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Particle Size Results – PS31

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Table 1. Summary of the particle size information received from participating laboratories and replicate analysis laboratories for the thirty-first particle size distribution - PS31.

Replicate Sample Data

Sample	Method	% < 63 micron	Median (phi)	Mean (phi)	Sort	IGS (SKi)
PS31_42	L ¹	1.5	1.766	1.660	1.317	-0.380
PS31_43	L ¹	1.8	1.774	1.670	1.233	-0.354
PS31_44	L ¹	1.3	1.764	1.654	1.341	-0.390
PS31_45	L ¹	1.3	1.759	1.637	1.313	-0.386
PS31_46	L ¹	1.6	1.769	1.663	1.348	-0.386
PS31_47	L ¹	1.4	1.762	1.657	1.335	-0.384
PS31_48	L ¹	2.0	1.766	1.649	1.320	-0.378
PS31_35	L ²	7.0	2.220	2.225	1.373	-0.030
PS31_36	L ²	9.2	2.253	2.248	1.552	0.094
PS31_37	L ²	10.5	2.276	2.299	1.636	0.094
PS31_38	L ²	7.0	2.218	2.225	1.385	0.003
PS31_39	L ²	7.0	2.228	2.224	1.360	-0.024
PS31_40	L ²	8.2	2.247	2.245	1.448	0.015
PS31_41	L ²	10.4	2.298	2.346	1.654	0.110
UM	Overall Average	5.01	2.007	1.957	1.401	-0.171
UM	L¹RepAv	1.56	1.766	1.656	1.315	-0.380
UM	L²RepAv	8.47	2.249	2.259	1.487	0.037

Participant Data

Lab	Method	%<63µm	Median	Mean	Sort	IGS (SKi)
LB1401	L, DS	4.90	1.85	1.57	1.63	0.37
LB1402	L	2.25	1.86	1.88	0.66	0.040
LB1403	L, DS	1.92	2.13	1.61	1.97	-0.670
LB1404	L, DS	2.32	2.30	1.77	1.52	-0.720
LB1405*	L	2.25	1.86	1.88	0.66	0.04
LB1406	L, DS	2.75	1.15	0.22	1.92	-0.51
LB1408	L, DS	0.90	1.73	-0.65	1.73	0.6
LB1410	L, DS	2.05	2.68	2.53	1.37	-0.460
LB1415	DS	0.59	2.51	2.06	1.35	-0.732
LB1422	L, DS	3.04	1.69	0.46	2.3	-0.63
LB1423	L, DS	2.44	1.69	1.61	1.35	-0.36

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 - PS31.

PS31																
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	1.56	-0.81	PASS	1.77	-0.72	PASS	1.66	0.22	PASS	1.32	-1.03	PASS	-0.380	-0.14	PASS	Gravelly sand/Gravelly sand
Laser ² RepAv	8.47	5.71	Fail	2.25	0.92	PASS	2.26	1.14	PASS	1.49	-0.32	PASS	0.037	1.01	PASS	Gravelly sand / gravelly sand
LB1401	4.90	2.35	Fail	1.85	-0.43	PASS	1.57	0.09	PASS	1.63	0.27	PASS	0.370	1.93	PASS	Gravelly sand with silt/(gS) Gravelly sand
LB1402	2.25	-0.15	PASS	1.86	-0.40	PASS	1.88	0.57	PASS	0.66	-3.75	Fail	0.040	1.02	PASS	sand / sand
LB1403	1.92	-0.46	PASS	2.13	0.52	PASS	1.61	0.15	PASS	1.97	1.68	PASS	-0.670	-0.95	PASS	Slightly muddy & gravelly sand.../ Gravelly sand (gS)
LB1404	2.32	-0.09	PASS	2.30	1.09	PASS	1.77	0.40	PASS	1.52	-0.18	PASS	-0.720	-1.09	PASS	(g)S/(g)S
LB1405*	2.25	-0.15	PASS	1.86	-0.40	PASS	1.88	0.57	PASS	0.66	-3.75	Fail	0.04	1.02	PASS	sand / sand
LB1406	2.75	0.32	PASS	1.15	-2.80	Fail	0.22	-1.96	PASS	1.92	1.48	PASS	-0.510	-0.50	PASS	Sand/gravelly sand gS
LB1407	-	-	Deemed Fail	-	-	Deemed Fail	-	-	Deemed Fail	-	-	Deemed Fail	-	-	Deemed Fail	-
LB1408	0.90	-1.43	PASS	1.73	-0.84	PASS	-0.65	-3.29	Fail	1.73	0.69	PASS	0.6	2.57	Fail	Sand with small pebbles/-
LB1410	2.05	-0.34	PASS	2.68	2.38	Fail	2.53	1.56	PASS	1.37	-0.81	PASS	-0.460	-0.37	PASS	gravelly sand/gravelly sand
LB1415	0.59	-1.72	PASS	2.51	1.80	PASS	2.06	0.83	PASS	1.35	-0.89	PASS	-0.732	-1.12	PASS	Gravelly sand/Poorly sorted fine sand
LB1422	3.04	0.59	PASS	1.69	-0.97	PASS	0.46	-1.60	PASS	2.3	3.05	Fail	-0.630	-0.84	PASS	Gravelly SAND/Gravelly SAND
LB1423	2.44	0.03	PASS	1.69	-0.97	PASS	1.61	0.15	PASS	1.35	-0.89	PASS	-0.360	-0.09	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 PS31. Seven samples analysed by Malvern Laser and seven samples analysed by Coulter Laser.

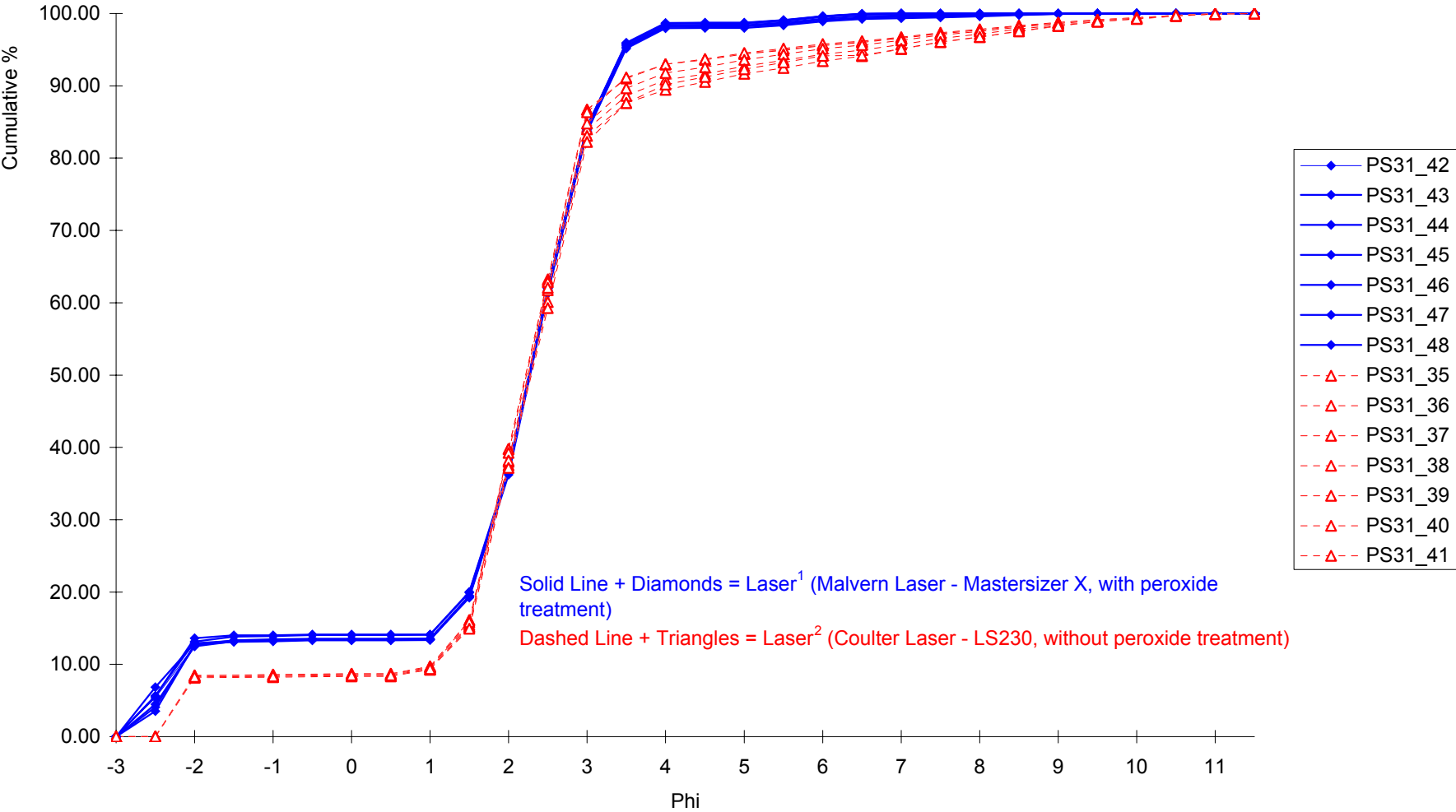


Figure 2. Particle size distribution curves from participating laboratories for sediment samples from PS31.

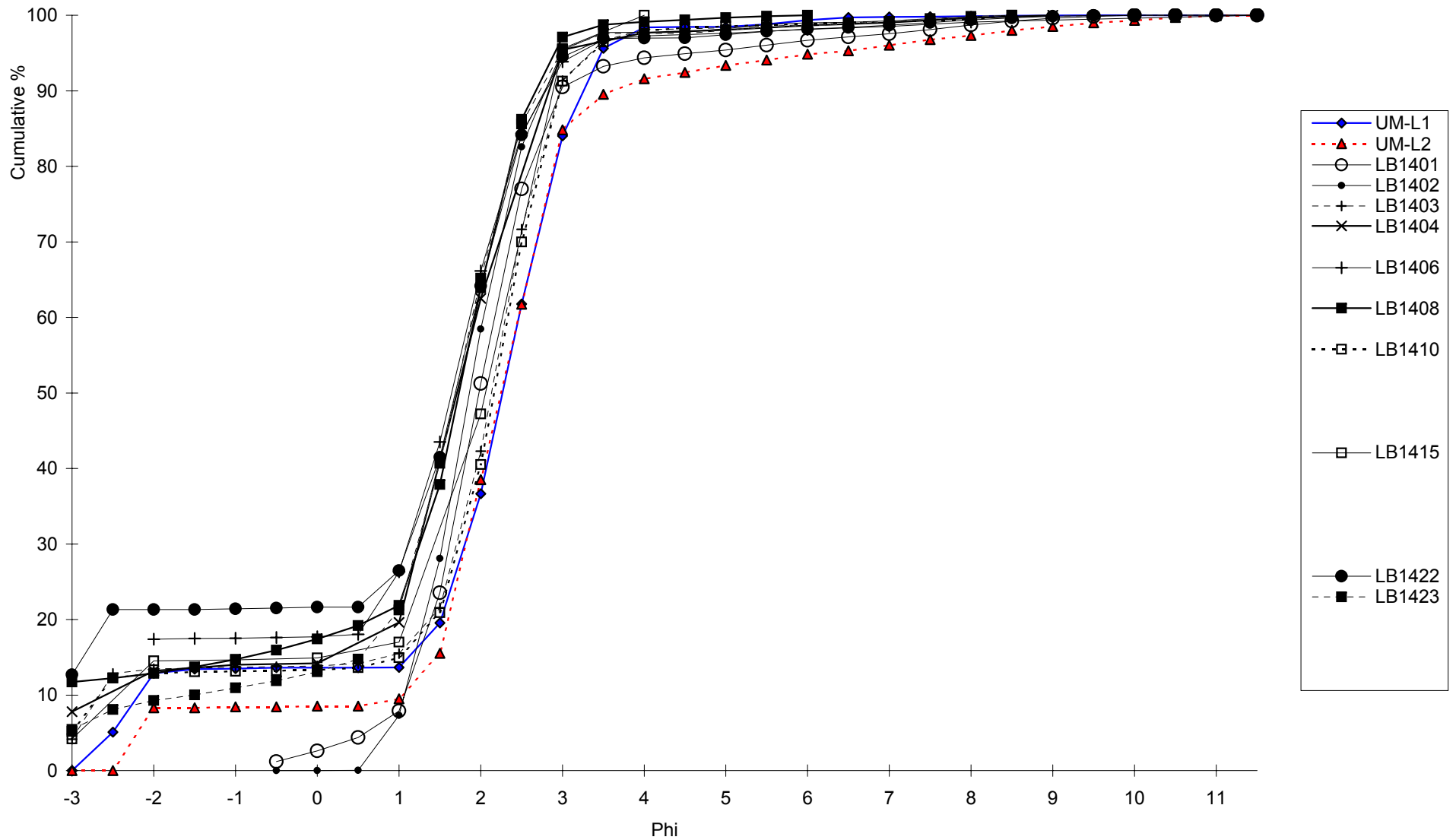


Figure 3. Z-scores for PS31 derived statistics (replicated data not displayed).

