

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

Particle Size Results – PS29

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Table 1. Summary of the particle size information received from participating laboratories and replicate analysis laboratories for the twenty-ninth particle size distribution - PS29.

Replicate Sample Data

Sample	Method	% < 63 micron	Median (phi)	Mean (phi)	Sort	IGS (SKi)
PS29_42	L ¹	1.40	1.77	1.75	0.62	-0.040
PS29_43	L ¹	1.16	1.77	1.75	0.62	-0.060
PS29_44	L ¹	1.22	1.77	1.76	0.62	-0.050
PS29_45	L ¹	1.05	1.75	1.74	0.63	-0.050
PS29_46	L ¹	1.15	1.76	1.74	0.63	-0.040
PS29_47	L ¹	0.98	1.76	1.74	0.62	-0.040
PS29_48	L ¹	1.02	1.75	1.73	0.63	-0.050
PS29_35	L ²	0.054	1.65	1.61	0.70	0.191
PS29_36	L ²	0.049	1.63	1.58	0.73	0.319
PS29_37	L ²	0.961	1.63	1.62	0.75	-0.517
PS29_38	L ²	0.045	1.66	1.64	0.67	0.075
PS29_39	L ²	1.982	1.67	1.71	0.65	-1.618
PS29_40	L ²	1.226	1.64	1.65	0.76	-0.701
PS29_41	L ²	1.048	1.65	1.65	0.73	-0.693
UM	Overall Average	0.95	1.70	1.69	0.67	-0.23
UM	L ¹ RepAv	1.14	1.76	1.74	0.62	-0.05
UM	L ² RepAv	0.77	1.65	1.64	0.71	-0.42

Participant Data

Lab	Method	%<63µm	Median	Mean	Sort	IGS (SKi)
LB1302	Air dry, DS	0	2.05	2.00	0.54	-0.180
LB1303	L	0.69	1.4	1.42	0.71	0.030
LB1305	WS, DS, FD, L	0.87	1.65	1.67	0.74	0.020
LB1306*	L	0.69	1.4	1.42	0.71	0.030
LB1307	L	4.72	1.99	1.26	0.81	0.16
LB1308	L	0.89	2.13	2.11	0.57	-0.09
LB1314	L	0.00	1.63	1.47	0.69	0.010
LB1317	L	1.76	1.61	1.62	0.73	0.030
LB1320	DS	0.20	2.08	2.03	0.65	-0.102

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 (Mastersizer X)

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 - PS29.

PS29																
Lab	%<63µm	z-score	Flag	Median	z-score	Flag	Mean	z-score	Flag	Sort	z-score	Flag	IGS (SKi)	z-score	Flag	Description
Laser ¹ RepAv	1.14	0.65	PASS	1.76	-0.20	PASS	1.74	0.20	PASS	0.62	-0.91	PASS	-0.047	-0.08	PASS	Unspecified
Laser ² RepAv	0.77	-0.04	PASS	1.65	-0.76	PASS	1.64	-0.28	PASS	0.71	0.59	PASS	-0.42	-4.90	Fail	Sand/Sand
LB1302	0	-1.45	PASS	2.05	1.22	PASS	2.00	1.36	PASS	0.54	-2.34	Fail	-0.180	-1.80	PASS	Medium sand/Sand
LB1303	0.69	-0.18	PASS	1.4	-1.98	PASS	1.42	-1.26	PASS	0.71	0.54	PASS	0.030	0.92	PASS	Coarse sand/Sand
LB1305	0.87	0.15	PASS	1.65	-0.75	PASS	1.67	-0.13	PASS	0.74	1.05	PASS	0.020	0.79	PASS	Very sl. gravelly (shelly) sand/ Sand
LB1306*	0.69	-0.18	PASS	1.4	-1.98	PASS	1.42	-1.26	PASS	0.71	0.54	PASS	0.030	0.92	PASS	Coarse sand/Sand
LB1307	4.72	7.24	Fail	1.99	0.93	PASS	1.26	-1.98	PASS	0.81	2.23	Fail	0.16	2.60	Fail	Sand/Sand
LB1308	0.89	0.19	PASS	2.13	1.62	PASS	2.11	1.86	PASS	0.57	-1.83	PASS	-0.090	-0.63	PASS	Sand/Sand
LB1314	0.00	-1.45	PASS	1.63	-0.85	PASS	1.47	-1.03	PASS	0.69	0.20	PASS	0.010	0.66	PASS	Sandy/-
LB1317	1.76	1.79	PASS	1.61	-0.95	PASS	1.62	-0.36	PASS	0.73	0.88	PASS	0.030	0.92	PASS	Muddy sand/Medium sand
LB1320	0.20	-1.09	PASS	2.08	1.36	PASS	2.03	1.49	PASS	0.65	-0.51	PASS	-0.102	-0.79	PASS	Sand/Sand

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

"*" = centralised analysis

Figure 1. Particle size distribution curves resulting from analysis of fourteen replicate samples of sediment distributed as PS29. Seven samples analysed by Malvern Laser and seven samples analysed by Coulter Laser.

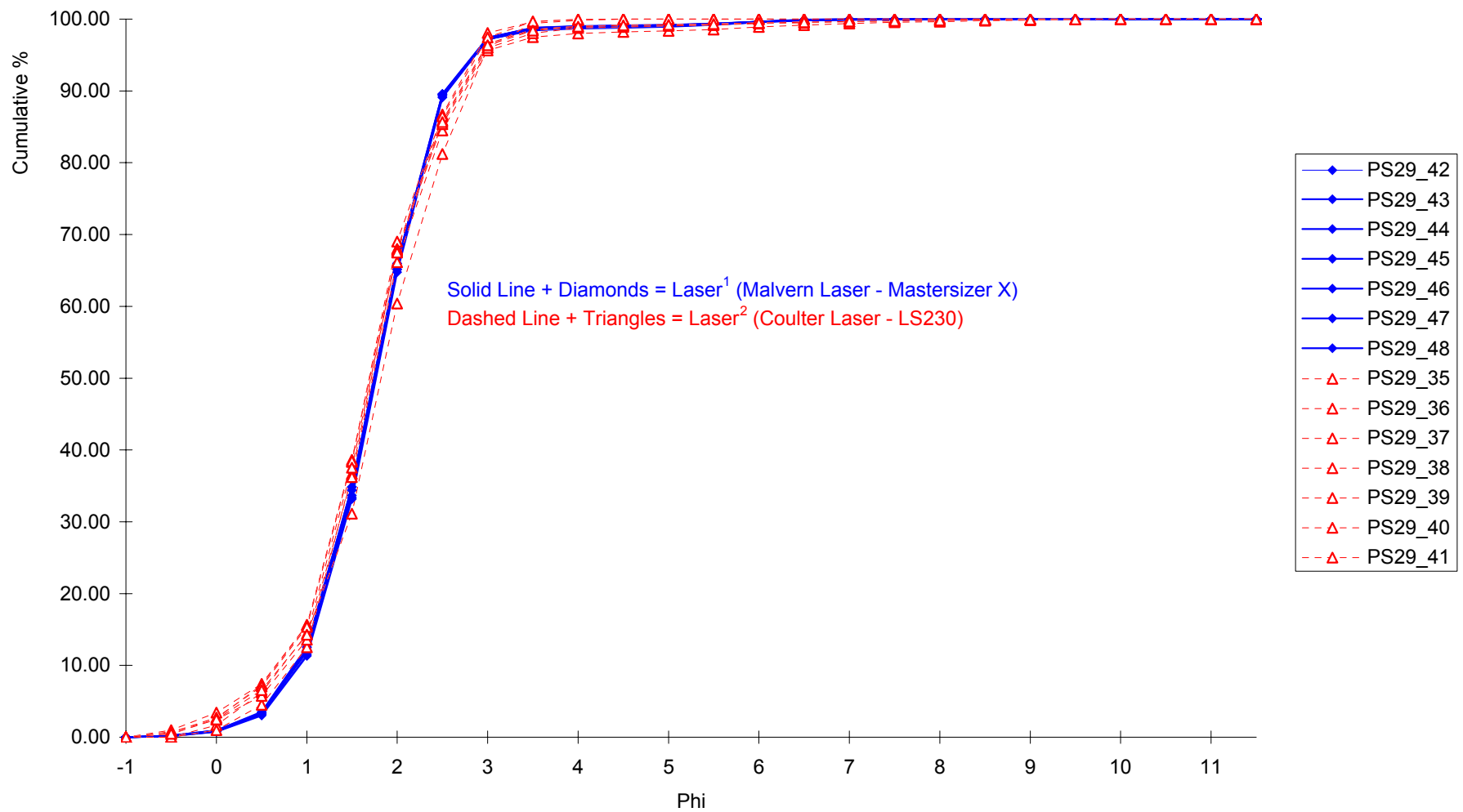


Figure 3. Z-scores for PS29 derived statistics (replicated data not displayed).

