

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

Particle Size Results – PS28

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Contents

Tables

- Table 1. Summary of the particle size information received from participating laboratories and replicate analysis laboratories for the twenty-eighth particle size distribution – PS28.
- Table 2. Z-score results for the derived statistics supplied by participating laboratories for the particle size exercise – PS28.

Figures

- Figure 1. Particle size distribution curves resulting from analysis of fourteen replicate samples distributed as PS28.
- Figure 2. Particle size distribution curves from participating laboratories for sediment samples from PS28.
- Figure 3. Z-scores for PS28 derived statistics (replicated data not displayed).

Table 1. Summary of the particle size information received from participating laboratories and replicate analysis laboratories for the twenty-eighth particle size distribution - PS28.

Replicate Sample Data

Sample	Method	% < 63 micron	Median (phi)	Mean (phi)	Sort	IGS (SKi)
PS28_42	L ¹	94.12	6.91	6.96	1.99	0.03
PS28_43	L ¹	94.25	6.91	6.97	1.99	0.04
PS28_44	L ¹	95.17	6.88	6.95	1.94	0.06
PS28_45	L ¹	95.00	6.90	6.96	1.96	0.05
PS28_46	L ¹	94.86	6.90	6.96	1.96	0.05
PS28_47	L ¹	95.65	6.92	6.99	1.94	0.06
PS28_48	L ¹	94.76	6.89	6.96	1.96	0.05
PS28_35	L ²	100.00	7.200	7.400	1.417	-0.562
PS28_36	L ²	100.00	7.010	7.210	1.429	-0.616
PS28_37	L ²	100.00	7.129	7.320	1.395	-0.614
PS28_38	L ²	100.00	7.118	7.307	1.424	-0.588
PS28_39	L ²	100.00	7.075	7.268	1.424	-0.598
PS28_40	L ²	100.00	6.999	7.147	1.543	-0.441
PS28_41	L ²	100.00	7.128	7.316	1.431	-0.583
UM	Overall Average	97.42	7.00	7.12	1.70	-0.26
UM	L¹RepAv	94.83	6.90	6.96	1.96	0.05
UM	L²RepAv	100	7.094	7.28	1.44	-0.57

Participant Data

Lab	Method	%<63µm	Median	Mean	Sort	IGS (SKi)
LB1301	-	-	-	-	-	-
LB1302	L	90.89	6.74	6.65	1.96	0.050
LB1303	L	89.58	6.44	6.11	1.70	-0.260
LB1304	L	95.17	7.02	6.91	1.73	0.070
LB1305	L	89.98	5.81	5.95	1.74	0.220
LB1306*	L*	89.58	6.44	6.11	1.70	0.260
LB1307	L	82.03	6.07	6.16	3.13	-0.62
LB1308	L	96.12	7.00	6.82	1.4	-0.260
LB1314	L	88.57	6.58	5.20	1.91	0.120
LB1317	L	91.94	5.96	4.97	1.71	0.170
LB1320	DS	38.61	3.624	4.54	2.31	0.565

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* - replicated data - not included in calculations

"-" - 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 - PS28.

PS28																
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	94.83	0.89	PASS	6.90	0.87	PASS	6.96	1.06	PASS	1.96	0.55	PASS	0.049	0.36	PASS	-
Laser ² RepAv	100	2.09	Fail	7.094	1.28	PASS	7.28	1.49	PASS	1.44	-1.60	PASS	-0.572	-2.02	Fail	-
LB1301	-	-	Deemed Fail	-	-	Deemed Fail	-	-	Deemed Fail	-	-	Deemed Fail	-	-	Deemed Fail	-/-
LB1302	90.89	-0.03	PASS	6.74	0.52	PASS	6.65	0.63	PASS	1.96	0.53	PASS	0.050	0.37	PASS	M/M
LB1303	89.58	-0.33	PASS	6.44	-0.14	PASS	6.11	-0.11	PASS	1.70	-0.53	PASS	-0.260	-0.82	PASS	Mud/Mud
LB1304	95.17	0.96	PASS	7.02	1.12	PASS	6.91	0.98	PASS	1.73	-0.41	PASS	0.070	0.44	PASS	Mud(anoxic)/Mud
LB1305	89.98	-0.24	PASS	5.81	-1.50	PASS	5.95	-0.33	PASS	1.74	-0.37	PASS	0.220	1.02	PASS	Thick dk brown mud + occ. shell fragments/(g)M
LB1306*	89.58	-0.33	PASS	6.44	-0.14	PASS	6.11	-0.11	PASS	1.70	-0.53	PASS	0.260	1.17	PASS	Mud/Mud
LB1307	82.03	-2.08	Fail	6.07	-0.94	PASS	6.16	-0.04	PASS	3.13	5.32	Fail	-0.62	-2.20	Fail	mud/mud
LB1308	96.12	1.19	PASS	7.00	1.08	PASS	6.82	0.86	PASS	1.4	-1.76	PASS	-0.260	-0.82	PASS	mud/mud
LB1314	88.57	-0.57	PASS	6.58	0.17	PASS	5.20	-1.36	PASS	1.91	0.33	PASS	0.120	0.64	PASS	mud/-
LB1317	91.94	0.22	PASS	5.96	-1.18	PASS	4.97	-1.68	PASS	1.71	-0.49	PASS	0.170	0.83	PASS	muddy silt/medium silt
LB1320	38.61	-12.16	Fail	3.624	-6.24	Fail	4.54	-2.26	Fail	2.31	1.98	PASS	0.565	2.34	Fail	Mud/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 1. Particle size distribution curves resulting from analysis of fourteen replicate samples of sediment distributed as PS28. Seven samples analysed by Malvern Laser and seven samples analysed by Coulter Laser.

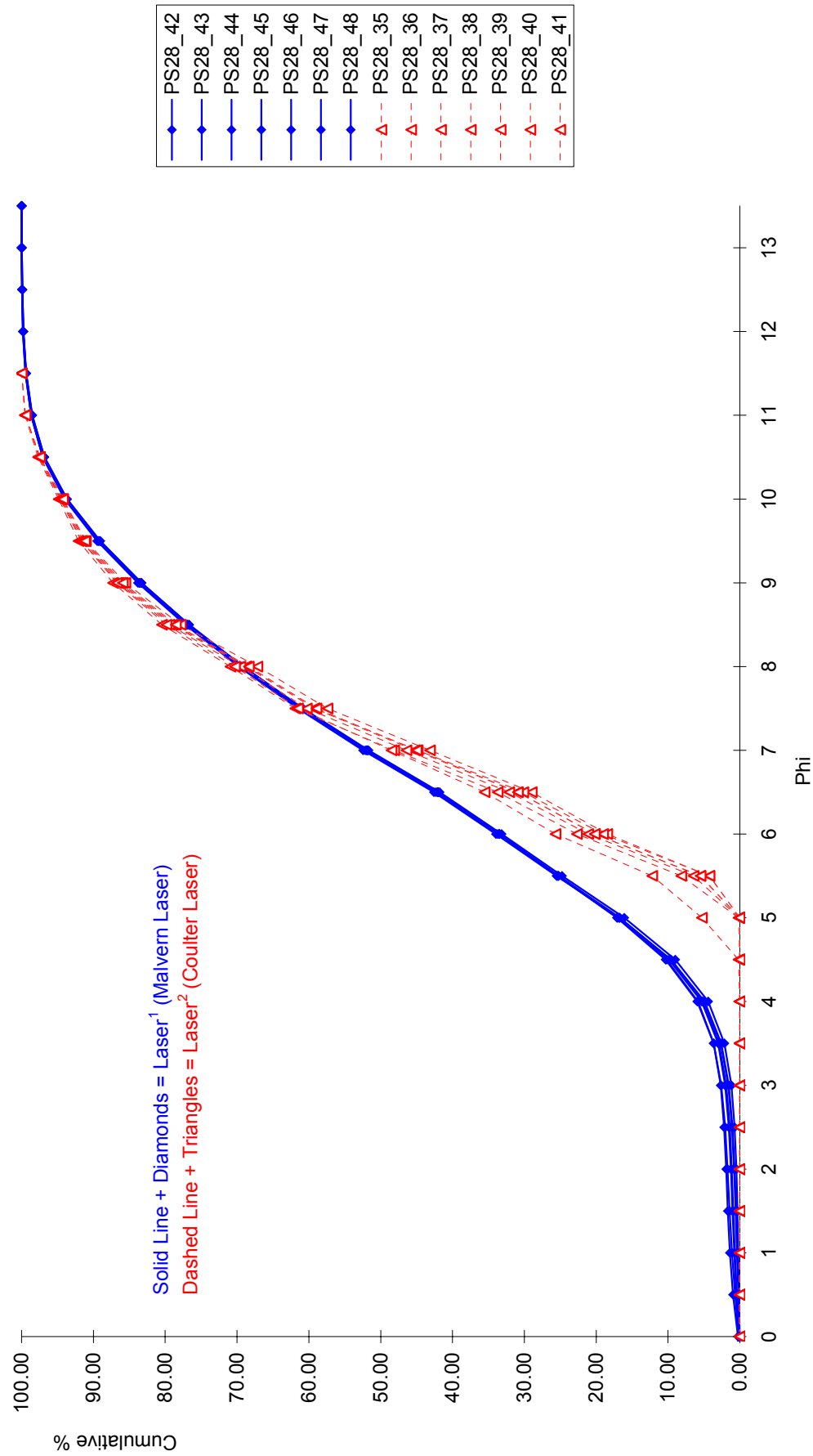


Figure 2. Particle size distribution curves from participating laboratories for sediment samples from PS28.

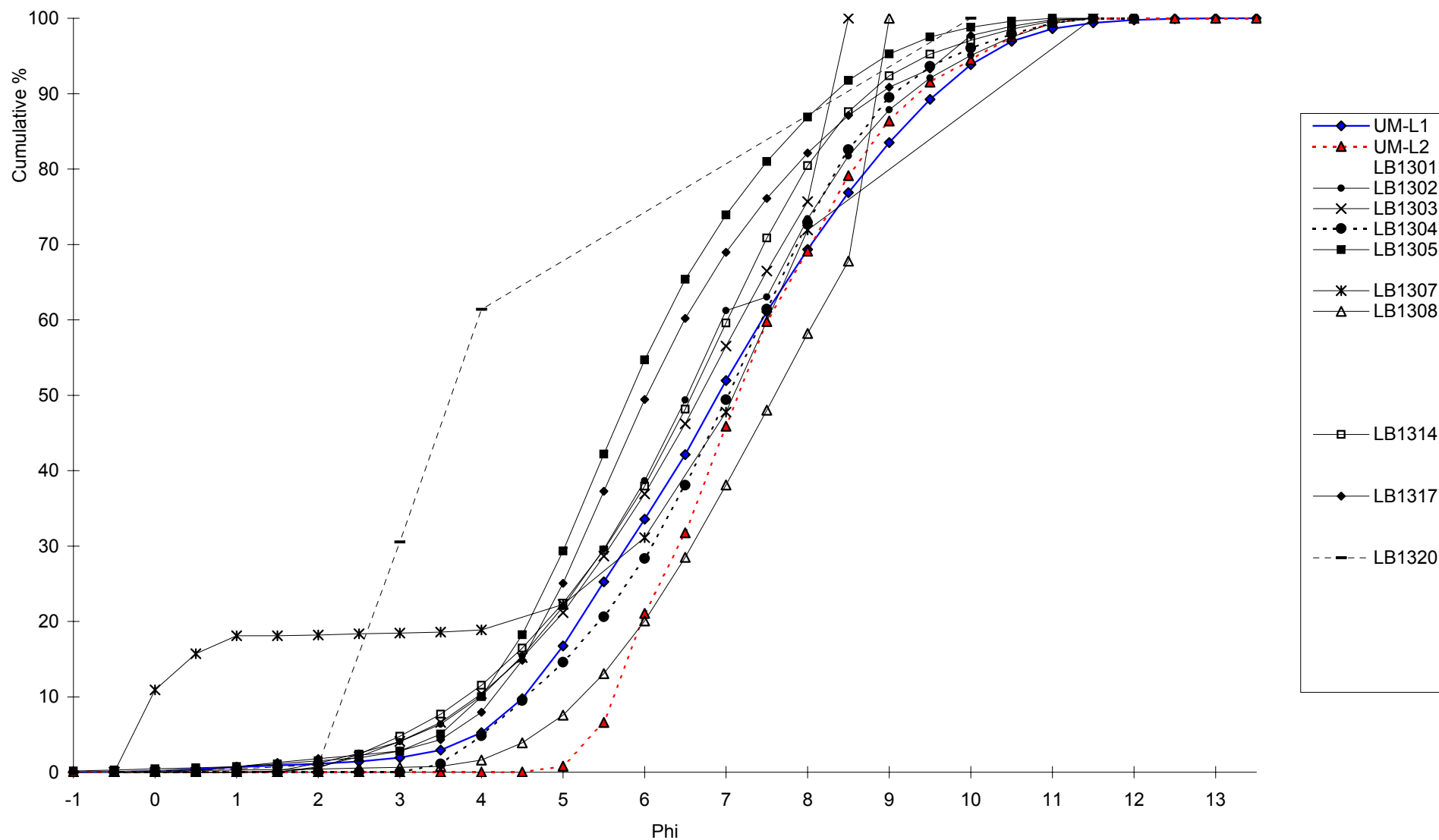


Figure 3. Z-scores for PS28 derived statistics (replicated data not displayed).

