

The National Marine Biological
Analytical Quality Control Scheme
www.nmqcs.org

Particle Size Results – PS34

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Table 1. Summary of the particle size information received from participating laboratories and replicate analysis laboratories for the thirty-fourth particle size distribution - PS34.

Replicate Sample Data

Sample	Method	% < 63 micron	Median (phi)	Mean (phi)	Sort	IGS (SKi)
PS34_42	L ¹	50.15	4.013	4.383	2.415	0.229
PS34_43	L ¹	50.10	4.008	4.382	2.406	0.232
PS34_44	L ¹	49.86	3.987	4.367	2.411	0.235
PS34_45	L ¹	49.50	3.952	4.350	2.410	0.245
PS34_46	L ¹	49.99	3.999	4.376	2.411	0.233
PS34_47	L ¹	49.78	3.979	4.363	2.416	0.236
PS34_48	L ¹	49.26	3.929	4.336	2.409	0.249
PS34_49	L ²	52.1	4.206	4.654	2.680	0.254
PS34_50	L ²	50.4	4.040	4.581	2.677	0.304
PS34_51	L ²	52.3	4.228	4.654	2.653	0.246
PS34_52	L ²	53.7	4.354	4.714	2.647	0.216
PS34_53	L ²	51.4	4.144	4.618	2.645	0.269
PS34_54	L ²	51.1	4.112	4.611	2.669	0.279
PS34_55	L ²	52.8	4.272	4.687	2.671	0.240
UM	Overall Average	50.89	4.09	4.51	2.54	0.25
UM	L ¹ RepAv	49.81	3.98	4.37	2.41	0.24
UM	L ² RepAv	51.97	4.19	4.65	2.66	0.26

Participant Data

Lab	Method	%<63µm	Median	Mean	Sort	IGS (SKi)
LB1601	L	49.27	3.91	4.45	2.69	0.31
LB1602	L	59.05	4.76	4.96	2.67	0.14
LB1603	L	68.6	4	4.8	2.32	-0.06
LB1604	WS/DS >63; L<63	48.32	3.88	4.56	2.35	5.55
LB1605	L	45.76	3.59	4.45	2.32	0.34
LB1606	WS/DS >63; L<63	48.27	3.90	4.60	2.27	0.40
LB1611	-	-	-	-	-	-
LB1620	L	54.1	4.38	4.58	2.49	0.2
LB1623	L	48.31	3.81	3.02	2.63	-0.36
LB1625	WS/L	58.16	4.65	4.92	2.73	0.17
LB1627	L	54.9	4.42	4.74	2.71	0.2
LB1635	L	59.5	4.806	5.027	2.802	0.184

Key to methods:

L - Laser analysis DS - Dry sieve CC - Coulter counter
 S - Sieve WS - Wet sieve FD - Freeze dried
 P - Pipette

L¹ - Replicate analysis by Malvern Laser (Mastersizer 2000)

L² - Replicate analysis by Malvern Laser (Mastersizer X)

"-" - No data. See forthcoming Annual Report, Section 6, for details.

Shaded cells - maximum and minimum values for each derived statistic.

Table 2. Z-score results for the derived statistics supplied by participating laboratories for the particle size exercise - PS34.

PS34																
LabCode	%<63µm	z-score	Flag	Median	z-score	Flag	Mean	z-score	Flag	Sort	z-score	Flag	IGS (SKi)	z-score	Flag	Description: pre/post analysis
Laser ¹ RepAv	49.81	-0.68	PASS	3.98	-0.57	PASS	4.37	-1.43	PASS	2.41	-0.79	PASS	0.237	0.17	PASS	- / Sandy mud
Laser ² RepAv	51.97	-0.20	PASS	4.19	0.07	PASS	4.65	0.01	PASS	2.66	0.71	PASS	0.258	0.35	PASS	Sandy mud / Sandy mud
LB1601	49.27	-0.80	PASS	3.91	-0.79	PASS	4.45	-0.99	PASS	2.69	0.87	PASS	0.310	0.78	PASS	mS / mS
LB1602	59.05	1.37	PASS	4.76	1.77	PASS	4.96	1.64	PASS	2.67	0.75	PASS	0.140	-0.63	PASS	Sandy mud / Sandy mud sM
LB1603	68.6	3.50	Fail	4.00	-0.52	PASS	4.80	0.81	PASS	2.32	-1.34	PASS	-0.060	-2.29	Fail	sandy mud / sandy mud
LB1604	48.32	-1.02	PASS	3.88	-0.88	PASS	4.56	-0.43	PASS	2.35	-1.16	PASS	5.55	44.16	Fail	Soft, light brown, muddy sand (slightly micaceous) containing some shell fragments and a few organic fragments / sM (sandy mud)
LB1605	45.76	-1.59	PASS	3.59	-1.75	PASS	4.45	-0.99	PASS	2.32	-1.34	PASS	0.340	1.02	PASS	Mud / Muddy Sand
LB1606	48.27	-1.03	PASS	3.90	-0.82	PASS	4.60	-0.22	PASS	2.27	-1.64	PASS	0.400	1.52	PASS	Mud / Sandy Mud
LB1611	-	-	Deemed Fail	-	-	Deemed Fail	-	-	Deemed Fail	-	-	Deemed Fail	-	-	Deemed Fail	- / -
LB1620	54.10	0.27	PASS	4.38	0.63	PASS	4.58	-0.32	PASS	2.49	-0.32	PASS	0.200	-0.13	PASS	Mud / Sandy mud
LB1623	48.31	-1.02	PASS	3.81	-1.09	PASS	3.02	-8.37	Fail	2.63	0.51	PASS	-0.36	-4.77	Fail	Silt / Silt
LB1625	58.16	1.18	PASS	4.65	1.44	PASS	4.92	1.43	PASS	2.73	1.11	PASS	0.170	-0.38	PASS	Slightly sandy silts / Sandy silts
LB1627	54.90	0.45	PASS	4.42	0.75	PASS	4.74	0.50	PASS	2.71	0.99	PASS	0.200	-0.13	PASS	Sandy MUD / Sandy MUD
LB1635	59.50	1.47	PASS	4.806	1.91	PASS	5.027	1.98	PASS	2.802	1.54	PASS	0.184	-0.27	PASS	Sandy mud / Sandy silt

"-" no return and/or data from laboratory. See text, Section 6 in the forthcoming Annual Report, for details.

Laser¹RepAv - Average of replicate analysis by Malvern Laser (Mastersizer2000; no blue laser used; pump & stirrer at max.; dispersion 90% for 90seconds)

Laser²RepAv - Average of replicate analysis by Malvern Laser (MastersizerX)

Figure 1. Particle size distribution curves resulting from analysis of fourteen replicate samples of sediment distributed as PS34. Seven samples analysed by Malvern Mastersizer 2000 and seven by Malvern Mastersizer X.

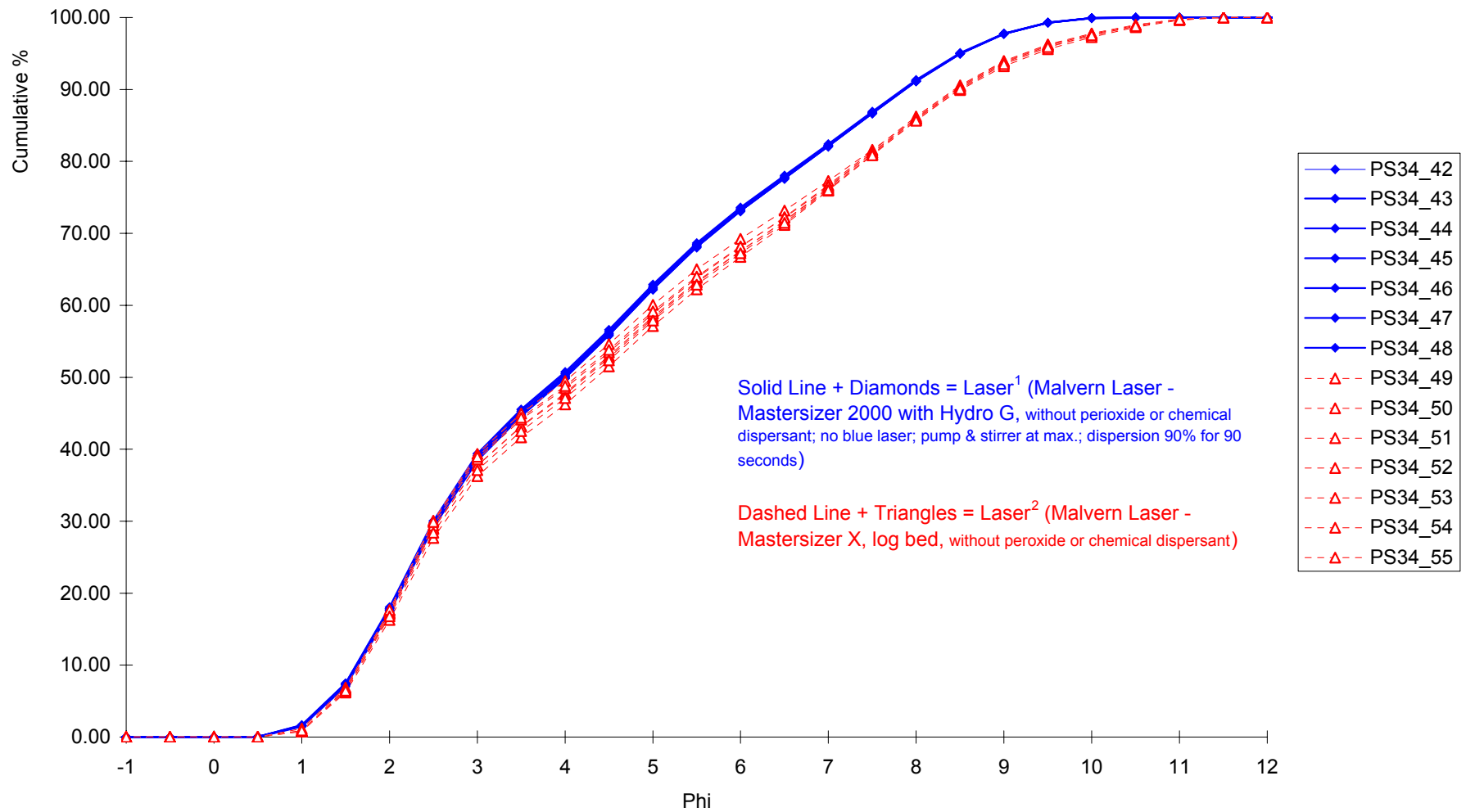


Figure 2. Particle size distribution curves from participating laboratories for sediment samples from PS34.

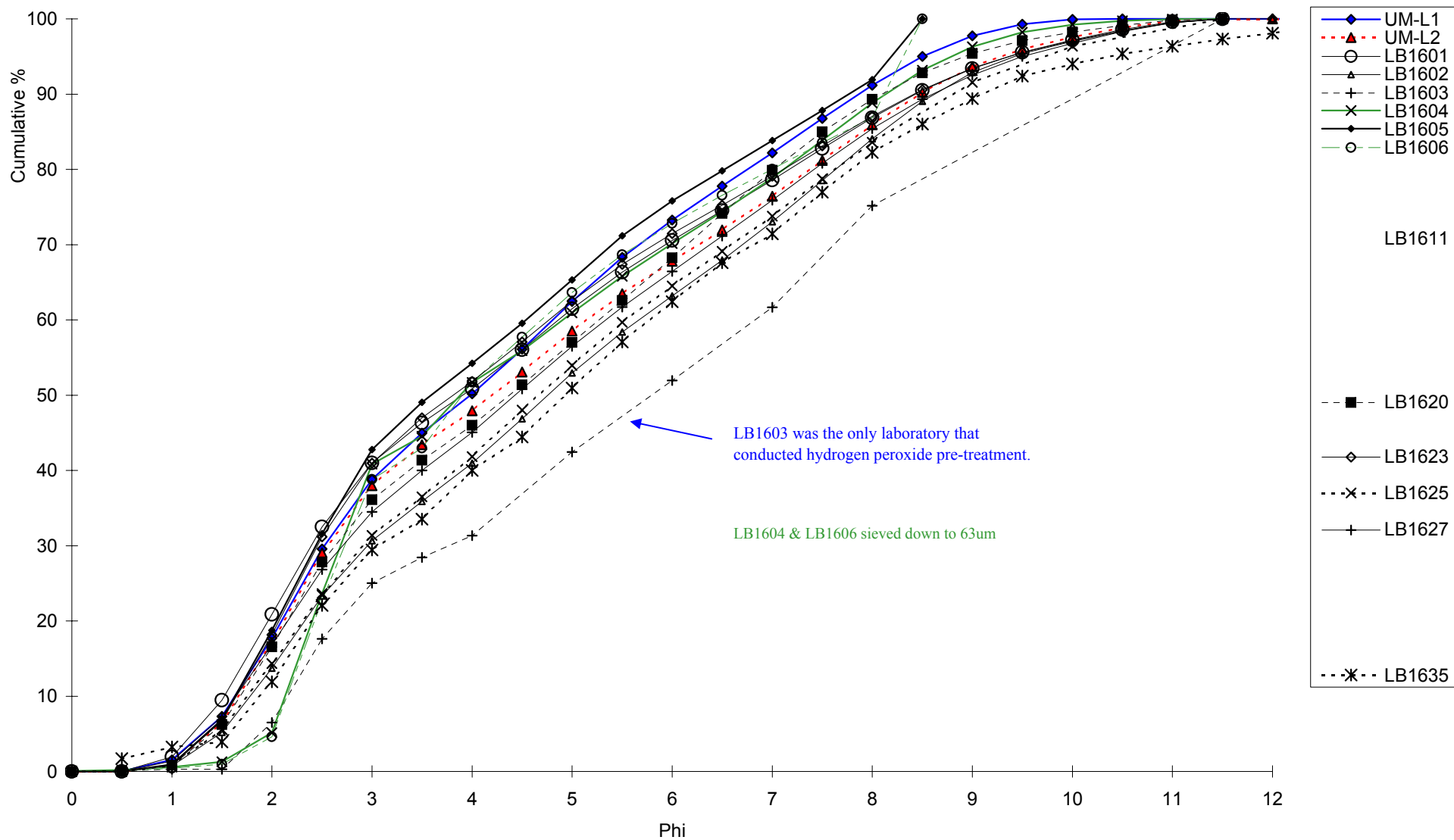
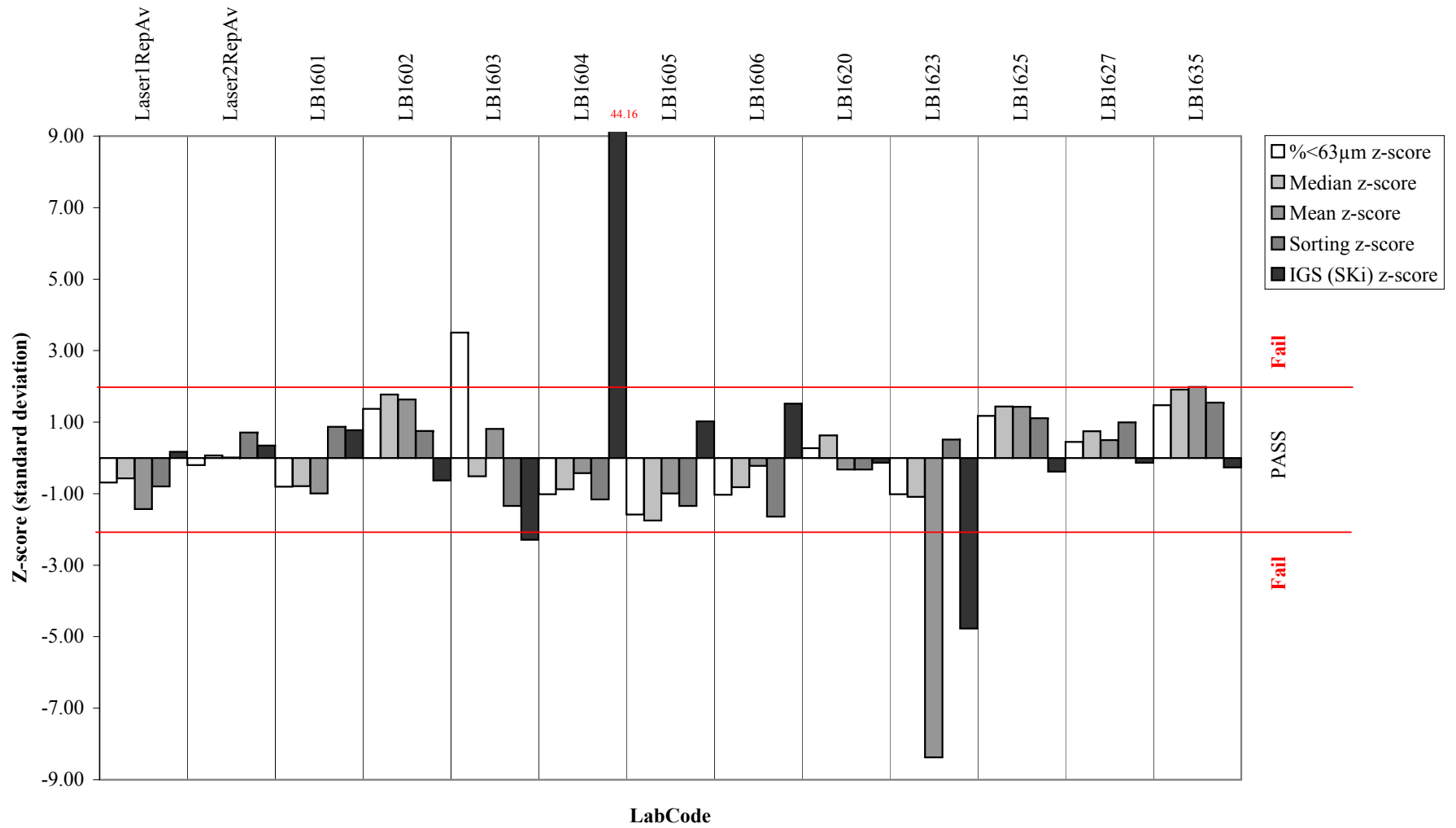


Figure 3. Z-scores for PS34 derived statistics.



Appendices

NMBAQCS - PS Exercise Record Sheet

Return to Unicmarine Ltd. by 02-10-09

Exercise Code:	PS34
LabCode:	LB1601
Sample Code:	PS341601
Method used:	Laser
Equipment used:	Malvern 2000 (0.02 - 2000 u) Hydro G
Peroxide treatment used:	no
Chemical dispersant used:	yes -calgon added to Hydro-G
% less than 63 micron:	49.27%
Median particle diameter (phi):	3.91
Mean particle diameter (phi):	4.45
Sorting Coefficient:	2.69
Inclusive Graphic Skewness (SKi):	0.31
Sediment Description Pre-analysis (e.g. sandy mud):	mS
Sediment Description Post-analysis (Folk Triangle) [†] :	mS

(*deleted as applicable)

Phi interval (explicit)	Volume/Weight (%)
-3.50 to -3.00	
-3.00 to -2.50	
-2.50 to -2.00	
-2.00 to -1.50	
-1.50 to -1.00	
-1.00 to -0.50	0
-0.50 to 0.00	0
0.00 to 0.50	0
0.50 to 1.00	1.92
1.00 to 1.50	7.54
1.50 to 2.00	11.41
2.00 to 2.50	11.64
2.50 to 3.00	8.48
3.00 to 3.50	5.32
3.50 to 4.00	4.54
4.00 to 4.50	5.2
4.50 to 5.00	5.44
5.00 to 5.50	4.87
5.50 to 6.00	4.2
6.00 to 6.50	3.97
6.50 to 7.00	4.07
7.00 to 7.50	4.19
7.50 to 8.00	4.09
8.00 to 8.50	3.63
8.50 to 9.00	2.91
9.00 to 9.50	2.14
9.50 to 10.00	1.64
10.00 to 10.50	1.38
10.50 to 11.00	1.03
11.00 to 11.50	0.4

continue if necessary...

[†] The Folk Sediment Description Triangle can be found on the British Geological Surveys web site or Folk, R. L. (1974) The Petrology of Sedimentary Rocks. Hemphill Publishing Co.

Exercise Code:	PS34 old (Absorbtion 0.01, Refractive Index 1.52)
LabCode:	LB1602
Sample Code:	PS34 old (Absorbtion 0.01, Refractive Index 1.52)
Method used:	<i>Laser granulometer</i>
Equipment used:	<i>Mastersizer 2000, Hydro Mu accessory unit</i>
Peroxide treatment used:	No
Chemical dispersant used:	No
% less than 63 micron:	59.05
Median particle diameter (phi):	4.76
Mean particle diameter (phi):	4.96
Sorting Coefficient:	2.67
Inclusive Graphic Skewness (SKi):	0.14
Sediment Description Pre-analysis (e.g. sandy mud):	<i>Sandy mud</i>
Sediment Description Post-analysis (Folk Triangle) [†] :	<i>Sandy mud sM</i>

(*deleted as applicable)

Phi interval (explicit)	Volume/Weight (%)
-3.50 to -3.00	0
-3.00 to -2.50	0
-2.50 to -2.00	0
-2.00 to -1.50	0
-1.50 to -1.00	0
-1.00 to -0.50	0
-0.50 to 0.00	0
0.00 to 0.50	0
0.50 to 1.00	0.75
1.00 to 1.50	4.44
1.50 to 2.00	8.54
2.00 to 2.50	9.59
2.50 to 3.00	7.35
3.00 to 3.50	5.2
3.50 to 4.00	5.08
4.00 to 4.50	5.9
4.50 to 5.00	6.08
5.00 to 5.50	5.44
5.50 to 6.00	4.82
6.00 to 6.50	4.74
6.50 to 7.00	5.1
7.00 to 7.50	5.49
7.50 to 8.00	5.53
8.00 to 8.50	4.99
8.50 to 9.00	3.84
9.00 to 9.50	2.49
9.50 to 10.00	1.64
10.00 to 10.50	1.37
10.50 to 11.00	1.12
11.00 to 11.50	0.49
11.50 to 12.00	0

continue if necessary...

[†] The Folk Sediment Description Triangle can be found on the British Geological Surveys web site or Folk, R. L. (1974) The Petrology of Sedimentary Rocks. Hemphill Publishing Co.

NMBAQCS - PS Exercise Record Sheet

Return to Unicmarine Ltd. by 02-10-09

Exercise Code:	PS34
LabCode:	LB1603
Sample Code:	PS341603
Method used:	<i>in-house</i>
Equipment used:	<i>sieve and malvern laser mam5004</i>
Peroxide treatment used:	yes
Chemical dispersant used:	no
% less than 63 micron:	68.6
Median particle diameter (phi):	4
Mean particle diameter (phi):	4.8
Sorting Coefficient:	2.32
Inclusive Graphic Skewness (SKi):	-0.06
Sediment Description Pre-analysis (e.g. sandy mud):	<i>sandy mud</i>
Sediment Description Post-analysis (Folk Triangle) [†] :	<i>sandy mud</i>

(*deleted as applicable)

Phi interval (explicit)	Volume/Weight (%)
-3.50 to -3.00	
-3.00 to -2.50	0.0
-2.50 to -2.00	
-2.00 to -1.50	0.0
-1.50 to -1.00	0.0
-1.00 to -0.50	0.0
-0.50 to 0.00	0.0
0.00 to 0.50	0.1
0.50 to 1.00	0.2
1.00 to 1.50	0.0
1.50 to 2.00	6.2
2.00 to 2.50	11.1
2.50 to 3.00	7.4
3.00 to 3.50	3.4
3.50 to 4.00	2.9
4.00 to 4.50	
4.50 to 5.00	11.1
5.00 to 5.50	
5.50 to 6.00	9.5
6.00 to 6.50	
6.50 to 7.00	9.7
7.00 to 7.50	
7.50 to 8.00	13.5
8.00 to 8.50	
8.50 to 9.00	
9.00 to 9.50	
9.50 to 10.00	24.8
10.00 to 10.50	
10.50 to 11.00	
11.00 to 11.50	

continue if necessary...

[†] The Folk Sediment Description Triangle can be found on the British Geological Surveys web site or Folk, R. L. (1974) The Petrology of Sedimentary Rocks. Hemphill Publishing Co.

NMBAQCS - PS Exercise Record Sheet

Return to Unicomarine Ltd. by 02-10-09

Exercise Code:	PS34
LabCode:	LB1604
Sample Code:	PS341604
Method used:	<i>Wet sieve at 63um. Dry sieve >63um, and laser-size <63um.</i>
Equipment used:	<i>Malvern Mastersizer 2000</i>
Peroxide treatment used:	no
Chemical dispersant used:	no
% less than 63 micron:	48.32
Median particle diameter (phi):	3.88
Mean particle diameter (phi):	4.56
Sorting Coefficient:	2.35
Inclusive Graphic Skewness (SKi):	5.55
Sediment Description Pre-analysis (e.g. sandy mud):	<i>Soft, light brown, muddy sand (slightly micaceous) containing some shell fragments and few organic fragments.</i>
Sediment Description Post-analysis (Folk Triangle)[†]:	<i>sM (sandy mud)</i>

(*deleted as applicable)

Phi interval (explicit)	Volume/Weight (%)
-2.00 to -1.50	0.00
-1.50 to -1.00	0.05
-1.00 to -0.50	0.01
-0.50 to 0.00	0.02
0.00 to 0.50	0.11
0.50 to 1.00	0.40
1.00 to 1.50	0.70
1.50 to 2.00	3.87
2.00 to 2.50	18.47
2.50 to 3.00	17.22
3.00 to 3.50	3.69
3.50 to 4.00	7.15
4.00 to 4.50	4.23
4.50 to 5.00	5.03
5.00 to 5.50	4.86
5.50 to 6.00	4.34
6.00 to 6.50	4.23
6.50 to 7.00	4.50
7.00 to 7.50	5.00
7.50 to 8.00	4.94
8.00 to 8.50	4.36
8.50 to 9.00	3.13
9.00 to 9.50	1.91
9.50 to 10.00	1.00
10.00 to 10.50	0.52
10.50 to 11.00	0.23
11.00 to 11.50	0.03

[†] The Folk Sediment Description Triangle can be found on the British Geological Surveys web site or Folk, R. L. (1974) The Petrology of Sedimentary Rocks. Hemphill Publishing Co.

NMBAQCS - PS Exercise Record Sheet

Return to Unicmarine Ltd. by 02-10-09

Exercise Code:	PS34
LabCode:	LB1605
Sample Code:	PS341605
Method used:	<i>Laser Granulometry</i>
Equipment used:	<i>Malvern 2000</i>
Peroxide treatment used:	No
Chemical dispersant used:	No
% less than 63 micron:	45.76
Median particle diameter (phi):	3.59
Mean particle diameter (phi):	4.45
Sorting Coefficient:	2.32
Inclusive Graphic Skewness (SKi):	0.34
Sediment Description Pre-analysis (e.g. sandy mud):	<i>Mud</i>
Sediment Description Post-analysis (Folk Triangle) [†] :	<i>Muddy Sand</i>

(*deleted as applicable)

Phi interval (explicit)	Volume/Weight (%)
-3.50 to -3.00	
-3.00 to -2.50	
-2.50 to -2.00	
-2.00 to -1.50	
-1.50 to -1.00	0
-1.00 to -0.50	0
-0.50 to 0.00	0
0.00 to 0.50	0
0.50 to 1.00	0.92
1.00 to 1.50	5.97
1.50 to 2.00	11.84
2.00 to 2.50	12.86
2.50 to 3.00	11.17
3.00 to 3.50	6.28
3.50 to 4.00	5.2
4.00 to 4.50	5.3
4.50 to 5.00	5.79
5.00 to 5.50	5.86
5.50 to 6.00	4.61
6.00 to 6.50	4.02
6.50 to 7.00	4.01
7.00 to 7.50	4
7.50 to 8.00	4.09
8.00 to 8.50	8.08
8.50 to 9.00	
9.00 to 9.50	
9.50 to 10.00	
10.00 to 10.50	
10.50 to 11.00	
11.00 to 11.50	

continue if necessary...

[†] The Folk Sediment Description Triangle can be found on the British Geological Surveys web site or Folk, R. L. (1974) The Petrology of Sedimentary Rocks. Hemphill Publishing Co.

NMBAQCS - PS Exercise Record Sheet

Return to Unicomarine Ltd. By 02-10-09

Particle Size Analysis:	PS34
Lab Code:	LB1606
Sample Code:	PS341606
Method used:	Wet Sieve, Dry Sieve and Laser Diffraction
Equipment used:	Wet Sieve at 63um. Dry Sieve >63um fraction. Laser Diffraction (Mastersizer Micro) a subsample of the wet <63um fraction.
Peroxide treatment used:	no
Chemical dispersant used:	no
% less than 63 micron:	48.27
Median particle diameter (phi):	3.90
Mean particle diameter (phi):	4.60
Sorting Coefficient:	2.27
Inclusive Graphic Skewness (SKi):	0.40
Sediment Description Pre-analysis (i.e. sandy mud):	Muddy sand
Sediment Description Post-analysis (Folk Triangle)[†]:	Muddy sand

(*deleted as applicable)

Phi interval (explicit)	Volume/Weight (%)
-3.50 to 3.00	n/a
-3.00 to -2.50	n/a
-2.50 to -2.00	n/a
-2.00 to -1.50	n/a
-1.50 to -1.00	n/a
-1.00 to -0.50	n/a
-0.50 to 0.00	n/a
0.00 to 0.50	0.110
0.50 to 1.00	0.318
1.00 to 1.50	0.553
1.50 to 2.00	3.636
2.00 to 2.50	18.136
2.50 to 3.00	16.048
3.00 to 3.50	4.173
3.50 to 4.00	8.756
4.00 to 4.50	5.975
4.50 to 5.00	5.945
5.00 to 5.50	5.014
5.50 to 6.00	4.153
6.00 to 6.50	3.722
6.50 to 7.00	3.504
7.00 to 7.50	3.515
7.50 to 8.00	3.345
8.00 to 8.50	13.097
8.50 to 9.00	n/a
9.00 to 9.50	n/a
9.50 to 10.00	n/a
10.00 to 10.50	n/a
10.50 to 11.00	n/a
11.00 to 11.50	n/a

continue if necessary...

[†] The Folk Sediment Description Triangle can be found on the British Geological Surveys web site or Folk, R. L. (1974) The Petrology of Sedimentary Rocks. Hemphill Publishing Co.

Exercise Code:	PS34
LabCode:	LB1620
Sample Code:	PS341620
Method used:	<i>Laser Diffraction</i>
Equipment used:	<i>Malvern Mastersizer 2000</i>
Peroxide treatment used:	No
Chemical dispersant used:	No
% less than 63 micron:	54.1
Median particle diameter (phi):	4.38
Mean particle diameter (phi):	4.58
Sorting Coefficient:	2.49
Inclusive Graphic Skewness (SKi):	0.2
Sediment Description Pre-analysis (e.g. sandy mud):	<i>Mud</i>
Sediment Description Post-analysis (Folk Triangle) [†] :	<i>Sandy mud</i>

(*deleted as applicable)

Phi interval (explicit)	Volume/Weight (%)
-3.50 to -3.00	
-3.00 to -2.50	
-2.50 to -2.00	
-2.00 to -1.50	
-1.50 to -1.00	
-1.00 to -0.50	0
-0.50 to 0.00	0
0.00 to 0.50	0
0.50 to 1.00	0.8
1.00 to 1.50	5.43
1.50 to 2.00	10.31
2.00 to 2.50	11.29
2.50 to 3.00	8.28
3.00 to 3.50	5.24
3.50 to 4.00	4.66
4.00 to 4.50	5.36
4.50 to 5.00	5.65
5.00 to 5.50	5.56
5.50 to 6.00	5.67
6.00 to 6.50	5.9
6.50 to 7.00	5.74
7.00 to 7.50	5.12
7.50 to 8.00	4.32
8.00 to 8.50	3.49
8.50 to 9.00	2.58
9.00 to 9.50	1.7
9.50 to 10.00	1.13
10.00 to 10.50	0.92
10.50 to 11.00	0.69
11.00 to 11.50	0.17

continue if necessary...

[†] The Folk Sediment Description Triangle can be found on the British Geological Surveys web site or Folk, R. L. (1974) The Petrology of Sedimentary Rocks. Hemphill Publishing Co.

Exercise Code:	PS34
LabCode:	LB1623
Sample Code:	PS341623
Method used:	<i>Laser Diffraction</i>
Equipment used:	<i>Malvern Mastersizer 2000</i>
Peroxide treatment used:	no*
Chemical dispersant used:	no*
% less than 63 micron:	48.31
Median particle diameter (phi):	3.81
Mean particle diameter (phi):	3.02
Sorting Coefficient:	2.63
Inclusive Graphic Skewness (SKi):	-0.36
Sediment Description Pre-analysis (e.g. sandy mud):	<i>Silt</i>
Sediment Description Post-analysis (Folk Triangle) [†] :	<i>Silt</i>

(*deleted as applicable)

Phi interval (explicit)	Volume/Weight (%)
-3.50 to -3.00	0
-3.00 to -2.50	0
-2.50 to -2.00	0
-2.00 to -1.50	0
-1.50 to -1.00	0
-1.00 to -0.50	0
-0.50 to 0.00	0
0.00 to 0.50	0
0.50 to 1.00	0.85
1.00 to 1.50	5.85
1.50 to 2.00	11.46
2.00 to 2.50	13.01
2.50 to 3.00	9.8
3.00 to 3.50	6.03
3.50 to 4.00	4.81
4.00 to 4.50	5.27
4.50 to 5.00	5.45
5.00 to 5.50	4.86
5.50 to 6.00	4.09
6.00 to 6.50	3.76
6.50 to 7.00	3.86
7.00 to 7.50	4.03
7.50 to 8.00	3.94
8.00 to 8.50	3.54
8.50 to 9.00	2.87
9.00 to 9.50	2.08
9.50 to 10.00	1.54
10.00 to 10.50	1.33
10.50 to 11.00	1.08
11.00 to 11.50	0.5

continue if necessary...

[†] The Folk Sediment Description Triangle can be found on the British Geological Surveys web site or Folk, R. L. (1974) The Petrology of Sedimentary Rocks. Hemphill Publishing Co.

Exercise Code:	PS34
LabCode:	LB1625
Sample Code:	PS341625
Method used:	<i>West Sieve and Lazer Diffraction</i>
Equipment used:	<i>Sieves(Phi Scale) & Malvern Mastersizer</i>
Peroxide treatment used:	no
Chemical dispersant used:	no
% less than 63 micron:	58.16
Median particle diameter (phi):	4.65
Mean particle diameter (phi):	4.92
Sorting Coefficient:	2.73
Inclusive Graphic Skewness (SKi):	0.17
Sediment Description Pre-analysis (e.g. sandy mud):	<i>Slightly sandy silts</i>
Sediment Description Post-analysis (Folk Triangle) [†] :	<i>Sandy silts</i>

(*deleted as applicable)

Phi interval (explicit)	Volume/Weight (%)
-3.50 to -3.00	0.00
-3.00 to -2.50	0.00
-2.50 to -2.00	0.00
-2.00 to -1.50	0.00
-1.50 to -1.00	0.00
-1.00 to -0.50	0.00
-0.50 to 0.00	0.00
0.00 to 0.50	0.00
0.50 to 1.00	0.79
1.00 to 1.50	4.78
1.50 to 2.00	8.76
2.00 to 2.50	9.12
2.50 to 3.00	7.93
3.00 to 3.50	5.12
3.50 to 4.00	5.34
4.00 to 4.50	6.17
4.50 to 5.00	5.92
5.00 to 5.50	5.76
5.50 to 6.00	4.82
6.00 to 6.50	4.61
6.50 to 7.00	4.65
7.00 to 7.50	4.96
7.50 to 8.00	4.89
8.00 to 8.50	7.93
8.50 to 9.00	
9.00 to 9.50	4.82
9.50 to 10.00	
10.00 to 10.50	
10.50 to 11.00	3.63
11.00 to 11.50	

continue if necessary...

[†] The Folk Sediment Description Triangle can be found on the British Geological Surveys web site or Folk, R. L. (1974) The Petrology of Sedimentary Rocks. Hemphill Publishing Co.

Exercise Code:	PS34
LabCode:	LB1627
Sample Code:	PS341627
Method used:	<i>laser diffraction</i>
Equipment used:	<i>Malvern Mastersizer 2000</i>
Peroxide treatment used:	no
Chemical dispersant used:	no
% less than 63 micron:	54.9
Median particle diameter (phi):	4.42
Mean particle diameter (phi):	4.74 (<i>coarse silt</i>)
Sorting Coefficient:	2.71 (<i>very poorly sorted</i>)
Inclusive Graphic Skewness (SKi):	0.2 (<i>Positive - fine</i>)
Sediment Description Pre-analysis (e.g. sandy mud):	<i>Sandy MUD</i>
Sediment Description Post-analysis (Folk Triangle) [†] :	<i>Sandy MUD</i>

(*deleted as applicable)

Phi interval (explicit)	Volume/Weight (%)
-3.50 to -3.00	0
-3.00 to -2.50	0
-2.50 to -2.00	0
-2.00 to -1.50	0
-1.50 to -1.00	0
-1.00 to -0.50	0
-0.50 to 0.00	0
0.00 to 0.50	0
0.50 to 1.00	1.4
1.00 to 1.50	5.9
1.50 to 2.00	9.55
2.00 to 2.50	9.95
2.50 to 3.00	7.68
3.00 to 3.50	5.49
3.50 to 4.00	5.05
4.00 to 4.50	5.79
4.50 to 5.00	5.66
5.00 to 5.50	5.19
5.50 to 6.00	4.75
6.00 to 6.50	4.7
6.50 to 7.00	4.76
7.00 to 7.50	4.9
7.50 to 8.00	4.61
8.00 to 8.50	3.91
8.50 to 9.00	3.19
9.00 to 9.50	2.47
9.50 to 10.00	1.76
10.00 to 10.50	1.58
10.50 to 11.00	1.15
11.00 to 11.50	0.51

continue if necessary...

[†] The Folk Sediment Description Triangle can be found on the British Geological Surveys web site or Folk, R. L. (1974) The Petrology of Sedimentary Rocks. Hemphill Publishing Co.

Exercise Code:	PS34
LabCode:	LB1635
Sample Code:	PS341635
Method used:	LASER DIFFRACTION
Equipment used:	Coulter LS200 (dispersed using Calgon and ultrasonic)
Peroxide treatment used:	no
Chemical dispersant used:	yes
% less than 63 micron:	59.5
Median particle diameter (phi):	4.806
Mean particle diameter (phi):	5.027
Sorting Coefficient:	2.802
Inclusive Graphic Skewness (SKi):	0.184
Sediment Description Pre-analysis (e.g. sandy mud):	Sandy mud
Sediment Description Post-analysis (Folk Triangle) [†] :	Sandy silt

(*deleted as applicable)

Phi interval (explicit)	Volume/Weight (%)
0.00 to 0.50	1.72
0.50 to 1.00	1.54
1.00 to 1.50	0.68
1.50 to 2.00	7.98
2.00 to 2.50	10.13
2.50 to 3.00	7.37
3.00 to 3.50	4.10
3.50 to 4.00	6.49
4.00 to 4.50	4.44
4.50 to 5.00	6.49
5.00 to 5.50	6.11
5.50 to 6.00	5.37
6.00 to 6.50	5.17
6.50 to 7.00	3.85
7.00 to 7.50	5.51
7.50 to 8.00	5.29
8.00 to 8.50	3.78
8.50 to 9.00	3.37
9.00 to 9.50	3.00
9.50 to 10.00	1.60
10.00 to 10.50	1.37
10.50 to 11.00	0.99
11.00 to 11.50	0.98
11.50 to 12.00	0.75
12.00 to 12.50	1.13
12.50 to 13.00	0.47
13.00 to 13.50	0.31
13.50 to 14.00	
14.00 to 14.50	
14.50 to 15.00	

continue if necessary...

[†] The Folk Sediment Description Triangle can be found on the British Geological Surveys web site or Folk, R. L. (1974) The Petrology of Sedimentary Rocks. Hemphill Publishing Co.