

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	L ² 22.235 3.130 3.820		3.820	1.590	0.700
PS30_41	L^2	L ² 23.622 3.150 3.870 1.		1.670	0.706	
UM	Overall Average	26.89	3.16	4.06	1.92	0.72
UM	L ¹ RepAv	31.52	3.19	4.31	2.24	0.74
UM	L ² RepAv	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

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

Laser¹RepAv - Average of replicate analysis by Malvern Laser

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

[&]quot;*" = centralised analysis

Figure 1. Particle size distribution curves resulting from analysis of fourteen replicate samples of sediment distributed as PS30. Seven samples analysed by Malvern Laser and seven samples analysed by Coulter Laser.

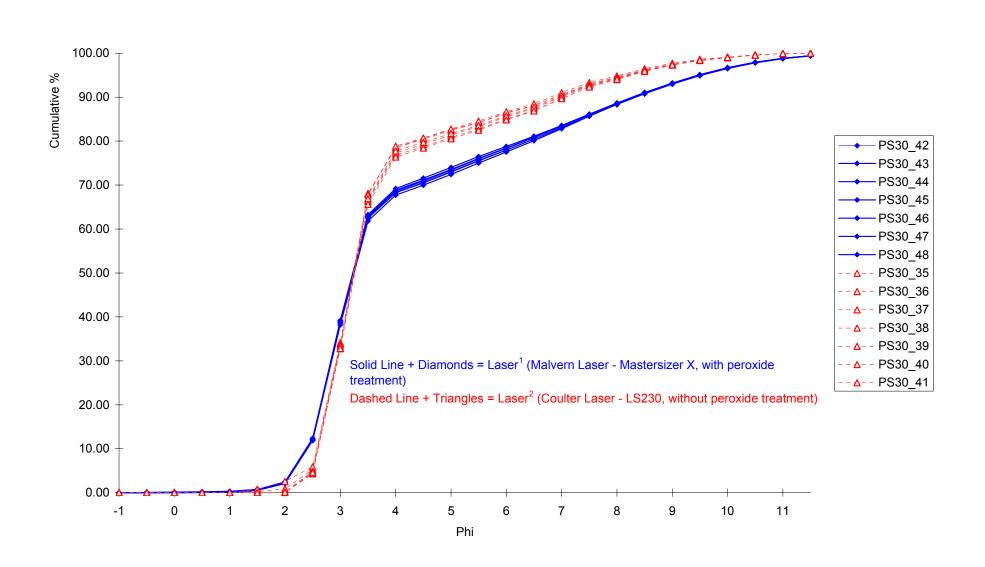


Figure 2. Particle size distribution curves from participating laboratories for sediment samples from PS30.

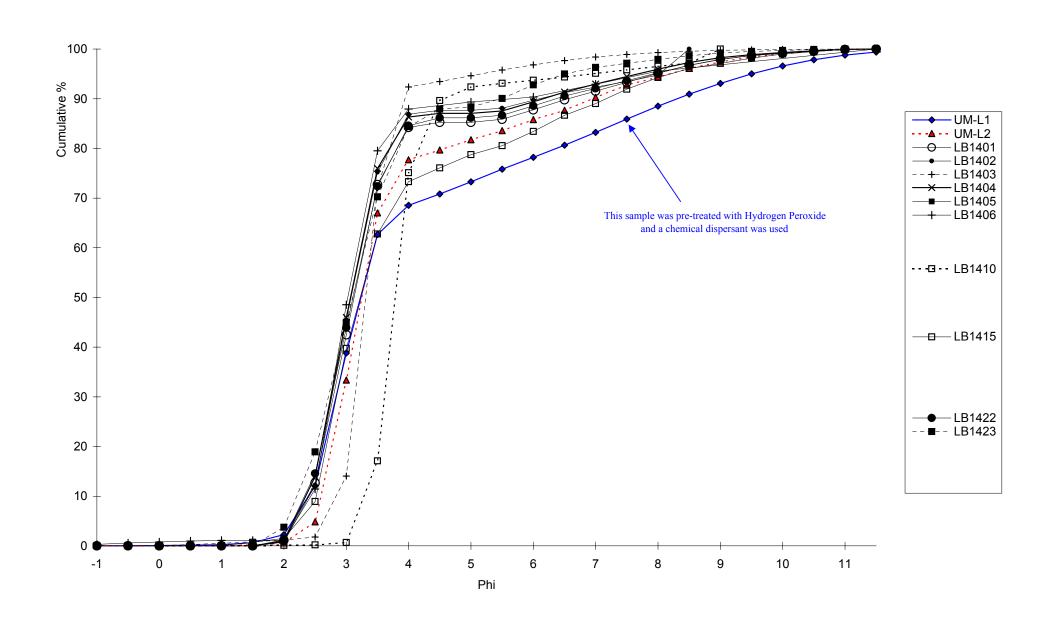


Figure 3. Z-scores for PS30 derived statistics (replicated data not displayed).

