



**The National Marine Biological
Analytical Quality Control Scheme**

Particle Size Results – PS30

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Table 1. Summary of the particle size information received from participating laboratories and replicate analysis laboratories for the thirtieth particle size distribution - PS30.

Replicate Sample Data

Sample	Method	% < 63 micron	Median (phi)	Mean (phi)	Sort	IGS (SKi)
PS30_42	L ¹	31.63	3.19	4.32	2.25	0.74
PS30_43	L ¹	31.21	3.18	4.29	2.23	0.74
PS30_44	L ¹	31.33	3.18	4.30	2.23	0.74
PS30_45	L ¹	32.36	3.20	4.34	2.25	0.74
PS30_46	L ¹	31.41	3.18	4.30	2.23	0.74
PS30_47	L ¹	31.83	3.19	4.32	2.25	0.74
PS30_48	L ¹	30.84	3.18	4.28	2.22	0.74
PS30_35	L ²	23.172	3.140	3.860	1.660	0.710
PS30_36	L ²	22.691	3.140	3.860	1.620	0.700
PS30_37	L ²	21.512	3.120	3.780	1.560	0.686
PS30_38	L ²	21.499	3.110	3.770	1.560	0.684
PS30_39	L ²	21.149	3.130	3.770	1.510	0.677
PS30_40	L ²	22.235	3.130	3.820	1.590	0.700
PS30_41	L ²	23.622	3.150	3.870	1.670	0.706
UM	Overall Average	26.89	3.16	4.06	1.92	0.72
UM	L¹RepAv	31.52	3.19	4.31	2.24	0.74
UM	L²RepAv	22.27	3.13	3.82	1.60	0.69

Participant Data

Lab	Method	%<63µm	Median	Mean	Sort	IGS (SKi)
LB1401	L	15.79	3.11	3.22	1.21	0.47
LB1402	L	13.11	2.81	2.95	1.22	0.460
LB1403	L	7.62	3.31	3.46	0.90	0.310
LB1404	L	13.76	3.06	3.13	1.13	-0.44
LB1405*	L	13.11	2.81	2.95	1.22	0.460
LB1406	L	12.18	2.75	3.48	1.01	0.420
LB1408	L	13.78	3.06	3.06	1.14	-0.410
LB1410	L	10.36	3.78	3.83	0.76	0.450
LB1415	L	26.70	2.97	3.92	1.75	0.701
LB1422	L	15.42	3.09	3.19	-1.22	-0.25
LB1423	L	15.83	3.09	3.17	1.06	0.34

Key to methods:

L - Laser analysis DS - Dry sieve CC - Coulter counter
 S - Sieve WS - Wet sieve FD - Freeze dried
 P - Pipette

L¹ - Replicate analysis by Malvern Laser

L² - Replicate analysis by Coulter Laser (LS230)

L* - data for this laboratory not included in calculations (replicate data).

"-" - No data. See forthcoming Annual Report, Section 6, for details.

Shaded cells - maximum and minimum values for each derived statistic.

Table 2. Z-score results for the derived statistics supplied by participating laboratories for the particle size exercise - PS30.

PS30																
Lab	%<63µm	z-score	Flag	Median	z-score	Flag	Mean	z-score	Flag	Sort	z-score	Flag	IGS (SKi)	z-score	Flag	Description: pre/post analysis
Laser ¹ RepAv	31.52	3.16	Fail	3.19	0.80	PASS	4.31	2.72	Fail	2.24	3.57	Fail	0.74	1.15	PASS	-
Laser ² RepAv	22.27	1.29	PASS	3.13	0.38	PASS	3.82	1.21	PASS	1.60	1.40	PASS	0.695	1.02	PASS	-
LB1401	15.79	-0.03	PASS	3.11	0.22	PASS	3.22	-0.64	PASS	1.21	0.11	PASS	0.470	0.41	PASS	Anoxic Muddy Sand/mS - anoxic
LB1402	13.11	-0.57	PASS	2.81	-2.08	Fail	2.95	-1.47	PASS	1.22	0.14	PASS	0.460	0.39	PASS	Mud/Muddy Sand
LB1403	7.62	-1.68	PASS	3.31	1.75	PASS	3.46	0.10	PASS	0.90	-0.93	PASS	0.310	-0.02	PASS	Drk Brwn, consolidated, muddy anoxic sand with organic fragments and mica/S(sand)
LB1404	13.76	-0.44	PASS	3.06	-0.17	PASS	3.13	-0.92	PASS	1.13	-0.16	PASS	-0.44	-2.07	Fail	sM/mS
LB1405*	13.11	-0.57	PASS	2.81	-2.08	Fail	2.95	-1.47	PASS	1.22	0.14	PASS	0.460	0.39	PASS	-
LB1406	12.18	-0.76	PASS	2.75	-2.54	Fail	3.48	0.16	PASS	1.01	-0.56	PASS	0.420	0.28	PASS	fine sand/sand
LB1407	-	-	Deemed Fail	-	-	Deemed Fail	-	-	Deemed Fail	-	-	Deemed Fail	-	-	Deemed Fail	-
LB1408	13.78	-0.43	PASS	3.06	-0.17	PASS	3.06	-1.13	PASS	1.14	-0.13	PASS	-0.410	-1.98	PASS	Fine silty sand/-
LB1410	10.36	-1.13	PASS	3.78	5.35	Fail	3.83	1.24	PASS	0.76	-1.40	PASS	0.450	0.36	PASS	Muddy sand/Muddy sand
LB1415	26.70	2.19	Fail	2.97	-0.86	PASS	3.92	1.51	PASS	1.75	1.91	PASS	0.701	1.04	PASS	Muddy sand/Poorly sorted very fine sand
LB1422	15.42	-0.10	PASS	3.09	0.06	PASS	3.19	-0.73	PASS	-1.22	-8.05	Fail	-0.250	-1.55	PASS	Muddy Sand/Muddy Sand
LB1423	15.83	-0.02	PASS	3.09	0.06	PASS	3.17	-0.79	PASS	1.06	-0.39	PASS	0.340	0.06	PASS	Muddy Sand/Muddy Sand

"-" no return and/or data from laboratory. See text, Section 6 in the forthcoming Annual Report, for details.

"*" = centralised analysis

Laser¹RepAv - Average of replicate analysis by Malvern Laser

Laser²RepAv - Average of replicate analysis by Coulter Laser (LS230)

Figure 3. Z-scores for PS30 derived statistics (replicated data not displayed).

