NMBAQC

NE Atlantic Marine Biological Analytical Quality Control Scheme

Own Sample Module Summary Report

Benthic Invertebrate Component - 2018/19

OS68, 69 and 70

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APEM

MODULE / EXERCISE DETAILS

Module:	Own Sample (OS)
Exercises:	OS68, 69 and 70
Data/Sample Request Circulated:	31 August 2018
Sample Submission Deadline:	26 October 2018
Number of Subscribing Laboratories:	31
Number of Own Samples Received:	89

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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_2501 OS68	35	44	39.6 - 48.4	FAIL	7	15.91	Reprocess	10	22.73	Reprocess	165	228	205.2 - 250.8	FAIL	62	27.19	Reprocess	-	-	-	-	55.696	90	FAIL	FAIL - BAD
BI_2501 OS69	29	32	28.8 - 35.2	PASS	1	3.13	-	8	25.00	Reprocess	83	84	75.6 - 92.4	PASS	5	5.95	Review	-	-	-	-	63.473	90	FAIL	FAIL - BAD
BI_2501 OS70	58	67	60.3 - 73.7	FAIL	4	5.97	Review	21	31.34	Reprocess	276	384	345.6 - 422.4	FAIL	89	23.18	Reprocess	-	-	-	-	49.096	90	FAIL	FAIL - BAD
BI_2502 OS68	98	98	88.2 - 107.8	PASS	0	0.00	-	0	0.00	-	1168	1169	1052.1 - 1285.9	PASS	0	0.00	-	5.5514	5.8803	4.70424 - 7.05636	PASS	96.36	90	PASS	PASS - GOOD
BI_2502 OS69	106	108	97.2 - 118.8	PASS	1	0.93	-	3	2.78	-	1283	1282	1153.8 - 1410.2	PASS	9	0.70	-	15.3645	14.8788	11.90304 - 17.85456	PASS	99.25	90	PASS	PASS - GOOD
BI_2502 OS70	25	25	22.5 - 27.5	PASS	0	0.00	-	0	0.00	-	142	142	127.8 - 156.2	PASS	0	0.00	-	0.9291	0.7245	0.5796 - 0.8694	FAIL	100	90	PASS	PASS - EXCELLENT
BI_2503 OS68	5	6	5.4 - 6.6	FAIL	0	0.00	-	0	0.00	-	19	19	17.1 - 20.9	PASS	0	0.00	-	-	-	-	-	94.737	90	PASS	PASS - ACCEPTABLE
BI_2503 OS69	1	1	0.9 - 1.1	PASS	0	0.00	-	0	0.00	-	1	1	0.9 - 1.1	PASS	0	0.00	-	-	-	-	-	100	90	PASS	PASS - EXCELLENT
BI_2503 OS70	17	17	15.3 - 18.7	PASS	0	0.00	-	1	5.88	-	117	118	106.2 - 129.8	PASS	1	0.85	-	-	-	-	-	98.745	90	PASS	PASS - GOOD
BI_2504 OS68	24	27	24.3 - 29.7	FAIL	2	7.41	-	2	7.41	-	474	482	433.8 - 530.2	PASS	8	1.66	-	-	-	-	-	98.33	90	PASS	PASS - GOOD
BI_2504 OS69	18	19	17.1 - 20.9	PASS	1	5.26	-	1	5.26	-	464	465	418.5 - 511.5	PASS	3	0.65	-	-	-	-	-	99.463	90	PASS	PASS - GOOD
BI_2504 OS70	33	37	33.3 - 40.7	FAIL	3	8.11	-	1	2.70	-	79	83	74.7 - 91.3	PASS	4	4.82	-	-	-	-	-	93.976	90	PASS	PASS - ACCEPTABLE
BI_2506 OS68	45	46	41.4 - 50.6	PASS	0	0.00	-	1	2.17	-	126	125	112.5 - 137.5	PASS	0	0.00	-	-	-	-	-	97.619	90	PASS	PASS - GOOD
BI_2506 OS69	60	62	55.8 - 68.2	PASS	2	3.23	-	1	1.61	-	287	289	260.1 - 317.9	PASS	2	0.69	-	-	-	-	-	99.306	90	PASS	PASS - GOOD
BI_2506 OS70	51	52	46.8 - 57.2	PASS	1	1.92	-	1	1.92	-	183	184	165.6 - 202.4	PASS	1	0.54	-	-	-	-	-	99.183	90	PASS	PASS - GOOD
BI_2509 OS68	31	33	29.7 - 36.3	PASS	1	3.03	-	3	9.09	-	183	187	168.3 - 205.7	PASS	3	1.60	-	-	-	-	-	96.216	90	PASS	PASS - GOOD
BI_2509 OS69	33	33	29.7 - 36.3	PASS	0	0.00	-	2	6.06	-	187	191	171.9 - 210.1	PASS	5	2.62	-	-	-	-	-	96.296	90	PASS	PASS - GOOD
BI_2509 OS70	3	3	2.7 - 3.3	PASS	0	0.00	-	0	0.00	-	4	3	2.7 - 3.3	FAIL	0	0.00	-	-	-	-	-	85.714	90	FAIL	FAIL - POOR
BI_2510 OS68	28	34	30.6 - 37.4	FAIL	4	11.76	Reprocess	2	5.88	Review	537	645	580.5 - 709.5	FAIL	116	17.98	Reprocess	16.6387	14.8698	11.895848 - 17.843772	PASS	87.426	90	FAIL	FAIL - POOR
BI_2510 OS69	12	13	11.7 - 14.3	PASS	1	7.69	-	2	15.38	-	54	56	50.4 - 61.6	PASS	1	1.79	-	0.76036	0.5546	0.44368 - 0.66552	FAIL	90.909	90	PASS	PASS - ACCEPTABLE
BI_2510 OS70	18	21	18.9 - 23.1	FAIL	2	9.52	-	2	9.52	-	33	34	30.6 - 37.4	PASS	1	2.94	-	0.31255	0.2191	0.1752768 - 0.2629152	FAIL	90.141	90	PASS	PASS - ACCEPTABLE
BI_2516 OS68	2	2	1.8 - 2.2	PASS	0	0.00	-	0	0.00	-	15	15	13.5 - 16.5	PASS	0	0.00	-	-	-	-	-	100	90	PASS	PASS - EXCELLENT
BI_2516 OS69	8	9	8.1 - 9.9	FAIL	1	11.11	-	0	0.00	-	6	6	5.4 - 6.6	PASS	0	0.00	-	-	-	-	-	94.118	90	PASS	PASS - ACCEPTABLE
BI_2516 OS70	12	14	12.6 - 15.4	FAIL	2	14.29	-	0	0.00	-	14	17	15.3 - 18.7	FAIL	3	17.65	-	-	-	-	-	92.308	90	PASS	PASS - ACCEPTABLE
BI_2517 OS68	15	15	13.5 - 16.5	PASS	0	0.00	-	3	20.00	Reprocess	22	22	19.8 - 24.2	PASS	0	0.00	-	-	-	-	-	81.818	90	FAIL	FAIL - BAD
BI_2517 OS69	14	15	13.5 - 16.5	PASS	1	6.67	-	1	6.67	-	18	18	16.2 - 19.8	PASS	0	0.00	-	-	-	-	-	91.892	90	PASS	PASS - ACCEPTABLE
BI_2517 OS70	61	71	63.9 - 78.1	FAIL	5	7.04	-	3	4.23	-	186	208	187.2 - 228.8	FAIL	25	12.02	-	-	-	-	-	90.291	90	PASS	PASS - ACCEPTABLE
BI_2519 OS68	16	16	14.4 - 17.6	PASS	0	0.00	-	0	0.00	-	116	116	104.4 - 127.6	PASS	0	0.00	-	-	-	-	-	100	90	PASS	PASS - EXCELLENT
BI_2519 OS69	10	10	9 - 11	PASS	0	0.00	-	1	10.00	-	139	140	126 - 154	PASS	0	0.00	-	0.047	0.0344	0.02752 - 0.04128	FAIL	98.925	90	PASS	PASS - GOOD
BI_2519 OS70	8	8	7.2 - 8.8	PASS	0	0.00	-	0	0.00	-	26	26	23.4 - 28.6	PASS	0	0.00	-	0.0328	0.0321	0.02568 - 0.03852	PASS	100	90	PASS	PASS - EXCELLENT
BI_2525 OS68	10	16	14.4 - 17.6	FAIL	6	37.50	Reprocess	2	12.50	Review	26	52	46.8 - 57.2	FAIL	26	50.00	Reprocess	-	-	-	-	43.59	90	FAIL	FAIL - BAD
BI_2525 OS69	10	12	10.8 - 13.2	FAIL	2	16.67	Review	4	33.33	Reprocess	13	26	23.4 - 28.6	FAIL	13	50.00	Reprocess	-	-	-	-	41.026	90	FAIL	FAIL - BAD
BI_2525 OS70	16	25	22.5 - 27.5	FAIL	8	32.00	Reprocess	4	16.00	Reprocess	23	31	27.9 - 34.1	FAIL	8	25.81	Reprocess	-	-	-	-	64.286	90	FAIL	FAIL - BAD
BI_2526 OS68	32	34	30.6 - 37.4	PASS	1	2.94	-	5	14.71	-	301	320	288 - 352	PASS	18	5.63	-	-	-	-	-	90.499	90	PASS	PASS - ACCEPTABLE
BI_2526 OS69	58	68	61.2 - 74.8	FAIL	9	13.24	Reprocess	4	5.88	Review	212	246	221.4 - 270.6	FAIL	36	14.63	Reprocess	-	-	-	-	87.607	90	FAIL	FAIL - POOR
BI_2526 OS70	28	32	28.8 - 35.2	FAIL	4	12.50	-	1	3.13	-	64	69	62.1 - 75.9	PASS	5	7.25	-	-	-	-	-	91.971	90	PASS	PASS - ACCEPTABLE

NB. This table details the findings of the audit only. For details of Own Sample remedial action please refer to NMBAQCS Year 26 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_2527 OS68	10	10	9 - 11	PASS	0	0.00	-	0	0.00	-	295	290	261 - 319	PASS	0	0.00	-	-	-	-	-	98.812	90	PASS	PASS - GOOD
BI_2527 OS69	24	25	22.5 - 27.5	PASS	1	4.00	-	0	0.00	-	43	45	40.5 - 49.5	PASS	2	4.44	-	-	-	-	-	97.872	90	PASS	PASS - GOOD
BI_2527 OS70	5	5	4.5 - 5.5	PASS	0	0.00	-	0	0.00	-	6	6	5.4 - 6.6	PASS	0	0.00	-	-	-	-	-	100	90	PASS	PASS - EXCELLENT
BI_2528 OS68	13	18	16.2 - 19.8	FAIL	5	27.78	Reprocess	4	22.22	Reprocess	47	65	58.5 - 71.5	FAIL	18	27.69	Reprocess	-	-	-	-	69.492	90	FAIL	FAIL - BAD
BI_2528 OS69	19	26	23.4 - 28.6	FAIL	7	26.92	Reprocess	6	23.08	Reprocess	204	246	221.4 - 270.6	FAIL	47	19.11	Reprocess	-	-	-	-	64.192	90	FAIL	FAIL - BAD
BI_2528 OS70	14	21	18.9 - 23.1	FAIL	5	23.81	Reprocess	5	23.81	Reprocess	104	121	108.9 - 133.1	FAIL	24	19.83	Reprocess	-	-	-	-	30.769	90	FAIL	FAIL - BAD
BI_2529 OS68	13	13	11.7 - 14.3	PASS	0	0.00	-	1	7.69	-	24	24	21.6 - 26.4	PASS	0	0.00	-	0.0786	0.0843	0.06744 - 0.10116	PASS	96.67	90	PASS	PASS - GOOD
BI_2529 OS69	86	86	77.4 - 94.6	PASS	0	0.00	-	1	1.16	-	315	316	284.4 - 347.6	PASS	1	0.32	-	8.41502	9.0421	7.23368 - 10.85052	PASS	99.44	90	PASS	PASS - GOOD
BI_2529 OS70	68	67	60.3 - 73.7	PASS	0	0.00	-	2	2.99	-	207	208	187.2 - 228.8	PASS	1	0.48	-	15.1695	13.9443	11.15544 - 16.73316	PASS	99.76	90	PASS	PASS - GOOD
BI_2530 OS68	49	50	45 - 55	PASS	0	0.00	-	1	2.00	-	304	304	273.6 - 334.4	PASS	0	0.00	-	-	-	-	-	99.512	90	PASS	PASS - GOOD
BI_2530 OS69	55	57	51.3 - 62.7	PASS	2	3.51	-	2	3.51	-	158	161	144.9 - 177.1	PASS	3	1.86	-	-	-	-	-	97.297	90	PASS	PASS - GOOD
BI_2530 OS70	61	64	57.6 - 70.4	PASS	2	3.13	-	3	4.69	-	172	174	156.6 - 191.4	PASS	2	1.15	-	-	-	-	-	96.809	90	PASS	PASS - GOOD
BI_2531 OS68	25	25	22.5 - 27.5	PASS	0	0.00	-	0	0.00	-	43	42	37.8 - 46.2	PASS	0	0.00	-	-	-	-	-	98.824	90	PASS	PASS - GOOD
BI_2531 OS69	53	55	49.5 - 60.5	PASS	2	3.64	-	3	5.45	-	130	139	125.1 - 152.9	PASS	11	7.91	-	-	-	-	-	91.575	90	PASS	PASS - ACCEPTABLE
BI_2531 OS70	41	47	42.3 - 51.7	FAIL	5	10.64	-	2	4.26	-	92	94	84.6 - 103.4	PASS	5	5.32	-	-	-	-	-	91.979	90	PASS	PASS - ACCEPTABLE
BI_2532 OS68	21	21	18.9 - 23.1	PASS	1	4.76	-	0	0.00	-	178	181	162.9 - 199.1	PASS	3	1.66	-	-	-	-	-	98.645	90	PASS	PASS - GOOD
BI_2532 OS69	53	57	51.3 - 62.7	PASS	4	7.02	-	1	1.75	-	287	328	295.2 - 360.8	FAIL	42	12.80	-	-	-	-	-	93.098	90	PASS	PASS - ACCEPTABLE
BI_2532 OS70	41	42	37.8 - 46.2	PASS	1	2.38	-	1	2.38	-	103	116	104.4 - 127.6	FAIL	12	10.34	-	-	-	-	-	93.506	90	PASS	PASS - ACCEPTABLE
BI_2533 OS68	30	31	27.9 - 34.1	PASS	1	3.23	-	1	3.23	-	240	236	212.4 - 259.6	PASS	1	0.42	-	14.2086	13.9034	11.12272 - 16.68408	PASS	98.113	90	PASS	PASS - GOOD
BI_2533 OS69	20	23	20.7 - 25.3	FAIL	3	13.04	Reprocess	1	4.35	-	78	84	75.6 - 92.4	PASS	9	10.71	Reprocess	2.5802	2.5045	2.0036 - 3.0054	PASS	57.143	90	FAIL	FAIL - BAD
BI_2533 OS70	20	21	18.9 - 23.1	PASS	1	4.76	-	1	4.76	-	104	104	93.6 - 114.4	PASS	1	0.96	-	6.0513	5.4776	4.38208 - 6.57312	PASS	93.897	90	PASS	PASS - ACCEPTABLE
BI_2534 OS68	38	43	38.7 - 47.3	FAIL	5	11.63	-	0	0.00	-	243	245	220.5 - 269.5	PASS	4	1.63	-	0.3416	0.2868	0.22944 - 0.34416	PASS	98	90	PASS	PASS - GOOD
BI_2534 OS69	20	20	18 - 22	PASS	1	5.00	-	1	5.00	-	1176	1169	1052.1 - 1285.9	PASS	2	0.17	-	0.9296	0.9025	0.722 - 1.083	PASS	99.108	90	PASS	PASS - GOOD
BI_2534 OS70	23	23	20.7 - 25.3	PASS	0	0.00	-	0	0.00	-	4177	4150	3735 - 4565	PASS	8	0.19	-	14.7834	12.3562	9.88496 - 14.82744	PASS	99.364	90	PASS	PASS - GOOD
BI_2535 OS68	28	34	30.6 - 37.4	FAIL	6	17.65	Reprocess	0	0.00	-	35	48	43.2 - 52.8	FAIL	13	27.08	Reprocess	0.2364	0.2698	0.21584 - 0.32376	PASS	86.239	90	FAIL	FAIL - POOR
BI_2535 OS69	5	5	4.5 - 5.5	PASS	0	0.00	-	0	0.00	-	10	10	9 - 11	PASS	0	0.00	-	0.0709	0.0658	0.05264 - 0.07896	PASS	100	90	PASS	PASS - EXCELLENT
BI_2535 OS70	71	70	63 - 77	PASS	0	0.00	-	1	1.43	-	636	596	536.4 - 655.6	PASS	0	0.00	-	124.607	126.023	100.81856 - 151.22784	PASS	96.682	90	PASS	PASS - GOOD
BI_2536 OS68	11	11	9.9 - 12.1	PASS	0	0.00	-	0	0.00	-	274	280	252 - 308	PASS	2	0.71	-	0.3369	0.3577	0.28616 - 0.42924	PASS	98.917	90	PASS	PASS - GOOD
BI_2536 OS69	9	9	8.1 - 9.9	PASS	0	0.00	-	0	0.00	-	40	42	37.8 - 46.2	PASS	1	2.38	-	0.0364	0.0341	0.02728 - 0.04092	PASS	97.561	90	PASS	PASS - GOOD
BI_2536 OS70	11	11	9.9 - 12.1	PASS	0	0.00	-	0	0.00	-	70	70	63 - 77	PASS	0	0.00	-	0.0258	0.0254	0.02032 - 0.03048	PASS	100	90	PASS	PASS - EXCELLENT
BI_2537 OS68	7	8	7.2 - 8.8	FAIL	0	0.00	-	0	0.00	-	276	277	249.3 - 304.7	PASS	2	0.72	-	1.0728	0.7163	0.57304 - 0.85956	FAIL	99.458	90	PASS	PASS - GOOD
BI_2537 OS69	3	3	2.7 - 3.3	PASS	0	0.00	-	0	0.00	-	4	4	3.6 - 4.4	PASS	0	0.00	-	0.2256	0.2041	0.16328 - 0.24492	PASS	100	90	PASS	PASS - EXCELLENT
BI_2537 OS70	6	6	5.4 - 6.6	PASS	0	0.00	-	0	0.00	-	9	9	8.1 - 9.9	PASS	0	0.00	-	0.0082	0.0057	0.00456 - 0.00684	FAIL	100	90	PASS	PASS - EXCELLENT
BI_2538 OS68	3	3	2.7 - 3.3	PASS	0	0.00	-	0	0.00	-	3	3	2.7 - 3.3	PASS	0	0.00	-	-	-	-	-	100	90	PASS	PASS - EXCELLENT
BI_2538 OS69	10	10	9 - 11	PASS	0	0.00	-	1	10.00	-	753	740	666 - 814	PASS	1	0.14	-	-	-	-	-	94.181	90	PASS	PASS - ACCEPTABLE
BI_2538 OS70	5	6	5.4 - 6.6	FAIL	1	16.67	-	0	0.00	-	18	19	17.1 - 20.9	PASS	1	5.26	-	-	-	-	-	97.297	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 26 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_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_2540 OS68	4	6	5.4 - 6.6	FAIL	2	33.33	-	0	0.00	-	52	54	48.6 - 59.4	PASS	3	5.56	-	-	-	-	-	95.327	90	PASS	PASS - GOOD
BI_2540 OS69	6	6	5.4 - 6.6	PASS	0	0.00	-	0	0.00	-	359	382	343.8 - 420.2	PASS	22	5.76	-	-	-	-	-	96.896	90	PASS	PASS - GOOD
BI_2540 OS70	12	12	10.8 - 13.2	PASS	0	0.00	-	0	0.00	-	33	33	29.7 - 36.3	PASS	0	0.00	-	0.1003	0.0954	0.07632 - 0.11448	PASS	100	90	PASS	PASS - EXCELLENT
BI_2541 OS68	4	4	3.6 - 4.4	PASS	0	0.00	-	0	0.00	-	13	13	11.7 - 14.3	PASS	0	0.00	-	-	-	-	-	100	90	PASS	PASS - EXCELLENT
BI_2541 OS69	24	24	21.6 - 26.4	PASS	0	0.00	-	0	0.00	-	184	185	166.5 - 203.5	PASS	2	1.08	-	0.1422	0.169	0.1352 - 0.2028	PASS	99.187	90	PASS	PASS - GOOD
BI_2541 OS70	72	78	70.2 - 85.8	PASS	5	6.41	-	1	1.28	-	228	236	212.4 - 259.6	PASS	8	3.39	-	-	-	-	-	97.6	90	PASS	PASS - GOOD
BI_2542 OS68	10	10	9 - 11	PASS	0	0.00	-	0	0.00	-	447	449	404.1 - 493.9	PASS	1	0.22	-	1.6703	1.6969	1.35752 - 2.03628	PASS	99.777	90	PASS	PASS - GOOD
BI_2542 OS69	13	13	11.7 - 14.3	PASS	0	0.00	-	0	0.00	-	297	299	269.1 - 328.9	PASS	1	0.33	-	0.216	0.2174	0.17392 - 0.26088	PASS	99.666	90	PASS	PASS - GOOD
BI_2542 OS70	8	8	7.2 - 8.8	PASS	0	0.00	-	0	0.00	-	92	92	82.8 - 101.2	PASS	0	0.00	-	0.0391	0.0406	0.03248 - 0.04872	PASS	100	90	PASS	PASS - EXCELLENT
BI_2543 OS68	9	9	8.1 - 9.9	PASS	0	0.00	-	0	0.00	-	50	50	45 - 55	PASS	0	0.00	-	0.4087	0.3641	0.29128 - 0.43692	PASS	100	90	PASS	PASS - EXCELLENT
BI_2543 OS69	10	10	9 - 11	PASS	0	0.00	-	0	0.00	-	126	127	114.3 - 139.7	PASS	0	0.00	-	0.2396	0.2515	0.2012 - 0.3018	PASS	99.605	90	PASS	PASS - GOOD
BI_2543 OS70	11	11	9.9 - 12.1	PASS	0	0.00	-	0	0.00	-	85	84	75.6 - 92.4	PASS	0	0.00	-	0.3641	0.3744	0.29952 - 0.44928	PASS	99.408	90	PASS	PASS - GOOD
BI_2544 OS68	10	10	9 - 11	PASS	0	0.00	-	0	0.00	-	26	27	24.3 - 29.7	PASS	1	3.70	-	0.0357	0.0506	0.04048 - 0.06072	FAIL	98.182	90	PASS	PASS - GOOD
BI_2544 OS69	5	5	4.5 - 5.5	PASS	0	0.00	-	0	0.00	-	9	9	8.1 - 9.9	PASS	0	0.00	-	0.0741	0.0763	0.06104 - 0.09156	PASS	100	90	PASS	PASS - EXCELLENT

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.

NB. This table details the findings of the audit only. For details of Own Sample remedial action please refer to NMBAQCS Year 26 Annual report, section 2.4.

Table 2. Comparison of the extraction efficiency by the participating laboratories for the major taxonomic groups present in Own Samples (OS68-70).

LabCode			Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2501	OS68	AD count	1	82	-	1	18	47	18	61	228
		Missed	1	22	-	0	2	25	5	7	62
		%missed	100.0	26.8	-	0.0	11.1	53.2	27.8	11.5	27.2
	OS69	AD count	5	48	-	-	16	7	8	-	84
		Missed	2	2	-	-	1	0	0	-	5
		%missed	40.0	4.2	-	-	6.3	0.0	0.0	-	6.0
	OS70	AD count	8	23	-	-	62	122	94	75	384
		Missed	3	3	-	-	7	22	9	45	89
		%missed	37.5	13.0	-	-	11.3	18.0	9.6	60.0	23.2
BI_2502	OS68	AD count	6	471	-	-	478	177	10	27	1169
		Missed	0	0	-	-	0	0	0	0	0
		%missed	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0
	OS69	AD count	4	286	-	2	555	205	12	218	1282
		Missed	0	2	-	0	0	4	0	3	9
		%missed	0.0	0.7	-	0.0	0.0	2.0	0.0	1.4	0.7
	OS70	AD count	-	37	7	-	7	79	-	12	142
		Missed	-	0	0	-	0	0	-	0	0
		%missed	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0
BI_2503	OS68	AD count	1	5	-	-	13	-	-	-	19
		Missed	0	0	-	-	0	-	-	-	0
		%missed	0.0	0.0	-	-	0.0	-	-	-	0.0
	OS69	AD count	-	1	-	-	-	-	-	-	1
		Missed	-	0	-	-	-	-	-	-	0
		%missed	-	0.0	-	-	-	-	-	-	0.0
	OS70	AD count	-	96	-	-	10	12	-	-	118
		Missed	-	0	-	-	0	1	-	-	1
		%missed	-	0.0	-	-	0.0	8.3	-	-	0.8
BI_2504	OS68	AD count	10	458	-	-	-	11	-	3	482
		Missed	0	6	-	-	-	2	-	0	8
		%missed	0.0	1.3	-	-	-	18.2	-	0.0	1.7
	OS69	AD count	-	445	-	-	1	18	1	-	465
		Missed	-	2	-	-	1	0	0	-	3
		%missed	-	0.4	-	-	100.0	0.0	0.0	-	0.6
	OS70	AD count	1	28	-	-	11	17	24	2	83
		Missed	0	3	-	-	0	1	0	0	4
		%missed	0.0	10.7	-	-	0.0	5.9	0.0	0.0	4.8
BI_2506	OS68	AD count	3	82	-	-	15	13	10	2	125
		Missed	0	0	-	-	0	0	0	0	0
		%missed	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0
	OS69	AD count	2	198	-	-	15	50	9	15	289
		Missed	0	0	-	-	0	1	0	1	2
		%missed	0.0	0.0	-	-	0.0	2.0	0.0	6.7	0.7
	OS70	AD count	2	113	-	-	14	40	11	4	184
		Missed	0	0	-	-	0	0	0	1	1
		%missed	0.0	0.0	-	-	0.0	0.0	0.0	25.0	0.5
BI_2509	OS68	AD count	1	117	-	-	22	19	21	7	187
		Missed	0	1	-	-	0	1	0	1	3
		%missed	0.0	0.9	-	-	0.0	5.3	0.0	14.3	1.6
	OS69	AD count	-	100	-	-	5	39	42	5	191
		Missed	-	1	-	-	0	1	1	2	5
		%missed	-	1.0	-	-	0.0	2.6	2.4	40.0	2.6
	OS70	AD count	-	1	-	-	1	-	1	-	3
		Missed	-	0	-	-	0	-	0	-	0
		%missed	-	0.0	-	-	0.0	-	0.0	-	0.0
BI_2510	OS68	AD count	-	224	105	-	4	310	-	2	645
		Missed	-	40	0	-	0	74	-	2	116
		%missed	-	17.9	0.0	-	0.0	23.9	-	100.0	18.0
	OS69	AD count	-	27	-	-	28	-	-	1	56
		Missed	-	0	-	-	0	-	-	1	1
		%missed	-	0.0	-	-	0.0	-	-	100.0	1.8
	OS70	AD count	-	22	-	-	9	2	-	1	34
		Missed	-	0	-	-	0	0	-	1	1
		%missed	-	0.0	-	-	0.0	0.0	-	100.0	2.9

Table 2. Comparison of the extraction efficiency by the participating laboratories for the major taxonomic groups present in Own Samples (OS68-70).

LabCode			Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2516	OS68	AD count	-	2	-	-	13	-	-	-	15
		Missed	-	0	-	-	0	-	-	-	0
		%missed	-	0.0	-	-	0.0	-	-	-	0.0
	OS69	AD count	-	4	-	-	-	2	-	-	6
		Missed	-	0	-	-	-	0	-	-	0
		%missed	-	0.0	-	-	-	0.0	-	-	0.0
	OS70	AD count	-	5	-	-	-	8	3	1	17
		Missed	-	1	-	-	-	0	1	1	3
		%missed	-	20.0	-	-	-	0.0	33.3	100.0	17.6
BI_2517	OS68	AD count	-	6	-	-	3	13	-	-	22
		Missed	-	0	-	-	0	0	-	-	0
		%missed	-	0.0	-	-	0.0	0.0	-	-	0.0
	OS69	AD count	-	11	-	-	3	4	-	-	18
		Missed	-	0	-	-	0	0	-	-	0
		%missed	-	0.0	-	-	0.0	0.0	-	-	0.0
	OS70	AD count	1	53	-	-	18	58	41	37	208
		Missed	1	5	-	-	0	5	0	14	25
		%missed	100.0	9.4	-	-	0.0	8.6	0.0	37.8	12.0
BI_2519	OS68	AD count	-	78	14	-	-	8	-	16	116
		Missed	-	0	0	-	-	0	-	0	0
		%missed	-	0.0	0.0	-	-	0.0	-	0.0	0.0
	OS69	AD count	-	69	25	-	46	-	-	-	140
		Missed	-	0	0	-	0	-	-	-	0
		%missed	-	0.0	0.0	-	0.0	-	-	-	0.0
	OS70	AD count	-	5	-	-	11	10	-	-	26
		Missed	-	0	-	-	0	0	-	-	0
		%missed	-	0.0	-	-	0.0	0.0	-	-	0.0
BI_2525	OS68	AD count	-	2	-	-	22	28	-	-	52
		Missed	-	1	-	-	1	24	-	-	26
		%missed	-	50.0	-	-	4.5	85.7	-	-	50.0
	OS69	AD count	-	9	-	-	1	12	-	4	26
		Missed	-	2	-	-	0	9	-	2	13
		%missed	-	22.2	-	-	0.0	75.0	-	50.0	50.0
	OS70	AD count	1	27	-	-	3	-	-	-	31
		Missed	1	7	-	-	0	-	-	-	8
		%missed	100.0	25.9	-	-	0.0	-	-	-	25.8
BI_2526	OS68	AD count	5	61	114	-	121	6	7	6	320
		Missed	0	2	8	-	0	4	0	4	18
		%missed	0.0	3.3	7.0	-	0.0	66.7	0.0	66.7	5.6
	OS69	AD count	3	109	3	1	109	11	6	4	246
		Missed	2	12	0	0	15	5	1	1	36
		%missed	66.7	11.0	0.0	0.0	13.8	45.5	16.7	25.0	14.6
	OS70	AD count	1	13	-	-	41	10	2	2	69
		Missed	0	0	-	-	4	0	0	1	5
		%missed	0.0	0.0	-	-	9.8	0.0	0.0	50.0	7.2
BI_2527	OS68	AD count	-	269	10	-	-	4	-	7	290
		Missed	-	0	0	-	-	0	-	0	0
		%missed	-	0.0	0.0	-	-	0.0	-	0.0	0.0
	OS69	AD count	-	22	7	-	-	11	5	-	45
		Missed	-	2	0	-	-	0	0	-	2
		%missed	-	9.1	0.0	-	-	0.0	0.0	-	4.4
	OS70	AD count	-	-	-	-	-	3	2	1	6
		Missed	-	-	-	-	-	0	0	0	0
		%missed	-	-	-	-	-	0.0	0.0	0.0	0.0
BI_2528	OS68	AD count	-	36	-	-	6	23	-	-	65
		Missed	-	4	-	-	3	11	-	-	18
		%missed	-	11.1	-	-	50.0	47.8	-	-	27.7
	OS69	AD count	-	58	-	2	1	132	-	53	246
		Missed	-	6	-	2	0	4	-	35	47
		%missed	-	10.3	-	100.0	0.0	3.0	-	66.0	19.1
	OS70	AD count	-	23	7	-	89	2	-	-	121
		Missed	-	4	3	-	15	2	-	-	24
		%missed	-	17.4	42.9	-	16.9	100.0	-	-	19.8

Table 2. Comparison of the extraction efficiency by the participating laboratories for the major taxonomic groups present in Own Samples (OS68-70).

LabCode			Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2529	OS68	AD count	-	10	-	-	-	14	-	-	24
		Missed	-	0	-	-	-	0	-	-	0
		%missed	-	0.0	-	-	-	0.0	-	-	0.0
	OS69	AD count	4	168	-	12	13	36	45	38	316
		Missed	0	1	-	0	0	0	0	0	1
		%missed	0.0	0.6	-	0.0	0.0	0.0	0.0	0.0	0.3
	OS70	AD count	5	133	-	1	5	9	39	16	208
		Missed	0	1	-	0	0	0	0	0	1
		%missed	0.0	0.8	-	0.0	0.0	0.0	0.0	0.0	0.5
BI_2530	OS68	AD count	2	229	-	-	36	32	3	2	304
		Missed	0	0	-	-	0	0	0	0	0
		%missed	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0
	OS69	AD count	-	130	-	-	7	23	1	-	161
		Missed	-	0	-	-	1	2	0	-	3
		%missed	-	0.0	-	-	14.3	8.7	0.0	-	1.9
	OS70	AD count	17	115	-	-	9	20	11	2	174
		Missed	0	1	-	-	0	0	0	1	2
		%missed	0.0	0.9	-	-	0.0	0.0	0.0	50.0	1.1
BI_2531	OS68	AD count	-	21	-	-	10	4	1	6	42
		Missed	-	0	-	-	0	0	0	0	0
		%missed	-	0.0	-	-	0.0	0.0	0.0	0.0	0.0
	OS69	AD count	-	52	-	-	22	36	19	10	139
		Missed	-	0	-	-	0	11	0	0	11
		%missed	-	0.0	-	-	0.0	30.6	0.0	0.0	7.9
	OS70	AD count	1	28	-	-	24	17	14	10	94
		Missed	0	1	-	-	2	0	0	2	5
		%missed	0.0	3.6	-	-	8.3	0.0	0.0	20.0	5.3
BI_2532	OS68	AD count	-	39	-	1	4	135	-	2	181
		Missed	-	3	-	0	0	0	-	0	3
		%missed	-	7.7	-	0.0	0.0	0.0	-	0.0	1.7
	OS69	AD count	4	221	1	3	55	14	20	10	328
		Missed	0	37	1	0	0	0	0	4	42
		%missed	0.0	16.7	100.0	0.0	0.0	0.0	0.0	40.0	12.8
	OS70	AD count	1	53	-	3	36	10	2	11	116
		Missed	0	7	-	0	1	2	0	2	12
		%missed	0.0	13.2	-	0.0	2.8	20.0	0.0	18.2	10.3
BI_2533	OS68	AD count	4	155	-	-	51	24	-	2	236
		Missed	0	0	-	-	0	1	-	0	1
		%missed	0.0	0.0	-	-	0.0	4.2	-	0.0	0.4
	OS69	AD count	1	39	33	-	-	7	-	4	84
		Missed	0	2	1	-	-	4	-	2	9
		%missed	0.0	5.1	3.0	-	-	57.1	-	50.0	10.7
	OS70	AD count	3	62	5	-	-	28	5	1	104
		Missed	0	0	0	-	-	1	0	0	1
		%missed	0.0	0.0	0.0	-	-	3.6	0.0	0.0	1.0
BI_2534	OS68	AD count	-	156	1	-	62	24	-	2	245
		Missed	-	2	0	-	1	1	-	0	4
		%missed	-	1.3	0.0	-	1.6	4.2	-	0.0	1.6
	OS69	AD count	-	39	248	-	12	799	-	71	1169
		Missed	-	1	0	-	1	0	-	0	2
		%missed	-	2.6	0.0	-	8.3	0.0	-	0.0	0.2
	OS70	AD count	-	748	1311	-	466	1624	-	1	4150
		Missed	-	0	3	-	0	5	-	0	8
		%missed	-	0.0	0.2	-	0.0	0.3	-	0.0	0.2
BI_2535	OS68	AD count	-	24	-	-	17	5	-	2	48
		Missed	-	13	-	-	0	0	-	0	13
		%missed	-	54.2	-	-	0.0	0.0	-	0.0	27.1
	OS69	AD count	-	7	-	-	3	-	-	-	10
		Missed	-	0	-	-	0	-	-	-	0
		%missed	-	0.0	-	-	0.0	-	-	-	0.0
	OS70	AD count	6	471	18	14	17	48	-	22	596
		Missed	0	0	0	0	0	0	-	0	0
		%missed	0.0	0.0	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 (OS68-70).

LabCode			Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2536	OS68	AD count	-	182	-	-	1	97	-	-	280
		Missed	-	0	-	-	0	2	-	-	2
		%missed	-	0.0	-	-	0.0	2.1	-	-	0.7
	OS69	AD count	-	3	20	-	7	3	-	9	42
		Missed	-	1	0	-	0	0	-	0	1
		%missed	-	33.3	0.0	-	0.0	0.0	-	0.0	2.4
	OS70	AD count	-	53	7	-	-	10	-	-	70
		Missed	-	0	0	-	-	0	-	-	0
		%missed	-	0.0	0.0	-	-	0.0	-	-	0.0
BI_2537	OS68	AD count	1	1	7	-	209	30	-	29	277
		Missed	0	0	0	-	2	0	-	0	2
		%missed	0.0	0.0	0.0	-	1.0	0.0	-	0.0	0.7
	OS69	AD count	-	1	-	-	1	2	-	-	4
		Missed	-	0	-	-	0	0	-	-	0
		%missed	-	0.0	-	-	0.0	0.0	-	-	0.0
	OS70	AD count	-	2	3	-	1	2	-	1	9
		Missed	-	0	0	-	0	0	-	0	0
		%missed	-	0.0	0.0	-	0.0	0.0	-	0.0	0.0
BI_2538	OS68	AD count	-	-	-	-	2	1	-	-	3
		Missed	-	-	-	-	0	0	-	-	0
		%missed	-	-	-	-	0.0	0.0	-	-	0.0
	OS69	AD count	645	89	1	-	-	5	-	-	740
		Missed	0	0	0	-	-	1	-	-	1
		%missed	0.0	0.0	0.0	-	-	20.0	-	-	0.1
	OS70	AD count	1	15	-	-	3	-	-	-	19
		Missed	0	0	-	-	1	-	-	-	1
		%missed	0.0	0.0	-	-	33.3	-	-	-	5.3
BI_2539	OS68	AD count	-	3	10	-	22	-	-	9	44
		Missed	-	0	0	-	2	-	-	0	2
		%missed	-	0.0	0.0	-	9.1	-	-	0.0	4.5
	OS69	AD count	-	13	33	-	18	121	-	2	187
		Missed	-	1	0	-	0	6	-	1	8
		%missed	-	7.7	0.0	-	0.0	5.0	-	50.0	4.3
	OS70	AD count	-	79	251	-	2	3	-	1	336
		Missed	-	1	0	-	0	0	-	0	1
		%missed	-	1.3	0.0	-	0.0	0.0	-	0.0	0.3
BI_2540	OS68	AD count	-	35	-	-	12	4	-	3	54
		Missed	-	0	-	-	0	0	-	3	3
		%missed	-	0.0	-	-	0.0	0.0	-	100.0	5.6
	OS69	AD count	-	7	-	-	3	372	-	-	382
		Missed	-	0	-	-	0	22	-	-	22
		%missed	-	0.0	-	-	0.0	5.9	-	-	5.8
	OS70	AD count	-	21	-	-	2	9	-	1	33
		Missed	-	0	-	-	0	0	-	0	0
		%missed	-	0.0	-	-	0.0	0.0	-	0.0	0.0
BI_2541	OS68	AD count	-	2	10	-	-	1	-	-	13
		Missed	-	0	0	-	-	0	-	-	0
		%missed	-	0.0	0.0	-	-	0.0	-	-	0.0
	OS69	AD count	-	60	8	-	19	98	-	-	185
		Missed	-	0	0	-	0	2	-	-	2
		%missed	-	0.0	0.0	-	0.0	2.0	-	-	1.1
	OS70	AD count	2	147	-	-	41	32	2	12	236
		Missed	0	5	-	-	2	0	0	1	8
		%missed	0.0	3.4	-	-	4.9	0.0	0.0	8.3	3.4
BI_2542	OS68	AD count	-	321	112	-	1	15	-	-	449
		Missed	-	0	0	-	0	1	-	-	1
		%missed	-	0.0	0.0	-	0.0	6.7	-	-	0.2
	OS69	AD count	-	100	188	-	-	11	-	-	299
		Missed	-	0	0	-	-	1	-	-	1
		%missed	-	0.0	0.0	-	-	9.1	-	-	0.3
	OS70	AD count	-	44	46	-	1	1	-	-	92
		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 (OS68-70).

LabCode			Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2543	OS68	AD count	-	33	3	-	8	6	-	-	50
		Missed	-	0	0	-	0	0	-	-	0
		%missed	-	0.0	0.0	-	0.0	0.0	-	-	0.0
	OS69	AD count	-	35	86	-	5	1	-	-	127
		Missed	-	0	0	-	0	0	-	-	0
		%missed	-	0.0	0.0	-	0.0	0.0	-	-	0.0
	OS70	AD count	-	9	4	-	-	70	-	1	84
		Missed	-	0	0	-	-	0	-	0	0
		%missed	-	0.0	0.0	-	-	0.0	-	0.0	0.0
BI_2544	OS68	AD count	-	15	4	-	-	6	-	2	27
		Missed	-	0	0	-	-	1	-	0	1
		%missed	-	0.0	0.0	-	-	16.7	-	0.0	3.7
	OS69	AD count	-	5	-	-	-	4	-	-	9
		Missed	-	0	-	-	-	0	-	-	0
		%missed	-	0.0	-	-	-	0.0	-	-	0.0

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 (OS68 - 70) (erroneous identifications in brackets).

LabCode / Smp.		Taxonomic Errors	Major Taxonomic Group					
			Polychaeta	Oligochaeta	Crustacea	Mollusca	Echinodermata	Other
BI_2501	OS68	10	*Syllis garciai (Trypanosyllis coeliaca)*	-	*Nototropis vedlomensis (Dexamine spinosa)*	-	*Amphipholis squamata/* Amphiuridae juv. *(Ophiopholis aculeata)*	-
			Aonides paucibranchiata (Aonides oxycephala)	-	*Cheirocratus sundevallii (Othomaera othonis)*	-	-	-
			Dipolydora flava (Dipolydora armata)	-	*Megamphopus cornutus (Photis longicaudata)*	-	-	-
			Aurospio banyulensis (Prionospio cirrifera)	-	*Cymodoce (Lekanesphaera rugicauda)*	-	-	-
			Chone (Jasmineira caudata)	-	-	-	-	-
	OS69	8	*Aonides oxycephala (Aonides paucibranchiata)*	-	*Urothoe elegans (Urothoe marina)*	-	*Amphipholis squamata (Amphiura chiajei)*	-
			Aurospio banyulensis (Prionospio cirrifera)	-	*Cymodoce (Lekanesphaera rugicauda)*	-	-	-
			Spio armata (Spio symphyta)	-	-	-	-	-
			Cirriformia juv. (Aphelochaeta)	-	-	-	-	-
			Cirriformia tentaculata (Chaetozone zetlandica/Chaetozone gibber)	-	-	-	-	-
	OS70	21	*Pseudomystides limbata (Eumida sanguinea)*	-	*Lysianassa plumosa (Lysianassa ceratina)*	*Lepidochitona cinerea (Tonicella rubra)*	*Amphipholis squamata (Amphiura securigera)*	*Nephasoma minuta (Golfingia)*
			Goniada maculata (Glycera lapidum)	-	*Iphimedia perplexa (Iphimedia obesa)*	*Jujubinus montagui (Gibbula tumida)*	-	-
			-	-	*Microdeutopus versiculatus/Animoceradocus semiserratus (Photis longicaudata)*	*Diaphana minuta (Retusa obtusa)*	-	-
			-	-	*Animoceradocus semiserratus (Aoridae)*	*Gouldia minima (Glycymeris glycymeris)*	-	-
			-	-	*Leptocheirus pectinatus (Leptocheirus hirsutimanus)*	*Modiolus juv. (Modiolula phaseolina)*	-	-
			-	-	*Cymodoce (Lekanesphaera rugicauda)*	*Musculus discors (Crenella decussata)*	-	-
			-	-	-	*Limaria loscombi (Limatula subauriculata)*	-	-
			-	-	-	*Gari tellinella juv./Thracia juv. (Moerella pygmaea)*	-	-
			-	-	-	*Polititapes rhomboides/Polititapes rhomboides juv. (Venerupis corrugata)*	-	-
			-	-	-	*Gouldia minima (Dosinia exoleta)*	-	-
			-	-	-	*Mya truncata juv. (Mya arenaria)*	-	-
BI_2502	OS68	0	-	-	-	-	-	-
	OS69	3	*Pholoe baltica (sensu Petersen) (Pholoe inornata (sensu Petersen))*	-	*Harpinia pectinata (Harpinia antennaria)*	-	-	-
			Pseudopolydora sp. A (Dipolydora flava)	-	-	-	-	-
	OS70	0	-	-	-	-	-	-
BI_2503	OS68	0	-	-	-	-	-	-
	OS69	0	-	-	-	-	-	-
	OS70	1	-	-	*Cumopsis fagei (Iphinoe trispinosa)*	-	-	-
BI_2504	OS68	2	*Cirriformia juv. (Cirratulus juv)*	-	-	*Hermania (Philine)*	-	-
	OS69	1	*Myriochele (Galathowenia oculata)*	-	-	-	-	-
	OS70	1	-	-	-	-	-	*Lovenella clausa (Phialella quadrata)*
BI_2506	OS68	0	-	-	-	-	-	-
	OS69	0	-	-	-	-	-	-
	OS70	0	-	-	-	-	-	-
BI_2509	OS68	3	*Scolelepis bonnieri (Scolelepis (Scolelepis) squamata)*	-	-	*Abra prismatica (Abra nitida)*	-	-
			Lumbrineris cingulata agg. (Hilbigneris gracilis)	-	-	-	-	-
	OS69	2	*Phyllodoce groenlandica (Phyllodoce mucosa)*	-	-	-	-	-
			Lumbrineris cingulata agg. (Hilbigneris gracilis)	-	-	-	-	-
	OS70	0	-	-	-	-	-	-
BI_2510	OS68	2	-	-	*Monocorophium acherusicum (Corophium sp)*	*Thyasira gouldi (Thyasira flexuosa)*	-	-
	OS69	0	-	-	-	-	-	-
	OS70	0	-	-	-	-	-	-
BI_2516	OS68	0	-	-	-	-	-	-
	OS69	0	-	-	-	-	-	-
	OS70	0	-	-	-	-	-	-
BI_2517	OS68	3	*Kirkegaardia (Kirkegaardia dorsobranchialis)*	-	*Ampelisca tenuicornis (Ampelisca aequicornis)*	*Scutopus ventrolineatus (Chaetoderma nitidulum)*	-	-
	OS69	1	*Praxillella affinis (Euclymene damaged)*	-	-	-	-	-
	OS70	3	*Tharyx killariensis (Chaetozone "species D" sensu Worsfold)*	-	-	-	-	*Sycon (Leucosolenia indet)*
			Thelepus davehalli (Thelepus cincinnatus)	-	-	-	-	-
BI_2519	OS68	0	-	-	-	-	-	-
	OS69	1	*Desdemona ornata (Manayunkia aestuarina)*	-	-	-	-	-
	OS70	0	-	-	-	-	-	-
BI_2525	OS68	2	-	-	*Apseudopsis adami (Apseudopsis mediterraneus)*	*Fabulina fabula (Tellina compressa)*	-	-
	OS69	4	*Dipolydora sp. B (Pseudopolydora sp.1)*	-	-	*Fabulina fabula (Tellina compressa)*	-	-
			Scolelepis neglecta (Microspio mecznicowianus)	-	-	-	-	-
			Lumbrinerides (Lumbrineris impatiens)	-	-	-	-	-
	OS70	4	*Nothria (Ramphobrachium sp.1)*	-	*Ampelisca diadema (Ampelisca spinipes)*	-	-	-
			Paradoneis ilvana (Paradoneis armata)	-	-	-	-	-
			Scalibregma celticum (Scalibregma inflatum)	-	-	-	-	-

Table 3. Summary of mis-identified taxa in the Own Sample Module (OS68 - 70) (erroneous identifications in brackets).

LabCode / Smp.		Taxonomic Errors	Major Taxonomic Group					
			Polychaeta	Oligochaeta	Crustacea	Mollusca	Echinodermata	Other
BI_2526	OS68	5	*Sphaerosyllis c.f. taylori (Sphaerosyllis hystrix)*	*Tubificoides cf. galiciensis/Capitella (Tubificoides benedii)*	*Zeuxo holdichi (Hexapleomera wombat)*	*Onoba aculeus (Onoba semicostata)*	-	-
			Aphelochaeta Species A (Aphelochaeta marioni)	-	-	-	-	-
	OS69	4	*Loimia medusa (Lanice conchilega)*	-	*Zeuxo holdichi (Hexapleomera wombat)*	-	-	*Chorizopora brongniartii (Tubulipora spp.)*
			-	-	-	-	-	*Fenestrulina delicia (Fenestrulina malusii)*
	OS70	1	*Ampharete lindstroemi (Ampharete cf. acutifrons)*	-	-	-	-	-
BI_2527	OS68	0	-	-	-	-	-	-
	OS69	0	-	-	-	-	-	-
	OS70	0	-	-	-	-	-	-
BI_2528	OS68	4	*Nephtys hombergii (Nephtys cirrosa)*	-	-	*Cerastoderma edule juv. (Parvicardium pinnulatum Prev. P. ovale)*	-	*Scrupocellaria scruposa (Crisia spp.)*
			-	-	-	-	-	Spermatophyta *(Alcyonidium spp. indet.)*
	OS69	6	*Nephtys hombergii (Nephtys cirrosa)*	-	-	*Nucula nitidosa (Nucula hanleyi)*	-	*Tricellaria inopinata (Crisia spp.)*
			Melinna palmata (Ampharete falcata)	-	-	*Cerastoderma edule juv (Parvicardium pinnulatum Prev. P. ovale)*	-	-
			-	-	-	*Semelidae/Nuculidae juv. (Abra nitida)*	-	-
	OS70	5	*Alitta virens (Hediste diversicolor)*	-	*Amphibalanus improvisus (Balanus crenatus)*	-	-	-
			-	-	*Paragnathia formica (Gnathia sp)*	-	-	-
			-	-	*Cyathura carinata (Anthura gracilis)*	-	-	-
			-	-	*Lekanesphaera monodi (Sphaeroma serratum)*	-	-	-
BI_2529	OS68	1	-	-	-	-	-	*Scrupocellaria scrupea (Scrupocellaria scruposa)*
	OS69	1	-	-	-	-	-	*Polycarpa (Molgula)*
	OS70	2	*Dipolydora flava (Dipolydora coeca)*	-	*Harpinia pectinata (Harpinia antennaria)*	-	-	-
BI_2530	OS68	1	-	-	*Leucothoe lilljeborgi (Leucothoe incisa)*	-	-	-
	OS69	2	*Microspio atlantica (Microspio mecznikowianus)*	-	-	-	-	Phaeophyceae (RHODOPHYTA Hildenbrandiacea)
	OS70	3	*Microspio atlantica (Microspio mecznikowianus)*	-	-	-	-	Phaeophyceae (RHODOPHYTA Hildenbrandiacea)
			-	-	-	-	-	Ascidiacea (Eggs)
BI_2531	OS68	0	-	-	-	-	-	-
	OS69	3	*Euchone southerni (Euchone pararosea)*	-	*Pseudoparatanais batei (Tanaopsis graciloides)*	-	-	-
			Fabricia stellaris (Pseudofabricia aberrans ?)	-	-	-	-	-
	OS70	2	*Pista cristata (Pista mediterranea)*	-	-	-	-	-
			Dialychone dunerificta/Spirorbinae (Jasmineira caudata)	-	-	-	-	-
BI_2532	OS68	0	-	-	-	-	-	-
	OS69	1	-	-	-	*Ocenebra erinaceus juv. (Trophonopsis)*	-	-
	OS70	1	-	-	-	*Steromphala cineraria (Gibbula)*	-	-
BI_2533	OS68	1	-	-	-	*Euspira catena juv. (Euspira nitida)*	-	-
	OS69	1	-	*Tubificoides diazi agg. (Tubificoides pseudogaster)*	-	-	-	-
	OS70	1	-	*Tubificoides diazi agg. (Tubificoides pseudogaster)*	-	-	-	-
BI_2534	OS68	0	-	-	-	-	-	-
	OS69	1	-	-	-	-	-	*Ulva* (ANIMALIA_fragment)
	OS70	0	-	-	-	-	-	-
BI_2535	OS68	0	-	-	-	-	-	-
	OS69	0	-	-	-	-	-	-
	OS70	1	-	-	-	*Pusillina inconspicua (Rissoa parva)*	-	-
BI_2536	OS68	0	-	-	-	-	-	-
	OS69	0	-	-	-	-	-	-
	OS70	0	-	-	-	-	-	-
BI_2537	OS68	0	-	-	-	-	-	-
	OS69	0	-	-	-	-	-	-
	OS70	0	-	-	-	-	-	-
BI_2538	OS68	0	-	-	-	-	-	-
	OS69	1	-	-	-	-	-	Nemertea (Turbellaria)
	OS70	0	-	-	-	-	-	-

Table 3. Summary of mis-identified taxa in the Own Sample Module (OS68 - 70) (erroneous identifications in brackets).

LabCode / Smp.		Taxonomic Errors	Major Taxonomic Group					
			Polychaeta	Oligochaeta	Crustacea	Mollusca	Echinodermata	Other
BI_2539	OS68	0	-	-	-	-	-	-
	OS69	1	-	-	-	*Abra tenuis (Scrobicularia plana Juvenile)*	-	-
	OS70	0	-	-	-	-	-	-
BI_2540	OS68	0	-	-	-	-	-	-
	OS69	0	-	-	-	-	-	-
	OS70	0	-	-	-	-	-	-
BI_2541	OS68	0	-	-	-	-	-	-
	OS69	0	-	-	-	-	-	-
	OS70	1	*Praxilella affinis (Euclymene oerstedii aggregate)*	-	-	-	-	-
BI_2542	OS68	0	-	-	-	-	-	-
	OS69	0	-	-	-	-	-	-
	OS70	0	-	-	-	-	-	-
BI_2543	OS68	0	-	-	-	-	-	-
	OS69	0	-	-	-	-	-	-
	OS70	0	-	-	-	-	-	-
BI_2543	OS68	0	-	-	-	-	-	-
	OS69	0	-	-	-	-	-	-
	OS70	0	-	-	-	-	-	-
BI_25	OS68	0	-	-	-	-	-	-
	OS69	0	-	-	-	-	-	-

TOTAL	122	47	3	27	27	3	15
% Error		39	2	22	22	2	12

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 OS68-OS70.

OS68

LabCode		Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2502	OD	0.0663	2.8334	-	-	0.7191	0.8368	0.8869	0.2089	5.5514
	AD	0.0734	3.0370	-	-	0.7773	0.8664	0.9206	0.2056	5.8803
	%diff.	-10.71	-7.19	-	-	-8.09	-3.54	-3.80	1.58	-5.92
BI_2510	OD	0.1248	1.2063	0.0194	-	0.1748	15.1135	-	-	16.6388
	AD	0.0826	0.8378	0.0196	-	0.1325	13.7973	-	-	14.8698
	%diff.	33.8141	30.5480	-1.0309	-	24.1991	8.7088	-	-	10.63
BI_2519	OD	-	-	-	-	-	-	-	-	0.0000
	AD	-	-	-	-	-	-	-	-	0.0000
	%diff.	-	-	-	-	-	-	-	-	-
BI_2529	OD	-	0.0521	-	-	-	0.0265	-	-	0.0786
	AD	-	0.0594	-	-	-	0.0249	-	-	0.0843
	%diff.	-	-14.0115	-	-	-	6.0377	-	-	-7.25
BI_2533	OD	0.0016	0.0789	-	-	7.0059	7.1221	-	0.0001	14.2086
	AD	0.0023	0.0540	-	-	6.8052	7.0418	-	0.0001	13.9034
	%diff.	-43.75	31.56	-	-	2.86	1.13	-	0.00	2.15
BI_2534	OD	-	0.1227	0.0001	-	0.0246	0.1940	-	0.0002	0.3416
	AD	-	0.0742	0.0001	-	0.0182	0.1941	-	0.0002	0.2868
	%diff.	-	39.53	0.00	-	26.02	-0.05	-	0.00	16.04
BI_2535	OD	-	0.1071	-	-	0.0025	0.0366	-	0.0902	0.2364
	AD	-	0.1393	-	-	0.0028	0.0358	-	0.0919	0.2698
	%diff.	-	-30.0654	-	-	-12.0000	2.1858	-	-1.8847	-14.13
BI_2536	OD	-	0.3183	-	-	0.0001	0.0185	-	-	0.3369
	AD	-	0.3412	-	-	0.0004	0.0161	-	-	0.3577
	%diff.	-	-7.1945	-	-	-300.0000	12.9730	-	-	-6.17
BI_2537	OD	0.0024	0.0001	0.0025	-	0.8704	0.1973	-	0.0001	1.0728
	AD	0.0021	0.0001	0.0022	-	0.5472	0.1636	-	0.0011	0.7163
	%diff.	12.50	0.00	12.00	-	37.13	17.08	-	-1000.00	33.23
BI_2539	OD	-	-	-	-	-	-	-	-	0.0000
	AD	-	-	-	-	-	-	-	-	0.0000
	%diff.	-	-	-	-	-	-	-	-	-
BI_2540	OD	-	-	-	-	-	-	-	-	0.0000
	AD	-	-	-	-	-	-	-	-	0.0000
	%diff.	-	-	-	-	-	-	-	-	-
BI_2541	OD	-	-	-	-	-	-	-	-	0.0000
	AD	-	-	-	-	-	-	-	-	0.0000
	%diff.	-	-	-	-	-	-	-	-	-
BI_2542	OD	-	0.1956	0.0253	-	0.0013	1.4481	-	-	1.6703
	AD	-	0.2241	0.0318	-	0.0006	1.4404	-	-	1.6969
	%diff.	-	-14.57	-25.69	-	53.85	0.53	-	-	-1.59
BI_2543	OD	-	0.0639	0.0002	-	0.0239	0.3207	-	-	0.4087
	AD	-	0.0592	0.0002	-	0.0251	0.2796	-	-	0.3641
	%diff.	-	7.36	0.00	-	-5.02	12.82	-	-	10.91
BI_2544	OD	-	0.0347	0.0002	-	-	0.0008	-	-	0.0357
	AD	-	0.0495	0.0002	-	-	0.0009	-	-	0.0506
	%diff.	-	-42.65	0.00	-	-	-12.50	-	-	-41.74

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 OS68-OS70.

OS69

LabCode		Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2502	OD	0.0026	3.2328	-	0.0020	3.7361	7.8593	0.2742	0.2575	15.3645
	AD	0.0019	3.2952	-	0.0019	3.2687	7.7433	0.2817	0.2861	14.8788
	%diff.	26.92	-1.93	-	5.00	12.51	1.48	-2.74	-11.11	3.16
BI_2510	OD	-	0.5752	-	-	0.1851	-	-	-	0.7603
	AD	-	0.4244	-	-	0.1302	-	-	-	0.5546
	%diff.	-	26.22	-	-	29.66	-	-	-	27.06
BI_2519	OD	-	0.0283	0.0038	-	0.0149	-	-	-	0.0470
	AD	-	0.0205	0.0017	-	0.0122	-	-	-	0.0344
	%diff.	-	27.56	55.26	-	18.12	-	-	-	26.8085
BI_2529	OD	0.0086	0.7422	-	0.0032	0.0024	3.2070	3.2532	1.1984	8.4150
	AD	0.0086	1.2974	-	0.0030	0.0022	3.1117	3.4473	1.1719	9.0421
	%diff.	0.0000	-74.8046	-	6.2500	8.3333	2.9716	-5.9664	2.2113	-7.45
BI_2533	OD	0.0001	0.1088	0.0016	-	-	2.0709	-	0.3988	2.5802
	AD	0.0008	0.0776	0.0017	-	-	2.0768	-	0.3476	2.5045
	%diff.	-700.00	28.68	-6.25	-	-	-0.28	-	12.84	2.93
BI_2534	OD	-	0.0044	0.0174	-	0.0108	0.8864	-	0.0106	0.9296
	AD	-	0.0037	0.0167	-	0.0099	0.8629	-	0.0093	0.9025
	%diff.	-	15.91	4.02	-	8.33	2.65	-	12.26	2.92
BI_2535	OD	-	0.0637	-	-	0.0072	-	-	-	0.0709
	AD	-	0.0596	-	-	0.0062	-	-	-	0.0658
	%diff.	-	6.4364	-	-	13.8889	-	-	-	7.19
BI_2536	OD	-	0.0002	0.0037	-	0.0029	0.0002	-	0.0294	0.0364
	AD	-	0.0002	0.0038	-	0.0028	0.0002	-	0.0271	0.0341
	%diff.	-	0.0000	-2.7027	-	3.4483	0.0000	-	7.8231	6.32
BI_2537	OD	-	0.0084	-	-	0.0007	0.2165	-	-	0.2256
	AD	-	0.0052	-	-	0.0003	0.1986	-	-	0.2041
	%diff.	-	38.10	-	-	57.14	8.27	-	-	9.53
BI_2539	OD	-	-	-	-	-	-	-	-	0.0000
	AD	-	-	-	-	-	-	-	-	0.0000
	%diff.	-	-	-	-	-	-	-	-	-
BI_2540	OD	-	-	-	-	-	-	-	-	0.0000
	AD	-	-	-	-	-	-	-	-	0.0000
	%diff.	-	-	-	-	-	-	-	-	-
BI_2541	OD	-	0.0701	0.0006	-	0.0045	0.0670	-	-	0.1422
	AD	-	0.1005	0.0011	-	0.0035	0.0639	-	-	0.1690
	%diff.	-	-43.37	-83.33	-	22.22	4.63	-	-	-18.85
BI_2542	OD	-	0.1318	0.0498	-	-	0.0344	-	-	0.2160
	AD	-	0.1280	0.0598	-	-	0.0296	-	-	0.2174
	%diff.	-	2.88	-20.08	-	-	13.95	-	-	-0.65
BI_2543	OD	-	0.0434	0.0136	-	0.0120	0.1706	-	-	0.2396
	AD	-	0.0413	0.0141	-	0.0134	0.1827	-	-	0.2515
	%diff.	-	4.84	-3.68	-	-11.67	-7.09	-	-	-4.97
BI_2544	OD	-	0.0738	-	-	-	0.0003	-	-	0.0741
	AD	-	0.0751	-	-	-	0.0012	-	-	0.0763
	%diff.	-	-1.76	-	-	-	-300.00	-	-	-2.97

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 OS68-OS70.

		OS70								
LabCode		Nemertea	Polychaeta	Oligochaeta	Chelicerata	Crustacea	Mollusca	Echinodermata	Other	Overall
BI_2502	OD	-	0.7992	0.0004	-	0.0062	0.1198	0.0032	0.0003	0.9291
	AD	-	0.6016	0.0004	-	0.0044	0.1148	0.0031	0.0002	0.7245
	%diff.	-	24.72	0.00	-	29.03	4.17	3.13	33.33	22.02
BI_2510	OD	0.0691	0.1622	-	-	0.0305	0.0507	-	-	0.3125
	AD	0.0452	0.1066	-	-	0.0198	0.0475	-	-	0.2191
	%diff.	34.59	34.28	-	-	35.08	6.31	-	-	29.89
BI_2519	OD	-	0.0053	-	-	0.0064	0.0211	-	-	0.0328
	AD	-	0.0050	-	-	0.0067	0.0204	-	-	0.0321
	%diff.	-	5.66	-	-	-4.69	3.32	-	-	2.1341
BI_2529	OD	0.0038	0.4519	-	0.0001	0.1147	0.2082	14.3402	0.0506	15.1695
	AD	0.0035	0.4485	-	0.0001	0.1354	0.1705	13.1220	0.0643	13.9443
	%diff.	7.8947	0.7524	-	0.0000	-18.0471	18.1076	8.4950	-27.0751	8.08
BI_2533	OD	0.0014	0.1873	0.0001	-	-	0.7054	5.1569	0.0002	6.0513
	AD	0.0004	0.1147	0.0001	-	-	0.6276	4.7346	0.0002	5.4776
	%diff.	71.43	38.76	0.00	-	-	11.03	8.19	0.00	9.48
BI_2534	OD	-	6.4923	1.1806	-	0.0892	7.0212	-	0.0001	14.7834
	AD	-	5.0395	0.5572	-	0.1038	6.6556	-	0.0001	12.3562
	%diff.	-	22.38	52.80	-	-16.37	5.21	-	0.00	16.42
BI_2535	OD	0.0581	10.2929	0.0110	0.0038	0.1155	113.1162	-	1.0099	124.6074
	AD	0.0692	9.5305	0.0116	0.0034	0.1089	115.4615	-	0.8381	126.0232
	%diff.	-19.1050	7.4070	-5.4545	10.5263	5.7143	-2.0734	-	17.0116	-1.14
BI_2536	OD	-	0.0186	0.0009	-	-	0.0063	-	-	0.0258
	AD	-	0.0188	0.0008	-	-	0.0058	-	-	0.0254
	%diff.	-	-1.0753	11.1111	-	-	7.9365	-	-	1.55
BI_2537	OD	-	0.0064	0.0012	-	0.0002	0.0003	-	0.0001	0.0082
	AD	-	0.0041	0.0011	-	0.0002	0.0002	-	0.0001	0.0057
	%diff.	-	35.94	8.33	-	0.00	33.33	-	0.00	30.49
BI_2539	OD	-	0.2993	0.0975	-	0.0001	0.1673	-	0.0001	0.5643
	AD	-	0.1815	0.0647	-	0.0001	0.1355	-	0.0001	0.3819
	%diff.	-	39.36	33.64	-	0.00	19.01	-	0.00	32.32
BI_2540	OD	-	0.0448	-	-	0.0030	0.0524	-	0.0001	0.1003
	AD	-	0.0417	-	-	0.0031	0.0505	-	0.0001	0.0954
	%diff.	-	6.92	-	-	-3.33	3.63	-	0.00	4.89
BI_2541	OD	-	-	-	-	-	-	-	-	0.0000
	AD	-	-	-	-	-	-	-	-	0.0000
	%diff.	-	-	-	-	-	-	-	-	-
BI_2542	OD	-	0.0299	0.0090	-	0.0001	0.0001	-	-	0.0391
	AD	-	0.0315	0.0085	-	0.0004	0.0002	-	-	0.0406
	%diff.	-	-5.35	5.56	-	-300.00	-100.00	-	-	-3.84
BI_2543	OD	-	0.3188	0.0028	-	-	0.0424	-	0.0001	0.3641
	AD	-	0.3329	0.0010	-	-	0.0404	-	0.0001	0.3744
	%diff.	-	-4.42	64.29	-	-	4.72	-	0.00	-2.83

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 2018/19 (OS01-70).

		Number of samples		
Scheme Year	**Exercise**	**Pass (>90% BCSI)**	**Fail (<90% BCSI)**	**% Pass**
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
	Total	**1379**	**282**	**83**

* - Own Samples selected from completed data matrices

BCSI - Bray Curtis Similarity Index (untransformed)