Supplement 1

Retardation (nm)	Grey Value	Thickness (µm)	Weight (pg)
0		0	0
1	1	0.005813953	0.015755814
2	3	0.011627907	0.031511628
3	4	0.01744186	0.047267442
4	6	0.023255814	0.063023256
5	8	0.029069767	0.07877907
6	10	0.034883721	0.094534884
7	11	0.040697674	0.110290698
8	13	0.046511628	0.126046512
9	14	0.052325581	0.141802326
10	16	0.058139535	0.15755814
11	17	0.063953488	0.173313953
12	19	0.069767442	0.189069767
13	20	0.075581395	0.204825581
14	22	0.081395349	0.220581395
15	24	0.087209302	0.236337209
16	25	0.093023256	0.252093023
17	26	0.098837209	0.267848837
18	28	0.104651163	0.283604651
19	30	0.110465116	0.299360465
20	31	0.11627907	0.315116279
21	33	0.122093023	0.330872093
22	34	0.127906977	0.346627907
23	36	0.13372093	0.362383721
24	37	0.139534884	0.378139535
25	39	0.145348837	0.393895349
26	40	0.151162791	0.409651163
27	42	0.156976744	0.425406977
28	44	0.162790698	0.441162791
29	45	0.168604651	0.456918605
30	47	0.174418605	0.472674419
31	48	0.180232558	0.488430233
32	50	0.186046512	0.504186047
33	51	0.191860465	0.51994186
34	53	0.197674419	0.535697674
35	54	0.203488372	0.551453488
36	56	0.209302326	0.567209302
37	57	0.215116279	0.582965116
38	59	0.220930233	0.59872093
39	61	0.226744186	0.614476744
40	62	0.23255814	0.630232558

41	64	0.238372093	0.645988372
42	65	0.244186047	0.661744186
43	66	0.25	0.6775
44	68	0.255813953	0.693255814
45	70	0.261627907	0.709011628
46	71	0.26744186	0.724767442
47	73	0.273255814	0.740523256
48	74	0.279069767	0.75627907
49	76	0.284883721	0.772034884
50	77	0.290697674	0.787790698
51	79	0.296511628	0.803546512
52	80	0.302325581	0.819302326
53	81	0.308139535	0.83505814
54	83	0.313953488	0.850813953
55	85	0.319767442	0.866569767
56	86	0.325581395	0.882325581
57	88	0.331395349	0.898081395
58	89	0.337209302	0.913837209
59	91	0.343023256	0.929593023
60	92	0.348837209	0.945348837
61	93	0.354651163	0.961104651
62	95	0.360465116	0.976860465
63	96	0.36627907	0.992616279
64	98	0.372093023	1.008372093
65	99	0.377906977	1.024127907
66	100	0.38372093	1.039883721
67	102	0.389534884	1.055639535
68	104	0.395348837	1.071395349
69	105	0.401162791	1.087151163
70	107	0.406976744	1.102906977
71	108	0.412790698	1.118662791
72	109	0.418604651	1.134418605
73	111	0.424418605	1.150174419
74	112	0.430232558	1.165930233
75	113	0.436046512	1.181686047
76	115	0.441860465	1.19744186
77	116	0.447674419	1.213197674
78	117	0.453488372	1.228953488
79	119	0.459302326	1.244709302
80	120	0.465116279	1.260465116
81	122	0.470930233	1.27622093
82	123	0.476744186	1.291976744
83	125	0.48255814	1.307732558

84	126	0.488372093	1.323488372
85	127	0.494186047	1.339244186
86	129	0.5	1.355
87	130	0.505813953	1.370755814
88	131	0.511627907	1.386511628
89	133	0.51744186	1.402267442
90	134	0.523255814	1.418023256
91	135	0.529069767	1.43377907
92	137	0.534883721	1.449534884
93	138	0.540697674	1.465290698
94	139	0.546511628	1.481046512
95	141	0.552325581	1.496802326
96	142	0.558139535	1.51255814
97	143	0.563953488	1.528313953
98	144	0.569767442	1.544069767
99	146	0.575581395	1.559825581
100	147	0.581395349	1.575581395
101	148	0.587209302	1.591337209
102	149	0.593023256	1.607093023
103	151	0.598837209	1.622848837
104	152	0.604651163	1.638604651
105	153	0.610465116	1.654360465
106	155	0.61627907	1.670116279
107	156	0.622093023	1.685872093
108	157	0.627906977	1.701627907
109	159	0.63372093	1.717383721
110	160	0.639534884	1.733139535
111	161	0.645348837	1.748895349
112	162	0.651162791	1.764651163
113	164	0.656976744	1.780406977
114	165	0.662790698	1.796162791
115	166	0.668604651	1.811918605
116	167	0.674418605	1.827674419
117	168	0.680232558	1.843430233
118	169	0.686046512	1.859186047
119	171	0.691860465	1.87494186
120	172	0.697674419	1.890697674
121	173	0.703488372	1.906453488
122	174	0.709302326	1.922209302
123	175	0.715116279	1.937965116
124	176	0.720930233	1.95372093
125	177	0.726744186	1.969476744
126	178	0.73255814	1.985232558

127	180	0.738372093	2.000988372
128	181	0.744186047	2.016744186
129	182	0.75	2.0325
130	183	0.755813953	2.048255814
131	184	0.761627907	2.064011628
132	185	0.76744186	2.079767442
133	186	0.773255814	2.095523256
134	187	0.779069767	2.11127907
135	188	0.784883721	2.127034884
136	189	0.790697674	2.142790698
137	190	0.796511628	2.158546512
138	191	0.802325581	2.174302326
139	193	0.808139535	2.19005814
140	194	0.813953488	2.205813953
141	195	0.819767442	2.221569767
142	196	0.825581395	2.237325581
143	197	0.831395349	2.253081395
144	198	0.837209302	2.268837209
145	199	0.843023256	2.284593023
146	200	0.848837209	2.300348837
147	201	0.854651163	2.316104651
148	201	0.860465116	2.331860465
149	202	0.86627907	2.347616279
150	203	0.872093023	2.363372093
151	204	0.877906977	2.379127907
152	205	0.88372093	2.394883721
153	206	0.889534884	2.410639535
154	207	0.895348837	2.426395349
155	208	0.901162791	2.442151163
156	209	0.906976744	2.457906977
157	210	0.912790698	2.473662791
158	211	0.918604651	2.489418605
159	212	0.924418605	2.505174419
160	213	0.930232558	2.520930233
161	214	0.936046512	2.536686047
162	215	0.941860465	2.55244186
163	215	0.947674419	2.568197674
164	216	0.953488372	2.583953488
165	217	0.959302326	2.599709302
166	218	0.965116279	2.615465116
167	219	0.970930233	2.63122093
168	220	0.976744186	2.646976744
169	220	0.98255814	2.662732558

170	221	0.988372093	2.678488372
171	222	0.994186047	2.694244186
172	223	1	2.71
173	224	1.005813953	2.725755814
174	224	1.011627907	2.741511628
175	225	1.01744186	2.757267442
176	226	1.023255814	2.773023256
177	226	1.029069767	2.78877907
178	227	1.034883721	2.804534884
179	228	1.040697674	2.820290698
180	229	1.046511628	2.836046512
181	229	1.052325581	2.851802326
182	230	1.058139535	2.86755814
183	231	1.063953488	2.883313953
184	231	1.069767442	2.899069767
185	232	1.075581395	2.914825581
186	233	1.081395349	2.930581395
187	234	1.087209302	2.946337209
188	234	1.093023256	2.962093023
189	235	1.098837209	2.977848837
190	235	1.104651163	2.993604651
191	236	1.110465116	3.009360465
192	237	1.11627907	3.025116279
193	238	1.122093023	3.040872093
194	238	1.127906977	3.056627907
195	238	1.13372093	3.072383721
196	239	1.139534884	3.088139535
197	240	1.145348837	3.103895349
198	240	1.151162791	3.119651163
199	241	1.156976744	3.135406977
200	241	1.162790698	3.151162791
201	242	1.168604651	3.166918605
202	242	1.174418605	3.182674419
203	243	1.180232558	3.198430233
204	243	1.186046512	3.214186047
205	244	1.191860465	3.22994186
206	244	1.197674419	3.245697674
207	245	1.203488372	3.261453488
208	246	1.209302326	3.277209302
209	246	1.215116279	3.292965116
210	246	1.220930233	3.30872093
211	247	1.226744186	3.324476744
212	247	1.23255814	3.340232558

213	247	1.238372093	3.355988372
214	248	1.244186047	3.371744186
215	248	1.25	3.3875
216	249	1.255813953	3.403255814
217	249	1.261627907	3.419011628
218	250	1.26744186	3.434767442
219	250	1.273255814	3.450523256
220	251	1.279069767	3.46627907
221	251	1.284883721	3.482034884
222	251	1.290697674	3.497790698
223	251	1.296511628	3.513546512
224	251	1.302325581	3.529302326
225	252	1.308139535	3.54505814
226	252	1.313953488	3.560813953
227	252	1.319767442	3.576569767
228	252	1.325581395	3.592325581
229	252	1.331395349	3.608081395
230	252	1.337209302	3.623837209
231	252	1.343023256	3.639593023
232	252	1.348837209	3.655348837
233	252	1.354651163	3.671104651
234	252	1.360465116	3.686860465
235	252	1.36627907	3.702616279
236	253	1.372093023	3.718372093
237	253	1.377906977	3.734127907
238	252	1.38372093	3.749883721
239	253	1.389534884	3.765639535
240	253	1.395348837	3.781395349
241	253	1.401162791	3.797151163
242	253	1.406976744	3.812906977
243	253	1.412790698	3.828662791
244	253	1.418604651	3.844418605
245	253	1.424418605	3.860174419
246	252	1.430232558	3.875930233
247	253	1.436046512	3.891686047
248	253	1.441860465	3.90744186
249	253	1.447674419	3.923197674

Supplement 2

Species	Sample	Length (µm)	Weight (pg)	Resolution (pg)
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.15	0.31	0.13
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.46	0.32	0.14
E. huxleyi/small placoliths	GEOB3602, 0-1cm	1.85	0.54	0.22
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.16	0.59	0.22
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.66	0.65	0.24
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.61	0.66	0.22
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.12	0.74	0.26
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.10	0.77	0.30
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.07	0.78	0.28
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.43	0.79	0.26
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.46	0.81	0.29
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.84	0.82	0.28
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.25	0.84	0.30
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.43	0.84	0.29
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.21	0.91	0.32
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.07	0.91	0.31
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.21	0.92	0.33
E. huxleyi/small placoliths	GEOB3602, 0-1cm	1.94	0.93	0.33
E. huxleyi/small placoliths	GEOB3602, 0-1cm	1.85	0.94	0.33
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.42	0.96	0.34
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.39	0.98	0.31
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.30	0.99	0.33
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.25	1.04	0.36
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.30	1.07	0.36
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.21	1.07	0.36
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.52	1.10	0.35
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.03	1.15	0.40
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.16	1.17	0.38
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.25	1.23	0.38
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.16	1.23	0.37
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.03	1.25	0.41
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.52	1.25	0.39
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.12	1.30	0.46
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.91	1.34	0.41
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.48	1.40	0.41
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.97	1.54	0.43
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.03	1.59	0.52
E. huxleyi/small placoliths	GEOB3602, 0-1cm	3.67	1.66	0.46
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.88	1.70	0.48
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.66	1.72	0.51
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.66	1.77	0.49

E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.57	1.86	0.52
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.70	1.92	0.52
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.70	2.06	0.58
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.75	2.06	0.57
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.93	2.07	0.54
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.66	2.10	0.56
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.70	2.16	0.57
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.34	2.16	0.62
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.52	2.19	0.59
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.79	2.21	0.58
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.34	2.22	0.64
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.61	2.29	0.64
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.61	2.57	0.67
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.93	2.64	0.69
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.84	2.69	0.68
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.57	2.69	0.71
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.66	2.70	0.73
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.43	2.78	0.74
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.97	2.79	0.73
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.39	2.83	0.78
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.61	2.83	0.79
E. huxleyi/small placoliths	GEOB3602, 0-1cm	3.15	2.94	0.74
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.48	2.97	0.78
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.73	3.24	0.81
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.70	3.26	0.82
E. huxleyi/small placoliths	GEOB3602, 0-1cm	3.02	3.32	0.82
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.75	3.38	0.88
E. huxleyi/small placoliths	GEOB3602, 0-1cm	3.76	3.42	0.79
E. huxleyi/small placoliths	GEOB3602, 0-1cm	2.61	3.49	0.93
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
G. muellerae	DSDP 119-1-1, 31cm	2.79	3.53	0.89
G. muellerae	DSDP 119-1-1, 31cm	2.70	5.01	1.20
G. muellerae	DSDP 119-1-1, 31cm	2.52	3.25	0.90
G. muellerae	DSDP 119-1-1, 31cm	4.01	8.77	1.65
G. muellerae	DSDP 119-1-1, 31cm	3.38	7.55	1.61
G. muellerae	GEOB3602, 0-1cm	4.02	9.06	1.66
G. muellerae	GEOB3602, 0-1cm	3.80	11.75	2.15
G. muellerae	GEOB3602, 0-1cm	3.67	10.24	1.85
G. muellerae	GEOB3602, 0-1cm	4.25	11.36	1.88
G. muellerae	GEOB3602, 0-1cm	3.58	9.22	1.67
G. muellerae	GEOB3602, 0-1cm	3.53	7.56	1.51
G. muellerae	GEOB3602, 0-1cm	3.98	11.63	2.01
G. muellerae	GEOB3602, 0-1cm	3.49	7.41	1.49

G. muellerae	GEOB3602, 0-1cm	3.00	4.48	1.05
G. muellerae	GEOB3602, 0-1cm	3.53	6.73	1.33
G. muellerae	GEOB3602, 0-1cm	3.02	5.91	1.31
G. muellerae	GEOB3602, 0-1cm	3.20	5.92	1.29
G. muellerae	GEOB3602, 0-1cm	3.26	6.69	1.38
G. muellerae	GEOB3602, 0-1cm	3.24	4.42	1.03
G. muellerae	GEOB3602, 0-1cm	2.84	4.46	1.03
G. muellerae	GEOB3602, 0-1cm	3.24	4.50	1.03
G. muellerae	DSDP 119-1-1, 31cm	2.88	4.04	0.99
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
G. oceanica	GEOB3602, 0-1cm	2.93	3.79	0.91
G. oceanica	GEOB3602, 0-1cm	3.56	3.97	0.89
G. oceanica	GEOB3602, 0-1cm	3.56	3.89	0.87
G. oceanica	GEOB3602, 0-1cm	3.42	3.56	0.82
G. oceanica	GEOB3602, 0-1cm	4.10	13.91	2.32
G. oceanica	GEOB3602, 0-1cm	4.41	14.85	2.29
G. oceanica	GEOB3602, 0-1cm	4.28	12.61	2.12
G. oceanica	GEOB3602, 0-1cm	4.68	12.67	1.97
G. oceanica	GEOB3602, 0-1cm	3.87	8.65	1.60
G. oceanica	GEOB3602, 0-1cm	3.74	10.44	1.87
G. oceanica	GEOB3602, 0-1cm	4.32	13.10	2.16
G. oceanica	DSDP 119-1-1, 31cm	4.50	19.50	2.87
G. oceanica	DSDP 119-1-1, 31cm	5.40	24.19	3.35
G. oceanica	DSDP 119-1-1, 31cm	4.77	24.17	3.50
G. oceanica	DSDP 119-1-1, 31cm	4.10	16.09	2.57
G. oceanica	DSDP 119-1-1, 31cm	4.95	26.58	3.57
G. oceanica	DSDP 119-1-1, 31cm	4.72	22.46	3.23
G. oceanica	DSDP 119-1-1, 31cm	4.54	18.38	2.74
G. oceanica	DSDP 119-1-1, 31cm	4.10	8.18	1.50
G. oceanica	DSDP 119-1-1, 31cm	4.14	18.04	2.89
G. oceanica	DSDP 119-1-1, 31cm	4.23	17.21	2.72
G. oceanica	GEOB3602, 0-1cm	4.74	10.60	1.73
G. oceanica	GEOB3602, 0-1cm	5.01	17.32	2.54
G. oceanica	GEOB3602, 0-1cm	3.26	5.57	1.22
G. oceanica	GEOB3602, 0-1cm	4.78	19.39	2.73
G. oceanica	GEOB3602, 0-1cm	3.85	7.78	1.48
G. oceanica	GEOB3602, 0-1cm	4.83	15.60	2.34
G. oceanica	GEOB3602, 0-1cm	6.04	38.75	4.49
G. oceanica	GEOB3602, 0-1cm	4.02	9.02	1.59
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
F. profunda	GEOB3602, 0-1cm	2.88	1.14	0.36
F. profunda	GEOB3602, 0-1cm	1.62	0.35	0.16
F. profunda	GEOB3602, 0-1cm	1.53	0.41	0.20

F. profunda	GEOB3602, 0-1cm	1.67	0.42	0.18
F. profunda	GEOB3602, 0-1cm	2.03	0.45	0.20
F. profunda	GEOB3602, 0-1cm	1.98	0.46	0.20
F. profunda	GEOB3602, 0-1cm	1.53	0.49	0.21
F. profunda	GEOB3602, 0-1cm	1.71	0.53	0.22
F. profunda	GEOB3602, 0-1cm	1.49	0.54	0.23
F. profunda	GEOB3602, 0-1cm	1.53	0.54	0.25
F. profunda	GEOB3602, 0-1cm	2.12	0.54	0.20
F. profunda	GEOB3602, 0-1cm	2.39	0.55	0.21
F. profunda	GEOB3602, 0-1cm	2.25	0.55	0.21
F. profunda	GEOB3602, 0-1cm	1.67	0.60	0.25
F. profunda	GEOB3602, 0-1cm	1.89	0.62	0.24
F. profunda	GEOB3602, 0-1cm	2.61	0.63	0.23
F. profunda	GEOB3602, 0-1cm	1.67	0.63	0.25
F. profunda	GEOB3602, 0-1cm	2.30	0.66	0.25
F. profunda	GEOB3602, 0-1cm	1.67	0.70	0.28
F. profunda	GEOB3602, 0-1cm	2.25	0.72	0.26
F. profunda	GEOB3602, 0-1cm	1.94	0.77	0.32
F. profunda	GEOB3602, 0-1cm	2.07	0.82	0.30
F. profunda	GEOB3602, 0-1cm	1.89	0.87	0.32
F. profunda	GEOB3602, 0-1cm	1.94	0.88	0.31
F. profunda	GEOB3602, 0-1cm	1.94	0.91	0.33
F. profunda	GEOB3602, 0-1cm	2.25	0.96	0.32
F. profunda	GEOB3602, 0-1cm	2.39	1.00	0.34
F. profunda	GEOB3602, 0-1cm	2.30	1.03	0.35
F. profunda	GEOB3602, 0-1cm	3.11	1.05	0.32
F. profunda	GEOB3602, 0-1cm	3.69	1.06	0.37
F. profunda	GEOB3602, 0-1cm	2.34	1.07	0.37
F. profunda	GEOB3602, 0-1cm	2.34	1.08	0.36
F. profunda	GEOB3602, 0-1cm	1.85	1.10	0.38
F. profunda	GEOB3602, 0-1cm	3.24	1.16	0.38
F. profunda	GEOB3602, 0-1cm	3.51	1.44	0.42
F. profunda	GEOB3602, 0-1cm	2.52	1.46	0.42
F. profunda	GEOB3602, 0-1cm	4.68	1.52	0.51
F. profunda	GEOB3602, 0-1cm	4.68	1.57	0.51
F. profunda	GEOB3602, 0-1cm	2.57	1.66	0.47
F. profunda	GEOB3602, 0-1cm	4.81	1.82	0.50
F. profunda	GEOB3602, 0-1cm	4.63	1.83	0.52
F. profunda	GEOB3602, 0-1cm	3.69	1.90	0.50
F. profunda	GEOB3602, 0-1cm	3.24	2.01	0.50
F. profunda	GEOB3602, 0-1cm	4.05	2.08	0.57
F. profunda	GEOB3602, 0-1cm	2.39	2.10	0.59
F. profunda	GEOB3602, 0-1cm	4.63	3.04	0.66

F. profunda	GEOB3602, 0-1cm	2.15	0.50	0.20
F. profunda	GEOB3602, 0-1cm	2.50	1.90	0.53
F. profunda	GEOB3602, 0-1cm	2.01	0.74	0.29
F. profunda	GEOB3602, 0-1cm	1.48	0.23	0.13
F. profunda	GEOB3602, 0-1cm	2.19	0.72	0.26
F. profunda	GEOB3602, 0-1cm	2.28	0.42	0.17
F. profunda	GEOB3602, 0-1cm	3.40	1.00	0.36
F. profunda	GEOB3602, 0-1cm	4.07	1.40	0.42
F. profunda	GEOB3602, 0-1cm	2.28	0.67	0.25
F. profunda	GEOB3602, 0-1cm	3.89	1.18	0.40
F. profunda	GEOB3602, 0-1cm	3.89	1.66	0.49
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
U. tenuis	GEOB3602, 0-1cm	5.58	6.80	1.25
U. tenuis	GEOB3602, 0-1cm	5.26	9.35	1.53
U. tenuis	GEOB3602, 0-1cm	5.98	13.53	1.91
U. tenuis	GEOB3602, 0-1cm	4.23	5.01	1.03
U. tenuis	GEOB3602, 0-1cm	6.07	12.52	1.84
U. tenuis	GEOB3602, 0-1cm	6.39	10.60	1.71
U. tenuis	GEOB3602, 0-1cm	5.68	7.37	1.33
U. tenuis	GEOB3602, 0-1cm	5.68	7.95	1.39
U. tenuis	GEOB3602, 0-1cm	5.41	7.78	1.38
U. tenuis	GEOB3602, 0-1cm	5.90	9.70	1.58
U. tenuis	GEOB3602, 0-1cm	5.19	6.52	1.21
U. tenuis	GEOB3602, 0-1cm	5.63	7.83	1.38
U. tenuis	GEOB3602, 0-1cm	5.86	9.31	1.56
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
U. irregularis	GEOB3602, 0-1cm	7.24	6.14	1.11
U. irregularis	GEOB3602, 0-1cm	6.48	3.94	0.93
U. irregularis	GEOB3602, 0-1cm	8.41	9.84	1.83
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
Rhabdosphaera spp.	GEOB3602, 0-1cm	5.71	3.75	0.66
Rhabdosphaera spp.	GEOB3602, 0-1cm	7.51	8.23	0.95
Rhabdosphaera spp.	GEOB3602, 0-1cm	7.29	10.69	1.36
Rhabdosphaera spp.	GEOB3602, 0-1cm	9.67	25.69	2.28
Rhabdosphaera spp.	GEOB3602, 0-1cm	9.67	28.69	2.47
Rhabdosphaera spp.	GEOB3602, 0-1cm	7.47	10.24	1.33
Rhabdosphaera spp.	GEOB3602, 0-1cm	7.91	9.32	1.06
Rhabdosphaera spp.	GEOB3602, 0-1cm	6.89	6.49	0.83
Rhabdosphaera spp.	GEOB3602, 0-1cm	5.99	3.41	0.48
Rhabdosphaera spp.	GEOB3602, 0-1cm	7.60	7.22	1.06
Rhabdosphaera spp.	GEOB3602, 0-1cm	7.65	7.30	1.03
Rhabdosphaera spp.	GEOB3602, 0-1cm	6.53	7.11	0.84
Rhabdosphaera spp.	GEOB3602, 0-1cm	8.32	11.13	1.55

Rhabdosphaera spp.	GEOB3602, 0-1cm	6.71	5.13	0.66
Rhabdosphaera spp.	GEOB3602, 0-1cm	7.20	6.87	0.88
Rhabdosphaera spp.	GEOB3602, 0-1cm	6.04	2.77	0.47
Rhabdosphaera spp.	GEOB3602, 0-1cm	9.66	26.65	2.16
Rhabdosphaera spp.	GEOB3602, 0-1cm	9.17	21.72	2.12
Rhabdosphaera spp.	GEOB3602, 0-1cm	10.46	12.81	1.15
Rhabdosphaera spp.	GEOB3602, 0-1cm	10.93	12.77	1.67
Rhabdosphaera spp.	GEOB3602, 0-1cm	10.98	19.75	2.37
Rhabdosphaera spp.	GEOB3602, 0-1cm	11.40	13.18	1.37
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
Calciosolenia spp.	GEOB3602, 0-1cm	6.07	3.28	0.86
Calciosolenia spp.	GEOB3602, 0-1cm	6.75	7.14	1.54
Calciosolenia spp.	GEOB3602, 0-1cm	5.04	1.33	0.36
Calciosolenia spp.	GEOB3602, 0-1cm	5.90	3.35	0.89
Calciosolenia spp.	GEOB3602, 0-1cm	4.70	1.60	0.53
Calciosolenia spp.	GEOB3602, 0-1cm	4.47	1.05	0.30
Calciosolenia spp.	GEOB3602, 0-1cm	4.25	1.38	0.40
Calciosolenia spp.	GEOB3602, 0-1cm	4.25	2.27	0.68
Calciosolenia spp.	GEOB3602, 0-1cm	4.34	1.29	0.31
Calciosolenia spp.	GEOB3602, 0-1cm	4.11	2.27	0.48
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
C. leptoporus	GEOB3602, 0-1cm	4.99	14.11	2.10
C. leptoporus	GEOB3602, 0-1cm	4.54	15.74	2.42
C. leptoporus	GEOB3602, 0-1cm	5.62	18.89	2.57
C. leptoporus	GEOB3602, 0-1cm	5.40	18.06	2.52
C. leptoporus	GEOB3602, 0-1cm	7.38	47.44	4.82
C. leptoporus	GEOB3602, 0-1cm	5.04	22.12	3.02
C. leptoporus	GEOB3602, 0-1cm	5.26	24.93	3.28
C. leptoporus	GEOB3602, 0-1cm	7.47	41.69	4.32
C. leptoporus	GEOB3602, 0-1cm	6.16	24.48	2.94
C. leptoporus	GEOB3602, 0-1cm	5.62	18.70	2.52
C. leptoporus	GEOB3602, 0-1cm	4.45	6.73	1.23
C. leptoporus	DSDP 119-1-1, 31cm	3.69	11.10	2.00
C. leptoporus	DSDP 119-1-1, 31cm	5.85	26.63	3.33
C. leptoporus	DSDP 119-1-1, 31cm	5.04	19.46	2.70
C. leptoporus	DSDP 119-1-1, 31cm	4.01	12.83	2.20
C. leptoporus	DSDP 119-1-1, 31cm	5.67	27.16	3.44
C. leptoporus	DSDP 119-1-1, 31cm	5.13	13.32	2.02
C. leptoporus	DSDP 119-1-1, 31cm	7.56	59.81	5.61
C. leptoporus	DSDP 119-1-1, 31cm	6.07	31.66	3.72
C. leptoporus	DSDP 119-1-1, 31cm	9.94	76.32	6.37
C. leptoporus	DSDP 119-1-1, 31cm	6.93	39.31	4.26
C. leptoporus	DSDP 119-1-1, 31cm	3.78	8.19	1.53

C. leptoporus	DSDP 119-1-1, 31cm	5.13	21.72	3.02
C. leptoporus	DSDP 119-1-1, 31cm	6.66	25.40	3.06
C. leptoporus	DSDP 119-1-1, 31cm	5.71	37.08	4.40
C. leptoporus	DSDP 119-1-1, 31cm	7.02	41.65	4.43
C. leptoporus	GEOB3602, 0-1cm	5.10	11.64	1.79
C. leptoporus	GEOB3602, 0-1cm	4.38	7.59	1.36
C. leptoporus	GEOB3602, 0-1cm	7.47	46.39	4.69
C. leptoporus	GEOB3602, 0-1cm	4.38	10.33	1.72
C. leptoporus	GEOB3602, 0-1cm	8.85	84.70	7.11
C. leptoporus	GEOB3602, 0-1cm	7.38	55.92	5.48
C. leptoporus	GEOB3602, 0-1cm	7.42	22.29	2.74
C. leptoporus	GEOB3602, 0-1cm	6.35	40.54	4.51
C. leptoporus	GEOB3602, 0-1cm	7.91	53.05	5.06
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
Helicosphaera spp.	GEOB3602, 0-1cm	6.30	24.77	3.12
Helicosphaera spp.	GEOB3602, 0-1cm	7.69	51.17	5.23
Helicosphaera spp.	GEOB3602, 0-1cm	6.25	25.84	3.12
Helicosphaera spp.	GEOB3602, 0-1cm	8.77	72.08	6.08
Helicosphaera spp.	GEOB3602, 0-1cm	6.84	39.86	4.32
Helicosphaera spp.	GEOB3602, 0-1cm	6.48	37.21	4.17
Helicosphaera spp.	DSDP 119-1-1, 31cm	6.57	56.96	5.70
Helicosphaera spp.	DSDP 119-1-1, 31cm	9.81	94.37	7.45
Helicosphaera spp.	DSDP 119-1-1, 31cm	7.47	39.81	4.19
Helicosphaera spp.	DSDP 119-1-1, 31cm	8.46	65.26	6.03
Helicosphaera spp.	DSDP 119-1-1, 31cm	5.98	43.16	4.82
Helicosphaera spp.	DSDP 119-1-1, 31cm	9.40	70.37	6.15
Helicosphaera spp.	DSDP 119-1-1, 31cm	5.85	33.09	3.86
Helicosphaera spp.	DSDP 119-1-1, 31cm	9.45	88.58	7.62
Helicosphaera spp.	DSDP 119-1-1, 31cm	7.96	50.59	5.15
Helicosphaera spp.	DSDP 119-1-1, 31cm	10.57	92.54	6.94
Helicosphaera spp.	DSDP 119-1-1, 31cm	7.96	58.76	6.05
Helicosphaera spp.	DSDP 119-1-1, 31cm	9.04	69.67	6.41
Helicosphaera spp.	DSDP 119-1-1, 31cm	8.05	53.18	5.59
Helicosphaera spp.	DSDP 119-1-1, 31cm	6.75	35.02	4.09
Helicosphaera spp.	DSDP 119-1-1, 31cm	6.39	34.97	3.91
Helicosphaera spp.	DSDP 119-1-1, 31cm	9.49	89.01	7.48
Helicosphaera spp.	DSDP 119-1-1, 31cm	9.31	82.23	7.03
Helicosphaera spp.	DSDP 119-1-1, 31cm	7.65	54.50	5.04
Helicosphaera spp.	GEOB3602, 0-1cm	7.69	50.33	5.20
Helicosphaera spp.	GEOB3602, 0-1cm	9.72	92.90	7.70
Helicosphaera spp.	GEOB3602, 0-1cm	9.85	96.22	8.56
Helicosphaera spp.	GEOB3602, 0-1cm	9.21	48.75	4.61
Helicosphaera spp.	GEOB3602, 0-1cm	8.50	58.84	5.36

Helicosphaera spp.	GEOB3602, 0-1cm	9.48	93.06	7.98
Helicosphaera spp.	GEOB3602, 0-1cm	5.63	18.79	2.72
Helicosphaera spp.	GEOB3602, 0-1cm	5.72	26.33	3.61
Helicosphaera spp.	GEOB3602, 0-1cm	5.46	25.89	3.66
Helicosphaera spp.	GEOB3602, 0-1cm	8.41	67.35	6.60
Helicosphaera spp.	GEOB3602, 0-1cm	8.14	63.47	5.89
Helicosphaera spp.	GEOB3602, 0-1cm	7.78	51.84	5.41
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
Syracospahera spp.	GEOB3602, 0-1cm	6.71	7.04	1.31
Syracospahera spp.	GEOB3602, 0-1cm	4.43	3.25	0.68
Syracospahera spp.	GEOB3602, 0-1cm	5.50	11.69	1.79
Syracospahera spp.	GEOB3602, 0-1cm	6.66	6.18	1.22
Syracospahera spp.	GEOB3602, 0-1cm	4.47	2.34	0.55
Syracospahera spp.	GEOB3602, 0-1cm	3.71	3.97	0.89
Syracospahera spp.	GEOB3602, 0-1cm	6.71	10.36	1.71
Syracospahera spp.	GEOB3602, 0-1cm	5.32	5.14	1.05
Syracospahera spp.	GEOB3602, 0-1cm	6.35	7.29	1.34
Syracospahera spp.	GEOB3602, 0-1cm	5.55	7.33	1.30
Syracospahera spp.	GEOB3602, 0-1cm	4.43	3.60	0.79
Syracospahera spp.	GEOB3602, 0-1cm	5.63	4.63	1.01
Syracospahera spp.	GEOB3602, 0-1cm	4.78	4.16	0.86
Syracospahera spp.	GEOB3602, 0-1cm	4.74	6.05	1.12
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.47	3.91	0.84
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.65	3.75	0.83
Umbilicosphaera spp.	GEOB3602, 0-1cm	6.21	25.47	3.11
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.51	5.71	1.11
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.69	4.05	0.84
Umbilicosphaera spp.	GEOB3602, 0-1cm	4.01	5.98	1.15
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.83	6.08	1.15
Umbilicosphaera spp.	GEOB3602, 0-1cm	4.63	11.17	1.80
Umbilicosphaera spp.	GEOB3602, 0-1cm	4.28	11.03	1.83
Umbilicosphaera spp.	GEOB3602, 0-1cm	4.14	6.71	1.26
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.92	5.83	1.09
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.38	3.35	0.74
Umbilicosphaera spp.	GEOB3602, 0-1cm	4.19	6.66	1.21
Umbilicosphaera spp.	GEOB3602, 0-1cm	4.50	2.94	0.68
Umbilicosphaera spp.	GEOB3602, 0-1cm	4.23	2.55	0.65
Umbilicosphaera spp.	GEOB3602, 0-1cm	4.95	7.08	1.20
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.78	3.92	0.85
Umbilicosphaera spp.	GEOB3602, 0-1cm	4.50	4.62	0.93
Umbilicosphaera spp.	GEOB3602, 0-1cm	5.50	6.71	1.20
Umbilicosphaera spp.	GEOB3602, 0-1cm	4.11	1.73	0.48

Umbilicosphaera spp.	GEOB3602, 0-1cm	4.65	5.10	1.00
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.26	0.85	0.27
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.26	2.62	0.64
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.31	2.09	0.55
Umbilicosphaera spp.	GEOB3602, 0-1cm	4.83	17.10	2.47
Umbilicosphaera spp.	GEOB3602, 0-1cm	5.28	20.19	2.75
Umbilicosphaera spp.	GEOB3602, 0-1cm	5.23	20.85	2.84
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.62	3.73	0.83
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.00	4.79	1.07
Umbilicosphaera spp.	GEOB3602, 0-1cm	3.31	4.21	0.88
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
C. pelagicus	DSDP 119-1-1, 31cm	7.42	75.66	7.13
C. pelagicus	DSDP 119-1-1, 31cm	8.37	77.73	6.68
C. pelagicus	DSDP 119-1-1, 31cm	9.63	89.63	7.55
C. pelagicus	DSDP 119-1-1, 31cm	10.12	111.92	8.29
C. pelagicus	DSDP 119-1-1, 31cm	10.44	89.84	7.11
C. pelagicus	DSDP 119-1-1, 31cm	12.06	179.60	11.69
C. pelagicus	DSDP 119-1-1, 31cm	12.28	113.75	8.25
C. pelagicus	DSDP 119-1-1, 31cm	12.33	152.81	10.28
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
Ceratolithus HET	GEOB3602, 0-1cm	6.66	5.84	1.07
Ceratolithus HET	GEOB3602, 0-1cm	7.33	4.88	0.81
Ceratolithus HET	GEOB3602, 0-1cm	6.66	7.56	1.35
Ceratolithus HET	GEOB3602, 0-1cm	5.32	1.62	0.41
Ceratolithus HET	GEOB3602, 0-1cm	7.56	3.78	0.75
Ceratolithus HET	GEOB3602, 0-1cm	5.77	6.80	1.02
Ceratolithus HET	GEOB3602, 0-1cm	8.00	12.69	1.53
Ceratolithus HET	GEOB3602, 0-1cm	6.93	3.92	0.70
Ceratolithus HET	GEOB3602, 0-1cm	5.50	3.24	0.66
Ceratolithus HET	GEOB3602, 0-1cm	9.21	8.38	1.23
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
P. discoporaa	DSDP 119-1-1, 31cm	7.20	65.78	6.27
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
P. multipora	GEOB3602, 0-1cm	6.08	22.78	2.82
P. multipora	GEOB3602, 0-1cm	8.36	36.88	4.01
Species	**Sample**	**Length (µm)**	**Weight (pg)**	**Resolution (pg)**
P. japonica	DSDP 119-1-1, 31cm	7.69	45.34	4.66