

Quality Control Statistical Summary

Onshore Grab Sample: PI-44-BB

Sample Taken By: D. Phelps
 Sample Taken On: 11/04/09
 County: Pinellas

Latitude: 27° 39' 51.9"
 Longitude: 82° 44' 40.5"
 Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	1.8265	phi (0.282 mm)	1.7653	phi (0.2942 mm)
Standard Dev:	1.1248	phi-units (0.4586 mm)	1.1301	phi-units (0.4569 mm)
Skewness:	-1.0694	dimensionless	-0.8874	dimensionless
Kurtosis:	3.3531	dimensionless	2.9340	dimensionless
5th Moment:	-7.3261	dimensionless	-5.7185	dimensionless
6th Moment:	20.5625	dimensionless	15.6213	dimensionless
RARD*:	0.6158	dimensionless	0.6402	dimensionless
Median:	2.1067	phi (0.2322 mm)	2.0196	phi (0.2466 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	0.5447	phi (0.6856 mm)	0.5999	phi (0.6598 mm)
Standard Dev:	1.0897	phi-units (0.4699 mm)	1.0694	phi-units (0.4765 mm)
Skewness:	0.1253	dimensionless	0.3164	dimensionless
Kurtosis:	2.5238	dimensionless	3.0012	dimensionless
5th Moment:	0.3948	dimensionless	2.1702	dimensionless
6th Moment:	9.4300	dimensionless	12.8982	dimensionless
RARD*:	2.0007	dimensionless	1.7825	dimensionless
Median:	0.4157	phi (0.7497 mm)	0.4658	phi (0.7241 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	2.3611	phi (0.1946 mm)	2.3288	phi (0.1991 mm)
Standard Dev:	0.5784	phi-units (0.6697 mm)	0.6140	phi-units (0.6534 mm)
Skewness:	-0.9722	dimensionless	-1.1120	dimensionless
Kurtosis:	3.9395	dimensionless	4.3363	dimensionless
5th Moment:	-8.9021	dimensionless	-11.2226	dimensionless
6th Moment:	31.9117	dimensionless	42.0036	dimensionless
RARD*:	0.2450	dimensionless	0.2637	dimensionless
Median:	2.3655	phi (0.1941 mm)	2.3534	phi (0.1957 mm)

Additional Data	
Total Fines	
Original:	0.1 %
Duplicate:	0.14 %
Total Carbonates	
Original:	32.45 %
Duplicate:	29.4 %

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)

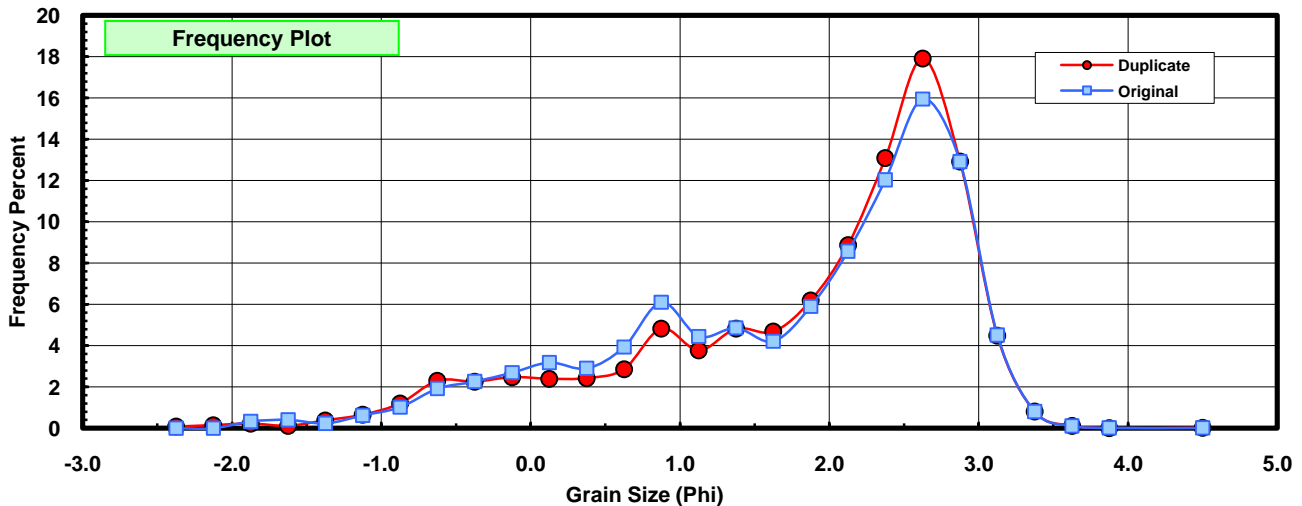
Pre-Digestion Grain Size Distribution

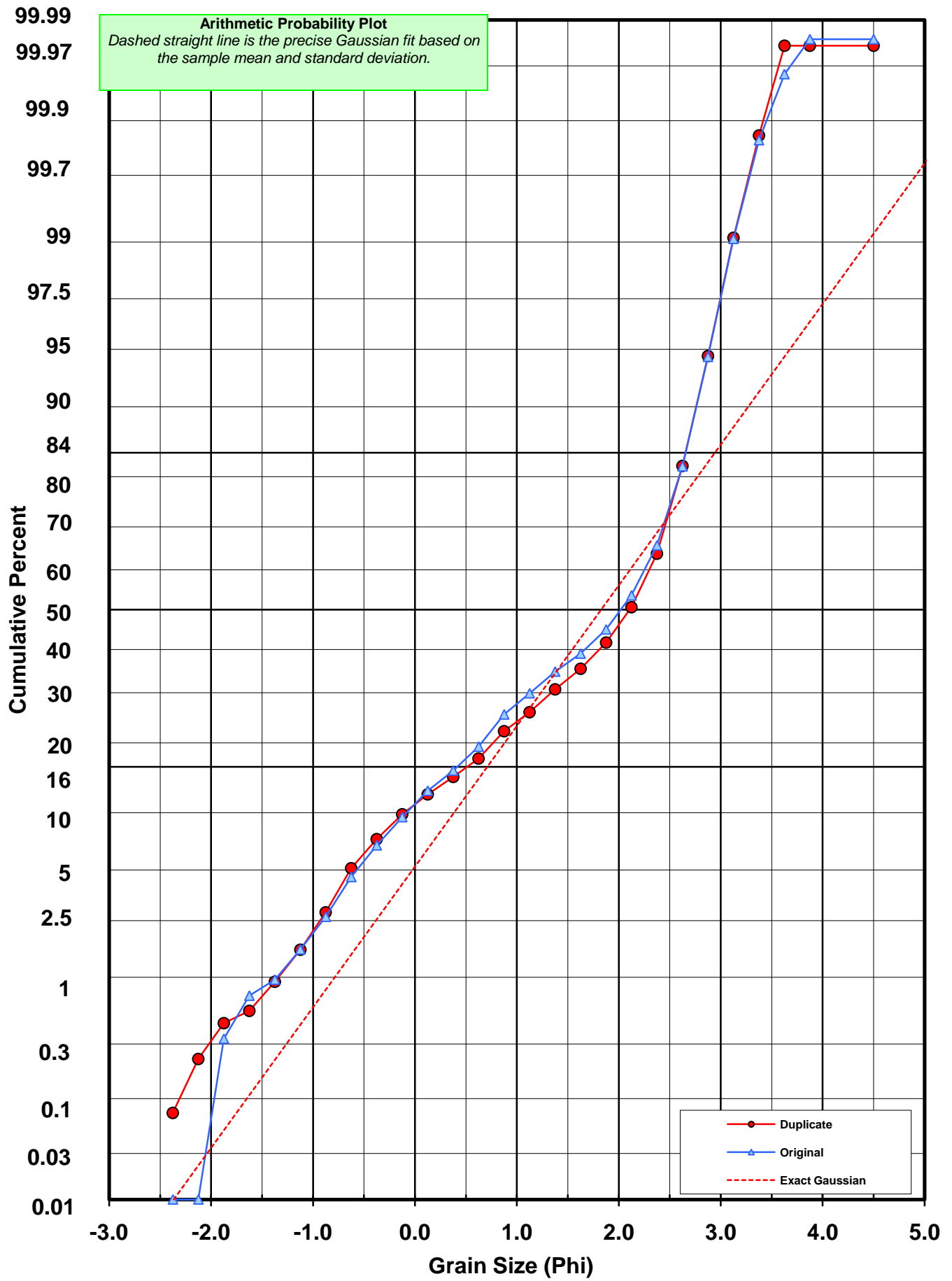
Onshore Grab Sample: PI-44-BB

Total Duplicate Sample Mass: 61.746 grams

Total Original Sample Mass: 69.856 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	0.046	0.074	0.074	0.000	0.000	0.000
-2.00	-2.125	0.091	0.147	0.222	0.000	0.000	0.000
-1.75	-1.875	0.138	0.223	0.445	0.231	0.331	0.331
-1.50	-1.625	0.071	0.115	0.560	0.285	0.408	0.739
-1.25	-1.375	0.235	0.381	0.941	0.166	0.238	0.976
-1.00	-1.125	0.402	0.651	1.592	0.436	0.624	1.600
-0.75	-0.875	0.740	1.198	2.790	0.713	1.021	2.621
-0.50	-0.625	1.420	2.300	5.090	1.342	1.921	4.542
-0.25	-0.375	1.392	2.254	7.345	1.581	2.263	6.805
0.00	-0.125	1.527	2.473	9.818	1.881	2.693	9.498
0.25	0.125	1.479	2.395	12.213	2.223	3.182	12.680
0.50	0.375	1.498	2.426	14.639	2.026	2.900	15.581
0.75	0.625	1.767	2.862	17.501	2.747	3.932	19.513
1.00	0.875	2.979	4.825	22.325	4.263	6.103	25.616
1.25	1.125	2.325	3.765	26.091	3.106	4.446	30.062
1.50	1.375	2.978	4.823	30.914	3.396	4.861	34.923
1.75	1.625	2.889	4.679	35.593	2.944	4.214	39.138
2.00	1.875	3.820	6.187	41.779	4.123	5.902	45.040
2.25	2.125	5.478	8.872	50.651	5.991	8.576	53.616
2.50	2.375	8.083	13.091	63.742	8.408	12.036	65.652
2.75	2.625	11.061	17.914	81.655	11.143	15.951	81.604
3.00	2.875	7.980	12.924	94.579	9.024	12.918	94.522
3.25	3.125	2.764	4.476	99.056	3.156	4.518	99.039
3.50	3.375	0.500	0.810	99.866	0.568	0.813	99.853
3.75	3.625	0.072	0.117	99.982	0.077	0.110	99.963
4.00	3.875	0.000	0.000	99.982	0.016	0.023	99.986
5.00	4.500	0.011	0.018	100.000	0.010	0.014	100.000



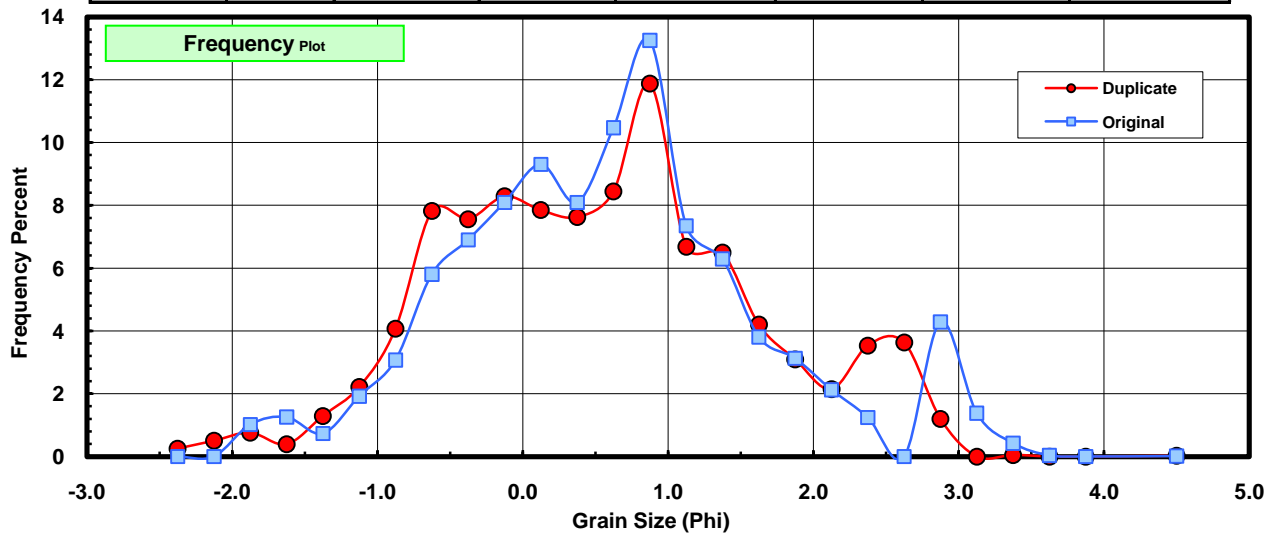


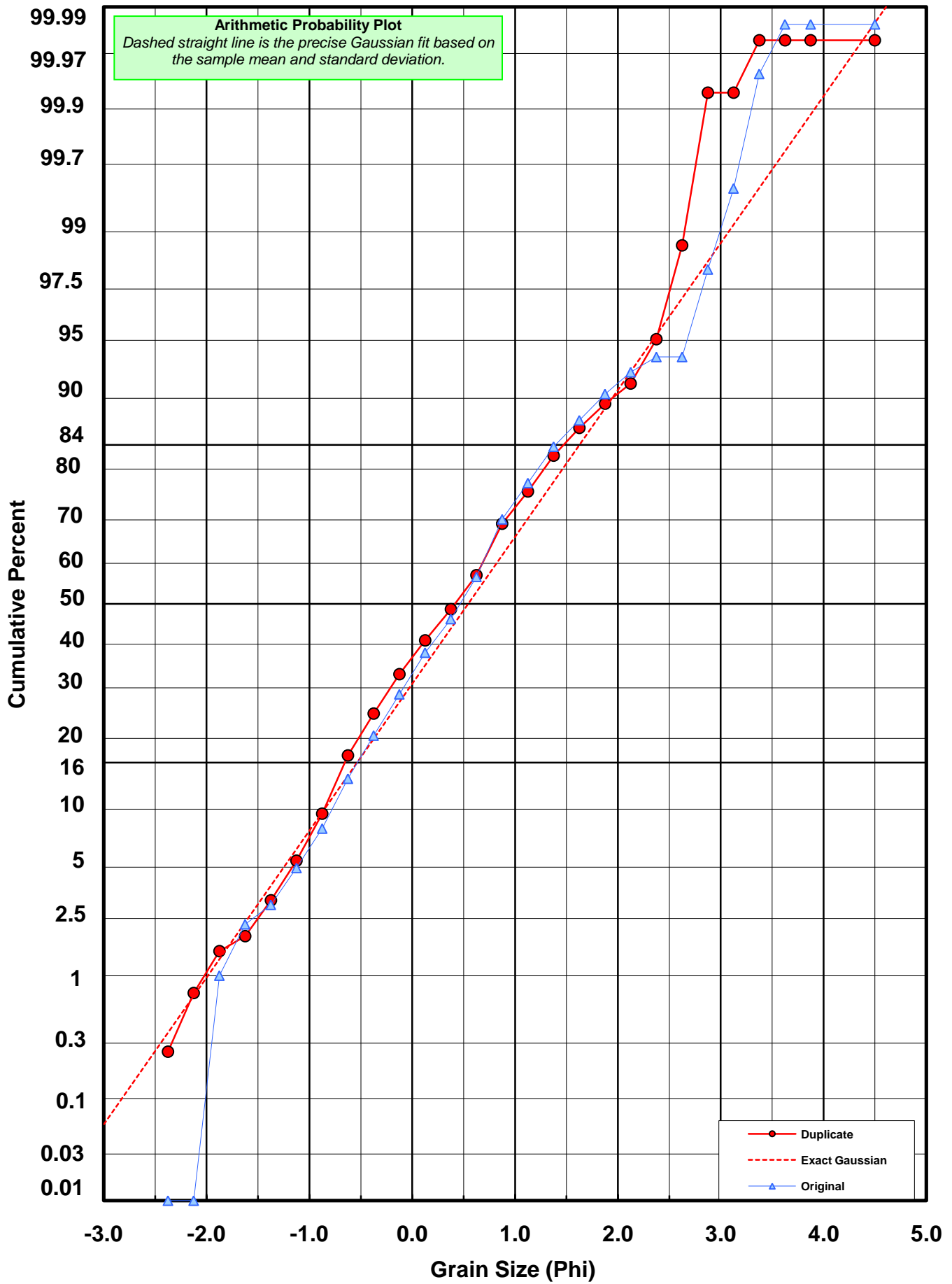
Carbonate Grain Size Distribution

Onshore Grab Sample: PI-44-BB

Total Duplicate Carbonate Mass: 18.159 grams
% Carbonate in Duplicate: 29.4 %
Total Original Carbonate Mass: 22.668 grams
% Carbonate in Original: 32.4 %

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	0.046	0.253	0.253	0.000	0.000	0.000
-2.00	-2.125	0.091	0.501	0.754	0.000	0.000	0.000
-1.75	-1.875	0.138	0.760	1.514	0.231	1.019	1.019
-1.50	-1.625	0.071	0.391	1.905	0.285	1.257	2.276
-1.25	-1.375	0.235	1.294	3.200	0.166	0.732	3.009
-1.00	-1.125	0.402	2.214	5.413	0.436	1.923	4.932
-0.75	-0.875	0.740	4.075	9.488	0.697	3.075	8.007
-0.50	-0.625	1.420	7.820	17.308	1.316	5.806	13.812
-0.25	-0.375	1.372	7.555	24.864	1.564	6.900	20.712
0.00	-0.125	1.505	8.288	33.152	1.834	8.091	28.803
0.25	0.125	1.425	7.847	40.999	2.109	9.304	38.107
0.50	0.375	1.385	7.627	48.626	1.834	8.091	46.197
0.75	0.625	1.533	8.442	57.068	2.373	10.469	56.666
1.00	0.875	2.157	11.878	68.947	3.003	13.248	69.914
1.25	1.125	1.213	6.680	75.626	1.665	7.345	77.259
1.50	1.375	1.180	6.498	82.125	1.427	6.295	83.554
1.75	1.625	0.763	4.202	86.326	0.863	3.807	87.361
2.00	1.875	0.562	3.095	89.421	0.709	3.128	90.489
2.25	2.125	0.389	2.142	91.563	0.482	2.126	92.615
2.50	2.375	0.642	3.535	95.099	0.282	1.244	93.859
2.75	2.625	0.659	3.629	98.728	0.000	0.000	93.859
3.00	2.875	0.218	1.201	99.928	0.972	4.288	98.147
3.25	3.125	0.000	0.000	99.928	0.313	1.381	99.528
3.50	3.375	0.009	0.050	99.978	0.096	0.424	99.951
3.75	3.625	0.000	0.000	99.978	0.008	0.035	99.987
4.00	3.875	0.000	0.000	99.978	0.000	0.000	99.987
5.00	4.500	0.004	0.022	100.000	0.003	0.013	100.000





Post-Digestion Grain Size Distribution

Onshore Grab Sample: PI-44-BB

Total Duplicate Digested Mass: 43.610 grams
% Silica in Duplicate: 70.6 %
Total Original Digested Mass: 47.765 grams
% Silica in Original: 68.4 %

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	0.016	0.033	0.033
-0.50	-0.625	0.000	0.000	0.000	0.026	0.054	0.088
-0.25	-0.375	0.020	0.046	0.046	0.017	0.036	0.124
0.00	-0.125	0.022	0.050	0.096	0.047	0.098	0.222
0.25	0.125	0.054	0.124	0.220	0.114	0.239	0.461
0.50	0.375	0.113	0.259	0.479	0.192	0.402	0.863
0.75	0.625	0.234	0.537	1.016	0.374	0.783	1.646
1.00	0.875	0.822	1.885	2.901	1.260	2.638	4.283
1.25	1.125	1.112	2.550	5.451	1.441	3.017	7.300
1.50	1.375	1.798	4.123	9.573	1.969	4.122	11.423
1.75	1.625	2.126	4.875	14.449	2.081	4.357	15.779
2.00	1.875	3.258	7.471	21.919	3.414	7.147	22.927
2.25	2.125	5.089	11.669	33.589	5.509	11.534	34.460
2.50	2.375	7.441	17.063	50.651	8.126	17.012	51.473
2.75	2.625	10.402	23.852	74.504	11.720	24.537	76.010
3.00	2.875	7.762	17.799	92.302	8.052	16.858	92.867
3.25	3.125	2.771	6.354	98.656	2.843	5.952	98.819
3.50	3.375	0.491	1.126	99.782	0.472	0.988	99.807
3.75	3.625	0.074	0.170	99.952	0.069	0.144	99.952
4.00	3.875	0.014	0.032	99.984	0.016	0.033	99.985
5.00	4.500	0.007	0.016	100.000	0.007	0.015	100.000

