



NMBAQC

NE Atlantic Marine Biological Analytical Quality Control Scheme

NMBAQC Scheme 2025/26

PS99 Report



Client: North-East Atlantic Marine Biological Analytical Quality Control Scheme

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Revision and Amendment Register

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1.0	Interim	07/05/2026	All	All	n/a	LMB
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Contents

1.	BENCHMARK DATA.....	1
2.	PARTICIPANT DATA.....	9
3.	APPENDICES.....	18

Figures

Figure 1 Bar charts showing percentage amount greater than 1mm in each half-phi category for analysis of 5 replicate samples of sediment distributed as PS99.....	3
Figure 2 Particle size distribution curves resulting from final laser analysis of 5 replicate samples of sediment distributed as PS99 (Benchmark Data).....	4
Figure 3 Particle size distribution curves resulting from laser analysis of five replicate samples of sediment distributed as PS99.....	6
Figure 4 Particle size distribution curves resulting from analysis of 5 replicate samples of sediment distributed as PS99 (Benchmark Data).....	8
Figure 5 Final sieve data (in percentages) provided by each participant for sediment distributed as PS99.....	12
Figure 6 Final laser data (in percentages) provided by each participant and the Benchmark average for sediment distributed as PS99.....	15
Figure 7 Particle size distribution curves from all participating laboratories and the Benchmark average for sediment distributed as PS99.....	16
Figure 8 Bar charts showing the percentage gravel, sand, silt and clay recorded by each participating laboratory and the Benchmark average for PS99.	17

Tables

Table 1 Summary data for the Benchmark replicates distributed as PS99.	1
Table 2 Summary of the sieve data the Benchmark replicates distributed as PS99.	1
Table 3 Summary of the final laser data for the Benchmark replicates distributed as PS99.....	2
Table 4 Summary of Coefficient of Variation for Benchmark laser replicates for PS99.....	5
Table 5 Laser Metadata for the Benchmark replicates for PS99.....	5
Table 6 Summary of equipment and methods used by participants and sample summary data provided by participants for sediment distributed as PS99.	9
Table 7 Summary of the sieve data provided by participants for sediment distributed as PS99*.	10
Table 7 Summary of the sieve data provided by participants for sediment distributed as PS99.	11

Table 9 Summary of final laser data for the participants for sediment distributed as PS99 with Gradistat output.	13
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Participation

At time of issue no results have been received from participant PSA_3217 and PSA_3211 chose not to participate.

1. BENCHMARK DATA

Table 1 Summary data for the Benchmark replicates distributed as PS99.

Sample	Method	% Gravel	% Sand	% Mud	Sediment Description
PSA_3136 BM REP 1	NMBAQC	17.91	79.70	2.39	Gravelly Sand
PSA_3137 BM REP2	NMBAQC	17.83	79.77	2.40	Gravelly Sand
PSA_3138 BM REP 3	NMBAQC	17.09	80.45	2.46	Gravelly Sand
PSA_3139 BM REP 4	NMBAQC	17.15	80.42	2.42	Gravelly Sand
PSA_3140 BM REP 5	NMBAQC	17.34	80.29	2.37	Gravelly Sand
BM Rep Average	NMBAQC	17.46	80.13	2.41	Gravelly Sand

Table 2 Summary of the sieve data the Benchmark replicates distributed as PS99.

Phi Interval; microns	PSA_3236 BM REP 1	PSA_3237 BM REP2	PSA_3238 BM REP 3	PSA_3239 BM REP 4	PSA_3240 BM REP 5	BM Rep Average	
Starting Weight	68.09	70.79	68.48	67.52	70.30	69.04	
-6.50 to -6.00; 63 mm	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	
-5.50 to -5.00; 31.5 mm	0.00	0.00	0.00	0.00	0.00	0.00	
-5.00 to -4.50; 22.4 mm	0.00	4.54	4.38	0.00	0.00	1.78	
-4.50 to -4.00; 16 mm	47.63	51.17	51.39	53.09	52.65	51.19	
-4.00 to -3.50; 11.2 mm	15.23	9.80	7.80	8.40	11.15	10.48	
-3.50 to -3.00; 8 mm	4.96	5.17	4.16	5.84	5.20	5.07	
-3.00 to -2.50; 5.6 mm	0.00	0.00	0.34	0.00	0.36	0.14	
-2.50 to -2.00; 4 mm	0.00	0.00	0.10	0.00	0.41	0.10	
-2.00 to -1.50; 2.8 mm	0.00	0.00	0.02	0.08	0.10	0.04	
-1.50 to -1.00; 2 mm	0.03	0.02	0.06	0.03	0.13	0.05	
-1.00 to -0.50; 1.4 mm	0.03	0.02	0.06	0.02	0.07	0.04	
-0.50 to 0.00; 1.0 mm	0.03	0.03	0.04	0.03	0.03	0.03	
>1.0mm		67.91	70.75	68.35	67.49	70.10	68.92
<1.0mm	Base Pan	0.19	0.10	0.13	0.05	0.18	0.13
	Oven dried	310.76	325.71	330.76	325.63	333.52	325.28
	Total	310.95	325.81	330.89	325.68	333.70	325.41
Total Weight		378.86	396.56	399.24	393.17	403.80	394.33
% increase/ decrease		0.01	0.08	0.00	0.03	-0.03	0.02

Table 3 Summary of the final laser data for the Benchmark replicates distributed as PS99.

Phi Interval; microns	PSA_3236 BM REP 1	PSA_3237 BM REP2	PSA_3238 BM REP 3	PSA_3239 BM REP 4	PSA_3240 BM REP 5	BM Rep Average
0.00 to 0.50; (707 μm)	11.26	10.71	9.59	11.15	9.67	10.48
0.50 to 1.00; (500 μm)	19.22	19.06	18.73	18.90	17.43	18.67
1.00 to 1.50; (353.6 μm)	16.83	17.50	17.83	16.43	17.02	17.12
1.50 to 2.00; (250 μm)	12.52	13.23	13.36	12.68	13.76	13.11
2.00 to 2.50; (176.8 μm)	17.68	17.71	17.71	18.25	18.99	18.07
2.50 to 3.00; (125 μm)	14.04	13.57	14.20	14.17	14.80	14.15
3.00 to 3.50; (88.39 μm)	4.37	4.15	4.44	4.31	4.36	4.33
3.50 to 4.00; (62.5 μm)	1.17	1.14	1.18	1.18	1.09	1.15
4.00 to 4.50; (44.19 μm)	0.39	0.40	0.39	0.42	0.39	0.40
4.50 to 5.00; (31.25 μm)	0.25	0.25	0.22	0.24	0.20	0.23
5.00 to 5.50; (22.097 μm)	0.19	0.19	0.18	0.21	0.20	0.19
5.50 to 6.00; (15.625 μm)	0.19	0.18	0.18	0.18	0.18	0.18
6.00 to 6.50; (11.049 μm)	0.22	0.22	0.22	0.22	0.21	0.22
6.50 to 7.00; (7.813 μm)	0.22	0.22	0.24	0.23	0.22	0.23
7.00 to 7.50; (5.524 μm)	0.23	0.23	0.24	0.23	0.22	0.23
7.50 to 8.00; (3.906 μm)	0.22	0.21	0.22	0.21	0.20	0.21
8.00 to 8.50; (2.762 μm)	0.17	0.17	0.17	0.17	0.16	0.17
8.50 to 9.00; (1.953 μm)	0.14	0.14	0.14	0.13	0.13	0.13
9.00 to 9.50; (1.381 μm)	0.13	0.13	0.13	0.13	0.13	0.13
9.50 to 10.00; (0.977 μm)	0.13	0.13	0.13	0.13	0.13	0.13
10.00 to 10.50; (0.691 μm)	0.12	0.12	0.12	0.12	0.12	0.12
10.50 to 11.00; (0.488 μm)	0.10	0.10	0.10	0.09	0.10	0.10
11.00 to 11.50; (0.345 μm)	0.07	0.08	0.08	0.07	0.08	0.08
11.50 to 12.00; (0.244 μm)	0.05	0.06	0.07	0.05	0.07	0.06
12.00 to 12.50; (0.173 μm)	0.04	0.04	0.05	0.04	0.05	0.04
12.50 to 13.00; (0.122 μm)	0.03	0.03	0.04	0.03	0.04	0.03
13.00 to 13.50; (0.086 μm)	0.02	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	0.01
14.00 to 14.50; (0.043 μm)	0.00	0.00	0.00	0.00	0.00	0.00
>14.50; (0.01 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

Summary Data

Mean	317.74	318.30	311.09	315.01	305.23	313.40
Sorting	2.01	1.99	1.99	2.01	1.98	2.00
Skewness	-0.10	-0.10	-0.09	-0.07	-0.03	-0.08
Kurtosis	0.83	0.84	0.84	0.83	0.85	0.84
Mode	Bimodal	Bimodal	Bimodal	Bimodal	Bimodal	Bimodal
Primary Mode	603.50	603.50	603.50	603.50	213.40	603.50
Secondary Mode	213.4	213.4	213.4	213.4	603.5	213.4

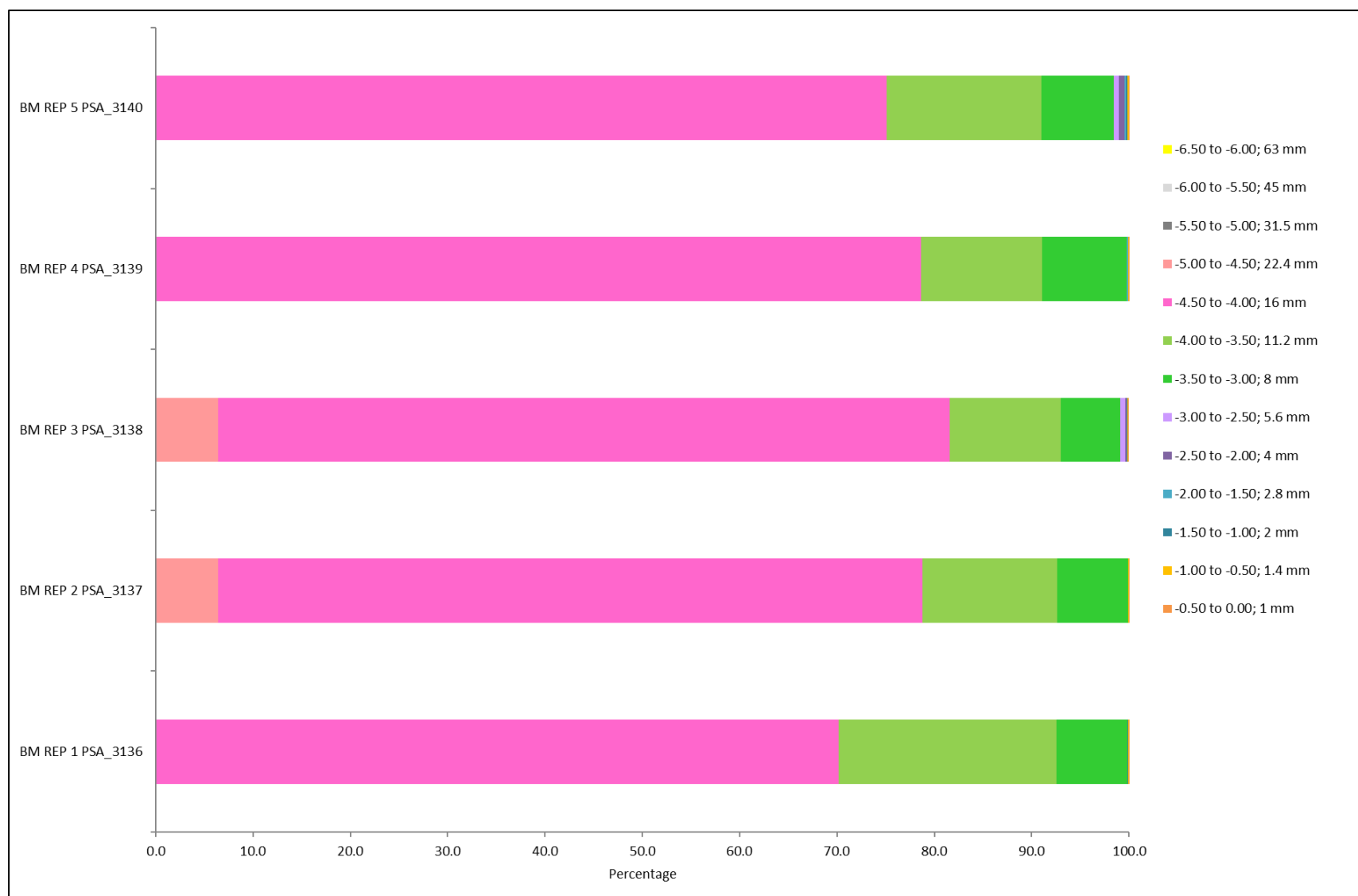


Figure 1 Bar charts showing percentage amount greater than 1mm in each half-phi category for analysis of 5 replicate samples of sediment distributed as PS99.

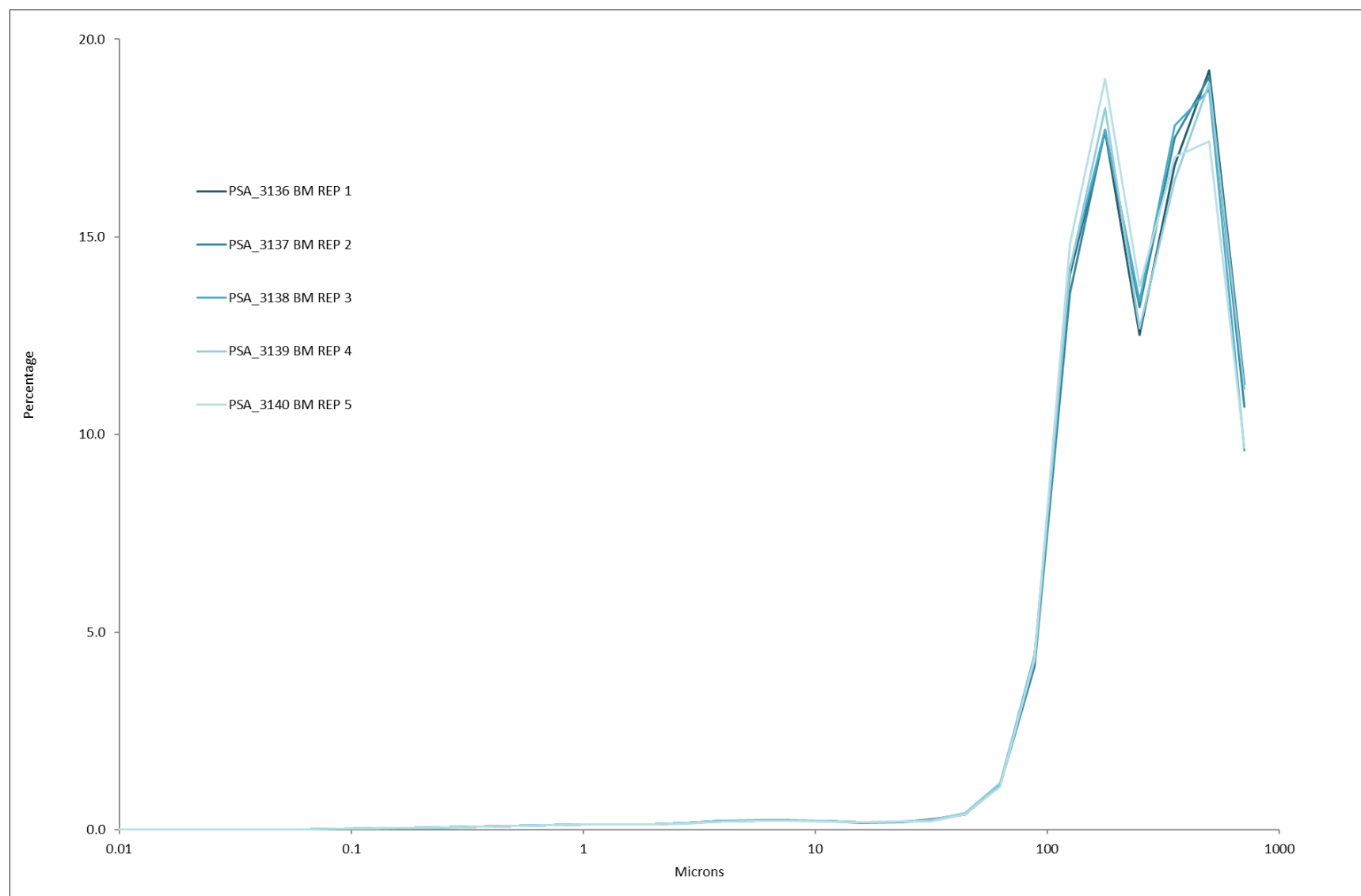


Figure 2 Particle size distribution curves resulting from final laser analysis of 5 replicate samples of sediment distributed as PS99 (Benchmark Data)

Table 4 Summary of Coefficient of Variation for Benchmark laser replicates for PS99.

		PSA_3236 BM REP 1	PSA_3237 BM REP2	PSA_3238 BM REP 3	PSA_3239 BM REP 4	PSA_3140 BM REP 5
D ₁₀	Sub-sample 1	0.46	0.57	0.34	0.28	0.30
	Sub-sample 2	0.26	0.35	0.28	0.06	0.29
	Sub-sample 3	0.45	0.08	0.24	0.33	0.15
D ₅₀	Sub-sample 1	0.73	1.45	0.59	0.32	0.25
	Sub-sample 2	0.85	1.49	0.84	0.34	1.21
	Sub-sample 3	0.45	0.58	1.14	0.22	0.63
D ₉₀	Sub-sample 1	0.67	1.82	0.27	0.24	0.28
	Sub-sample 2	0.33	1.33	0.19	0.28	0.39
	Sub-sample 3	0.51	0.64	0.82	0.63	1.18

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

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 replicates show good reproducibility.

Table 5 Laser Metadata for the Benchmark replicates for PS99.

	Benchmark Lab
Laser used:	Beckman Coulter LS 13320
Dispersion Unit:	Universal Liquid Module
Analysis model:	Mie
Dispersion Used	Water (RI – 1.33)
Particle Refractive Index	1.55
Particle Absorption Index:	0.1
Fines extension	PIDS system
Obscuration	10%
Pump Speed (% or rpm)	80%
Stirrer speed (% or rpm)	n/a
Ultrasonic duration	20
Ultrasonic level	2

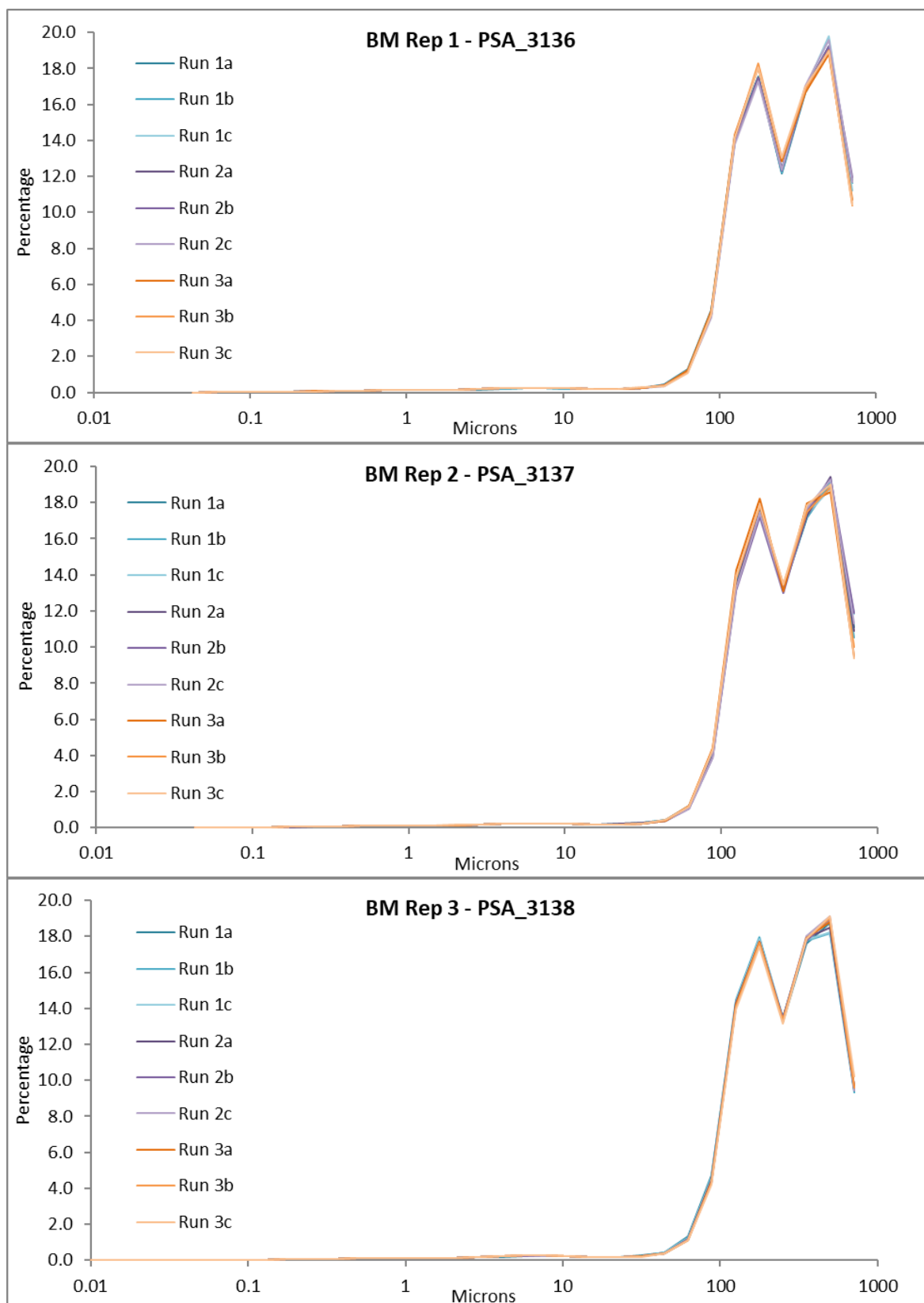


Figure 3 Particle size distribution curves resulting from laser analysis of five replicate samples of sediment distributed as PS99.

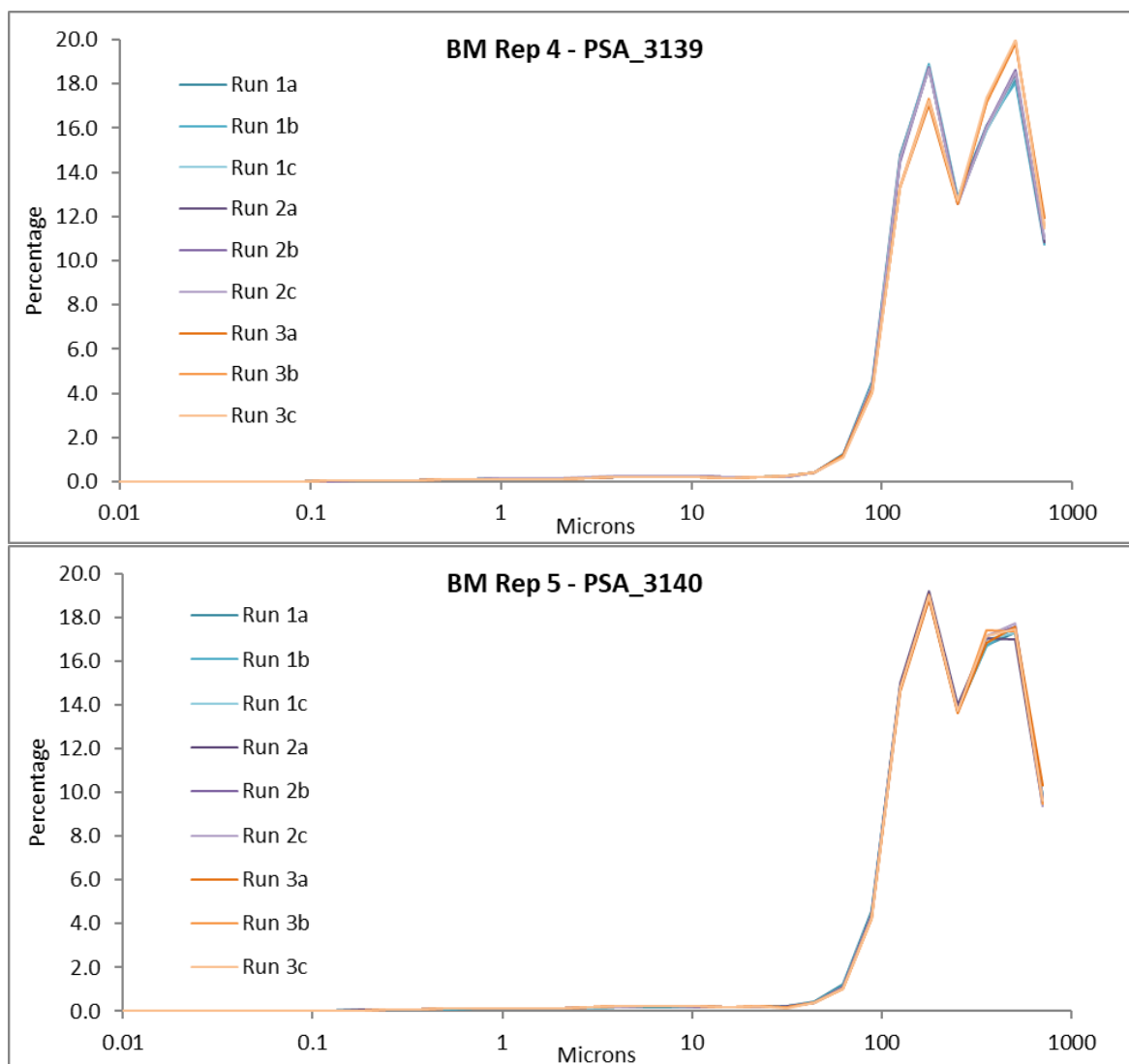


Figure 3 Particle size distribution curves resulting from laser analysis of five replicate samples of sediment distributed as PS99.

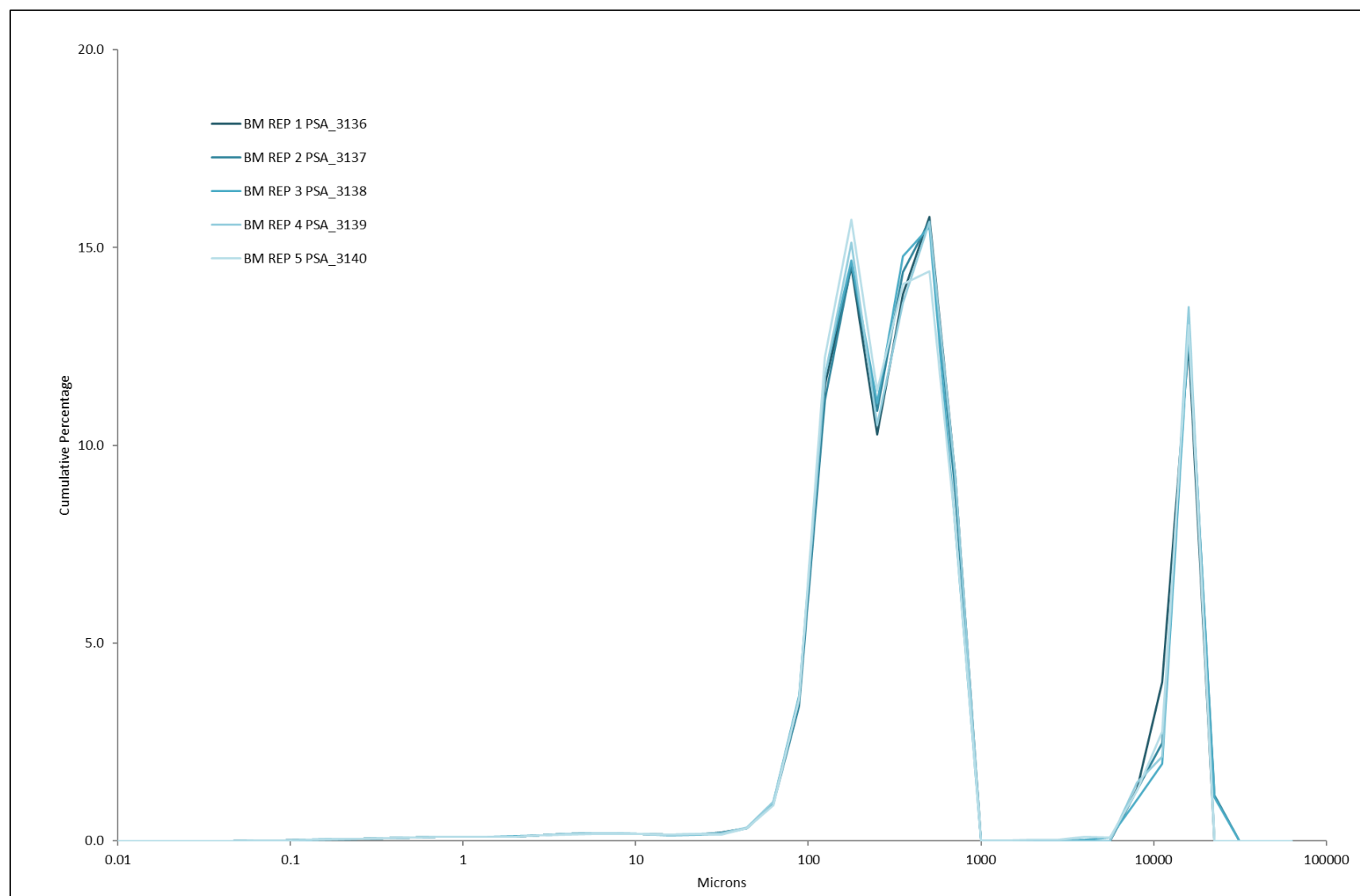


Figure 4 Particle size distribution curves resulting from analysis of 5 replicate samples of sediment distributed as PS99 (Benchmark Data).

2. PARTICIPANT DATA

Table 6 Summary of equipment and methods used by participants and sample summary data provided by participants for sediment distributed as PS99.

Lab	Equipment Used		Method Used	Chemical Dispersant	Peroxide pre-treatment	Summary Data			Sediment Description	
	Sieves	Laser				% Gravel	% Sand	% Mud	(post analysis)	Gradistat Textural Group
BM Average	Yes	Yes	NMBAQC	No	No	17.46	80.13	2.41	Gravelly Sand	Gravelly Sand
PSA_3201	Yes	Yes	NMBAQC	No	No	19.07	75.30	5.26	Gravelly Sand	Gravelly Sand
PSA_3202	Yes	Yes	OTHER	No	No	16.51	81.72	1.79	Gravelly Sand	Gravelly Sand
PSA_3203	Yes	Yes	NMBAQC	No	No	16.95	82.93	0.12	Gravelly Sand	Gravelly Sand
PSA_3204	Yes	Yes	NMBAQC	No	No	17.66	80.96	1.39	Gravelly Sand	Gravelly Sand
PSA_3205	n/p	Yes	OTHER	No	No	0.00	96.60	3.40	Sand	Sand
PSA_3206	Yes	Yes	NMBAQC	No	No	18.07	79.73	2.21	Gravelly Sand	Gravelly Sand
PSA_3207	Yes	Yes	OTHER	No	No	16.43	82.15	1.42	Gravelly Sand	Gravelly Sand
PSA_3208	Yes	Yes	NMBAQC	No	No	19.08	78.98	1.95	Gravelly Sand	Gravelly Sand
PSA_3209	Yes	Yes	NMBAQC	No	No	16.93	78.48	4.59	Gravelly Sand	Gravelly Sand
PSA_3210	Yes	Yes	NMBAQC	No	No	17.87	82.12	0.01	Fine sandy, gravelly, mud	Gravelly Sand
PSA_3212	Yes	Yes	NMBAQC	No	No	19.60	78.30	2.10		Gravelly Sand
PSA_3213	Yes	Yes	NMBAQC	No	No	17.93	77.84	4.23		Gravelly Sand
PSA_3214	Yes	Yes	NMBAQC	No	No	16.37	80.99	2.64		Gravelly Sand
PSA_3215	Yes	Yes	NMBAQC	No	No	17.94	79.77	2.29		Gravelly Sand
PSA_3216	Yes	Yes	NMBAQC	No	No	17.42	79.50	3.08	Gravelly Sand	Gravelly Sand

Table 7 Summary of the sieve data provided by participants for sediment distributed as PS99*.

Phi interval (explicit); Sieve mesh (mm)	BM Average	PSA_3201	PSA_3202	PSA_3203	PSA_3204	PSA_3206	PSA_3207	PSA_3208
Starting weight (>1.0mm)	69.04	70.65	-	70.60	62.05	72.07	69.10	70.30
-6.50 to -6.00; 63 mm	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
-5.50 to -5.00; 31.5 mm	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
-5.00 to -4.50; 22.4 mm	1.78	4.67	-	6.95	0.00	4.32	5.27	0.00
-4.50 to -4.00; 16 mm	51.19	51.73	-	45.87	43.64	41.98	47.40	34.75
-4.00 to -3.50; 11.2 mm	10.48	10.79	-	11.66	4.95	17.55	10.93	22.85
-3.50 to -3.00; 8 mm	5.07	2.04	-	3.88	9.59	7.84	4.10	8.89
-3.00 to -2.50; 5.6 mm	0.14	0.00	-	0.51	1.88	0.10	0.20	1.92
-2.50 to -2.00; 4 mm	0.10	0.00	-	0.00	0.26	0.07	0.07	0.55
-2.00 to -1.50; 2.8 mm	0.04	0.04	-	0.00	0.15	0.03	0.10	0.30
-1.50 to -1.00; 2 mm	0.05	0.03	69.32	0.00	0.08	0.04	0.10	0.26
-1.00 to -0.50; 1.4 mm	0.04	0.00	-	0.00	0.05	0.05	0.10	0.11
-0.50 to 0.00; 1 mm	0.03	0.05	0.09	0.00	0.08	0.04	0.10	0.10
Total	68.92	69.35	69.41	68.87	60.67	72.02	68.37	69.73
Summary Data								
>1.00 mm	68.92	69.35	69.41	68.87	60.67	72.02	68.37	69.73
<1.0mm	Base pan	0.13	1.28	-	0.87	1.32	0.12	0.45
	Oven dried	325.28	292.84	-	336.47	280.96	325.96	294.22
	Total	325.41	294.12	0.00	337.34	282.28	326.08	294.67
Total Sample Weight	394.33	363.47	69.41	406.21	342.95	398.10	414.90	364.40
% increase/ decrease	0.02	-0.03	-	-1.22	-0.10	0.10	-1.06	-0.17

* Participant PSA_3205 follows a different method and chose not to participate in the sieve element of this test.

Table 8 Summary of the sieve data provided by participants for sediment distributed as PS99.

Phi interval (explicit); Sieve mesh (mm)	BM Average	PSA_3209	PSA_3210	PSA_3212	PSA_3213	PSA_3214	PSA_3215	PSA_3216
Starting weight (>1.0mm)	69.04	70.987	72.88	69.68	68.09	61.50	70.27	68.50
-6.50 to -6.00; 63 mm	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
-5.50 to -5.00; 31.5 mm	0.00	0.00	34.38	0.00	0.00	0.00	0.00	0.00
-5.00 to -4.50; 22.4 mm	1.78	4.63	23.58	4.84	6.16	5.18	0.00	4.44
-4.50 to -4.00; 16 mm	51.19	49.13	0.00	45.88	34.38	49.36	57.47	42.47
-4.00 to -3.50; 11.2 mm	10.48	10.62	6.67	12.98	19.72	0.00	6.17	12.19
-3.50 to -3.00; 8 mm	5.07	5.75	5.68	5.93	7.04	5.15	6.35	3.20
-3.00 to -2.50; 5.6 mm	0.14	0.29	0.00	0.00	0.00	0.11	0.12	1.88
-2.50 to -2.00; 4 mm	0.10	0.36	0.00	0.00	0.00	0.08	0.00	1.34
-2.00 to -1.50; 2.8 mm	0.04	0.09	0.04	0.00	0.08	0.00	0.00	1.44
-1.50 to -1.00; 2 mm	0.05	0.06	0.04	0.00	0.03	0.03	0.02	0.68
-1.00 to -0.50; 1.4 mm	0.04	0.03	0.03	0.01	0.04	0.01	0.03	0.31
-0.50 to 0.00; 1 mm	0.03	0.04	0.09	0.02	0.05	0.01	0.03	0.18
Total	68.92	70.99	70.51	69.66	67.50	59.93	70.19	68.13
Summary Data								
>1.00 mm	68.92	70.987	70.51	69.66	67.50	59.93	70.19	68.13
<1.0mm	Base pan	0.13	0.006	2.36	0.02	0.60	1.60	0.39
	Oven dried	325.28	137.938	321.02	286.18	307.92	304.32	319.84
	Total	325.41	137.944	323.38	286.20	308.52	305.92	320.23
Total Sample Weight	394.33	208.931	393.89	355.86	376.02	365.85	390.83	388.36
% increase/ decrease	0.02	0.01	-0.01	0.00	0.01	0.04	0.03	0.03

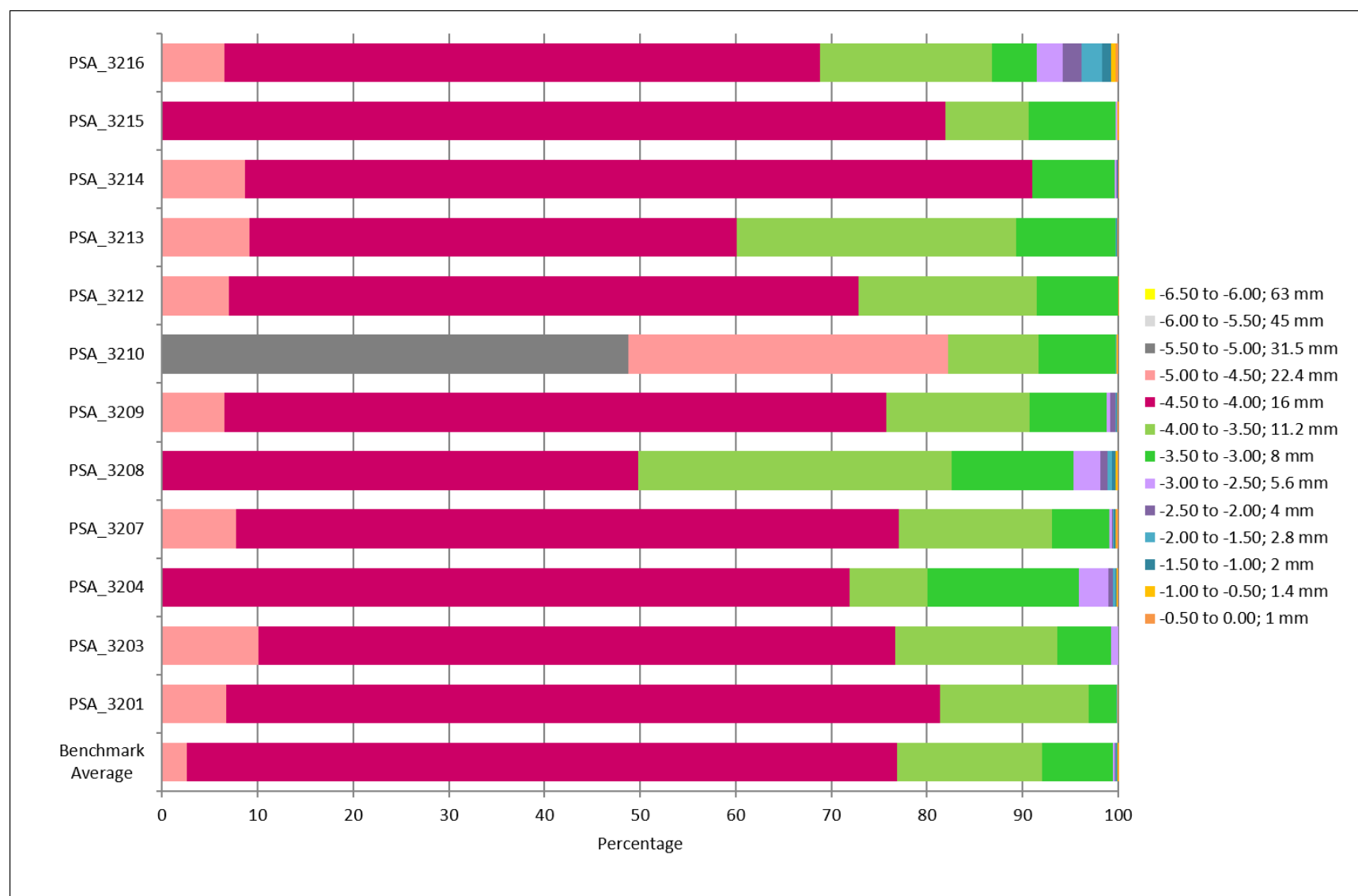


Figure 5 Final sieve data (in percentages) provided by each participant for sediment distributed as PS99.

Table 9 Summary of final laser data for the participants for sediment distributed as PS99 with Gradistat output.

Microns	BM Average	PSA_3201	PSA_3202	PSA_3203	PSA_3204	PSA_3205	PSA_3206	PSA_3207
1400	-	-	0.00	-	-	0.06	-	-
1000	-	-	2.36	-	-	2.42	-	-
707	10.48	3.49	8.52	14.28	13.07	7.16	6.58	6.62
500	18.67	7.66	14.02	19.98	16.91	11.08	13.40	11.16
353.6	17.12	11.73	16.71	17.26	17.17	13.26	17.03	13.84
250	13.11	16.97	17.24	14.55	16.15	15.90	12.46	16.80
176.8	18.07	21.90	16.57	15.30	15.05	18.51	20.04	19.60
125	14.15	19.66	13.23	12.35	11.91	16.65	17.39	17.69
88.39	4.33	9.92	7.23	5.15	6.41	9.19	8.86	9.91
62.5	1.15	2.13	1.97	0.98	1.65	2.38	1.54	2.68
44.19	0.40	0.22	0.01	0.14	0.01	0.09	0.13	0.12
31.25	0.23	0.21	0.02	0.00	0.03	0.14	0.02	0.04
22.097	0.19	0.51	0.30	0.00	0.32	0.36	0.28	0.28
15.625	0.18	0.66	0.35	0.00	0.34	0.35	0.35	0.27
11.049	0.22	0.69	0.23	0.00	0.18	0.30	0.28	0.16
7.813	0.23	0.75	0.19	0.00	0.05	0.34	0.19	0.15
5.524	0.23	0.87	0.25	0.00	0.19	0.43	0.34	0.23
3.906	0.21	0.87	0.30	0.00	0.24	0.47	0.40	0.24
2.762	0.17	0.75	0.28	0.00	0.22	0.44	0.26	0.17
1.953	0.13	0.49	0.22	0.00	0.11	0.34	0.32	0.02
1.381	0.13	0.23	0.01	0.00	0.00	0.11	0.12	0.00
0.977	0.13	0.16	0.00	0.00	0.00	0.00	0.00	0.00
0.691	0.12	0.13	0.00	0.00	0.00	0.00	0.00	0.00
0.488	0.10	0.02	0.00	0.00	0.00	0.00	0.00	0.00
0.345	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.244	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.173	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.122	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.086	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.061	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.043	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	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	100.00	97.52	100.00	100.00
MEAN:	313.40	219.20	297.34	345.08	321.44	264.26	262.98	255.10
SORTING:	2.00	2.45	2.05	1.95	2.03	2.10	1.98	1.97
SKEWNESS:	-0.08	-0.16	-0.02	-0.12	-0.10	0.08	0.09	0.09
KURTOSIS:	0.84	1.72	0.91	0.79	0.85	0.93	0.83	0.88
MODE:	Bimodal	Unimodal	Unimodal	Bimodal	Unimodal	Unimodal	Bimodal	Unimodal
Primary Mode	603.50	213.40	301.80	603.50	426.80	213.40	213.4	213.4
Secondary Mode	213.40	-	-	213.4	-	-	426.8	-

Table 9 Summary of final laser data for the participants for sediment distributed as PS99 with Gradistat output.

Microns	Benchmark Average	PSA_3208	PSA_3109	PSA_3210	PSA_3212	PSA_3213	PSA_3214	PSA_3215	PSA_3216
1400	-	-	-	-	-	-	-	-	-
1000	-	-	-	-	-	-	-	-	-
707	10.48	6.65	6.87	7.16	8.08	12.05	12.59	11.71	12.27
500	18.67	11.79	12.26	12.57	12.89	16.05	21.65	19.01	20.27
353.6	17.12	15.08	15.09	16.05	15.17	13.17	17.11	15.92	16.47
250	13.11	17.56	16.55	18.72	17.05	11.02	10.85	12.54	11.20
176.8	18.07	18.97	17.19	19.76	18.33	18.45	15.92	18.21	15.90
125	14.15	16.27	14.76	16.31	15.79	16.07	13.23	14.30	13.86
88.39	4.33	8.91	8.81	7.90	8.26	6.01	4.40	4.41	4.89
62.5	1.15	2.36	2.94	1.52	1.92	2.01	1.11	1.11	1.41
44.19	0.40	0.10	0.22	0.01	0.06	0.72	0.43	0.38	0.50
31.25	0.23	0.00	0.05	0.00	0.07	0.32	0.28	0.20	0.35
22.097	0.19	0.28	0.57	0.00	0.32	0.45	0.23	0.20	0.29
15.625	0.18	0.34	0.73	0.00	0.34	0.22	0.26	0.19	0.26
11.049	0.22	0.28	0.61	0.00	0.27	0.26	0.26	0.20	0.28
7.813	0.23	0.25	0.54	0.00	0.29	0.42	0.24	0.20	0.26
5.524	0.23	0.30	0.57	0.00	0.34	0.43	0.22	0.22	0.27
3.906	0.21	0.33	0.58	0.00	0.35	0.39	0.19	0.21	0.27
2.762	0.17	0.30	0.54	0.00	0.31	0.34	0.15	0.16	0.21
1.953	0.13	0.21	0.44	0.00	0.17	0.33	0.13	0.13	0.18
1.381	0.13	0.02	0.32	0.00	0.00	0.32	0.14	0.13	0.18
0.977	0.13	0.00	0.23	0.00	0.00	0.27	0.15	0.13	0.18
0.691	0.12	0.00	0.12	0.00	0.00	0.21	0.13	0.12	0.15
0.488	0.10	0.00	0.00	0.00	0.00	0.15	0.10	0.10	0.12
0.345	0.08	0.00	0.00	0.00	0.00	0.11	0.08	0.07	0.09
0.244	0.06	0.00	0.00	0.00	0.00	0.08	0.06	0.05	0.06
0.173	0.04	0.00	0.00	0.00	0.00	0.06	0.04	0.04	0.04
0.122	0.03	0.00	0.00	0.00	0.00	0.04	0.03	0.03	0.03
0.086	0.02	0.00	0.00	0.00	0.00	0.03	0.02	0.02	0.02
0.061	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
0.043	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.00	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	100.00	100.00	100.00	100.00	100.00
MEAN:	313.40	262.18	254.57	278.71	273.63	285.12	332.82	316.63	320.8
SORTING:	2.00	1.97	2.44	1.91	2.00	2.24	2.03	2.01	2.079
SKEWNESS:	-0.08	0.04	-0.17	0.05	0.03	-0.01	-0.20	-0.07	-0.166
KURTOSIS:	0.84	0.89	1.29	0.88	0.88	0.93	0.82	0.82	0.832
MODE:	Bimodal	Unimodal	Unimodal	Unimodal	Unimodal	Bimodal	Bimodal	Bimodal	Bimodal
Primary Mode	603.50	213.4	213.4	213.4	213.4	213.4	603.5	603.5	603.5
Secondary Mode	213.40	-	-	-	-	603.5	213.4	213.4	213.4

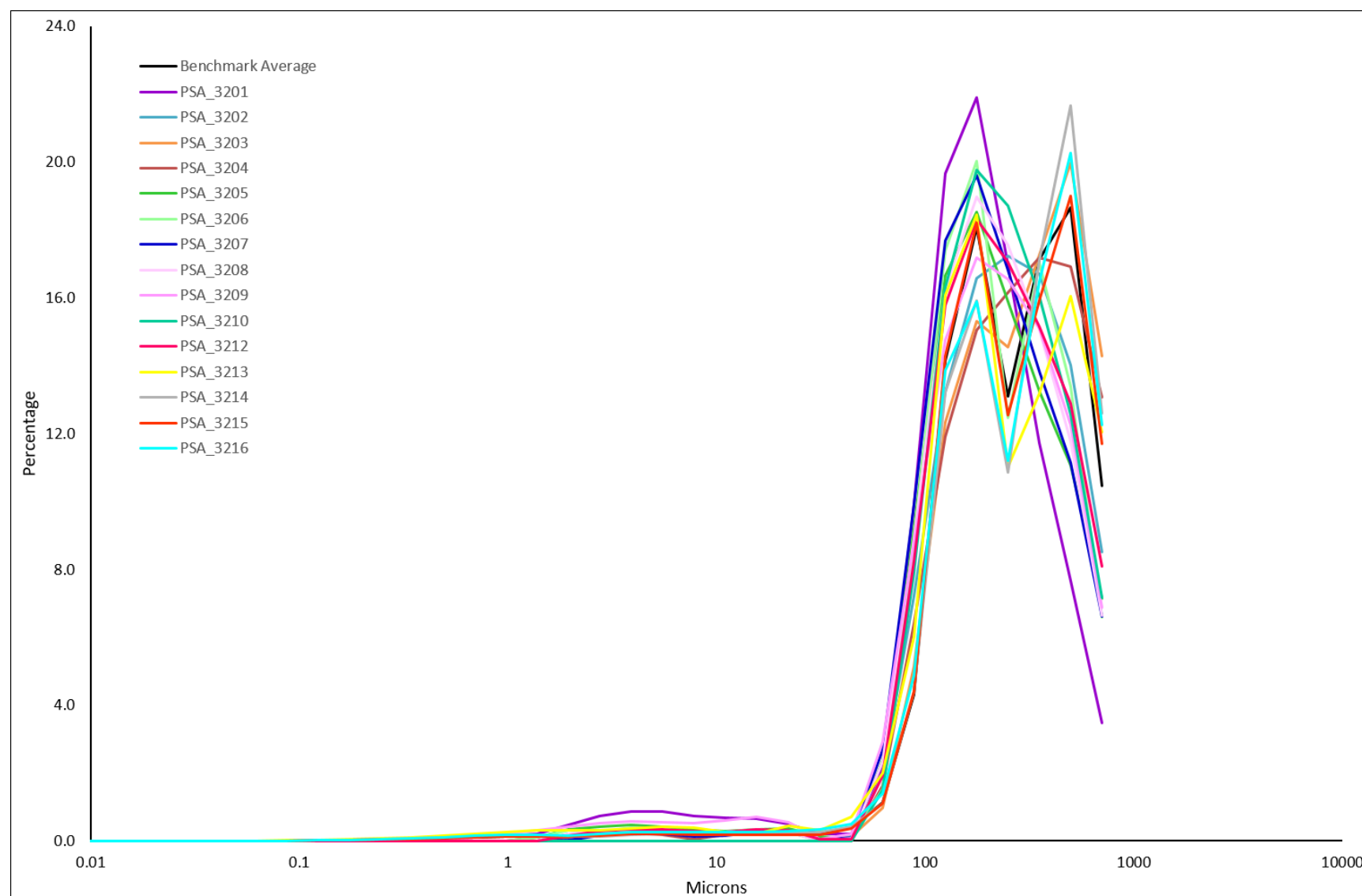


Figure 6 Final laser data (in percentages) provided by each participant and the Benchmark average for sediment distributed as PS99.

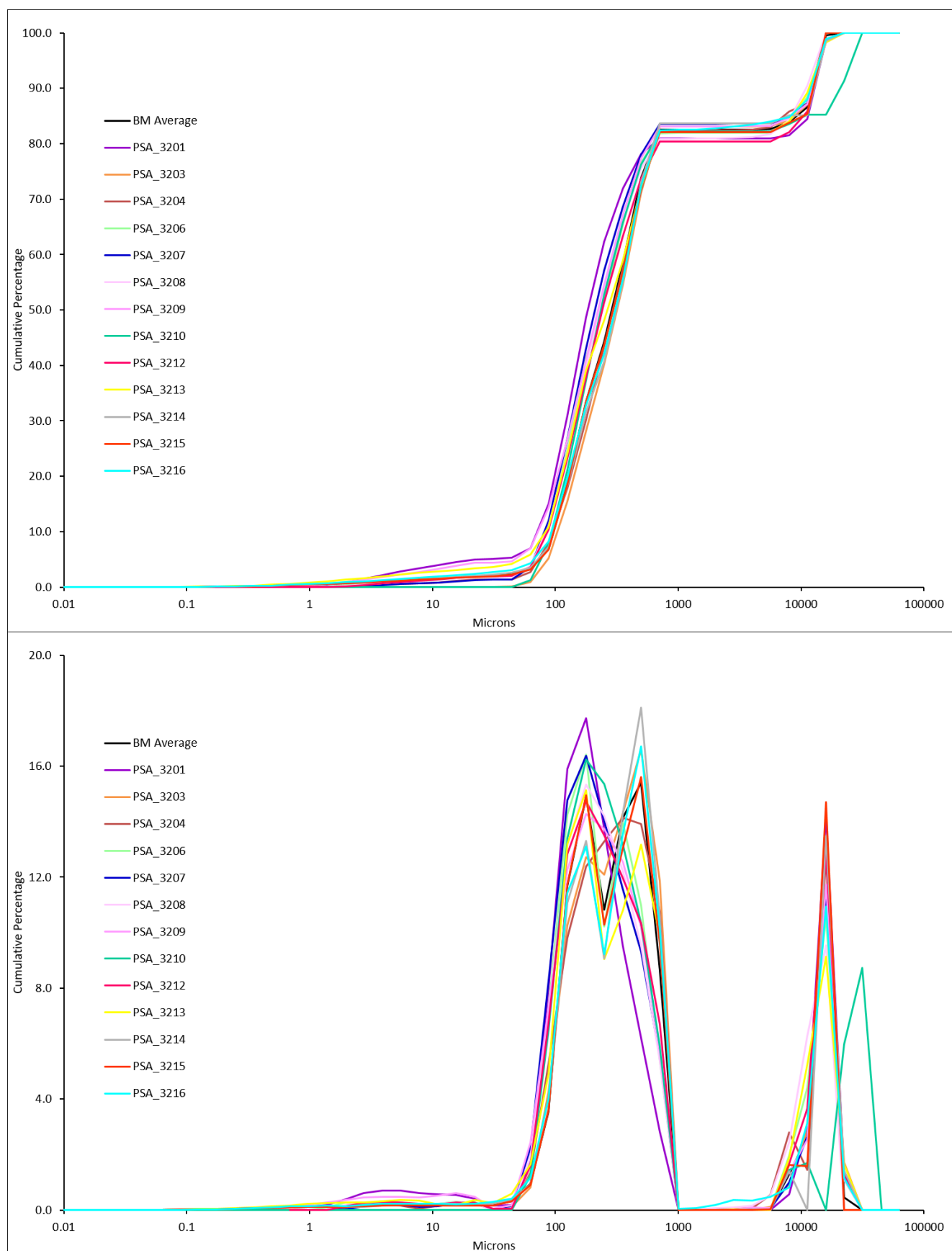


Figure 7 Particle size distribution curves from all participating laboratories and the Benchmark average for sediment distributed as PS99.

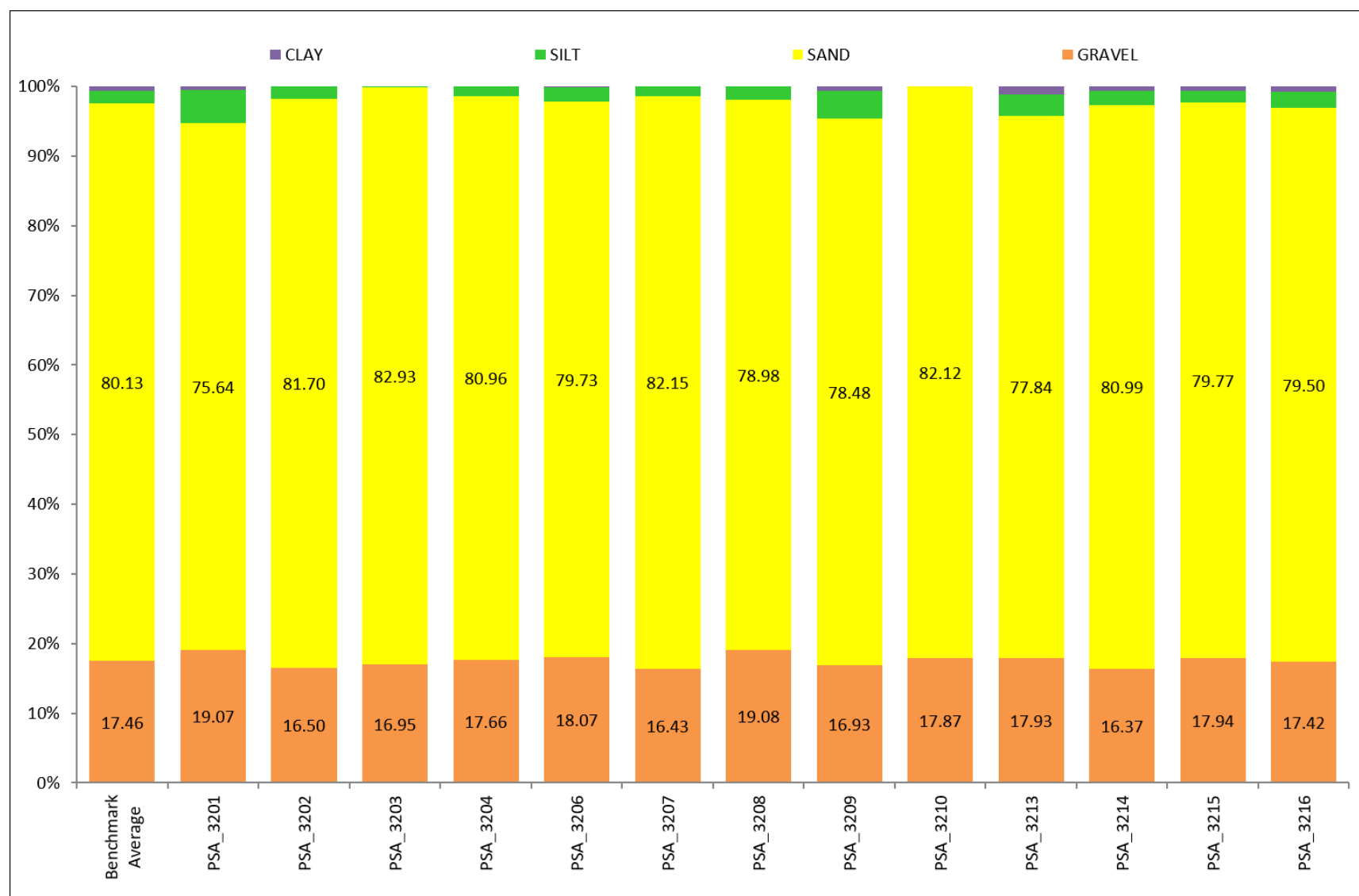
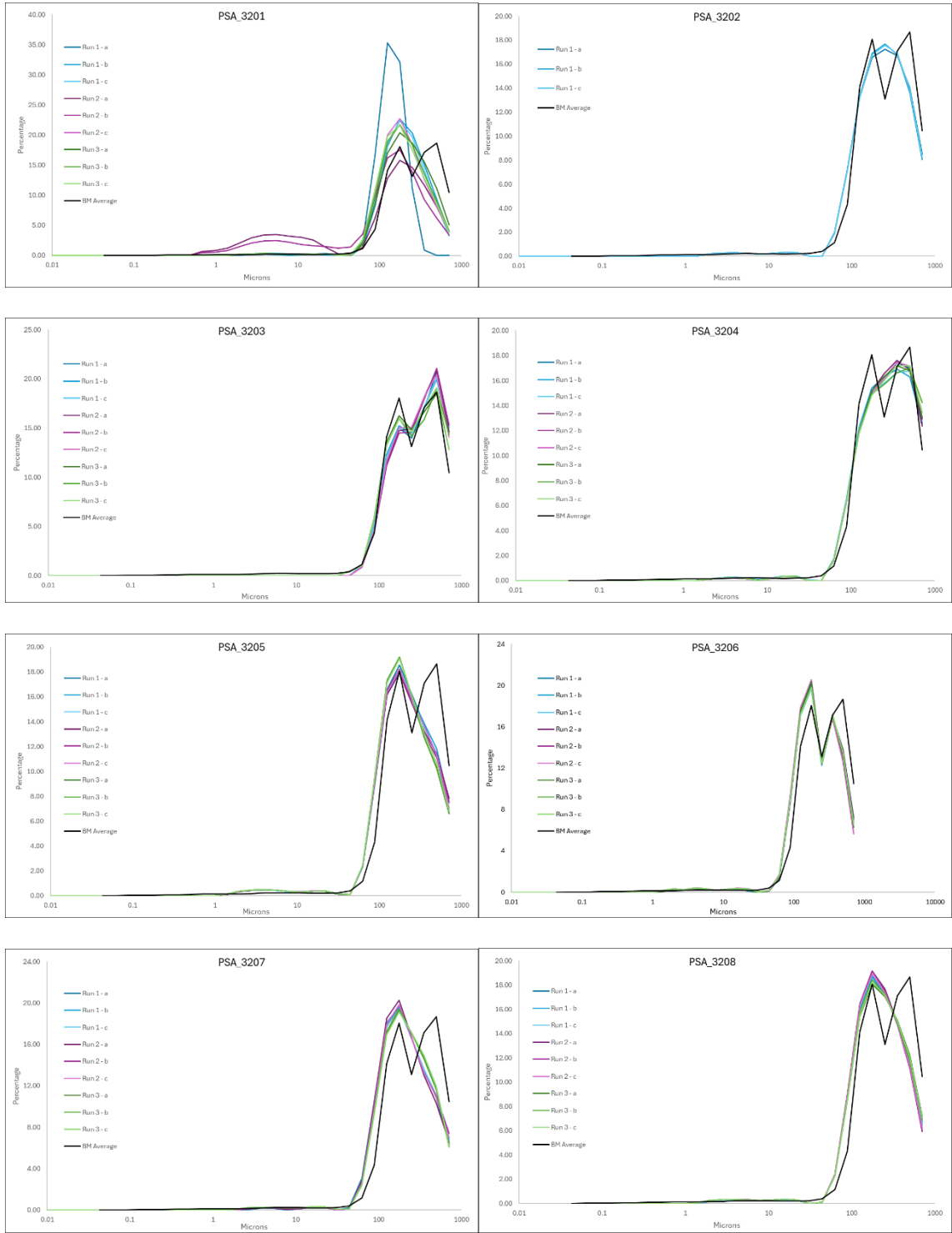


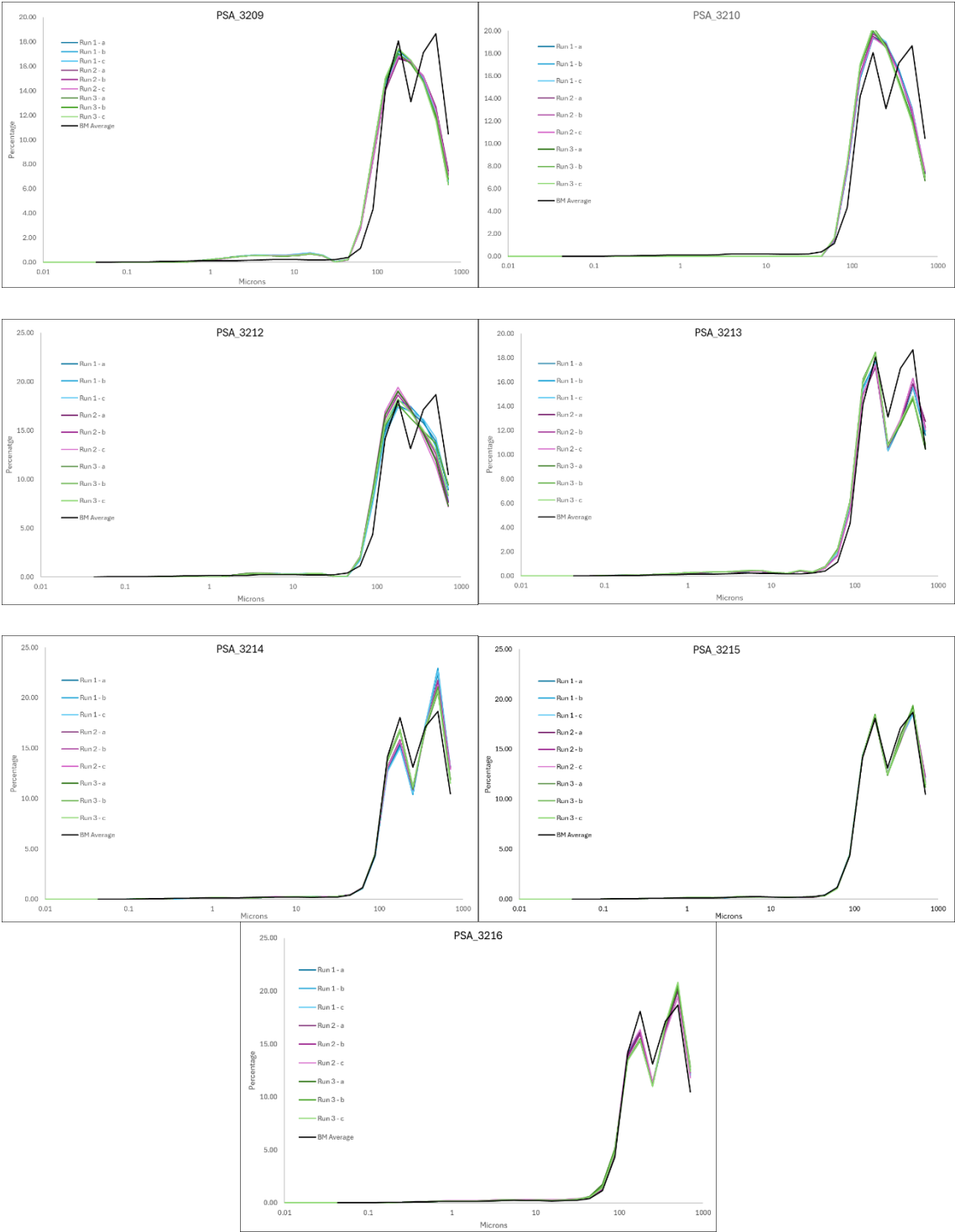
Figure 8 Bar charts showing the percentage gravel, sand, silt and clay recorded by each participating laboratory and the Benchmark average for PS99.

3. APPENDICES

Appendix 1 – Participant Laser Replicate Graphs

Benchmark and Participant laser replicate data can be found in the associated embedded Excel file – PS99 Appendix 1.





Appendix 2 – Gradistat output of size categories based on final merged data provided by each participant and the Benchmark Average for sediment distributed as PS99.

Data can be found in the associated embedded Excel file – PS99 Appendix 2.

Appendix 3 – Benchmark Lab and Participant Final Merged Data for sediment distributed as PS99.

Data can be found in the associated embedded Excel file – PS99 Appendix 3.

Appendix 4 – Individual comparison of participant and Benchmark sieve data for sediment distributed as PS99.

