NMBAQC

NE Atlantic Marine Biological Analytical Quality Control Scheme

Particle Size Report - PS69

Particle Size Component 2018/19

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APEM

CONTENTS

APPENDICES

Appendix 1. Benchmark laser replicates with d10, d50, d90 and Coefficient of Variance calculations.

Appendix 2. Gradistat output of size categories based on final merged data provided by each participant and the Benchmark Average for sediment distributed as PS69 (used to create Figure 7).

Appendix 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by Lab Code) and the benchmark replicates for sediment distributed as PS69.

BENCHMARK DATA– OVERVIEW

Table 1. Summary data for the benchmark replicates distributed as PS69.

	Method	% Gravel	% Sand	% Mud	Sediment Description (Post analysis) (Folk (1954)
BM REP 1 (PSA_2530)	NMBAQC	23.64	74.35	2.02	Gravelly Sand
BM REP 2 (PSA_2531)	NMBAQC	24.28	74.61	1.11	Gravelly Sand
BM REP 3 (PSA_2532)	NMBAQC	24.02	75.05	0.93	Gravelly Sand
BM REP 4 (PSA_2533)	NMBAQC	23.82	75.16	1.02	Gravelly Sand
BM REP 5 (PSA_2534)	NMBAQC	23.77	75.26	0.96	Gravelly Sand

BENCHMARK DATA – SIEVE

Table 2. Summary of sieve data for the benchmark replicates distributed as PS69.

Sieves used		☑	☑	☑	☑	☑
Phi interval; mm		**Weight in grams**				
-6.50 to -6.00; 63 mm		0.00	0.00	0.00	0.00	0.00
-6.00 to -5.50; 45 mm		0.00	0.00	0.00	0.00	0.00
-5.50 to -5.00; 31.5 mm		0.00	0.00	0.00	0.00	0.00
-5.00 to -4.50; 22.4 mm		0.00	0.00	0.00	0.00	0.00
-4.50 to -4.00; 16 mm		0.00	0.00	0.00	0.00	0.00
-4.00 to -3.50; 11.2 mm		45.83	47.79	45.43	42.18	49.21
-3.50 to -3.00; 8 mm		29.13	33.99	36.79	30.19	27.54
-3.00 to -2.50; 5.6 mm		63.66	63.67	70.59	72.67	66.81
-2.50 to -2.00; 4 mm		75.05	74.58	65.84	71.38	71.82
-2.00 to -1.50; 2.8 mm		16.54	17.82	16.20	16.11	16.01
-1.50 to -1.00; 2 mm		4.39	4.74	4.55	4.76	4.36
-1.00 to -0.50; 1.4 mm		0.07	0.05	0.03	0.03	0.04
-0.50 to 0.00; 1 mm		0.03	0.03	0.02	0.03	0.02
Weight (g) < 0.00; >1 mm		234.70	242.67	239.45	237.35	235.81
Weight (g) > 0.00; <1 mm	Base Pan	0.09	0.03	0.03	0.03	0.03
	Oven Dried	757.71	756.34	757.31	758.71	755.87
Total Weight (g)		992.50	999.04	996.79	996.09	991.71

BENCHMARK DATA – LASER

Table 3. Summary of final laser data for the benchmark replicates distributed as PS69.

	BM REP 1 (PSA_2530)	BM REP 2 (PSA_2531)	BM REP 3 (PSA_2532)	BM REP 4 (PSA_2533)	BM REP 5 (PSA_2534)
Laser used	☑	☑	☑	☑	☑
0.00 to 0.50; (707 µm)	8.26	8.87	8.88	8.56	8.84
0.50 to 1.00; (500 µm)	25.23	26.04	25.75	25.79	25.57
1.00 to 1.50; (353.6 µm)	36.36	36.49	36.42	36.78	36.66
1.50 to 2.00; (250 µm)	21.22	20.98	21.45	21.41	21.43
2.00 to 2.50; (176.8 µm)	4.93	4.85	4.96	4.84	4.96
2.50 to 3.00; (125 µm)	0.90	0.92	0.89	0.89	0.92
3.00 to 3.50; (88.39 µm)	0.30	0.27	0.32	0.30	0.26
3.50 to 4.00; (62.5 µm)	0.17	0.10	0.10	0.10	0.09
4.00 to 4.50; (44.19 µm)	0.22	0.10	0.09	0.10	0.08
4.50 to 5.00; (31.25 µm)	0.31	0.12	0.09	0.09	0.09
5.00 to 5.50; (22.097 µm)	0.33	0.13	0.09	0.10	0.10
5.50 to 6.00; (15.625 µm)	0.32	0.13	0.10	0.11	0.10
6.00 to 6.50; (11.049 µm)	0.28	0.13	0.10	0.10	0.10
6.50 to 7.00; (7.813 µm)	0.22	0.11	0.09	0.09	0.09
7.00 to 7.50; (5.524 µm)	0.17	0.09	0.07	0.08	0.08
7.50 to 8.00; (3.906 µm)	0.12	0.07	0.05	0.06	0.06
8.00 to 8.50; (2.762 µm)	0.08	0.05	0.04	0.05	0.05
8.50 to 9.00; (1.953 µm)	0.06	0.05	0.04	0.05	0.05
9.00 to 9.50; (1.381 µm)	0.07	0.06	0.05	0.06	0.06
9.50 to 10.00; (0.977 µm)	0.08	0.07	0.06	0.07	0.07
10.00 to 10.50; (0.691 µm)	0.08	0.07	0.07	0.07	0.07
10.50 to 11.00; (0.488 µm)	0.07	0.07	0.06	0.07	0.07
11.00 to 11.50; (0.345 µm)	0.06	0.06	0.06	0.06	0.06
11.50 to 12.00; (0.244 µm)	0.05	0.05	0.05	0.06	0.05
12.00 to 12.50; (0.173 µm)	0.04	0.04	0.04	0.05	0.04
12.50 to 13.00; (0.122 µm)	0.03	0.03	0.03	0.04	0.03
13.00 to 13.50; (0.086 µm)	0.02	0.02	0.02	0.02	0.02
13.50 to 14.00; (0.061 µm)	0.01	0.01	0.01	0.01	0.01
14.00 to 14.50; (0.043 µm)	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	100.00	100.00	100.00

Table 4. Summary of average Coefficient of Variation for Benchmark laser replicates.

	Mean	Standard Deviation	Coefficient Of Variation
	Benchmark Replicate 1 (PSA_2530)		
d10	251.969	9.727	3.861
d50	427.173	1.904	0.446
d90	690.277	2.343	0.339
	Benchmark Replicate 2 (PSA_2531)		
d10	260.076	1.354	0.521
d50	433.292	2.699	0.623
d90	696.463	2.613	0.375
	Benchmark Replicate 3 (PSA_2532)		
d10	260.318	0.545	0.209
d50	432.001	1.824	0.422
d90	696.382	2.656	0.381
	Benchmark Replicate 4 (PSA_2533)		
d10	260.967	0.940	0.360
d50	432.502	1.813	0.419
d90	695.145	2.998	0.431
	Benchmark Replicate 5 (PSA_2534)		
d10	260.326	0.368	0.141
d50	431.505	0.539	0.125
d90	695.992	2.593	0.373

NB. See appendix 1 for full dataset.

Table 5. Laser metadata for Benchmark replicates for PS69.

If laser used, provide manufacturer/model:	Beckman Coulter LS 13320
Dispersion Unit:	Aqueous Liquid Module (ALM)
Analysis model:	Mie
Dispersant used:	Water (RI - 1.33)
Particle Refractive Index:	1.55
Particle Absorption Index:	0.1
Fines extension	PIDS system
Obscuration (average):	10
Pump speed (% or rpm)	80
Stirrer speed (% or rpm)	n/a
Ultrasonic duration (seconds)	20 plus during run
Ultrasonic level (eg %, unit as described by instrument manual)	2

Figure 1. Graphical presentations of (a) sieve data and (b) laser data produced by the benchmark lab for sediment distributed as PS69.

Figure 1a. Percentage bar charts resulting from final sieve analysis of 5 replicate samples of sediment distibuted as PS69 (Benchmark Data).

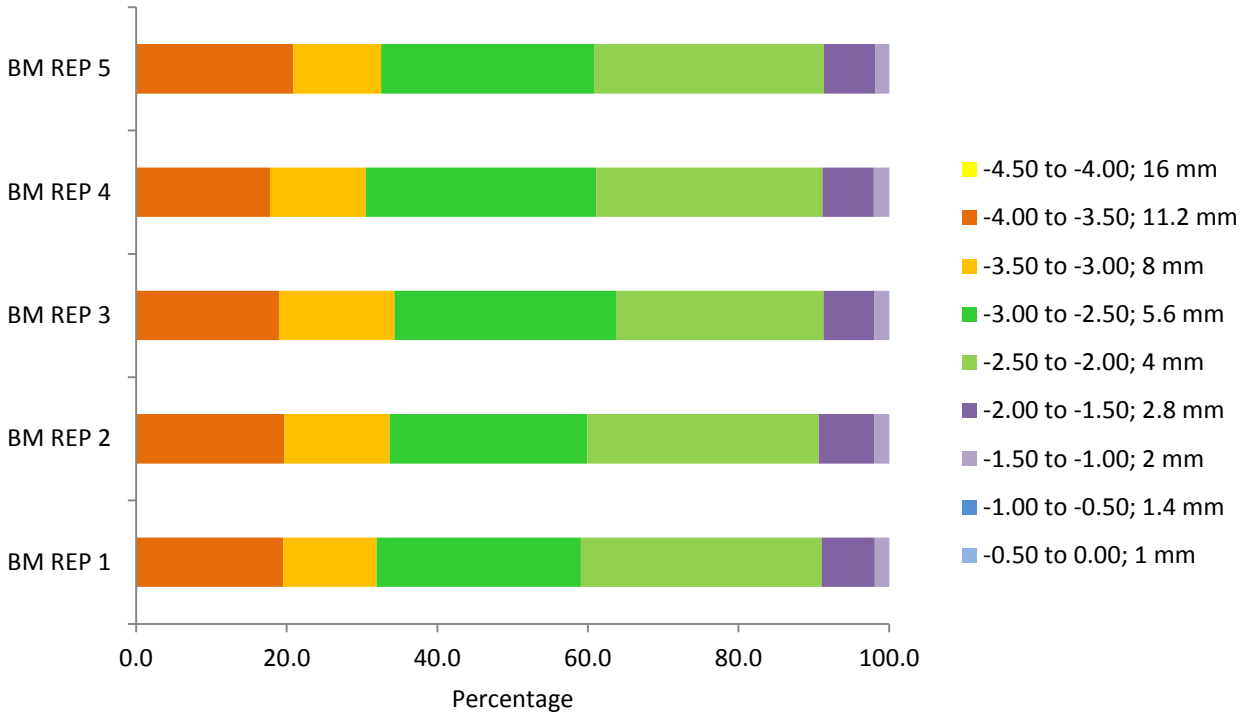


Figure 1b. Particle size distribution curves resulting from final laser analysis of 5 replicate samples of sediment distibuted as PS69 (Benchmark Data).

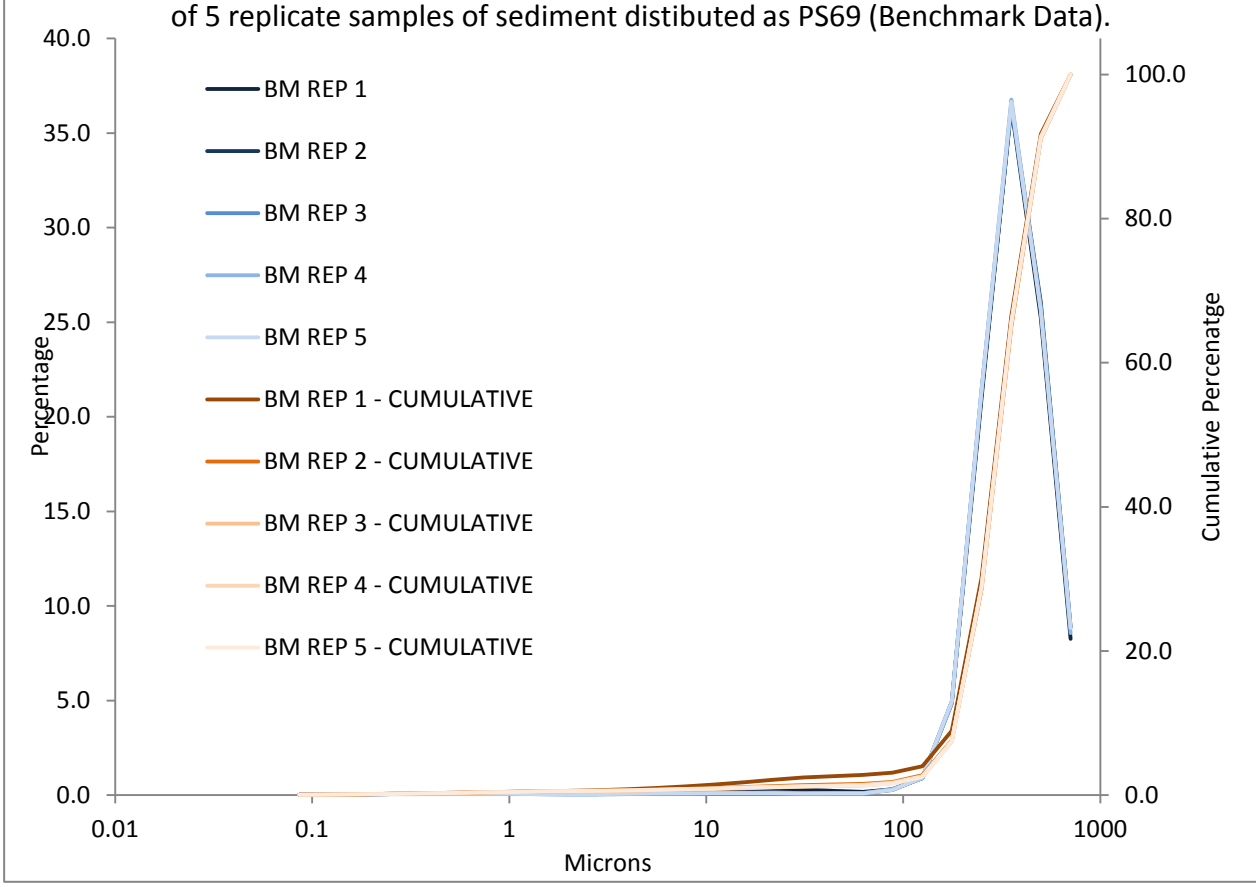
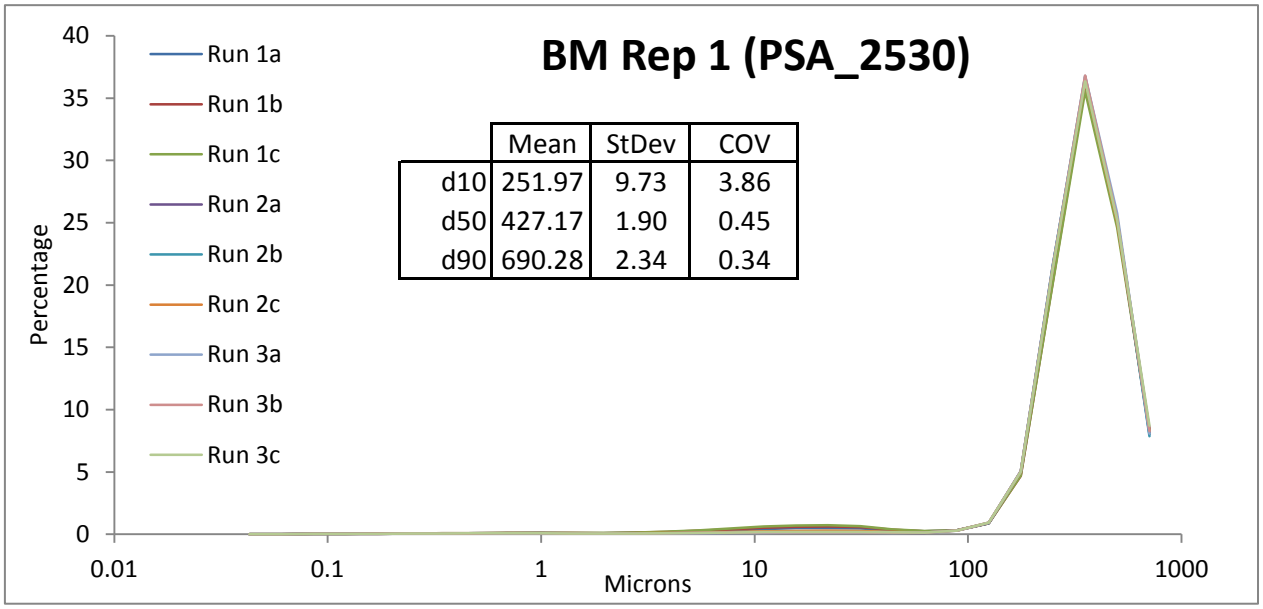
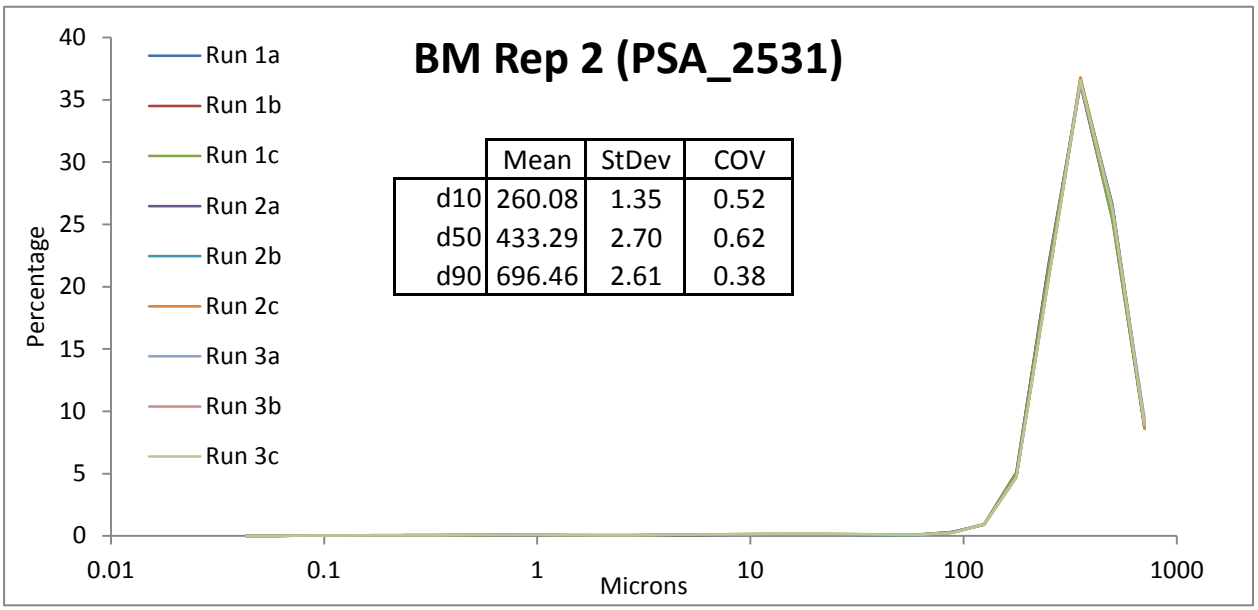


Figure 2. Particle size distribution curves resulting from laser analysis of five replicate samples of sediment distributed as PS69 along with sample statistics and Coefficient of Variance.





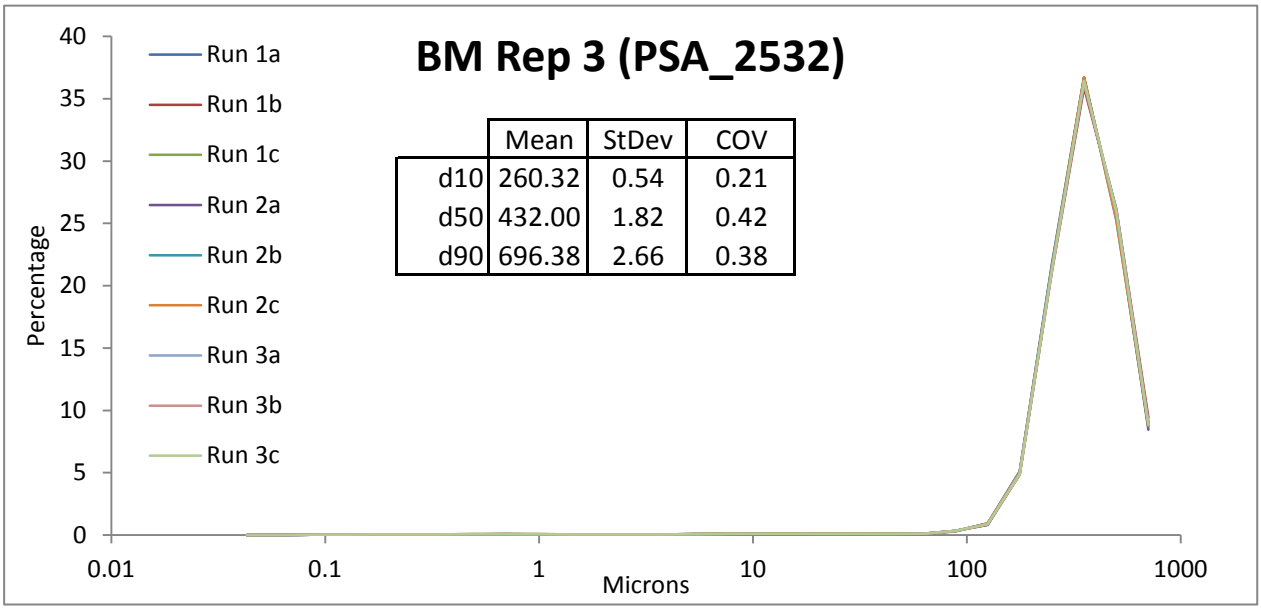
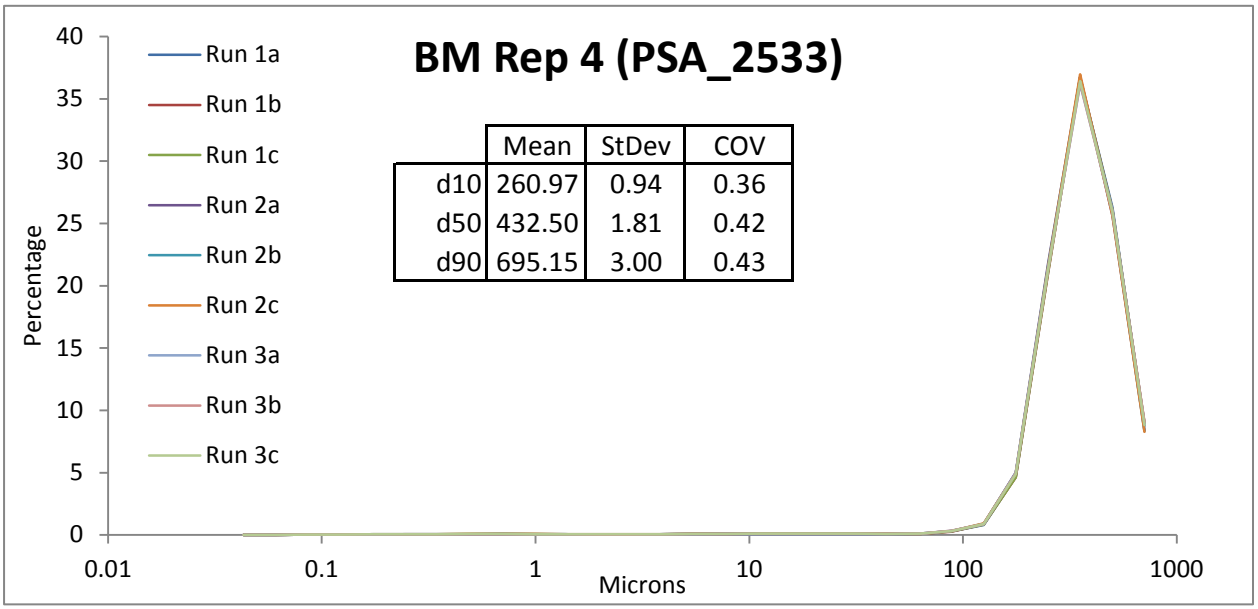
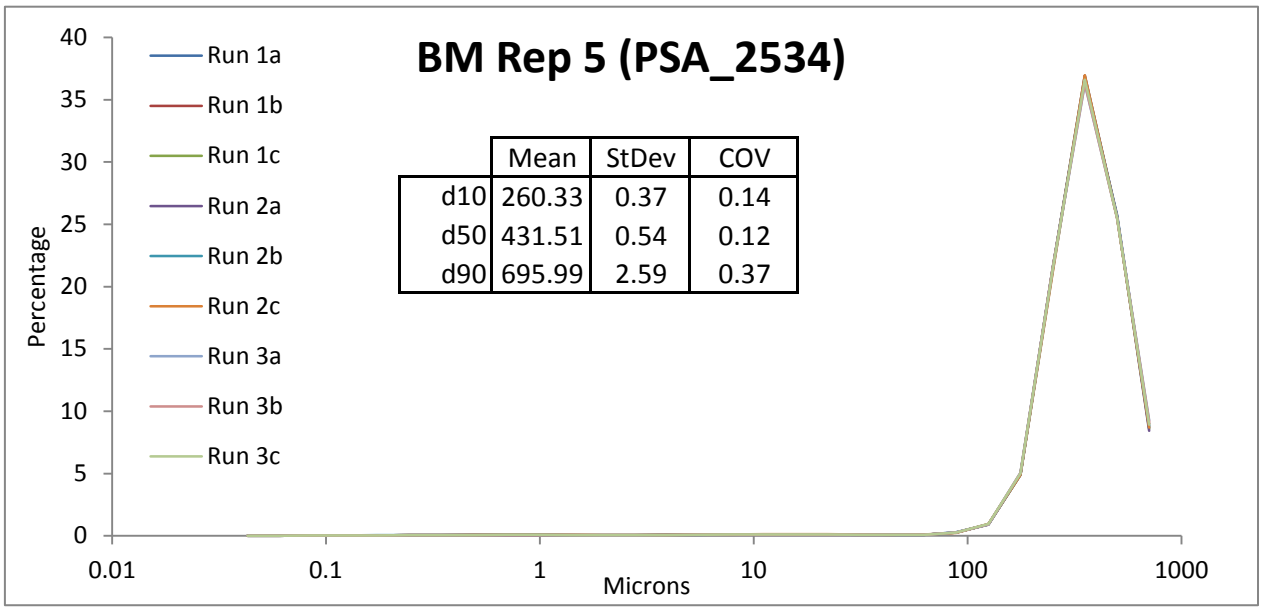


Figure 2. Particle size distribution curves resulting from laser analysis of five replicate samples of sediment distributed as PS69 along with sample statistics and Coefficient of Variance.





$$COV = \left(\frac{StDev}{Mean}\right) * 100$$

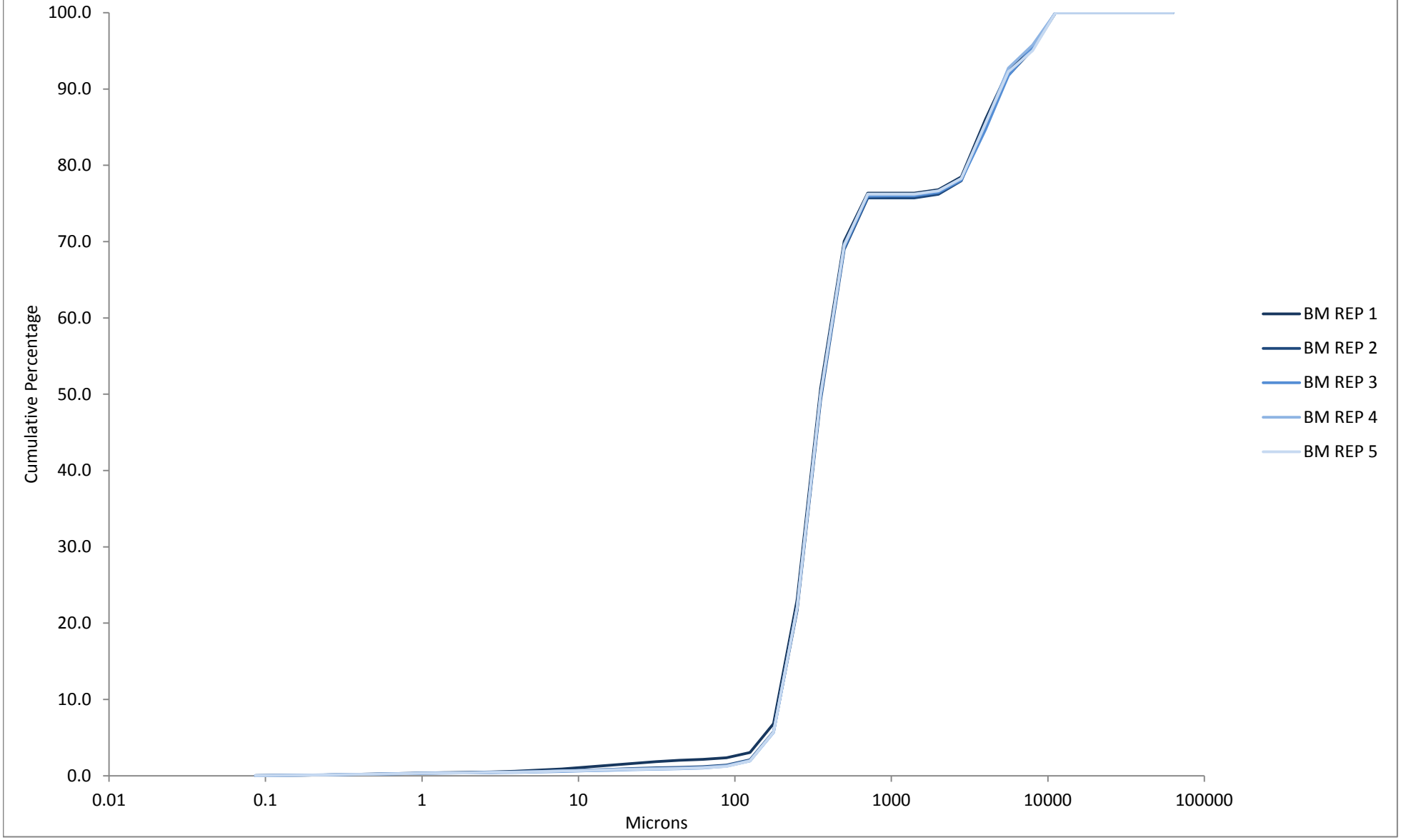
ISO 133020 defines good reproducibility when: COV is <3% for D50
COV is <5% for D10 and D90

All limits double when the D50 is <10microns.

In reality 3% and 5% are low and greater variability is expected for natural sediment samples therefore a maximum of 20% (based on three replicates being measured) will be used as a guide.

The Benchmark laser replicates show good reproducibility.

Figure 3. Particle size distribution curves resulting from analysis of 5 replicate samples of sediment distibuted as PS69 (Benchmark Data).



PARTICIPANT DATA

Table 6. Summary of equipment and methods used by participants and sample summary data for sediment distributed as PS69.

Lab	Equipment Used		Method Used	Chemical Dispersant Used	Peroxide pre-treatment Used	Summary Data			Sediment Description (Post Analysis)
	Sieves	Laser				% Gravel	% Sand	% Mud	
Benchmark Average	YES	YES	NMBAQC	NO	NO	23.91	74.89	1.21	Gravelly Sand
PSA_2501	YES	NO	OTHER	NO	NO	24.1	75.8	0.2	Gravelly Sand
PSA_2502	YES	YES	NMBAQC	NO	NO	25.06	74.94	0.00	Gravelly Sand
PSA_2503	YES	YES	OTHER	NO	NO	24.20	75.80	0.00	Gravelly Sand
PSA_2504	YES	YES	NMBAQC	NO	NO	25.07	74.93	0.00	Gravelly Sand
PSA_2505	YES	YES	NMBAQC	NO	NO	24.38	75.62	0.00	Gravelly Sand
PSA_2506	YES	YES	NMBAQC	NO	NO	23.59	75.33	1.08	Gravelly Sand
PSA_2507	YES	YES	NMBAQC	NO	NO	27.10	71.40	1.50	Gravelly Sand
PSA_2508	YES	YES	NMBAQC	NO	NO	24.45	75.55	0.00	Gravelly Sand
PSA_2509	YES	YES	NMBAQC	NO	NO	23.8	73.1	3.1	Gravelly Sand
PSA_2510	YES	YES	NMBAQC	NO	NO	23.5	75.6	0.9	Gravelly Sand
PSA_2511	YES	YES	NMBAQC	NO	NO	23.99	74.97	1.03	Gravelly Sand
PSA_2512	YES	YES	NMBAQC	NO	NO	25.10	74.90	0.00	Gravelly Sand
PSA_2513	YES	YES	NMBAQC	NO	NO	23.65	75.35	1.00	Gravelly Sand
PSA_2514	YES	YES	NMBAQC	NO	NO	24.27	74.75	0.98	Gravelly Sand
PSA_2515	YES	YES	NMBAQC	NO	NO	24	76	0	Gravelly Sand
PSA_2516	YES	YES	NMBAQC	NO	NO	24.11	75.89	0.00	Gravelly Sand

NB: Decimal places as supplied by participant.
- Data not provided.

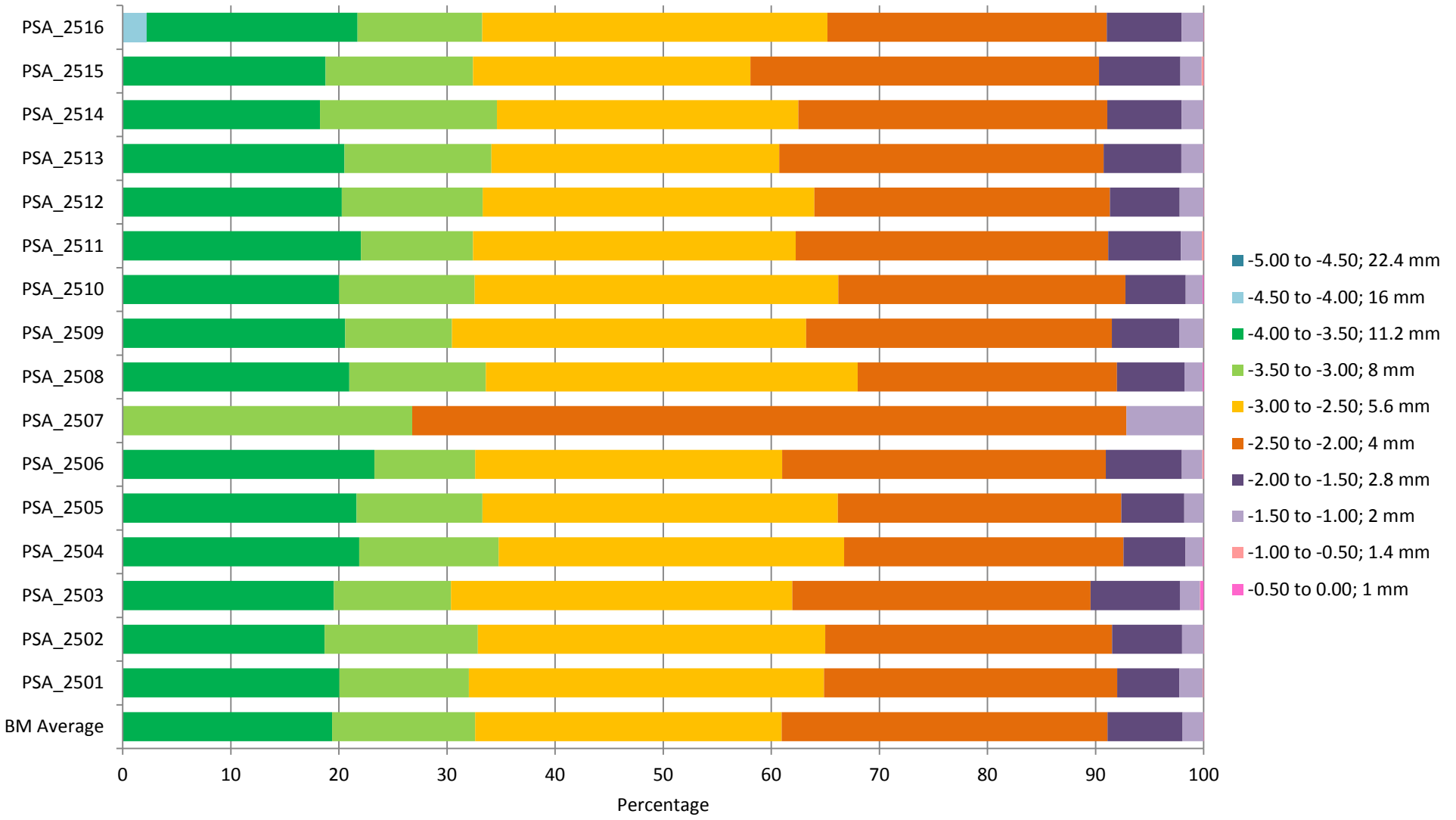
PARTICIPANT DATA

Table 7. Raw sieve data (weight in grams) provided by participants for sediment distributed as PS69.

		Participant															
Phi interval (explicit) + sieve mesh		Benchmark Average	PSA_2501	PSA_2502	PSA_2503	PSA_2504	PSA_2505	PSA_2506	PSA_2507	PSA_2508	PSA_2509	PSA_2510	PSA_2511	PSA_2512	PSA_2513	PSA_2514	PSA_2515	PSA_2516
-6.50 to -6.00; 63 mm		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-6.00 to -5.50; 45 mm		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-5.50 to -5.00; 31.5 mm		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-5.00 to -4.50; 22.4 mm		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-4.50 to -4.00; 16 mm		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.57
-4.00 to -3.50; 11.2 mm		46.09	50.27	44.273	49.17	54.87	53.01	51.52	0.00	48.48	51.02	49.86	50.88	49.34	47.56	44.26	46.78	49.04
-3.50 to -3.00; 8 mm		31.53	30.04	33.645	27.33	32.35	28.53	20.61	22.08	29.22	24.46	31.28	23.89	31.78	31.53	39.69	33.98	28.96
-3.00 to -2.50; 5.6 mm		67.48	82.39	76.169	79.53	80.18	80.53	62.85	-	79.60	81.17	83.84	68.95	74.73	61.79	67.58	64.00	80.29
-2.50 to -2.00; 4 mm		71.73	67.96	62.983	69.50	64.77	64.21	66.22	54.47	55.44	70.11	66.19	66.74	66.61	69.58	69.25	80.37	64.97
-2.00 to -1.50; 2.8 mm		16.54	14.49	15.309	20.80	14.42	14.27	15.57	-	14.49	15.43	13.89	15.49	15.72	16.72	16.68	18.78	17.36
-1.50 to -1.00; 2 mm		4.56	5.44	4.666	4.70	4.02	4.42	4.24	5.87	3.88	5.56	3.90	4.52	5.34	4.68	4.92	4.90	5.10
-1.00 to -0.50; 1.4 mm		0.04	0.08	0.057	0.03	0.02	0.00	0.23	-	0.01	0.07	0.01	0.34	0.08	0.07	0.03	0.43	0.04
-0.50 to 0.00; 1 mm		0.03	0.08	0.033	0.80	0.17	0.00	0.01	0.02	0.20	0.00	0.21	0.01	0.01	0.02	0.02	0.02	0.02
Total		238.0	250.7	237.1	251.9	250.8	245.0	221.3	82.4	231.3	247.8	249.2	230.8	243.6	232.0	242.4	249.3	251.4
Summary Data																		
< 0.00; >1 mm		238.00	250.74	237.14	251.87	250.80	244.97	221.25	82.44	231.32	247.82	249.18	230.82	243.61	231.95	242.43	249.26	251.35
> 0.00; <1 mm	Base pan	0.04	1.78	0.73	-	1.01	0.86	0.69	0.40	0.68	1.37	2.95	0.73	0.32	0.33	0.03	0.34	0.38
	Oven dried	757.19	788.39	708.20	784.10	747.90	759.10	714.85	221.82	713.41	791.41	805.75	729.10	726.59	748.26	756.11	786.32	790.60
Total Sample Weight		995.2	1040.9	946.1	1036.0	999.7	1004.9	936.8	304.7	945.4	1040.6	1057.9	960.7	970.5	980.5	998.6	1035.9	1042.3

- No data provided.

Figure 4. Final sieve data (in percentages) provided by each participant and the Benchmark Average for sediment distributed as PS69.



PARTICIPANT DATA

Table 8. Summary of final laser data for the participants for sediment distributed as PS69.

Phi interval (explicit) + sieve mesh	BM Average	PSA_2501*	PSA_2502	PSA_2503	PSA_2504	PSA_2505	PSA_2506	PSA_2507	PSA_2508
0.00 to 0.50; (707 µm)	8.68	4.07	12.55	6.42	32.40	7.69	8.20	31.53	9.40
0.50 to 1.00; (500 µm)	25.68	13.43	25.69	23.13	39.74	25.34	26.80	37.38	26.96
1.00 to 1.50; (353.6 µm)	36.54	34.26	31.84	34.97	22.97	35.36	35.99	18.61	35.29
1.50 to 2.00; (250 µm)	21.30	34.70	22.35	26.76	4.86	24.17	22.52	9.43	22.36
2.00 to 2.50; (176.8 µm)	4.91	11.34	7.32	8.18	0.02	7.06	4.95	0.76	5.77
2.50 to 3.00; (125 µm)	0.90	1.75	0.25	0.55	0.00	0.37	0.13	0.02	0.21
3.00 to 3.50; (88.39 µm)	0.29	0.19	0.00	0.00	0.00	0.00	0.00	0.03	0.00
3.50 to 4.00; (62.5 µm)	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0.14	0.00
4.00 to 4.50; (44.19 µm)	0.12	0.23	0.00	0.00	0.00	0.00	0.00	0.22	0.00
4.50 to 5.00; (31.25 µm)	0.14		0.00	0.00	0.00	0.00	0.05	0.38	0.00
5.00 to 5.50; (22.097 µm)	0.15		0.00	0.00	0.00	0.00	0.27	0.26	0.00
5.50 to 6.00; (15.625 µm)	0.15		0.00	0.00	0.00	0.00	0.29	0.24	0.00
6.00 to 6.50; (11.049 µm)	0.14		0.00	0.00	0.00	0.00	0.24	0.11	0.00
6.50 to 7.00; (7.813 µm)	0.12		0.00	0.00	0.00	0.00	0.25	0.13	0.00
7.00 to 7.50; (5.524 µm)	0.10		0.00	0.00	0.00	0.00	0.25	0.10	0.00
7.50 to 8.00; (3.906 µm)	0.07		0.00	0.00	0.00	0.00	0.07	0.15	0.00
8.00 to 8.50; (2.762 µm)	0.05		0.00	0.00	0.00	0.00	0.00	0.11	0.00
8.50 to 9.00; (1.953 µm)	0.05		0.00	0.00	0.00	0.00	0.00	0.10	0.00
9.00 to 9.50; (1.381 µm)	0.06		0.00	0.00	0.00	0.00	0.00	0.10	0.00
9.50 to 10.00; (0.977 µm)	0.07		0.00	0.00	0.00	0.00	0.00	0.06	0.00
10.00 to 10.50; (0.691 µm)	0.07		0.00	0.00	0.00	0.00	0.00	0.05	0.00
10.50 to 11.00; (0.488 µm)	0.07		0.00	0.00	0.00	0.00	0.00	0.03	0.00
11.00 to 11.50; (0.345 µm)	0.06		0.00	0.00	0.00	0.00	0.00	0.02	0.00
11.50 to 12.00; (0.244 µm)	0.05		0.00	0.00	0.00	0.00	0.00	0.01	0.00
12.00 to 12.50; (0.173 µm)	0.04		0.00	0.00	0.00	0.00	0.00	0.01	0.00
12.50 to 13.00; (0.122 µm)	0.03		0.00	0.00	0.00	0.00	0.00	0.01	0.00
13.00 to 13.50; (0.086 µm)	0.02		0.00	0.00	0.00	0.00	0.00	0.01	0.00
13.50 to 14.00; (0.061 µm)	0.01		0.00		0.00	0.00	0.00		0.00
14.00 to 14.50; (0.043 µm)	0.00		0.00		0.00	0.00	0.00		0.00
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

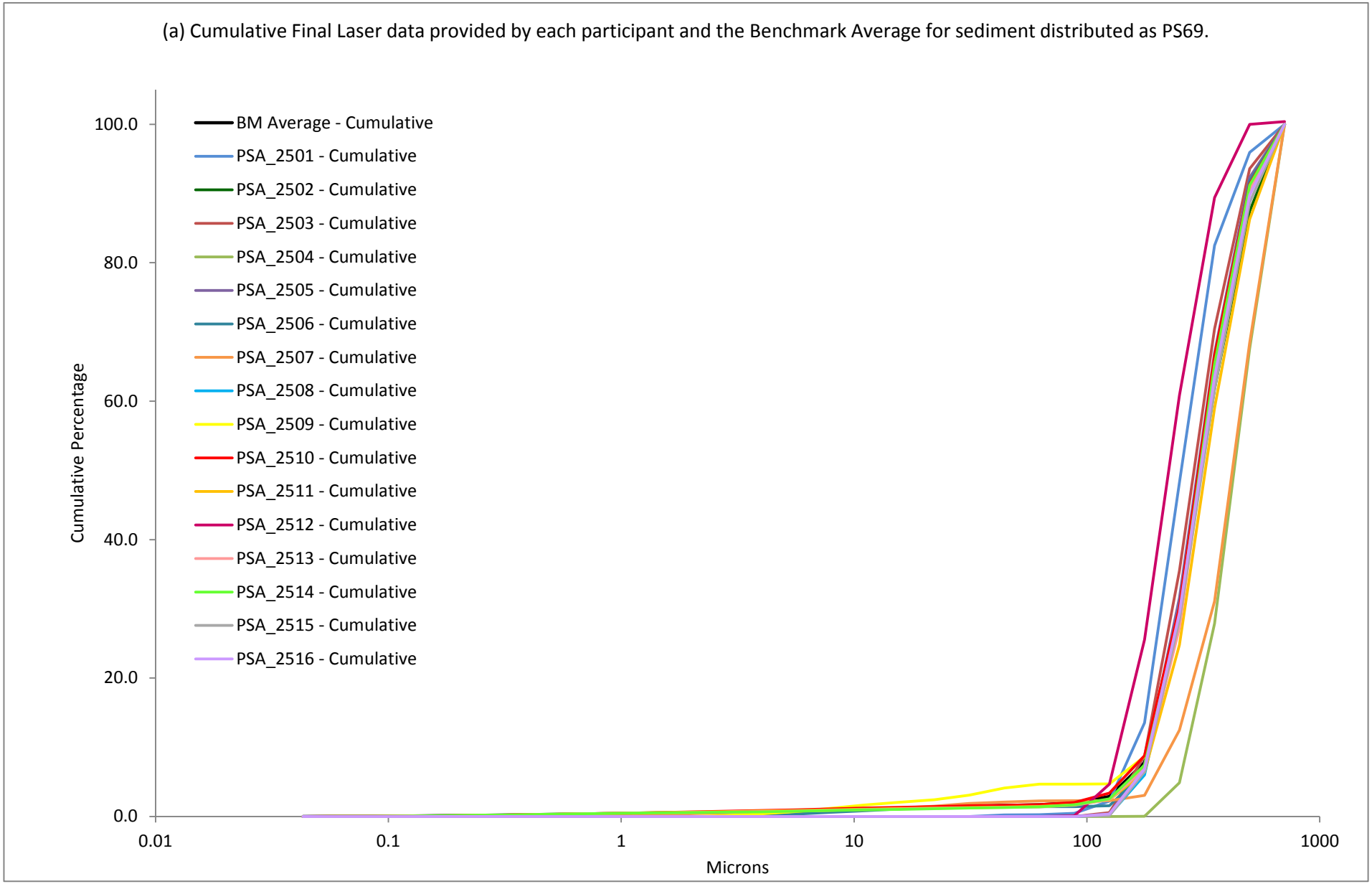
* Participant does not have a laser; sieve weights have been converted to percentages for comparison.

PARTICIPANT DATA

Table 8. Summary of final laser data for the participants for sediment distributed as PS69.

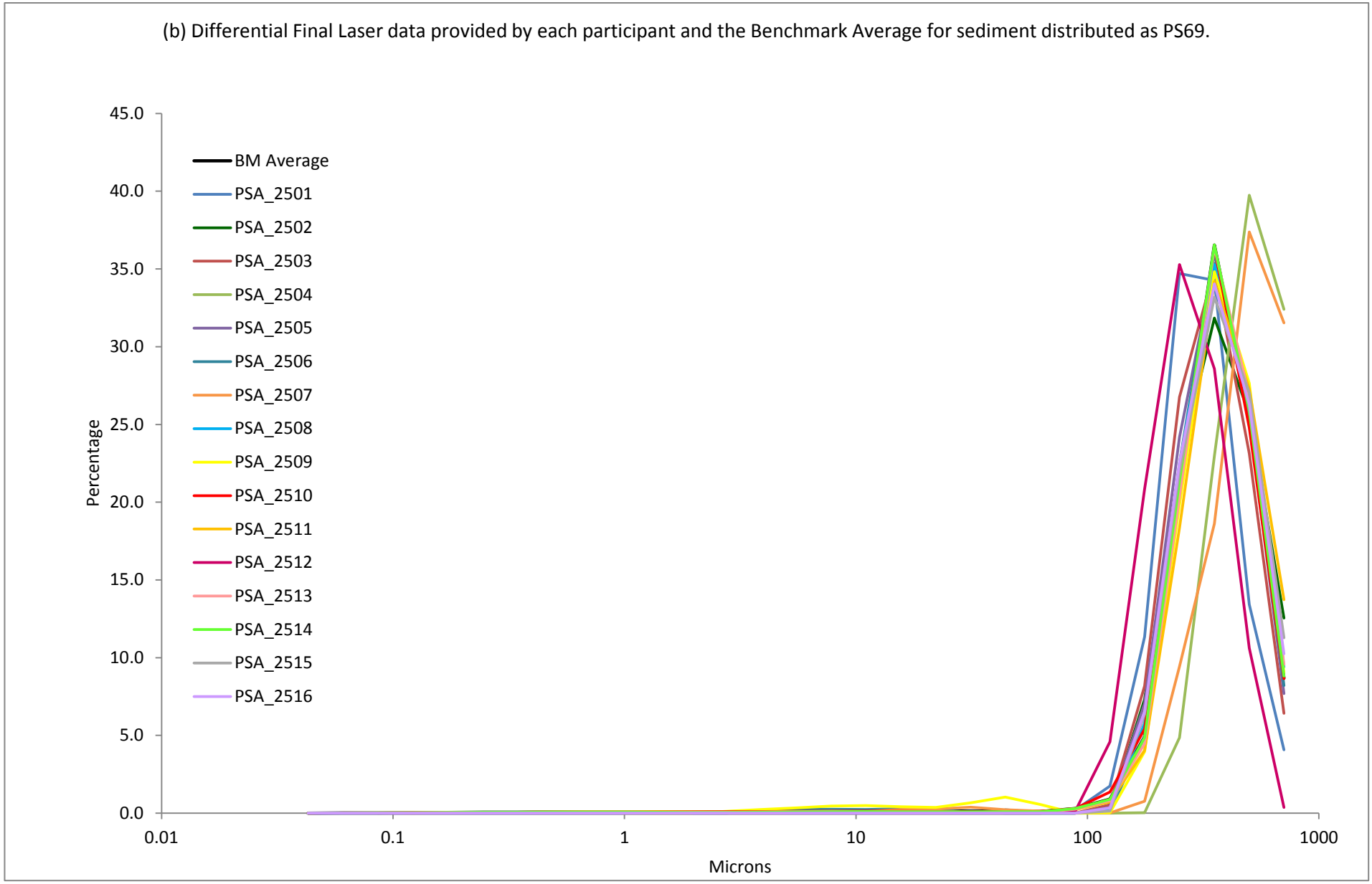
Phi interval (explicit) + sieve mesh	BM Average	PSA_2509	PSA_2510	PSA_2511	PSA_2512	PSA_2513	PSA_2514	PSA_2515	PSA_2516
0.00 to 0.50; (707 µm)	8.68	9.06	8.65	13.73	0.37	9.56	8.81	11.28	10.24
0.50 to 1.00; (500 µm)	25.68	27.64	24.79	27.28	10.61	26.80	25.86	27.04	26.27
1.00 to 1.50; (353.6 µm)	36.54	34.83	36.37	34.19	28.57	36.38	36.55	33.19	34.05
1.50 to 2.00; (250 µm)	21.30	19.82	21.40	18.35	35.29	20.36	21.35	22.00	22.56
2.00 to 2.50; (176.8 µm)	4.91	3.96	5.43	4.05	20.85	4.47	4.86	6.35	6.53
2.50 to 3.00; (125 µm)	0.90	0.03	1.35	0.72	4.59	0.81	0.88	0.13	0.34
3.00 to 3.50; (88.39 µm)	0.29	0.00	0.29	0.22	0.10	0.24	0.29	0.00	0.00
3.50 to 4.00; (62.5 µm)	0.11	0.56	0.12	0.10	0.00	0.07	0.09	0.00	0.00
4.00 to 4.50; (44.19 µm)	0.12	1.03	0.06	0.08	0.00	0.07	0.08	0.00	0.00
4.50 to 5.00; (31.25 µm)	0.14	0.66	0.11	0.06	0.00	0.07	0.09	0.00	0.00
5.00 to 5.50; (22.097 µm)	0.15	0.37	0.10	0.07	0.00	0.08	0.09	0.00	0.00
5.50 to 6.00; (15.625 µm)	0.15	0.41	0.12	0.08	0.00	0.09	0.10	0.00	0.00
6.00 to 6.50; (11.049 µm)	0.14	0.49	0.13	0.09	0.00	0.10	0.10	0.00	0.00
6.50 to 7.00; (7.813 µm)	0.12	0.46	0.12	0.10	0.00	0.10	0.09	0.00	0.00
7.00 to 7.50; (5.524 µm)	0.10	0.34	0.11	0.10	0.00	0.09	0.08	0.00	0.00
7.50 to 8.00; (3.906 µm)	0.07	0.24	0.11	0.08	0.00	0.08	0.06	0.00	0.00
8.00 to 8.50; (2.762 µm)	0.05	0.11	0.10	0.07	0.00	0.06	0.05	0.00	0.00
8.50 to 9.00; (1.953 µm)	0.05	0.00	0.09	0.07	0.00	0.06	0.05	0.00	0.00
9.00 to 9.50; (1.381 µm)	0.06	0.00	0.09	0.08	0.00	0.06	0.06	0.00	0.00
9.50 to 10.00; (0.977 µm)	0.07	0.00	0.09	0.09	0.00	0.07	0.07	0.00	0.00
10.00 to 10.50; (0.691 µm)	0.07		0.08	0.09	0.00	0.08	0.07	0.00	0.00
10.50 to 11.00; (0.488 µm)	0.07		0.08	0.08	0.00	0.07	0.07	0.00	0.00
11.00 to 11.50; (0.345 µm)	0.06		0.07	0.06	0.00	0.06	0.06	0.00	0.00
11.50 to 12.00; (0.244 µm)	0.05		0.05	0.05	0.00	0.05	0.06	0.00	0.00
12.00 to 12.50; (0.173 µm)	0.04		0.04	0.04	0.00	0.04	0.05	0.00	0.00
12.50 to 13.00; (0.122 µm)	0.03		0.03	0.03	0.00	0.03	0.04	0.00	0.00
13.00 to 13.50; (0.086 µm)	0.02		0.02	0.02	0.00	0.02	0.02	0.00	0.00
13.50 to 14.00; (0.061 µm)	0.01		0.01	0.01	0.00	0.01	0.01	0.00	0.00
14.00 to 14.50; (0.043 µm)	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	100.00	100.00	100.37	100.00	100.00	100.00	100.00

Figure 5. Final laser data provided by each participant and the Benchmark Average for sediment distributed as PS69, shown as (a) cumulative and (b) differential.



NMBAQC Particle Size Analysis
2018/19 - PS69

Figure 5. Final laser data provided by each participant and the Benchmark Average for sediment distributed as PS69, shown as (a) cumulative and (b) differential.



NMBAQC Particle Size Analysis
2018/19 - PS69

Figure 6. Particle size distribution curves from all participating laboratories and the Benchmark Average for sediment distributed as PS69.

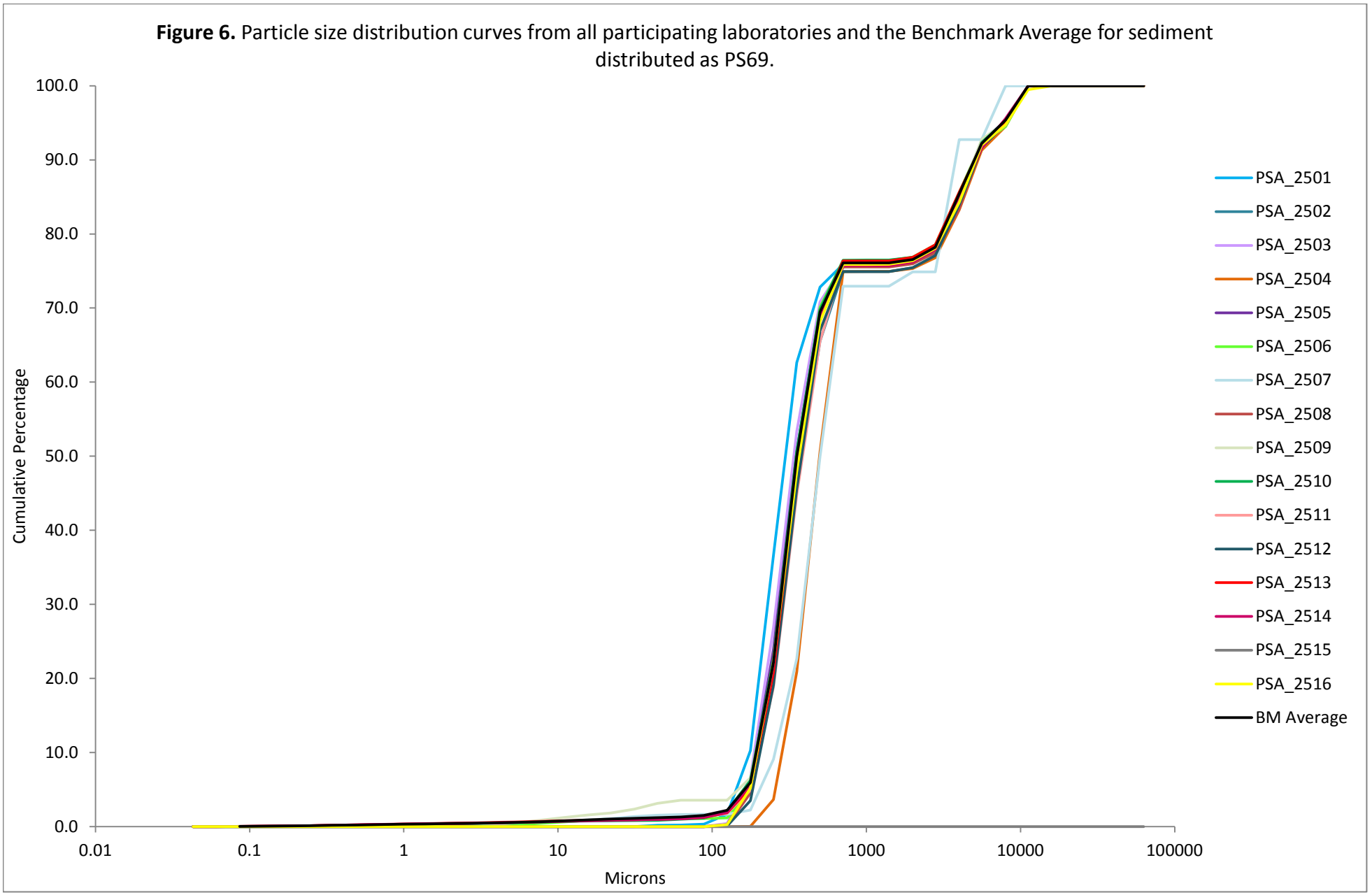
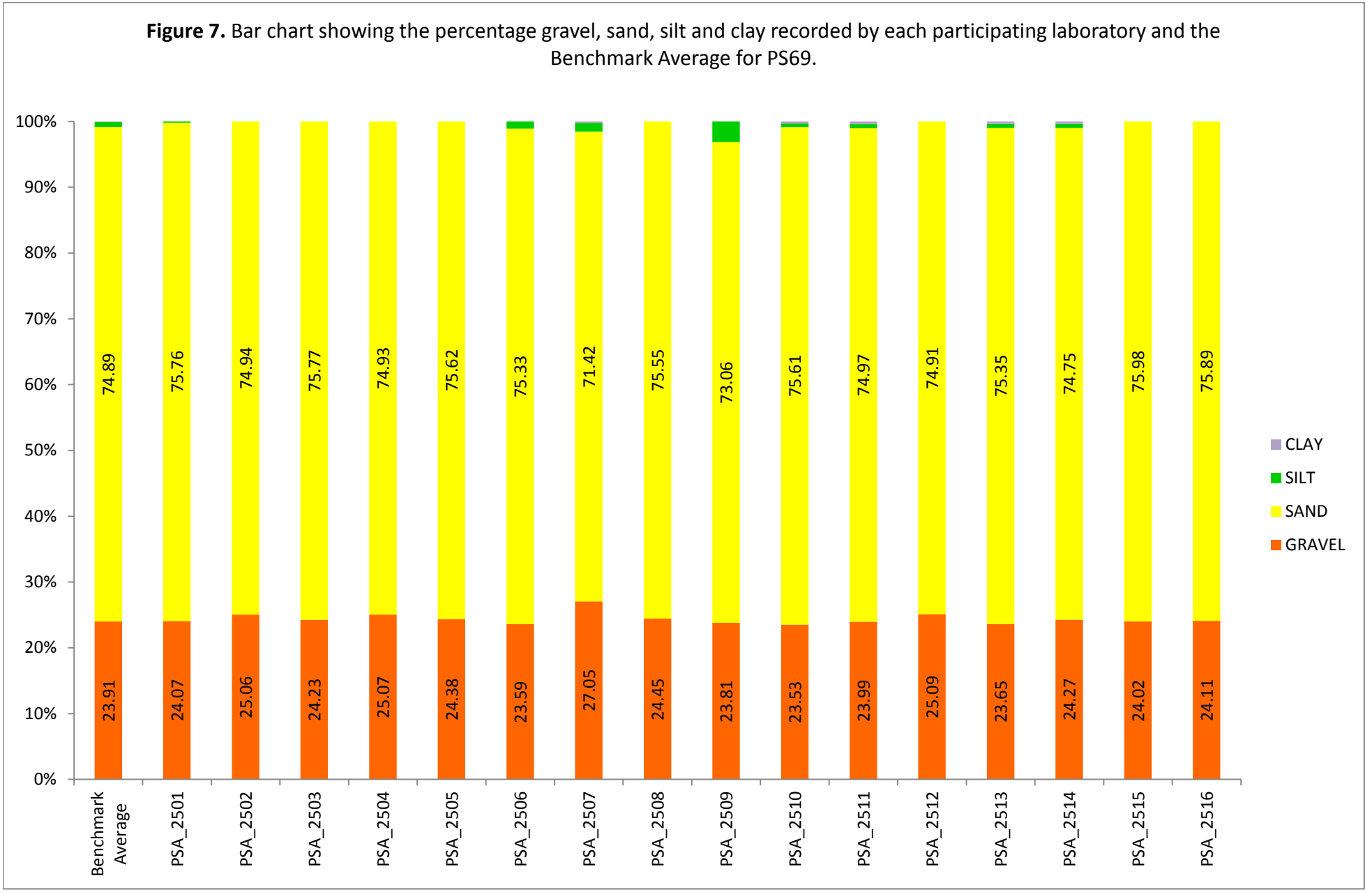


Figure 7. Bar chart showing the percentage gravel, sand, silt and clay recorded by each participating laboratory and the Benchmark Average for PS69.



APPENDICES

APPENDIX 1. Benchmark laser replicate data for sediment distributed as PS69.

	Replicate Sample 1								
	Rep 1			Rep 2			Rep 3		
	Run 1a	Run 1b	Run 1c	Run 2a	Run 2b	Run 2c	Run 3a	Run 3b	Run 3c
0.00 to 0.50; (707 µm)	8.023	8.190	8.366	8.427	7.876	8.362	8.060	8.274	8.725
0.50 to 1.00; (500 µm)	25.284	25.020	24.627	25.379	25.339	25.066	25.760	25.326	25.231
1.00 to 1.50; (353.6 µm)	36.214	35.981	35.565	36.438	36.708	36.384	36.782	36.810	36.350
1.50 to 2.00; (250 µm)	20.627	20.411	20.304	21.730	21.706	21.513	21.611	21.567	21.477
2.00 to 2.50; (176.8 µm)	4.842	4.686	4.715	5.061	5.013	4.979	5.041	5.027	5.018
2.50 to 3.00; (125 µm)	0.879	0.883	0.866	0.880	0.906	0.922	0.923	0.937	0.922
3.00 to 3.50; (88.39 µm)	0.304	0.297	0.309	0.315	0.317	0.306	0.295	0.296	0.289
3.50 to 4.00; (62.5 µm)	0.224	0.234	0.260	0.118	0.129	0.142	0.121	0.129	0.138
4.00 to 4.50; (44.19 µm)	0.314	0.355	0.400	0.134	0.161	0.184	0.116	0.133	0.150
4.50 to 5.00; (31.25 µm)	0.461	0.558	0.652	0.160	0.208	0.252	0.125	0.154	0.181
5.00 to 5.50; (22.097 µm)	0.500	0.611	0.719	0.169	0.225	0.277	0.128	0.161	0.194
5.50 to 6.00; (15.625 µm)	0.480	0.596	0.710	0.165	0.219	0.271	0.124	0.158	0.192
6.00 to 6.50; (11.049 µm)	0.414	0.515	0.616	0.148	0.193	0.237	0.118	0.145	0.173
6.50 to 7.00; (7.813 µm)	0.311	0.384	0.455	0.125	0.158	0.189	0.104	0.124	0.144
7.00 to 7.50; (5.524 µm)	0.225	0.275	0.322	0.099	0.122	0.144	0.086	0.101	0.115
7.50 to 8.00; (3.906 µm)	0.158	0.189	0.219	0.072	0.087	0.101	0.065	0.076	0.086
8.00 to 8.50; (2.762 µm)	0.105	0.120	0.137	0.050	0.060	0.068	0.048	0.055	0.061
8.50 to 9.00; (1.953 µm)	0.084	0.090	0.101	0.045	0.052	0.058	0.044	0.049	0.054
9.00 to 9.50; (1.381 µm)	0.089	0.094	0.105	0.054	0.060	0.066	0.054	0.059	0.063
9.50 to 10.00; (0.977 µm)	0.096	0.102	0.112	0.065	0.071	0.077	0.064	0.069	0.074
10.00 to 10.50; (0.691 µm	0.089	0.097	0.105	0.069	0.075	0.080	0.066	0.071	0.075
10.50 to 11.00; (0.488 µm	0.076	0.084	0.090	0.067	0.072	0.076	0.062	0.066	0.069
11.00 to 11.50; (0.345 µm	0.062	0.069	0.074	0.062	0.065	0.068	0.056	0.059	0.061
11.50 to 12.00; (0.244 µm	0.049	0.055	0.060	0.054	0.056	0.058	0.048	0.050	0.051
12.00 to 12.50; (0.173 µm	0.036	0.041	0.045	0.044	0.045	0.046	0.038	0.040	0.040
12.50 to 13.00; (0.122 µm	0.027	0.031	0.034	0.035	0.036	0.036	0.030	0.031	0.031
13.00 to 13.50; (0.086 µm	0.017	0.020	0.022	0.024	0.024	0.024	0.020	0.021	0.021
13.50 to 14.00; (0.061 µm	0.008	0.009	0.010	0.012	0.012	0.012	0.010	0.010	0.010
14.00 to 14.50; (0.043 µm	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

d10	250.622	242.767	229.937	257.998	256.591	255.395	259.035	258.073	257.301
d50	426.203	425.366	423.663	428.649	426.750	427.010	429.322	428.487	429.105
d90	688.104	689.503	690.931	691.982	686.766	691.172	688.789	690.507	694.734

	Mean	StDev	COV
d10	251.969	9.727	3.861
d50	427.173	1.904	0.446
d90	690.277	2.343	0.339

APPENDIX 1. Benchmark laser replicate data for sediment distributed as PS69.

	Replicate Sample 2								
	Rep 1			Rep 2			Rep 3		
	Run 1a	Run 1b	Run 1c	Run 2a	Run 2b	Run 2c	Run 3a	Run 3b	Run 3c
0.00 to 0.50; (707 µm)	8.624	8.819	8.716	9.081	8.614	8.650	9.455	9.009	8.883
0.50 to 1.00; (500 µm)	25.569	25.449	25.272	26.595	26.518	26.303	26.147	26.390	26.160
1.00 to 1.50; (353.6 µm)	36.339	36.236	36.424	36.483	36.768	36.787	36.340	36.432	36.593
1.50 to 2.00; (250 µm)	21.757	21.673	21.509	20.660	20.787	20.818	20.539	20.537	20.534
2.00 to 2.50; (176.8 µm)	5.125	5.063	5.095	4.779	4.748	4.744	4.697	4.701	4.727
2.50 to 3.00; (125 µm)	0.897	0.903	0.960	0.911	0.920	0.918	0.914	0.919	0.930
3.00 to 3.50; (88.39 µm)	0.314	0.307	0.285	0.268	0.259	0.256	0.255	0.248	0.245
3.50 to 4.00; (62.5 µm)	0.105	0.110	0.126	0.089	0.092	0.098	0.104	0.107	0.113
4.00 to 4.50; (44.19 µm)	0.089	0.101	0.113	0.080	0.088	0.097	0.103	0.110	0.119
4.50 to 5.00; (31.25 µm)	0.092	0.112	0.136	0.085	0.102	0.117	0.130	0.140	0.156
5.00 to 5.50; (22.097 µm)	0.108	0.131	0.157	0.089	0.109	0.126	0.142	0.156	0.174
5.50 to 6.00; (15.625 µm)	0.110	0.133	0.158	0.090	0.110	0.128	0.144	0.159	0.179
6.00 to 6.50; (11.049 µm)	0.105	0.125	0.146	0.088	0.106	0.120	0.135	0.148	0.165
6.50 to 7.00; (7.813 µm)	0.093	0.108	0.122	0.080	0.094	0.105	0.117	0.127	0.141
7.00 to 7.50; (5.524 µm)	0.075	0.087	0.097	0.068	0.080	0.089	0.098	0.106	0.118
7.50 to 8.00; (3.906 µm)	0.055	0.064	0.072	0.052	0.062	0.069	0.076	0.083	0.092
8.00 to 8.50; (2.762 µm)	0.040	0.046	0.053	0.039	0.046	0.051	0.056	0.060	0.067
8.50 to 9.00; (1.953 µm)	0.039	0.044	0.050	0.038	0.043	0.047	0.052	0.055	0.060
9.00 to 9.50; (1.381 µm)	0.050	0.054	0.061	0.049	0.054	0.058	0.062	0.066	0.071
9.50 to 10.00; (0.977 µm)	0.061	0.065	0.072	0.059	0.064	0.069	0.073	0.077	0.082
10.00 to 10.50; (0.691 µm	0.065	0.070	0.075	0.062	0.067	0.071	0.074	0.078	0.083
10.50 to 11.00; (0.488 µm	0.064	0.068	0.071	0.059	0.063	0.066	0.069	0.072	0.076
11.00 to 11.50; (0.345 µm	0.059	0.062	0.063	0.053	0.056	0.059	0.061	0.063	0.066
11.50 to 12.00; (0.244 µm	0.052	0.054	0.054	0.045	0.048	0.050	0.051	0.053	0.056
12.00 to 12.50; (0.173 µm	0.042	0.044	0.043	0.037	0.039	0.040	0.041	0.041	0.043
12.50 to 13.00; (0.122 µm	0.033	0.035	0.033	0.029	0.030	0.031	0.031	0.032	0.033
13.00 to 13.50; (0.086 µm	0.023	0.024	0.022	0.020	0.021	0.021	0.021	0.021	0.022
13.50 to 14.00; (0.061 µm	0.011	0.011	0.011	0.010	0.010	0.010	0.010	0.010	0.011
14.00 to 14.50; (0.043 µm	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

d10	259.289	258.858	257.865	262.114	261.460	260.881	260.694	260.195	259.323
d50	430.055	430.178	429.369	436.414	434.642	433.939	435.874	435.180	433.979
d90	693.940	695.729	694.669	698.587	694.316	694.540	701.914	697.858	696.616

	Mean	StDev	COV
d10	260.076	1.354	0.521
d50	433.292	2.699	0.623
d90	696.463	2.613	0.375

APPENDIX 1. Benchmark laser replicate data for sediment distributed as PS69.

	Replicate Sample 3								
	Rep 1			Rep 2			Rep 3		
	Run 1a	Run 1b	Run 1c	Run 2a	Run 2b	Run 2c	Run 3a	Run 3b	Run 3c
0.00 to 0.50; (707 µm)	8.978	9.413	8.717	8.451	8.711	8.748	8.975	9.076	8.825
0.50 to 1.00; (500 µm)	25.969	26.152	25.661	25.590	25.208	25.282	26.087	25.872	25.928
1.00 to 1.50; (353.6 µm)	36.209	35.896	36.688	36.665	36.700	36.756	36.179	36.288	36.435
1.50 to 2.00; (250 µm)	21.459	21.179	21.379	21.723	21.801	21.508	21.372	21.308	21.321
2.00 to 2.50; (176.8 µm)	4.951	4.853	4.861	5.117	5.043	5.040	4.977	4.935	4.881
2.50 to 3.00; (125 µm)	0.832	0.826	0.924	0.934	0.923	0.961	0.862	0.885	0.881
3.00 to 3.50; (88.39 µm)	0.335	0.327	0.339	0.308	0.305	0.278	0.333	0.330	0.324
3.50 to 4.00; (62.5 µm)	0.095	0.094	0.094	0.096	0.098	0.105	0.093	0.095	0.096
4.00 to 4.50; (44.19 µm)	0.104	0.108	0.105	0.085	0.088	0.095	0.082	0.087	0.091
4.50 to 5.00; (31.25 µm)	0.081	0.090	0.097	0.083	0.093	0.108	0.081	0.089	0.097
5.00 to 5.50; (22.097 µm)	0.083	0.094	0.107	0.085	0.095	0.111	0.082	0.090	0.101
5.50 to 6.00; (15.625 µm)	0.094	0.105	0.118	0.086	0.097	0.114	0.084	0.094	0.104
6.00 to 6.50; (11.049 µm)	0.092	0.101	0.111	0.084	0.093	0.107	0.084	0.093	0.102
6.50 to 7.00; (7.813 µm)	0.081	0.088	0.095	0.076	0.083	0.093	0.077	0.084	0.091
7.00 to 7.50; (5.524 µm)	0.066	0.072	0.078	0.064	0.070	0.080	0.064	0.070	0.076
7.50 to 8.00; (3.906 µm)	0.049	0.054	0.060	0.049	0.055	0.063	0.048	0.054	0.059
8.00 to 8.50; (2.762 µm)	0.037	0.040	0.046	0.036	0.041	0.047	0.036	0.040	0.045
8.50 to 9.00; (1.953 µm)	0.036	0.039	0.046	0.037	0.040	0.046	0.037	0.040	0.044
9.00 to 9.50; (1.381 µm)	0.046	0.050	0.057	0.048	0.052	0.057	0.048	0.051	0.055
9.50 to 10.00; (0.977 µm)	0.058	0.061	0.067	0.059	0.063	0.068	0.059	0.063	0.067
10.00 to 10.50; (0.691 µm	0.063	0.066	0.070	0.063	0.066	0.069	0.063	0.067	0.071
10.50 to 11.00; (0.488 µm	0.062	0.065	0.066	0.060	0.063	0.064	0.062	0.066	0.069
11.00 to 11.50; (0.345 µm	0.058	0.060	0.059	0.055	0.057	0.056	0.057	0.060	0.063
11.50 to 12.00; (0.244 µm	0.051	0.053	0.050	0.047	0.049	0.047	0.050	0.053	0.055
12.00 to 12.50; (0.173 µm	0.042	0.043	0.040	0.038	0.039	0.037	0.041	0.043	0.045
12.50 to 13.00; (0.122 µm	0.033	0.034	0.031	0.030	0.031	0.029	0.032	0.034	0.035
13.00 to 13.50; (0.086 µm	0.023	0.023	0.021	0.021	0.021	0.019	0.022	0.023	0.024
13.50 to 14.00; (0.061 µm	0.011	0.011	0.010	0.010	0.010	0.009	0.011	0.011	0.012
14.00 to 14.50; (0.043 µm	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

d10	260.788	261.042	260.116	259.880	259.813	259.415	260.824	260.567	260.413
d50	432.933	434.976	431.426	430.011	429.582	430.127	433.357	433.073	432.522
d90	697.424	701.524	694.864	692.328	694.591	694.975	697.442	698.306	695.985

	Mean	StDev	COV
d10	260.318	0.545	0.209
d50	432.001	1.824	0.422
d90	696.382	2.656	0.381

APPENDIX 1. Benchmark laser replicate data for sediment distributed as PS69.

	Replicate Sample 4								
	Rep 1			Rep 2			Rep 3		
	Run 1a	Run 1b	Run 1c	Run 2a	Run 2b	Run 2c	Run 3a	Run 3b	Run 3c
0.00 to 0.50; (707 µm)	8.753	9.028	8.940	8.411	8.335	8.272	8.975	9.076	8.825
0.50 to 1.00; (500 µm)	26.281	26.091	26.105	25.622	25.851	25.617	26.087	25.872	25.928
1.00 to 1.50; (353.6 µm)	36.685	36.767	36.693	36.731	36.712	36.979	36.179	36.288	36.435
1.50 to 2.00; (250 µm)	21.252	21.006	21.073	21.776	21.603	21.538	21.372	21.308	21.321
2.00 to 2.50; (176.8 µm)	4.671	4.628	4.623	5.003	4.963	4.946	4.977	4.935	4.881
2.50 to 3.00; (125 µm)	0.790	0.855	0.823	0.880	0.894	0.933	0.862	0.885	0.881
3.00 to 3.50; (88.39 µm)	0.299	0.263	0.284	0.323	0.311	0.306	0.333	0.330	0.324
3.50 to 4.00; (62.5 µm)	0.076	0.083	0.082	0.107	0.104	0.081	0.093	0.095	0.096
4.00 to 4.50; (44.19 µm)	0.081	0.087	0.091	0.087	0.090	0.114	0.082	0.087	0.091
4.50 to 5.00; (31.25 µm)	0.085	0.096	0.102	0.072	0.077	0.104	0.081	0.089	0.097
5.00 to 5.50; (22.097 µm)	0.085	0.098	0.104	0.083	0.090	0.096	0.082	0.090	0.101
5.50 to 6.00; (15.625 µm)	0.091	0.103	0.110	0.086	0.093	0.099	0.084	0.094	0.104
6.00 to 6.50; (11.049 µm)	0.091	0.101	0.109	0.085	0.092	0.098	0.084	0.093	0.102
6.50 to 7.00; (7.813 µm)	0.082	0.090	0.097	0.079	0.085	0.090	0.077	0.084	0.091
7.00 to 7.50; (5.524 µm)	0.069	0.076	0.082	0.066	0.072	0.077	0.064	0.070	0.076
7.50 to 8.00; (3.906 µm)	0.053	0.060	0.064	0.050	0.056	0.060	0.048	0.054	0.059
8.00 to 8.50; (2.762 µm)	0.041	0.046	0.049	0.038	0.042	0.047	0.036	0.040	0.045
8.50 to 9.00; (1.953 µm)	0.040	0.045	0.047	0.038	0.042	0.047	0.037	0.040	0.044
9.00 to 9.50; (1.381 µm)	0.051	0.056	0.058	0.049	0.053	0.059	0.048	0.051	0.055
9.50 to 10.00; (0.977 µm)	0.062	0.067	0.070	0.061	0.065	0.070	0.059	0.063	0.067
10.00 to 10.50; (0.691 µm	0.067	0.069	0.074	0.065	0.069	0.073	0.063	0.067	0.071
10.50 to 11.00; (0.488 µm	0.066	0.066	0.072	0.064	0.068	0.069	0.062	0.066	0.069
11.00 to 11.50; (0.345 µm	0.061	0.059	0.066	0.059	0.062	0.062	0.057	0.060	0.063
11.50 to 12.00; (0.244 µm	0.053	0.051	0.058	0.052	0.054	0.053	0.050	0.053	0.055
12.00 to 12.50; (0.173 µm	0.043	0.041	0.047	0.042	0.044	0.043	0.041	0.043	0.045
12.50 to 13.00; (0.122 µm	0.034	0.032	0.037	0.033	0.035	0.033	0.032	0.034	0.035
13.00 to 13.50; (0.086 µm	0.024	0.022	0.025	0.023	0.024	0.023	0.022	0.023	0.024
13.50 to 14.00; (0.061 µm	0.012	0.011	0.012	0.011	0.011	0.011	0.011	0.011	0.012
14.00 to 14.50; (0.043 µm	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

d10	262.415	262.224	261.830	260.317	260.238	259.872	260.824	260.567	260.413
d50	434.099	434.586	434.155	430.095	430.683	429.950	433.357	433.073	432.522
d90	695.471	697.936	697.123	691.969	691.399	690.675	697.442	698.306	695.985

	Mean	StDev	COV
d10	260.967	0.940	0.360
d50	432.502	1.813	0.419
d90	695.145	2.998	0.431

APPENDIX 1. Benchmark laser replicate data for sediment distributed as PS69.

	Replicate Sample 5								
	Rep 1			Rep 2			Rep 3		
	Run 1a	Run 1b	Run 1c	Run 2a	Run 2b	Run 2c	Run 3a	Run 3b	Run 3c
0.00 to 0.50; (707 µm)	8.698	8.986	8.590	8.427	8.811	8.678	9.273	9.185	8.921
0.50 to 1.00; (500 µm)	25.743	25.512	25.599	25.646	25.600	25.519	25.545	25.461	25.479
1.00 to 1.50; (353.6 µm)	36.618	36.611	36.906	36.939	36.743	36.964	36.253	36.322	36.611
1.50 to 2.00; (250 µm)	21.567	21.525	21.447	21.449	21.273	21.166	21.490	21.543	21.422
2.00 to 2.50; (176.8 µm)	4.994	4.921	4.915	4.918	4.893	4.884	5.063	5.035	5.010
2.50 to 3.00; (125 µm)	0.907	0.908	0.927	0.928	0.924	0.947	0.903	0.916	0.950
3.00 to 3.50; (88.39 µm)	0.277	0.269	0.263	0.262	0.258	0.246	0.278	0.271	0.252
3.50 to 4.00; (62.5 µm)	0.083	0.085	0.087	0.092	0.092	0.097	0.083	0.082	0.090
4.00 to 4.50; (44.19 µm)	0.072	0.073	0.078	0.081	0.083	0.089	0.072	0.075	0.079
4.50 to 5.00; (31.25 µm)	0.077	0.081	0.087	0.093	0.098	0.109	0.072	0.077	0.086
5.00 to 5.50; (22.097 µm)	0.082	0.089	0.096	0.104	0.109	0.122	0.078	0.083	0.094
5.50 to 6.00; (15.625 µm)	0.084	0.091	0.099	0.106	0.112	0.124	0.083	0.089	0.099
6.00 to 6.50; (11.049 µm)	0.085	0.092	0.099	0.105	0.112	0.123	0.086	0.091	0.102
6.50 to 7.00; (7.813 µm)	0.080	0.086	0.092	0.098	0.103	0.112	0.081	0.086	0.094
7.00 to 7.50; (5.524 µm)	0.069	0.075	0.081	0.086	0.091	0.099	0.070	0.076	0.081
7.50 to 8.00; (3.906 µm)	0.054	0.059	0.064	0.069	0.073	0.081	0.055	0.060	0.065
8.00 to 8.50; (2.762 µm)	0.040	0.044	0.048	0.052	0.055	0.061	0.041	0.045	0.051
8.50 to 9.00; (1.953 µm)	0.039	0.043	0.046	0.049	0.052	0.056	0.040	0.043	0.049
9.00 to 9.50; (1.381 µm)	0.050	0.054	0.057	0.061	0.064	0.069	0.050	0.054	0.060
9.50 to 10.00; (0.977 µm)	0.061	0.064	0.069	0.072	0.076	0.080	0.060	0.064	0.070
10.00 to 10.50; (0.691 µm	0.063	0.067	0.071	0.074	0.078	0.081	0.063	0.067	0.070
10.50 to 11.00; (0.488 µm	0.060	0.063	0.066	0.070	0.073	0.074	0.060	0.064	0.065
11.00 to 11.50; (0.345 µm	0.054	0.056	0.059	0.061	0.064	0.063	0.054	0.057	0.056
11.50 to 12.00; (0.244 µm	0.046	0.048	0.050	0.052	0.054	0.052	0.047	0.049	0.047
12.00 to 12.50; (0.173 µm	0.037	0.038	0.040	0.041	0.043	0.040	0.038	0.039	0.037
12.50 to 13.00; (0.122 µm	0.029	0.030	0.031	0.032	0.033	0.031	0.030	0.031	0.029
13.00 to 13.50; (0.086 µm	0.020	0.020	0.021	0.022	0.022	0.021	0.020	0.021	0.019
13.50 to 14.00; (0.061 µm	0.010	0.010	0.010	0.011	0.011	0.010	0.010	0.010	0.009
14.00 to 14.50; (0.043 µm	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

d10	260.779	260.833	260.487	260.142	260.083	259.716	260.545	260.311	260.041
d50	431.558	431.779	431.033	430.620	431.651	431.168	432.476	431.886	431.380
d90	694.721	697.330	693.635	692.132	695.715	694.425	700.065	699.204	696.701

	Mean	StDev	COV
d10	260.326	0.368	0.141
d50	431.505	0.539	0.125
d90	695.992	2.593	0.373

APPENDIX 2. Gradistat output of size categories based on final merged data provided by each participant and the Benchmark Average for sediment distributed as PS69 (used to create Figure 7).

	BM Average	PSA_2501	PSA_2502	PSA_2503	PSA_2504	PSA_2505	PSA_2506	PSA_2507	PSA_2508	PSA_2509	PSA_2510	PSA_2511	PSA_2512	PSA_2513	PSA_2514	PSA_2515	PSA_2516
VERY COARSE GRAVEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COARSE GRAVEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
MEDIUM GRAVEL	7.80	7.72	8.24	7.38	8.72	8.11	7.70	7.25	8.22	7.25	7.67	7.78	8.36	8.07	8.41	7.80	7.48
FINE GRAVEL	13.99	14.44	14.71	14.39	14.50	14.40	13.78	17.88	14.28	14.54	14.18	14.12	14.56	13.40	13.70	13.94	13.94
VERY FINE GRAVEL	2.12	1.91	2.11	2.46	1.84	1.86	2.11	1.93	1.94	2.02	1.68	2.08	2.17	2.18	2.16	2.29	2.15
VERY COARSE SAND	0.01	0.02	0.01	0.08	0.02	0.00	0.03	0.01	0.02	0.01	0.02	0.04	0.01	0.01	0.01	0.04	0.01
COARSE SAND	26.14	13.28	28.66	22.36	54.04	24.98	26.74	50.26	27.47	27.96	25.80	31.16	29.35	27.76	26.26	29.10	27.92
MEDIUM SAND	44.01	52.35	40.61	46.72	20.85	45.02	44.69	20.45	43.54	41.63	44.43	39.92	42.04	43.31	43.84	41.91	42.77
FINE SAND	4.42	9.93	5.67	6.60	0.02	5.62	3.88	0.57	4.52	3.04	5.06	3.62	3.51	4.03	4.35	4.92	5.19
VERY FINE SAND	0.31	0.18	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.43	0.29	0.24	0.00	0.24	0.29	0.00	0.00
VERY COARSE SILT	0.19	0.17	0.00	0.00	0.00	0.00	0.03	0.44	0.00	1.28	0.06	0.11	0.00	0.11	0.13	0.00	0.00
COARSE SILT	0.23	0.00	0.00	0.00	0.00	0.00	0.42	0.37	0.00	0.59	0.11	0.12	0.00	0.13	0.14	0.00	0.00
MEDIUM SILT	0.20	0.00	0.00	0.00	0.00	0.00	0.37	0.17	0.00	0.72	0.13	0.15	0.00	0.15	0.14	0.00	0.00
FINE SILT	0.13	0.00	0.00	0.00	0.00	0.00	0.25	0.18	0.00	0.44	0.12	0.13	0.00	0.13	0.11	0.00	0.00
VERY FINE SILT	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.09	0.11	0.11	0.00	0.09	0.07	0.00	0.00
CLAY	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.32	0.42	0.00	0.39	0.39	0.00	0.00

GRAVEL	23.91	24.07	25.06	24.23	25.07	24.38	23.59	27.05	24.45	23.81	23.53	23.99	25.09	23.65	24.27	24.02	24.11
SAND	74.89	75.76	74.94	75.77	74.93	75.62	75.33	71.42	75.55	73.06	75.61	74.97	74.91	75.35	74.75	75.98	75.89
SILT	0.76	0.17	0.00	0.00	0.00	0.00	1.08	1.31	0.00	3.13	0.54	0.61	0.00	0.61	0.59	0.00	0.00
CLAY	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.32	0.42	0.00	0.39	0.39	0.00	0.00

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2501
Sample Code:	PS692501

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams
-6.50 to -6.00; 63 mm	0.00	0.0000
-6.00 to -5.50; 45 mm	0.00	0.0000
-5.50 to -5.00; 31.5 mm	0.00	0.0000
-5.00 to -4.50; 22.4 mm	0.00	0.0000
-4.50 to -4.00; 16 mm	0.00	0.0000
-4.00 to -3.50; 11.2 mm	4.83	50.2710
-3.50 to -3.00; 8 mm	2.89	30.0370
-3.00 to -2.50; 5.6 mm	7.91	82.3850
-2.50 to -2.00; 4 mm	6.53	67.9560
-2.00 to -1.50; 2.8 mm	1.39	14.4870
-1.50 to -1.00; 2 mm	0.52	5.4430
-1.00 to -0.50; 1.4 mm	0.01	0.0800
-0.50 to 0.00; 1 mm	0.01	0.0790
0.00 to 0.50; (707 µm)	3.09	32.1760
0.50 to 1.00; (500 µm)	10.19	106.0920
1.00 to 1.50; (353.6 µm)	26.01	270.7130
1.50 to 2.00; (250 µm)	26.34	274.1920
2.00 to 2.50; (176.8 µm)	8.61	89.5950
2.50 to 3.00; (125 µm)	1.33	13.8010
3.00 to 3.50; (88.39 µm)	0.14	1.4760
3.50 to 4.00; (62.5 µm)	0.03	0.3480
4.00 to 4.50; (44.19 µm)	0.17	1.7790
4.50 to 5.00; (31.25 µm)		
5.00 to 5.50; (22.097 µm)		
5.50 to 6.00; (15.625 µm)		
6.00 to 6.50; (11.049 µm)		
6.50 to 7.00; (7.813 µm)		
7.00 to 7.50; (5.524 µm)		
7.50 to 8.00; (3.906 µm)		
8.00 to 8.50; (2.762 µm)		
8.50 to 9.00; (1.953 µm)		
9.00 to 9.50; (1.381 µm)		
9.50 to 10.00; (0.977 µm)		
10.00 to 10.50; (0.691 µm)		
10.50 to 11.00; (0.488 µm)		
11.00 to 11.50; (0.345 µm)		
11.50 to 12.00; (0.244 µm)		
12.00 to 12.50; (0.173 µm)		
12.50 to 13.00; (0.122 µm)		
13.00 to 13.50; (0.086 µm)		
13.50 to 14.00; (0.061µm)		
14.00 to 14.50; (0.043µm)		
TOTAL	100.0000	1040.9100

Notes: Red text calculated by APEM.

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2502
Sample Code:	PS692502

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams
-6.50 to -6.00; 63 mm	0.00	0.0000
-6.00 to -5.50; 45 mm	0.00	0.0000
-5.50 to -5.00; 31.5 mm	0.00	0.0000
-5.00 to -4.50; 22.4 mm	0.00	0.0000
-4.50 to -4.00; 16 mm	0.00	0.0000
-4.00 to -3.50; 11.2 mm	4.68	44.2730
-3.50 to -3.00; 8 mm	3.56	33.6450
-3.00 to -2.50; 5.6 mm	8.05	76.1690
-2.50 to -2.00; 4 mm	6.66	62.9830
-2.00 to -1.50; 2.8 mm	1.62	15.3090
-1.50 to -1.00; 2 mm	0.49	4.6660
-1.00 to -0.50; 1.4 mm	0.01	0.0570
-0.50 to 0.00; 1 mm	0.00	0.0330
0.00 to 0.50; (707 µm)	9.41	89.0032
0.50 to 1.00; (500 µm)	19.25	182.1378
1.00 to 1.50; (353.6 µm)	23.86	225.7409
1.50 to 2.00; (250 µm)	16.75	158.4267
2.00 to 2.50; (176.8 µm)	5.48	51.8716
2.50 to 3.00; (125 µm)	0.18	1.7498
3.00 to 3.50; (88.39 µm)	0.00	0.0000
3.50 to 4.00; (62.5 µm)	0.00	0.0000
4.00 to 4.50; (44.19 µm)	0.00	0.0000
4.50 to 5.00; (31.25 µm)	0.00	0.0000
5.00 to 5.50; (22.097 µm)	0.00	0.0000
5.50 to 6.00; (15.625 µm)	0.00	0.0000
6.00 to 6.50; (11.049 µm)	0.00	0.0000
6.50 to 7.00; (7.813 µm)	0.00	0.0000
7.00 to 7.50; (5.524 µm)	0.00	0.0000
7.50 to 8.00; (3.906 µm)	0.00	0.0000
8.00 to 8.50; (2.762 µm)	0.00	0.0000
8.50 to 9.00; (1.953 µm)	0.00	0.0000
9.00 to 9.50; (1.381 µm)	0.00	0.0000
9.50 to 10.00; (0.977 µm)	0.00	0.0000
10.00 to 10.50; (0.691 µm)	0.00	0.0000
10.50 to 11.00; (0.488 µm)	0.00	0.0000
11.00 to 11.50; (0.345 µm)	0.00	0.0000
11.50 to 12.00; (0.244 µm)	0.00	0.0000
12.00 to 12.50; (0.173 µm)	0.00	0.0000
12.50 to 13.00; (0.122 µm)	0.00	0.0000
13.00 to 13.50; (0.086 µm)	0.00	0.0000
13.50 to 14.00; (0.061µm)	0.00	0.0000
14.00 to 14.50; (0.043µm)	0.00	0.0000
TOTAL	100.0000	946.0650

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2503
Sample Code:	PS692503

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams
-6.50 to -6.00; 63 mm	0.00	0.0000
-6.00 to -5.50; 45 mm	0.00	0.0000
-5.50 to -5.00; 31.5 mm	0.00	0.0000
-5.00 to -4.50; 22.4 mm	0.00	0.0000
-4.50 to -4.00; 16 mm	0.00	0.0000
-4.00 to -3.50; 11.2 mm	4.75	49.1667
-3.50 to -3.00; 8 mm	2.64	27.3333
-3.00 to -2.50; 5.6 mm	7.68	79.5333
-2.50 to -2.00; 4 mm	6.71	69.5000
-2.00 to -1.50; 2.8 mm	2.01	20.8000
-1.50 to -1.00; 2 mm	0.45	4.7000
-1.00 to -0.50; 1.4 mm	0.00	0.0333
-0.50 to 0.00; 1 mm	0.08	0.8000
0.00 to 0.50; (707 µm)	4.86	50.3030
0.50 to 1.00; (500 µm)	17.51	181.3591
1.00 to 1.50; (353.6 µm)	26.46	274.1654
1.50 to 2.00; (250 µm)	20.26	209.8597
2.00 to 2.50; (176.8 µm)	6.19	64.1223
2.50 to 3.00; (125 µm)	0.41	4.2905
3.00 to 3.50; (88.39 µm)	0.00	0.0000
3.50 to 4.00; (62.5 µm)	0.00	0.0000
4.00 to 4.50; (44.19 µm)	0.00	0.0000
4.50 to 5.00; (31.25 µm)	0.00	0.0000
5.00 to 5.50; (22.097 µm)	0.00	0.0000
5.50 to 6.00; (15.625 µm)	0.00	0.0000
6.00 to 6.50; (11.049 µm)	0.00	0.0000
6.50 to 7.00; (7.813 µm)	0.00	0.0000
7.00 to 7.50; (5.524 µm)	0.00	0.0000
7.50 to 8.00; (3.906 µm)	0.00	0.0000
8.00 to 8.50; (2.762 µm)	0.00	0.0000
8.50 to 9.00; (1.953 µm)	0.00	0.0000
9.00 to 9.50; (1.381 µm)	0.00	0.0000
9.50 to 10.00; (0.977 µm)	0.00	0.0000
10.00 to 10.50; (0.691 µm)	0.00	0.0000
10.50 to 11.00; (0.488 µm)	0.00	0.0000
11.00 to 11.50; (0.345 µm)	0.00	0.0000
11.50 to 12.00; (0.244 µm)	0.00	0.0000
12.00 to 12.50; (0.173 µm)	0.00	0.0000
12.50 to 13.00; (0.122 µm)	0.00	0.0000
13.00 to 13.50; (0.086 µm)	0.00	0.0000
13.50 to 14.00; (0.061µm)		
14.00 to 14.50; (0.043µm)		
TOTAL	100.0000	1035.9667

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2504
Sample Code:	PS692504

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams
-6.50 to -6.00; 63 mm	0.00	0.0000
-6.00 to -5.50; 45 mm	0.00	0.0000
-5.50 to -5.00; 31.5 mm	0.00	0.0000
-5.00 to -4.50; 22.4 mm	0.00	0.0000
-4.50 to -4.00; 16 mm	0.00	0.0000
-4.00 to -3.50; 11.2 mm	5.49	54.8700
-3.50 to -3.00; 8 mm	3.24	32.3500
-3.00 to -2.50; 5.6 mm	8.02	80.1800
-2.50 to -2.00; 4 mm	6.48	64.7700
-2.00 to -1.50; 2.8 mm	1.44	14.4200
-1.50 to -1.00; 2 mm	0.40	4.0200
-1.00 to -0.50; 1.4 mm	0.00	0.0200
-0.50 to 0.00; 1 mm	0.02	0.1700
0.00 to 0.50; (707 µm)	24.27	242.6545
0.50 to 1.00; (500 µm)	29.77	297.6328
1.00 to 1.50; (353.6 µm)	17.21	172.0580
1.50 to 2.00; (250 µm)	3.64	36.3869
2.00 to 2.50; (176.8 µm)	0.02	0.1779
2.50 to 3.00; (125 µm)	0.00	0.0000
3.00 to 3.50; (88.39 µm)	0.00	0.0000
3.50 to 4.00; (62.5 µm)	0.00	0.0000
4.00 to 4.50; (44.19 µm)	0.00	0.0000
4.50 to 5.00; (31.25 µm)	0.00	0.0000
5.00 to 5.50; (22.097 µm)	0.00	0.0000
5.50 to 6.00; (15.625 µm)	0.00	0.0000
6.00 to 6.50; (11.049 µm)	0.00	0.0000
6.50 to 7.00; (7.813 µm)	0.00	0.0000
7.00 to 7.50; (5.524 µm)	0.00	0.0000
7.50 to 8.00; (3.906 µm)	0.00	0.0000
8.00 to 8.50; (2.762 µm)	0.00	0.0000
8.50 to 9.00; (1.953 µm)	0.00	0.0000
9.00 to 9.50; (1.381 µm)	0.00	0.0000
9.50 to 10.00; (0.977 µm)	0.00	0.0000
10.00 to 10.50; (0.691 µm)	0.00	0.0000
10.50 to 11.00; (0.488 µm)	0.00	0.0000
11.00 to 11.50; (0.345 µm)	0.00	0.0000
11.50 to 12.00; (0.244 µm)	0.00	0.0000
12.00 to 12.50; (0.173 µm)	0.00	0.0000
12.50 to 13.00; (0.122 µm)	0.00	0.0000
13.00 to 13.50; (0.086 µm)	0.00	0.0000
13.50 to 14.00; (0.061µm)	0.00	0.0000
14.00 to 14.50; (0.043µm)	0.00	0.0000
TOTAL	100.00	999.7100

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2505
Sample Code:	PS692505

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams (mark as "0" for no material & leave blank for not analysed)
-6.50 to -6.00; 63 mm		
-6.00 to -5.50; 45 mm		
-5.50 to -5.00; 31.5 mm		
-5.00 to -4.50; 22.4 mm		
-4.50 to -4.00; 16 mm		
-4.00 to -3.50; 11.2 mm	5.27	53.01
-3.50 to -3.00; 8 mm	2.84	28.53
-3.00 to -2.50; 5.6 mm	8.01	80.53
-2.50 to -2.00; 4 mm	6.39	64.21
-2.00 to -1.50; 2.8 mm	1.42	14.27
-1.50 to -1.00; 2 mm	0.44	4.42
-1.00 to -0.50; 1.4 mm	0.00	0.00
-0.50 to 0.00; 1 mm	0.00	0.00
0.00 to 0.50; (707 µm)	5.82	58.48
0.50 to 1.00; (500 µm)	19.16	192.58
1.00 to 1.50; (353.6 µm)	26.74	268.75
1.50 to 2.00; (250 µm)	18.28	183.72
2.00 to 2.50; (176.8 µm)	5.34	53.65
2.50 to 3.00; (125 µm)	0.28	2.79
3.00 to 3.50; (88.39 µm)	0.00	0.00
3.50 to 4.00; (62.5 µm)	0.00	0.00
4.00 to 4.50; (44.19 µm)	0.00	0.00
4.50 to 5.00; (31.25 µm)	0.00	0.00
5.00 to 5.50; (22.097 µm)	0.00	0.00
5.50 to 6.00; (15.625 µm)	0.00	0.00
6.00 to 6.50; (11.049 µm)	0.00	0.00
6.50 to 7.00; (7.813 µm)	0.00	0.00
7.00 to 7.50; (5.524 µm)	0.00	0.00
7.50 to 8.00; (3.906 µm)	0.00	0.00
8.00 to 8.50; (2.762 µm)	0.00	0.00
8.50 to 9.00; (1.953 µm)	0.00	0.00
9.00 to 9.50; (1.381 µm)	0.00	0.00
9.50 to 10.00; (0.977 µm)	0.00	0.00
10.00 to 10.50; (0.691 µm)	0.00	0.00
10.50 to 11.00; (0.488 µm)	0.00	0.00
11.00 to 11.50; (0.345 µm)	0.00	0.00
11.50 to 12.00; (0.244 µm)	0.00	0.00
12.00 to 12.50; (0.173 µm)	0.00	0.00
12.50 to 13.00; (0.122 µm)	0.00	0.00
13.00 to 13.50; (0.086 µm)	0.00	0.00
13.50 to 14.00; (0.061µm)	0.00	0.00
14.00 to 14.50; (0.043µm)	0.00	0.00
TOTAL	100.000	1004.9300

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2506
Sample Code:	PS692506

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams (mark as "0" for no material & leave blank for not analysed)
-6.50 to -6.00; 63 mm	0.00	0.00
-6.00 to -5.50; 45 mm	0.00	0.00
-5.50 to -5.00; 31.5 mm	0.00	0.00
-5.00 to -4.50; 22.4 mm	0.00	0.00
-4.50 to -4.00; 16 mm	0.00	0.00
-4.00 to -3.50; 11.2 mm	5.50	51.52
-3.50 to -3.00; 8 mm	2.20	20.61
-3.00 to -2.50; 5.6 mm	6.71	62.85
-2.50 to -2.00; 4 mm	7.07	66.22
-2.00 to -1.50; 2.8 mm	1.66	15.57
-1.50 to -1.00; 2 mm	0.45	4.24
-1.00 to -0.50; 1.4 mm	0.02	0.23
-0.50 to 0.00; 1 mm	0.00	0.01
0.00 to 0.50; (707 µm)	6.26	58.69
0.50 to 1.00; (500 µm)	20.47	191.78
1.00 to 1.50; (353.6 µm)	27.49	257.50
1.50 to 2.00; (250 µm)	17.20	161.12
2.00 to 2.50; (176.8 µm)	3.78	35.42
2.50 to 3.00; (125 µm)	0.10	0.93
3.00 to 3.50; (88.39 µm)	0.00	0.00
3.50 to 4.00; (62.5 µm)	0.00	0.00
4.00 to 4.50; (44.19 µm)	0.00	0.00
4.50 to 5.00; (31.25 µm)	0.03	0.32
5.00 to 5.50; (22.097 µm)	0.20	1.91
5.50 to 6.00; (15.625 µm)	0.22	2.04
6.00 to 6.50; (11.049 µm)	0.18	1.72
6.50 to 7.00; (7.813 µm)	0.19	1.79
7.00 to 7.50; (5.524 µm)	0.19	1.79
7.50 to 8.00; (3.906 µm)	0.06	0.53
8.00 to 8.50; (2.762 µm)	0.00	0.00
8.50 to 9.00; (1.953 µm)	0.00	0.00
9.00 to 9.50; (1.381 µm)	0.00	0.00
9.50 to 10.00; (0.977 µm)	0.00	0.00
10.00 to 10.50; (0.691 µm)	0.00	0.00
10.50 to 11.00; (0.488 µm)	0.00	0.00
11.00 to 11.50; (0.345 µm)	0.00	0.00
11.50 to 12.00; (0.244 µm)	0.00	0.00
12.00 to 12.50; (0.173 µm)	0.00	0.00
12.50 to 13.00; (0.122 µm)	0.00	0.00
13.00 to 13.50; (0.086 µm)	0.00	0.00
13.50 to 14.00; (0.061µm)	0.000	0.0000
14.00 to 14.50; (0.043µm)	0.000	0.0000
TOTAL	100.0000	936.7900

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2507
Sample Code:	PS692507

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams
-6.50 to -6.00; 63 mm	0.00	
-6.00 to -5.50; 45 mm	0.00	
-5.50 to -5.00; 31.5 mm	0.00	
-5.00 to -4.50; 22.4 mm	0.00	
-4.50 to -4.00; 16 mm	0.00	
-4.00 to -3.50; 11.2 mm	0.00	
-3.50 to -3.00; 8 mm	7.25	
-3.00 to -2.50; 5.6 mm	0.00	
-2.50 to -2.00; 4 mm	17.88	
-2.00 to -1.50; 2.8 mm	0.00	
-1.50 to -1.00; 2 mm	1.93	
-1.00 to -0.50; 1.4 mm	0.00	
-0.50 to 0.00; 1 mm	0.01	
0.00 to 0.50; (707 µm)	23.00	
0.50 to 1.00; (500 µm)	27.27	
1.00 to 1.50; (353.6 µm)	13.57	
1.50 to 2.00; (250 µm)	6.88	
2.00 to 2.50; (176.8 µm)	0.56	
2.50 to 3.00; (125 µm)	0.01	
3.00 to 3.50; (88.39 µm)	0.02	
3.50 to 4.00; (62.5 µm)	0.10	
4.00 to 4.50; (44.19 µm)	0.16	
4.50 to 5.00; (31.25 µm)	0.28	
5.00 to 5.50; (22.097 µm)	0.19	
5.50 to 6.00; (15.625 µm)	0.17	
6.00 to 6.50; (11.049 µm)	0.08	
6.50 to 7.00; (7.813 µm)	0.09	
7.00 to 7.50; (5.524 µm)	0.07	
7.50 to 8.00; (3.906 µm)	0.11	
8.00 to 8.50; (2.762 µm)	0.08	
8.50 to 9.00; (1.953 µm)	0.07	
9.00 to 9.50; (1.381 µm)	0.08	
9.50 to 10.00; (0.977 µm)	0.04	
10.00 to 10.50; (0.691 µm)	0.04	
10.50 to 11.00; (0.488 µm)	0.02	
11.00 to 11.50; (0.345 µm)	0.02	
11.50 to 12.00; (0.244 µm)	0.01	
12.00 to 12.50; (0.173 µm)	0.01	
12.50 to 13.00; (0.122 µm)	0.01	
13.00 to 13.50; (0.086 µm)	0.01	
13.50 to 14.00; (0.061µm)		
14.00 to 14.50; (0.043µm)		
TOTAL	100.0000	

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2508
Sample Code:	PS692508

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams (mark as "0" for no material & leave blank for not analysed)
-6.50 to -6.00; 63 mm	0.00	0.00
-6.00 to -5.50; 45 mm	0.00	0.00
-5.50 to -5.00; 31.5 mm	0.00	0.00
-5.00 to -4.50; 22.4 mm	0.00	0.00
-4.50 to -4.00; 16 mm	0.00	0.00
-4.00 to -3.50; 11.2 mm	5.13	48.48
-3.50 to -3.00; 8 mm	3.09	29.22
-3.00 to -2.50; 5.6 mm	8.42	79.60
-2.50 to -2.00; 4 mm	5.86	55.44
-2.00 to -1.50; 2.8 mm	1.53	14.49
-1.50 to -1.00; 2 mm	0.41	3.88
-1.00 to -0.50; 1.4 mm	0.00	0.01
-0.50 to 0.00; 1 mm	0.02	0.20
0.00 to 0.50; (707 µm)	7.10	67.16
0.50 to 1.00; (500 µm)	20.36	192.51
1.00 to 1.50; (353.6 µm)	26.65	251.97
1.50 to 2.00; (250 µm)	16.89	159.70
2.00 to 2.50; (176.8 µm)	4.36	41.24
2.50 to 3.00; (125 µm)	0.16	1.51
3.00 to 3.50; (88.39 µm)	0.00	0.00
3.50 to 4.00; (62.5 µm)	0.00	0.00
4.00 to 4.50; (44.19 µm)	0.00	0.00
4.50 to 5.00; (31.25 µm)	0.00	0.00
5.00 to 5.50; (22.097 µm)	0.00	0.00
5.50 to 6.00; (15.625 µm)	0.00	0.00
6.00 to 6.50; (11.049 µm)	0.00	0.00
6.50 to 7.00; (7.813 µm)	0.00	0.00
7.00 to 7.50; (5.524 µm)	0.00	0.00
7.50 to 8.00; (3.906 µm)	0.00	0.00
8.00 to 8.50; (2.762 µm)	0.00	0.00
8.50 to 9.00; (1.953 µm)	0.00	0.00
9.00 to 9.50; (1.381 µm)	0.00	0.00
9.50 to 10.00; (0.977 µm)	0.00	0.00
10.00 to 10.50; (0.691 µm)	0.00	0.00
10.50 to 11.00; (0.488 µm)	0.00	0.00
11.00 to 11.50; (0.345 µm)	0.00	0.00
11.50 to 12.00; (0.244 µm)	0.00	0.00
12.00 to 12.50; (0.173 µm)	0.00	0.00
12.50 to 13.00; (0.122 µm)	0.00	0.00
13.00 to 13.50; (0.086 µm)	0.00	0.00
13.50 to 14.00; (0.061µm)	0.00	0.00
14.00 to 14.50; (0.043µm)	0.00	0.00
TOTAL	100.00	945.41

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2509
Sample Code:	PS692509

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams (mark as "0" for no material & leave blank for not analysed)
-6.50 to -6.00; 63 mm	0.00	0.00
-6.00 to -5.50; 45 mm	0.00	0.00
-5.50 to -5.00; 31.5 mm	0.00	0.00
-5.00 to -4.50; 22.4 mm	0.00	0.00
-4.50 to -4.00; 16 mm	0.00	0.00
-4.00 to -3.50; 11.2 mm	4.90	51.02
-3.50 to -3.00; 8 mm	2.35	24.46
-3.00 to -2.50; 5.6 mm	7.80	81.17
-2.50 to -2.00; 4 mm	6.74	70.11
-2.00 to -1.50; 2.8 mm	1.48	15.43
-1.50 to -1.00; 2 mm	0.53	5.56
-1.00 to -0.50; 1.4 mm	0.01	0.07
-0.50 to 0.00; 1 mm	0.00	0.00
0.00 to 0.50; (707 µm)	6.90	71.79
0.50 to 1.00; (500 µm)	21.06	219.15
1.00 to 1.50; (353.6 µm)	26.53	276.09
1.50 to 2.00; (250 µm)	15.10	157.14
2.00 to 2.50; (176.8 µm)	3.01	31.37
2.50 to 3.00; (125 µm)	0.02	0.25
3.00 to 3.50; (88.39 µm)	0.00	0.00
3.50 to 4.00; (62.5 µm)	0.43	4.44
4.00 to 4.50; (44.19 µm)	0.78	8.15
4.50 to 5.00; (31.25 µm)	0.50	5.21
5.00 to 5.50; (22.097 µm)	0.28	2.94
5.50 to 6.00; (15.625 µm)	0.31	3.23
6.00 to 6.50; (11.049 µm)	0.38	3.91
6.50 to 7.00; (7.813 µm)	0.35	3.61
7.00 to 7.50; (5.524 µm)	0.26	2.69
7.50 to 8.00; (3.906 µm)	0.18	1.92
8.00 to 8.50; (2.762 µm)	0.09	0.90
8.50 to 9.00; (1.953 µm)	0.00	0.00
9.00 to 9.50; (1.381 µm)	0.00	0.00
9.50 to 10.00; (0.977 µm)	0.00	0.00
10.00 to 10.50; (0.691 µm)	0.00	0.00
10.50 to 11.00; (0.488 µm)	0.00	0.00
11.00 to 11.50; (0.345 µm)	0.00	0.00
11.50 to 12.00; (0.244 µm)		
12.00 to 12.50; (0.173 µm)		
12.50 to 13.00; (0.122 µm)		
13.00 to 13.50; (0.086 µm)		
13.50 to 14.00; (0.061µm)		
14.00 to 14.50; (0.043µm)		
TOTAL	100.0000	1040.6000

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2510
Sample Code:	PS692510

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams
-6.50 to -6.00; 63 mm	0.00	
-6.00 to -5.50; 45 mm	0.00	
-5.50 to -5.00; 31.5 mm	0.00	
-5.00 to -4.50; 22.4 mm	0.00	
-4.50 to -4.00; 16 mm	0.00	
-4.00 to -3.50; 11.2 mm	4.71	
-3.50 to -3.00; 8 mm	2.96	
-3.00 to -2.50; 5.6 mm	7.92	
-2.50 to -2.00; 4 mm	6.26	
-2.00 to -1.50; 2.8 mm	1.31	
-1.50 to -1.00; 2 mm	0.37	
-1.00 to -0.50; 1.4 mm	0.00	
-0.50 to 0.00; 1 mm	0.02	
0.00 to 0.50; (707 µm)	6.65	
0.50 to 1.00; (500 µm)	19.15	
1.00 to 1.50; (353.6 µm)	28.08	
1.50 to 2.00; (250 µm)	16.36	
2.00 to 2.50; (176.8 µm)	4.09	
2.50 to 3.00; (125 µm)	0.97	
3.00 to 3.50; (88.39 µm)	0.15	
3.50 to 4.00; (62.5 µm)	0.14	
4.00 to 4.50; (44.19 µm)	0.03	
4.50 to 5.00; (31.25 µm)	0.03	
5.00 to 5.50; (22.097 µm)	0.04	
5.50 to 6.00; (15.625 µm)	0.06	
6.00 to 6.50; (11.049 µm)	0.07	
6.50 to 7.00; (7.813 µm)	0.06	
7.00 to 7.50; (5.524 µm)	0.06	
7.50 to 8.00; (3.906 µm)	0.06	
8.00 to 8.50; (2.762 µm)	0.06	
8.50 to 9.00; (1.953 µm)	0.05	
9.00 to 9.50; (1.381 µm)	0.05	
9.50 to 10.00; (0.977 µm)	0.05	
10.00 to 10.50; (0.691 µm)	0.05	
10.50 to 11.00; (0.488 µm)	0.04	
11.00 to 11.50; (0.345 µm)	0.04	
11.50 to 12.00; (0.244 µm)	0.03	
12.00 to 12.50; (0.173 µm)	0.02	
12.50 to 13.00; (0.122 µm)	0.02	
13.00 to 13.50; (0.086 µm)	0.01	
13.50 to 14.00; (0.061µm)	0.01	
14.00 to 14.50; (0.043µm)	0.00	
TOTAL	100.00	

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2511
Sample Code:	PS692511

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams (mark as "0" for no material & leave blank for not analysed)
-6.50 to -6.00; 63 mm	0.00	0.00
-6.00 to -5.50; 45 mm	0.00	0.00
-5.50 to -5.00; 31.5 mm	0.00	0.00
-5.00 to -4.50; 22.4 mm	0.00	0.00
-4.50 to -4.00; 16 mm	0.00	0.00
-4.00 to -3.50; 11.2 mm	5.30	50.88
-3.50 to -3.00; 8 mm	2.49	23.89
-3.00 to -2.50; 5.6 mm	7.18	68.95
-2.50 to -2.00; 4 mm	6.95	66.74
-2.00 to -1.50; 2.8 mm	1.61	15.49
-1.50 to -1.00; 2 mm	0.47	4.52
-1.00 to -0.50; 1.4 mm	0.04	0.34
-0.50 to 0.00; 1 mm	0.00	0.01
0.00 to 0.50; (707 µm)	10.43	100.21
0.50 to 1.00; (500 µm)	20.73	199.12
1.00 to 1.50; (353.6 µm)	25.97	249.53
1.50 to 2.00; (250 µm)	13.94	133.93
2.00 to 2.50; (176.8 µm)	3.07	29.53
2.50 to 3.00; (125 µm)	0.55	5.25
3.00 to 3.50; (88.39 µm)	0.17	1.59
3.50 to 4.00; (62.5 µm)	0.08	0.74
4.00 to 4.50; (44.19 µm)	0.06	0.57
4.50 to 5.00; (31.25 µm)	0.05	0.47
5.00 to 5.50; (22.097 µm)	0.06	0.54
5.50 to 6.00; (15.625 µm)	0.06	0.58
6.00 to 6.50; (11.049 µm)	0.07	0.68
6.50 to 7.00; (7.813 µm)	0.08	0.74
7.00 to 7.50; (5.524 µm)	0.07	0.69
7.50 to 8.00; (3.906 µm)	0.06	0.58
8.00 to 8.50; (2.762 µm)	0.05	0.49
8.50 to 9.00; (1.953 µm)	0.05	0.52
9.00 to 9.50; (1.381 µm)	0.06	0.62
9.50 to 10.00; (0.977 µm)	0.07	0.66
10.00 to 10.50; (0.691 µm)	0.07	0.63
10.50 to 11.00; (0.488 µm)	0.06	0.56
11.00 to 11.50; (0.345 µm)	0.05	0.47
11.50 to 12.00; (0.244 µm)	0.04	0.38
12.00 to 12.50; (0.173 µm)	0.03	0.29
12.50 to 13.00; (0.122 µm)	0.02	0.22
13.00 to 13.50; (0.086 µm)	0.02	0.15
13.50 to 14.00; (0.061µm)	0.01	0.07
14.00 to 14.50; (0.043µm)	0.00	0.01
TOTAL	100.00	471.83

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2512
Sample Code:	PS692512

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams
-6.50 to -6.00; 63 mm	0.00	
-6.00 to -5.50; 45 mm	0.00	
-5.50 to -5.00; 31.5 mm	0.00	
-5.00 to -4.50; 22.4 mm	0.00	
-4.50 to -4.00; 16 mm	0.00	
-4.00 to -3.50; 11.2 mm	5.08	
-3.50 to -3.00; 8 mm	3.27	
-3.00 to -2.50; 5.6 mm	7.70	
-2.50 to -2.00; 4 mm	6.86	
-2.00 to -1.50; 2.8 mm	1.62	
-1.50 to -1.00; 2 mm	0.55	
-1.00 to -0.50; 1.4 mm	0.01	
-0.50 to 0.00; 1 mm	0.00	
0.00 to 0.50; (707 µm)	7.95	
0.50 to 1.00; (500 µm)	21.40	
1.00 to 1.50; (353.6 µm)	26.43	
1.50 to 2.00; (250 µm)	15.61	
2.00 to 2.50; (176.8 µm)	3.44	
2.50 to 3.00; (125 µm)	0.08	
3.00 to 3.50; (88.39 µm)	0.00	
3.50 to 4.00; (62.5 µm)	0.00	
4.00 to 4.50; (44.19 µm)	0.00	
4.50 to 5.00; (31.25 µm)	0.00	
5.00 to 5.50; (22.097 µm)	0.00	
5.50 to 6.00; (15.625 µm)	0.00	
6.00 to 6.50; (11.049 µm)	0.00	
6.50 to 7.00; (7.813 µm)	0.00	
7.00 to 7.50; (5.524 µm)	0.00	
7.50 to 8.00; (3.906 µm)	0.00	
8.00 to 8.50; (2.762 µm)	0.00	
8.50 to 9.00; (1.953 µm)	0.00	
9.00 to 9.50; (1.381 µm)	0.00	
9.50 to 10.00; (0.977 µm)	0.00	
10.00 to 10.50; (0.691 µm)	0.00	
10.50 to 11.00; (0.488 µm)	0.00	
11.00 to 11.50; (0.345 µm)	0.00	
11.50 to 12.00; (0.244 µm)	0.00	
12.00 to 12.50; (0.173 µm)	0.00	
12.50 to 13.00; (0.122 µm)	0.00	
13.00 to 13.50; (0.086 µm)	0.00	
13.50 to 14.00; (0.061µm)	0.00	
14.00 to 14.50; (0.043µm)	0.00	
TOTAL	100.00	

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2513
Sample Code:	PS692513

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams (mark as "0" for no material & leave blank for not analysed)
-6.50 to -6.00; 63 mm	0.00	0.00
-6.00 to -5.50; 45 mm	0.00	0.00
-5.50 to -5.00; 31.5 mm	0.00	0.00
-5.00 to -4.50; 22.4 mm	0.00	0.00
-4.50 to -4.00; 16 mm	0.00	0.00
-4.00 to -3.50; 11.2 mm	4.85	47.56
-3.50 to -3.00; 8 mm	3.22	31.53
-3.00 to -2.50; 5.6 mm	6.30	61.79
-2.50 to -2.00; 4 mm	7.10	69.58
-2.00 to -1.50; 2.8 mm	1.71	16.72
-1.50 to -1.00; 2 mm	0.48	4.68
-1.00 to -0.50; 1.4 mm	0.01	0.07
-0.50 to 0.00; 1 mm	0.00	0.02
0.00 to 0.50; (707 µm)	7.30	71.56
0.50 to 1.00; (500 µm)	20.46	200.60
1.00 to 1.50; (353.6 µm)	27.77	272.32
1.50 to 2.00; (250 µm)	15.54	152.38
2.00 to 2.50; (176.8 µm)	3.41	33.47
2.50 to 3.00; (125 µm)	0.62	6.09
3.00 to 3.50; (88.39 µm)	0.19	1.83
3.50 to 4.00; (62.5 µm)	0.05	0.51
4.00 to 4.50; (44.19 µm)	0.05	0.52
4.50 to 5.00; (31.25 µm)	0.05	0.52
5.00 to 5.50; (22.097 µm)	0.06	0.58
5.50 to 6.00; (15.625 µm)	0.07	0.71
6.00 to 6.50; (11.049 µm)	0.08	0.76
6.50 to 7.00; (7.813 µm)	0.08	0.74
7.00 to 7.50; (5.524 µm)	0.07	0.69
7.50 to 8.00; (3.906 µm)	0.06	0.59
8.00 to 8.50; (2.762 µm)	0.05	0.46
8.50 to 9.00; (1.953 µm)	0.04	0.42
9.00 to 9.50; (1.381 µm)	0.05	0.48
9.50 to 10.00; (0.977 µm)	0.06	0.55
10.00 to 10.50; (0.691 µm)	0.06	0.56
10.50 to 11.00; (0.488 µm)	0.05	0.53
11.00 to 11.50; (0.345 µm)	0.05	0.47
11.50 to 12.00; (0.244 µm)	0.04	0.40
12.00 to 12.50; (0.173 µm)	0.03	0.32
12.50 to 13.00; (0.122 µm)	0.03	0.25
13.00 to 13.50; (0.086 µm)	0.02	0.17
13.50 to 14.00; (0.061µm)	0.01	0.08
14.00 to 14.50; (0.043µm)	0.00	0.02
TOTAL	100.0000	980.54

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2514
Sample Code:	PS692514

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams (mark as "0" for no material & leave blank for not analysed)
-6.50 to -6.00; 63 mm	0.00	0.00
-6.00 to -5.50; 45 mm	0.00	0.00
-5.50 to -5.00; 31.5 mm	0.00	0.00
-5.00 to -4.50; 22.4 mm	0.00	0.00
-4.50 to -4.00; 16 mm	0.00	0.00
-4.00 to -3.50; 11.2 mm	4.43	44.26
-3.50 to -3.00; 8 mm	3.97	39.69
-3.00 to -2.50; 5.6 mm	6.77	67.58
-2.50 to -2.00; 4 mm	6.93	69.25
-2.00 to -1.50; 2.8 mm	1.67	16.68
-1.50 to -1.00; 2 mm	0.49	4.92
-1.00 to -0.50; 1.4 mm	0.00	0.03
-0.50 to 0.00; 1 mm	0.00	0.02
0.00 to 0.50; (707 µm)	6.67	66.64
0.50 to 1.00; (500 µm)	19.59	195.57
1.00 to 1.50; (353.6 µm)	27.68	276.39
1.50 to 2.00; (250 µm)	16.16	161.42
2.00 to 2.50; (176.8 µm)	3.68	36.77
2.50 to 3.00; (125 µm)	0.67	6.67
3.00 to 3.50; (88.39 µm)	0.22	2.22
3.50 to 4.00; (62.5 µm)	0.07	0.67
4.00 to 4.50; (44.19 µm)	0.06	0.63
4.50 to 5.00; (31.25 µm)	0.06	0.65
5.00 to 5.50; (22.097 µm)	0.07	0.69
5.50 to 6.00; (15.625 µm)	0.07	0.72
6.00 to 6.50; (11.049 µm)	0.07	0.74
6.50 to 7.00; (7.813 µm)	0.07	0.69
7.00 to 7.50; (5.524 µm)	0.06	0.61
7.50 to 8.00; (3.906 µm)	0.05	0.48
8.00 to 8.50; (2.762 µm)	0.04	0.37
8.50 to 9.00; (1.953 µm)	0.04	0.36
9.00 to 9.50; (1.381 µm)	0.04	0.44
9.50 to 10.00; (0.977 µm)	0.05	0.52
10.00 to 10.50; (0.691 µm)	0.06	0.55
10.50 to 11.00; (0.488 µm)	0.05	0.54
11.00 to 11.50; (0.345 µm)	0.05	0.49
11.50 to 12.00; (0.244 µm)	0.04	0.42
12.00 to 12.50; (0.173 µm)	0.03	0.34
12.50 to 13.00; (0.122 µm)	0.03	0.27
13.00 to 13.50; (0.086 µm)	0.02	0.18
13.50 to 14.00; (0.061µm)	0.01	0.09
14.00 to 14.50; (0.043µm)	0.00	0.02
TOTAL	100.00	998.57

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2515
Sample Code:	PS692515

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams
-6.50 to -6.00; 63 mm	0.0000	
-6.00 to -5.50; 45 mm	0.0000	
-5.50 to -5.00; 31.5 mm	0.0000	
-5.00 to -4.50; 22.4 mm	0.0000	
-4.50 to -4.00; 16 mm	0.0000	
-4.00 to -3.50; 11.2 mm	4.5159	
-3.50 to -3.00; 8 mm	3.2798	
-3.00 to -2.50; 5.6 mm	6.1785	
-2.50 to -2.00; 4 mm	7.7587	
-2.00 to -1.50; 2.8 mm	1.8126	
-1.50 to -1.00; 2 mm	0.4734	
-1.00 to -0.50; 1.4 mm	0.0414	
-0.50 to 0.00; 1 mm	0.0017	
0.00 to 0.50; (707 µm)	8.5685	
0.50 to 1.00; (500 µm)	20.5355	
1.00 to 1.50; (353.6 µm)	25.2056	
1.50 to 2.00; (250 µm)	16.7090	
2.00 to 2.50; (176.8 µm)	4.8213	
2.50 to 3.00; (125 µm)	0.0982	
3.00 to 3.50; (88.39 µm)	0.0000	
3.50 to 4.00; (62.5 µm)	0.0000	
4.00 to 4.50; (44.19 µm)	0.0000	
4.50 to 5.00; (31.25 µm)	0.0000	
5.00 to 5.50; (22.097 µm)	0.0000	
5.50 to 6.00; (15.625 µm)	0.0000	
6.00 to 6.50; (11.049 µm)	0.0000	
6.50 to 7.00; (7.813 µm)	0.0000	
7.00 to 7.50; (5.524 µm)	0.0000	
7.50 to 8.00; (3.906 µm)	0.0000	
8.00 to 8.50; (2.762 µm)	0.0000	
8.50 to 9.00; (1.953 µm)	0.0000	
9.00 to 9.50; (1.381 µm)	0.0000	
9.50 to 10.00; (0.977 µm)	0.0000	
10.00 to 10.50; (0.691 µm)	0.0000	
10.50 to 11.00; (0.488 µm)	0.0000	
11.00 to 11.50; (0.345 µm)	0.0000	
11.50 to 12.00; (0.244 µm)	0.0000	
12.00 to 12.50; (0.173 µm)	0.0000	
12.50 to 13.00; (0.122 µm)	0.0000	
13.00 to 13.50; (0.086 µm)	0.0000	
13.50 to 14.00; (0.061µm)	0.0000	
14.00 to 14.50; (0.043µm)	0.0000	
TOTAL	100.0000	

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2516
Sample Code:	PS692516

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams (mark as "0" for no material & leave blank for not analysed)
-6.50 to -6.00; 63 mm	0.00	0.00
-6.00 to -5.50; 45 mm	0.00	0.00
-5.50 to -5.00; 31.5 mm	0.00	0.00
-5.00 to -4.50; 22.4 mm	0.00	0.00
-4.50 to -4.00; 16 mm	0.53	5.57
-4.00 to -3.50; 11.2 mm	4.70	49.04
-3.50 to -3.00; 8 mm	2.78	28.96
-3.00 to -2.50; 5.6 mm	7.70	80.29
-2.50 to -2.00; 4 mm	6.23	64.97
-2.00 to -1.50; 2.8 mm	1.67	17.36
-1.50 to -1.00; 2 mm	0.49	5.10
-1.00 to -0.50; 1.4 mm	0.00	0.04
-0.50 to 0.00; 1 mm	0.00	0.02
0.00 to 0.50; (707 µm)	7.74	80.67
0.50 to 1.00; (500 µm)	20.19	210.39
1.00 to 1.50; (353.6 µm)	25.72	268.12
1.50 to 2.00; (250 µm)	17.05	177.69
2.00 to 2.50; (176.8 µm)	4.93	51.40
2.50 to 3.00; (125 µm)	0.26	2.71
3.00 to 3.50; (88.39 µm)	0.00	0.00
3.50 to 4.00; (62.5 µm)	0.00	0.00
4.00 to 4.50; (44.19 µm)	0.00	0.00
4.50 to 5.00; (31.25 µm)	0.00	0.00
5.00 to 5.50; (22.097 µm)	0.00	0.00
5.50 to 6.00; (15.625 µm)	0.00	0.00
6.00 to 6.50; (11.049 µm)	0.00	0.00
6.50 to 7.00; (7.813 µm)	0.00	0.00
7.00 to 7.50; (5.524 µm)	0.00	0.00
7.50 to 8.00; (3.906 µm)	0.00	0.00
8.00 to 8.50; (2.762 µm)	0.00	0.00
8.50 to 9.00; (1.953 µm)	0.00	0.00
9.00 to 9.50; (1.381 µm)	0.00	0.00
9.50 to 10.00; (0.977 µm)	0.00	0.00
10.00 to 10.50; (0.691 µm)	0.00	0.00
10.50 to 11.00; (0.488 µm)	0.00	0.00
11.00 to 11.50; (0.345 µm)	0.00	0.00
11.50 to 12.00; (0.244 µm)	0.00	0.00
12.00 to 12.50; (0.173 µm)	0.00	0.00
12.50 to 13.00; (0.122 µm)	0.00	0.00
13.00 to 13.50; (0.086 µm)	0.00	0.00
13.50 to 14.00; (0.061µm)	0.00	0.00
14.00 to 14.50; (0.043µm)	0.00	0.00
TOTAL	100.00	1042.34

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2530
Sample Code:	Benchmark Replicate 1

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams (mark as "0" for no material & leave blank for not analysed)
-6.50 to -6.00; 63 mm	0.00	0.00
-6.00 to -5.50; 45 mm	0.00	0.00
-5.50 to -5.00; 31.5 mm	0.00	0.00
-5.00 to -4.50; 22.4 mm	0.00	0.00
-4.50 to -4.00; 16 mm	0.00	0.00
-4.00 to -3.50; 11.2 mm	4.62	45.83
-3.50 to -3.00; 8 mm	2.94	29.13
-3.00 to -2.50; 5.6 mm	6.41	63.66
-2.50 to -2.00; 4 mm	7.56	75.05
-2.00 to -1.50; 2.8 mm	1.67	16.54
-1.50 to -1.00; 2 mm	0.44	4.39
-1.00 to -0.50; 1.4 mm	0.01	0.07
-0.50 to 0.00; 1 mm	0.00	0.03
0.00 to 0.50; (707 µm)	6.30	62.56
0.50 to 1.00; (500 µm)	19.26	191.16
1.00 to 1.50; (353.6 µm)	27.76	275.53
1.50 to 2.00; (250 µm)	16.20	160.78
2.00 to 2.50; (176.8 µm)	3.77	37.37
2.50 to 3.00; (125 µm)	0.69	6.83
3.00 to 3.50; (88.39 µm)	0.23	2.30
3.50 to 4.00; (62.5 µm)	0.13	1.26
4.00 to 4.50; (44.19 µm)	0.17	1.64
4.50 to 5.00; (31.25 µm)	0.23	2.32
5.00 to 5.50; (22.097 µm)	0.25	2.51
5.50 to 6.00; (15.625 µm)	0.25	2.45
6.00 to 6.50; (11.049 µm)	0.22	2.15
6.50 to 7.00; (7.813 µm)	0.17	1.68
7.00 to 7.50; (5.524 µm)	0.13	1.25
7.50 to 8.00; (3.906 µm)	0.09	0.89
8.00 to 8.50; (2.762 µm)	0.06	0.59
8.50 to 9.00; (1.953 µm)	0.05	0.49
9.00 to 9.50; (1.381 µm)	0.05	0.54
9.50 to 10.00; (0.977 µm)	0.06	0.61
10.00 to 10.50; (0.691 µm)	0.06	0.61
10.50 to 11.00; (0.488 µm)	0.06	0.56
11.00 to 11.50; (0.345 µm)	0.05	0.48
11.50 to 12.00; (0.244 µm)	0.04	0.40
12.00 to 12.50; (0.173 µm)	0.03	0.32
12.50 to 13.00; (0.122 µm)	0.02	0.24
13.00 to 13.50; (0.086 µm)	0.02	0.16
13.50 to 14.00; (0.061µm)	0.01	0.08
14.00 to 14.50; (0.043µm)	0.00	0.02
TOTAL	100.00	992.50

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2531
Sample Code:	Benchmark Replicate 2

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams (mark as "0" for no material & leave blank for not analysed)
-6.50 to -6.00; 63 mm	0.00	0.00
-6.00 to -5.50; 45 mm	0.00	0.00
-5.50 to -5.00; 31.5 mm	0.00	0.00
-5.00 to -4.50; 22.4 mm	0.00	0.00
-4.50 to -4.00; 16 mm	0.00	0.00
-4.00 to -3.50; 11.2 mm	4.78	47.79
-3.50 to -3.00; 8 mm	3.40	33.99
-3.00 to -2.50; 5.6 mm	6.37	63.67
-2.50 to -2.00; 4 mm	7.47	74.58
-2.00 to -1.50; 2.8 mm	1.78	17.82
-1.50 to -1.00; 2 mm	0.47	4.74
-1.00 to -0.50; 1.4 mm	0.01	0.05
-0.50 to 0.00; 1 mm	0.00	0.03
0.00 to 0.50; (707 µm)	6.72	67.11
0.50 to 1.00; (500 µm)	19.72	197.00
1.00 to 1.50; (353.6 µm)	27.63	275.99
1.50 to 2.00; (250 µm)	15.88	158.68
2.00 to 2.50; (176.8 µm)	3.67	36.71
2.50 to 3.00; (125 µm)	0.70	6.95
3.00 to 3.50; (88.39 µm)	0.21	2.05
3.50 to 4.00; (62.5 µm)	0.08	0.79
4.00 to 4.50; (44.19 µm)	0.08	0.76
4.50 to 5.00; (31.25 µm)	0.09	0.90
5.00 to 5.50; (22.097 µm)	0.10	1.00
5.50 to 6.00; (15.625 µm)	0.10	1.02
6.00 to 6.50; (11.049 µm)	0.10	0.96
6.50 to 7.00; (7.813 µm)	0.08	0.83
7.00 to 7.50; (5.524 µm)	0.07	0.69
7.50 to 8.00; (3.906 µm)	0.05	0.53
8.00 to 8.50; (2.762 µm)	0.04	0.39
8.50 to 9.00; (1.953 µm)	0.04	0.36
9.00 to 9.50; (1.381 µm)	0.04	0.44
9.50 to 10.00; (0.977 µm)	0.05	0.52
10.00 to 10.50; (0.691 µm)	0.05	0.54
10.50 to 11.00; (0.488 µm)	0.05	0.51
11.00 to 11.50; (0.345 µm)	0.05	0.46
11.50 to 12.00; (0.244 µm)	0.04	0.39
12.00 to 12.50; (0.173 µm)	0.03	0.31
12.50 to 13.00; (0.122 µm)	0.02	0.24
13.00 to 13.50; (0.086 µm)	0.02	0.16
13.50 to 14.00; (0.061µm)	0.01	0.08
14.00 to 14.50; (0.043µm)	0.00	0.02
TOTAL	100.00	999.04

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2532
Sample Code:	Benchmark Replicate 3

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams (mark as "0" for no material & leave blank for not analysed)
-6.50 to -6.00; 63 mm	0.00	0.00
-6.00 to -5.50; 45 mm	0.00	0.00
-5.50 to -5.00; 31.5 mm	0.00	0.00
-5.00 to -4.50; 22.4 mm	0.00	0.00
-4.50 to -4.00; 16 mm	0.00	0.00
-4.00 to -3.50; 11.2 mm	4.56	45.43
-3.50 to -3.00; 8 mm	3.69	36.79
-3.00 to -2.50; 5.6 mm	7.08	70.59
-2.50 to -2.00; 4 mm	6.61	65.84
-2.00 to -1.50; 2.8 mm	1.63	16.20
-1.50 to -1.00; 2 mm	0.46	4.55
-1.00 to -0.50; 1.4 mm	0.00	0.03
-0.50 to 0.00; 1 mm	0.00	0.02
0.00 to 0.50; (707 µm)	6.74	67.23
0.50 to 1.00; (500 µm)	19.56	195.01
1.00 to 1.50; (353.6 µm)	27.67	275.85
1.50 to 2.00; (250 µm)	16.30	162.45
2.00 to 2.50; (176.8 µm)	3.77	37.58
2.50 to 3.00; (125 µm)	0.68	6.76
3.00 to 3.50; (88.39 µm)	0.24	2.42
3.50 to 4.00; (62.5 µm)	0.07	0.73
4.00 to 4.50; (44.19 µm)	0.07	0.71
4.50 to 5.00; (31.25 µm)	0.07	0.69
5.00 to 5.50; (22.097 µm)	0.07	0.71
5.50 to 6.00; (15.625 µm)	0.08	0.75
6.00 to 6.50; (11.049 µm)	0.07	0.73
6.50 to 7.00; (7.813 µm)	0.06	0.65
7.00 to 7.50; (5.524 µm)	0.05	0.54
7.50 to 8.00; (3.906 µm)	0.04	0.41
8.00 to 8.50; (2.762 µm)	0.03	0.31
8.50 to 9.00; (1.953 µm)	0.03	0.31
9.00 to 9.50; (1.381 µm)	0.04	0.39
9.50 to 10.00; (0.977 µm)	0.05	0.48
10.00 to 10.50; (0.691 µm)	0.05	0.50
10.50 to 11.00; (0.488 µm)	0.05	0.49
11.00 to 11.50; (0.345 µm)	0.04	0.44
11.50 to 12.00; (0.244 µm)	0.04	0.38
12.00 to 12.50; (0.173 µm)	0.03	0.31
12.50 to 13.00; (0.122 µm)	0.02	0.24
13.00 to 13.50; (0.086 µm)	0.02	0.17
13.50 to 14.00; (0.061µm)	0.01	0.08
14.00 to 14.50; (0.043µm)	0.00	0.02
TOTAL	100.00	996.79

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2533
Sample Code:	Benchmark Replicate 4

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams (mark as "0" for no material & leave blank for not analysed)
-6.50 to -6.00; 63 mm	0.00	0.00
-6.00 to -5.50; 45 mm	0.00	0.00
-5.50 to -5.00; 31.5 mm	0.00	0.00
-5.00 to -4.50; 22.4 mm	0.00	0.00
-4.50 to -4.00; 16 mm	0.00	0.00
-4.00 to -3.50; 11.2 mm	4.23	42.18
-3.50 to -3.00; 8 mm	3.03	30.19
-3.00 to -2.50; 5.6 mm	7.30	72.67
-2.50 to -2.00; 4 mm	7.17	71.38
-2.00 to -1.50; 2.8 mm	1.62	16.11
-1.50 to -1.00; 2 mm	0.48	4.76
-1.00 to -0.50; 1.4 mm	0.00	0.03
-0.50 to 0.00; 1 mm	0.00	0.03
0.00 to 0.50; (707 µm)	6.52	64.96
0.50 to 1.00; (500 µm)	19.65	195.68
1.00 to 1.50; (353.6 µm)	28.02	279.06
1.50 to 2.00; (250 µm)	16.31	162.44
2.00 to 2.50; (176.8 µm)	3.69	36.74
2.50 to 3.00; (125 µm)	0.67	6.72
3.00 to 3.50; (88.39 µm)	0.23	2.26
3.50 to 4.00; (62.5 µm)	0.07	0.73
4.00 to 4.50; (44.19 µm)	0.07	0.72
4.50 to 5.00; (31.25 µm)	0.07	0.71
5.00 to 5.50; (22.097 µm)	0.08	0.76
5.50 to 6.00; (15.625 µm)	0.08	0.80
6.00 to 6.50; (11.049 µm)	0.08	0.79
6.50 to 7.00; (7.813 µm)	0.07	0.71
7.00 to 7.50; (5.524 µm)	0.06	0.60
7.50 to 8.00; (3.906 µm)	0.05	0.47
8.00 to 8.50; (2.762 µm)	0.04	0.36
8.50 to 9.00; (1.953 µm)	0.04	0.35
9.00 to 9.50; (1.381 µm)	0.04	0.44
9.50 to 10.00; (0.977 µm)	0.05	0.53
10.00 to 10.50; (0.691 µm)	0.06	0.56
10.50 to 11.00; (0.488 µm)	0.05	0.54
11.00 to 11.50; (0.345 µm)	0.05	0.49
11.50 to 12.00; (0.244 µm)	0.04	0.43
12.00 to 12.50; (0.173 µm)	0.03	0.34
12.50 to 13.00; (0.122 µm)	0.03	0.27
13.00 to 13.50; (0.086 µm)	0.02	0.18
13.50 to 14.00; (0.061µm)	0.01	0.09
14.00 to 14.50; (0.043µm)	0.00	0.02
TOTAL	100.00	996.09

Notes:

APPENDIX 3. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS69.

Exercise Code:	PS69
LabCode:	PSA_2534
Sample Code:	Benchmark Replicate 5

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material & leave blank for not analysed)	Grams (mark as "0" for no material & leave blank for not analysed)
-6.50 to -6.00; 63 mm	0.00	0.00
-6.00 to -5.50; 45 mm	0.00	0.00
-5.50 to -5.00; 31.5 mm	0.00	0.00
-5.00 to -4.50; 22.4 mm	0.00	0.00
-4.50 to -4.00; 16 mm	0.00	0.00
-4.00 to -3.50; 11.2 mm	4.96	49.21
-3.50 to -3.00; 8 mm	2.78	27.54
-3.00 to -2.50; 5.6 mm	6.74	66.81
-2.50 to -2.00; 4 mm	7.24	71.82
-2.00 to -1.50; 2.8 mm	1.61	16.01
-1.50 to -1.00; 2 mm	0.44	4.36
-1.00 to -0.50; 1.4 mm	0.00	0.04
-0.50 to 0.00; 1 mm	0.00	0.02
0.00 to 0.50; (707 µm)	6.74	66.83
0.50 to 1.00; (500 µm)	19.49	193.26
1.00 to 1.50; (353.6 µm)	27.95	277.14
1.50 to 2.00; (250 µm)	16.34	162.00
2.00 to 2.50; (176.8 µm)	3.78	37.49
2.50 to 3.00; (125 µm)	0.70	6.98
3.00 to 3.50; (88.39 µm)	0.20	2.00
3.50 to 4.00; (62.5 µm)	0.07	0.67
4.00 to 4.50; (44.19 µm)	0.06	0.59
4.50 to 5.00; (31.25 µm)	0.07	0.66
5.00 to 5.50; (22.097 µm)	0.07	0.72
5.50 to 6.00; (15.625 µm)	0.08	0.74
6.00 to 6.50; (11.049 µm)	0.08	0.75
6.50 to 7.00; (7.813 µm)	0.07	0.70
7.00 to 7.50; (5.524 µm)	0.06	0.61
7.50 to 8.00; (3.906 µm)	0.05	0.49
8.00 to 8.50; (2.762 µm)	0.04	0.37
8.50 to 9.00; (1.953 µm)	0.04	0.35
9.00 to 9.50; (1.381 µm)	0.04	0.44
9.50 to 10.00; (0.977 µm)	0.05	0.52
10.00 to 10.50; (0.691 µm)	0.05	0.53
10.50 to 11.00; (0.488 µm)	0.05	0.50
11.00 to 11.50; (0.345 µm)	0.04	0.44
11.50 to 12.00; (0.244 µm)	0.04	0.37
12.00 to 12.50; (0.173 µm)	0.03	0.30
12.50 to 13.00; (0.122 µm)	0.02	0.23
13.00 to 13.50; (0.086 µm)	0.02	0.16
13.50 to 14.00; (0.061µm)	0.01	0.08
14.00 to 14.50; (0.043µm)	0.00	0.02
TOTAL	100.00	991.71

Notes: