NMBAQC

NE Atlantic Marine Biological Analytical Quality Control Scheme

Particle Size Report - PS67

Particle Size Component 2017/18

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APEM

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BENCHMARK DATA– OVERVIEW

Table 1. Summary data for the benchmark replicates distributed as PS67.

	Method	% Gravel	% Sand	% Mud	Sediment Description (Post analysis)
BM REPLICATE 1	NMBAQC	84.53	15.47	0.00	Gravel
BM REPLICATE 2	NMBAQC	84.71	15.29	0.00	Gravel
BM REPLICATE 3	NMBAQC	84.94	15.06	0.00	Gravel
BM REPLICATE 4	NMBAQC	84.81	15.19	0.00	Gravel
BM REPLICATE 5	NMBAQC	84.63	15.37	0.00	Gravel
REP AVERAGE	NMBAQC	84.72	15.28	0.00	Gravel

BENCHMARK DATA – SIEVE

Table 2. Summary of sieve data for the benchmark replicates distributed as PS67.

	BM REP 1	BM REP 2	BM REP 3	BM REP 4	BM REP 5
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	9.29	8.72	8.99	8.67	8.48
-4.00 to -3.50; 11.2 mm	3.18	6.62	7.49	2.62	14.49
-3.50 to -3.00; 8 mm	313.25	317.97	322.77	326.36	308.31
-3.00 to -2.50; 5.6 mm	312.56	308.78	298.03	300.39	311.78
-2.50 to -2.00; 4 mm	71.74	67.05	69.72	72.81	64.39
-2.00 to -1.50; 2.8 mm	103.46	101.38	102.79	99.86	100.36
-1.50 to -1.00; 2 mm	106.31	111.68	116.26	113.31	113.25
-1.00 to -0.50; 1.4 mm	110.86	109.21	107.37	109.42	109.79
-0.50 to 0.00; 1 mm	54.98	55.39	55.32	54.59	55.78
Weight (g) < 0.00; >1 mm	1085.63	1086.8	1088.74	1088.03	1086.63
Weight (g) > 0.00; <1 mm	2.46	1.84	1.56	1.54	1.66
Total Weight (g)	1088.09	1088.64	1090.3	1089.57	1088.29

BENCHMARK DATA – LASER

Table 3. Summary of final laser data for the benchmark replicates distributed as PS67.

	BM REP 1	BM REP 2	BM REP 3	BM REP 4	BM REP 5
Laser used	☒	☒	☒	☒	☒
0.00 to 0.50; (707 µm)	-	-	-	-	-
0.50 to 1.00; (500 µm)	-	-	-	-	-
1.00 to 1.50; (353.6 µm)	-	-	-	-	-
1.50 to 2.00; (250 µm)	-	-	-	-	-
2.00 to 2.50; (176.8 µm)	-	-	-	-	-
2.50 to 3.00; (125 µm)	-	-	-	-	-
3.00 to 3.50; (88.39 µm)	-	-	-	-	-
3.50 to 4.00; (62.5 µm)	-	-	-	-	-
4.00 to 4.50; (44.19 µm)	-	-	-	-	-
4.50 to 5.00; (31.25 µm)	Benchmark Lab Notes: The large amount of gravel in this sample meant that it was impossible to take a representative subsample for laser analysis. Therefore, the small amount of sand below 1 mm and above 180 µm was sieved at half phi intervals and entered into the merged data spreadsheet.				
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)	-	-	-	-	-
Total	-	-	-	-	-

Figure 1. Graphical presentations of (a) sieve data and (b) laser data produced by the benchmark lab for sediment distributed as PS67.

Figure 1a. Percentage bar charts resulting from final sieve analysis of 5 replicate samples of sediment distibuted as PS67 (Benchmark Data).

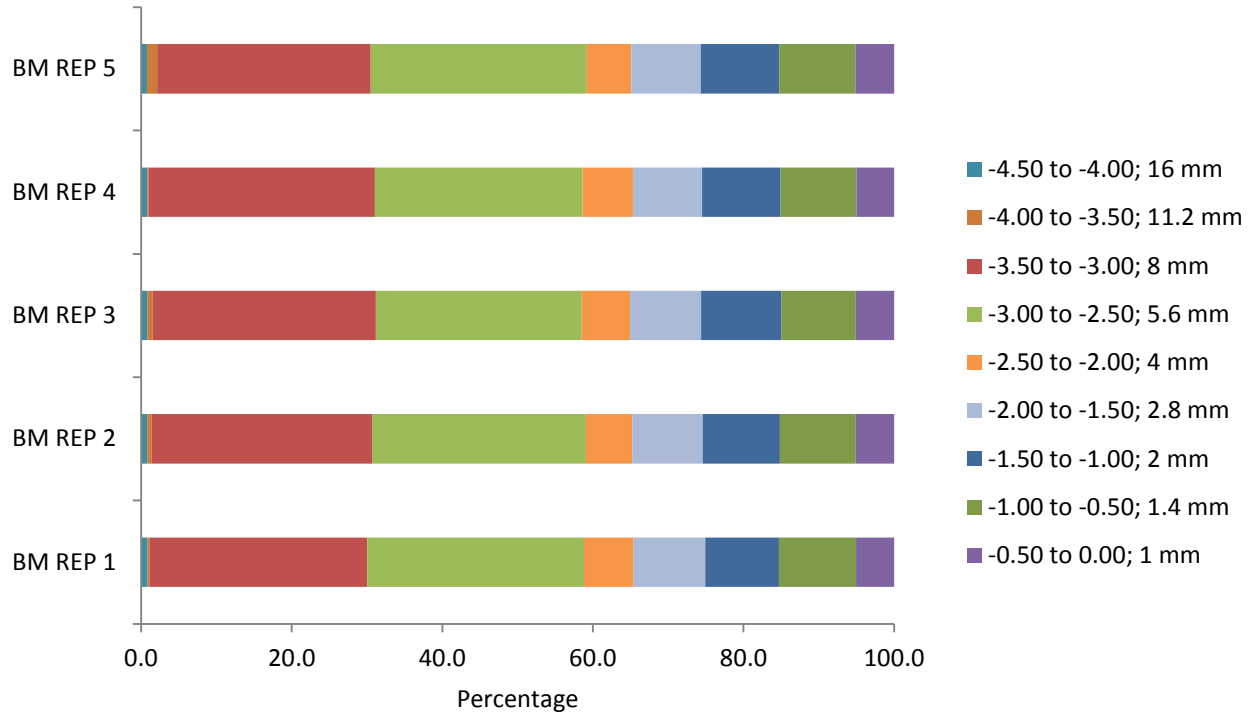


Figure 1b. Particle size distribution curves resulting from final laser analysis of 5 replicate samples of sediment distibuted as PS67 (Benchmark Data).

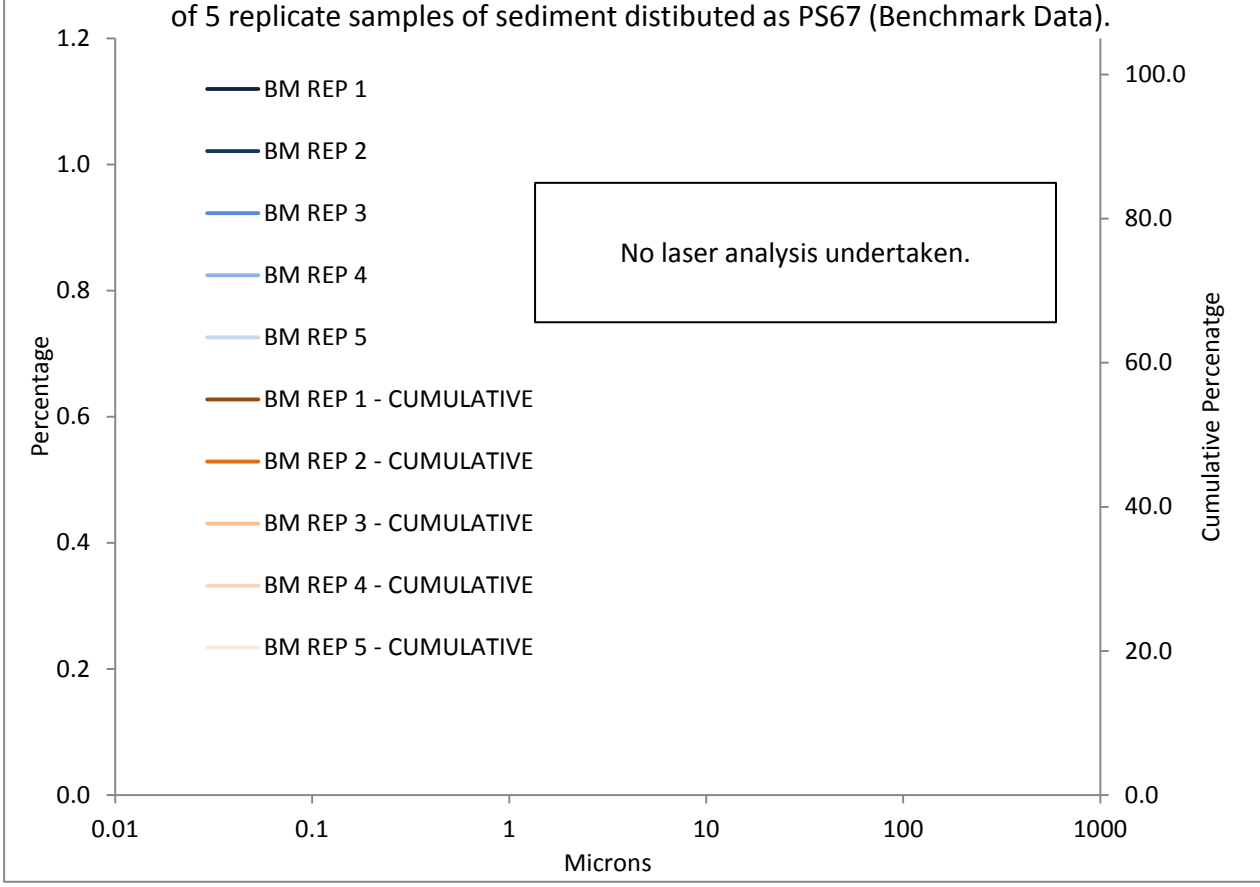
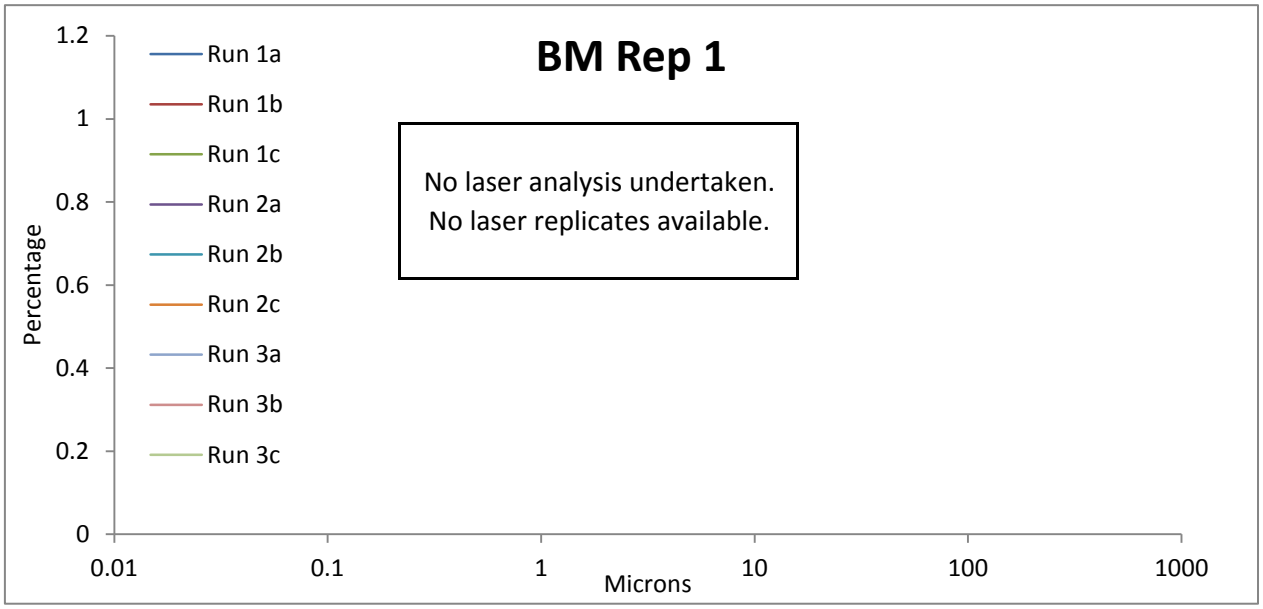
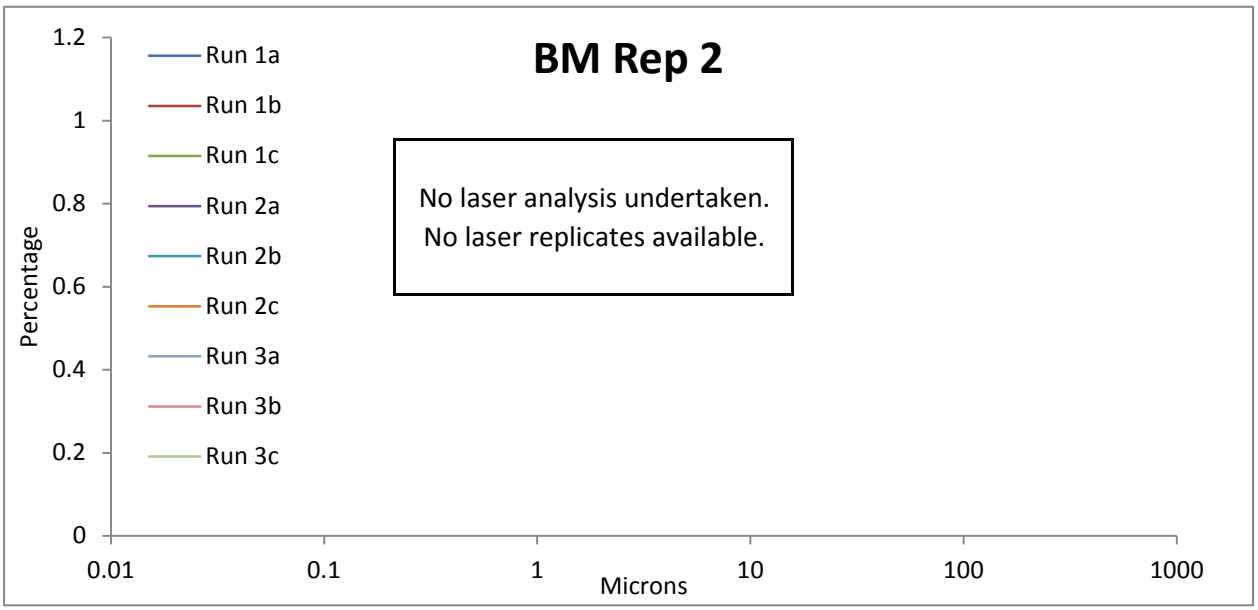


Figure 2. Particle size distribution curves resulting from laser analysis of five replicate samples of sediment distributed as PS67 along with sample statistics and Coefficient of Variance.





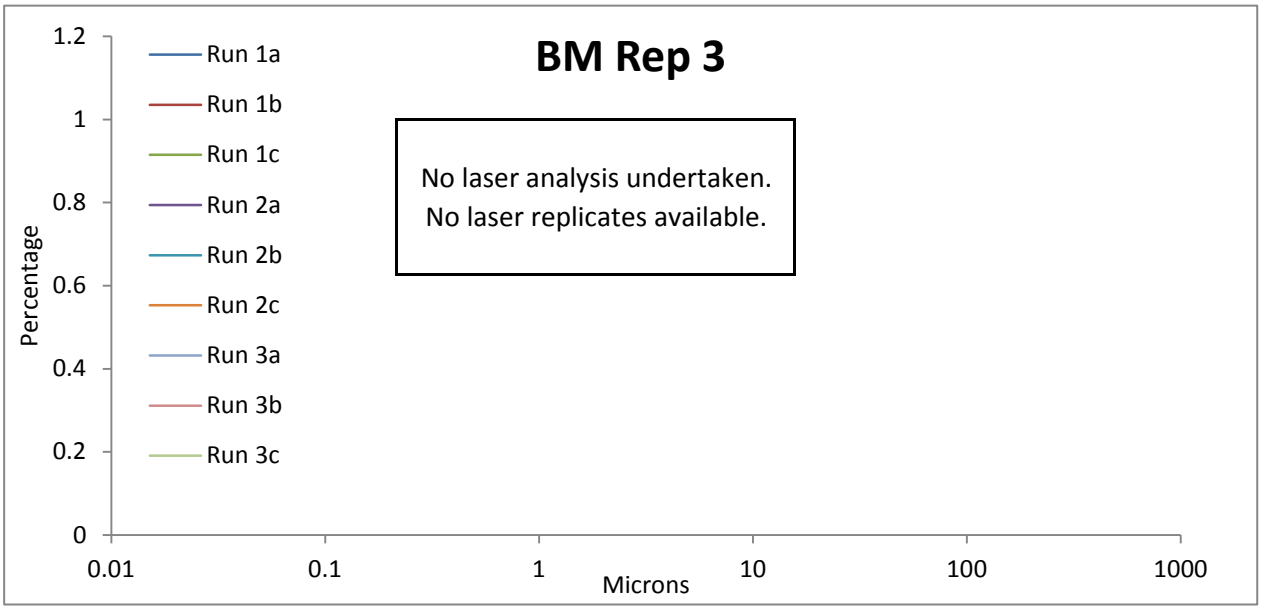
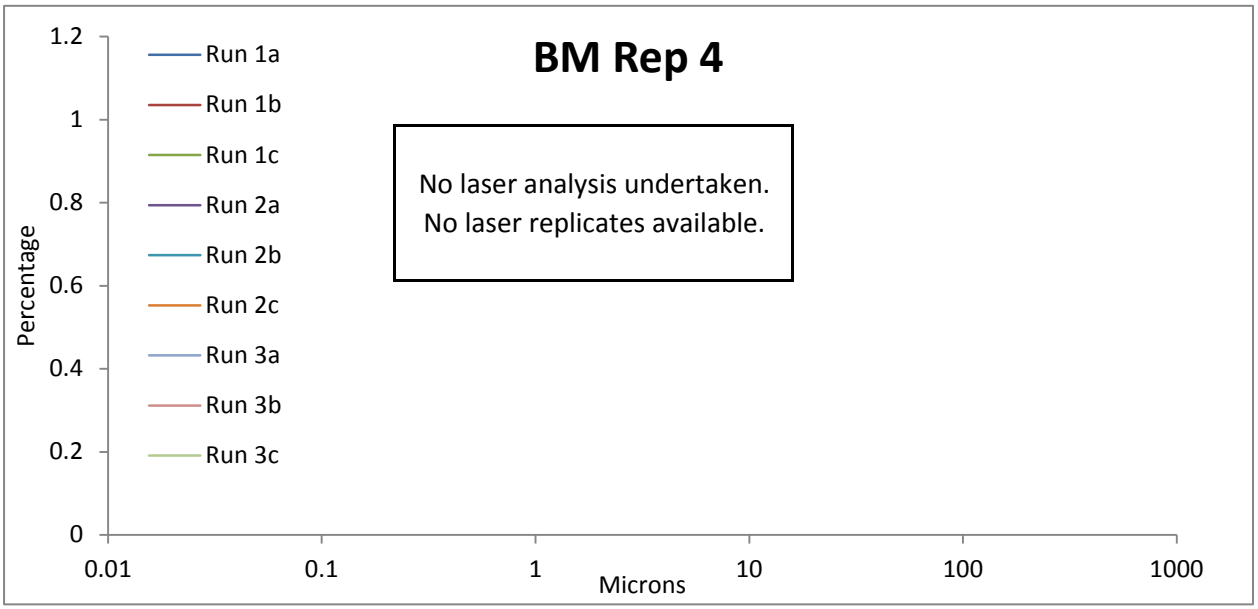
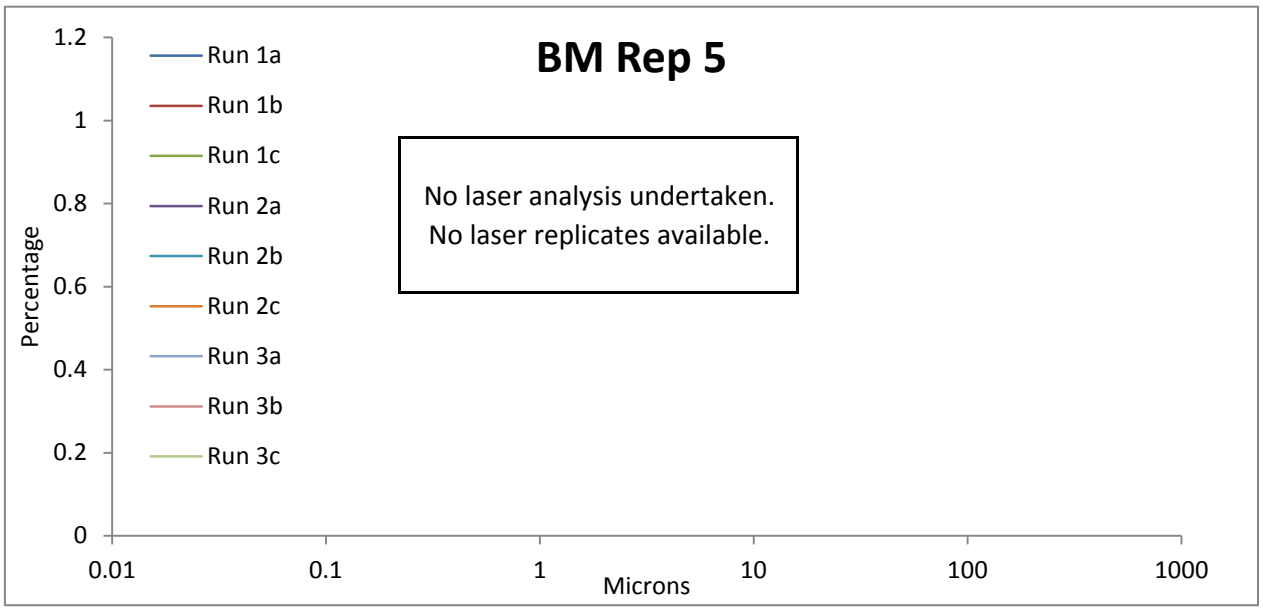


Figure 2. Particle size distribution curves resulting from laser analysis of five replicate samples of sediment distributed as PS67 along with sample statistics and Coefficient of Variance.





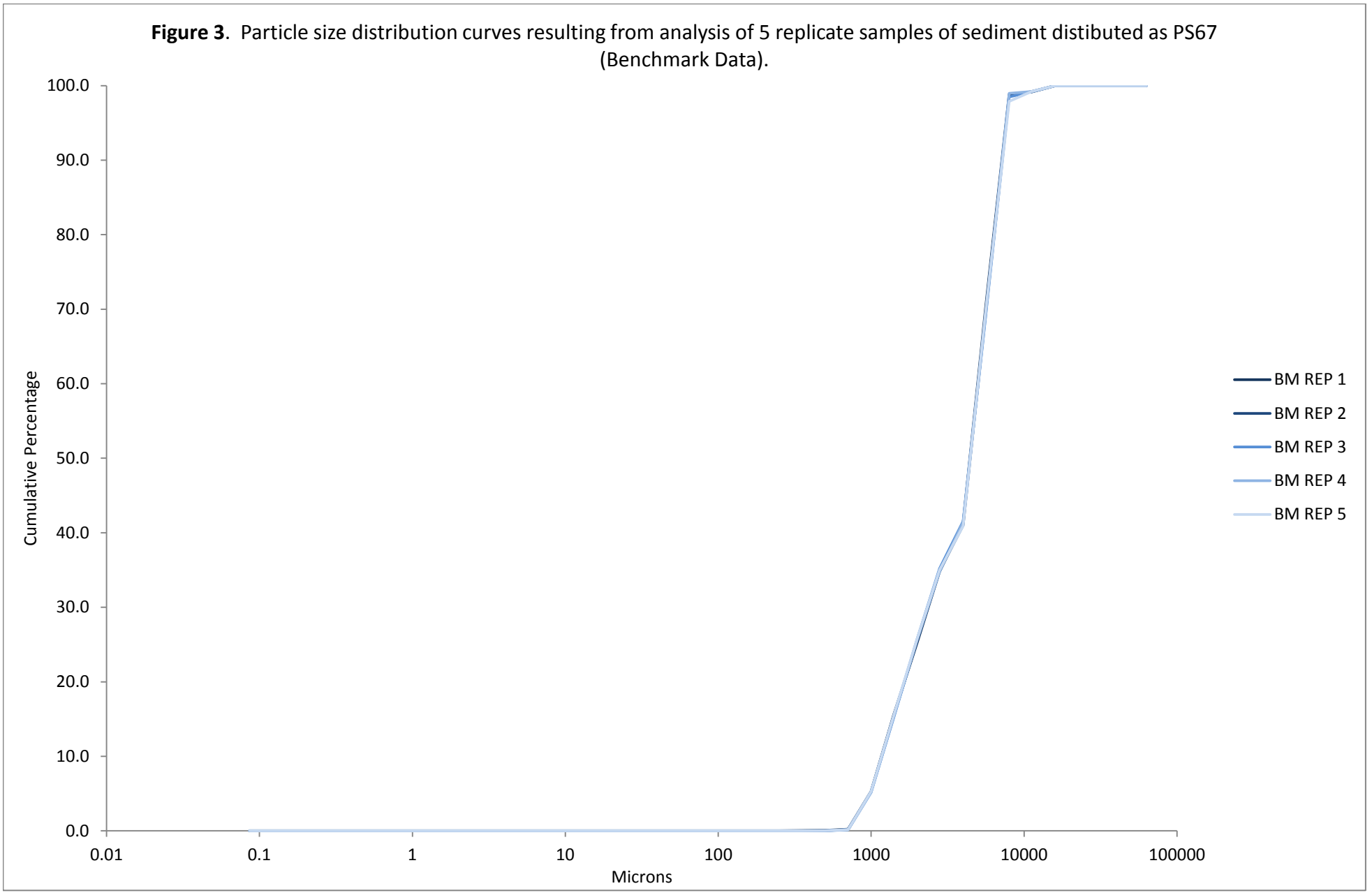
$$COV = \left(\frac{StDev}{Mean}\right) * 100$$

Good reproducibility when: COV is <3% for D50
COV is <5% for D10 and D90

All limits double when the D50 is <10microns.

All Benchmark laser replicates distributed as PS66 show a COV <3% for the D50 and <5% for the D10 and D90.
The laser replicates show good reproducibility.

Figure 3. Particle size distribution curves resulting from analysis of 5 replicate samples of sediment distibuted as PS67 (Benchmark Data).



PARTICIPANT DATA

Table 4. Summary of equipment and methods used by participants and sample summary data for sediment distributed as PS67.

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	NO	NMBAQC	NO	NO	84.72	15.28	0.00	Gravel
PSA_2401	YES	NO	NMBAQC	NO	NO	86.55	13.45	0.00	Gravel
PSA_2402	NO	NO	NMBAQC	NO	NO	84	16	0	Gravel
PSA_2403	YES	NO	NMBAQC	NO	NO	85.81	14.19	0.00	Gravel
PSA_2404	YES	NO	NMBAQC	NO	NO	84.1	15.9	0.0	Gravel
PSA_2405	YES	NO	NMBAQC	NO	NO	85	15	0	Gravel
PSA_2406	YES	NO	NMBAQC	NO	NO	83.91	16.09	0.00	Gravel
PSA_2407	YES	NO	NMBAQC	NO	NO	84.62	15.38	0.00	Gravel
PSA_2408	YES	NO	OTHER	NO	NO	84.2	15.8	0.0	Gravel
PSA_2409	YES	NO	NMBAQC	NO	NO	84.2	15.8	0.0	Gravel
PSA_2410	YES	NO	NMBAQC	NO	NO	84.67	15.33	0.00	Fine Gravel
PSA_2411	YES	NO	NMBAQC	NO	NO	85.09	14.91	0.00	Gravel
PSA_2412	YES	NO	NMBAQC	NO	NO	84.63	15.10	0.27	Gravel
PSA_2413	YES	NO	NMBAQC	NO	NO	85.4	14.6	0.0	Gravel
PSA_2414	YES	YES	NMBAQC	NO	NO	83.8	16.2	0.0	Gravel
PSA_2415	n/p	n/p	n/p	n/p	n/p	n/p	n/p	n/p	n/p
PSA_2416	YES	NO	NMBAQC	NO	NO	85.95	14.05	0.00	Gravel

NB: Decimal places as supplied by participant.

n/p - not participating in this exercise as do not analyse sediment greater than 1mm.

PARTICIPANT DATA

Table 5. Raw sieve data (weight in grams) provided by participants for sediment distributed as PS67.

		Participant															
Phi interval (explicit) + sieve mesh		Benchmark Average	PSA_2401	PSA_2402	PSA_2403	PSA_2404	PSA_2405	PSA_2406	PSA_2407	PSA_2408	PSA_2409	PSA_2410	PSA_2411	PSA_2412	PSA_2413	PSA_2414	PSA_2415	PSA_2416
-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	n/p	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	n/p	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	n/p	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	n/p	12.24
-4.50 to -4.00; 16 mm		8.83	12.33	10.12	11.32	9.49	11.50	9.83	11.27	9.58	1.10	10.28	9.67	10.93	11.80	11.12	n/p	0.00
-4.00 to -3.50; 11.2 mm		6.88	15.76	7.568	6.87	5.94	0.00	7.22	4.01	5.91	0.89	20.89	4.76	0.00	9.45	8.68	n/p	23.14
-3.50 to -3.00; 8 mm		317.73	299.92	307.2	314.64	315.4	298.56	294.08	314.39	325.65	29.05	295.00	323.67	308.61	328.14	318	n/p	306.26
-3.00 to -2.50; 5.6 mm		306.31	294.85	309.3	285.95	318.1	345.16	335.15	314.54	311.69	28.70	318.50	302.19	333.28	307.16	306.4	n/p	315.42
-2.50 to -2.00; 4 mm		69.14	59.88	75.77	60.79	63.15	64.99	62.82	67.91	65.35	5.08	71.61	70.86	59.73	65.76	68.39	n/p	57.00
-2.00 to -1.50; 2.8 mm		101.57	85.88	92.15	97.80	89.19	87.37	92.58	98.78	89.60	8.54	93.68	100.51	95.06	101.95	62.24	n/p	108.90
-1.50 to -1.00; 2 mm		112.16	106.89	114.6	102.28	118.2	120.60	114.79	114.01	112.55	10.83	118.30	118.88	119.20	112.32	118.7	n/p	123.46
-1.00 to -0.50; 1.4 mm		109.33	82.30	87.7	88.39	107.4	104.07	108.14	103.02	102.74	9.58	99.10	104.56	101.68	99.02	103.5	n/p	92.23
-0.50 to 0.00; 1 mm		55.21	53.71	87.47	52.87	60.23	64.74	58.71	59.57	64.88	5.96	62.67	56.02	62.74	61.50	62.31	n/p	58.32
Total		1087.2	1011.5	1091.9	1020.9	1087.1	1097.0	1083.3	1087.5	1088.0	99.7	1090.0	1091.1	1091.2	1097.1	1059.4	n/p	1097.0
Summary Data																		
< 0.00; >1 mm		1087.2	1011.5	1091.9	1020.9	1090.6	1097.0	1083.3	1087.5	1088.0	99.7	1090.0	1091.1	1091.2	1097.1	1059.4	n/p	1097.0
> 0.00; <1 mm	Base pan	1.8	1.6	5.7	1.4	3.6	3.7	8.2	5.5	0.0	0.3	6.4	2.5	3.9	2.1	6.8	n/p	4.1
	Oven dried	0.0	1.0	0.0	2.9	2.5	0.0	0.6	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	n/p	0.0
Total Sample Weight		1089.0	1014.1	1097.6	1025.1	1096.7	1100.7	1092.2	1093.0	1093.3	100.0	1096.4	1093.6	1095.1	1099.2	1066.1	n/p	1101.1

n/p - not participating in this exercise as do not analyse sediment greater than 1mm.

PARTICIPANT DATA

Table 6. Summary of final laser data for the participants for sediment distributed as PS67.

Phi interval (explicit) + sieve mesh	BM Average	PSA_2401	PSA_2402	PSA_2403	PSA_2404	PSA_2405	PSA_2406	PSA_2407	PSA_2408	PSA_2409	PSA_2410	PSA_2411	PSA_2412	PSA_2413	PSA_2414	PSA_2415	PSA_2416
0.00 to 0.50; (707 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74.96	-	-
0.50 to 1.00; (500 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.24	-	-
1.00 to 1.50; (353.6 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	-	-
1.50 to 2.00; (250 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.95	-	-
2.00 to 2.50; (176.8 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.45	-	-
2.50 to 3.00; (125 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.54	-	-
3.00 to 3.50; (88.39 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.59	-	-
3.50 to 4.00; (62.5 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.77	-	-
4.00 to 4.50; (44.19 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.90	-	-
4.50 to 5.00; (31.25 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.74	-	-
5.00 to 5.50; (22.097 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.37	-	-
5.50 to 6.00; (15.625 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10	-	-
6.00 to 6.50; (11.049 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	-	-
6.50 to 7.00; (7.813 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03	-	-
7.00 to 7.50; (5.524 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.48	-	-
7.50 to 8.00; (3.906 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.50	-	-
8.00 to 8.50; (2.762 µm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.22	-	-
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	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.000	-	-

Figure 4. Final sieve data (in percentages) provided by each participant and the Benchmark Average for sediment distributed as PS67.

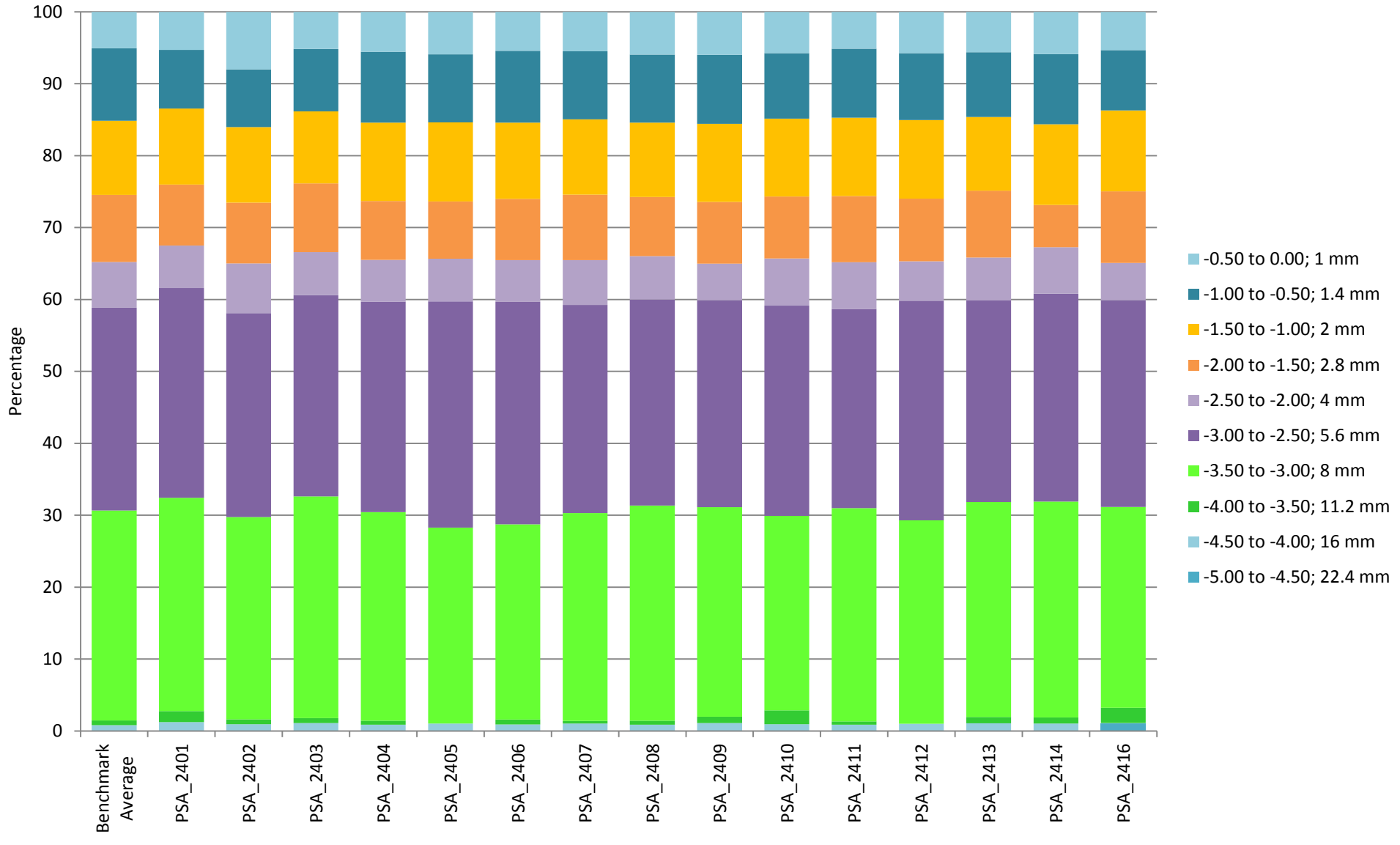
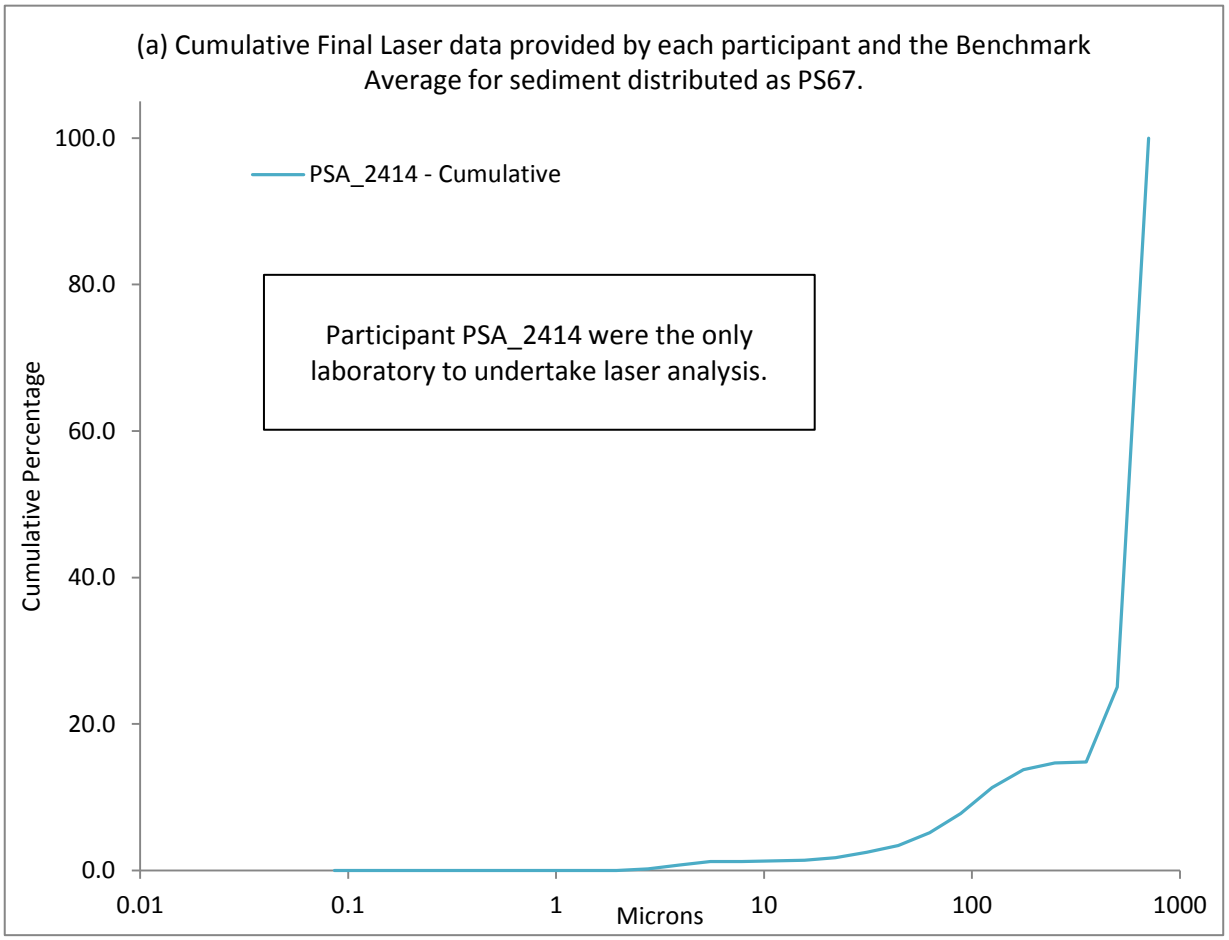


Figure 5. Final laser data provided by each participant and the Benchmark Average for sediment distributed as PS67, shown as (a) cumulative and (b) differential.



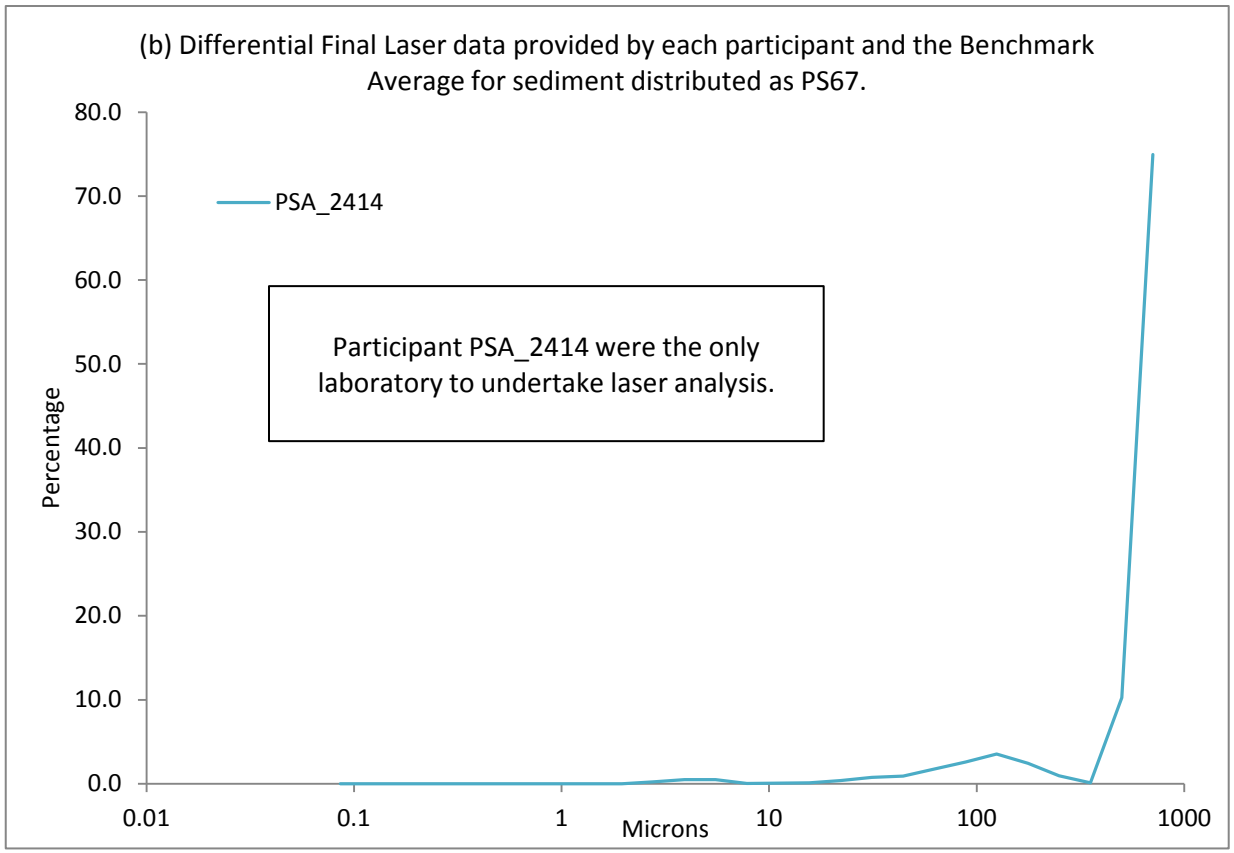


Figure 6. Particle size distribution curves from all participating laboratories and the Benchmark Average for sediment distributed as PS67.

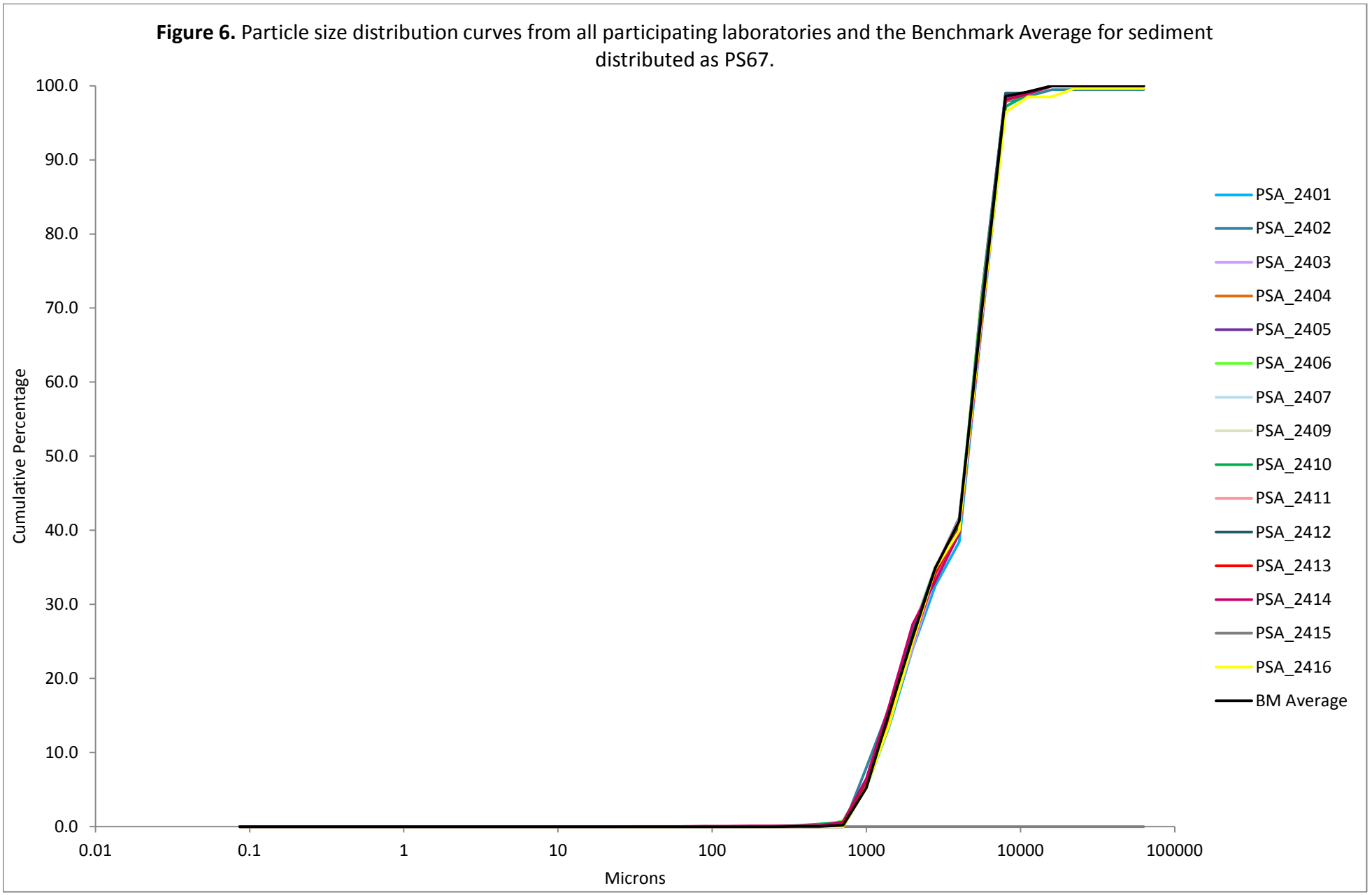
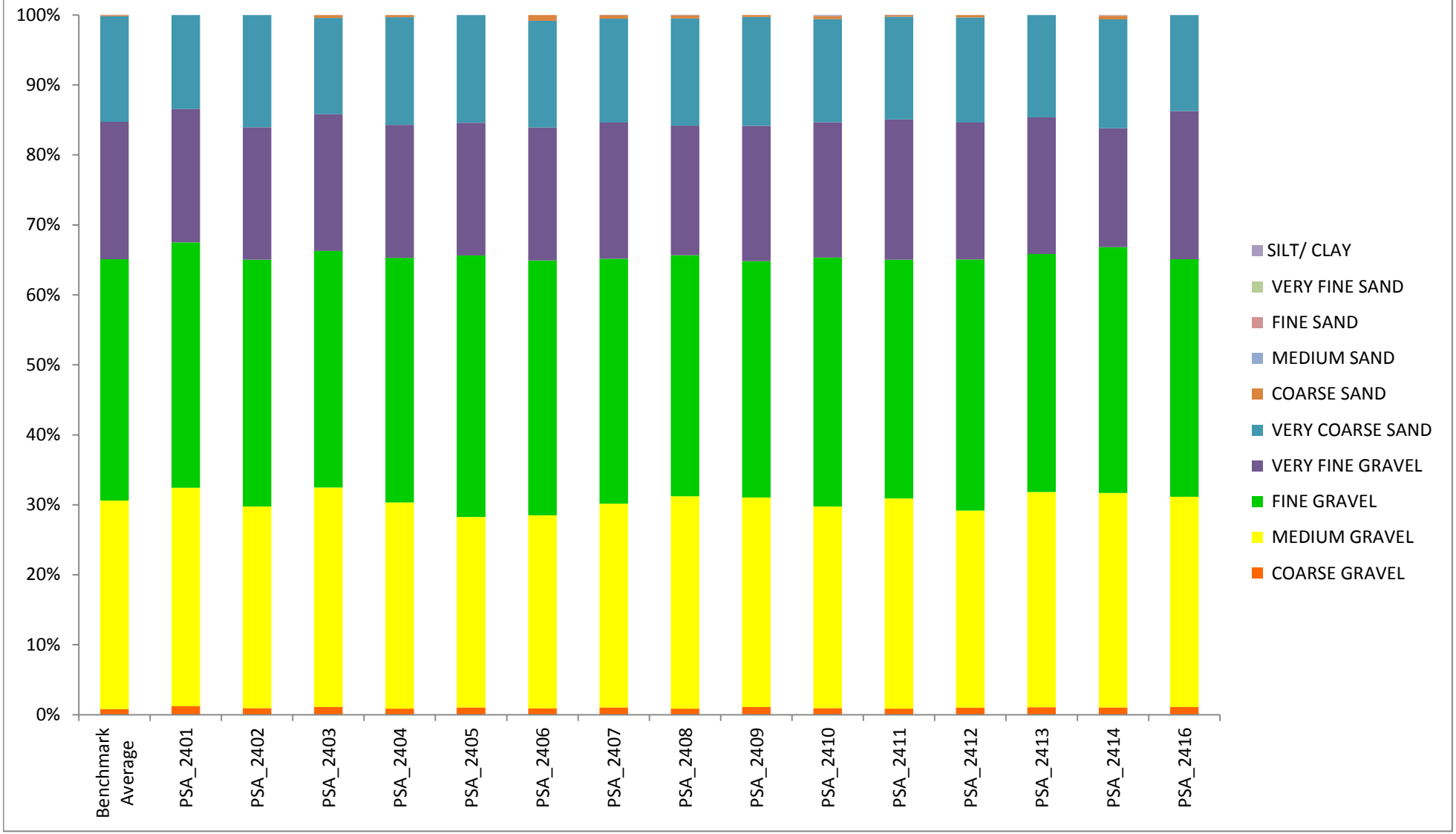


Figure 7. Bar chart showing the percentage gravel, sand, silt and clay recorded by each participating laboratory and the benchmark average for PS67.



APPENDICES

APPENDIX 1. Gradistat output of size categories based on final merged data provided by each participant and the Benchmark Average for sediment distributed as PS67 (used to create Figure 7).

	BM Average	PSA_2401	PSA_2402	PSA_2403	PSA_2404	PSA_2405	PSA_2406	PSA_2407	PSA_2408	PSA_2409	PSA_2410	PSA_2411	PSA_2412	PSA_2413	PSA_2414	PSA_2415	PSA_2416
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
COARSE GRAVEL	0.81	1.22	0.93	1.10	0.87	1.05	0.90	1.03	0.88	1.10	0.94	0.88	1.00	1.08	1.04		1.11
MEDIUM GRAVEL	29.81	31.21	28.82	31.36	29.46	27.22	27.59	29.13	30.33	29.93	28.81	30.03	28.18	30.77	30.64		30.02
FINE GRAVEL	34.48	35.07	35.27	33.82	34.96	37.39	36.44	34.99	34.48	33.78	35.58	34.11	35.89	33.99	35.15		33.96
VERY FINE GRAVEL	19.63	19.06	18.94	19.52	19.01	18.96	18.99	19.47	18.49	19.36	19.33	20.06	19.56	19.53	16.97		21.18
VERY COARSE SAND	15.11	13.45	16.04	13.78	15.37	15.39	15.28	14.88	15.33	15.54	14.75	14.68	15.01	14.63	15.55		13.73
COARSE SAND	0.15	0.00	0.00	0.41	0.33	0.00	0.81	0.48	0.47	0.29	0.43	0.22	0.36	0.00	0.54		0.00
MEDIUM SAND	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.15	0.01	0.00	0.00	0.01		0.00
FINE SAND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.04		0.00
VERY FINE SAND	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	0.03		0.00
VERY COARSE SILT	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	0.01		0.00
COARSE SILT	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
MEDIUM SILT	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
FINE SILT	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	0.01		0.00
VERY FINE SILT	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
CLAY	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

GRAVEL	84.72	86.55	83.96	85.81	84.30	84.61	83.91	84.62	84.18	84.17	84.67	85.09	84.63	85.37	83.81		86.27
SAND	15.28	13.45	16.04	14.19	15.70	15.39	16.09	15.38	15.82	15.83	15.33	14.91	15.37	14.63	16.17		13.73
SILT	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	0.02		0.00
CLAY	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

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2401
Sample Code:	PS672401

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams (mark as "0" for no material or not analysed)
-6.50 to -6.00; 63 mm	0.0000	0.0000
-6.00 to -5.50; 45 mm	0.0000	0.0000
-5.50 to -5.00; 31.5 mm	0.0000	0.0000
-5.00 to -4.50; 22.4 mm	0.0000	0.0000
-4.50 to -4.00; 16 mm	1.2190	12.3300
-4.00 to -3.50; 11.2 mm	1.5581	15.7600
-3.50 to -3.00; 8 mm	29.6504	299.9200
-3.00 to -2.50; 5.6 mm	29.1492	294.8500
-2.50 to -2.00; 4 mm	5.9198	59.8800
-2.00 to -1.50; 2.8 mm	8.4902	85.8800
-1.50 to -1.00; 2 mm	10.5673	106.8900
-1.00 to -0.50; 1.4 mm	8.1363	82.3000
-0.50 to 0.00; 1 mm	5.3098	53.7100
0.00 to 0.50; (707 µm)	0.0000	0.0000
0.50 to 1.00; (500 µm)	0.0000	0.0000
1.00 to 1.50; (353.6 µm)	0.0000	0.0000
1.50 to 2.00; (250 µm)	0.0000	0.0000
2.00 to 2.50; (176.8 µm)	0.0000	0.0000
2.50 to 3.00; (125 µm)	0.0000	0.0000
3.00 to 3.50; (88.39 µm)	0.0000	0.0000
3.50 to 4.00; (62.5 µm)	0.0000	0.0000
4.00 to 4.50; (44.19 µm)	0.0000	0.0000
4.50 to 5.00; (31.25 µm)	0.0000	0.0000
5.00 to 5.50; (22.097 µm)	0.0000	0.0000
5.50 to 6.00; (15.625 µm)	0.0000	0.0000
6.00 to 6.50; (11.049 µm)	0.0000	0.0000
6.50 to 7.00; (7.813 µm)	0.0000	0.0000
7.00 to 7.50; (5.524 µm)	0.0000	0.0000
7.50 to 8.00; (3.906 µm)	0.0000	0.0000
8.00 to 8.50; (2.762 µm)	0.0000	0.0000
8.50 to 9.00; (1.953 µm)	0.0000	0.0000
9.00 to 9.50; (1.381 µm)	0.0000	0.0000
9.50 to 10.00; (0.977 µm)	0.0000	0.0000
10.00 to 10.50; (0.691 µm)	0.0000	0.0000
10.50 to 11.00; (0.488 µm)	0.0000	0.0000
11.00 to 11.50; (0.345 µm)	0.0000	0.0000
11.50 to 12.00; (0.244 µm)	0.0000	0.0000
12.00 to 12.50; (0.173 µm)	0.0000	0.0000
12.50 to 13.00; (0.122 µm)	0.0000	0.0000
13.00 to 13.50; (0.086 µm)	0.0000	0.0000
TOTAL	100.0000	1011.5200

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2402
Sample Code:	PS672402

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams (mark as "0" for no material or not analysed)
-6.50 to -6.00; 63 mm	0.0000	0.0000
-6.00 to -5.50; 45 mm	0.0000	0.0000
-5.50 to -5.00; 31.5 mm	0.0000	0.0000
-5.00 to -4.50; 22.4 mm	0.0000	0.0000
-4.50 to -4.00; 16 mm	0.9222	10.1220
-4.00 to -3.50; 11.2 mm	0.6895	7.5680
-3.50 to -3.00; 8 mm	27.9862	307.1700
-3.00 to -2.50; 5.6 mm	28.1840	309.3410
-2.50 to -2.00; 4 mm	6.9032	75.7680
-2.00 to -1.50; 2.8 mm	8.3953	92.1450
-1.50 to -1.00; 2 mm	10.4427	114.6170
-1.00 to -0.50; 1.4 mm	7.9906	87.7030
-0.50 to 0.00; 1 mm	7.9689	87.4650
0.00 to 0.50; (707 µm)	0.0000	0.0000
0.50 to 1.00; (500 µm)	0.0000	0.0000
1.00 to 1.50; (353.6 µm)	0.0000	0.0000
1.50 to 2.00; (250 µm)	0.0000	0.0000
2.00 to 2.50; (176.8 µm)	0.0000	0.0000
2.50 to 3.00; (125 µm)	0.0000	0.0000
3.00 to 3.50; (88.39 µm)	0.0000	0.0000
3.50 to 4.00; (62.5 µm)	0.0000	0.0000
4.00 to 4.50; (44.19 µm)	0.0000	0.0000
4.50 to 5.00; (31.25 µm)	0.0000	0.0000
5.00 to 5.50; (22.097 µm)	0.0000	0.0000
5.50 to 6.00; (15.625 µm)	0.0000	0.0000
6.00 to 6.50; (11.049 µm)	0.0000	0.0000
6.50 to 7.00; (7.813 µm)	0.0000	0.0000
7.00 to 7.50; (5.524 µm)	0.0000	0.0000
7.50 to 8.00; (3.906 µm)	0.0000	0.0000
8.00 to 8.50; (2.762 µm)	0.0000	0.0000
8.50 to 9.00; (1.953 µm)	0.0000	0.0000
9.00 to 9.50; (1.381 µm)	0.0000	0.0000
9.50 to 10.00; (0.977 µm)	0.0000	0.0000
10.00 to 10.50; (0.691 µm)	0.0000	0.0000
10.50 to 11.00; (0.488 µm)	0.0000	0.0000
11.00 to 11.50; (0.345 µm)	0.0000	0.0000
11.50 to 12.00; (0.244 µm)	0.0000	0.0000
12.00 to 12.50; (0.173 µm)	0.0000	0.0000
12.50 to 13.00; (0.122 µm)	0.0000	0.0000
13.00 to 13.50; (0.086 µm)	0.0000	0.0000
TOTAL	99.4828	1091.8990

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2403
Sample Code:	PS672403

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams (mark as "0" for no material or not analysed)
-6.50 to -6.00; 63 mm	0.0000	0.0000
-6.00 to -5.50; 45 mm	0.0000	0.0000
-5.50 to -5.00; 31.5 mm	0.0000	0.0000
-5.00 to -4.50; 22.4 mm	0.0000	0.0000
-4.50 to -4.00; 16 mm	1.1043	11.3200
-4.00 to -3.50; 11.2 mm	0.6702	6.8700
-3.50 to -3.00; 8 mm	30.6927	314.6400
-3.00 to -2.50; 5.6 mm	27.8940	285.9500
-2.50 to -2.00; 4 mm	5.9300	60.7900
-2.00 to -1.50; 2.8 mm	9.5403	97.8000
-1.50 to -1.00; 2 mm	9.9773	102.2800
-1.00 to -0.50; 1.4 mm	8.6223	88.3900
-0.50 to 0.00; 1 mm	5.1574	52.8700
0.00 to 0.50; (707 µm)	0.4117	4.2200
0.50 to 1.00; (500 µm)	0.0000	0.0000
1.00 to 1.50; (353.6 µm)	0.0000	0.0000
1.50 to 2.00; (250 µm)	0.0000	0.0000
2.00 to 2.50; (176.8 µm)	0.0000	0.0000
2.50 to 3.00; (125 µm)	0.0000	0.0000
3.00 to 3.50; (88.39 µm)	0.0000	0.0000
3.50 to 4.00; (62.5 µm)	0.0000	0.0000
4.00 to 4.50; (44.19 µm)	0.0000	0.0000
4.50 to 5.00; (31.25 µm)	0.0000	0.0000
5.00 to 5.50; (22.097 µm)	0.0000	0.0000
5.50 to 6.00; (15.625 µm)	0.0000	0.0000
6.00 to 6.50; (11.049 µm)	0.0000	0.0000
6.50 to 7.00; (7.813 µm)	0.0000	0.0000
7.00 to 7.50; (5.524 µm)	0.0000	0.0000
7.50 to 8.00; (3.906 µm)	0.0000	0.0000
8.00 to 8.50; (2.762 µm)	0.0000	0.0000
8.50 to 9.00; (1.953 µm)	0.0000	0.0000
9.00 to 9.50; (1.381 µm)	0.0000	0.0000
9.50 to 10.00; (0.977 µm)	0.0000	0.0000
10.00 to 10.50; (0.691 µm)	0.0000	0.0000
10.50 to 11.00; (0.488 µm)	0.0000	0.0000
11.00 to 11.50; (0.345 µm)	0.0000	0.0000
11.50 to 12.00; (0.244 µm)	0.0000	0.0000
12.00 to 12.50; (0.173 µm)	0.0000	0.0000
12.50 to 13.00; (0.122 µm)	0.0000	0.0000
13.00 to 13.50; (0.086 µm)	0.0000	0.0000
TOTAL	100.0000	1025.1300

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2404
Sample Code:	PS672404

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or 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	0.8701	
-4.00 to -3.50; 11.2 mm	0.5446	
-3.50 to -3.00; 8 mm	28.9145	
-3.00 to -2.50; 5.6 mm	29.1685	
-2.50 to -2.00; 4 mm	5.7902	
-2.00 to -1.50; 2.8 mm	8.1778	
-1.50 to -1.00; 2 mm	10.8350	
-1.00 to -0.50; 1.4 mm	9.8503	
-0.50 to 0.00; 1 mm	5.5225	
0.00 to 0.50; (707 µm)	0.3264	
0.50 to 1.00; (500 µm)	0.0000	
1.00 to 1.50; (353.6 µm)	0.0000	
1.50 to 2.00; (250 µm)	0.0000	
2.00 to 2.50; (176.8 µm)	0.0000	
2.50 to 3.00; (125 µm)	0.0000	
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	
TOTAL	100.0000	

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2405
Sample Code:	PS672405

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams (mark as "0" for no material or not analysed)
-6.50 to -6.00; 63 mm	0.0000	0.0000
-6.00 to -5.50; 45 mm	0.0000	0.0000
-5.50 to -5.00; 31.5 mm	0.0000	0.0000
-5.00 to -4.50; 22.4 mm	0.0000	0.0000
-4.50 to -4.00; 16 mm	1.0483	11.5000
-4.00 to -3.50; 11.2 mm	0.0000	0.0000
-3.50 to -3.00; 8 mm	27.2163	298.5600
-3.00 to -2.50; 5.6 mm	31.4643	345.1600
-2.50 to -2.00; 4 mm	5.9244	64.9900
-2.00 to -1.50; 2.8 mm	7.9645	87.3700
-1.50 to -1.00; 2 mm	10.9937	120.6000
-1.00 to -0.50; 1.4 mm	9.4869	104.0700
-0.50 to 0.00; 1 mm	5.9016	64.7400
0.00 to 0.50; (707 µm)		
0.50 to 1.00; (500 µm)		
1.00 to 1.50; (353.6 µm)		
1.50 to 2.00; (250 µm)		
2.00 to 2.50; (176.8 µm)		
2.50 to 3.00; (125 µm)		
3.00 to 3.50; (88.39 µm)		
3.50 to 4.00; (62.5 µm)		
4.00 to 4.50; (44.19 µm)		
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)		
TOTAL	100.0000	1096.9900

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2406
Sample Code:	PS672406

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams (mark as "0" for no material or 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	0.90	9.83
-4.00 to -3.50; 11.2 mm	0.66	7.22
-3.50 to -3.00; 8 mm	26.93	294.08
-3.00 to -2.50; 5.6 mm	30.69	335.15
-2.50 to -2.00; 4 mm	5.75	62.82
-2.00 to -1.50; 2.8 mm	8.48	92.58
-1.50 to -1.00; 2 mm	10.51	114.79
-1.00 to -0.50; 1.4 mm	9.90	108.14
-0.50 to 0.00; 1 mm	5.38	58.71
0.00 to 0.50; (707 µm)	0.81	8.83
0.50 to 1.00; (500 µm)		
1.00 to 1.50; (353.6 µm)		
1.50 to 2.00; (250 µm)		
2.00 to 2.50; (176.8 µm)		
2.50 to 3.00; (125 µm)		
3.00 to 3.50; (88.39 µm)		
3.50 to 4.00; (62.5 µm)		
4.00 to 4.50; (44.19 µm)		
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)		
TOTAL	100.0000	1092.1500

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2407
Sample Code:	PS672407

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams (mark as "0" for no material or not analysed)
-6.50 to -6.00; 63 mm	0.0000	0.0000
-6.00 to -5.50; 45 mm	0.0000	0.0000
-5.50 to -5.00; 31.5 mm	0.0000	0.0000
-5.00 to -4.50; 22.4 mm	0.0000	0.0000
-4.50 to -4.00; 16 mm	1.0311	11.2700
-4.00 to -3.50; 11.2 mm	0.3669	4.0100
-3.50 to -3.00; 8 mm	28.7634	314.3900
-3.00 to -2.50; 5.6 mm	28.7771	314.5400
-2.50 to -2.00; 4 mm	6.2131	67.9100
-2.00 to -1.50; 2.8 mm	9.0373	98.7800
-1.50 to -1.00; 2 mm	10.4307	114.0100
-1.00 to -0.50; 1.4 mm	9.4253	103.0200
-0.50 to 0.00; 1 mm	5.4500	59.5700
0.00 to 0.50; (707 µm)	0.4657	5.0900
0.50 to 1.00; (500 µm)	0.0183	0.2000
1.00 to 1.50; (353.6 µm)	0.0082	0.0900
1.50 to 2.00; (250 µm)	0.0064	0.0700
2.00 to 2.50; (176.8 µm)	0.0055	0.0600
2.50 to 3.00; (125 µm)	0.0009	0.0100
3.00 to 3.50; (88.39 µm)	0.0000	0.0000
3.50 to 4.00; (62.5 µm)	0.0000	0.0000
4.00 to 4.50; (44.19 µm)	0.0000	0.0000
4.50 to 5.00; (31.25 µm)	0.0000	0.0000
5.00 to 5.50; (22.097 µm)	0.0000	0.0000
5.50 to 6.00; (15.625 µm)	0.0000	0.0000
6.00 to 6.50; (11.049 µm)	0.0000	0.0000
6.50 to 7.00; (7.813 µm)	0.0000	0.0000
7.00 to 7.50; (5.524 µm)	0.0000	0.0000
7.50 to 8.00; (3.906 µm)	0.0000	0.0000
8.00 to 8.50; (2.762 µm)	0.0000	0.0000
8.50 to 9.00; (1.953 µm)	0.0000	0.0000
9.00 to 9.50; (1.381 µm)	0.0000	0.0000
9.50 to 10.00; (0.977 µm)	0.0000	0.0000
10.00 to 10.50; (0.691 µm)	0.0000	0.0000
10.50 to 11.00; (0.488 µm)	0.0000	0.0000
11.00 to 11.50; (0.345 µm)	0.0000	0.0000
11.50 to 12.00; (0.244 µm)	0.0000	0.0000
12.00 to 12.50; (0.173 µm)	0.0000	0.0000
12.50 to 13.00; (0.122 µm)	0.0000	0.0000
13.00 to 13.50; (0.086 µm)	0.0000	0.0000
TOTAL	100.0000	1093.0200

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2408
Sample Code:	PS672408

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams (mark as "0" for no material or 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	0.8759	9.5770
-4.00 to -3.50; 11.2 mm	0.5406	5.9110
-3.50 to -3.00; 8 mm	29.7849	325.6520
-3.00 to -2.50; 5.6 mm	28.5076	311.6870
-2.50 to -2.00; 4 mm	5.9772	65.3510
-2.00 to -1.50; 2.8 mm	8.1948	89.5980
-1.50 to -1.00; 2 mm	10.2942	112.5510
-1.00 to -0.50; 1.4 mm	9.3968	102.7400
-0.50 to 0.00; 1 mm	5.9344	64.8840
0.00 to 0.50; (707 µm)	0.4506	4.9270
0.50 to 1.00; (500 µm)	0.0172	0.1880
1.00 to 1.50; (353.6 µm)	0.0061	0.0670
1.50 to 2.00; (250 µm)	0.0089	0.0970
2.00 to 2.50; (176.8 µm)	0.0033	0.0360
2.50 to 3.00; (125 µm)	0.0026	0.0280
3.00 to 3.50; (88.39 µm)	0.0023	0.0250
3.50 to 4.00; (62.5 µm)	0.0010	0.0110
4.00 to 4.50; (44.19 µm)	0.0015	0.0160
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)		
TOTAL	100.0000	1093.3460

Notes: Red text calculated by APEM.

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2409
Sample Code:	PS672409

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or 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	1.0978	
-4.00 to -3.50; 11.2 mm	0.8868	
-3.50 to -3.00; 8 mm	29.0471	
-3.00 to -2.50; 5.6 mm	28.7015	
-2.50 to -2.00; 4 mm	5.0760	
-2.00 to -1.50; 2.8 mm	8.5358	
-1.50 to -1.00; 2 mm	10.8259	
-1.00 to -0.50; 1.4 mm	9.5790	
-0.50 to 0.00; 1 mm	5.9609	
0.00 to 0.50; (707 µm)	0.2347	
0.50 to 1.00; (500 µm)	0.0546	
1.00 to 1.50; (353.6 µm)	0.0000	
1.50 to 2.00; (250 µm)	0.0000	
2.00 to 2.50; (176.8 µm)	0.0000	
2.50 to 3.00; (125 µm)	0.0000	
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	
TOTAL	100.0000	0.0000

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2410
Sample Code:	PS672410

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams (mark as "0" for no material or not analysed)
-6.50 to -6.00; 63 mm	0.0000	0.0000
-6.00 to -5.50; 45 mm	0.0000	0.0000
-5.50 to -5.00; 31.5 mm	0.0000	0.0000
-5.00 to -4.50; 22.4 mm	0.0000	0.0000
-4.50 to -4.00; 16 mm	0.9376	10.2800
-4.00 to -3.50; 11.2 mm	1.9053	20.8900
-3.50 to -3.00; 8 mm	26.9065	295.0000
-3.00 to -2.50; 5.6 mm	29.0499	318.5000
-2.50 to -2.00; 4 mm	6.5314	71.6100
-2.00 to -1.50; 2.8 mm	8.5444	93.6800
-1.50 to -1.00; 2 mm	10.7900	118.3000
-1.00 to -0.50; 1.4 mm	9.0388	99.1000
-0.50 to 0.00; 1 mm	5.7160	62.6700
0.00 to 0.50; (707 µm)	0.2153	2.3609
0.50 to 1.00; (500 µm)	0.2162	2.3701
1.00 to 1.50; (353.6 µm)	0.1202	1.3179
1.50 to 2.00; (250 µm)	0.0283	0.3100
2.00 to 2.50; (176.8 µm)	0.0001	0.0011
2.50 to 3.00; (125 µm)	0.0000	0.0000
3.00 to 3.50; (88.39 µm)	0.0000	0.0000
3.50 to 4.00; (62.5 µm)	0.0000	0.0000
4.00 to 4.50; (44.19 µm)	0.0000	0.0000
4.50 to 5.00; (31.25 µm)	0.0000	0.0000
5.00 to 5.50; (22.097 µm)	0.0000	0.0000
5.50 to 6.00; (15.625 µm)	0.0000	0.0000
6.00 to 6.50; (11.049 µm)	0.0000	0.0000
6.50 to 7.00; (7.813 µm)	0.0000	0.0000
7.00 to 7.50; (5.524 µm)	0.0000	0.0000
7.50 to 8.00; (3.906 µm)	0.0000	0.0000
8.00 to 8.50; (2.762 µm)	0.0000	0.0000
8.50 to 9.00; (1.953 µm)	0.0000	0.0000
9.00 to 9.50; (1.381 µm)	0.0000	0.0000
9.50 to 10.00; (0.977 µm)	0.0000	0.0000
10.00 to 10.50; (0.691 µm)	0.0000	0.0000
10.50 to 11.00; (0.488 µm)	0.0000	0.0000
11.00 to 11.50; (0.345 µm)	0.0000	0.0000
11.50 to 12.00; (0.244 µm)	0.0000	0.0000
12.00 to 12.50; (0.173 µm)	0.0000	0.0000
12.50 to 13.00; (0.122 µm)	0.0000	0.0000
13.00 to 13.50; (0.086 µm)	0.0000	0.0000
TOTAL	100.0000	1096.3900

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2411
Sample Code:	PS672411

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams (mark as "0" for no material or 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	0.8842	9.6700
-4.00 to -3.50; 11.2 mm	0.4352	4.7600
-3.50 to -3.00; 8 mm	29.5957	323.6700
-3.00 to -2.50; 5.6 mm	27.6316	302.1900
-2.50 to -2.00; 4 mm	6.4793	70.8600
-2.00 to -1.50; 2.8 mm	9.1904	100.5100
-1.50 to -1.00; 2 mm	10.8701	118.8800
-1.00 to -0.50; 1.4 mm	9.5607	104.5600
-0.50 to 0.00; 1 mm	5.1223	56.0200
0.00 to 0.50; (707 µm)	0.2066	2.2600
0.50 to 1.00; (500 µm)	0.0155	0.1700
1.00 to 1.50; (353.6 µm)	0.0027	0.0300
1.50 to 2.00; (250 µm)	0.0027	0.0300
2.00 to 2.50; (176.8 µm)	0.0027	0.0300
2.50 to 3.00; (125 µm)	0.0000	0.0000
3.00 to 3.50; (88.39 µm)	0.0000	0.0000
3.50 to 4.00; (62.5 µm)	0.0000	0.0000
4.00 to 4.50; (44.19 µm)		
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)		
TOTAL	100.0000	1093.6400

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2412
Sample Code:	PS672412

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams (mark as "0" for no material or not analysed)
-6.50 to -6.00; 63 mm	0.0000	0.0000
-6.00 to -5.50; 45 mm	0.0000	0.0000
-5.50 to -5.00; 31.5 mm	0.0000	0.0000
-5.00 to -4.50; 22.4 mm	0.0000	0.0000
-4.50 to -4.00; 16 mm	0.9984	10.9340
-4.00 to -3.50; 11.2 mm	0.0000	0.0000
-3.50 to -3.00; 8 mm	28.1800	308.6120
-3.00 to -2.50; 5.6 mm	30.4323	333.2770
-2.50 to -2.00; 4 mm	5.4539	59.7280
-2.00 to -1.50; 2.8 mm	8.6800	95.0590
-1.50 to -1.00; 2 mm	10.8841	119.1970
-1.00 to -0.50; 1.4 mm	9.2843	101.6760
-0.50 to 0.00; 1 mm	5.7286	62.7360
0.00 to 0.50; (707 µm)	0.3584	3.9250
0.50 to 1.00; (500 µm)		
1.00 to 1.50; (353.6 µm)		
1.50 to 2.00; (250 µm)		
2.00 to 2.50; (176.8 µm)		
2.50 to 3.00; (125 µm)		
3.00 to 3.50; (88.39 µm)		
3.50 to 4.00; (62.5 µm)		
4.00 to 4.50; (44.19 µm)		
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)		
TOTAL	100.0000	1095.1440

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2413
Sample Code:	PS672413

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams
-6.50 to -6.00; 63 mm	0.0000	0.0000
-6.00 to -5.50; 45 mm	0.0000	0.0000
-5.50 to -5.00; 31.5 mm	0.0000	0.0000
-5.00 to -4.50; 22.4 mm	0.0000	0.0000
-4.50 to -4.00; 16 mm	1.0756	11.8000
-4.00 to -3.50; 11.2 mm	0.8614	9.4500
-3.50 to -3.00; 8 mm	29.9098	328.1400
-3.00 to -2.50; 5.6 mm	27.9974	307.1600
-2.50 to -2.00; 4 mm	5.9940	65.7600
-2.00 to -1.50; 2.8 mm	9.2927	101.9500
-1.50 to -1.00; 2 mm	10.2379	112.3200
-1.00 to -0.50; 1.4 mm	9.0256	99.0200
-0.50 to 0.00; 1 mm	5.6057	61.5000
0.00 to 0.50; (707 µm)	0.0000	0.0000
0.50 to 1.00; (500 µm)	0.0000	0.0000
1.00 to 1.50; (353.6 µm)	0.0000	0.0000
1.50 to 2.00; (250 µm)	0.0000	0.0000
2.00 to 2.50; (176.8 µm)	0.0000	0.0000
2.50 to 3.00; (125 µm)	0.0000	0.0000
3.00 to 3.50; (88.39 µm)	0.0000	0.0000
3.50 to 4.00; (62.5 µm)	0.0000	0.0000
4.00 to 4.50; (44.19 µm)	0.0000	0.0000
4.50 to 5.00; (31.25 µm)	0.0000	0.0000
5.00 to 5.50; (22.097 µm)	0.0000	0.0000
5.50 to 6.00; (15.625 µm)	0.0000	0.0000
6.00 to 6.50; (11.049 µm)	0.0000	0.0000
6.50 to 7.00; (7.813 µm)	0.0000	0.0000
7.00 to 7.50; (5.524 µm)	0.0000	0.0000
7.50 to 8.00; (3.906 µm)	0.0000	0.0000
8.00 to 8.50; (2.762 µm)	0.0000	0.0000
8.50 to 9.00; (1.953 µm)	0.0000	0.0000
9.00 to 9.50; (1.381 µm)	0.0000	0.0000
9.50 to 10.00; (0.977 µm)	0.0000	0.0000
10.00 to 10.50; (0.691 µm)	0.0000	0.0000
10.50 to 11.00; (0.488 µm)	0.0000	0.0000
11.00 to 11.50; (0.345 µm)	0.0000	0.0000
11.50 to 12.00; (0.244 µm)	0.0000	0.0000
12.00 to 12.50; (0.173 µm)	0.0000	0.0000
12.50 to 13.00; (0.122 µm)	0.0000	0.0000
13.00 to 13.50; (0.086 µm)	0.0000	0.0000
TOTAL	100.0000	1097.1000

Notes: Red text calculated by APEM.

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2414
Sample Code:	PS672414

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams (mark as "0" for no material or not analysed)
-6.50 to -6.00; 63 mm	0.0000	0.0000
-6.00 to -5.50; 45 mm	0.0000	0.0000
-5.50 to -5.00; 31.5 mm	0.0000	0.0000
-5.00 to -4.50; 22.4 mm	0.0000	0.0000
-4.50 to -4.00; 16 mm	1.0430	11.1200
-4.00 to -3.50; 11.2 mm	0.8142	8.6800
-3.50 to -3.00; 8 mm	29.8300	318.0300
-3.00 to -2.50; 5.6 mm	28.7383	306.3900
-2.50 to -2.00; 4 mm	6.4147	68.3900
-2.00 to -1.50; 2.8 mm	5.8379	62.2400
-1.50 to -1.00; 2 mm	11.1327	118.6900
-1.00 to -0.50; 1.4 mm	9.7098	103.5200
-0.50 to 0.00; 1 mm	5.8444	62.3100
0.00 to 0.50; (707 µm)	0.4760	5.0747
0.50 to 1.00; (500 µm)	0.0650	0.6933
1.00 to 1.50; (353.6 µm)	0.0007	0.0070
1.50 to 2.00; (250 µm)	0.0061	0.0646
2.00 to 2.50; (176.8 µm)	0.0155	0.1655
2.50 to 3.00; (125 µm)	0.0225	0.2396
3.00 to 3.50; (88.39 µm)	0.0164	0.1752
3.50 to 4.00; (62.5 µm)	0.0112	0.1196
4.00 to 4.50; (44.19 µm)	0.0057	0.0607
4.50 to 5.00; (31.25 µm)	0.0047	0.0503
5.00 to 5.50; (22.097 µm)	0.0023	0.0250
5.50 to 6.00; (15.625 µm)	0.0007	0.0071
6.00 to 6.50; (11.049 µm)	0.0003	0.0037
6.50 to 7.00; (7.813 µm)	0.0002	0.0024
7.00 to 7.50; (5.524 µm)	0.0030	0.0325
7.50 to 8.00; (3.906 µm)	0.0032	0.0337
8.00 to 8.50; (2.762 µm)	0.0014	0.0149
8.50 to 9.00; (1.953 µm)	0.0000	0.0001
9.00 to 9.50; (1.381 µm)	0.0000	0.0000
9.50 to 10.00; (0.977 µm)	0.0000	0.0000
10.00 to 10.50; (0.691 µm)	0.0000	0.0000
10.50 to 11.00; (0.488 µm)	0.0000	0.0000
11.00 to 11.50; (0.345 µm)	0.0000	0.0000
11.50 to 12.00; (0.244 µm)	0.0000	0.0000
12.00 to 12.50; (0.173 µm)	0.0000	0.0000
12.50 to 13.00; (0.122 µm)	0.0000	0.0000
13.00 to 13.50; (0.086 µm)	0.0000	0.0000
TOTAL	100.0000	1066.1400

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2415
Sample Code:	PS672415

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams
-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		
-3.50 to -3.00; 8 mm		
-3.00 to -2.50; 5.6 mm		
-2.50 to -2.00; 4 mm		
-2.00 to -1.50; 2.8 mm		
-1.50 to -1.00; 2 mm		
-1.00 to -0.50; 1.4 mm		
-0.50 to 0.00; 1 mm		
0.00 to 0.50; (707 µm)		
0.50 to 1.00; (500 µm)		
1.00 to 1.50; (353.6 µm)		
1.50 to 2.00; (250 µm)		
2.00 to 2.50; (176.8 µm)		
2.50 to 3.00; (125 µm)		
3.00 to 3.50; (88.39 µm)		
3.50 to 4.00; (62.5 µm)		
4.00 to 4.50; (44.19 µm)		
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)		
TOTAL		

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2416
Sample Code:	PS672416

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams (mark as "0" for no material or not analysed)
-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	1.1100	12.2400
-4.50 to -4.00; 16 mm	0.0000	0.0000
-4.00 to -3.50; 11.2 mm	2.1000	23.1400
-3.50 to -3.00; 8 mm	27.8100	306.2600
-3.00 to -2.50; 5.6 mm	28.6500	315.4200
-2.50 to -2.00; 4 mm	5.1800	57.0000
-2.00 to -1.50; 2.8 mm	9.8900	108.9000
-1.50 to -1.00; 2 mm	11.2100	123.4600
-1.00 to -0.50; 1.4 mm	8.3800	92.2300
-0.50 to 0.00; 1 mm	5.3000	58.3200
0.00 to 0.50; (707 µm)		
0.50 to 1.00; (500 µm)		
1.00 to 1.50; (353.6 µm)		
1.50 to 2.00; (250 µm)		
2.00 to 2.50; (176.8 µm)		
2.50 to 3.00; (125 µm)		
3.00 to 3.50; (88.39 µm)		
3.50 to 4.00; (62.5 µm)		
4.00 to 4.50; (44.19 µm)		
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)		
TOTAL	99.6300	1096.9700

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2426
Sample Code:	Benchmark Replicate 1

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams (mark as "0" for no material or 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	0.8538	9.2900
-4.00 to -3.50; 11.2 mm	0.2923	3.1800
-3.50 to -3.00; 8 mm	28.7890	313.2500
-3.00 to -2.50; 5.6 mm	28.7256	312.5600
-2.50 to -2.00; 4 mm	6.5932	71.7400
-2.00 to -1.50; 2.8 mm	9.5084	103.4600
-1.50 to -1.00; 2 mm	9.7703	106.3100
-1.00 to -0.50; 1.4 mm	10.1885	110.8600
-0.50 to 0.00; 1 mm	5.0529	54.9800
0.00 to 0.50; (707 µm)	0.1645	1.7900
0.50 to 1.00; (500 µm)	0.0285	0.3100
1.00 to 1.50; (353.6 µm)	0.0184	0.2000
1.50 to 2.00; (250 µm)	0.0119	0.1300
2.00 to 2.50; (176.8 µm)	0.0028	0.0300
2.50 to 3.00; (125 µm)	0.0000	0.0000
3.00 to 3.50; (88.39 µm)	0.0000	0.0000
3.50 to 4.00; (62.5 µm)	0.0000	0.0000
4.00 to 4.50; (44.19 µm)		
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)		
TOTAL	100.0000	1088.0900

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2427
Sample Code:	Benchmark Replicate 2

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams
-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	0.8010	8.7200
-4.00 to -3.50; 11.2 mm	0.6081	6.6200
-3.50 to -3.00; 8 mm	29.2080	317.9700
-3.00 to -2.50; 5.6 mm	28.3638	308.7800
-2.50 to -2.00; 4 mm	6.1591	67.0500
-2.00 to -1.50; 2.8 mm	9.3125	101.3800
-1.50 to -1.00; 2 mm	10.2587	111.6800
-1.00 to -0.50; 1.4 mm	10.0318	109.2100
-0.50 to 0.00; 1 mm	5.0880	55.3900
0.00 to 0.50; (707 µm)	0.1405	1.5300
0.50 to 1.00; (500 µm)	0.0138	0.1500
1.00 to 1.50; (353.6 µm)	0.0046	0.0500
1.50 to 2.00; (250 µm)	0.0037	0.0400
2.00 to 2.50; (176.8 µm)	0.0064	0.0700
2.50 to 3.00; (125 µm)	0.0000	0.0000
3.00 to 3.50; (88.39 µm)	0.0000	0.0000
3.50 to 4.00; (62.5 µm)	0.0000	0.0000
4.00 to 4.50; (44.19 µm)		
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)		
TOTAL	100.0000	1088.6400

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2428
Sample Code:	Benchmark Replicate 3

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams
-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	0.8245	8.9900
-4.00 to -3.50; 11.2 mm	0.6870	7.4900
-3.50 to -3.00; 8 mm	29.6038	322.7700
-3.00 to -2.50; 5.6 mm	27.3347	298.0300
-2.50 to -2.00; 4 mm	6.3946	69.7200
-2.00 to -1.50; 2.8 mm	9.4277	102.7900
-1.50 to -1.00; 2 mm	10.6631	116.2600
-1.00 to -0.50; 1.4 mm	9.8477	107.3700
-0.50 to 0.00; 1 mm	5.0738	55.3200
0.00 to 0.50; (707 µm)	0.1238	1.3500
0.50 to 1.00; (500 µm)	0.0165	0.1800
1.00 to 1.50; (353.6 µm)	0.0028	0.0300
1.50 to 2.00; (250 µm)	0.0000	0.0000
2.00 to 2.50; (176.8 µm)	0.0000	0.0000
2.50 to 3.00; (125 µm)	0.0000	0.0000
3.00 to 3.50; (88.39 µm)	0.0000	0.0000
3.50 to 4.00; (62.5 µm)	0.0000	0.0000
4.00 to 4.50; (44.19 µm)		
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)		
TOTAL	100.0000	1090.3000

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2429
Sample Code:	Benchmark Replicate 4

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams
-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	0.7957	8.6700
-4.00 to -3.50; 11.2 mm	0.2405	2.6200
-3.50 to -3.00; 8 mm	29.9531	326.3600
-3.00 to -2.50; 5.6 mm	27.5696	300.3900
-2.50 to -2.00; 4 mm	6.6825	72.8100
-2.00 to -1.50; 2.8 mm	9.1651	99.8600
-1.50 to -1.00; 2 mm	10.3995	113.3100
-1.00 to -0.50; 1.4 mm	10.0425	109.4200
-0.50 to 0.00; 1 mm	5.0102	54.5900
0.00 to 0.50; (707 µm)	0.1248	1.3600
0.50 to 1.00; (500 µm)	0.0128	0.1400
1.00 to 1.50; (353.6 µm)	0.0037	0.0400
1.50 to 2.00; (250 µm)	0.0000	0.0000
2.00 to 2.50; (176.8 µm)	0.0000	0.0000
2.50 to 3.00; (125 µm)	0.0000	0.0000
3.00 to 3.50; (88.39 µm)	0.0000	0.0000
3.50 to 4.00; (62.5 µm)	0.0000	0.0000
4.00 to 4.50; (44.19 µm)		
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)		
TOTAL	100.0000	1089.5700

Notes:

APPENDIX 2. Final Merged Data sheets (with comments) as supplied by participating laboratories (arranged by LabCode) and the Benchmerk Replicates for sediment distributed as PS67.

Exercise Code:	PS67
LabCode:	PSA_2430
Sample Code:	Benchmark Replicate 5

Phi interval (explicit) + sieve mesh (theoretical sieves shown in brackets)	Percentage (mark as "0" for no material or not analysed)	Grams
-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	0.7792	8.4800
-4.00 to -3.50; 11.2 mm	1.3314	14.4900
-3.50 to -3.00; 8 mm	28.3298	308.3100
-3.00 to -2.50; 5.6 mm	28.6486	311.7800
-2.50 to -2.00; 4 mm	5.9166	64.3900
-2.00 to -1.50; 2.8 mm	9.2218	100.3600
-1.50 to -1.00; 2 mm	10.4062	113.2500
-1.00 to -0.50; 1.4 mm	10.0883	109.7900
-0.50 to 0.00; 1 mm	5.1255	55.7800
0.00 to 0.50; (707 µm)	0.1195	1.3000
0.50 to 1.00; (500 µm)	0.0110	0.1200
1.00 to 1.50; (353.6 µm)	0.0083	0.0900
1.50 to 2.00; (250 µm)	0.0110	0.1200
2.00 to 2.50; (176.8 µm)	0.0028	0.0300
2.50 to 3.00; (125 µm)	0.0000	0.0000
3.00 to 3.50; (88.39 µm)	0.0000	0.0000
3.50 to 4.00; (62.5 µm)	0.0000	0.0000
4.00 to 4.50; (44.19 µm)		
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)		
TOTAL	100.0000	1088.2900

Notes: