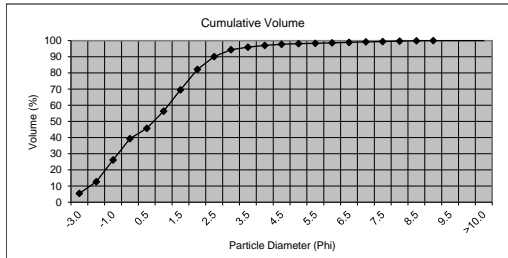
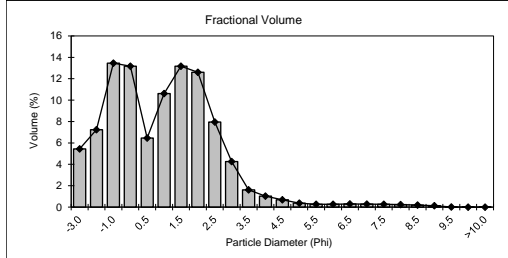


Sample No.: MM\_ECC\_10\_SEC\_DNA Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 06/09/2023 12:13



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	5.44	5.44	
4.0000	-2.0	7.24	12.68	Pebble
2.0000	-1.0	13.46	26.14	Granule
1.0000	0.0	13.17	39.31	V.Coarse Sand
0.7100	0.5	6.46	45.77	
0.5000	1.0	10.61	56.38	Coarse Sand
0.3550	1.5	13.17	69.55	
0.2500	2.0	12.60	82.15	Medium Sand
0.1800	2.5	7.95	90.10	
0.1250	3.0	4.27	94.37	Fine Sand
0.0900	3.5	1.61	95.98	
0.0630	4.0	1.03	97.01	V.Fine Sand
0.0440	4.5	0.69	97.70	
0.0315	5.0	0.37	98.07	Coarse Silt
0.0220	5.5	0.27	98.33	
0.0156	6.0	0.26	98.59	Medium Silt
0.0110	6.5	0.29	98.88	
0.0078	7.0	0.28	99.16	Fine silt
0.0055	7.5	0.27	99.43	
0.0039	8.0	0.23	99.66	V.Fine Silt
0.0028	8.5	0.19	99.85	
0.0020	9.0	0.13	99.99	Coarse Clay
0.0014	9.5	0.02	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

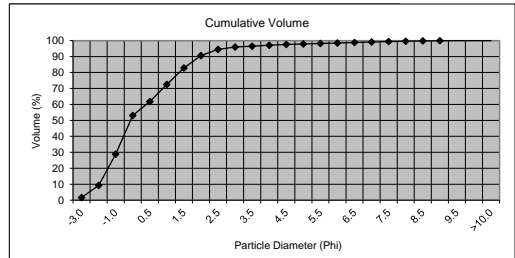
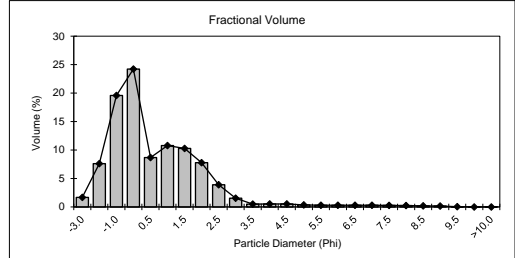
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.801	2.899	0.321
Median	0.626		0.675

Wentworth Classification: Coarse Sand

Sorting	Value	Inference
Coefficient	1.92	Poorly Sorted
Skewness	-0.23	Negative (Fine)
Kurtosis	0.91	Mesokurtic
Fines (%)	2.99%	
Sands (%)	70.87%	
Gravel (%)	26.14%	

BGS Mod. Folk Classification: Gravelly Sand  
 Mod. Folk for Habitat Classification: Coarse Sediments

Sample No.: MM\_ECC\_11\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 06/09/2023 12:34



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	1.67	1.67	
4.0000	-2.0	7.61	9.28	Pebble
2.0000	-1.0	19.58	28.85	Granule
1.0000	0.0	24.22	53.07	V.Coarse Sand
0.7100	0.5	8.68	61.75	
0.5000	1.0	10.79	72.54	Coarse Sand
0.3550	1.5	10.28	82.82	
0.2500	2.0	7.79	90.60	Medium Sand
0.1800	2.5	3.90	94.50	
0.1250	3.0	1.53	96.03	Fine Sand
0.0900	3.5	0.50	96.53	
0.0630	4.0	0.53	97.06	V.Fine Sand
0.0440	4.5	0.51	97.57	
0.0315	5.0	0.35	97.92	Coarse Silt
0.0220	5.5	0.30	98.21	
0.0156	6.0	0.29	98.50	Medium Silt
0.0110	6.5	0.30	98.80	
0.0078	7.0	0.29	99.09	Fine silt
0.0055	7.5	0.27	99.36	
0.0039	8.0	0.24	99.60	V.Fine Silt
0.0028	8.5	0.19	99.80	
0.0020	9.0	0.15	99.94	Coarse Clay
0.0014	9.5	0.06	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

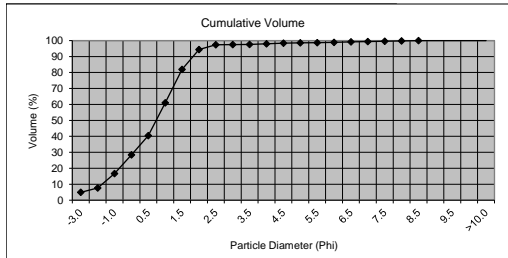
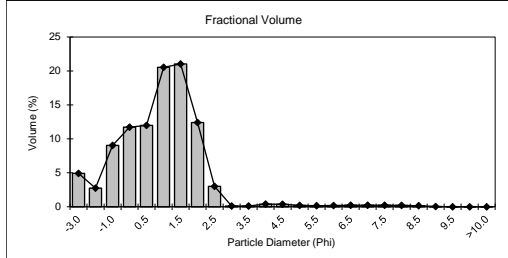
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	1.082	2.119	-0.113
Median	1.127		-0.172

Wentworth Classification: V. Coarse Sand

Sorting	Value	Inference
Coefficient	1.62	Poorly Sorted
Skewness	0.06	Symmetrical
Kurtosis	0.91	Mesokurtic
Fines (%)	2.95%	
Sands (%)	68.20%	
Gravel (%)	28.85%	

BGS Mod. Folk Classification: Gravelly Sand  
 Mod. Folk for Habitat Classification: Coarse Sediments

Sample No.: MM\_ECC\_12\_SEC\_DNA Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 06/09/2023 12:50



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	4.91	4.91	
4.0000	-2.0	2.76	7.67	Pebble
2.0000	-1.0	9.03	16.70	Granule
1.0000	0.0	11.74	28.43	V.Coarse Sand
0.7100	0.5	11.99	40.42	
0.5000	1.0	20.55	60.97	Coarse Sand
0.3550	1.5	21.03	82.00	
0.2500	2.0	12.40	94.40	Medium Sand
0.1800	2.5	3.01	97.41	
0.1250	3.0	0.11	97.52	Fine Sand
0.0900	3.5	0.11	97.63	
0.0630	4.0	0.39	98.01	V.Fine Sand
0.0440	4.5	0.38	98.39	
0.0315	5.0	0.20	98.59	Coarse Silt
0.0220	5.5	0.15	98.74	
0.0156	6.0	0.19	98.93	Medium Silt
0.0110	6.5	0.22	99.15	
0.0078	7.0	0.22	99.37	Fine silt
0.0055	7.5	0.23	99.60	
0.0039	8.0	0.21	99.81	V.Fine Silt
0.0028	8.5	0.16	99.97	
0.0020	9.0	0.03	100.00	Coarse Clay
0.0014	9.5	0.00	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

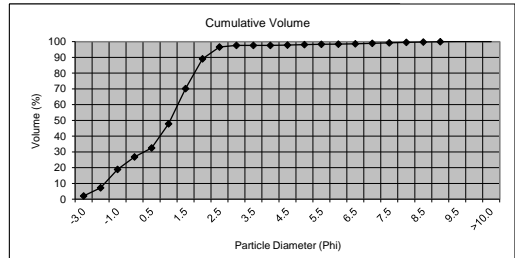
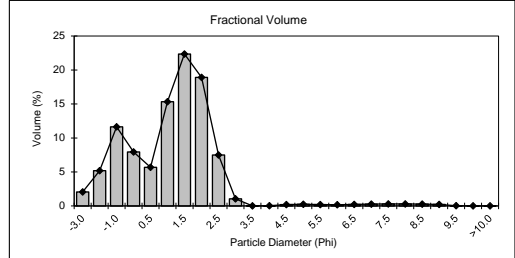
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.764	2.506	0.388
Median	0.612		0.708

Wentworth Classification: Coarse Sand

Sorting	Value	Inference
Coefficient	1.43	Poorly Sorted
Skewness	-0.41	Very Negative(fine)
Kurtosis	1.23	Leptokurtic
Fines (%)	1.99%	
Sands (%)	81.32%	
Gravel (%)	16.70%	

BGS Mod. Folk Classification: Gravelly Sand  
 Mod. Folk for Habitat Classification: Coarse Sediments

Sample No.: MM\_ECC\_13\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 06/09/2023 14:10



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	2.06	2.06	
4.0000	-2.0	5.18	7.24	Pebble
2.0000	-1.0	11.64	18.88	Granule
1.0000	0.0	7.94	26.82	V.Coarse Sand
0.7100	0.5	5.68	32.49	
0.5000	1.0	15.32	47.81	Coarse Sand
0.3550	1.5	22.35	70.16	
0.2500	2.0	18.90	89.06	Medium Sand
0.1800	2.5	7.49	96.56	
0.1250	3.0	1.05	97.61	Fine Sand
0.0900	3.5	0.00	97.61	
0.0630	4.0	0.02	97.63	V.Fine Sand
0.0440	4.5	0.20	97.83	
0.0315	5.0	0.23	98.06	Coarse Silt
0.0220	5.5	0.20	98.26	
0.0156	6.0	0.17	98.43	Medium Silt
0.0110	6.5	0.21	98.65	
0.0078	7.0	0.26	98.91	Fine silt
0.0055	7.5	0.30	99.20	
0.0039	8.0	0.30	99.50	V.Fine Silt
0.0028	8.5	0.26	99.76	
0.0020	9.0	0.21	99.97	Coarse Clay
0.0014	9.5	0.03	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

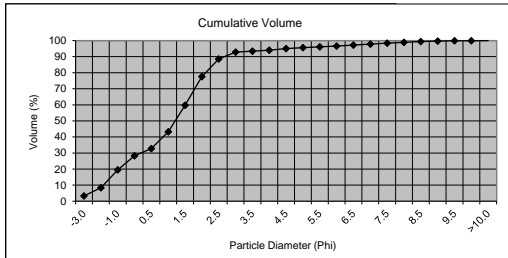
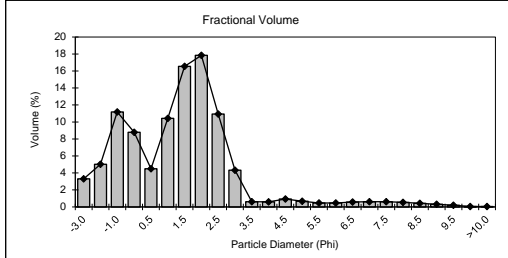
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.696	1.940	0.523
Median	0.486		1.042

Wentworth Classification: Coarse Sand

Sorting	Value	Inference
Coefficient	1.53	Poorly Sorted
Skewness	-0.48	Very Negative(fine)
Kurtosis	1.05	Mesokurtic
Fines (%)	2.37%	
Sands (%)	78.75%	
Gravel (%)	18.88%	

BGS Mod. Folk Classification: Gravelly Sand  
 Mod. Folk for Habitat Classification: Coarse Sediments

Sample No.: MM\_ECC\_14\_SEC\_DNA Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 06/09/2023 14:29



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	3.31	3.31	
4.0000	-2.0	5.02	8.32	Pebble
2.0000	-1.0	11.17	19.50	Granule
1.0000	0.0	8.78	28.28	V.Coarse Sand
0.7100	0.5	4.49	32.77	
0.5000	1.0	10.43	43.20	Coarse Sand
0.3550	1.5	16.54	59.74	
0.2500	2.0	17.84	77.58	Medium Sand
0.1800	2.5	10.94	88.53	
0.1250	3.0	4.32	92.84	Fine Sand
0.0900	3.5	0.61	93.45	
0.0630	4.0	0.60	94.05	V.Fine Sand
0.0440	4.5	0.94	94.99	
0.0315	5.0	0.67	95.66	Coarse Silt
0.0220	5.5	0.47	96.13	
0.0156	6.0	0.46	96.59	Medium Silt
0.0110	6.5	0.58	97.17	
0.0078	7.0	0.62	97.78	Fine silt
0.0055	7.5	0.61	98.39	
0.0039	8.0	0.54	98.93	V.Fine Silt
0.0028	8.5	0.44	99.37	
0.0020	9.0	0.32	99.69	Coarse Clay
0.0014	9.5	0.20	99.89	
0.0010	10.0	0.06	99.94	Medium Clay
<0.001	>10.0	0.06	100.00	Fine Clay

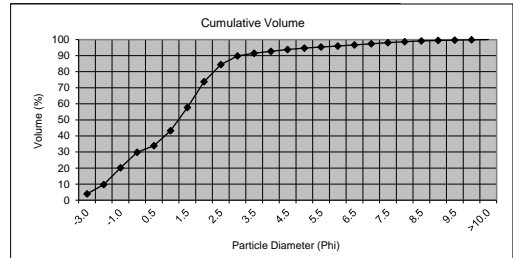
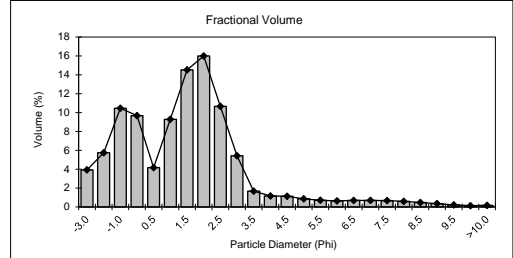
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.623	2.248	0.683
Median	0.440		1.183

Wentworth Classification: Coarse Sand

Sorting	Value	Inference
Coefficient	2.01	Very Poorly Sorted
Skewness	-0.25	Negative (Fine)
Kurtosis	1.25	Leptokurtic
Fines (%)	5.95%	
Sands (%)	74.56%	
Gravel (%)	19.50%	

BGS Mod. Folk Classification: Gravelly Sand  
 Mod. Folk for Habitat Classification: Coarse Sediments

Sample No.: MM\_ECC\_15\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 06/09/2023 15:04



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	3.93	3.93	
4.0000	-2.0	5.74	9.67	Pebble
2.0000	-1.0	10.46	20.13	Granule
1.0000	0.0	9.67	29.80	V.Coarse Sand
0.7100	0.5	4.16	33.96	
0.5000	1.0	9.28	43.25	Coarse Sand
0.3550	1.5	14.52	57.76	
0.2500	2.0	15.99	73.76	Medium Sand
0.1800	2.5	10.65	84.40	
0.1250	3.0	5.42	89.82	Fine Sand
0.0900	3.5	1.68	91.50	
0.0630	4.0	1.16	92.66	V.Fine Sand
0.0440	4.5	1.13	93.80	
0.0315	5.0	0.85	94.65	Coarse Silt
0.0220	5.5	0.70	95.36	
0.0156	6.0	0.64	95.99	Medium Silt
0.0110	6.5	0.69	96.69	
0.0078	7.0	0.70	97.38	Fine silt
0.0055	7.5	0.68	98.06	
0.0039	8.0	0.60	98.65	V.Fine Silt
0.0028	8.5	0.47	99.13	
0.0020	9.0	0.35	99.47	Coarse Clay
0.0014	9.5	0.22	99.69	
0.0010	10.0	0.14	99.83	Medium Clay
<0.001	>10.0	0.17	100.00	Fine Clay

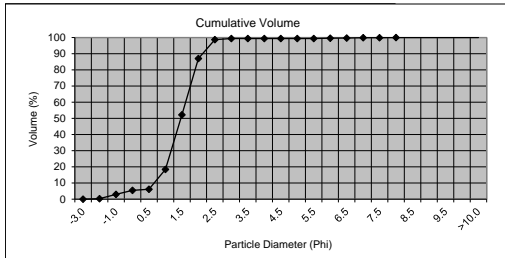
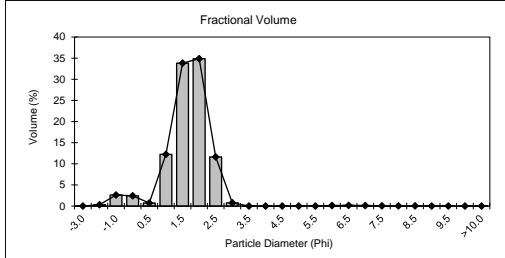
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.604	2.456	0.727
Median	0.433		1.209

Wentworth Classification: Coarse Sand

Sorting	Value	Inference
Coefficient	2.21	Very Poorly Sorted
Skewness	-0.19	Negative (Fine)
Kurtosis	1.26	Leptokurtic
Fines (%)	7.34%	
Sands (%)	72.53%	
Gravel (%)	20.13%	

BGS Mod. Folk Classification: Gravelly Sand  
 Mod. Folk for Habitat Classification: Coarse Sediments

Sample No.: MM\_ECC\_16\_SEC\_DNA Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 06/09/2023 15:24



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.00	0.00	
4.0000	-2.0	0.33	0.33	Pebble
2.0000	-1.0	2.64	2.96	Granule
1.0000	0.0	2.44	5.41	V.Coarse Sand
0.7100	0.5	0.72	6.13	
0.5000	1.0	12.25	18.38	Coarse Sand
0.3550	1.5	33.80	52.18	
0.2500	2.0	34.86	87.04	Medium Sand
0.1800	2.5	11.63	98.67	
0.1250	3.0	0.77	99.44	Fine Sand
0.0900	3.5	0.00	99.44	
0.0630	4.0	0.00	99.44	V.Fine Sand
0.0440	4.5	0.00	99.44	
0.0315	5.0	0.00	99.44	Coarse Silt
0.0220	5.5	0.00	99.44	
0.0156	6.0	0.14	99.58	Medium Silt
0.0110	6.5	0.16	99.74	
0.0078	7.0	0.12	99.86	Fine silt
0.0055	7.5	0.06	99.92	
0.0039	8.0	0.05	99.97	V.Fine Silt
0.0028	8.5	0.03	100.00	
0.0020	9.0	0.00	100.00	Coarse Clay
0.0014	9.5	0.00	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

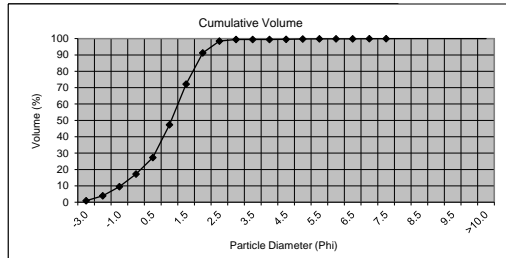
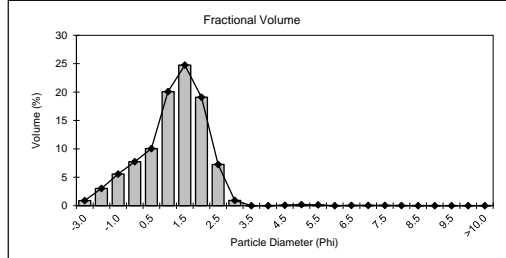
Graphical Mean (MZ)	mm	StDev (mm)	Phi
Mean	0.371	0.304	1.431
Median	0.364		1.457

Wentworth Classification: Medium Sand

Sorting Coefficient	Value	Inference
Sorting Coefficient	0.65	Moderately Well Sorted
Skewness	-0.20	Negative (Fine)
Kurtosis	1.44	Leptokurtic
Fines (%)	0.57%	
Sands (%)	96.47%	
Gravel (%)	2.96%	

BGS Mod. Folk Classification: Slightly Gravelly Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_17\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 06/09/2023 16:11



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.89	0.89	
4.0000	-2.0	3.05	3.94	Pebble
2.0000	-1.0	5.58	9.52	Granule
1.0000	0.0	7.74	17.26	V.Coarse Sand
0.7100	0.5	10.04	27.29	
0.5000	1.0	20.08	47.37	Coarse Sand
0.3550	1.5	24.75	72.12	
0.2500	2.0	19.10	91.23	Medium Sand
0.1800	2.5	7.27	98.50	
0.1250	3.0	0.91	99.41	Fine Sand
0.0900	3.5	0.00	99.41	
0.0630	4.0	0.00	99.41	V.Fine Sand
0.0440	4.5	0.09	99.50	
0.0315	5.0	0.20	99.70	Coarse Silt
0.0220	5.5	0.12	99.82	
0.0156	6.0	0.01	99.83	Medium Silt
0.0110	6.5	0.04	99.87	
0.0078	7.0	0.05	99.92	Fine silt
0.0055	7.5	0.06	99.98	
0.0039	8.0	0.03	100.00	V.Fine Silt
0.0028	8.5	0.00	100.00	
0.0020	9.0	0.00	100.00	Coarse Clay
0.0014	9.5	0.00	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

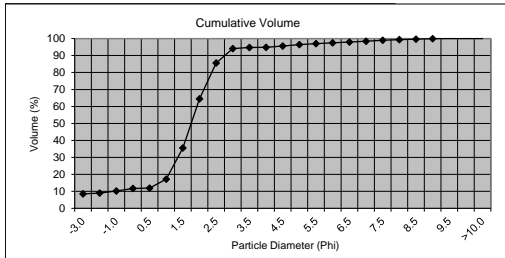
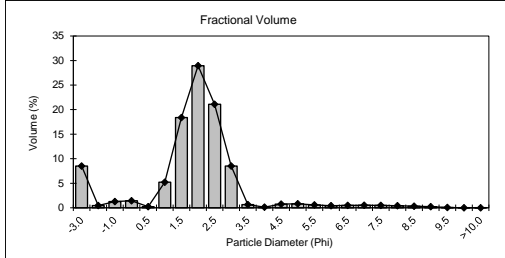
Graphical Mean (MZ)	mm	StDev (mm)	Phi
Mean	0.546	1.129	0.872
Median	0.485		1.045

Wentworth Classification: Coarse Sand

Sorting Coefficient	Value	Inference
Sorting Coefficient	1.12	Poorly Sorted
Skewness	-0.34	Very Negative(fine)
Kurtosis	1.40	Leptokurtic
Fines (%)	0.59%	
Sands (%)	89.89%	
Gravel (%)	9.52%	

BGS Mod. Folk Classification: Gravelly Sand  
 Mod. Folk for Habitat Classification: Coarse Sediments

Sample No.: MM\_ECC\_18\_SEC\_DNA Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 06/09/2023 16:28



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	8.50	8.50	
4.0000	-2.0	0.47	8.97	Pebble
2.0000	-1.0	1.27	10.24	Granule
1.0000	0.0	1.45	11.68	V.Coarse Sand
0.7100	0.5	0.22	11.90	
0.5000	1.0	5.23	17.14	Coarse Sand
0.3550	1.5	18.38	35.51	
0.2500	2.0	28.96	64.47	Medium Sand
0.1800	2.5	21.10	85.57	
0.1250	3.0	8.50	94.07	Fine Sand
0.0900	3.5	0.65	94.72	
0.0630	4.0	0.14	94.87	V.Fine Sand
0.0440	4.5	0.74	95.61	
0.0315	5.0	0.82	96.43	Coarse Silt
0.0220	5.5	0.60	97.03	
0.0156	6.0	0.44	97.46	Medium Silt
0.0110	6.5	0.48	97.94	
0.0078	7.0	0.52	98.46	Fine silt
0.0055	7.5	0.49	98.95	
0.0039	8.0	0.42	99.37	V.Fine Silt
0.0028	8.5	0.32	99.69	
0.0020	9.0	0.23	99.93	Coarse Clay
0.0014	9.5	0.08	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

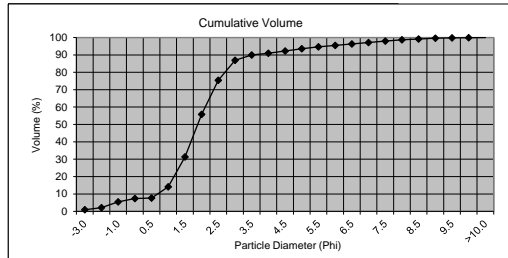
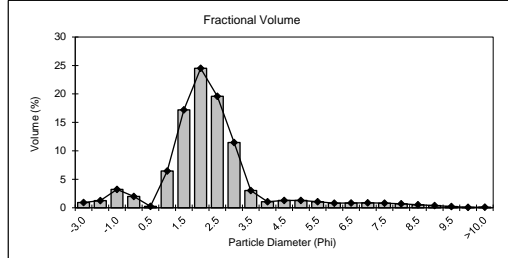
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.313	12.430	1.677
Median	0.302		1.725

Wentworth Classification: Medium Sand

Sorting	Value	Inference
Coefficient	1.80	Poorly Sorted
Skewness	-0.29	Negative (Fine)
Kurtosis	3.72	Extremely Leptokurtic
Fines (%)	5.14%	
Sands (%)	84.63%	
Gravel (%)	10.24%	

BGS Mod. Folk Classification: Gravelly Sand  
 Mod. Folk for Habitat Classification: Coarse Sediments

Sample No.: MM\_ECC\_19\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 06/09/2023 17:03



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.91	0.91	
4.0000	-2.0	1.27	2.18	Pebble
2.0000	-1.0	3.25	5.43	Granule
1.0000	0.0	2.01	7.44	V.Coarse Sand
0.7100	0.5	0.24	7.68	
0.5000	1.0	6.46	14.13	Coarse Sand
0.3550	1.5	17.20	31.33	
0.2500	2.0	24.50	55.83	Medium Sand
0.1800	2.5	19.59	75.42	
0.1250	3.0	11.47	86.88	Fine Sand
0.0900	3.5	3.04	89.92	
0.0630	4.0	1.05	90.97	V.Fine Sand
0.0440	4.5	1.29	92.26	
0.0315	5.0	1.30	93.56	Coarse Silt
0.0220	5.5	1.07	94.64	
0.0156	6.0	0.82	95.46	Medium Silt
0.0110	6.5	0.84	96.30	
0.0078	7.0	0.86	97.16	Fine silt
0.0055	7.5	0.82	97.98	
0.0039	8.0	0.69	98.67	V.Fine Silt
0.0028	8.5	0.53	99.20	
0.0020	9.0	0.38	99.59	Coarse Clay
0.0014	9.5	0.22	99.80	
0.0010	10.0	0.09	99.89	Medium Clay
<0.001	>10.0	0.11	100.00	Fine Clay

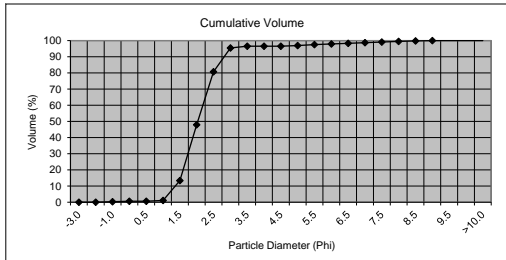
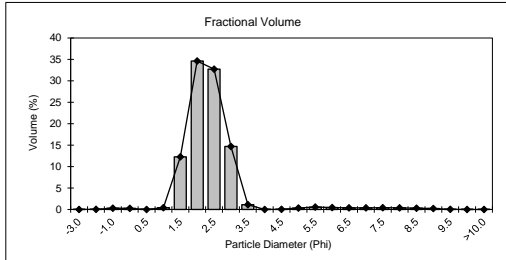
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.264	0.691	1.919
Median	0.275		1.863

Wentworth Classification: Medium Sand

Sorting	Value	Inference
Coefficient	1.49	Poorly Sorted
Skewness	0.11	Positive(Coarse)
Kurtosis	2.41	Very Leptokurtic
Fines (%)	9.03%	
Sands (%)	85.54%	
Gravel (%)	5.43%	

BGS Mod. Folk Classification: Gravelly Sand  
 Mod. Folk for Habitat Classification: Coarse Sediments

Sample No.: MM\_ECC\_20\_SEC\_DNA Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 07/09/2023 13:54



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.00	0.00	
4.0000	-2.0	0.04	0.04	Pebble
2.0000	-1.0	0.32	0.36	Granule
1.0000	0.0	0.28	0.64	V.Coarse Sand
0.7100	0.5	0.00	0.64	
0.5000	1.0	0.43	1.07	Coarse Sand
0.3550	1.5	12.28	13.35	
0.2500	2.0	34.62	47.97	Medium Sand
0.1800	2.5	32.75	80.72	
0.1250	3.0	14.72	95.44	Fine Sand
0.0900	3.5	1.11	96.55	
0.0630	4.0	0.00	96.55	V.Fine Sand
0.0440	4.5	0.02	96.57	
0.0315	5.0	0.34	96.92	Coarse Silt
0.0220	5.5	0.58	97.49	
0.0156	6.0	0.46	97.95	Medium Silt
0.0110	6.5	0.36	98.31	
0.0078	7.0	0.37	98.68	Fine silt
0.0055	7.5	0.41	99.09	
0.0039	8.0	0.38	99.47	V.Fine Silt
0.0028	8.5	0.29	99.76	
0.0020	9.0	0.21	99.97	Coarse Clay
0.0014	9.5	0.03	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

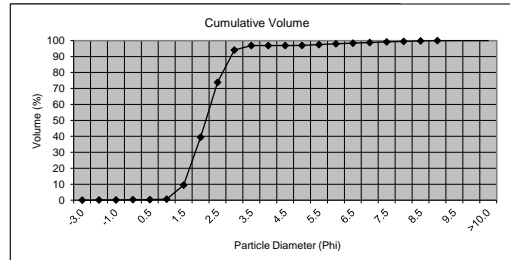
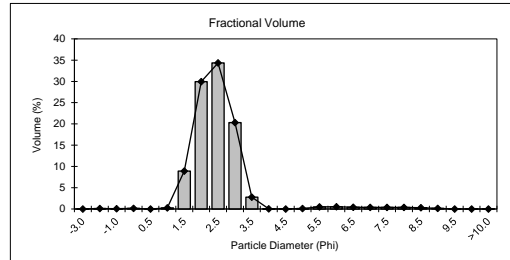
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.243	0.118	2.043
Median	0.246		2.025

Wentworth Classification: Fine Sand

Sorting	Value	Inference
Coefficient	0.54	Moderately Well Sorted
Skewness	0.04	Symmetrical
Kurtosis	1.03	Mesokurtic
Fines (%)	3.45%	
Sands (%)	96.19%	
Gravel (%)	0.36%	

BGS Mod. Folk Classification: Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_21\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 07/09/2023 14:35



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.00	0.00	
4.0000	-2.0	0.10	0.10	Pebble
2.0000	-1.0	0.06	0.16	Granule
1.0000	0.0	0.16	0.32	V.Coarse Sand
0.7100	0.5	0.00	0.32	
0.5000	1.0	0.28	0.60	Coarse Sand
0.3550	1.5	8.90	9.50	
0.2500	2.0	29.96	39.46	Medium Sand
0.1800	2.5	34.33	73.79	
0.1250	3.0	20.31	94.10	Fine Sand
0.0900	3.5	2.78	96.87	
0.0630	4.0	0.04	96.92	V.Fine Sand
0.0440	4.5	0.00	96.92	
0.0315	5.0	0.09	97.01	Coarse Silt
0.0220	5.5	0.48	97.49	
0.0156	6.0	0.51	98.00	Medium Silt
0.0110	6.5	0.41	98.41	
0.0078	7.0	0.37	98.78	Fine silt
0.0055	7.5	0.39	99.17	
0.0039	8.0	0.37	99.54	V.Fine Silt
0.0028	8.5	0.29	99.83	
0.0020	9.0	0.16	99.99	Coarse Clay
0.0014	9.5	0.01	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

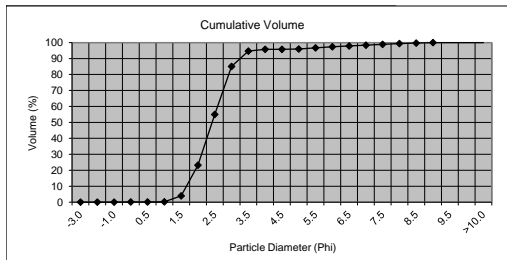
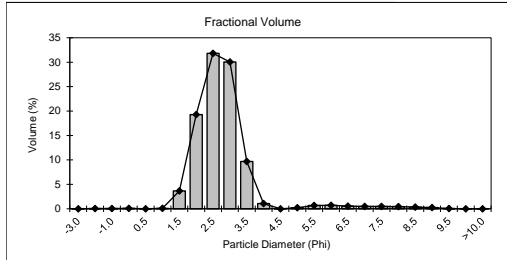
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.226	0.111	2.145
Median	0.229		2.130

Wentworth Classification: Fine Sand

Sorting	Value	Inference
Coefficient	0.57	Moderately Well Sorted
Skewness	0.05	Symmetrical
Kurtosis	1.02	Mesokurtic
Fines (%)	3.09%	
Sands (%)	96.75%	
Gravel (%)	0.16%	

BGS Mod. Folk Classification: Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_22\_SEC\_DNA Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 07/09/2023 14:49



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.00	0.00	
4.0000	-2.0	0.04	0.04	Pebble
2.0000	-1.0	0.04	0.08	Granule
1.0000	0.0	0.08	0.16	V.Coarse Sand
0.7100	0.5	0.00	0.16	
0.5000	1.0	0.09	0.25	Coarse Sand
0.3550	1.5	3.66	3.92	
0.2500	2.0	19.27	23.18	Medium Sand
0.1800	2.5	31.82	55.01	
0.1250	3.0	30.04	85.04	Fine Sand
0.0900	3.5	9.69	94.73	
0.0630	4.0	1.06	95.79	V.Fine Sand
0.0440	4.5	0.00	95.79	
0.0315	5.0	0.21	96.01	Coarse Silt
0.0220	5.5	0.68	96.69	
0.0156	6.0	0.70	97.38	Medium Silt
0.0110	6.5	0.55	97.93	
0.0078	7.0	0.47	98.41	Fine silt
0.0055	7.5	0.49	98.90	
0.0039	8.0	0.46	99.36	V.Fine Silt
0.0028	8.5	0.36	99.72	
0.0020	9.0	0.23	99.96	Coarse Clay
0.0014	9.5	0.05	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

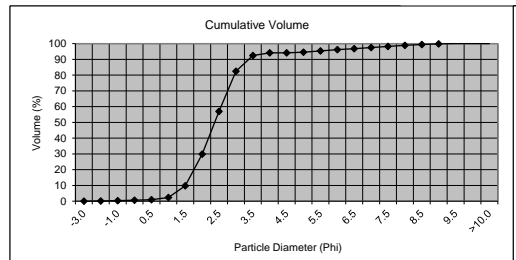
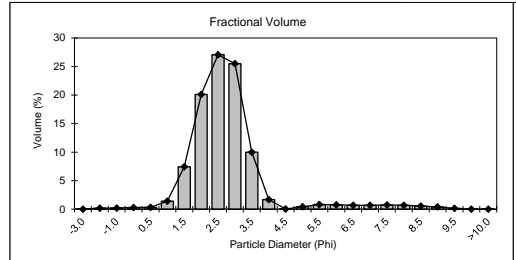
Graphical Mean (MZ)	mm	StDev (mm)	Phi
Mean (MZ)	0.191	0.099	2.386
Median	0.191		2.388

Wentworth Classification: Fine Sand

Sorting Coefficient	Value	Inference
Sorting Coefficient	0.61	Moderately Well Sorted
Skewness	0.08	Symmetrical
Kurtosis	1.09	Mesokurtic
Fines (%)	4.21%	
Sands (%)	95.71%	
Gravel (%)	0.08%	

BGS Mod. Folk Classification: Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_23\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 07/09/2023 15:12



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.00	0.00	
4.0000	-2.0	0.16	0.16	Pebble
2.0000	-1.0	0.20	0.36	Granule
1.0000	0.0	0.28	0.64	V.Coarse Sand
0.7100	0.5	0.30	0.94	
0.5000	1.0	1.40	2.35	Coarse Sand
0.3550	1.5	7.44	9.78	
0.2500	2.0	20.11	29.90	Medium Sand
0.1800	2.5	27.05	56.95	
0.1250	3.0	25.49	82.44	Fine Sand
0.0900	3.5	9.98	92.42	
0.0630	4.0	1.70	94.12	V.Fine Sand
0.0440	4.5	0.03	94.15	
0.0315	5.0	0.43	94.58	Coarse Silt
0.0220	5.5	0.82	95.40	
0.0156	6.0	0.75	96.15	Medium Silt
0.0110	6.5	0.66	96.82	
0.0078	7.0	0.67	97.49	Fine silt
0.0055	7.5	0.74	98.23	
0.0039	8.0	0.69	98.91	V.Fine Silt
0.0028	8.5	0.55	99.46	
0.0020	9.0	0.39	99.85	Coarse Clay
0.0014	9.5	0.15	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

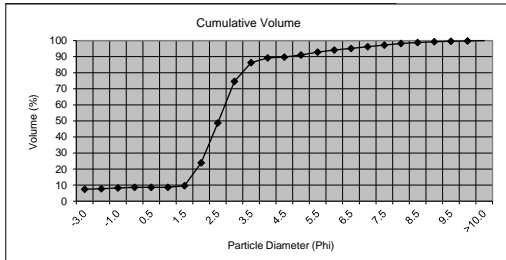
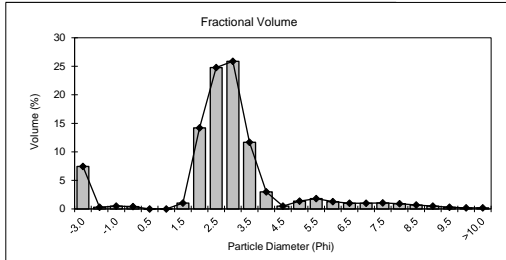
Graphical Mean (MZ)	mm	StDev (mm)	Phi
Mean (MZ)	0.197	0.138	2.344
Median	0.198		2.336

Wentworth Classification: Fine Sand

Sorting Coefficient	Value	Inference
Sorting Coefficient	0.97	Moderately Sorted
Skewness	0.22	Positive(Coarse)
Kurtosis	1.73	Very Leptokurtic
Fines (%)	5.88%	
Sands (%)	93.76%	
Gravel (%)	0.36%	

BGS Mod. Folk Classification: Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_24\_SEC\_DNA Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 12/09/2023 13:48



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	7.45	7.45	
4.0000	-2.0	0.30	7.76	Pebble
2.0000	-1.0	0.48	8.24	Granule
1.0000	0.0	0.41	8.65	V.Coarse Sand
0.7100	0.5	0.00	8.65	
0.5000	1.0	0.00	8.65	Coarse Sand
0.3550	1.5	1.03	9.68	
0.2500	2.0	14.20	23.87	Medium Sand
0.1800	2.5	24.79	48.67	
0.1250	3.0	25.88	74.55	Fine Sand
0.0900	3.5	11.67	86.22	
0.0630	4.0	2.98	89.20	V.Fine Sand
0.0440	4.5	0.49	89.69	
0.0315	5.0	1.36	91.05	Coarse Silt
0.0220	5.5	1.82	92.87	
0.0156	6.0	1.28	94.15	Medium Silt
0.0110	6.5	1.00	95.16	
0.0078	7.0	1.01	96.17	Fine silt
0.0055	7.5	1.06	97.23	
0.0039	8.0	0.92	98.16	V.Fine Silt
0.0028	8.5	0.69	98.85	
0.0020	9.0	0.49	99.34	Coarse Clay
0.0014	9.5	0.30	99.64	
0.0010	10.0	0.18	99.81	Medium Clay
<0.001	>10.0	0.19	100.00	Fine Clay

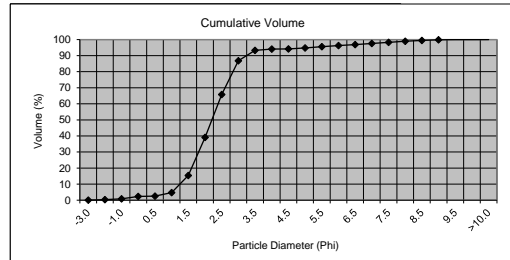
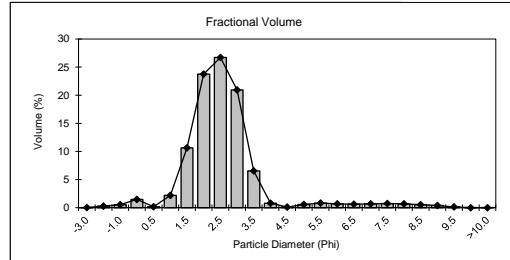
Graphical Mean (MZ)	mm	StDev (mm)	Phi
Median	0.177	13.396	2.497

Wentworth Classification: Fine Sand

Sorting Coefficient	Value	Inference
Sorting Coefficient	2.20	Very Poorly Sorted
Skewness	-0.14	Negative (Fine)
Kurtosis	4.83	Extremely Leptokurtic
Fines (%)	10.80%	
Sands (%)	80.96%	
Gravel (%)	8.24%	

BGS Mod. Folk Classification: Gravelly Muddy Sand  
 Mod. Folk for Habitat Classification: Mixed Sediments

Sample No.: MM\_ECC\_25\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 12/09/2023 14:11



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.04	0.04	
4.0000	-2.0	0.28	0.32	Pebble
2.0000	-1.0	0.54	0.86	Granule
1.0000	0.0	1.46	2.33	V.Coarse Sand
0.7100	0.5	0.18	2.50	
0.5000	1.0	2.20	4.70	Coarse Sand
0.3550	1.5	10.64	15.34	
0.2500	2.0	23.75	39.10	Medium Sand
0.1800	2.5	26.72	65.82	
0.1250	3.0	20.95	86.76	Fine Sand
0.0900	3.5	6.54	93.30	
0.0630	4.0	0.79	94.09	V.Fine Sand
0.0440	4.5	0.10	94.19	
0.0315	5.0	0.55	94.74	Coarse Silt
0.0220	5.5	0.83	95.57	
0.0156	6.0	0.67	96.25	Medium Silt
0.0110	6.5	0.61	96.86	
0.0078	7.0	0.66	97.52	Fine silt
0.0055	7.5	0.73	98.25	
0.0039	8.0	0.67	98.93	V.Fine Silt
0.0028	8.5	0.54	99.46	
0.0020	9.0	0.39	99.85	Coarse Clay
0.0014	9.5	0.15	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

Graphical Mean (MZ)	mm	StDev (mm)	Phi
Median	0.221	0.158	2.175

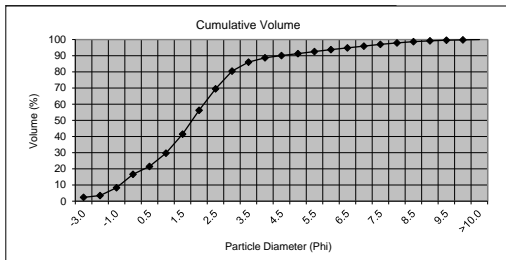
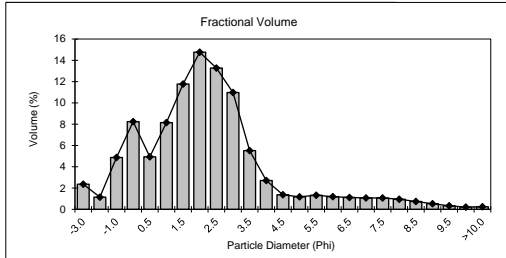
Wentworth Classification: Fine Sand

Sorting Coefficient	Value	Inference
Sorting Coefficient	0.98	Moderately Sorted
Skewness	0.24	Positive(Coarse)
Kurtosis	1.68	Very Leptokurtic
Fines (%)	5.91%	
Sands (%)	93.23%	
Gravel (%)	0.86%	

BGS Mod. Folk Classification: Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand



Sample No.: MM\_ECC\_26\_SEC\_DNA Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 12/09/2023 15:49



Aperture (mm)	Aperture (Phi unit)	Percentage		Sediment Description
		Fractional	Cumulative	
8.0000	-3.0	2.36	2.36	
4.0000	-2.0	1.14	3.50	Pebble
2.0000	-1.0	4.87	8.37	Granule
1.0000	0.0	8.24	16.61	V.Coarse Sand
0.7100	0.5	4.93	21.54	
0.5000	1.0	8.15	29.68	Coarse Sand
0.3550	1.5	11.77	41.45	
0.2500	2.0	14.76	56.21	Medium Sand
0.1800	2.5	13.27	69.48	
0.1250	3.0	10.98	80.46	Fine Sand
0.0900	3.5	5.52	85.99	
0.0630	4.0	2.71	88.69	V.Fine Sand
0.0440	4.5	1.37	90.06	
0.0315	5.0	1.18	91.24	Coarse Silt
0.0220	5.5	1.32	92.57	
0.0156	6.0	1.18	93.75	Medium Silt
0.0110	6.5	1.12	94.87	
0.0078	7.0	1.07	95.94	Fine silt
0.0055	7.5	1.07	97.01	
0.0039	8.0	0.95	97.96	V.Fine Silt
0.0028	8.5	0.74	98.69	
0.0020	9.0	0.53	99.22	Coarse Clay
0.0014	9.5	0.33	99.55	
0.0010	10.0	0.21	99.76	Medium Clay
<0.001	>10.0	0.25	100.00	Fine Clay

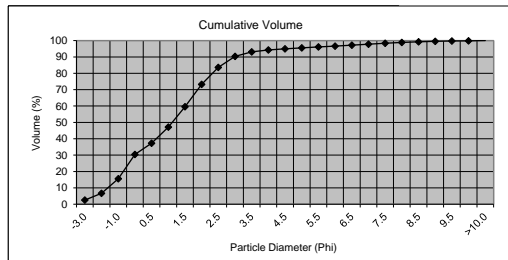
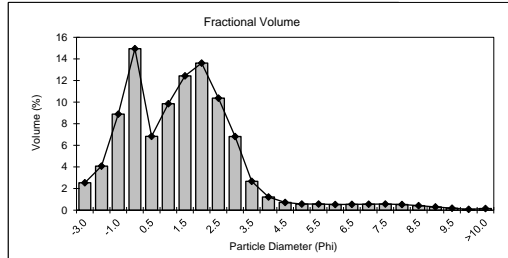
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.319	1.126	1.649
Median	0.294		1.765

Wentworth Classification: Medium Sand

Sorting	Value	Inference
Coefficient	2.11	Very Poorly Sorted
Skewness	0.02	Symmetrical
Kurtosis	1.68	Very Leptokurtic
Fines (%)	11.31%	
Sands (%)	80.32%	
Gravel (%)	8.37%	

BGS Mod. Folk Classification: Gravelly Muddy Sand  
 Mod. Folk for Habitat Classification: Mixed Sediments

Sample No.: MM\_ECC\_27\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 12/09/2023 16:11



Aperture (mm)	Aperture (Phi unit)	Percentage		Sediment Description
		Fractional	Cumulative	
8.0000	-3.0	2.54	2.54	
4.0000	-2.0	4.08	6.62	Pebble
2.0000	-1.0	8.89	15.52	Granule
1.0000	0.0	14.94	30.46	V.Coarse Sand
0.7100	0.5	6.83	37.29	
0.5000	1.0	9.86	47.15	Coarse Sand
0.3550	1.5	12.43	59.58	
0.2500	2.0	13.62	73.20	Medium Sand
0.1800	2.5	10.38	83.57	
0.1250	3.0	6.82	90.39	Fine Sand
0.0900	3.5	2.67	93.06	
0.0630	4.0	1.22	94.28	V.Fine Sand
0.0440	4.5	0.71	94.99	
0.0315	5.0	0.57	95.56	Coarse Silt
0.0220	5.5	0.57	96.13	
0.0156	6.0	0.52	96.65	Medium Silt
0.0110	6.5	0.54	97.19	
0.0078	7.0	0.56	97.75	Fine silt
0.0055	7.5	0.57	98.32	
0.0039	8.0	0.52	98.85	V.Fine Silt
0.0028	8.5	0.42	99.27	
0.0020	9.0	0.31	99.58	Coarse Clay
0.0014	9.5	0.19	99.77	
0.0010	10.0	0.08	99.85	Medium Clay
<0.001	>10.0	0.16	100.00	Fine Clay

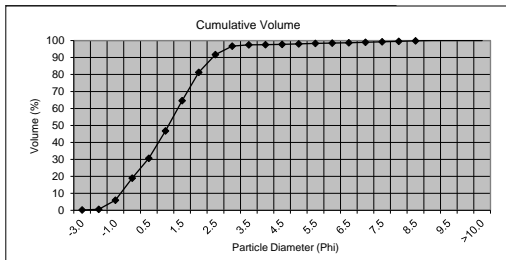
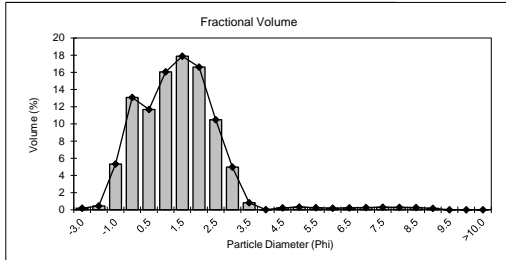
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.545	1.885	0.875
Median	0.467		1.099

Wentworth Classification: Coarse Sand

Sorting	Value	Inference
Coefficient	1.93	Poorly Sorted
Skewness	-0.11	Negative (Fine)
Kurtosis	1.14	Leptokurtic
Fines (%)	5.73%	
Sands (%)	78.76%	
Gravel (%)	15.52%	

BGS Mod. Folk Classification: Gravelly Sand  
 Mod. Folk for Habitat Classification: Coarse Sediments

Sample No.: MM\_ECC\_28\_SEC\_DNA Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 12/09/2023 17:13



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.18	0.18	
4.0000	-2.0	0.44	0.62	Pebble
2.0000	-1.0	5.32	5.94	Granule
1.0000	0.0	13.07	19.01	V.Coarse Sand
0.7100	0.5	11.67	30.68	
0.5000	1.0	16.06	46.74	Coarse Sand
0.3550	1.5	17.88	64.62	
0.2500	2.0	16.62	81.24	Medium Sand
0.1800	2.5	10.49	91.73	
0.1250	3.0	4.97	96.70	Fine Sand
0.0900	3.5	0.81	97.51	
0.0630	4.0	0.02	97.53	V.Fine Sand
0.0440	4.5	0.23	97.77	
0.0315	5.0	0.32	98.08	Coarse Silt
0.0220	5.5	0.24	98.32	
0.0156	6.0	0.18	98.50	Medium Silt
0.0110	6.5	0.22	98.72	
0.0078	7.0	0.27	98.99	Fine silt
0.0055	7.5	0.29	99.29	
0.0039	8.0	0.29	99.57	V.Fine Silt
0.0028	8.5	0.26	99.83	
0.0020	9.0	0.17	100.00	Coarse Clay
0.0014	9.5	0.00	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

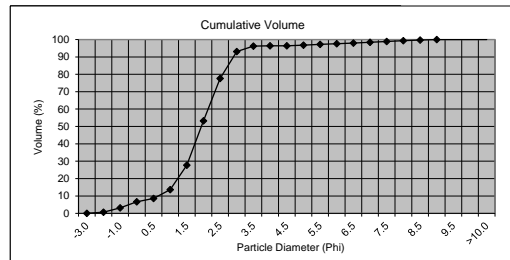
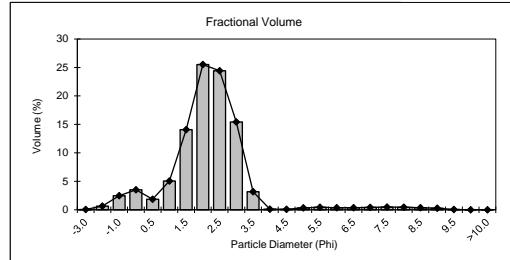
Graphical Mean (Mz)	mm	StDev (mm)	Phi
Mean	0.513	0.781	0.963
Median	0.474		1.078

Wentworth Classification: Coarse Sand

Sorting Coefficient	Value	Inference
Sorting Coefficient	1.21	Poorly Sorted
Skewness	-0.15	Negative (Fine)
Kurtosis	1.06	Mesokurtic
Fines (%)	2.47%	
Sands (%)	91.59%	
Gravel (%)	5.94%	

BGS Mod. Folk Classification: Gravelly Sand  
 Mod. Folk for Habitat Classification: Coarse Sediments

Sample No.: MM\_ECC\_29\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 13/09/2023 10:16



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.05	0.05	
4.0000	-2.0	0.66	0.70	Pebble
2.0000	-1.0	2.48	3.18	Granule
1.0000	0.0	3.52	6.70	V.Coarse Sand
0.7100	0.5	1.87	8.57	
0.5000	1.0	5.06	13.63	Coarse Sand
0.3550	1.5	14.08	27.71	
0.2500	2.0	25.51	53.22	Medium Sand
0.1800	2.5	24.43	77.65	
0.1250	3.0	15.43	93.09	Fine Sand
0.0900	3.5	3.17	96.26	
0.0630	4.0	0.10	96.36	V.Fine Sand
0.0440	4.5	0.08	96.44	
0.0315	5.0	0.34	96.79	Coarse Silt
0.0220	5.5	0.46	97.25	
0.0156	6.0	0.38	97.63	Medium Silt
0.0110	6.5	0.37	98.00	
0.0078	7.0	0.42	98.42	Fine silt
0.0055	7.5	0.47	98.89	
0.0039	8.0	0.44	99.33	V.Fine Silt
0.0028	8.5	0.36	99.69	
0.0020	9.0	0.27	99.96	Coarse Clay
0.0014	9.5	0.04	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

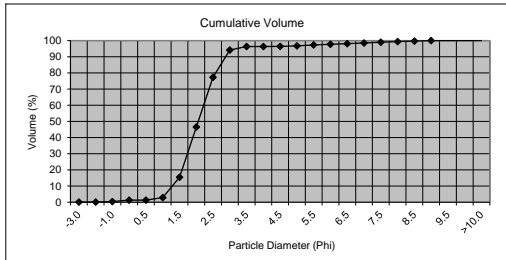
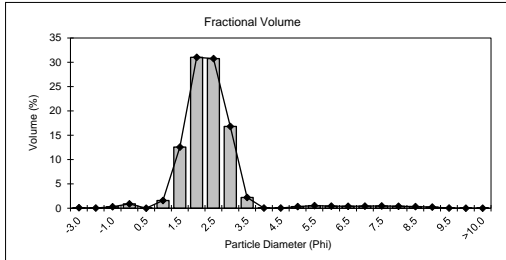
Graphical Mean (Mz)	mm	StDev (mm)	Phi
Mean	0.270	0.435	1.888
Median	0.263		1.925

Wentworth Classification: Medium Sand

Sorting Coefficient	Value	Inference
Sorting Coefficient	0.98	Moderately Sorted
Skewness	-0.18	Negative (Fine)
Kurtosis	1.53	Very Leptokurtic
Fines (%)	3.64%	
Sands (%)	93.18%	
Gravel (%)	3.18%	

BGS Mod. Folk Classification: Slightly Gravelly Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_30\_SEC\_DNA Operator Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 13/09/2023 10:39



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.10	0.10	
4.0000	-2.0	0.04	0.14	Pebble
2.0000	-1.0	0.30	0.44	Granule
1.0000	0.0	0.88	1.32	V.Coarse Sand
0.7100	0.5	0.00	1.32	
0.5000	1.0	1.59	2.91	Coarse Sand
0.3550	1.5	12.58	15.49	
0.2500	2.0	31.04	46.53	Medium Sand
0.1800	2.5	30.78	77.31	
0.1250	3.0	16.81	94.12	Fine Sand
0.0900	3.5	2.22	96.34	
0.0630	4.0	0.03	96.38	V.Fine Sand
0.0440	4.5	0.03	96.40	
0.0315	5.0	0.35	96.75	Coarse Silt
0.0220	5.5	0.54	97.29	
0.0156	6.0	0.43	97.73	Medium Silt
0.0110	6.5	0.39	98.11	
0.0078	7.0	0.42	98.53	Fine silt
0.0055	7.5	0.46	98.99	
0.0039	8.0	0.42	99.41	V.Fine Silt
0.0028	8.5	0.33	99.74	
0.0020	9.0	0.23	99.97	Coarse Clay
0.0014	9.5	0.03	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

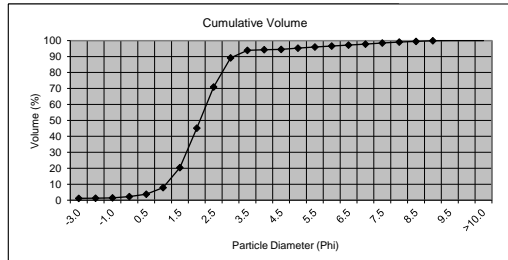
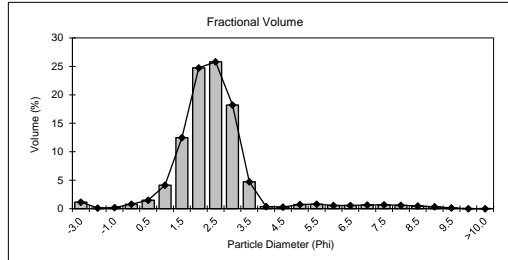
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.238	0.131	2.069
Median	0.242		2.046

Wentworth Classification: Fine Sand

Sorting	Value	Inference
Coefficient	0.61	Moderately Well Sorted
Skewness	0.07	Symmetrical
Kurtosis	1.07	Mesokurtic
Fines (%)	3.63%	
Sands (%)	95.94%	
Gravel (%)	0.44%	

BGS Mod. Folk Classification: Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_31\_SEC Operator Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 13/09/2023 11:05



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	1.16	1.16	
4.0000	-2.0	0.10	1.26	Pebble
2.0000	-1.0	0.21	1.47	Granule
1.0000	0.0	0.80	2.27	V.Coarse Sand
0.7100	0.5	1.50	3.77	
0.5000	1.0	4.13	7.90	Coarse Sand
0.3550	1.5	12.48	20.38	
0.2500	2.0	24.74	45.12	Medium Sand
0.1800	2.5	25.81	70.93	
0.1250	3.0	18.22	89.15	Fine Sand
0.0900	3.5	4.73	93.88	
0.0630	4.0	0.37	94.26	V.Fine Sand
0.0440	4.5	0.27	94.53	
0.0315	5.0	0.72	95.25	Coarse Silt
0.0220	5.5	0.78	96.03	
0.0156	6.0	0.57	96.60	Medium Silt
0.0110	6.5	0.56	97.16	
0.0078	7.0	0.64	97.79	Fine silt
0.0055	7.5	0.67	98.47	
0.0039	8.0	0.60	99.06	V.Fine Silt
0.0028	8.5	0.47	99.53	
0.0020	9.0	0.34	99.87	Coarse Clay
0.0014	9.5	0.13	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

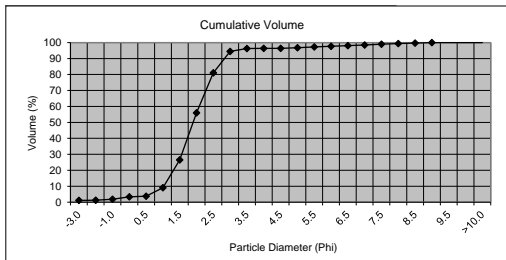
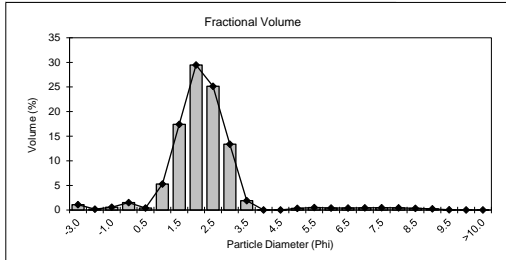
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.238	0.197	2.070
Median	0.237		2.079

Wentworth Classification: Fine Sand

Sorting	Value	Inference
Coefficient	1.02	Poorly Sorted
Skewness	0.14	Positive(Coarse)
Kurtosis	1.71	Very Leptokurtic
Fines (%)	5.75%	
Sands (%)	92.79%	
Gravel (%)	1.47%	

BGS Mod. Folk Classification: Slightly Gravelly Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_32\_SEC\_DNA Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 13/09/2023 11:24



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	1.10	1.10	
4.0000	-2.0	0.18	1.29	Pebble
2.0000	-1.0	0.58	1.87	Granule
1.0000	0.0	1.50	3.36	V.Coarse Sand
0.7100	0.5	0.40	3.76	
0.5000	1.0	5.29	9.06	Coarse Sand
0.3550	1.5	17.42	26.47	
0.2500	2.0	29.47	55.94	Medium Sand
0.1800	2.5	25.14	81.08	
0.1250	3.0	13.36	94.44	Fine Sand
0.0900	3.5	1.89	96.33	
0.0630	4.0	0.03	96.36	V.Fine Sand
0.0440	4.5	0.03	96.39	
0.0315	5.0	0.35	96.75	Coarse Silt
0.0220	5.5	0.50	97.25	
0.0156	6.0	0.42	97.67	Medium Silt
0.0110	6.5	0.40	98.07	
0.0078	7.0	0.43	98.50	Fine silt
0.0055	7.5	0.46	98.96	
0.0039	8.0	0.42	99.38	V.Fine Silt
0.0028	8.5	0.34	99.72	
0.0020	9.0	0.24	99.97	Coarse Clay
0.0014	9.5	0.04	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

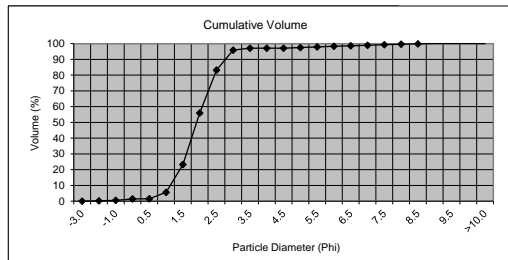
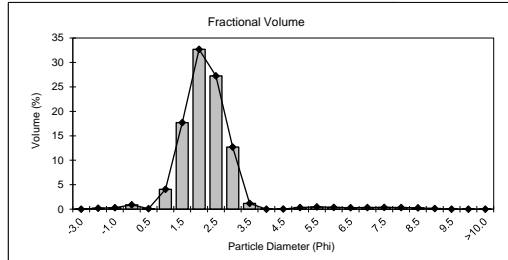
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.272	0.186	1.878
Median	0.271		1.883

Wentworth Classification: Medium Sand

Sorting	Value	Inference
Coefficient	0.73	Moderately Sorted
Skewness	-0.01	Symmetrical
Kurtosis	1.15	Leptokurtic
Fines (%)	3.64%	
Sands (%)	94.50%	
Gravel (%)	1.87%	

BGS Mod. Folk Classification: Slightly Gravelly Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_33\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 13/09/2023 11:52



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.00	0.00	
4.0000	-2.0	0.20	0.20	Pebble
2.0000	-1.0	0.30	0.51	Granule
1.0000	0.0	0.88	1.39	V.Coarse Sand
0.7100	0.5	0.11	1.49	
0.5000	1.0	4.06	5.55	Coarse Sand
0.3550	1.5	17.72	23.27	
0.2500	2.0	32.68	55.96	Medium Sand
0.1800	2.5	27.25	83.21	
0.1250	3.0	12.69	95.89	Fine Sand
0.0900	3.5	1.18	97.08	
0.0630	4.0	0.00	97.08	V.Fine Sand
0.0440	4.5	0.03	97.10	
0.0315	5.0	0.35	97.45	Coarse Silt
0.0220	5.5	0.47	97.92	
0.0156	6.0	0.35	98.27	Medium Silt
0.0110	6.5	0.31	98.59	
0.0078	7.0	0.34	98.92	Fine silt
0.0055	7.5	0.36	99.29	
0.0039	8.0	0.33	99.62	V.Fine Silt
0.0028	8.5	0.25	99.87	
0.0020	9.0	0.13	100.00	Coarse Clay
0.0014	9.5	0.00	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

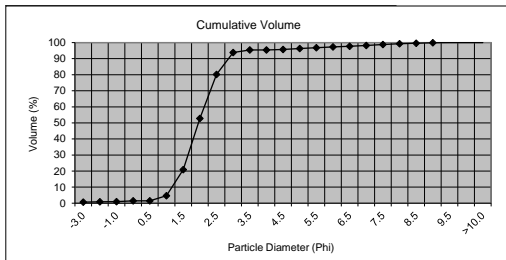
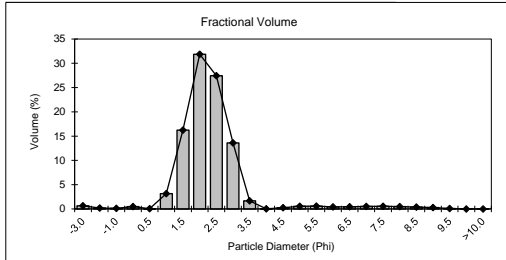
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.270	0.147	1.889
Median	0.269		1.894

Wentworth Classification: Medium Sand

Sorting	Value	Inference
Coefficient	0.62	Moderately Well Sorted
Skewness	0.02	Symmetrical
Kurtosis	1.05	Mesokurtic
Fines (%)	2.93%	
Sands (%)	96.57%	
Gravel (%)	0.51%	

BGS Mod. Folk Classification: Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_34\_SEC\_DNA Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 13/09/2023 12:14



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.66	0.66	
4.0000	-2.0	0.17	0.84	Pebble
2.0000	-1.0	0.12	0.96	Granule
1.0000	0.0	0.47	1.43	V.Coarse Sand
0.7100	0.5	0.05	1.48	
0.5000	1.0	3.15	4.63	Coarse Sand
0.3550	1.5	16.24	20.88	
0.2500	2.0	31.86	52.74	Medium Sand
0.1800	2.5	27.45	80.19	
0.1250	3.0	13.59	93.77	Fine Sand
0.0900	3.5	1.66	95.43	
0.0630	4.0	0.02	95.45	V.Fine Sand
0.0440	4.5	0.27	95.72	
0.0315	5.0	0.56	96.27	Coarse Silt
0.0220	5.5	0.57	96.84	
0.0156	6.0	0.43	97.27	Medium Silt
0.0110	6.5	0.45	97.73	
0.0078	7.0	0.52	98.24	Fine silt
0.0055	7.5	0.54	98.78	
0.0039	8.0	0.48	99.26	V.Fine Silt
0.0028	8.5	0.37	99.63	
0.0020	9.0	0.27	99.90	Coarse Clay
0.0014	9.5	0.10	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

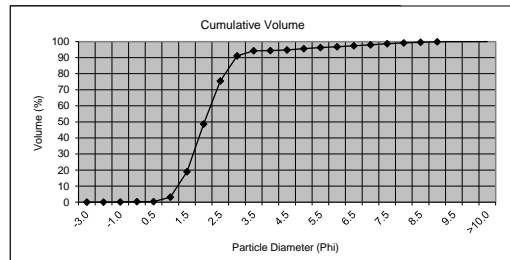
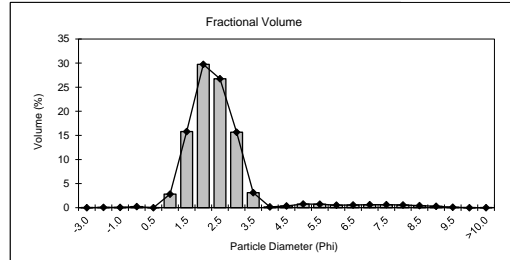
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.257	0.145	1.960
Median	0.259		1.949

Wentworth Classification: Medium Sand

Sorting	Value	Inference
Coefficient	0.67	Moderately Well Sorted
Skewness	0.11	Positive(Coarse)
Kurtosis	1.16	Leptokurtic
Fines (%)	4.55%	
Sands (%)	94.49%	
Gravel (%)	0.96%	

BGS Mod. Folk Classification: Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_35\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 13/09/2023 12:26



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.00	0.00	
4.0000	-2.0	0.07	0.07	Pebble
2.0000	-1.0	0.07	0.14	Granule
1.0000	0.0	0.21	0.36	V.Coarse Sand
0.7100	0.5	0.00	0.36	
0.5000	1.0	2.81	3.17	Coarse Sand
0.3550	1.5	15.79	18.96	
0.2500	2.0	29.73	48.69	Medium Sand
0.1800	2.5	26.77	75.46	
0.1250	3.0	15.67	91.13	Fine Sand
0.0900	3.5	3.12	94.26	
0.0630	4.0	0.16	94.42	V.Fine Sand
0.0440	4.5	0.37	94.79	
0.0315	5.0	0.76	95.55	Coarse Silt
0.0220	5.5	0.72	96.27	
0.0156	6.0	0.53	96.80	Medium Silt
0.0110	6.5	0.56	97.36	
0.0078	7.0	0.63	97.99	Fine silt
0.0055	7.5	0.64	98.63	
0.0039	8.0	0.55	99.18	V.Fine Silt
0.0028	8.5	0.42	99.60	
0.0020	9.0	0.30	99.90	Coarse Clay
0.0014	9.5	0.10	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

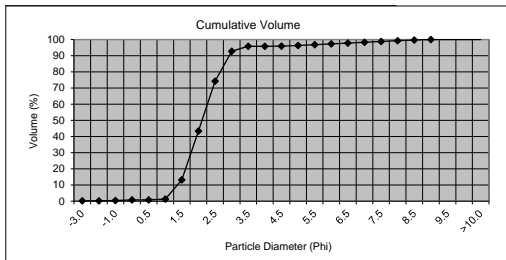
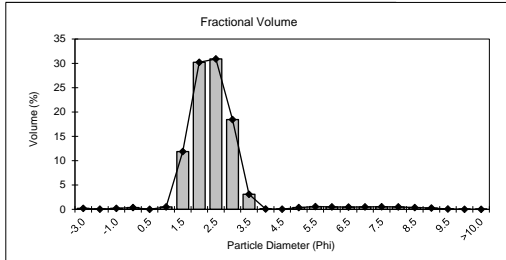
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.242	0.152	2.048
Median	0.247		2.020

Wentworth Classification: Fine Sand

Sorting	Value	Inference
Coefficient	0.88	Moderately Sorted
Skewness	0.26	Positive(Coarse)
Kurtosis	1.66	Very Leptokurtic
Fines (%)	5.58%	
Sands (%)	94.28%	
Gravel (%)	0.14%	

BGS Mod. Folk Classification: Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_36\_SEC\_DNA Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 13/09/2023 13:01



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.19	0.19	
4.0000	-2.0	0.04	0.23	Pebble
2.0000	-1.0	0.19	0.42	Granule
1.0000	0.0	0.38	0.79	V.Coarse Sand
0.7100	0.5	0.00	0.79	
0.5000	1.0	0.50	1.29	Coarse Sand
0.3550	1.5	11.87	13.16	
0.2500	2.0	30.22	43.38	Medium Sand
0.1800	2.5	30.90	74.28	
0.1250	3.0	18.44	92.72	Fine Sand
0.0900	3.5	3.09	95.81	
0.0630	4.0	0.07	95.88	V.Fine Sand
0.0440	4.5	0.03	95.91	
0.0315	5.0	0.37	96.28	Coarse Silt
0.0220	5.5	0.57	96.85	
0.0156	6.0	0.49	97.34	Medium Silt
0.0110	6.5	0.46	97.80	
0.0078	7.0	0.50	98.29	Fine silt
0.0055	7.5	0.53	98.83	
0.0039	8.0	0.48	99.31	V.Fine Silt
0.0028	8.5	0.37	99.68	
0.0020	9.0	0.26	99.94	Coarse Clay
0.0014	9.5	0.06	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

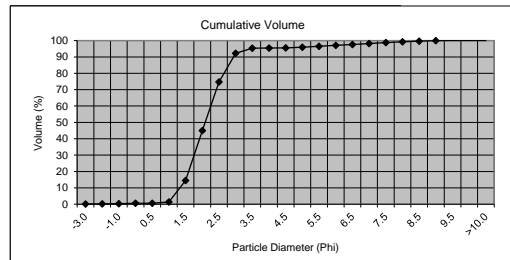
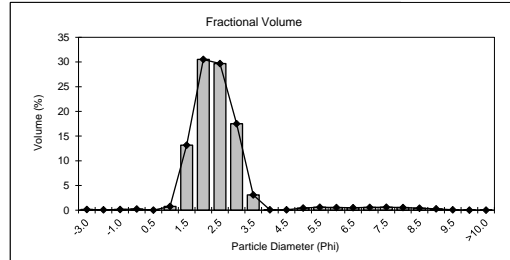
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.231	0.126	2.117
Median	0.235		2.089

Wentworth Classification: Fine Sand

Sorting	Value	Inference
Coefficient	0.63	Moderately Well Sorted
Skewness	0.10	Positive(Coarse)
Kurtosis	1.10	Mesokurtic
Fines (%)	4.12%	
Sands (%)	95.46%	
Gravel (%)	0.42%	

BGS Mod. Folk Classification: Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_37\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 45182.56407



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.13	0.13	
4.0000	-2.0	0.07	0.20	Pebble
2.0000	-1.0	0.13	0.33	Granule
1.0000	0.0	0.24	0.57	V.Coarse Sand
0.7100	0.5	0.00	0.57	
0.5000	1.0	0.77	1.34	Coarse Sand
0.3550	1.5	13.17	14.51	
0.2500	2.0	30.51	45.02	Medium Sand
0.1800	2.5	29.68	74.70	
0.1250	3.0	17.51	92.21	Fine Sand
0.0900	3.5	3.11	95.31	
0.0630	4.0	0.09	95.40	V.Fine Sand
0.0440	4.5	0.08	95.48	
0.0315	5.0	0.44	95.92	Coarse Silt
0.0220	5.5	0.61	96.53	
0.0156	6.0	0.52	97.06	Medium Silt
0.0110	6.5	0.51	97.57	
0.0078	7.0	0.56	98.13	Fine silt
0.0055	7.5	0.59	98.71	
0.0039	8.0	0.52	99.23	V.Fine Silt
0.0028	8.5	0.40	99.64	
0.0020	9.0	0.28	99.92	Coarse Clay
0.0014	9.5	0.09	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

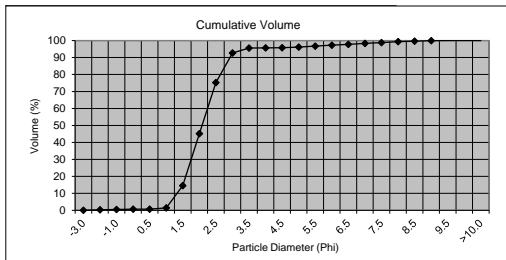
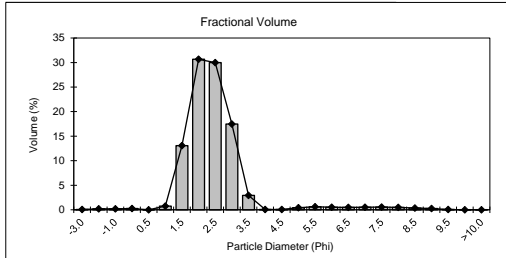
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.233	0.130	2.105
Median	0.238		2.069

Wentworth Classification: Fine Sand

Sorting	Value	Inference
Coefficient	0.65	Moderately Well Sorted
Skewness	0.13	Positive(Coarse)
Kurtosis	1.13	Leptokurtic
Fines (%)	4.60%	
Sands (%)	95.07%	
Gravel (%)	0.33%	

BGS Mod. Folk Classification: Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_38\_SEC\_DNA\_A Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 13/09/2023 13:53



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.05	0.05	
4.0000	-2.0	0.21	0.26	Pebble
2.0000	-1.0	0.19	0.46	Granule
1.0000	0.0	0.26	0.72	V.Coarse Sand
0.7100	0.5	0.00	0.72	
0.5000	1.0	0.76	1.48	Coarse Sand
0.3550	1.5	13.07	14.55	
0.2500	2.0	30.66	45.21	Medium Sand
0.1800	2.5	29.98	75.20	
0.1250	3.0	17.49	92.68	Fine Sand
0.0900	3.5	2.93	95.61	
0.0630	4.0	0.07	95.68	V.Fine Sand
0.0440	4.5	0.05	95.74	
0.0315	5.0	0.43	96.16	Coarse Silt
0.0220	5.5	0.61	96.77	
0.0156	6.0	0.51	97.29	Medium Silt
0.0110	6.5	0.49	97.78	
0.0078	7.0	0.52	98.30	Fine silt
0.0055	7.5	0.54	98.84	
0.0039	8.0	0.48	99.32	V.Fine Silt
0.0028	8.5	0.37	99.69	
0.0020	9.0	0.26	99.94	Coarse Clay
0.0014	9.5	0.06	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

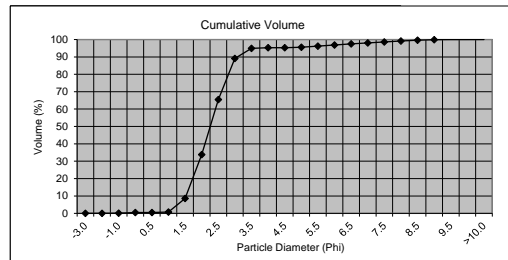
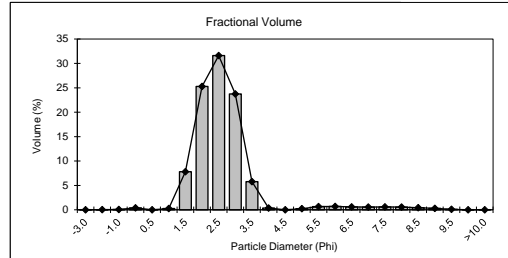
Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.234	0.129	2.098
Median	0.239		2.066

Wentworth Classification: Fine Sand

Sorting	Value	Inference
Coefficient	0.64	Moderately Well Sorted
Skewness	0.12	Positive(Coarse)
Kurtosis	1.12	Leptokurtic
Fines (%)	4.32%	
Sands (%)	95.22%	
Gravel (%)	0.46%	

BGS Mod. Folk Classification: Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand

Sample No.: MM\_ECC\_39\_SEC Operator: Mastersizer 3000  
 Source Data: 2305 Muir\_Mhor Date & Time: 13/09/2023 14:16



Aperture (mm)	Aperture (Phi unit)	Percentage Fractional	Percentage Cumulative	Sediment Description
8.0000	-3.0	0.00	0.00	
4.0000	-2.0	0.03	0.03	Pebble
2.0000	-1.0	0.05	0.08	Granule
1.0000	0.0	0.41	0.49	V.Coarse Sand
0.7100	0.5	0.00	0.49	
0.5000	1.0	0.27	0.76	Coarse Sand
0.3550	1.5	7.80	8.56	
0.2500	2.0	25.28	33.85	Medium Sand
0.1800	2.5	31.60	65.45	
0.1250	3.0	23.73	89.17	Fine Sand
0.0900	3.5	5.78	94.95	
0.0630	4.0	0.36	95.31	V.Fine Sand
0.0440	4.5	0.00	95.31	
0.0315	5.0	0.24	95.55	Coarse Silt
0.0220	5.5	0.66	96.21	
0.0156	6.0	0.67	96.89	Medium Silt
0.0110	6.5	0.59	97.47	
0.0078	7.0	0.56	98.04	Fine silt
0.0055	7.5	0.59	98.63	
0.0039	8.0	0.55	99.18	V.Fine Silt
0.0028	8.5	0.42	99.60	
0.0020	9.0	0.29	99.89	Coarse Clay
0.0014	9.5	0.11	100.00	
0.0010	10.0	0.00	100.00	Medium Clay
<0.001	>10.0	0.00	100.00	Fine Clay

Graphical	mm	StDev (mm)	Phi
Mean (MZ)	0.212	0.117	2.239
Median	0.214		2.223

Wentworth Classification: Fine Sand

Sorting	Value	Inference
Coefficient	0.66	Moderately Well Sorted
Skewness	0.09	Symmetrical
Kurtosis	1.09	Mesokurtic
Fines (%)	4.69%	
Sands (%)	95.23%	
Gravel (%)	0.08%	

BGS Mod. Folk Classification: Sand  
 Mod. Folk for Habitat Classification: Sand and Muddy Sand