	7	55	55	197
		Missed	1	42	-	-	17	16	4	48	48	128
		%missed	100.0	64.6	-	-	34.0	84.2	57.1	87.3	87.3	65.0

Key: AD = Audit Data

Missed = numbers of individuals missed in residue sorting

% Missed = Percentage missed in residue sorting

Table 3. Summary of mis-identified taxa in the Own Sample Module (OS74 - 76) (erroneous identifications in brackets).

LabCode / Smp.	Taxonomic Errors	Major Taxonomic Group					
		Polychaeta	Oligochaeta	Crustacea	Mollusca	Echinodermata	Other
BI_2701	OS74	2	<i>Nephtys hombergii</i> ( <i>Nephtys longosetosa</i> )	-	<i>Bathyporeia gracilis</i> ( <i>Bathyporeia elegans</i> )	-	-
	OS75	0	-	-	-	-	-
	OS76	2	<i>Syllidia armata</i> ( <i>Amblyosyllis spectabilis</i> ) <i>Sphaerodorum gracilis</i> ( <i>Sphaerodorum abyssorum</i> )	-	-	-	-
BI_2702	OS74	0	-	-	-	-	-
	OS75	1	<i>Lumbrineris cingulata</i> agg. ( <i>Hilbigneris gracilis</i> )	-	-	-	-
	OS76	3	<i>Chaetozone christiei</i> ( <i>Chaetozone setosa</i> )	-	<i>Bathyporeia tenuipes</i> ( <i>Bathyporeia elegans</i> ) <i>Pontocrates arcticus</i> ( <i>Pontocrates arenarius</i> )	-	-
BI_2703	OS74	0	-	-	-	-	-
	OS75	1	-	-	<i>Tryphosa crenata</i> ( <i>Tryphosa nana</i> )	-	-
	OS76	2	<i>Nephtys kersivalensis</i> ( <i>Nephtys assimilis</i> )	-	-	<i>Pharus legumen</i> juv. ( <i>Phaxas pellucidus</i> )	-
BI_2704	OS74	1	<i>Ampharete falcata</i> ( <i>Ampharete lindstroemi</i> Aggregate)	-	-	-	-
	OS75	1	<i>Phisidia aurea</i> ( <i>Amphitritides gracilis</i> )	-	-	-	-
	OS76	0	-	-	-	-	-
BI_2708	OS74	1	-	-	<i>Ampelisca brevicornis</i> ( <i>Ampelisca pectenata</i> )	-	-
	OS75	1	-	-	-	<i>Cerastoderma edule</i> juv. ( <i>Cerastoderma glaucum</i> juvenile)	-
	OS76	0	-	-	-	-	-
BI_2710	OS74	0	-	-	-	-	-
	OS75	0	-	-	-	-	-
	OS76	0	-	-	-	-	-
BI_2712	OS74	1	-	-	-	<i>Liostomia</i> ( <i>Brachystomia</i> )	-
	OS75	0	-	-	-	-	-
	OS76	0	-	-	-	-	-
BI_2729	OS74	1	-	-	-	-	NEMERTEA (?MOLLUSCA)
	OS75	0	-	-	-	-	-
	OS76	0	-	-	-	-	-
BI_2730	OS74	1	-	-	-	<i>Scrobicularia plana</i> ( <i>Limecola balthica</i> )	-
	OS75	2	<i>Orbinia sertulata</i> ( <i>Phylo grubei</i> )	-	<i>Bathyporeia elegans</i> ( <i>Bathyporeia pilosa</i> )	-	-
	OS76	0	-	-	-	-	-
BI_2731	OS74	1	<i>Prionospio fallax</i> ( <i>Prionospio steenstrupi</i> )	-	-	-	-
	OS75	1	<i>Prionospio fallax</i> ( <i>Prionospio steenstrupi</i> )	-	-	-	-
	OS76	0	-	-	-	-	-
BI_2732	OS74	1	<i>Cauleriella species C</i> ( <i>Chaetozone gibber</i> )	-	-	-	-
	OS75	1	<i>Cauleriella species C</i> ( <i>Chaetozone gibber</i> )	-	-	-	-
	OS76	1	<i>Cauleriella species C</i> ( <i>Chaetozone gibber</i> )	-	-	-	-
BI_2734	OS74	0	-	-	-	-	-
	OS75	0	-	-	-	-	-
	OS76	0	-	-	-	-	-
BI_2735	OS74	3	<i>Praxillella affinis</i> ( <i>Euclymene droebachiensis</i> )	-	-	<i>Ensis</i> juv. ( <i>Phaxas pellucidus</i> ) <i>Thracia convexa</i> ( <i>Thracia phaseolina</i> )	-
	OS75	1	<i>Praxillella affinis</i> ( <i>Euclymene droebachiensis</i> )	-	-	-	-
	OS76	0	-	-	-	-	-
BI_2736	OS74	0	-	-	-	-	-
	OS75	0	-	-	-	-	-
	OS76	2	-	-	<i>Cressa dubia</i> ( <i>Stenothoidae</i> ) <i>Gammaropsis palmata</i> ( <i>Megamphopus cornutus</i> )	-	-
BI_2737	OS74	0	-	-	-	-	-
	OS75	0	-	-	-	-	-
	OS76	1	-	-	<i>Ampithoe rubricata</i> ( <i>Jassa falcata</i> )	-	-
BI_2738	OS74	1	<i>Capitella</i> ( <i>Cirratulus</i> juvenile)	-	-	-	-
	OS75	0	-	-	-	-	-
	OS76	1	-	<i>Tubificoides galiciensis</i> ( <i>Baltidrilus costatus</i> )	-	-	-
BI_2739	OS74	0	-	-	-	-	-
	OS75	1	-	-	-	-	Bougainvilliidae (Hydractiniidae)
	OS76	0	-	-	-	-	-
BI_2740	OS74	0	-	-	-	-	-
	OS75	0	-	-	-	-	-
	OS76	2	<i>Nephtys cirrosa</i> ( <i>Nephtys caeca</i> )	-	<i>Pontocrates arcticus</i> ( <i>Pontocrates arenarius</i> )	-	-
BI_2741	OS74	4	-	<i>Baltidrilus costatus</i> ( <i>Tubificoides pseudogaster</i> Aggregate)	<i>Idotea chelipes</i> ( <i>Idotea pelagica</i> ) <i>Carcinus maenas</i> juv. (Portunidae_Juvenile)	<i>Limecola balthica</i> (Semelidae_Juvenile)	-
			-	-	-	-	

Table 3. Summary of mis-identified taxa in the Own Sample Module (OS74 - 76) (erroneous identifications in brackets).

LabCode / Smp.	Taxonomic Errors	Major Taxonomic Group						
		Polychaeta	Oligochaeta	Crustacea	Mollusca	Echinodermata	Other	
BI_2742	OS75	0	-	-	-	-	-	
	OS76	0	-	-	-	-	-	
BI_2743	OS74	1	-	<i>Baltidrilus costatus (Tubificoides pseudogaster agg.)</i>	-	-	-	
	OS75	0	-	-	-	-	-	
	OS76	1	-	<i>Paranais litoralis (Paranais frici)</i>	-	-	-	
BI_2744	OS74	1	-	-	-	<i>Cerastoderma edule (Cerastoderma glaucum)</i>	-	
	OS75	3	<i>Phyllodoce c.f. longipes (Phyllodoce groenlandica)</i>	-	-	<i>Bela nebula (Mangelia attenuata)</i>	-	
	OS76	6	<i>Dialychone (Chone filicaudata)</i>	-	-	<i>Spiralinella spiralis (Parthenina)</i>	-	
			-	-	-	<i>Kurtiella bidentata (Abra)</i>	-	
BI_2746	OS74	2	-	-	<i>Paratanaoidea (Chondrochelia savignyi)</i>	-	-	
			-	-	<i>Parvipalpus capillaceus (Phtisica marina)</i>	-	-	
	OS75	1	<i>Nephtys kersivalensis (Nephtys cirrosa)</i>	-	-	-	-	
	OS76	10	<i>Eunice pennata (Eunice vittata)</i>	-	<i>Pseudotanaoidea (Chondrochelia savignyi)</i>	<i>Limaria loscombi (Limaria hians)</i>	<i>Amphiura juv. (Amphipholis squamata)</i>	-
			<i>Lumbrineris lusitanica (Lumbrineris latreilli)</i>	-	<i>Iphinoe elisae (Iphinoe serrata)</i>	-	-	-
			<i>Trichobranchus (Terebellidae ind)</i>	-	<i>Parvipalpus capillaceus (Phtisica marina)</i>	-	-	-
			-	-	<i>Pariambus typicus (Phtisica marina)</i>	-	-	-
-	-	-	-	<i>Caprella juv. (Phtisica marina)</i>	-	-		
<b>TOTAL</b>	<b>66</b>	24	4	19	12	1	6	
<b>% Error</b>		36	6	29	18	2	9	

NB: % errors for taxonomic groups are percentages of the total errors generated by each taxon (not percentages of errors within each taxon)

Table 4. Comparison of the estimates of biomass made by the participating laboratories with those made by APEM Ltd. for the major taxonomic groups present in samples OS74-OS76.

		OS74								
LabCode		Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2701	OD	-	0.2127	-	-	0.0168	0.3092	0.7773	0.0027	1.3187
	AD	-	0.1763	-	-	0.0095	0.2946	0.6609	0.0016	1.1429
	%diff.	-	17.11	-	-	43.45	4.72	14.97	40.74	13.33
BI_2708	OD	0.0001	0.0702	-	-	0.0781	0.8817	-	0.0001	1.0302
	AD	0.0001	0.0516	-	-	0.0546	0.8651	-	0.0001	0.9715
	%diff.	0.0000	26.4957	-	-	30.0896	1.8827	-	0.0000	5.6979
BI_2710	OD	-	1.5156	-	-	0.4139	1.8929	0.0014	-	3.8238
	AD	-	1.0492	-	-	0.3320	1.6793	0.0014	-	3.0619
	%diff.	-	30.7733	-	-	19.7874	11.2843	0.0000	-	19.93
BI_2737	OD	-	0.5658	0.0016	-	0.0021	0.0001	-	0.0041	0.5737
	AD	-	0.4685	0.0007	-	0.0014	0.0001	-	0.0031	0.4738
	%diff.	-	17.20	56.25	-	33.33	0.00	-	24.39	17.41
BI_2739	OD	0.0011	0.4719	-	-	0.0345	0.9482	0.0471	0.0010	1.5038
	AD	0.0010	0.3048	-	-	0.0234	0.8610	0.0357	0.0002	1.2261
	%diff.	9.09	35.41	-	-	32.17	9.20	24.20	80.00	18.47
BI_2740	OD	-	0.1212	0.0004	-	0.0509	0.1464	-	0.0004	0.3193
	AD	-	0.0730	0.0004	-	0.0359	0.1380	-	0.0004	0.2477
	%diff.	-	39.77	0.00	-	29.47	5.74	-	0.00	22.42
BI_2741	OD	-	0.3770	0.0343	-	0.0708	6.4600	-	-	6.9421
	AD	-	0.1856	0.0171	-	0.0427	5.8988	-	-	6.1442
	%diff.	-	50.77	50.15	-	39.69	8.69	-	-	11.49
BI_2742	OD	-	0.0003	-	-	0.5690	0.0140	-	0.0187	0.6020
	AD	-	0.0001	-	-	0.2018	0.0139	-	0.0167	0.2325
	%diff.	-	66.67	-	-	64.53	0.71	-	10.70	61.38
BI_2743	OD	-	0.8801	0.0517	-	0.0167	0.0955	-	0.1257	1.1697
	AD	-	0.4649	0.0253	-	0.0110	0.0856	-	0.1118	0.6986
	%diff.	-	47.18	51.06	-	34.13	10.37	-	11.06	40.28
BI_2744	OD	-	0.1825	0.0104	-	0.1695	14.6256	0.0019	0.0001	14.9900
	AD	-	0.1171	0.0069	-	0.1147	14.2637	0.0010	0.0001	14.5035
	%diff.	-	35.84	33.65	-	32.33	2.47	47.37	0.00	3.25

Key: OD - Own data, participating laboratory  
AD - Audit data  
"-" - No data.

Table 4. Comparison of the estimates of biomass made by the participating laboratories with those made by APEM Ltd. for the major taxonomic groups present in samples OS74-OS76.

		OS75								
LabCode		Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2701	OD	-	5.6734	-	0.0009	0.0407	1.7088	0.0450	0.0187	7.4875
	AD	-	4.1801	-	0.0006	0.0285	1.6106	0.0476	0.0180	5.8854
	%diff.	-	26.32	-	33.33	29.98	5.75	-5.78	3.74	21.40
BI_2708	OD	-	-	-	-	-	-	-	-	0.0000
	AD	-	-	-	-	-	-	-	-	0.0000
	%diff.	-	-	-	-	-	-	-	-	-
BI_2710	OD	0.0086	1.0243	-	-	0.0159	0.6321	0.0037	-	1.6846
	AD	0.0056	0.5069	-	-	0.0107	0.5524	0.0045	-	1.0801
	%diff.	34.88	50.51	-	-	32.70	12.61	-21.62	-	35.88
BI_2737	OD	-	0.0504	-	-	0.1203	0.0625	-	-	0.2332
	AD	-	0.0295	-	-	0.0833	0.0593	-	-	0.1721
	%diff.	-	41.47	-	-	30.76	5.12	-	-	26.20
BI_2739	OD	0.3225	1.5069	-	-	0.0298	0.8423	0.6367	0.1442	3.4824
	AD	0.2798	1.7126	-	-	0.0169	0.7711	0.6033	0.1413	3.5250
	%diff.	13.24	-13.65	-	-	43.29	8.45	5.25	2.01	-1.22
BI_2740	OD	-	0.2204	-	-	0.0246	0.0066	-	-	0.2516
	AD	-	0.0924	-	-	0.0133	0.0064	-	-	0.1121
	%diff.	-	58.08	-	-	45.93	3.03	-	-	55.45
BI_2741	OD	-	0.4779	0.0065	-	0.0028	21.9228	-	-	22.4100
	AD	-	0.2605	0.0055	-	0.0016	17.9676	-	-	18.2352
	%diff.	-	45.49	15.38	-	42.86	18.04	-	-	18.63
BI_2742	OD	-	0.0007	0.0013	-	0.0648	5.1911	-	0.0001	5.2580
	AD	-	0.0003	0.0006	-	0.0296	4.1490	-	0.0001	4.1796
	%diff.	-	57.14	53.85	-	54.32	20.07	-	0.00	20.51
BI_2743	OD	-	0.9127	0.0007	-	0.1013	-	-	0.0599	1.0746
	AD	-	0.4678	0.0001	-	0.0528	-	-	0.0405	0.5612
	%diff.	-	48.75	85.71	-	47.88	-	-	32.39	47.78
BI_2744	OD	0.0074	0.3464	-	-	0.0393	0.2328	0.0737	0.0044	0.7040
	AD	0.0049	0.2726	-	-	0.0207	0.2479	0.0699	0.0033	0.6193
	%diff.	33.78	21.30	-	-	47.33	-6.49	5.16	25.00	12.03

Key: OD - Own data, participating laboratory  
 AD - Audit data  
 "-" - No data.

Table 4. Comparison of the estimates of biomass made by the participating laboratories with those made by APEM Ltd. for the major taxonomic groups present in samples OS74-OS76.

		OS76								
LabCode		Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2701	OD	0.0061	3.5264	0.0002	0.0013	0.2895	10.1943	0.0171	1.7684	15.8033
	AD	0.0056	2.6007	0.0002	0.0012	0.2415	10.0747	0.0184	1.7419	14.6842
	%diff.	8.20	26.25	0.00	7.69	16.58	1.17	-7.60	1.50	7.08
BI_2708	OD	-	0.0081	-	-	-	1.6603	-	0.0001	1.6685
	AD	-	0.0080	-	-	-	1.6176	-	0.0001	1.6257
	%diff.	-	1.23	-	-	-	2.57	-	0.00	2.5652
BI_2710	OD	0.0702	1.9613	-	-	0.0121	0.9652	63.0218	-	66.0306
	AD	0.0429	1.3669	-	-	0.0098	0.8982	34.1748	-	36.4926
	%diff.	38.89	30.31	-	-	19.01	6.94	45.77	-	44.73
BI_2737	OD	0.0002	0.0015	-	0.0001	0.1100	0.1008	0.0025	0.0002	0.2153
	AD	0.0002	0.0003	-	0.0001	0.0698	0.0929	0.0014	0.0002	0.1649
	%diff.	0.00	80.00	-	0.00	36.55	7.84	44.00	0.00	23.41
BI_2739	OD	0.0052	0.0560	-	-	0.0104	0.0671	0.0001	0.0064	0.1452
	AD	0.0038	0.0435	-	-	0.0067	0.0593	0.0001	0.0043	0.1177
	%diff.	26.92	22.32	-	-	35.58	11.62	0.00	32.81	18.94
BI_2740	OD	-	0.7332	-	-	0.0115	1.9294	-	-	2.6741
	AD	-	0.4831	-	-	0.0072	1.7966	-	-	2.2869
	%diff.	-	34.11	-	-	37.39	6.88	-	-	14.48
BI_2741	OD	0.0064	0.2681	-	-	0.0058	8.6520	-	-	8.9323
	AD	0.0031	0.1272	-	-	0.0026	7.3471	-	-	7.4800
	%diff.	51.56	52.56	-	-	55.17	15.08	-	-	16.26
BI_2742	OD	-	0.0620	0.0002	-	0.0925	0.0001	-	0.0004	0.1552
	AD	-	0.1363	0.0002	-	0.0450	0.1275	-	0.0001	0.3091
	%diff.	-	-119.84	0.00	-	51.35	-127400.00	-	75.00	-99.16
BI_2743	OD	-	1.2506	0.0034	-	0.1160	0.0001	-	0.0004	1.3705
	AD	-	0.7737	0.0032	-	0.0811	0.0001	-	0.0001	0.8582
	%diff.	-	38.13	5.88	-	30.09	0.00	-	75.00	37.38
BI_2744	OD	0.0872	1.4927	0.0001	-	0.1740	5.5987	0.1676	0.0847	7.6050
	AD	0.0705	1.1646	0.0001	-	0.1146	5.5153	0.1498	0.0728	7.0877
	%diff.	19.15	21.98	0.00	-	34.14	1.49	10.62	14.05	6.80

Key: OD - Own data, participating laboratory

AD - Audit data

"-" - No data.



Table 5. Comparison of the overall performance of laboratories in the Own Sample exercises from 1995/96 to 2020/21 (OS01-76).

Scheme Year	Exercise	Number of samples		% Pass
		Pass (>90% BCSI)	Fail (<90% BCSI)	
02 (1995/96)	01	14	0	100
03 (1996/97)	02, 03, 04	27	11	71
04 (1997/98)	05, 06, 07	33	7	83
05 (1998/99)	08, 09, 10	30	12	71
06 (1999/00)	11, 12, 13	37	14	73
07 (2000/01)	14, 15, 16	30	15	67
08 (2001/02)*	17, 18, 19	35	10	78
09 (2002/03)*	20, 21, 22	33	11	75
10 (2003/04)*	23, 24, 25	43	8	84
11 (2004/05)*	26, 27, 28	51	3	94
12 (2005/06)*	29, 30, 31	50	4	93
13 (2006/07)*	32, 33, 34	63	6	91
14 (2007/08)*	35, 36, 37	69	12	85
15 (2008/09)*	38, 39, 40	67	24	74
16 (2009/10)*	41, 42, 43	75	18	81
17 (2010/11)*	44, 45, 46	85	14	86
18 (2011/12)*	47, 48, 49	95	4	96
19 (2012/13)*	50, 51, 52	102	6	94
20 (2013/14)*	53, 54, 55	73	29	72
2014/15 (21)*	56, 57, 58	71	22	76
2015/16 (22)*	59, 60, 61	81	15	84
2016/17 (23)*	62, 63, 64	72	12	86
2017/18 (24)*	65, 66, 67	70	9	89
2018/19 (25)*	68, 69, 70	73	16	82
2019/20 (26)*	71, 72, 73	89	8	92
2020/21 (27)*	74, 75, 76	64	5	93
	<b>Total</b>	<b>1532</b>	<b>295</b>	<b>84</b>

\* - Own Samples selected from completed data matrices

BCSI - Bray Curtis Similarity Index (untransformed)