

Quality Control Statistical Summary

Onshore Grab Sample: PB-31-BB

Sample Taken By: D. Phelps
 Sample Taken On: 01/06/09
 County: Palm Beach

Latitude: 26° 32' 6.2"
 Longitude: 80° 02' 44.2"
 Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	1.6178	phi (0.3258 mm)	1.4792	phi (0.3587 mm)
Standard Dev:	0.9364	phi-units (0.5225 mm)	0.9914	phi-units (0.503 mm)
Skewness:	-1.0089	dimensionless	-0.7380	dimensionless
Kurtosis:	4.2677	dimensionless	3.3423	dimensionless
5th Moment:	-10.4719	dimensionless	-6.1552	dimensionless
6th Moment:	36.4178	dimensionless	20.3427	dimensionless
RARD*:	0.5788	dimensionless	0.6702	dimensionless
Median:	1.6438	phi (0.32 mm)	1.4962	phi (0.3545 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	1.3659	phi (0.388 mm)	1.2023	phi (0.4346 mm)
Standard Dev:	1.0230	phi-units (0.4921 mm)	1.0558	phi-units (0.481 mm)
Skewness:	-0.8420	dimensionless	-0.5122	dimensionless
Kurtosis:	3.4568	dimensionless	2.7659	dimensionless
5th Moment:	-7.0127	dimensionless	-3.7203	dimensionless
6th Moment:	21.9130	dimensionless	12.6557	dimensionless
RARD*:	0.7489	dimensionless	0.8782	dimensionless
Median:	1.3791	phi (0.3845 mm)	1.1769	phi (0.4423 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.9859	phi (0.2525 mm)	1.9360	phi (0.2613 mm)
Standard Dev:	0.6590	phi-units (0.6333 mm)	0.6759	phi-units (0.626 mm)
Skewness:	-0.3185	dimensionless	-0.2621	dimensionless
Kurtosis:	2.8928	dimensionless	2.7203	dimensionless
5th Moment:	-2.8159	dimensionless	-2.0075	dimensionless
6th Moment:	16.0964	dimensionless	12.5871	dimensionless
RARD*:	0.3318	dimensionless	0.3491	dimensionless
Median:	1.8823	phi (0.2713 mm)	1.8303	phi (0.2812 mm)

Additional Data	
Total Fines	
Original:	0.26 %
Duplicate:	0.32 %
Total Carbonates	
Original:	62.26 %
Duplicate:	59.26 %

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)

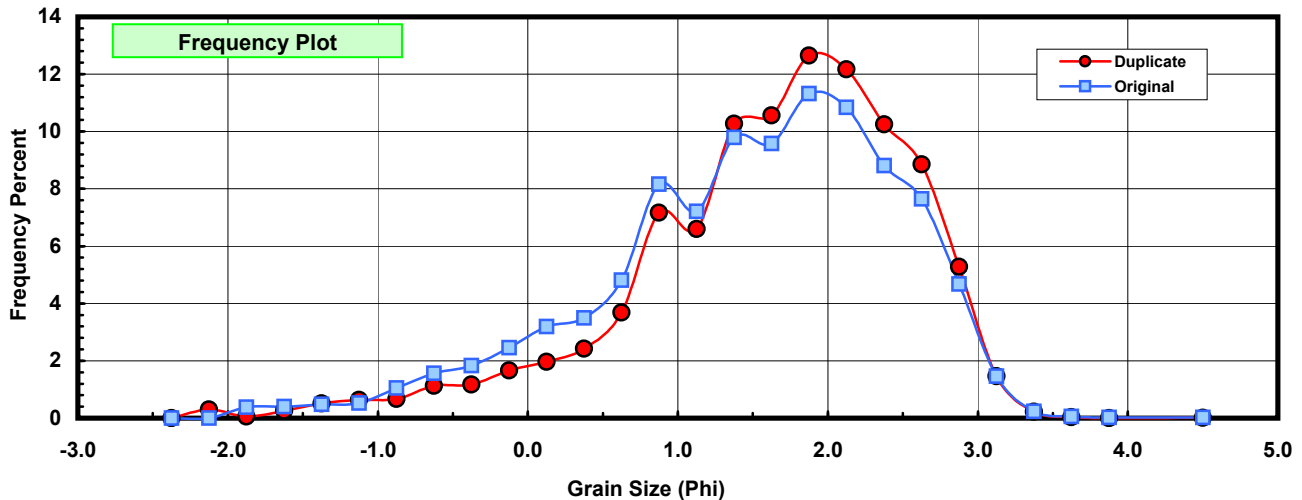
Pre-Digestion Grain Size Distribution

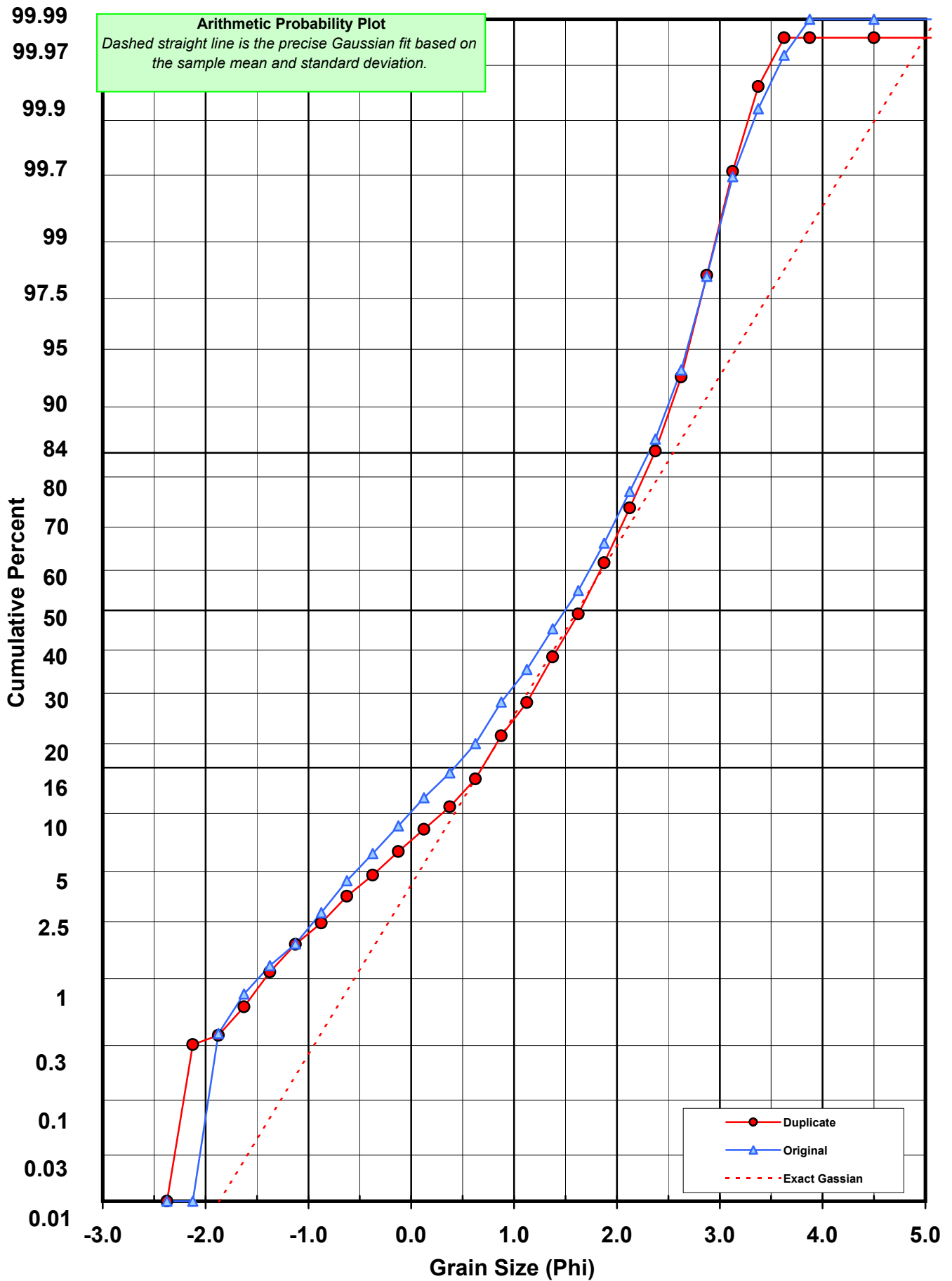
Onshore Grab Sample: PB-31-BB

Total Duplicate Sample Mass: 50.473 grams

Total Original Sample Mass: 58.498 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	0.000	0.000	0.000	0.000	0.000	0.000
-2.00	-2.125	0.153	0.303	0.303	0.000	0.000	0.000
-1.75	-1.875	0.030	0.059	0.363	0.220	0.376	0.376
-1.50	-1.625	0.130	0.258	0.620	0.235	0.402	0.778
-1.25	-1.375	0.260	0.515	1.135	0.281	0.480	1.258
-1.00	-1.125	0.319	0.632	1.767	0.304	0.520	1.778
-0.75	-0.875	0.339	0.672	2.439	0.614	1.050	2.828
-0.50	-0.625	0.567	1.123	3.562	0.915	1.564	4.393
-0.25	-0.375	0.590	1.169	4.731	1.072	1.833	6.225
0.00	-0.125	0.839	1.662	6.394	1.434	2.452	8.677
0.25	0.125	0.991	1.963	8.357	1.870	3.197	11.875
0.50	0.375	1.222	2.421	10.778	2.047	3.500	15.375
0.75	0.625	1.862	3.689	14.467	2.817	4.817	20.191
1.00	0.875	3.615	7.162	21.629	4.771	8.158	28.349
1.25	1.125	3.329	6.596	28.225	4.220	7.215	35.564
1.50	1.375	5.183	10.269	38.494	5.727	9.792	45.356
1.75	1.625	5.328	10.556	49.050	5.602	9.578	54.935
2.00	1.875	6.387	12.654	61.704	6.620	11.319	66.253
2.25	2.125	6.140	12.165	73.869	6.338	10.837	77.090
2.50	2.375	5.175	10.253	84.122	5.155	8.814	85.904
2.75	2.625	4.469	8.854	92.976	4.472	7.646	93.551
3.00	2.875	2.665	5.280	98.256	2.734	4.675	98.225
3.25	3.125	0.740	1.466	99.723	0.858	1.467	99.692
3.50	3.375	0.115	0.228	99.950	0.134	0.229	99.921
3.75	3.625	0.018	0.036	99.986	0.032	0.055	99.976
4.00	3.875	0.000	0.000	99.986	0.014	0.024	100.000
5.00	4.500	0.007	0.014	100.000	0.012	0.021	100.021



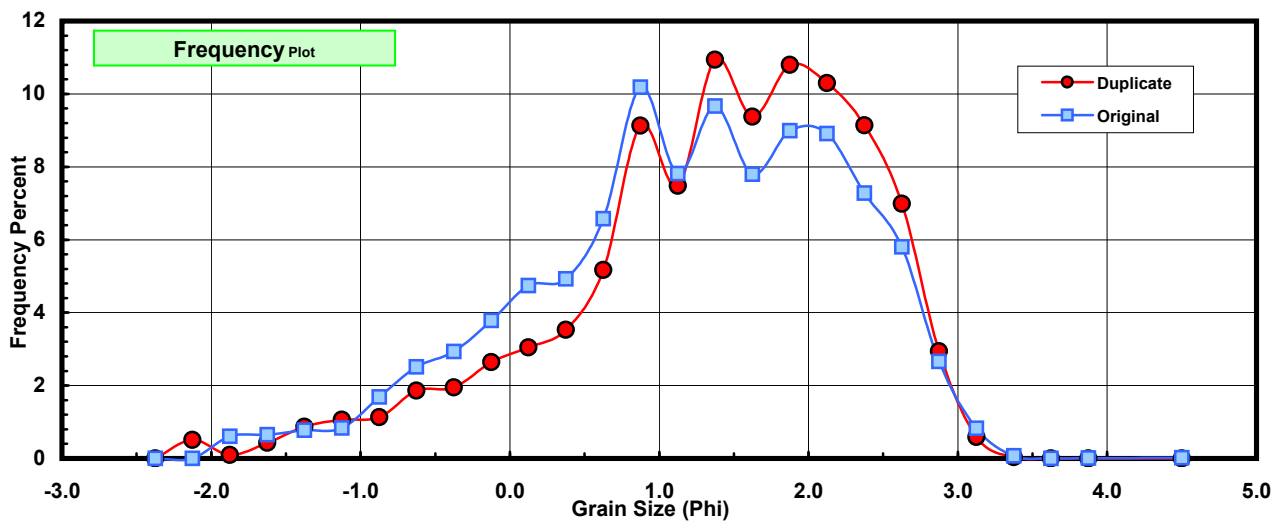


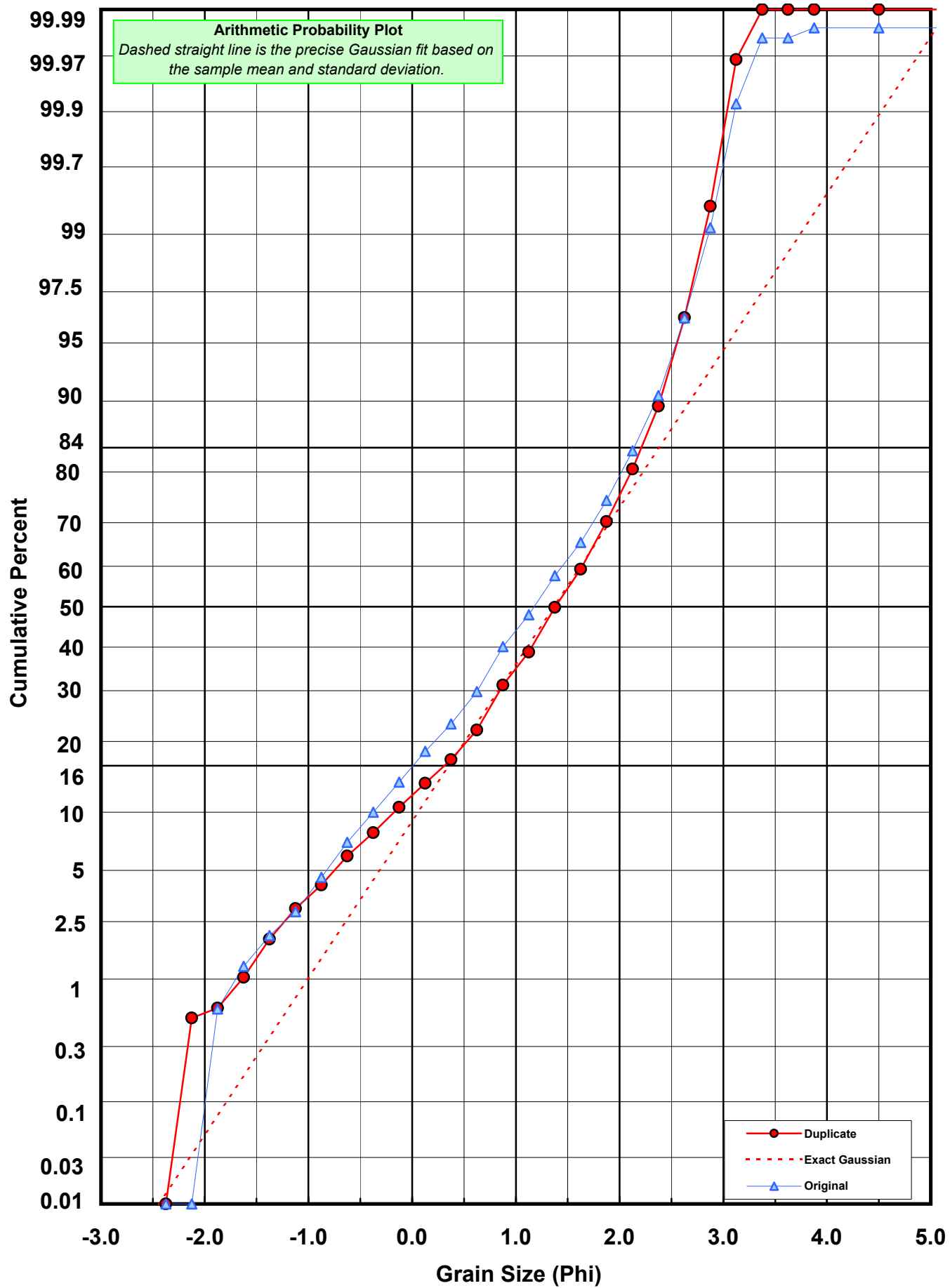
Carbonate Grain Size Distribution

Onshore Grab Sample: PB-31-BB

Total Duplicate Carbonate Mass: 29.923 grams
% Carbonate in Duplicate: 59.3 %
Total Original Carbonate Mass: 36.420 grams
% Carbonate in Original: 62.3 %

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	0.000	0.000	0.000	0.000	0.000	0.000
-2.00	-2.125	0.153	0.511	0.511	0.000	0.000	0.000
-1.75	-1.875	0.030	0.100	0.612	0.220	0.604	0.604
-1.50	-1.625	0.130	0.434	1.046	0.235	0.645	1.249
-1.25	-1.375	0.260	0.869	1.915	0.281	0.772	2.021
-1.00	-1.125	0.319	1.066	2.981	0.304	0.835	2.856
-0.75	-0.875	0.339	1.133	4.114	0.614	1.686	4.541
-0.50	-0.625	0.556	1.858	5.972	0.915	2.512	7.054
-0.25	-0.375	0.583	1.948	7.920	1.068	2.932	9.986
0.00	-0.125	0.790	2.640	10.560	1.377	3.781	13.767
0.25	0.125	0.911	3.044	13.605	1.726	4.739	18.506
0.50	0.375	1.055	3.526	17.131	1.793	4.923	23.429
0.75	0.625	1.546	5.167	22.297	2.394	6.573	30.003
1.00	0.875	2.733	9.133	31.431	3.708	10.181	40.184
1.25	1.125	2.237	7.476	38.907	2.844	7.809	47.993
1.50	1.375	3.274	10.941	49.848	3.520	9.665	57.658
1.75	1.625	2.806	9.377	59.225	2.838	7.792	65.450
2.00	1.875	3.230	10.794	70.020	3.275	8.992	74.443
2.25	2.125	3.080	10.293	80.313	3.244	8.907	83.350
2.50	2.375	2.735	9.140	89.453	2.650	7.276	90.626
2.75	2.625	2.091	6.988	96.441	2.114	5.805	96.431
3.00	2.875	0.879	2.938	99.378	0.969	2.661	99.091
3.25	3.125	0.176	0.588	99.967	0.300	0.824	99.915
3.50	3.375	0.010	0.033	100.000	0.024	0.066	99.981
3.75	3.625	0.000	0.000	100.000	0.000	0.000	99.981
4.00	3.875	0.000	0.000	100.000	0.002	0.005	99.986
5.00	4.500	0.000	0.000	100.000	0.005	0.014	100.000





Post-Digestion Grain Size Distribution

Onshore Grab Sample: PB-31-BB

Total Duplicate Digested Mass: 20.562 grams
% Silica in Duplicate: 40.7 %
Total Original Digested Mass: 22.079 grams
% Silica in Original: 37.7 %

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	0.000	0.000	0.000
-0.50	-0.625	0.011	0.053	0.053	0.000	0.000	0.000
-0.25	-0.375	0.007	0.034	0.088	0.004	0.018	0.018
0.00	-0.125	0.049	0.238	0.326	0.057	0.258	0.276
0.25	0.125	0.080	0.389	0.715	0.144	0.652	0.928
0.50	0.375	0.167	0.812	1.527	0.254	1.150	2.079
0.75	0.625	0.316	1.537	3.064	0.423	1.916	3.995
1.00	0.875	0.882	4.289	7.353	1.063	4.815	8.809
1.25	1.125	1.092	5.311	12.664	1.376	6.232	15.041
1.50	1.375	1.909	9.284	21.948	2.207	9.996	25.037
1.75	1.625	2.522	12.265	34.214	2.764	12.519	37.556
2.00	1.875	3.157	15.354	49.567	3.345	15.150	52.706
2.25	2.125	3.060	14.882	64.449	3.094	14.013	66.720
2.50	2.375	2.440	11.867	76.316	2.505	11.346	78.065
2.75	2.625	2.378	11.565	87.881	2.358	10.680	88.745
3.00	2.875	1.786	8.686	96.566	1.765	7.994	96.739
3.25	3.125	0.564	2.743	99.309	0.558	2.527	99.266
3.50	3.375	0.105	0.511	99.820	0.110	0.498	99.764
3.75	3.625	0.019	0.092	99.912	0.033	0.149	99.914
4.00	3.875	0.008	0.039	99.951	0.012	0.054	99.968
5.00	4.500	0.010	0.049	100.000	0.007	0.032	100.000

