

# Quality Control Statistical Summary

Onshore Grab Sample: LE-06-BB

Sample Taken By: D. Phelps  
 Sample Taken On: 01/12/10  
 County: Lee

Latitude: 26° 43' 3"  
 Longitude: 82° 15' 43.2"  
 Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	1.3991	phi (0.3792 mm)	1.2221	phi (0.4287 mm)
Standard Dev:	1.0948	phi-units (0.4682 mm)	1.2098	phi-units (0.4323 mm)
Skewness:	-1.0558	dimensionless	-0.9528	dimensionless
Kurtosis:	4.0854	dimensionless	3.4253	dimensionless
5th Moment:	-9.5348	dimensionless	-6.6930	dimensionless
6th Moment:	30.8635	dimensionless	19.4485	dimensionless
RARD*:	0.7825	dimensionless	0.9900	dimensionless
Median:	1.4957	phi (0.3546 mm)	1.3906	phi (0.3814 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	0.4619	phi (0.726 mm)	0.2650	phi (0.8322 mm)
Standard Dev:	1.2059	phi-units (0.4335 mm)	1.2624	phi-units (0.4168 mm)
Skewness:	-0.3276	dimensionless	-0.2564	dimensionless
Kurtosis:	2.6210	dimensionless	2.1463	dimensionless
5th Moment:	-2.1389	dimensionless	-1.3530	dimensionless
6th Moment:	9.9622	dimensionless	6.5916	dimensionless
RARD*:	2.6107	dimensionless	4.7642	dimensionless
Median:	0.4608	phi (0.7266 mm)	0.1961	phi (0.8729 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.8626	phi (0.275 mm)	1.8469	phi (0.278 mm)
Standard Dev:	0.6672	phi-units (0.6297 mm)	0.6990	phi-units (0.616 mm)
Skewness:	-0.4810	dimensionless	-0.5280	dimensionless
Kurtosis:	3.6781	dimensionless	3.6171	dimensionless
5th Moment:	-5.6595	dimensionless	-6.0195	dimensionless
6th Moment:	26.0888	dimensionless	25.9967	dimensionless
RARD*:	0.3582	dimensionless	0.3785	dimensionless
Median:	1.7660	phi (0.294 mm)	1.7504	phi (0.2972 mm)

Additional Data	
<b>Total Fines</b>	
Original:	0.24 %
Duplicate:	0.13 %
<b>Total Carbonates</b>	
Original:	38.24 %
Duplicate:	33.01 %

Statistical Explanation	
Calculations based on the Method of Moments Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0 Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0 Millimeter data calculated by $mm = 2^{-(\phi)}$	
* Reciprocal Absolute Relative Dispersion (RARD) Scale	
< 0.5	Excellent homogeneity (e.g., beaches)
0.5 to 1.0	Good homogeneity
1.0 to 1.33	Fair homogeneity
> 1.33	Poor homogeneity (e.g., glacial)

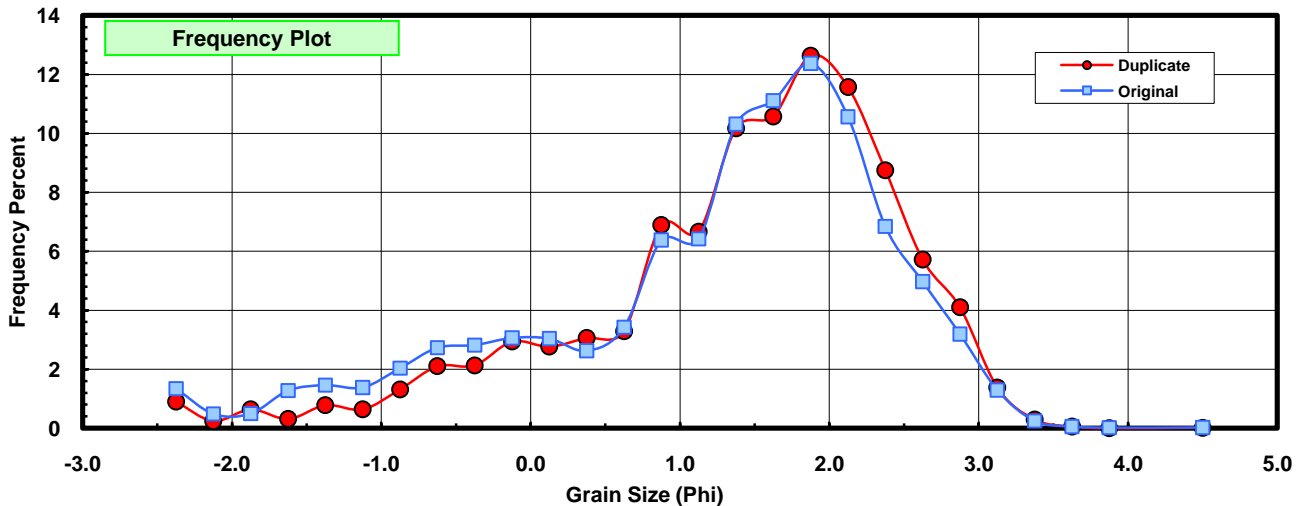
# Pre-Digestion Grain Size Distribution

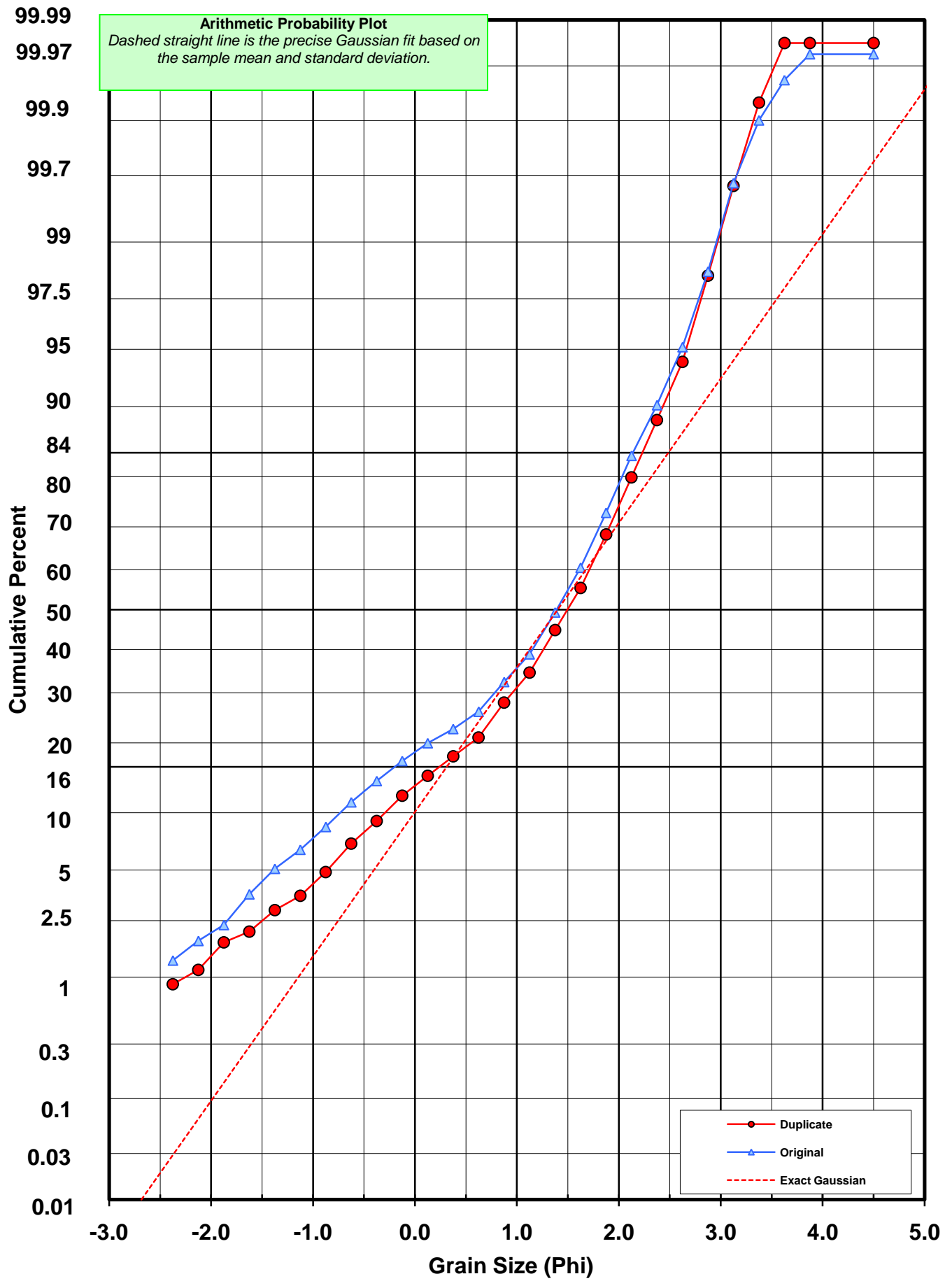
Onshore Grab Sample: LE-06-BB

Total Duplicate Sample Mass: 61.236 grams

Total Original Sample Mass: 65.782 grams

Sieve Size (phi)	Sieve Midpt (phi)	Weight of Dupl (grams)	Freq Weight %	Cumulative Weight %	Weight of Original (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.554	0.905	0.905	0.884	1.344	1.344
-2.00	-2.125	0.150	0.245	1.150	0.320	0.486	1.830
-1.75	-1.875	0.392	0.640	1.790	0.327	0.497	2.327
-1.50	-1.625	0.192	0.314	2.103	0.841	1.278	3.606
-1.25	-1.375	0.480	0.784	2.887	0.961	1.461	5.067
-1.00	-1.125	0.393	0.642	3.529	0.910	1.383	6.450
-0.75	-0.875	0.808	1.319	4.848	1.340	2.037	8.487
-0.50	-0.625	1.288	2.103	6.952	1.796	2.730	11.217
-0.25	-0.375	1.306	2.133	9.085	1.855	2.820	14.037
0.00	-0.125	1.802	2.943	12.027	2.015	3.063	17.100
0.25	0.125	1.695	2.768	14.795	1.999	3.039	20.139
0.50	0.375	1.876	3.064	17.859	1.727	2.625	22.765
0.75	0.625	2.018	3.295	21.154	2.253	3.425	26.190
1.00	0.875	4.222	6.895	28.049	4.201	6.386	32.576
1.25	1.125	4.084	6.669	34.718	4.224	6.421	38.997
1.50	1.375	6.232	10.177	44.895	6.782	10.310	49.307
1.75	1.625	6.477	10.577	55.472	7.308	11.109	60.416
2.00	1.875	7.737	12.635	68.107	8.139	12.373	72.789
2.25	2.125	7.085	11.570	79.677	6.948	10.562	83.351
2.50	2.375	5.360	8.753	88.430	4.502	6.844	90.195
2.75	2.625	3.503	5.720	94.150	3.271	4.972	95.167
3.00	2.875	2.511	4.101	98.251	2.099	3.191	98.358
3.25	3.125	0.847	1.383	99.634	0.852	1.295	99.653
3.50	3.375	0.182	0.297	99.931	0.163	0.248	99.901
3.75	3.625	0.032	0.052	99.984	0.037	0.056	99.957
4.00	3.875	0.000	0.000	99.984	0.013	0.020	99.977
5.00	4.500	0.010	0.016	100.000	0.015	0.023	100.000



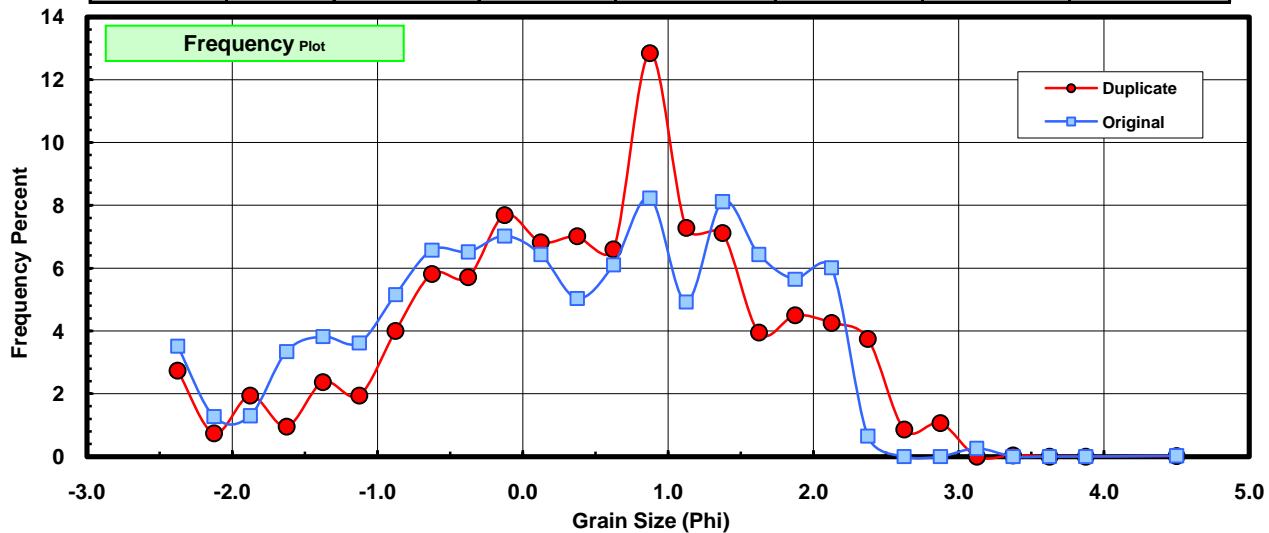


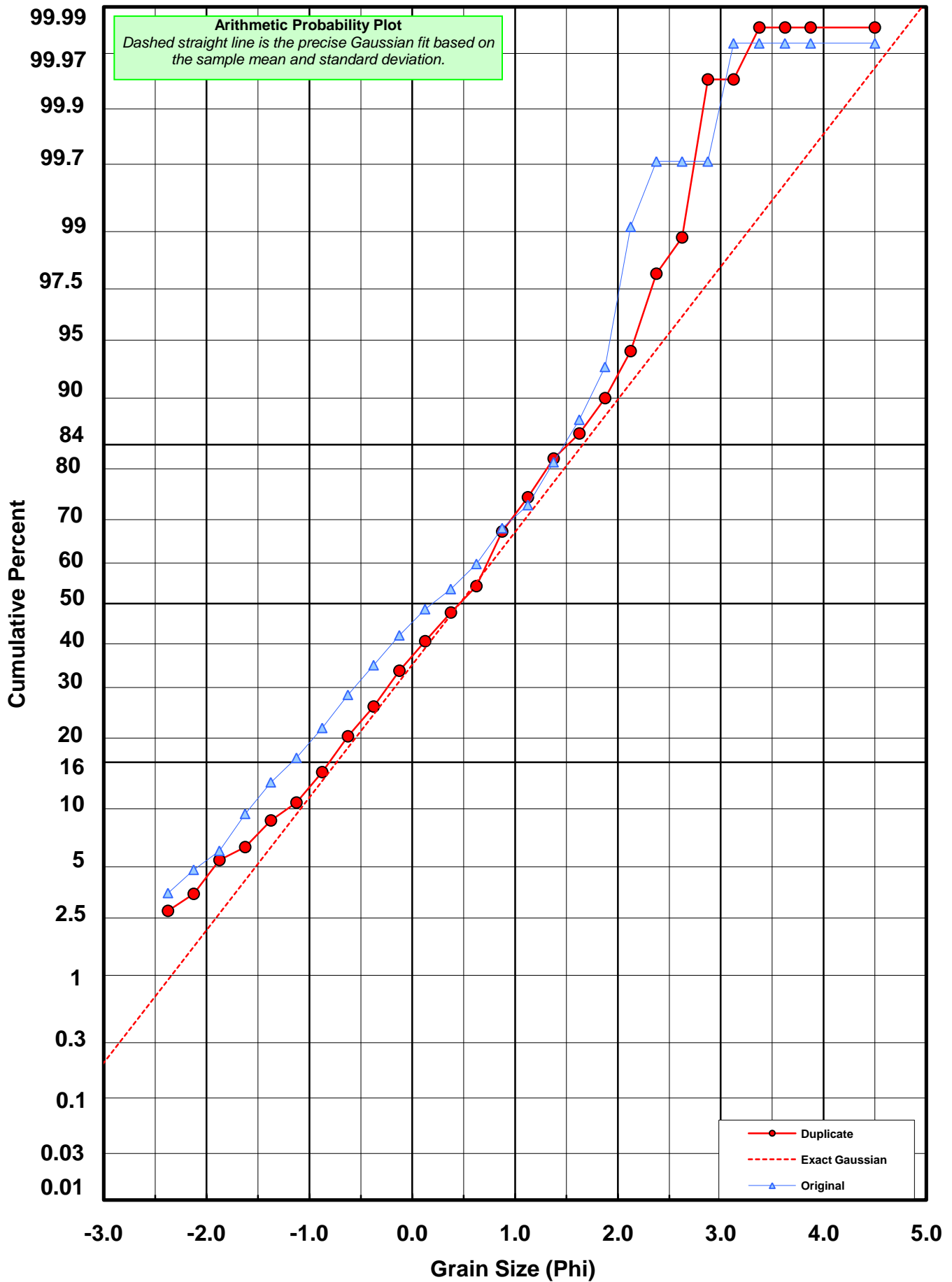
# Carbonate Grain Size Distribution

Onshore Grab Sample: LE-06-BB

**Total Duplicate Carbonate Mass:** 20.220 grams  
**% Carbonate in Duplicate:** 33.0 %  
**Total Original Carbonate Mass:** 25.152 grams  
**% Carbonate in Original:** 38.2 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight of Dupl (grams)	Freq Weight %	Cumulative Weight %	Weight of Original (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.554	2.740	2.740	0.884	3.515	3.515
-2.00	-2.125	0.150	0.742	3.482	0.320	1.272	4.787
-1.75	-1.875	0.392	1.939	5.420	0.327	1.300	6.087
-1.50	-1.625	0.192	0.950	6.370	0.841	3.344	9.431
-1.25	-1.375	0.480	2.374	8.744	0.961	3.821	13.251
-1.00	-1.125	0.393	1.944	10.687	0.910	3.618	16.869
-0.75	-0.875	0.808	3.996	14.683	1.297	5.157	22.026
-0.50	-0.625	1.175	5.811	20.495	1.653	6.572	28.598
-0.25	-0.375	1.154	5.707	26.202	1.639	6.516	35.115
0.00	-0.125	1.555	7.690	33.892	1.766	7.021	42.136
0.25	0.125	1.380	6.825	40.717	1.618	6.433	48.569
0.50	0.375	1.419	7.018	47.735	1.266	5.033	53.602
0.75	0.625	1.334	6.597	54.332	1.535	6.103	59.705
1.00	0.875	2.596	12.839	67.171	2.070	8.230	67.935
1.25	1.125	1.473	7.285	74.456	1.238	4.922	72.857
1.50	1.375	1.439	7.117	81.573	2.042	8.119	80.976
1.75	1.625	0.798	3.947	85.519	1.618	6.433	87.409
2.00	1.875	0.909	4.496	90.015	1.420	5.646	93.054
2.25	2.125	0.861	4.258	94.273	1.512	6.011	99.066
2.50	2.375	0.758	3.749	98.022	0.164	0.652	99.718
2.75	2.625	0.174	0.861	98.882	0.000	0.000	99.718
3.00	2.875	0.215	1.063	99.946	0.000	0.000	99.718
3.25	3.125	0.000	0.000	99.946	0.065	0.258	99.976
3.50	3.375	0.008	0.040	99.985	0.000	0.000	99.976
3.75	3.625	0.000	0.000	99.985	0.000	0.000	99.976
4.00	3.875	0.000	0.000	99.985	0.000	0.000	99.976
5.00	4.500	0.003	0.015	100.000	0.006	0.024	100.000





# Post-Digestion Grain Size Distribution

Onshore Grab Sample: LE-06-BB

**Total Duplicate Digested Mass:** 41.055 grams  
**% Silica in Duplicate:** 67.0 %  
**Total Original Digested Mass:** 42.255 grams  
**% Silica in Original:** 64.2 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %	Weight of Original (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000	0.043	0.102	0.102
-0.50	-0.625	0.113	0.275	0.275	0.143	0.338	0.440
-0.25	-0.375	0.152	0.370	0.645	0.216	0.511	0.951
0.00	-0.125	0.247	0.602	1.247	0.249	0.589	1.541
0.25	0.125	0.315	0.767	2.014	0.381	0.902	2.442
0.50	0.375	0.457	1.113	3.128	0.461	1.091	3.533
0.75	0.625	0.684	1.666	4.794	0.718	1.699	5.233
1.00	0.875	1.626	3.961	8.754	2.131	5.043	10.276
1.25	1.125	2.611	6.360	15.114	2.986	7.067	17.342
1.50	1.375	4.793	11.675	26.788	4.740	11.218	28.560
1.75	1.625	5.679	13.833	40.621	5.690	13.466	42.026
2.00	1.875	6.828	16.631	57.252	6.719	15.901	57.927
2.25	2.125	6.224	15.160	72.413	5.436	12.865	70.792
2.50	2.375	4.602	11.209	83.622	4.338	10.266	81.058
2.75	2.625	3.329	8.109	91.731	4.787	11.329	92.387
3.00	2.875	2.296	5.592	97.323	2.168	5.131	97.517
3.25	3.125	0.871	2.122	99.445	0.787	1.863	99.380
3.50	3.375	0.174	0.424	99.868	0.197	0.466	99.846
3.75	3.625	0.035	0.085	99.954	0.043	0.102	99.948
4.00	3.875	0.012	0.029	99.983	0.013	0.031	99.979
5.00	4.500	0.007	0.017	100.000	0.009	0.021	100.000

