

Quality Control Statistical Summary

Onshore Grab Sample: LE-18-BB

Sample Taken By: D. Phelps
 Sample Taken On: 11/07/09
 County: Lee

Latitude: 26° 34' 12.2"
 Longitude: 82° 12' 20"
 Datum: WGS 84

Statistical Results: Pre-CaCO3		
	Duplicate	Original
Mean:	1.4316 phi (0.3707 mm)	1.6483 phi (0.319 mm)
Standard Dev:	1.3182 phi-units (0.401 mm)	1.1651 phi-units (0.4459 mm)
Skewness:	-0.7555 dimensionless	-1.0833 dimensionless
Kurtosis:	2.5605 dimensionless	3.7496 dimensionless
5th Moment:	-4.2562 dimensionless	-9.0466 dimensionless
6th Moment:	11.1079 dimensionless	28.4703 dimensionless
RARD*:	0.9208 dimensionless	0.7069 dimensionless
Median:	1.7419 phi (0.299 mm)	1.8785 phi (0.272 mm)

Statistical Results: CaCO3		
	Duplicate	Original
Mean:	0.1842 phi (0.8802 mm)	0.4708 phi (0.7216 mm)
Standard Dev:	1.1222 phi-units (0.4594 mm)	1.1943 phi-units (0.437 mm)
Skewness:	0.1024 dimensionless	-0.0858 dimensionless
Kurtosis:	2.5644 dimensionless	2.9615 dimensionless
5th Moment:	0.6247 dimensionless	-1.1847 dimensionless
6th Moment:	9.5992 dimensionless	12.8387 dimensionless
RARD*:	6.0934 dimensionless	2.5367 dimensionless
Median:	-0.0107 phi (1.0075 mm)	0.3240 phi (0.7989 mm)

Statistical Results: Post-CaCO3		
	Duplicate	Original
Mean:	2.2115 phi (0.2159 mm)	2.1899 phi (0.2192 mm)
Standard Dev:	0.6765 phi-units (0.6257 mm)	0.6397 phi-units (0.6418 mm)
Skewness:	-1.1756 dimensionless	-1.0791 dimensionless
Kurtosis:	5.0454 dimensionless	5.0381 dimensionless
5th Moment:	-13.9051 dimensionless	-14.0090 dimensionless
6th Moment:	51.8158 dimensionless	56.0692 dimensionless
RARD*:	0.3059 dimensionless	0.2921 dimensionless
Median:	2.1837 phi (0.2201 mm)	2.1359 phi (0.2275 mm)

Additional Data	
Total Fines	
Original:	0.03 %
Duplicate:	0.2 %
Total Carbonates	
Original:	31.5 %
Duplicate:	38.44 %

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)

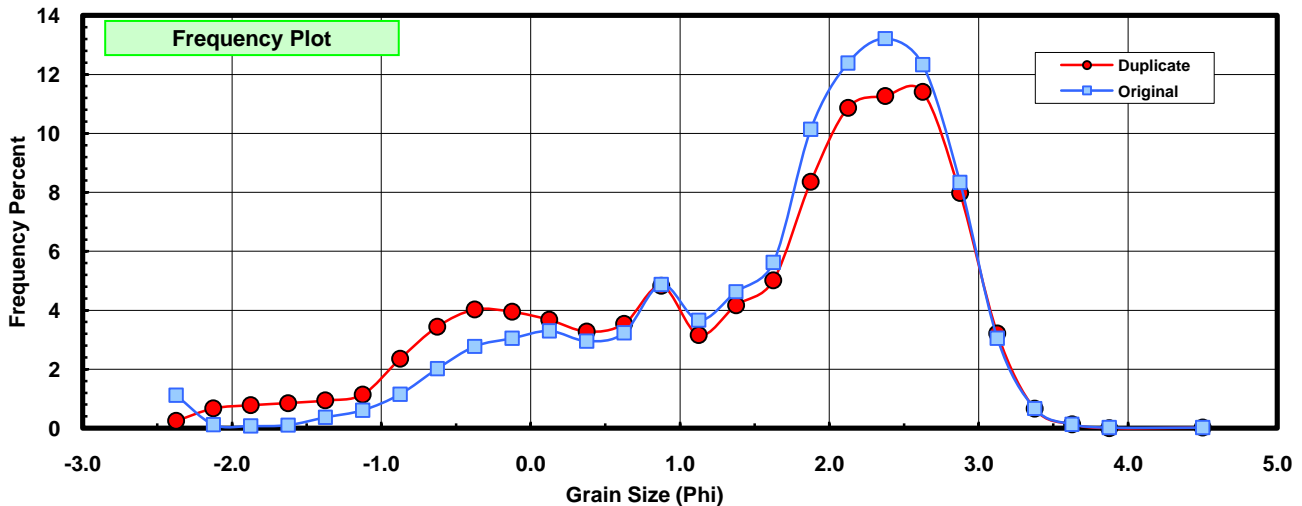
Pre-Digestion Grain Size Distribution

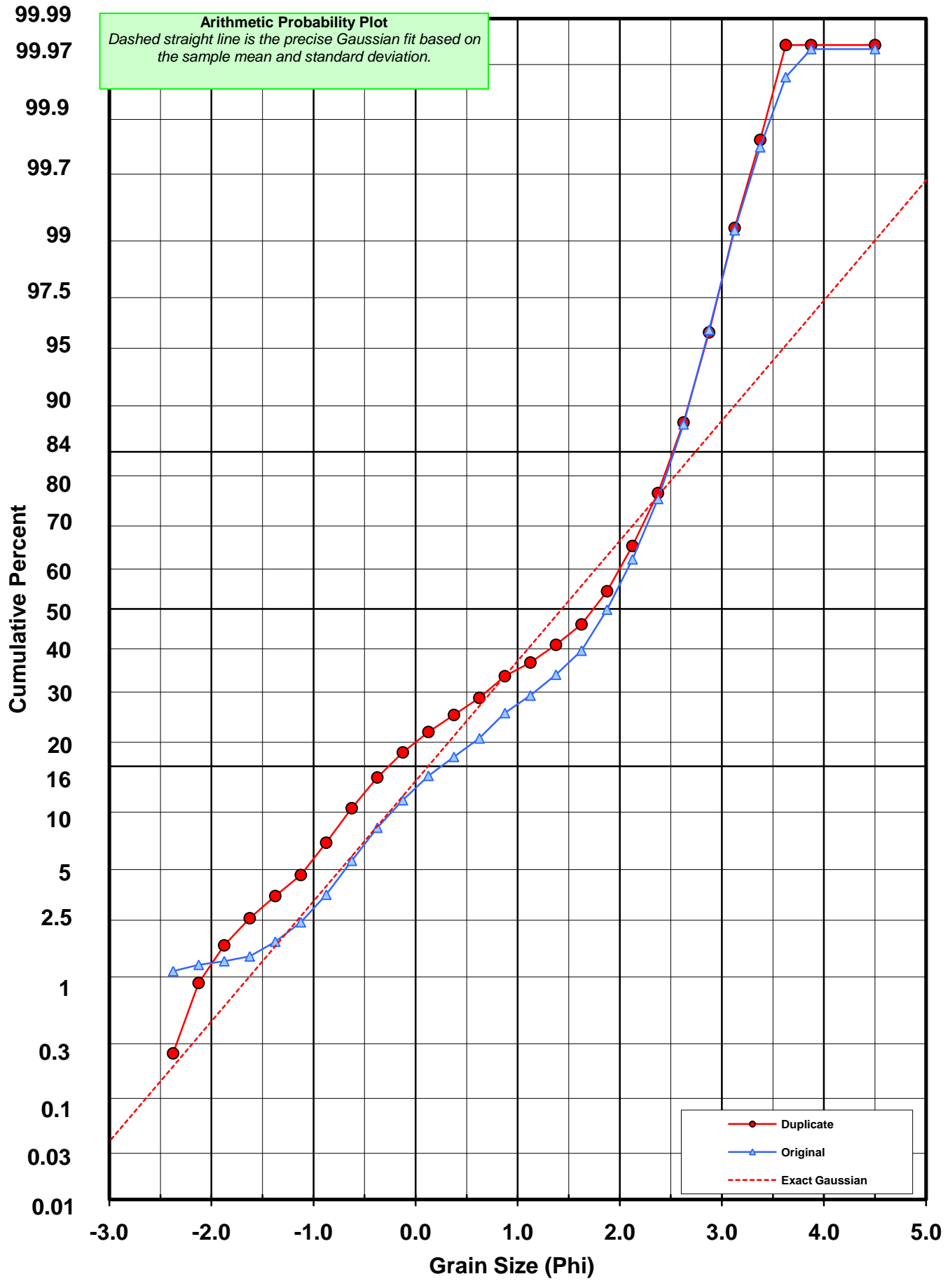
Onshore Grab Sample: LE-18-BB

Total Duplicate Sample Mass: 43.823 grams

Total Original Sample Mass: 48.731 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	0.108	0.246	0.246	0.546	1.120	1.120
-2.00	-2.125	0.294	0.671	0.917	0.060	0.123	1.244
-1.75	-1.875	0.342	0.780	1.698	0.037	0.076	1.319
-1.50	-1.625	0.374	0.853	2.551	0.052	0.107	1.426
-1.25	-1.375	0.413	0.942	3.494	0.180	0.369	1.796
-1.00	-1.125	0.502	1.146	4.639	0.298	0.612	2.407
-0.75	-0.875	1.032	2.355	6.994	0.562	1.153	3.560
-0.50	-0.625	1.510	3.446	10.440	0.984	2.019	5.580
-0.25	-0.375	1.764	4.025	14.465	1.353	2.776	8.356
0.00	-0.125	1.731	3.950	18.415	1.486	3.049	11.405
0.25	0.125	1.611	3.676	22.091	1.608	3.300	14.705
0.50	0.375	1.437	3.279	25.370	1.441	2.957	17.662
0.75	0.625	1.552	3.542	28.912	1.576	3.234	20.896
1.00	0.875	2.116	4.829	33.740	2.377	4.878	25.774
1.25	1.125	1.386	3.163	36.903	1.786	3.665	29.439
1.50	1.375	1.828	4.171	41.074	2.256	4.629	34.069
1.75	1.625	2.199	5.018	46.092	2.739	5.621	39.689
2.00	1.875	3.662	8.356	54.449	4.940	10.137	49.827
2.25	2.125	4.764	10.871	65.320	6.037	12.388	62.215
2.50	2.375	4.940	11.273	76.592	6.440	13.215	75.430
2.75	2.625	4.999	11.407	87.999	6.010	12.333	87.763
3.00	2.875	3.495	7.975	95.975	4.064	8.340	96.103
3.25	3.125	1.409	3.215	99.190	1.487	3.051	99.155
3.50	3.375	0.289	0.659	99.849	0.327	0.671	99.826
3.75	3.625	0.058	0.132	99.982	0.065	0.133	99.959
4.00	3.875	0.000	0.000	99.982	0.010	0.021	99.979
5.00	4.500	0.008	0.018	100.000	0.010	0.021	100.000



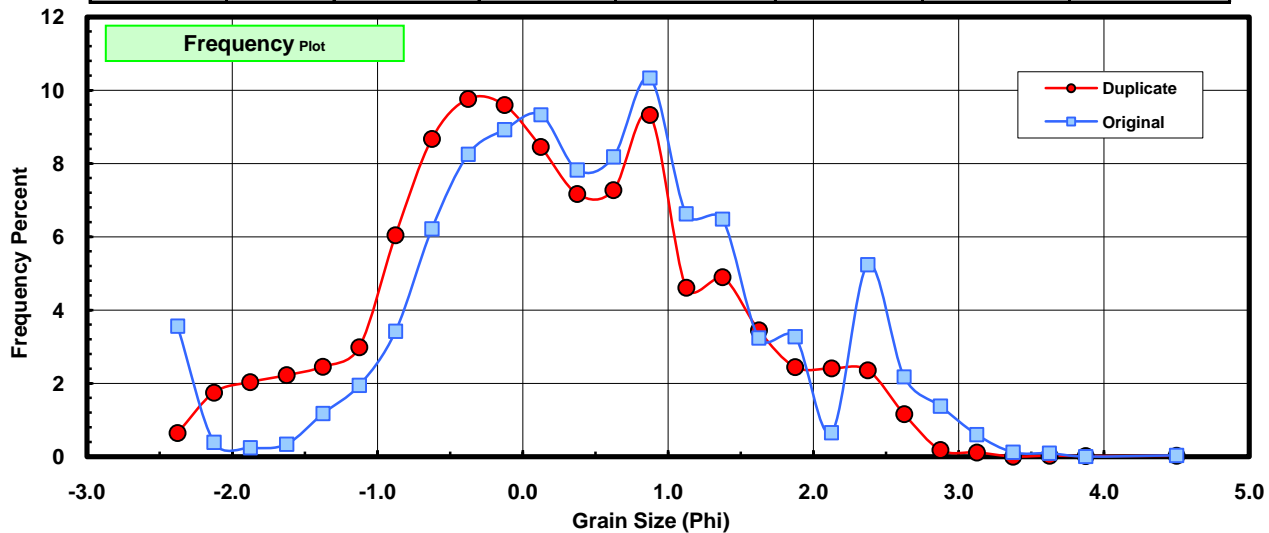


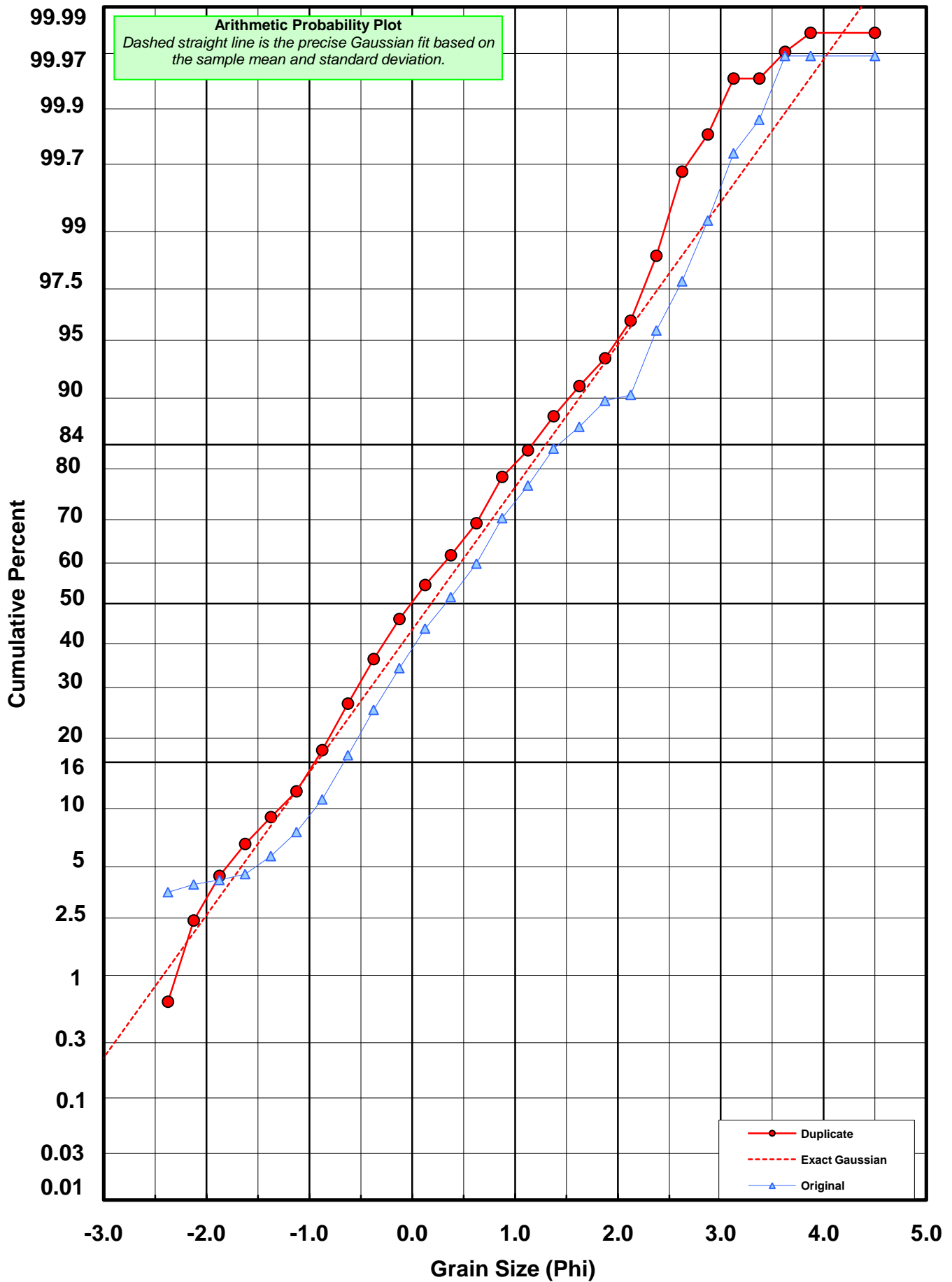
Carbonate Grain Size Distribution

Onshore Grab Sample: LE-18-BB

Total Duplicate Carbonate Mass: 16.848 grams
% Carbonate in Duplicate: 38.4 %
Total Original Carbonate Mass: 15.352 grams
% Carbonate in Original: 31.5 %

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	0.108	0.641	0.641	0.546	3.557	3.557
-2.00	-2.125	0.294	1.745	2.386	0.060	0.391	3.947
-1.75	-1.875	0.342	2.030	4.416	0.037	0.241	4.188
-1.50	-1.625	0.374	2.220	6.636	0.052	0.339	4.527
-1.25	-1.375	0.413	2.451	9.087	0.180	1.172	5.700
-1.00	-1.125	0.502	2.980	12.067	0.298	1.941	7.641
-0.75	-0.875	1.018	6.042	18.109	0.525	3.420	11.060
-0.50	-0.625	1.461	8.672	26.781	0.954	6.214	17.275
-0.25	-0.375	1.645	9.764	36.544	1.266	8.246	25.521
0.00	-0.125	1.616	9.592	46.136	1.370	8.924	34.445
0.25	0.125	1.424	8.452	54.588	1.432	9.328	43.773
0.50	0.375	1.208	7.170	61.758	1.201	7.823	51.596
0.75	0.625	1.225	7.271	69.029	1.256	8.181	59.777
1.00	0.875	1.571	9.325	78.354	1.586	10.331	70.108
1.25	1.125	0.776	4.606	82.959	1.017	6.625	76.733
1.50	1.375	0.825	4.897	87.856	0.995	6.481	83.214
1.75	1.625	0.580	3.443	91.299	0.497	3.237	86.451
2.00	1.875	0.411	2.439	93.738	0.502	3.270	89.721
2.25	2.125	0.405	2.404	96.142	0.100	0.651	90.373
2.50	2.375	0.397	2.356	98.498	0.804	5.237	95.610
2.75	2.625	0.195	1.157	99.656	0.334	2.176	97.785
3.00	2.875	0.030	0.178	99.834	0.211	1.374	99.160
3.25	3.125	0.019	0.113	99.947	0.092	0.599	99.759
3.50	3.375	0.000	0.000	99.947	0.018	0.117	99.876
3.75	3.625	0.004	0.024	99.970	0.014	0.091	99.967
4.00	3.875	0.002	0.012	99.982	0.000	0.000	99.967
5.00	4.500	0.003	0.018	100.000	0.005	0.033	100.000





Post-Digestion Grain Size Distribution

Onshore Grab Sample: LE-18-BB

Total Duplicate Digested Mass: 26.987 grams
% Silica in Duplicate: 61.6 %
Total Original Digested Mass: 33.379 grams
% Silica in Original: 68.5 %

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	0.014	0.052	0.052	0.037	0.111	0.111
-0.50	-0.625	0.049	0.182	0.233	0.030	0.090	0.201
-0.25	-0.375	0.119	0.441	0.674	0.087	0.261	0.461
0.00	-0.125	0.115	0.426	1.101	0.116	0.348	0.809
0.25	0.125	0.187	0.693	1.793	0.176	0.527	1.336
0.50	0.375	0.229	0.849	2.642	0.240	0.719	2.055
0.75	0.625	0.327	1.212	3.854	0.320	0.959	3.014
1.00	0.875	0.545	2.019	5.873	0.791	2.370	5.384
1.25	1.125	0.610	2.260	8.134	0.769	2.304	7.687
1.50	1.375	1.003	3.717	11.850	1.261	3.778	11.465
1.75	1.625	1.619	5.999	17.849	2.242	6.717	18.182
2.00	1.875	3.251	12.047	29.896	4.438	13.296	31.478
2.25	2.125	4.359	16.152	46.048	5.937	17.787	49.265
2.50	2.375	4.543	16.834	62.882	5.636	16.885	66.149
2.75	2.625	4.804	17.801	80.683	5.676	17.005	83.154
3.00	2.875	3.465	12.840	93.523	3.853	11.543	94.697
3.25	3.125	1.390	5.151	98.673	1.395	4.179	98.877
3.50	3.375	0.290	1.075	99.748	0.309	0.926	99.802
3.75	3.625	0.054	0.200	99.948	0.051	0.153	99.955
4.00	3.875	0.009	0.033	99.981	0.010	0.030	99.985
5.00	4.500	0.005	0.019	100.000	0.005	0.015	100.000

