

Minnow Environmental
Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
56.8	1.5	49	0.381	6.8	791	1.7	22	0.694	10	905	1.2
57.5	0.650	45	0.728	6.5	705	2.8	9.4	1.3	9.9	807	2.0
58.2	0.393	48	0.418	6.4	856	0.807	5.7	0.762	9.9	979	0.589
58.9	1.1	44	0.388	6.6	713	1.2	16	0.708	10	816	0.844
59.6	1.4	43	0.283	7.2	731	1.6	20	0.517	11	836	1.2
60.3	0.815	47	0.345	6.0	734	0.897	12	0.630	9.1	839	0.654
61.0	0.600	46	0.280	4.7	799	1.8	8.7	0.511	7.2	914	1.3
61.7	0.978	46	0.210	7.3	758	1.1	14	0.383	11	867	0.798
62.4	0.857	39	0.274	6.9	706	1.7	12	0.499	11	807	1.2
63.1	1.1	47	0.403	7.7	698	0.974	16	0.735	12	798	0.710
63.8	1.9	38	0.402	11	830	2.9	28	0.732	17	949	2.1
64.5	0.703	46	0.411	11	752	1.1	10	0.750	16	859	0.797
65.2	0.525	32	0.445	11	742	1.6	7.6	0.812	16	848	1.2
65.9	0.871	36	0.367	11	790	2.3	13	0.670	17	903	1.7
66.6	0.863	34	0.427	9.6	776	1.5	12	0.778	15	887	1.1
67.3	0.712	37	0.462	12	801	2.2	10	0.843	18	916	1.6
68.0	0.764	36	0.281	12	827	1.4	11	0.513	19	946	1.0
68.7	0.584	31	0.427	14	781	1.3	8.4	0.779	21	894	0.927
69.4	1.4	33	0.531	14	886	2.3	20	0.968	21	1014	1.7
70.1	0.672	27	0.586	13	812	1.0	9.7	1.1	20	929	0.762
70.8	1.1	27	0.295	15	770	2.1	15	0.538	22	881	1.5
71.5	0.547	26	0.736	13	819	2.1	7.9	1.3	20	936	1.5
72.2	0.776	31	0.756	15	904	1.5	11	1.4	24	1034	1.1
72.9	0.911	27	0.760	11	859	1.8	13	1.4	17	982	1.3
73.6	0.987	27	0.779	16	811	2.3	14	1.4	25	927	1.7
74.3	1.1	26	0.680	17	851	1.8	15	1.2	25	973	1.3
75.0	0.408	22	0.797	16	1041	1.9	5.9	1.5	25	1190	1.4
75.7	0.545	23	0.522	15	951	1.7	7.9	0.952	23	1088	1.3
76.4	0.831	26	0.867	20	860	1.0	12	1.6	31	983	0.764
77.1	0.707	24	0.572	17	1014	1.8	10	1.0	26	1160	1.3
77.8	0.725	23	0.870	15	858	2.0	10	1.6	23	981	1.4
78.5	0.838	21	0.826	12	919	1.5	12	1.5	19	1051	1.1
79.1	0.823	20	0.815	17	1118	2.0	12	1.5	27	1218	1.4
79.8	0.794	24	1.2	20	1158	3.3	11	2.1	30	1324	2.4
80.5	0.393	22	0.987	18	1032	3.1	5.7	1.8	28	1180	2.3
81.2	0.606	22	0.950	17	1246	2.7	8.7	1.7	26	1425	2.0
81.9	0.586	20	1.1	19	1090	3.1	8.5	2.1	29	1247	2.2
82.6	0.584	20	1.5	21	1204	3.0	8.4	2.8	32	1377	2.2
83.3	0.393	23	0.958	21	1217	2.4	5.7	1.7	32	1392	1.8
84.0	0.697	20	1.4	24	1253	3.0	10	2.6	37	1433	2.2
84.7	0.393	23	1.2	23	1207	3.0	5.7	2.2	35	1380	2.2
85.4	1.0	25	1.7	21	1507	2.3	14	3.2	32	1723	1.7
86.1	0.393	21	1.6	19	1328	2.9	5.7	2.9	30	1519	2.1
86.8	0.552	20	1.1	19	1134	2.3	8.0	2.0	29	1296	1.7
87.5	0.737	18	2.2	23	1226	2.5	11	4.1	35	1402	1.8
88.2	0.942	22	1.1	19	1343	2.7	14	2.0	29	1536	1.9
88.9	0.393	20	1.8	20	1407	2.7	5.7	3.2	31	1609	1.9
89.6	0.857	20	1.9	20	1475	2.7	12	3.5	31	1686	2.0
90.3	0.748	22	1.7	26	1288	2.7	11	3.1	40	1472	2.0
91.0	1.1	19	2.0	24	1307	2.2	16	3.6	36	1495	1.6
91.7	0.910	21	2.0	26	1476	2.6	13	3.7	39	1688	1.9
92.4	0.906	21	1.5	21	1581	4.5	13	2.8	32	1808	3.3
93.1	0.674	20	1.9	26	1551	3.9	9.7	3.4	39	1773	2.8
93.8	0.804	21	2.2	31	1583	3.9	12	4.0	47	1811	2.9
94.5	0.581	23	1.5	27	1625	2.8	8.4	2.8	41	1859	2.1
95.2	1.1	17	1.8	21	1329	4.0	15	3.2	32	1520	2.9
95.9	1.2	18	2.5	22	1564	3.4	18	4.5	34	1789	2.5
96.6	1.5	20	1.7	25	1591	4.7	22	3.1	38	1820	3.4
97.3	1.3	24	2.1	30	1424	4.2	19	3.8	46	1628	3.1
98.0	1.9	22	2.2	23	1586	1.8	28	4.0	35	1814	1.3
98.7	1.2	21	2.1	23	1502	3.1	17	3.7	35	1717	2.2
99.4	1.8	23	2.7	26	1737	4.3	26	5.0	40	1986	3.1
100.1	2.1	23	2.5	26	1595	3.7	30	4.5	39	1824	2.7
100.8	1.1	20	2.6	25	1412	3.5	15	4.7	39	1614	2.6
101.5	2.1	20	2.3	24	1506	3.4	30	4.2	37	1722	2.4
102.2	2.6	19	2.6	26	1542	3.7	37	4.7	41	1763	2.7
102.9	1.6	21	2.7	24	1572	3.1	23	5.0	36	1798	2.2
103.6	3.2	20	2.7	30	1617	3.0	46	5.0	47	1849	2.2
104.3	2.8	21	2.7	26	1589	2.8	40	5.0	40	1817	2.0
105.0	2.2	17	2.8	27	1429	2.1	31	5.1	41	1634	1.5
105.6	2.9	20	2.4	26	1562	3.3	41	4.3	40	1786	2.4
106.3	2.9	20	2.3	30	1690	4.1	42	4.1	46	1933	3.0
107.0	3.3	20	2.7	27	1454	3.2	48	4.9	41	1662	2.4
107.7	3.9	20	2.9	30	1512	4.0	57	5.3	46	1729	2.9
108.4	3.3	18	2.3	23	1312	2.6	47	4.2	36	1501	1.9
109.1	3.5	18	3.0	24	1407	2.8	51	5.4	37	1609	2.0
109.8	4.5	21	2.7	29	1480	3.7	66	4.9	45	1693	2.7
110.5	4.1	17	2.2	22	1378	3.1	59	4.1	33	1576	2.3
111.2	4.0	16	2.2	21	1422	4.4	58	4.1	32	1626	3.2
111.9	4.1	17	3.0	22	1303	3.7	59	5.5	34	1491	2.7
112.6	4.3	17	2.5	26	1454	3.2	61	4.7	40	1663	2.3

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113.3	4.4	16	1.8	22	1390	3.6	64	3.3	33	1590	2.6
114.0	3.6	16	1.7	25	1283	3.0	52	3.1	38	1467	2.2
114.7	4.7	14	2.1	23	1290	3.1	67	3.9	35	1476	2.3
115.4	3.2	16	2.0	19	1284	3.0	46	3.6	29	1468	2.2
116.1	3.4	19	2.4	27	1400	3.0	49	4.5	41	1601	2.2
116.8	4.2	15	1.8	23	1246	1.9	61	3.3	35	1425	1.4
117.5	3.4	14	1.6	22	1189	3.0	49	2.9	34	1359	2.2
118.2	2.4	15	1.9	21	1190	2.5	35	3.5	32	1360	1.9
118.9	3.9	13	2.2	23	1259	3.4	56	4.0	35	1440	2.4
119.6	2.4	15	1.7	16	1062	2.0	35	3.1	24	1214	1.4
120.3	3.4	14	1.8	21	1115	2.7	49	3.2	32	1275	1.9
121.0	3.0	15	1.5	18	1076	2.8	44	2.8	27	1231	2.1
121.7	2.3	14	1.3	18	1212	2.8	34	2.4	28	1386	2.0
122.4	2.6	14	0.897	20	1110	2.2	37	1.6	30	1270	1.6
123.1	2.5	15	1.3	18	1157	2.1	36	2.4	28	1323	1.6
123.8	3.3	16	1.1	19	1128	2.0	48	1.9	29	1290	1.5
124.5	2.5	12	1.2	17	1213	2.1	37	2.3	27	1387	1.5
125.2	2.3	15	1.2	15	1145	2.2	33	2.1	24	1310	1.6
125.9	1.9	13	1.2	17	1137	2.6	28	2.2	27	1300	1.9
126.6	2.5	14	1.1	15	1204	1.7	36	1.9	23	1377	1.2
127.3	2.1	12	1.1	15	934	1.7	30	1.9	23	1068	1.2
128.0	2.0	11	1.2	15	1159	2.4	29	2.2	23	1326	1.8
128.7	1.6	11	0.875	14	1087	1.9	23	1.6	21	1243	1.4
129.4	2.0	14	1.4	16	1221	3.1	29	2.6	25	1396	2.3
130.1	2.6	12	0.710	15	1081	2.0	37	1.3	23	1237	1.5
130.8	2.1	9.8	0.565	17	1089	1.9	31	1.0	27	1245	1.4
131.5	2.1	11	1.1	12	1061	1.5	30	1.9	18	1213	1.1
132.1	2.5	11	0.956	13	1038	2.2	36	1.7	21	1186	1.6
132.8	2.2	11	1.0	14	1101	2.8	31	1.9	21	1259	2.0
133.5	2.0	12	0.830	12	1095	2.3	29	1.5	19	1252	1.7
134.2	2.3	12	0.847	14	1022	1.8	32	1.5	22	1169	1.3
134.9	1.9	12	1.1	17	1061	2.5	27	2.0	25	1213	1.8
135.6	1.5	12	1.3	14	1069	2.2	22	2.4	22	1222	1.6
136.3	1.8	11	1.2	18	1063	2.3	26	2.3	28	1215	1.7
137.0	2.8	14	0.609	14	1014	2.5	41	1.1	21	1159	1.8
137.7	1.8	14	1.1	13	968	0.933	27	2.0	20	1107	0.681
138.4	1.4	13	0.753	15	974	1.6	20	1.4	23	1114	1.2
139.1	2.9	13	1.1	11	1021	2.9	42	2.0	17	1167	2.1
139.8	1.4	14	0.731	19	984	3.0	20	1.3	29	1125	2.2
140.5	1.4	11	0.811	14	967	1.2	20	1.5	22	1106	0.866
141.2	2.0	9.0	0.792	12	907	2.1	28	1.4	19	1038	1.5
141.9	2.1	11	0.898	14	928	1.6	30	1.6	21	1061	1.2
142.6	2.3	13	0.998	19	1121	2.0	33	1.8	30	1282	1.5
143.3	1.4	13	0.775	15	880	1.6	21	1.4	23	1007	1.2
144.0	1.9	12	0.886	14	903	2.9	28	1.6	22	1033	2.1
144.7	1.6	12	0.526	13	951	1.7	24	0.959	20	1087	1.2
145.4	1.7	10	0.574	12	940	1.7	24	1.0	19	1074	1.2
146.1	1.3	12	0.850	16	877	1.4	19	1.6	24	1003	1.0
146.8	1.5	12	0.686	14	932	1.5	22	1.3	21	1065	1.1
147.5	1.2	12	0.734	12	865	1.1	18	1.3	18	989	0.782
148.2	1.5	10	0.578	13	771	1.4	22	1.1	20	882	0.989
148.9	1.1	11	0.779	12	859	2.8	17	1.4	18	982	2.0
149.6	2.0	13	0.787	15	850	1.7	29	1.4	22	972	1.3
150.3	1.6	9.5	0.584	13	833	2.2	23	1.1	20	953	1.6
151.0	1.5	11	0.343	11	795	1.1	22	0.625	17	910	0.785
151.7	0.966	11	0.614	12	791	1.5	14	1.1	18	904	1.1
152.4	1.2	14	0.377	12	886	1.9	17	0.687	19	1013	1.4
153.1	1.8	15	0.579	15	804	1.3	25	1.1	23	919	0.923
153.8	1.7	11	0.509	11	809	1.7	24	0.929	17	925	1.2
154.5	1.2	12	0.628	12	794	1.2	18	1.1	19	907	0.900
155.2	0.918	13	0.253	13	866	1.5	13	0.462	20	990	1.1
155.9	0.568	12	0.738	13	745	1.0	8.2	1.3	19	852	0.764
156.6	0.393	14	0.511	14	854	1.5	5.7	0.931	21	977	1.1
157.3	0.956	12	0.480	13	753	1.7	14	0.875	19	861	1.3
157.9	0.717	12	0.368	15	805	1.1	10	0.671	23	920	0.822
158.6	0.928	11	0.582	15	818	1.6	13	1.1	23	935	1.2
159.3	1.7	14	0.690	17	910	2.3	24	1.3	26	1041	1.7
160.0	0.537	13	0.567	14	851	2.7	7.8	1.0	21	973	2.0
160.7	0.895	12	0.334	16	786	1.8	13	0.609	25	899	1.3
161.4	2.1	12	0.474	15	905	1.6	30	0.864	23	1035	1.2
162.1	1.5	12	0.722	15	849	1.6	21	1.3	23	970	1.2
162.8	0.501	16	0.529	14	813	2.6	7.2	0.965	21	929	1.9
163.5	1.5	14	0.430	14	762	1.7	22	0.784	22	871	1.2
164.2	0.736	12	0.433	14	753	2.3	11	0.791	22	862	1.7
164.9	0.606	12	0.658	16	908	1.4	8.8	1.2	24	1039	1.0
165.6	1.1	14	0.899	15	829	2.5	16	1.6	23	948	1.8
166.3	1.3	13	0.345	16	734	2.3	19	0.630	24	839	1.7
167.0	0.875	12	0.482	14	696	2.3	13	0.879	22	796	1.7
167.7	0.393	15	0.327	13	711	2.6	5.7	0.597	20	813	1.9
168.4	0.902	11	0.453	16	714	2.0	13	0.826	24	816	1.4
169.1	1.1	14	0.469	17	808	3.0	15	0.855	26	924	2.2

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169.8	1.5	13	0.616	19	789	1.7	21	1.1	30	903	1.3
170.5	1.4	15	0.839	16	778	1.8	20	1.5	24	890	1.3
171.2	0.393	14	0.487	16	830	2.5	5.7	0.888	25	949	1.8
171.9	1.1	15	0.704	18	742	2.5	16	1.3	28	849	1.8
172.6	0.613	18	0.791	18	863	1.7	8.8	1.4	28	987	1.2
173.3	0.796	15	0.645	20	726	2.4	11	1.2	31	830	1.8
174.0	0.790	15	0.559	14	805	2.0	11	1.0	22	921	1.5
174.7	0.763	15	0.660	15	790	1.3	11	1.2	23	904	0.953
175.4	0.419	16	0.445	18	830	1.6	6.0	0.812	27	949	1.2
176.1	0.790	15	0.531	20	848	1.9	11	0.968	31	969	1.4
176.8	1.1	16	0.745	21	807	2.5	15	1.4	33	923	1.8
177.5	1.1	15	0.758	20	938	2.6	15	1.4	30	1072	1.9
178.2	0.787	16	0.542	16	835	2.0	11	0.989	24	955	1.5
178.9	0.971	18	0.977	17	838	2.2	14	1.8	26	958	1.6
179.6	1.0	16	0.790	20	924	2.3	15	1.4	31	1056	1.7
180.3	1.1	14	0.576	19	729	1.9	15	1.0	29	834	1.4
181.0	0.574	15	1.0	20	829	2.0	8.3	1.9	31	948	1.5
181.7	1.4	17	1.0	18	878	2.3	20	1.8	27	1004	1.7
182.4	1.2	19	0.886	25	935	3.7	18	1.6	38	1069	2.7
183.1	0.920	17	1.1	22	861	2.3	13	2.1	34	984	1.7
183.7	0.520	17	0.871	19	830	1.5	7.5	1.6	30	949	1.1
184.4	1.0	16	0.924	28	966	3.1	15	1.7	43	1104	2.3
185.1	0.393	17	0.864	21	956	3.4	5.7	1.6	32	1094	2.5
185.8	0.789	21	1.0	25	957	2.1	11	1.9	38	1094	1.5
186.5	0.723	14	0.924	21	794	1.9	10	1.7	33	908	1.4
187.2	1.4	15	0.904	17	902	1.6	20	1.6	26	1031	1.2
187.9	1.0	20	1.2	19	1019	2.4	15	2.1	29	1165	1.7
188.6	0.624	18	1.1	24	974	3.0	9.0	2.1	37	1114	2.2
189.3	0.719	16	1.2	25	877	2.7	10	2.1	38	1002	2.0
190.0	0.733	19	1.1	19	911	2.7	11	2.0	30	1042	2.0
190.7	0.619	13	0.975	23	921	1.6	8.9	1.8	35	1053	1.1
191.4	0.710	15	0.908	18	894	3.0	10	1.7	27	1022	2.2
192.1	0.911	17	1.0	28	986	2.3	13	1.9	42	1127	1.7
192.8	0.712	16	1.3	24	945	2.7	10	2.3	37	1080	2.0
193.5	0.897	16	0.765	23	954	1.7	13	1.4	35	1091	1.3
194.2	0.849	15	1.2	20	943	2.1	12	2.1	31	1078	1.5
194.9	0.915	15	1.2	25	990	2.0	13	2.2	38	1132	1.5
195.6	0.393	17	1.2	25	1143	2.5	5.7	2.3	38	1307	1.8
196.3	1.2	20	1.1	27	1053	3.2	18	2.0	42	1204	2.4
197.0	1.4	18	1.5	27	1033	1.4	20	2.7	41	1182	1.0
197.7	0.655	17	1.6	20	1008	3.8	9.5	2.9	31	1153	2.8
198.4	1.0	17	1.4	28	1180	3.2	15	2.6	43	1350	2.4
199.1	0.644	18	1.6	29	1200	4.0	9.3	2.9	45	1372	2.9
199.8	0.541	20	1.5	30	1112	2.9	7.8	2.7	45	1271	2.1
200.5	0.448	17	1.3	23	1046	2.2	6.5	2.4	35	1196	1.6
201.2	0.684	16	1.4	23	1170	1.5	9.9	2.6	36	1338	1.1
201.9	1.6	15	2.0	27	1259	4.1	23	3.7	42	1439	3.0
202.6	1.1	18	2.2	32	1148	2.4	15	3.9	50	1313	1.7
203.3	0.615	19	1.5	29	1148	3.3	8.9	2.7	45	1313	2.4
204.0	0.852	17	1.6	27	1138	2.3	12	3.0	41	1302	1.7
204.7	1.2	19	1.9	23	1158	2.9	17	3.4	36	1324	2.1
205.4	0.643	18	1.9	34	1315	3.9	9.3	3.5	52	1504	2.9
206.1	1.1	17	1.8	26	1094	2.8	16	3.2	39	1251	2.1
206.8	1.3	20	1.9	31	1244	3.9	19	3.5	48	1423	2.8
207.5	0.493	17	1.7	28	1255	3.2	7.1	3.2	43	1436	2.3
208.2	0.713	17	1.9	29	1290	2.7	10	3.5	45	1475	2.0
208.9	1.1	20	2.2	36	1355	3.1	16	3.9	55	1549	2.3
209.6	1.2	19	2.4	37	1286	3.7	18	4.4	56	1471	2.7
210.2	0.903	18	2.4	29	1208	3.1	13	4.3	45	1382	2.3
210.9	1.5	19	2.4	29	1349	2.5	21	4.3	45	1543	1.8
211.6	1.5	21	2.4	31	1530	2.4	21	4.5	47	1749	1.8
212.3	1.6	22	2.6	39	1464	3.2	24	4.7	59	1675	2.3
213.0	1.7	21	2.3	35	1495	2.9	25	4.1	53	1709	2.1
213.7	0.723	22	2.2	32	1288	3.0	10	4.1	49	1473	2.2
214.4	1.9	20	2.9	35	1535	2.3	27	5.3	53	1755	1.6
215.1	1.2	20	2.7	32	1449	2.8	18	4.9	49	1657	2.1
215.8	2.2	19	2.7	35	1367	3.5	31	4.8	54	1563	2.5
216.5	1.8	22	2.9	35	1441	2.9	26	5.2	54	1647	2.1
217.2	2.0	17	3.0	34	1430	3.4	29	5.5	52	1636	2.5
217.9	2.5	18	3.4	31	1509	3.3	37	6.3	47	1726	2.4
218.6	3.1	18	3.3	36	1636	3.1	45	6.1	56	1871	2.3
219.3	2.2	21	3.6	43	1741	3.0	32	6.6	65	1991	2.2
220.0	1.7	20	3.2	37	1595	3.5	24	5.8	57	1823	2.5
220.7	2.9	19	3.2	33	1607	2.9	41	5.8	51	1837	2.1
221.4	2.0	20	3.9	40	1666	4.4	29	7.1	61	1905	3.2
222.1	3.2	22	3.8	38	1744	3.5	46	6.9	59	1995	2.5
222.8	3.2	21	4.5	39	1439	2.2	46	8.2	60	1645	1.6
223.5	2.4	18	3.6	33	1483	2.8	34	6.6	51	1696	2.0
224.2	3.9	20	3.6	42	1689	3.3	56	6.5	64	1931	2.4
224.9	3.3	21	3.6	39	1460	2.2	48	6.6	59	1670	1.6
225.6	4.1	23	4.1	46	1680	4.4	59	7.4	71	1921	3.2

Minnow Environmental
Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
226.3	3.4	19	3.7	41	1470	2.2	49	6.7	63	1681	1.6
227.0	3.1	19	4.0	37	1735	2.7	44	7.2	56	1984	2.0
227.7	3.2	16	4.1	30	1434	2.6	46	7.4	45	1640	1.9
228.4	4.3	16	4.0	38	1557	2.3	62	7.3	58	1780	1.7
229.1	3.0	22	3.9	37	1591	3.0	44	7.2	57	1819	2.2
229.8	3.8	20	3.2	40	1678	3.0	55	5.9	61	1919	2.2
230.5	3.8	16	3.4	34	1412	2.0	54	6.1	52	1615	1.5
231.2	3.1	17	4.0	35	1572	2.5	44	7.3	53	1798	1.8
231.9	4.0	18	3.7	39	1787	3.3	58	6.7	60	2043	2.4
232.6	3.6	22	4.0	47	1697	3.3	52	7.2	72	1940	2.4
233.3	3.4	16	3.9	38	1391	2.2	49	7.1	58	1591	1.6
234.0	3.8	17	3.6	32	1711	2.6	55	6.5	49	1956	1.9
234.7	4.1	20	4.3	39	1533	2.6	59	7.8	59	1753	1.9
235.4	5.2	21	5.8	47	1892	4.0	76	11	72	2164	2.9
236.0	3.3	20	4.9	36	1512	3.0	48	8.9	55	1729	2.2
236.7	3.9	18	4.2	36	1723	3.1	57	7.7	56	1970	2.3
237.4	5.9	16	3.6	37	1616	2.4	86	6.6	57	1848	1.7
238.1	5.4	18	4.9	39	1652	2.9	77	8.9	60	1889	2.1
238.8	7.3	18	4.1	41	1472	2.4	105	7.5	63	1683	1.8
239.5	5.5	17	4.3	42	1592	2.6	79	7.8	65	1820	1.9
240.2	5.0	15	4.1	33	1368	2.5	73	7.5	50	1564	1.9
240.9	4.9	14	3.9	33	1478	3.4	71	7.2	50	1690	2.5
241.6	7.3	17	5.2	33	1618	3.8	106	9.5	51	1850	2.8
242.3	5.0	17	3.8	31	1331	2.4	71	6.9	47	1523	1.8
243.0	6.1	19	4.4	38	1681	3.3	89	8.1	58	1922	2.4
243.7	6.1	16	3.7	34	1516	3.2	88	6.8	52	1734	2.3
244.4	6.7	17	3.9	28	1534	2.0	96	7.2	44	1754	1.5
245.1	5.4	17	4.3	28	1290	2.6	77	7.9	43	1475	1.9
245.8	6.0	18	3.9	35	1311	3.4	87	7.0	53	1499	2.5
246.5	5.7	15	3.5	36	1367	2.5	82	6.4	55	1564	1.8
247.2	6.5	15	3.7	28	1553	2.1	94	6.7	43	1776	1.5
247.9	6.2	16	3.5	28	1389	2.6	90	6.5	42	1588	1.9
248.6	9.3	16	4.2	29	1425	2.2	134	7.7	45	1630	1.6
249.3	6.2	16	4.2	31	1255	4.2	90	7.7	48	1435	3.1
250.0	6.0	15	3.5	29	1345	2.1	86	6.3	44	1538	1.5
250.7	7.8	14	3.1	30	1264	1.7	113	5.6	45	1446	1.3
251.4	7.2	15	3.8	28	1431	2.5	104	6.9	43	1637	1.9
252.1	6.2	17	3.3	28	1271	2.3	89	6.0	43	1453	1.7
252.8	5.0	17	2.6	27	1153	2.1	73	4.7	41	1318	1.6
253.5	5.6	12	2.1	26	1332	1.8	82	3.8	40	1523	1.3
254.2	5.6	13	2.8	23	1225	1.9	81	5.2	35	1401	1.4
254.9	5.5	14	3.4	25	1341	2.9	79	6.2	39	1533	2.1
255.6	5.4	15	2.1	23	1125	2.6	78	3.8	35	1287	1.9
256.3	4.6	12	2.4	23	992	2.4	67	4.4	35	1134	1.7
257.0	5.0	10	2.0	15	991	1.3	72	3.7	23	1133	0.957
257.7	5.1	12	1.5	20	1019	1.9	74	2.7	30	1166	1.4
258.4	4.8	13	2.4	25	1190	3.1	69	4.3	38	1360	2.3
259.1	4.4	12	1.6	21	1002	2.5	64	3.0	32	1146	1.8
259.8	3.8	13	1.6	20	997	1.1	55	2.9	31	1140	0.833
260.5	4.1	10	1.6	16	1074	1.9	59	2.9	25	1228	1.4
261.2	4.5	14	1.5	17	988	2.0	66	2.8	26	1129	1.5
261.8	4.0	12	1.5	21	1089	1.5	58	2.8	33	1245	1.1
262.5	3.4	11	1.1	16	933	1.8	49	2.0	24	1067	1.3
263.2	3.8	12	1.2	14	915	1.5	55	2.2	22	1046	1.1
263.9	2.9	9.4	1.3	14	978	1.8	42	2.4	22	1119	1.3
264.6	2.8	12	1.0	19	923	1.3	40	1.9	29	1056	0.951
265.3	3.7	12	0.917	19	1057	2.5	53	1.7	29	1209	1.9
266.0	2.7	9.8	0.706	13	882	2.3	39	1.3	19	1008	1.7
266.7	3.2	9.6	1.1	14	1107	1.9	46	2.0	22	1266	1.4
267.4	2.9	11	0.993	12	880	1.0	42	1.8	19	1006	0.730
268.1	3.0	10	0.866	12	1014	1.5	43	1.6	18	1160	1.1
268.8	2.6	12	0.732	17	999	1.5	37	1.3	25	1143	1.1
269.5	2.4	12	1.2	13	955	2.3	35	2.2	20	1092	1.7
270.2	1.7	11	0.635	9.2	930	1.5	25	1.2	14	1063	1.1
270.9	2.3	11	0.906	16	992	2.1	34	1.7	24	1135	1.5
271.6	2.3	11	0.763	14	1047	0.787	34	1.4	21	1197	0.574
272.3	1.7	13	0.415	9.2	827	1.1	25	0.756	14	945	0.816
273.0	2.3	11	0.515	12	880	1.1	33	0.940	18	1007	0.821
273.7	1.8	12	0.423	11	898	2.1	26	0.772	17	1027	1.5
274.4	1.5	10.0	0.701	13	1020	1.3	22	1.3	20	1166	0.980
275.1	1.9	15	0.631	15	965	1.7	27	1.2	23	1104	1.2
275.8	1.5	14	0.762	15	871	2.1	22	1.4	24	996	1.5
276.5	0.744	12	0.561	19	856	1.6	11	1.0	29	978	1.2
277.2	0.964	13	0.760	14	963	1.9	14	1.4	21	1101	1.4
277.9	1.3	16	0.669	14	944	1.3	18	1.2	22	1080	0.957
278.6	0.837	17	0.655	16	963	2.3	12	1.2	24	1101	1.6
279.3	0.538	13	0.617	16	827	1.7	7.8	1.1	25	946	1.2
280.0	1.1	11	0.609	13	968	1.5	16	1.1	20	1107	1.1
280.7	0.879	13	0.491	14	948	1.4	13	0.895	22	1084	1.0
281.4	1.4	15	0.455	18	841	2.3	20	0.830	28	962	1.7
282.1	1.2	16	0.552	18	939	1.1	18	1.0	27	1073	0.774

Minnow Environmental
Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
282.8	0.856	13	0.403	17	812	2.8	12	0.734	27	928	2.0
283.5	1.2	12	0.575	17	909	2.3	17	1.0	26	1039	1.7
284.2	1.1	15	0.843	21	1013	1.2	15	1.5	32	1158	0.878
284.9	1.0	18	0.786	17	935	2.5	15	1.4	27	1069	1.8
285.6	1.1	16	0.389	22	873	2.6	16	0.709	33	998	1.9
286.3	0.393	16	0.520	23	1043	1.6	5.7	0.949	35	1192	1.2
287.0	0.791	14	0.804	19	971	2.0	11	1.5	29	1111	1.5
287.7	0.961	15	0.780	15	1039	2.5	14	1.4	23	1188	1.8
288.3	0.872	16	1.0	22	1035	2.1	13	1.9	33	1184	1.5
289.0	0.697	17	0.564	19	994	1.8	10	1.0	30	1137	1.3
289.7	0.393	17	1.1	24	1069	1.9	5.7	2.1	38	1223	1.4
290.4	0.575	14	0.743	17	1037	1.7	8.3	1.4	27	1186	1.2
291.1	1.2	17	0.931	23	1021	2.0	18	1.7	35	1168	1.5
291.8	0.560	20	1.1	27	1140	3.6	8.1	2.0	42	1304	2.6
292.5	1.3	17	0.706	25	1134	1.5	18	1.3	38	1297	1.1
293.2	1.0	14	0.882	21	962	2.2	15	1.6	32	1100	1.6
293.9	0.485	14	0.832	18	1041	2.1	7.0	1.5	28	1191	1.5
294.6	1.3	19	1.1	23	1111	3.9	18	2.0	35	1271	2.8
295.3	0.907	18	0.899	25	1215	3.6	13	1.6	39	1390	2.7
296.0	1.3	18	1.0	22	1145	2.2	18	1.9	33	1310	1.6
296.7	0.704	14	0.822	24	1050	1.9	10	1.5	37	1200	1.4
297.4	1.4	17	0.962	26	1170	1.9	21	1.8	40	1337	1.4
298.1	0.629	20	0.864	33	1339	2.7	9.1	1.6	51	1532	2.0
298.8	0.856	17	1.0	32	1237	2.5	12	1.8	50	1414	1.8
299.5	0.656	17	0.957	25	1129	1.8	9.5	1.7	38	1291	1.3
300.2	1.1	16	1.0	27	1272	2.5	16	1.8	41	1455	1.8
300.9	0.752	19	1.0	29	1364	2.2	11	1.9	44	1560	1.6
301.6	0.838	17	0.896	32	1318	3.1	12	1.6	49	1507	2.2
302.3	0.422	17	0.736	34	1314	3.0	6.1	1.3	52	1502	2.2
303.0	0.393	17	1.2	30	1296	2.9	5.7	2.2	45	1482	2.1
303.7	0.940	15	1.2	26	1423	2.1	14	2.1	40	1627	1.5
304.4	0.849	17	1.3	30	1431	3.3	12	2.4	47	1637	2.4
305.1	0.833	16	1.0	35	1430	3.9	12	1.9	54	1635	2.9
305.8	0.547	16	1.1	29	1279	2.8	7.9	2.0	45	1463	2.1
306.5	0.699	17	1.4	30	1538	2.7	10	2.5	47	1758	1.9
307.2	0.974	15	1.5	27	1393	2.5	14	2.8	42	1593	1.8
307.9	0.730	16	1.3	34	1663	3.0	11	2.4	52	1902	2.2
308.6	0.393	19	1.3	36	1293	2.8	5.7	2.4	55	1479	2.0
309.3	0.810	15	1.1	38	1461	3.2	12	2.0	59	1671	2.3
310.0	0.766	16	1.1	36	1526	2.6	11	2.0	56	1745	1.9
310.7	0.755	14	0.945	30	1531	2.5	11	1.7	45	1750	1.8
311.4	0.745	20	1.3	36	1534	2.9	11	2.4	55	1754	2.2
312.1	1.4	17	0.958	29	1294	2.8	21	1.7	44	1480	2.1
312.8	0.856	15	1.2	36	1478	1.6	12	2.2	55	1690	1.1
313.5	0.575	15	1.5	28	1307	2.6	8.3	2.7	43	1494	1.9
314.2	1.4	17	1.4	34	1530	3.1	20	2.5	51	1750	2.2
314.9	0.905	16	1.5	36	1532	3.2	13	2.8	55	1752	2.3
315.5	0.800	18	1.4	39	1410	3.8	12	2.6	60	1613	2.8
316.2	0.737	14	1.1	34	1495	2.5	11	2.0	52	1710	1.8
316.9	1.7	16	0.897	26	1508	1.9	24	1.6	39	1724	1.4
317.6	2.5	17	1.5	37	1689	4.3	35	2.7	57	1931	3.1
318.3	2.3	17	1.3	33	1439	2.4	33	2.4	51	1645	1.8
319.0	1.5	16	1.1	33	1411	3.1	22	2.1	50	1614	2.2
319.7	1.6	14	1.2	32	1463	3.5	23	2.3	50	1673	2.5
320.4	2.2	13	1.1	27	1470	2.2	32	2.0	42	1681	1.6
321.1	2.5	16	1.7	36	1607	3.4	37	3.2	55	1838	2.5
321.8	2.2	16	1.3	38	1347	3.7	32	2.4	58	1540	2.7
322.5	1.6	17	1.5	34	1343	2.4	24	2.8	53	1536	1.8
323.2	2.1	14	1.1	34	1364	2.6	31	2.0	52	1560	1.9
323.9	2.7	15	1.7	29	1386	2.6	39	3.1	45	1585	1.9
324.6	2.6	16	1.6	35	1422	3.1	37	2.9	53	1626	2.3
325.3	2.2	17	1.3	32	1233	3.1	32	2.3	50	1410	2.2
326.0	1.5	16	1.0	29	1348	2.2	22	1.9	45	1541	1.6
326.7	1.2	14	1.1	24	1238	2.5	18	2.0	37	1416	1.8
327.4	1.7	13	1.1	25	1245	2.5	25	1.9	39	1423	1.8
328.1	1.6	18	0.765	25	1113	2.7	23	1.4	39	1272	2.0
328.8	1.1	13	0.963	29	1002	2.5	16	1.8	45	1146	1.8
329.5	1.3	13	0.674	24	1155	2.6	19	1.2	37	1321	1.9
330.2	1.3	11	1.1	21	1152	2.5	19	2.1	32	1317	1.8
330.9	1.7	12	0.774	23	1217	2.6	24	1.4	35	1392	1.9
331.6	1.2	14	0.967	23	1048	1.6	17	1.8	35	1199	1.1
332.3	1.2	14	0.762	23	1051	1.8	18	1.4	35	1202	1.3
333.0	1.6	8.5	0.705	17	894	2.5	22	1.3	26	1022	1.8
333.7	1.3	13	0.614	23	1239	3.1	19	1.1	35	1417	2.3
334.4	1.1	13	0.699	22	1153	2.6	16	1.3	33	1319	1.9
335.1	1.0	13	0.768	18	987	2.4	15	1.4	28	1129	1.8
335.8	1.4	11	0.554	18	1003	1.7	21	1.0	27	1147	1.3
336.5	1.3	11	0.717	18	1057	2.2	19	1.3	27	1209	1.6
337.2	1.1	9.6	0.655	20	946	1.7	16	1.2	30	1082	1.2
337.9	1.3	13	0.564	18	1016	1.9	19	1.0	28	1162	1.4
338.6	1.4	13	0.568	19	939	1.6	20	1.0	29	1074	1.1

Minnow Environmental
Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
339.3	1.0	11	0.480	19	956	2.1	14	0.875	29	1093	1.5
340.0	0.720	9.3	0.306	19	942	1.2	10	0.558	29	1077	0.895
340.7	1.7	11	0.512	19	1155	2.4	25	0.933	28	1321	1.8
341.4	0.804	11	0.555	14	1107	3.4	12	1.0	21	1266	2.5
342.0	1.6	10	0.421	15	967	1.4	23	0.768	23	1106	1.1
342.7	1.2	9.9	0.408	14	1024	1.8	18	0.745	21	1171	1.3
343.4	0.899	10	0.426	11	1077	2.2	13	0.777	17	1231	1.6
344.1	0.985	12	0.727	16	994	1.9	14	1.3	25	1137	1.4
344.8	0.805	11	0.318	17	899	2.1	12	0.580	26	1028	1.5
345.5	0.676	8.4	0.242	15	995	1.3	9.8	0.441	23	1137	0.982
346.2	0.652	7.8	0.548	10	897	1.7	9.4	0.999	16	1026	1.2
346.9	0.571	9.5	0.365	14	1061	0.948	8.2	0.666	22	1213	0.692
347.6	1.3	12	0.540	14	1031	2.2	19	0.985	22	1179	1.6
348.3	0.743	8.5	0.174	14	920	1.4	11	0.318	21	1052	0.996
349.0	0.482	9.0	0.454	12	1001	1.5	7.0	0.829	18	1145	1.1
349.7	0.509	6.9	0.453	8.1	1006	1.4	7.4	0.826	12	1150	1.0
350.4	0.462	10	0.347	12	956	1.3	6.7	0.633	18	1094	0.938
351.1	0.868	14	0.392	14	971	1.7	13	0.714	22	1110	1.2
351.8	0.768	9.4	0.440	13	835	1.4	11	0.802	19	955	1.0
352.5	0.624	11	0.433	14	1092	1.7	9.0	0.790	22	1249	1.2
353.2	0.610	12	0.377	11	1016	1.2	8.8	0.687	17	1162	0.894
353.9	0.883	11	0.301	13	1090	1.7	13	0.548	20	1247	1.3
354.6	1.1	14	0.579	21	1015	1.8	16	1.1	32	1161	1.3
355.3	0.628	13	0.323	19	1040	1.0	9.1	0.589	29	1190	0.761
356.0	0.766	14	0.529	15	951	0.804	11	0.966	23	1088	0.586
356.7	0.846	14	0.592	17	1107	1.3	12	1.1	25	1266	0.981
357.4	1.3	16	0.537	17	1115	1.6	19	0.979	25	1275	1.2
358.1	0.946	15	0.424	22	998	2.4	14	0.774	33	1141	1.7
358.8	1.5	17	1.1	21	1023	1.9	22	2.0	32	1170	1.4
359.5	0.424	14	0.696	16	921	1.7	6.1	1.3	25	1054	1.3
360.2	0.608	17	0.575	14	956	1.2	8.8	1.0	22	1094	0.883
360.9	1.2	18	0.618	20	927	2.3	17	1.1	30	1060	1.7
361.6	0.393	16	0.887	14	836	2.1	5.7	1.6	21	956	1.5
362.3	0.875	14	0.646	18	934	1.1	13	1.2	27	1068	0.825
363.0	1.1	15	0.688	15	956	2.7	16	1.3	23	1093	2.0
363.7	0.853	17	0.596	20	957	1.5	12	1.1	31	1095	1.1
364.4	0.483	20	0.843	27	955	2.2	7.0	1.5	41	1092	1.6
365.1	0.411	17	0.724	22	990	2.0	5.9	1.3	34	1132	1.4
365.8	0.755	15	0.573	23	808	1.4	11	1.0	35	924	1.0
366.5	0.753	17	0.993	24	984	1.4	11	1.8	37	1125	1.0
367.2	1.0	14	0.834	25	951	2.1	15	1.5	38	1087	1.5
367.8	0.594	17	0.726	25	912	2.1	8.6	1.3	38	1043	1.5
368.5	1.7	19	0.623	34	1044	3.1	24	1.1	51	1194	2.2
369.2	0.896	16	0.770	23	886	1.5	13	1.4	35	1013	1.1
369.9	0.598	15	0.906	28	1051	2.6	8.6	1.7	43	1202	1.9
370.6	1.2	16	0.892	24	950	2.7	18	1.6	37	1087	2.0
371.3	0.730	22	1.0	26	895	3.1	11	1.9	39	1023	2.2
372.0	0.816	19	0.598	26	942	2.3	12	1.1	41	1077	1.7
372.7	0.727	15	0.689	23	926	2.6	10	1.3	35	1059	1.9
373.4	0.826	14	0.710	25	884	2.6	12	1.3	38	1011	1.9
374.1	1.1	19	0.913	29	973	2.4	16	1.7	45	1112	1.8
374.8	0.600	19	0.733	29	986	2.9	8.7	1.3	45	1128	2.1
375.5	0.834	16	0.653	31	875	1.2	12	1.2	47	1000	0.893
376.2	0.421	17	1.1	26	955	2.5	6.1	2.0	40	1093	1.8
376.9	0.393	17	0.795	28	968	2.6	5.7	1.5	43	1107	1.9
377.6	0.604	21	0.692	29	933	3.2	8.7	1.3	45	1067	2.4
378.3	0.393	18	1.0	30	827	1.9	5.7	1.8	46	946	1.4
379.0	0.805	17	0.896	34	927	3.4	12	1.6	52	1060	2.5
379.7	0.430	17	0.929	29	1042	2.8	6.2	1.7	44	1191	2.0
380.4	1.0	18	1.0	36	978	2.6	15	1.9	55	1118	1.9
381.1	1.1	22	1.2	32	876	3.6	15	2.2	49	1001	2.6
381.8	0.628	18	1.3	36	893	3.4	9.1	2.4	55	1021	2.5
382.5	1.0	15	0.989	31	899	3.6	15	1.8	48	1028	2.6
383.2	0.398	14	1.2	30	995	3.8	5.7	2.3	46	1138	2.8
383.9	0.393	17	0.998	32	1037	2.8	5.7	1.8	49	1186	2.0
384.6	0.595	18	1.0	37	976	1.6	8.6	1.9	56	1116	1.2
385.3	0.393	18	1.2	40	917	3.3	5.7	2.2	62	1048	2.4
386.0	0.527	17	1.1	31	958	3.3	7.6	2.0	47	1096	2.4
386.7	0.393	20	1.6	32	1086	2.9	5.7	3.0	49	1242	2.1
387.4	0.860	21	1.2	38	1037	3.5	12	2.1	58	1186	2.6
388.1	0.486	19	1.4	38	988	3.1	7.0	2.6	58	1129	2.3
388.8	0.569	18	1.3	37	1060	2.8	8.2	2.4	56	1212	2.1
389.5	0.393	15	1.1	38	1024	2.8	5.7	2.1	58	1171	2.1
390.2	0.910	19	1.8	40	1065	3.9	13	3.3	61	1218	2.8
390.9	0.577	21	1.7	42	1027	3.6	8.3	3.0	64	1174	2.6
391.6	0.393	19	1.5	44	1106	2.6	5.7	2.8	67	1265	1.9
392.3	0.437	19	0.877	41	1236	2.9	6.3	1.6	63	1413	2.1
393.0	0.857	17	1.5	40	1004	2.3	12	2.8	62	1148	1.7
393.6	0.491	20	2.0	45	1209	2.5	7.1	3.6	69	1382	1.8
394.3	0.455	21	1.5	45	1121	2.4	6.6	2.8	69	1282	1.8
395.0	0.393	18	1.3	40	1061	2.2	5.7	2.4	61	1213	1.6

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
395.7	0.393	17	1.4	33	991	2.6	5.7	2.5	50	1133	1.9
396.4	0.476	17	1.4	39	1072	2.2	6.9	2.5	60	1226	1.6
397.1	0.393	19	1.7	36	1068	3.6	5.7	3.0	56	1222	2.6
397.8	0.691	19	1.9	54	1183	2.4	10.0	3.4	82	1353	1.8
398.5	0.393	21	1.7	45	1331	3.3	5.7	3.1	68	1522	2.4
399.2	0.393	14	2.1	36	1194	3.9	5.7	3.8	56	1365	2.8
399.9	0.493	17	2.0	38	1318	3.9	7.1	3.6	58	1507	2.9
400.6	0.435	21	2.1	41	1277	3.2	6.3	3.9	63	1461	2.4
401.3	0.509	21	2.0	48	1230	2.9	7.4	3.6	73	1407	2.1
402.0	0.393	17	1.9	48	1333	1.7	5.7	3.5	73	1525	1.3
402.7	0.717	17	2.3	38	1376	2.8	10	4.1	58	1573	2.0
403.4	0.393	17	2.5	44	1430	3.7	5.7	4.5	67	1636	2.7
404.1	0.393	22	2.5	50	1586	3.3	5.7	4.5	77	1814	2.4
404.8	1.0	18	1.6	45	1402	1.6	15	2.9	69	1604	1.2
405.5	0.393	17	2.3	42	1490	2.4	5.7	4.3	65	1704	1.8
406.2	0.596	16	2.4	41	1570	3.4	8.6	4.3	63	1796	2.5
406.9	0.472	19	2.6	46	1893	2.4	6.8	4.7	70	2165	1.8
407.6	0.610	21	2.5	50	1536	3.6	8.8	4.6	77	1757	2.7
408.3	0.518	21	2.4	50	1647	2.6	7.5	4.3	77	1884	1.9
409.0	0.393	16	2.4	43	1736	2.5	5.7	4.4	67	1985	1.8
409.7	0.627	19	2.3	40	1722	2.7	9.1	4.2	62	1969	2.0
410.4	0.393	20	3.2	52	2010	4.4	5.7	5.8	79	2298	3.2
411.1	0.521	18	3.1	61	1908	3.6	7.5	5.7	94	2182	2.7
411.8	0.401	19	3.1	48	1737	2.6	5.8	5.6	74	1987	1.9
412.5	0.799	17	2.8	51	1880	2.5	12	5.1	77	2150	1.8
413.2	0.393	18	2.7	45	1869	2.7	5.7	5.0	69	2138	2.0
413.9	1.1	21	3.4	55	2204	1.9	16	6.1	84	2520	1.4
414.6	0.705	21	2.5	51	1864	3.8	10	4.5	78	2132	2.8
415.3	0.517	19	2.9	56	1728	2.2	7.5	5.2	86	1976	1.6
416.0	0.768	18	2.4	49	2023	1.9	11	4.5	75	2313	1.4
416.7	0.393	18	2.8	55	1938	2.5	5.7	5.0	84	2216	1.9
417.4	0.904	21	2.8	55	1928	2.5	13	5.1	84	2205	1.8
418.1	0.496	23	3.1	63	1917	2.8	7.2	5.6	97	2193	2.0
418.8	0.703	22	2.9	53	1978	2.0	10	5.2	82	2261	1.5
419.5	1.2	17	2.9	43	1816	1.8	17	5.3	66	2076	1.3
420.2	0.880	23	3.3	54	2089	3.0	13	6.0	82	2388	2.2
420.8	0.880	23	3.4	59	1931	2.7	13	6.3	90	2209	2.0
421.5	0.602	19	2.9	49	1833	2.0	8.7	5.3	74	2097	1.5
422.2	0.602	20	2.8	54	1979	2.8	8.7	5.2	83	2263	2.0
422.9	0.883	20	3.3	50	2279	1.9	13	6.0	77	2606	1.4
423.6	0.962	22	3.5	49	2135	2.8	14	6.4	75	2441	2.1
424.3	0.723	21	3.6	64	2123	3.4	10	6.6	98	2427	2.5
425.0	1.0	21	4.0	70	2333	2.3	15	7.4	107	2667	1.7
425.7	0.470	14	3.8	51	1822	1.5	6.8	7.0	78	2083	1.1
426.4	0.723	23	4.5	60	2237	3.1	10	8.2	92	2558	2.2
427.1	0.681	19	4.3	48	1980	2.2	9.8	7.9	73	2264	1.6
427.8	0.992	17	3.9	69	2242	4.4	14	7.2	105	2564	3.2
428.5	1.3	20	3.6	59	2113	2.2	19	6.6	91	2416	1.6
429.2	0.785	18	3.7	59	2098	3.1	11	6.7	91	2399	2.2
429.9	0.856	23	5.2	59	2254	3.3	12	9.5	90	2578	2.4
430.6	1.6	21	3.9	66	2146	4.3	23	7.0	101	2454	3.2
431.3	0.655	23	4.4	62	1950	3.1	9.5	8.0	96	2229	2.3
432.0	1.2	20	3.9	67	2067	3.2	17	7.0	102	2364	2.3
432.7	1.3	22	4.3	60	2034	2.7	19	7.8	92	2326	2.0
433.4	1.7	23	4.6	67	2339	2.7	24	8.4	103	2675	2.0
434.1	2.0	25	4.1	76	2202	2.9	28	7.5	116	2518	2.1
434.8	1.8	23	4.1	63	2053	2.6	27	7.4	97	2347	1.9
435.5	1.3	19	4.6	53	1956	2.4	19	8.3	81	2236	1.8
436.2	2.8	19	5.7	67	2272	4.0	41	10	102	2598	2.9
436.9	3.1	24	6.0	69	2479	3.3	45	11	106	2835	2.4
437.6	3.0	19	5.0	73	2119	2.6	43	9.2	112	2423	1.9
438.3	2.1	20	5.3	73	2085	1.7	31	9.6	112	2384	1.2
439.0	2.5	18	6.0	63	2025	3.4	36	11	96	2316	2.5
439.7	3.6	20	7.2	62	2252	4.1	53	13	96	2575	3.0
440.4	4.2	23	7.7	75	2340	3.6	60	14	114	2676	2.6
441.1	3.6	23	6.2	85	2223	3.9	52	11	130	2542	2.9
441.8	4.3	24	7.1	75	2175	3.0	62	13	115	2487	2.2
442.5	3.6	20	6.9	62	2145	2.9	52	12	96	2452	2.2
443.2	4.2	20	8.3	70	2155	3.9	60	15	107	2465	2.9
443.9	3.6	26	7.9	68	2013	3.3	52	14	103	2301	2.4
444.6	2.7	23	7.6	76	2121	3.3	39	14	116	2426	2.4
445.3	3.8	19	7.5	65	2201	3.6	55	14	100	2516	2.6
446.0	5.3	25	7.8	65	2258	3.3	76	14	99	2583	2.4
446.6	4.1	25	9.2	75	2349	4.0	59	17	115	2686	2.9
447.3	3.3	25	7.2	77	2285	3.8	48	13	118	2613	2.8
448.0	3.2	26	6.8	81	2192	3.7	47	12	124	2507	2.7
448.7	3.3	19	7.1	61	2006	2.9	48	13	93	2294	2.1
449.4	3.1	24	8.9	75	2343	4.0	45	16	115	2680	3.0
450.1	4.2	25	8.1	81	2458	4.7	61	15	124	2810	3.4
450.8	3.7	29	7.6	81	2139	2.9	53	14	124	2446	2.1
451.5	4.1	22	6.6	76	1955	3.3	60	12	116	2235	2.4

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
452.2	3.4	20	7.1	72	2035	2.8	50	13	111	2327	2.1
452.9	4.5	24	8.3	69	2300	4.1	65	15	106	2630	3.0
453.6	4.2	25	8.9	86	2576	3.0	61	16	132	2945	2.2
454.3	3.9	29	8.3	82	1991	3.3	57	15	126	2276	2.4
455.0	3.8	24	8.2	72	2313	2.8	56	15	110	2645	2.1
455.7	4.3	22	9.4	70	1858	2.6	62	17	107	2124	1.9
456.4	4.4	25	9.2	73	2198	3.1	64	17	112	2514	2.2
457.1	5.0	29	12	82	2328	4.2	72	21	126	2662	3.1
457.8	5.3	26	8.5	83	1997	4.3	77	16	127	2283	3.2
458.5	3.9	21	8.7	77	2248	3.1	56	16	118	2570	2.3
459.2	5.6	20	9.5	67	2178	2.4	81	17	103	2490	1.8
459.9	5.3	27	10.0	75	2431	4.5	77	18	116	2780	3.3
460.6	5.2	24	10	76	2165	3.4	74	18	117	2476	2.5
461.3	4.7	26	8.0	79	2125	3.8	69	15	120	2430	2.8
462.0	5.3	26	10.0	77	2333	4.1	77	18	117	2668	3.0
462.7	4.9	25	13	74	2364	3.5	71	25	114	2703	2.6
463.4	6.2	29	11	77	2708	4.0	90	20	118	3097	2.9
464.1	6.0	28	11	88	2031	3.9	87	20	136	2322	2.9
464.8	5.6	24	9.2	69	2030	2.7	82	17	106	2322	2.0
465.5	4.8	30	9.2	67	2196	3.1	69	17	103	2512	2.3
466.2	5.1	27	9.7	67	2094	3.4	73	18	102	2394	2.5
466.9	5.1	33	10	74	2316	3.3	73	19	114	2648	2.4
467.6	5.1	25	9.4	70	2094	4.0	73	17	107	2395	2.9
468.3	4.5	26	9.5	71	2016	3.0	65	17	108	2305	2.2
469.0	5.6	23	9.7	62	2137	4.1	81	18	95	2443	3.0
469.7	5.7	23	10	70	2189	1.9	82	19	108	2503	1.4
470.4	6.2	30	11	78	2042	4.3	89	20	120	2335	3.2
471.1	5.8	27	8.5	78	1991	3.2	84	15	119	2276	2.3
471.8	3.7	24	9.0	67	1914	3.3	54	16	102	2189	2.4
472.4	4.8	24	8.7	52	1963	2.7	70	16	80	2245	2.0
473.1	4.5	23	11	66	2079	4.0	65	20	102	2378	2.9
473.8	5.6	31	11	71	2184	5.0	81	20	110	2498	3.6
474.5	3.9	26	9.5	75	2105	2.7	56	17	115	2407	2.0
475.2	4.2	22	10	63	1877	2.1	61	18	96	2146	1.5
475.9	5.6	24	11	63	2119	3.2	81	20	97	2423	2.4
476.6	4.0	26	10	60	1848	3.9	58	19	91	2113	2.8
477.3	5.0	29	9.6	67	2063	4.3	72	18	102	2359	3.1
478.0	5.7	26	9.3	58	1805	2.0	82	17	89	2064	1.4
478.7	5.4	24	8.7	74	2076	3.0	78	16	113	2374	2.2
479.4	6.0	26	9.7	64	2002	3.6	87	18	98	2289	2.6
480.1	5.8	28	11	67	2288	4.3	83	20	103	2616	3.1
480.8	6.3	30	9.6	69	1814	3.8	91	17	106	2074	2.7
481.5	5.5	24	8.1	59	1897	2.9	79	15	90	2170	2.1
482.2	5.6	24	9.2	57	1994	2.7	81	17	88	2280	2.0
482.9	5.7	26	9.9	61	1957	4.5	82	18	94	2238	3.3
483.6	5.9	26	7.9	50	1688	4.3	85	14	77	1931	3.1
484.3	4.0	30	8.2	62	1866	3.9	58	15	95	2134	2.9
485.0	4.6	22	7.2	56	1832	3.0	66	13	86	2095	2.2
485.7	5.5	23	8.3	48	1834	5.0	79	15	74	2097	3.7
486.4	7.6	28	9.4	61	1891	4.8	109	17	93	2163	3.5
487.1	6.6	27	9.2	60	1769	3.7	95	17	93	2022	2.7
487.8	5.5	25	8.0	52	1725	3.0	79	15	80	1972	2.2
488.5	7.0	24	8.2	41	1767	3.4	101	15	63	2020	2.5
489.2	7.7	21	8.1	40	1765	4.1	112	15	61	2018	3.0
489.9	7.9	30	9.2	51	2079	4.7	114	17	78	2378	3.5
490.6	7.1	26	8.3	57	1630	3.3	102	15	87	1864	2.4
491.3	7.9	24	8.3	51	1587	3.1	114	15	79	1815	2.3
492.0	7.7	23	7.7	42	1593	2.9	111	14	65	1821	2.1
492.7	9.7	24	7.2	44	1580	4.2	140	13	68	1807	3.1
493.4	12	27	7.8	50	1624	4.6	171	14	77	1857	3.4
494.1	7.9	26	7.1	53	1377	2.7	114	13	82	1574	2.0
494.8	7.7	20	4.8	44	1419	3.3	110	8.8	68	1622	2.4
495.5	8.5	23	6.3	42	1407	3.5	122	12	65	1609	2.6
496.2	9.3	23	6.6	47	1363	2.1	134	12	71	1559	1.5
496.9	8.9	24	7.1	48	1435	3.8	129	13	73	1641	2.8
497.6	9.5	24	5.9	46	1297	3.4	138	11	70	1483	2.5
498.2	7.8	18	5.7	41	1247	2.9	112	10	64	1426	2.1
498.9	8.4	20	5.9	31	1246	2.2	122	11	47	1424	1.6
499.6	9.1	24	5.8	45	1508	3.6	132	11	68	1724	2.6
500.3	7.2	27	5.6	46	1307	3.3	104	10	70	1495	2.4
501.0	7.0	22	4.4	39	1197	2.3	102	8.0	60	1369	1.7
501.7	6.9	19	4.0	41	1164	2.9	100	7.3	63	1331	2.1
502.4	6.6	23	4.5	35	1337	2.9	95	8.3	54	1529	2.1
503.1	6.9	23	3.7	33	1124	2.9	99	6.8	50	1285	2.1
503.8	5.3	22	3.3	30	1019	2.7	77	6.0	45	1166	1.9
504.5	4.8	21	3.0	33	1055	2.4	69	5.4	51	1207	1.7
505.2	5.7	21	3.1	29	1028	1.5	82	5.6	45	1175	1.1
505.9	6.0	21	3.4	31	1100	1.9	87	6.2	48	1258	1.4
506.6	4.4	21	2.3	31	982	3.8	64	4.3	48	1123	2.8
507.3	3.5	19	2.2	28	1037	3.5	51	4.0	43	1186	2.5
508.0	3.3	20	2.8	27	963	1.5	48	5.1	42	1102	1.1

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
508.7	3.4	18	2.0	28	1169	1.8	49	3.7	43	1337	1.3
509.4	3.8	20	2.5	24	1054	2.5	55	4.5	36	1205	1.8
510.1	4.1	21	2.4	28	1112	3.2	60	4.3	43	1272	2.4
510.8	2.4	23	1.9	28	929	2.4	34	3.5	43	1063	1.7
511.5	2.7	16	1.9	20	911	2.8	40	3.4	31	1042	2.1
512.2	3.8	19	2.0	23	1147	2.5	55	3.7	35	1311	1.8
512.9	4.0	21	2.0	23	1008	3.0	57	3.7	36	1152	2.2
513.6	2.9	19	2.0	27	1027	3.5	41	3.6	41	1175	2.5
514.3	2.4	19	1.8	24	988	0.847	34	3.3	36	1130	0.618
515.0	3.0	15	1.5	15	831	1.9	43	2.8	23	950	1.4
515.7	3.3	18	1.5	18	917	1.7	48	2.8	27	1048	1.3
516.4	3.1	19	1.8	22	1067	2.5	45	3.2	33	1220	1.8
517.1	2.4	19	1.4	20	954	2.3	35	2.5	31	1091	1.7
517.8	2.1	15	1.3	23	910	2.1	31	2.4	35	1041	1.5
518.5	2.6	15	1.2	18	961	2.0	38	2.2	27	1099	1.4
519.2	1.9	17	1.3	19	975	1.9	28	2.4	29	1115	1.4
519.9	3.3	18	1.4	24	936	1.5	47	2.5	37	1070	1.1
520.6	1.9	17	1.3	29	930	1.2	28	2.4	44	1063	0.878
521.3	1.9	14	1.2	22	890	3.0	27	2.2	34	1018	2.2
522.0	3.3	20	1.2	26	1178	2.5	48	2.2	40	1347	1.8
522.7	2.5	19	1.3	24	917	2.3	37	2.4	36	1049	1.6
523.4	2.1	16	0.933	24	900	1.8	31	1.7	36	1029	1.3
524.0	1.3	15	0.815	26	863	2.4	19	1.5	41	986	1.7
524.7	1.6	15	1.1	24	853	2.1	23	2.0	37	976	1.5
525.4	0.893	15	1.5	23	956	2.3	13	2.8	36	1093	1.7
526.1	2.0	17	1.4	24	969	2.3	29	2.6	36	1108	1.7
526.8	1.4	21	1.2	30	910	2.4	20	2.2	46	1040	1.7
527.5	1.4	17	1.1	28	825	3.0	20	1.9	43	943	2.2
528.2	0.929	14	1.4	23	805	1.8	13	2.5	36	920	1.3
528.9	1.7	19	1.6	26	1018	2.3	24	2.9	40	1164	1.7
529.6	1.4	20	1.5	31	837	2.6	20	2.7	47	957	1.9
530.3	1.3	20	1.5	36	957	4.1	18	2.8	56	1094	3.0
531.0	1.3	17	1.3	28	788	3.0	18	2.4	43	901	2.2
531.7	0.737	17	1.2	29	836	2.9	11	2.1	44	956	2.1
532.4	1.7	19	1.7	30	1113	2.7	25	3.1	46	1273	1.9
533.1	1.3	20	1.4	36	959	2.1	19	2.6	55	1096	1.6
533.8	0.488	16	1.5	34	824	2.8	7.0	2.7	53	942	2.0
534.5	0.918	17	1.3	33	935	2.9	13	2.4	50	1070	2.1
535.2	1.6	16	1.6	27	821	2.6	23	2.8	42	939	1.9
535.9	1.4	17	1.6	38	1087	2.0	20	3.0	58	1242	1.4
536.6	1.3	18	1.3	31	826	3.3	18	2.3	47	944	2.4
537.3	0.927	20	1.2	37	847	2.5	13	2.1	56	969	1.8
538.0	0.672	17	1.1	32	971	3.2	9.7	2.1	49	1111	2.4
538.7	1.3	19	1.6	32	905	2.1	18	2.9	49	1034	1.5
539.4	0.761	20	1.8	42	915	4.1	11	3.2	64	1046	3.0
540.1	1.1	20	1.3	46	882	3.6	15	2.4	71	1009	2.6
540.8	0.802	17	0.981	40	923	3.4	12	1.8	61	1055	2.5
541.5	0.651	16	1.5	34	920	1.9	9.4	2.7	52	1052	1.4
542.2	0.767	16	1.2	38	891	3.5	11	2.2	58	1018	2.5
542.9	1.4	21	1.3	48	907	4.6	20	2.4	74	1037	3.3
543.6	0.614	18	1.3	43	901	4.1	8.9	2.3	66	1030	3.0
544.3	0.393	18	1.1	39	789	2.3	5.7	2.0	59	902	1.7
545.0	1.3	17	1.5	37	995	2.2	19	2.6	57	1138	1.6
545.7	1.0	22	1.7	41	938	3.6	15	3.2	63	1073	2.6
546.4	1.3	26	1.8	53	991	3.0	18	3.3	82	1134	2.2
547.1	0.393	26	1.3	45	969	2.4	5.7	2.4	68	1108	1.8
547.8	0.662	17	0.873	47	999	2.7	9.6	1.6	71	1143	2.0
548.5	0.892	19	1.5	36	954	4.3	13	2.7	55	1090	3.1
549.2	1.0	20	1.6	44	944	3.6	15	3.0	67	1079	2.6
549.9	0.449	24	1.6	46	1040	3.3	6.5	2.9	71	1189	2.4
550.5	0.798	19	1.2	36	787	1.9	12	2.1	55	900	1.4
551.2	0.677	17	0.957	43	1063	3.0	9.8	1.7	66	1216	2.2
551.9	0.444	19	1.6	42	1044	4.2	6.4	2.9	64	1194	3.1
552.6	0.622	18	1.8	46	1074	4.7	9.0	3.3	71	1229	3.4
553.3	0.393	19	1.4	57	1149	4.2	5.7	2.6	88	1314	3.0
554.0	0.472	16	1.4	45	1025	1.8	6.8	2.6	68	1172	1.3
554.7	1.1	17	2.0	44	1037	2.9	16	3.6	68	1186	2.1
555.4	1.1	20	1.9	50	1096	3.2	15	3.4	77	1253	2.3
556.1	0.598	21	2.0	59	1320	3.3	8.6	3.6	90	1509	2.4
556.8	0.393	18	1.6	50	1020	3.0	5.7	2.9	77	1166	2.2
557.5	0.515	17	1.7	51	1158	2.9	7.4	3.1	78	1324	2.1
558.2	0.538	14	1.6	46	1074	2.7	7.8	2.9	71	1228	2.0
558.9	0.393	21	2.5	55	1287	2.5	5.7	4.6	85	1472	1.8
559.6	0.912	21	2.2	56	1266	2.9	13	4.1	87	1447	2.1
560.3	0.892	22	1.9	53	1155	2.8	13	3.5	81	1321	2.1
561.0	1.0	16	2.2	46	1244	2.6	15	4.0	71	1423	1.9
561.7	0.744	18	2.2	38	1162	2.9	11	3.9	59	1329	2.1
562.4	0.393	19	2.6	51	1408	2.2	5.7	4.8	78	1611	1.6
563.1	0.393	21	3.0	57	1242	2.8	5.7	5.5	88	1420	2.1
563.8	0.407	18	2.8	51	1417	2.5	5.9	5.0	79	1620	1.9
564.5	0.393	15	2.2	60	1405	3.0	5.7	4.1	93	1606	2.2

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
565.2	1.2	21	3.8	59	1420	2.4	17	6.9	91	1624	1.8
565.9	1.0	22	3.7	64	2002	2.9	15	6.8	97	2290	2.1
566.6	0.527	19	2.6	69	1612	1.1	7.6	4.8	106	1844	0.790
567.3	0.845	17	3.0	61	1694	2.7	12	5.4	94	1937	2.0
568.0	1.2	18	3.4	64	1978	2.2	17	6.2	98	2262	1.6
568.7	0.868	19	3.2	61	2053	3.3	13	5.8	94	2348	2.4
569.4	1.9	20	3.9	68	1929	3.3	27	7.2	105	2206	2.4
570.1	1.1	23	3.3	59	1578	2.1	16	6.1	90	1805	1.5
570.8	1.9	19	3.5	61	1649	2.9	28	6.3	94	1886	2.1
571.5	1.9	21	3.8	52	1834	2.1	28	6.9	79	2098	1.5
572.2	2.1	26	4.0	67	2014	2.6	31	7.2	103	2303	1.9
572.9	1.5	26	3.5	64	1644	3.5	22	6.3	98	1880	2.6
573.6	1.1	24	3.0	70	1643	2.9	15	5.4	108	1878	2.1
574.3	1.7	22	3.4	61	1718	2.1	25	6.1	93	1965	1.5
575.0	2.1	20	3.3	56	1918	2.2	30	6.0	86	2194	1.6
575.7	2.3	29	4.2	66	2072	2.3	34	7.7	102	2370	1.7
576.4	1.5	22	3.6	68	2008	2.3	22	6.5	105	2296	1.7
577.0	2.9	21	3.3	70	2036	2.0	42	6.1	107	2328	1.5
577.7	2.5	21	3.6	56	1985	2.1	35	6.5	86	2269	1.6
578.4	2.6	20	3.6	64	1889	2.1	37	6.5	98	2160	1.6
579.1	3.0	24	4.9	59	1969	2.3	43	8.9	90	2252	1.7
579.8	2.8	26	3.6	73	1850	2.2	40	6.5	111	2115	1.6
580.5	2.2	19	4.0	66	1876	2.9	31	7.2	101	2145	2.1
581.2	1.8	20	3.5	61	1807	1.6	26	6.4	93	2066	1.2
581.9	3.5	26	4.0	57	2195	2.6	51	7.3	87	2510	1.9
582.6	3.2	26	4.8	77	2220	2.5	47	8.8	118	2539	1.8
583.3	3.6	22	3.1	90	2191	2.4	51	5.7	137	2505	1.8
584.0	2.1	20	4.5	53	1598	2.1	31	8.2	82	1827	1.5
584.7	1.7	18	4.2	66	2188	2.4	25	7.7	101	2502	1.8
585.4	4.4	25	4.6	70	2181	2.2	63	8.4	107	2494	1.6
586.1	3.4	22	3.9	83	2036	2.6	49	7.2	127	2328	1.9
586.8	2.2	22	4.1	71	2099	2.7	32	7.4	109	2400	2.0
587.5	4.7	19	3.6	64	1881	1.3	67	6.5	99	2150	0.973
588.2	3.4	17	4.3	63	2041	1.7	50	7.8	96	2334	1.2
588.9	5.3	25	4.9	79	2581	3.3	76	9.0	121	2952	2.4
589.6	4.5	24	3.6	85	2071	1.1	65	6.5	130	2368	0.775
590.3	3.8	21	4.4	73	2026	2.6	55	8.0	112	2317	1.9
591.0	3.3	19	4.5	74	2060	2.3	47	8.3	113	2356	1.7
591.7	4.5	22	4.7	67	2265	1.7	65	8.5	103	2590	1.3
592.4	5.5	25	5.2	74	2201	2.6	80	9.4	113	2517	1.9
593.1	6.4	26	5.5	87	2206	2.7	93	10.0	133	2522	2.0
593.8	4.2	19	4.5	75	2215	1.5	61	8.2	114	2533	1.1
594.5	4.9	25	5.3	87	2277	1.6	71	9.6	134	2604	1.2
595.2	5.0	21	5.2	71	2188	2.8	73	9.5	109	2502	2.1
595.9	5.2	28	5.7	90	2472	2.7	75	10	137	2826	2.0
596.6	5.8	23	4.2	75	1956	1.5	84	7.7	116	2237	1.1
597.3	5.0	21	5.3	79	2216	2.0	73	9.7	121	2534	1.4
598.0	4.0	18	4.6	68	2059	2.3	58	8.4	104	2355	1.7
598.7	5.7	24	5.7	76	2257	1.7	83	10	117	2581	1.3
599.4	5.2	23	5.7	93	2301	2.6	75	10	143	2632	1.9
600.1	5.0	23	4.9	83	2034	2.4	72	8.9	127	2326	1.8
600.8	3.5	19	4.6	80	2126	1.7	50	8.4	123	2432	1.2
601.5	5.1	19	4.4	61	1870	1.1	73	8.0	93	2139	0.791
602.2	4.3	21	5.3	80	2512	2.3	63	9.7	122	2872	1.7
602.8	5.0	24	4.8	92	2129	2.8	73	8.8	141	2434	2.1
603.5	4.9	20	5.2	82	2141	1.9	70	9.5	125	2448	1.4
604.2	3.0	17	4.7	64	1929	2.2	43	8.6	99	2205	1.6
604.9	4.9	21	5.1	74	2234	1.4	70	9.3	113	2554	0.991
605.6	5.1	29	5.1	89	2085	2.2	73	9.3	137	2384	1.6
606.3	4.5	25	4.8	85	2012	2.1	65	8.8	130	2300	1.6
607.0	3.9	22	4.6	78	1944	2.5	57	8.5	120	2223	1.8
607.7	4.4	22	4.8	79	2051	2.2	64	8.7	121	2345	1.6
608.4	4.9	23	4.9	81	2284	2.0	70	8.9	124	2612	1.5
609.1	4.5	28	5.3	86	2074	2.7	65	9.6	131	2371	1.9
609.8	4.2	28	4.5	89	2077	1.7	61	8.1	137	2375	1.2
610.5	3.6	20	4.4	87	2034	1.7	52	8.1	134	2326	1.2
611.2	5.5	19	5.3	82	2197	2.5	79	9.8	125	2513	1.8
611.9	5.3	23	4.6	86	2452	2.6	77	8.4	132	2804	1.9
612.6	5.7	23	5.3	88	2110	1.8	83	9.6	134	2413	1.3
613.3	5.7	24	4.7	89	1937	2.1	82	8.5	136	2215	1.6
614.0	6.2	21	5.2	80	1813	1.9	89	9.5	123	2073	1.4
614.7	5.2	20	5.0	82	2306	2.3	74	9.1	125	2637	1.7
615.4	5.0	24	6.4	90	2209	2.3	72	12	138	2526	1.7
616.1	7.0	25	5.2	88	1955	3.7	101	9.6	135	2235	2.7
616.8	5.9	22	4.6	97	2130	2.6	85	8.4	148	2436	1.9
617.5	4.6	25	5.1	73	2023	3.6	67	9.3	112	2313	2.6
618.2	4.9	28	4.9	75	2293	3.7	70	8.9	115	2622	2.7
618.9	6.9	27	5.3	79	1880	1.7	100	9.6	121	2149	1.3
619.6	4.7	27	5.2	75	1715	1.8	68	9.4	115	1961	1.3
620.3	5.6	27	4.9	98	2074	2.0	80	8.8	150	2371	1.5
621.0	5.5	23	5.2	78	2304	2.6	79	9.6	120	2635	1.9

Minnow Environmental
Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
621.7	6.3	21	5.0	87	2200	3.3	90	9.1	133	2515	2.4
622.4	5.6	25	5.6	92	2095	3.6	80	10	141	2395	2.6
623.1	6.5	23	5.1	101	2166	2.7	93	9.2	155	2477	2.0
623.8	4.9	22	4.7	85	1984	2.6	71	8.5	130	2268	1.9
624.5	6.5	21	5.1	80	2231	2.3	94	9.4	123	2551	1.7
625.2	5.5	24	5.0	73	1804	2.9	79	9.1	113	2063	2.1
625.9	6.2	28	5.0	87	2258	3.0	90	9.2	133	2582	2.2
626.6	5.1	24	4.3	77	1825	2.4	73	7.9	118	2086	1.8
627.3	5.0	21	4.4	86	1869	1.8	72	8.1	132	2137	1.3
628.0	5.7	22	5.1	67	1744	2.5	82	9.3	103	1994	1.8
628.7	6.4	24	4.7	72	1852	1.8	93	8.6	110	2117	1.3
629.4	7.6	27	5.9	98	2266	2.8	110	11	150	2591	2.0
630.0	6.9	25	4.7	91	2096	2.0	100	8.5	140	2396	1.4
630.7	6.1	23	5.8	83	1821	3.1	88	11	127	2082	2.2
631.4	8.1	24	4.5	82	2251	2.8	117	8.2	126	2574	2.0
632.1	6.9	24	5.2	74	2113	3.7	99	9.5	113	2416	2.7
632.8	5.2	24	5.2	101	2335	2.5	76	9.4	155	2670	1.8
633.5	7.0	27	5.0	67	1705	2.2	101	9.1	103	1950	1.6
634.2	7.5	22	5.6	82	2193	1.8	109	10	126	2508	1.3
634.9	6.1	25	4.7	72	2126	3.0	88	8.6	110	2431	2.2
635.6	8.0	29	6.0	95	2039	2.4	116	11	145	2331	1.7
636.3	6.6	21	4.4	85	1895	3.0	95	7.9	130	2167	2.2
637.0	6.7	25	4.8	91	2018	3.2	97	8.8	139	2308	2.3
637.7	6.1	25	5.2	78	1871	1.6	88	9.5	119	2140	1.2
638.4	7.7	27	5.3	93	2733	2.9	111	9.7	142	3126	2.1
639.1	8.3	26	4.5	77	1898	2.0	119	8.2	118	2171	1.5
639.8	5.9	27	4.5	87	2014	2.7	86	8.2	133	2304	2.0
640.5	5.8	25	4.8	77	2019	2.2	84	8.8	118	2309	1.6
641.2	5.2	23	4.8	68	2066	2.7	75	8.7	104	2362	2.0
641.9	5.0	29	4.6	83	2141	2.7	72	8.3	128	2448	2.0
642.6	6.3	31	5.0	78	1771	2.5	91	9.2	119	2025	1.8
643.3	5.1	25	5.0	82	1952	2.4	73	9.0	126	2232	1.7
644.0	6.5	25	4.2	72	1932	3.7	94	7.7	111	2209	2.7
644.7	6.3	25	4.3	76	1815	1.6	91	7.9	116	2075	1.2
645.4	5.3	26	5.5	86	2223	2.7	77	10.0	131	2542	2.0
646.1	7.2	24	4.7	88	1832	2.4	105	8.6	135	2095	1.7
646.8	7.2	19	3.8	78	1977	3.7	103	6.9	119	2261	2.7
647.5	5.9	25	4.4	77	2305	4.3	85	8.0	118	2636	3.1
648.2	7.6	30	5.1	88	2300	3.2	109	9.4	135	2630	2.4
648.9	5.5	27	4.2	75	1808	2.5	79	7.6	115	2067	1.8
649.6	5.2	26	4.2	74	1664	3.0	75	7.6	114	1903	2.2
650.3	5.4	26	4.7	82	2032	3.1	78	8.7	126	2324	2.3
651.0	5.7	24	4.5	66	1894	3.5	82	8.3	101	2166	2.6
651.7	6.2	24	5.0	73	1955	4.0	90	9.1	112	2236	2.9
652.4	6.5	32	4.1	82	1674	3.0	93	7.5	126	1915	2.2
653.1	5.6	29	4.0	78	1937	3.8	81	7.3	120	2215	2.8
653.8	3.9	27	3.7	65	1855	3.0	56	6.8	100	2121	2.2
654.5	4.4	27	3.8	70	1828	2.1	64	7.0	108	2090	1.5
655.2	4.6	32	4.0	67	1718	2.6	67	7.2	103	1964	1.9
655.8	6.0	31	4.6	86	1852	3.3	87	8.4	132	2118	2.4
656.5	5.0	36	4.2	82	1863	2.9	72	7.6	125	2131	2.1
657.2	4.3	27	4.0	62	1824	3.1	62	7.3	95	2086	2.3
657.9	4.6	25	4.6	65	1861	3.3	66	8.4	100	2128	2.4
658.6	5.7	31	4.6	73	1927	3.3	82	8.5	112	2203	2.4
659.3	4.5	33	3.8	72	1790	3.1	65	7.0	110	2047	2.2
660.0	4.3	33	3.8	79	1946	2.7	62	7.0	120	2226	1.9
660.7	5.2	25	4.1	55	1598	2.4	74	7.5	85	1827	1.8
661.4	5.4	29	4.2	78	1990	2.8	78	7.7	119	2275	2.0
662.1	4.7	28	3.9	80	1876	3.7	68	7.2	123	2145	2.7
662.8	5.6	31	4.0	79	1780	2.8	81	7.3	122	2036	2.0
663.5	5.2	30	4.1	74	1622	2.5	76	7.5	114	1854	1.8
664.2	3.4	29	4.1	65	1816	2.9	50	7.5	99	2076	2.1
664.9	5.7	27	4.2	66	1745	1.9	83	7.6	102	1995	1.4
665.6	6.2	33	4.7	78	1958	3.6	90	8.5	120	2239	2.6
666.3	4.1	28	3.3	78	1696	3.2	60	6.1	120	1939	2.3
667.0	3.5	24	4.0	70	1780	3.1	51	7.2	108	2036	2.3
667.7	3.7	24	5.0	61	1883	2.3	53	9.2	93	2153	1.7
668.4	5.6	25	4.0	73	1781	2.2	80	7.3	112	2037	1.6
669.1	4.3	26	4.4	83	1856	4.1	62	8.0	127	2122	3.0
669.8	5.4	28	4.2	81	1746	3.1	79	7.7	125	1997	2.3
670.5	4.2	19	3.8	69	1785	2.1	61	7.0	106	2041	1.5
671.2	4.4	23	4.1	63	1640	2.2	64	7.6	97	1875	1.6
671.9	6.0	28	4.8	72	1895	3.9	86	8.8	110	2167	2.9
672.6	3.0	22	3.6	70	1479	2.8	43	6.6	108	1691	2.0
673.3	4.2	18	3.9	71	1714	2.0	61	7.1	109	1959	1.5
674.0	4.5	22	4.3	69	1669	2.4	65	7.9	106	1909	1.7
674.7	4.0	24	4.3	69	1851	3.7	58	7.9	106	2116	2.7
675.4	6.0	22	4.4	69	1528	2.3	86	8.0	106	1747	1.7
676.1	4.7	24	3.5	77	1592	2.3	68	6.5	117	1820	1.7
676.8	5.1	21	3.7	68	1957	1.8	73	6.7	104	2238	1.3
677.5	5.1	24	3.9	57	1491	2.4	74	7.1	88	1705	1.7

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
678.2	5.4	21	4.5	67	1722	2.5	78	8.3	102	1969	1.8
678.9	4.9	24	3.1	70	1417	2.4	71	5.6	107	1621	1.8
679.6	3.8	23	3.6	64	1582	2.1	54	6.7	99	1809	1.5
680.3	4.6	21	4.1	67	1537	2.6	67	7.5	103	1757	1.9
681.0	4.0	24	3.2	68	1660	2.4	58	5.8	103	1898	1.8
681.7	4.8	22	4.1	66	1716	4.4	70	7.6	101	1962	3.2
682.4	3.6	24	3.1	71	1427	2.6	52	5.7	108	1632	1.9
683.0	4.6	22	2.5	61	1208	2.2	67	4.6	93	1382	1.6
683.7	3.6	19	3.8	56	1429	0.893	51	6.9	85	1635	0.652
684.4	4.0	23	3.1	55	1484	3.0	58	5.7	84	1697	2.2
685.1	4.5	27	3.2	55	1410	2.5	65	5.9	85	1612	1.8
685.8	3.8	25	3.5	73	1482	3.5	54	6.4	112	1694	2.6
686.5	3.9	24	3.3	67	1531	3.1	56	6.0	102	1751	2.3
687.2	2.2	26	3.0	57	1475	2.0	31	5.4	87	1687	1.5
687.9	4.2	26	3.7	60	1489	1.9	61	6.7	92	1703	1.4
688.6	4.3	34	3.6	58	1415	2.0	62	6.6	90	1618	1.5
689.3	2.8	28	3.7	69	1429	1.7	40	6.7	106	1634	1.2
690.0	4.8	34	2.7	67	1672	2.6	69	4.9	103	1912	1.9
690.7	3.3	27	3.6	59	1558	3.1	48	6.5	90	1781	2.3
691.4	3.0	31	2.8	60	1414	2.2	43	5.2	92	1617	1.6
692.1	4.0	30	2.9	66	1383	2.2	57	5.2	101	1581	1.6
692.8	3.3	30	2.9	64	1458	2.8	47	5.3	98	1668	2.0
693.5	3.7	32	2.8	58	1590	3.0	53	5.0	88	1818	2.2
694.2	3.4	35	3.3	59	1383	2.5	49	6.1	90	1582	1.8
694.9	3.9	35	3.7	60	1530	2.8	56	6.8	91	1750	2.0
695.6	3.4	34	2.5	63	1310	3.6	49	4.6	97	1497	2.6
696.3	3.4	35	3.0	54	1283	2.5	49	5.5	83	1467	1.9
697.0	3.2	30	3.2	54	1185	1.9	46	5.8	82	1355	1.4
697.7	3.3	33	3.2	56	1648	4.3	48	5.9	86	1884	3.1
698.4	3.0	37	3.4	62	1465	2.1	44	6.1	95	1676	1.5
699.1	3.3	41	2.7	58	1226	2.9	47	4.9	89	1402	2.1
699.8	1.9	41	2.5	53	1397	1.1	27	4.6	81	1598	0.803
700.5	2.2	39	3.2	46	1435	2.4	32	5.9	71	1641	1.8
701.2	2.2	40	3.3	51	1241	1.9	32	6.0	78	1419	1.4
701.9	2.2	36	2.8	60	1486	1.9	32	5.1	92	1699	1.4
702.6	2.9	35	3.3	53	1337	1.6	42	6.1	81	1529	1.2
703.3	2.1	29	3.1	47	1334	2.0	31	5.6	73	1526	1.5
704.0	2.8	28	3.0	46	1413	2.6	41	5.5	70	1616	1.9
704.7	3.2	36	3.0	48	1300	1.7	47	5.4	74	1486	1.3
705.4	3.5	37	2.9	61	1374	2.3	50	5.3	93	1571	1.7
706.1	2.8	30	2.6	47	1333	2.6	40	4.7	72	1525	1.9
706.8	2.3	29	2.8	50	1177	2.5	33	5.2	77	1346	1.8
707.5	2.3	31	2.7	52	1129	1.3	34	4.9	79	1291	0.931
708.2	3.6	30	2.6	55	1324	2.1	52	4.8	84	1514	1.5
708.8	2.8	33	2.7	55	1237	2.8	40	5.0	85	1415	2.1
709.5	2.6	33	2.5	49	1161	2.6	37	4.6	75	1328	1.9
710.2	2.4	28	2.4	48	1331	1.7	35	4.3	73	1522	1.2
710.9	2.3	33	2.7	49	1309	2.9	33	4.9	76	1497	2.1
711.6	3.1	37	2.7	52	1296	1.8	45	4.9	80	1482	1.3
712.3	3.0	33	2.2	53	1168	2.8	44	4.0	81	1335	2.0
713.0	2.3	29	2.6	50	1180	2.0	34	4.8	76	1350	1.4
713.7	2.6	27	2.3	47	1279	1.7	37	4.1	72	1463	1.2
714.4	2.5	29	3.1	52	1450	3.6	37	5.6	79	1658	2.6
715.1	2.8	35	2.9	45	1206	2.6	40	5.3	68	1379	1.9
715.8	2.3	29	2.1	49	1318	1.6	33	3.9	76	1507	1.2
716.5	2.3	24	2.1	45	920	1.3	33	3.8	69	1053	0.970
717.2	2.0	28	2.7	47	1084	0.673	28	5.0	72	1239	0.491
717.9	2.5	27	2.2	43	1153	1.8	37	4.0	65	1318	1.3
718.6	2.5	29	2.2	53	1056	1.4	35	4.1	81	1208	1.1
719.3	1.5	31	2.4	42	994	2.7	22	4.4	65	1137	2.0
720.0	1.8	24	2.2	48	984	3.2	27	4.0	74	1126	2.3
720.7	1.4	24	2.0	46	936	2.5	20	3.7	70	1070	1.8
721.4	2.7	25	2.6	53	1182	1.9	38	4.8	82	1352	1.4
722.1	2.8	25	2.4	57	1139	2.6	41	4.3	87	1303	1.9
722.8	1.8	23	1.8	40	907	1.4	26	3.3	61	1037	0.991
723.5	1.7	24	2.1	44	1046	2.7	25	3.9	67	1197	2.0
724.2	2.0	28	2.5	49	1081	2.1	29	4.5	75	1236	1.5
724.9	2.5	29	2.9	57	1133	2.8	37	5.4	87	1296	2.1
725.6	2.7	22	2.0	56	890	1.7	39	3.6	86	1018	1.3
726.3	2.4	21	1.9	49	1064	1.7	34	3.4	75	1216	1.2
727.0	3.3	23	2.3	52	980	1.5	48	4.2	80	1121	1.1
727.7	2.1	20	1.8	43	750	1.4	31	3.3	66	858	1.0
728.4	2.2	23	1.7	41	891	1.5	32	3.2	63	1019	1.1
729.1	2.0	23	2.0	52	889	1.8	29	3.6	80	1017	1.3
729.8	2.7	25	1.7	44	898	2.6	39	3.1	68	1027	1.9
730.5	2.5	21	1.8	45	952	2.2	37	3.3	68	1089	1.6
731.2	2.6	25	1.9	44	910	2.1	37	3.5	67	1040	1.5
731.9	1.5	24	1.8	45	839	1.7	22	3.3	69	959	1.3
732.6	2.0	21	2.0	48	778	1.3	29	3.7	74	889	0.975
733.3	1.7	21	2.2	41	848	2.3	24	4.0	63	970	1.7
734.0	2.6	24	2.0	53	877	1.7	38	3.7	80	1003	1.2

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
734.6	2.4	24	2.5	48	902	1.3	35	4.6	74	1032	0.919
735.3	2.2	23	2.3	50	790	2.1	31	4.2	76	903	1.6
736.0	2.5	21	1.8	46	618	1.5	35	3.2	70	706	1.1
736.7	1.9	20	1.6	42	739	1.1	28	3.0	64	845	0.830
737.4	1.8	24	1.9	44	709	1.4	26	3.5	68	810	1.0
738.1	0.905	23	2.2	53	705	2.1	13	3.9	81	807	1.6
738.8	1.3	21	2.1	45	698	2.1	19	3.8	69	798	1.5
739.5	1.2	19	1.5	38	575	1.7	17	2.7	59	657	1.2
740.2	1.3	20	1.7	39	709	0.734	18	3.2	60	811	0.535
740.9	1.2	21	2.1	39	543	1.1	18	3.8	60	621	0.809
741.6	1.3	21	2.0	46	605	2.5	19	3.6	71	692	1.8
742.3	1.2	19	1.3	43	512	1.4	18	2.3	66	586	1.0
743.0	1.0	19	1.8	38	535	0.675	15	3.3	58	612	0.493
743.7	1.1	21	1.8	40	604	2.5	16	3.3	62	691	1.8
744.4	1.1	24	1.8	45	606	1.6	16	3.3	68	693	1.2
745.1	2.0	20	1.9	45	557	2.7	30	3.5	69	637	2.0
745.8	0.913	24	1.9	40	477	1.4	13	3.5	62	545	1.0
746.5	0.829	18	1.5	35	396	0.804	12	2.7	54	453	0.586
747.2	0.864	18	1.5	36	455	2.0	12	2.7	55	520	1.5
747.9	0.954	22	1.9	39	469	2.0	14	3.4	60	536	1.4
748.6	0.777	22	1.7	43	455	1.1	11	3.2	66	521	0.817
749.3	1.1	17	2.0	35	467	1.6	16	3.7	54	534	1.1
750.0	1.1	19	2.0	37	452	1.4	16	3.6	56	517	1.0
750.7	0.479	16	2.2	39	436	1.7	6.9	4.0	60	499	1.2
751.4	0.745	19	2.2	37	382	2.3	11	4.0	57	437	1.7
752.1	0.922	18	1.6	36	438	1.9	13	2.8	55	501	1.4
752.8	1.2	16	1.9	34	388	2.3	17	3.5	53	434	1.7
753.5	0.727	18	2.0	33	640	3.1	10	3.7	51	732	2.3
754.2	1.5	18	1.9	39	468	2.0	22	3.4	60	535	1.4
754.9	1.5	18	1.8	37	455	1.6	22	3.3	57	520	1.2
755.6	0.744	17	2.0	39	420	1.7	11	3.6	60	480	1.2
756.3	1.4	15	2.0	30	350	0.609	21	3.6	47	401	0.444
757.0	0.650	16	1.9	29	357	2.0	9.4	3.4	45	408	1.5
757.7	1.2	20	1.9	30	367	2.2	18	3.5	46	420	1.6
758.4	1.2	19	1.6	30	333	2.7	17	3.0	46	381	2.0
759.1	0.581	18	1.8	31	330	1.9	8.4	3.3	48	377	1.4
759.8	0.986	12	1.5	25	347	1.5	14	2.7	38	397	1.1
760.5	0.928	18	1.7	28	411	1.8	13	3.1	43	470	1.3
761.1	1.0	16	1.6	29	343	1.4	14	2.9	44	392	1.0
761.8	0.393	19	1.2	33	385	2.2	5.7	2.2	50	440	1.6
762.5	0.573	14	1.2	27	395	1.7	8.3	2.2	42	451	1.2
763.2	0.596	14	1.4	27	345	1.8	8.6	2.5	41	394	1.3
763.9	1.7	17	1.8	30	341	1.3	25	3.3	45	390	0.969
764.6	0.920	16	1.3	30	362	2.2	13	2.4	47	414	1.6
765.3	0.423	16	1.7	40	362	2.0	6.1	3.0	61	414	1.5
766.0	0.970	16	1.2	31	310	2.0	14	2.2	48	355	1.5
766.7	1.7	15	1.7	32	396	1.2	24	3.2	49	453	0.879
767.4	0.722	18	1.8	34	357	2.0	10	3.2	52	408	1.5
768.1	1.0	17	1.2	29	297	2.0	15	2.1	44	339	1.4
768.8	0.785	15	1.4	28	291	2.0	11	2.6	44	333	1.5
769.5	0.737	15	1.9	34	371	2.6	11	3.4	52	425	1.9
770.2	0.480	15	1.6	30	307	1.4	6.9	2.9	46	351	1.0
770.9	0.674	16	1.8	36	302	2.3	9.7	3.3	55	346	1.7
771.6	1.4	14	1.8	34	336	2.3	20	3.4	53	385	1.7
772.3	1.0	16	1.8	36	317	2.3	15	3.2	56	363	1.7
773.0	0.509	13	2.0	33	326	1.4	7.3	3.7	51	373	0.991
773.7	0.393	17	1.7	34	340	2.0	5.7	3.1	53	389	1.4
774.4	0.500	16	1.5	36	333	2.3	7.2	2.7	55	381	1.6
775.1	1.0	17	2.0	43	346	1.9	15	3.7	66	396	1.4
775.8	0.776	17	1.2	37	330	2.0	11	2.3	56	377	1.4
776.5	0.755	15	1.8	37	305	1.2	11	3.4	57	349	0.844
777.2	1.3	21	1.8	42	317	1.1	19	3.3	65	362	0.791
777.9	0.747	15	1.7	42	301	1.6	11	3.1	65	345	1.2
778.6	0.554	18	1.6	48	332	1.9	8.0	2.8	73	380	1.4
779.3	0.775	16	1.5	40	315	0.986	11	2.8	62	361	0.719
780.0	0.723	18	1.6	51	360	1.7	10	2.8	78	412	1.2
780.7	0.408	20	1.8	47	386	1.8	5.9	3.4	72	442	1.3
781.4	1.3	18	1.5	50	325	1.7	18	2.7	77	372	1.3
782.1	0.497	17	1.3	44	362	1.3	7.2	2.4	67	414	0.968
782.8	0.744	17	1.2	38	263	1.1	11	2.1	58	300	0.796
783.5	0.393	17	1.4	47	334	1.4	5.7	2.6	72	382	0.987
784.2	0.792	19	1.4	42	352	1.6	11	2.6	65	402	1.1
784.9	0.395	18	1.9	44	378	1.7	5.7	3.4	67	432	1.2
785.6	0.752	16	1.3	36	292	1.6	11	2.3	55	334	1.2
786.3	0.985	17	1.4	46	354	1.4	14	2.6	71	405	1.0
787.0	0.395	15	1.5	37	289	1.3	5.7	2.6	57	330	0.934
787.6	0.393	23	1.5	45	363	1.4	5.7	2.8	69	416	1.0
788.3	0.578	16	1.8	51	332	1.1	8.3	3.3	78	380	0.780
789.0	0.450	16	1.3	51	319	1.5	6.5	2.4	78	365	1.1
789.7	0.697	19	1.6	44	404	2.0	10	3.0	68	462	1.4
790.4	1.1	15	1.5	42	295	1.5	15	2.8	64	338	1.1

Minnow Environmental
Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
791.1	0.483	18	1.4	44	334	1.3	7.0	2.6	67	382	0.979
791.8	0.709	19	1.1	44	315	1.1	10	2.0	67	360	0.804
792.5	1.2	14	1.3	42	299	0.969	18	2.4	65	341	0.707
793.2	1.9	14	1.6	47	340	1.7	27	2.9	72	388	1.3
793.9	0.527	17	1.6	47	339	1.8	7.6	2.9	73	388	1.3
794.6	0.975	19	1.4	47	336	1.1	14	2.6	71	384	0.822
795.3	1.0	18	1.3	43	324	1.5	15	2.4	66	371	1.1
796.0	0.665	16	1.4	44	309	0.376	9.6	2.6	67	354	0.274
796.7	0.871	16	1.7	40	322	1.3	13	3.0	62	368	0.917
797.4	0.393	18	1.6	54	325	1.8	5.7	3.0	82	372	1.3
798.1	0.660	18	1.8	50	323	1.8	9.5	3.3	77	369	1.3
798.8	0.744	16	1.0	49	320	1.5	11	1.9	75	366	1.1
799.5	0.495	15	1.5	46	284	1.9	7.1	2.7	70	325	1.4
800.2	0.393	16	1.5	49	354	1.5	5.7	2.8	76	404	1.1
800.9	1.3	18	1.4	49	359	1.9	18	2.5	75	410	1.4
801.6	0.393	18	1.7	51	304	1.5	5.7	3.1	78	347	1.1
802.3	1.3	13	1.9	46	311	1.0	19	3.6	70	355	0.733
803.0	0.929	18	2.0	50	328	0.532	13	3.6	76	375	0.388
803.7	0.548	13	1.5	40	299	1.8	7.9	2.8	61	342	1.3
804.4	0.393	19	2.1	49	303	1.0	5.7	3.8	74	347	0.739
805.1	1.0	17	1.5	56	337	0.617	15	2.8	85	385	0.450
805.8	0.417	17	1.6	53	308	0.869	6.0	2.8	82	352	0.634
806.5	0.393	13	1.7	46	345	1.3	5.7	3.2	71	394	0.940
807.2	0.401	16	2.1	49	332	1.4	5.8	3.9	75	379	1.0
807.9	0.400	17	1.8	48	307	0.532	5.8	3.3	73	351	0.388
808.6	0.699	13	1.7	52	317	1.1	10	3.1	80	362	0.781
809.3	0.983	18	1.5	55	380	1.6	14	2.7	85	434	1.1
810.0	0.424	15	1.9	53	432	1.9	6.1	3.4	81	494	1.4
810.7	0.713	15	1.6	54	327	1.4	10	2.9	82	374	1.0
811.4	0.406	17	1.6	49	328	1.6	5.9	3.0	75	375	1.2
812.1	0.717	17	1.3	51	326	1.2	10	2.5	78	373	0.882
812.8	0.682	11	1.8	44	323	1.5	9.8	3.3	67	369	1.1
813.4	0.693	15	2.0	46	316	1.3	10	3.6	70	361	0.930
814.1	0.445	19	1.3	53	400	1.9	6.4	2.5	81	457	1.4
814.8	0.745	18	1.5	51	376	2.2	11	2.7	78	430	1.6
815.5	0.393	18	1.7	52	347	1.2	5.7	3.0	80	397	0.882
816.2	0.637	17	1.5	49	344	2.1	9.2	2.7	75	393	1.5
816.9	0.603	17	1.5	41	391	1.9	8.7	2.7	63	447	1.4
817.6	0.494	16	1.3	42	327	2.3	7.1	2.4	65	374	1.7
818.3	0.853	18	1.1	45	342	1.6	12	2.1	69	391	1.1
819.0	1.3	15	1.1	41	309	1.4	18	2.1	63	353	1.0
819.7	0.393	16	1.5	36	372	2.1	5.7	2.8	55	425	1.5
820.4	0.873	15	1.6	35	318	1.4	13	3.0	53	363	1.0
821.1	0.834	18	1.4	35	397	1.5	12	2.6	54	454	1.1
821.8	0.393	15	1.4	45	334	1.9	5.7	2.6	69	381	1.4
822.5	0.393	13	1.4	40	312	1.2	5.7	2.5	61	357	0.864
823.2	0.947	16	1.6	36	399	2.5	14	2.9	56	456	1.9
823.9	1.1	17	1.8	36	329	1.8	16	3.4	55	376	1.3
824.6	0.983	17	1.4	36	317	1.7	14	2.5	55	363	1.2
825.3	0.393	14	0.991	34	298	1.5	5.7	1.8	51	340	1.1
826.0	1.1	13	1.5	32	294	1.6	17	2.8	49	336	1.2
826.7	0.625	14	1.8	33	445	2.9	9.0	3.2	51	508	2.1
827.4	0.492	18	1.5	37	364	2.2	7.1	2.7	56	416	1.6
828.1	0.393	18	1.4	35	345	3.0	5.7	2.6	53	395	2.2
828.8	0.697	18	1.1	27	384	1.5	10	2.0	41	439	1.1
829.5	0.984	18	1.3	37	386	3.5	14	2.4	56	441	2.5
830.2	0.393	17	1.3	31	337	2.3	5.7	2.4	47	385	1.6
830.9	0.393	15	1.1	26	348	2.7	5.7	2.0	40	398	2.0
831.6	0.678	14	1.1	30	323	2.4	9.8	2.1	46	370	1.7
832.3	1.1	14	1.4	29	315	1.6	16	2.5	44	360	1.2
833.0	0.403	15	1.4	25	376	2.7	5.8	2.6	38	430	2.0
833.7	0.675	19	1.8	29	337	1.7	9.7	3.2	44	386	1.2
834.4	0.910	15	1.3	32	344	3.1	13	2.4	49	393	2.3
835.1	0.910	16	1.1	30	327	2.8	13	1.9	47	374	2.0
835.8	0.393	13	1.4	22	294	2.3	5.7	2.5	33	337	1.7
836.5	0.393	15	1.5	29	381	2.5	5.7	2.7	45	436	1.8
837.2	1.2	17	1.2	22	363	2.9	17	2.2	34	415	2.1
837.9	0.685	15	1.4	38	352	2.6	9.9	2.5	58	402	1.9
838.6	0.393	17	1.5	36	328	2.2	5.7	2.7	54	375	1.6
839.3	1.0	19	1.1	35	329	2.0	14	2.0	53	376	1.5
839.9	1.1	18	1.1	29	304	1.1	16	2.0	45	347	0.836
840.6	1.3	18	1.4	31	327	1.8	18	2.5	47	374	1.3
841.3	0.393	19	1.2	39	307	1.5	5.7	2.2	59	352	1.1
842.0	0.843	19	1.5	33	290	1.9	12	2.7	51	332	1.4
842.7	0.992	17	1.2	34	334	1.9	14	2.2	52	381	1.4
843.4	0.732	17	1.5	30	303	1.2	11	2.8	46	346	0.910
844.1	0.676	18	1.2	42	316	1.0	9.8	2.1	64	361	0.744
844.8	1.3	18	1.3	37	281	1.2	18	2.4	56	322	0.851
845.5	0.401	16	1.2	44	320	1.2	5.8	2.3	67	366	0.855
846.2	0.734	17	1.4	44	267	1.2	11	2.5	67	305	0.907
846.9	1.1	18	1.3	40	330	3.6	15	2.3	61	377	2.6

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
847.6	1.2	18	1.1	45	296	1.4	17	1.9	68	339	1.1
848.3	1.2	17	1.1	49	293	1.6	18	1.9	74	335	1.2
849.0	0.393	18	0.659	47	261	1.2	5.7	1.2	72	299	0.857
849.7	0.806	16	1.1	48	323	1.0	12	2.0	73	369	0.748
850.4	1.2	20	1.4	50	358	1.6	17	2.5	77	409	1.2
851.1	0.509	20	1.000	46	298	1.7	7.3	1.8	71	341	1.2
851.8	1.5	17	0.939	47	277	1.2	22	1.7	72	317	0.860
852.5	0.834	16	1.1	43	270	1.4	12	2.1	65	309	1.0
853.2	0.675	18	1.4	46	274	0.477	9.7	2.6	70	314	0.348
853.9	0.912	17	1.3	51	294	2.7	13	2.4	79	337	2.0
854.6	1.4	17	1.1	52	259	1.6	20	2.0	80	296	1.2
855.3	0.555	18	1.1	53	296	0.922	8.0	2.0	80	338	0.672
856.0	0.971	16	1.2	53	334	0.523	14	2.2	81	382	0.382
856.7	0.677	16	1.7	57	311	1.0	9.8	3.2	87	356	0.744
857.4	0.622	16	1.1	62	301	1.5	9.0	2.0	95	344	1.1
858.1	0.642	16	1.4	60	293	0.645	9.3	2.5	92	336	0.471
858.8	0.393	12	1.1	43	237	1.1	5.7	1.9	65	271	0.816
859.5	1.2	16	1.5	59	292	1.7	17	2.8	90	334	1.2
860.2	0.636	20	1.1	61	310	2.1	9.2	1.9	93	354	1.5
860.9	1.2	18	1.4	57	296	0.931	17	2.5	88	339	0.679
861.6	0.948	16	0.964	52	283	1.1	14	1.8	79	324	0.792
862.3	0.667	15	1.3	61	372	1.3	9.6	2.5	93	425	0.978
863.0	0.461	17	1.3	48	331	1.5	6.7	2.3	73	379	1.1
863.7	0.946	17	1.3	50	273	1.7	14	2.3	77	312	1.3
864.4	1.3	17	1.2	57	280	0.768	19	2.3	87	320	0.560
865.1	0.393	16	1.8	51	314	0.952	5.7	3.3	78	359	0.695
865.7	0.709	14	1.7	55	294	1.1	10	3.1	84	337	0.793
866.4	0.948	14	1.3	48	388	1.4	14	2.5	74	444	1.0
867.1	0.550	15	1.1	43	247	0.609	7.9	1.9	66	283	0.444
867.8	0.499	15	1.1	38	244	0.923	7.2	2.0	58	279	0.673
868.5	0.509	16	1.1	42	286	0.837	7.4	2.0	64	327	0.611
869.2	0.624	16	1.3	43	308	1.7	9.0	2.3	65	352	1.3
869.9	0.865	11	1.4	40	309	1.2	12	2.6	62	353	0.867
870.6	0.808	17	0.885	51	262	0.799	12	1.6	79	299	0.583
871.3	0.430	16	1.5	41	308	1.9	6.2	2.7	63	352	1.4
872.0	1.1	13	1.0	51	253	1.1	15	1.9	78	290	0.813
872.7	0.663	13	1.2	38	344	1.8	9.6	2.2	58	394	1.3
873.4	1.7	16	1.4	44	308	1.8	24	2.6	68	353	1.3
874.1	0.822	17	1.3	40	271	2.0	12	2.5	61	310	1.5
874.8	0.676	12	1.3	39	276	2.4	9.8	2.4	59	315	1.7
875.5	0.692	10	1.4	40	297	1.9	10.0	2.5	62	340	1.4
876.2	0.659	12	1.2	33	218	1.2	9.5	2.2	51	249	0.883
876.9	0.699	11	1.6	39	300	2.5	10	2.9	59	343	1.8
877.6	0.943	13	1.6	41	259	1.8	14	3.0	63	296	1.3
878.3	0.393	12	1.3	36	315	1.6	5.7	2.4	56	361	1.2
879.0	1.1	13	1.5	31	279	1.0	16	2.7	48	320	0.758
879.7	1.0	12	1.8	35	314	2.0	15	3.3	54	359	1.4
880.4	0.393	11	1.8	29	292	2.0	5.7	3.4	44	334	1.5
881.1	0.751	11	1.4	33	270	3.4	11	2.5	51	309	2.5
881.8	0.476	11	2.1	33	303	2.1	6.9	3.9	50	347	1.5
882.5	1.4	9.6	1.7	25	258	1.7	20	3.1	39	295	1.3
883.2	0.641	12	1.9	29	276	1.6	9.3	3.4	44	315	1.2
883.9	0.566	11	2.2	27	302	2.2	8.2	4.0	42	345	1.6
884.6	0.553	10	2.3	29	266	1.6	8.0	4.1	44	305	1.2
885.3	0.393	10	1.8	24	251	1.7	5.7	3.3	36	287	1.2
886.0	0.685	10	2.0	24	306	1.5	9.9	3.6	36	350	1.1
886.7	0.393	13	2.3	23	279	2.5	5.7	4.3	36	319	1.9
887.4	0.819	9.8	1.9	25	270	2.1	12	3.5	39	309	1.5
888.1	0.683	8.7	1.7	26	224	1.3	9.9	3.2	40	256	0.915
888.8	0.925	8.7	1.7	22	269	2.4	13	3.0	33	308	1.7
889.5	0.447	9.6	1.8	21	256	1.9	6.5	3.3	31	293	1.4
890.2	0.702	9.9	2.2	22	330	3.1	10	4.0	34	378	2.3
890.9	1.0	13	1.7	23	284	1.9	15	3.1	35	325	1.4
891.6	0.611	11	2.1	24	244	1.7	8.8	3.9	36	279	1.2
892.2	0.738	11	1.3	18	261	2.3	11	2.4	27	298	1.6
892.9	0.446	8.3	1.5	18	260	2.5	6.4	2.8	27	297	1.8
893.6	1.0	11	2.1	19	275	2.3	15	3.8	29	314	1.7
894.3	0.911	11	2.0	16	252	1.3	13	3.6	24	289	0.974
895.0	0.541	9.3	1.1	16	240	2.7	7.8	1.9	24	274	1.9
895.7	0.393	11	1.7	20	324	2.0	5.7	3.1	30	371	1.4
896.4	0.393	9.3	1.5	17	253	1.6	5.7	2.7	26	289	1.1
897.1	0.769	11	1.7	17	319	2.0	11	3.0	26	365	1.5
897.8	0.830	13	1.7	18	261	2.2	12	3.1	28	298	1.6
898.5	0.843	9.0	1.5	12	248	1.3	12	2.7	19	284	0.927
899.2	1.4	9.7	1.2	13	282	1.4	20	2.2	19	323	0.998
899.9	0.393	9.6	1.4	16	249	2.3	5.7	2.5	25	285	1.7
900.6	0.805	11	1.0	16	248	0.528	12	1.8	25	284	0.385
901.3	0.687	8.6	1.3	14	237	1.3	9.9	2.3	21	271	0.919
902.0	0.393	12	1.2	12	272	1.8	5.7	2.2	18	311	1.3
902.7	0.836	11	1.1	13	274	1.1	12	2.1	20	314	0.788
903.4	0.914	9.9	1.1	13	197	1.8	13	2.1	20	226	1.3

Minnow Environmental
Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
904.1	0.631	10	1.7	17	262	1.5	9.1	3.0	26	300	1.1
904.8	0.402	10	1.1	19	282	1.4	5.8	1.9	29	323	1.0
905.5	0.837	8.5	1.2	15	268	1.1	12	2.1	23	307	0.821
906.2	0.704	9.8	1.5	14	275	1.6	10	2.7	21	315	1.2
906.9	0.845	12	1.2	16	258	0.886	12	2.2	24	295	0.646
907.6	0.438	10	1.5	16	229	1.8	6.3	2.8	25	262	1.3
908.3	1.4	11	1.2	17	235	1.9	20	2.2	26	268	1.4
909.0	0.530	9.4	0.957	15	253	1.1	7.7	1.7	23	289	0.785
909.7	0.542	14	0.956	18	288	1.2	7.8	1.7	28	330	0.876
910.4	0.829	11	1.3	19	254	2.3	12	2.3	30	291	1.7
911.1	0.393	12	1.2	18	281	2.2	5.7	2.1	28	321	1.6
911.8	0.641	10	0.822	16	239	1.1	9.3	1.5	24	274	0.797
912.5	0.596	10	0.893	16	247	1.3	8.6	1.6	25	283	0.933
913.2	0.842	12	1.0	18	224	1.5	12	1.9	28	256	1.1
913.9	0.659	12	0.852	19	247	0.909	9.5	1.6	28	282	0.663
914.6	0.800	11	0.538	18	237	1.5	12	0.980	28	271	1.1
915.3	0.737	9.9	0.800	14	243	1.5	11	1.5	21	278	1.1
916.0	1.0	12	0.962	18	253	1.3	15	1.8	27	290	0.960
916.7	1.2	11	1.1	19	282	1.5	17	2.0	29	322	1.1
917.4	0.611	14	0.678	19	225	1.0	8.8	1.2	30	258	0.747
918.0	0.393	12	0.648	18	256	1.5	5.7	1.2	27	292	1.1
918.7	0.393	10	0.833	19	253	1.5	5.7	1.5	29	289	1.1
919.4	0.916	11	0.666	23	267	1.2	13	1.2	36	305	0.898
920.1	0.924	11	0.468	20	239	1.1	13	0.853	31	273	0.824
920.8	0.822	13	1.0	17	225	0.703	12	1.9	26	257	0.513
921.5	1.1	11	0.765	20	237	0.915	15	1.4	31	272	0.667
922.2	0.788	12	0.914	19	273	1.8	11	1.7	29	312	1.3
922.9	0.980	13	0.750	26	243	1.7	14	1.4	40	278	1.2
923.6	0.667	12	0.658	20	208	1.6	9.6	1.2	31	238	1.1
924.3	1.5	12	0.795	21	237	1.1	22	1.5	32	271	0.795
925.0	0.393	9.5	0.881	14	232	1.2	5.7	1.6	22	265	0.847
925.7	0.586	12	0.362	22	288	1.1	8.5	0.660	34	329	0.787
926.4	1.8	12	0.740	21	269	1.4	26	1.3	32	307	1.0
927.1	1.2	12	0.493	18	253	1.4	17	0.899	28	289	1.0
927.8	2.0	12	0.673	26	289	1.8	28	1.2	39	330	1.3
928.5	0.715	10	0.895	20	241	0.699	10	1.6	31	276	0.510
929.2	0.848	11	0.749	20	219	1.3	12	1.4	30	251	0.932
929.9	1.1	11	0.595	22	253	1.2	16	1.1	34	290	0.911
930.6	0.849	12	0.781	27	228	1.3	12	1.4	42	260	0.984
931.3	0.885	12	0.502	23	237	0.572	13	0.916	36	271	0.417
932.0	1.2	12	1.1	23	332	1.7	17	2.0	35	379	1.2
932.7	0.876	11	0.881	22	252	1.2	13	1.6	34	288	0.895
933.4	0.793	16	0.641	27	265	1.6	11	1.2	42	303	1.1
934.1	1.1	16	0.892	29	262	1.4	16	1.6	44	300	1.1
934.8	0.819	13	0.889	29	260	1.6	12	1.6	45	297	1.2
935.5	0.629	11	0.489	23	271	1.5	9.1	0.891	36	310	1.1
936.2	0.826	12	0.913	25	306	0.758	12	1.7	38	349	0.553
936.9	1.2	11	0.638	28	260	1.4	18	1.2	43	298	1.0
937.6	0.706	10	0.909	28	240	0.799	10	1.7	43	275	0.583
938.3	1.0	11	0.917	24	239	0.750	15	1.7	37	274	0.547
939.0	0.393	12	0.817	22	270	1.6	5.7	1.5	34	309	1.2
939.7	0.546	11	0.818	25	252	0.784	7.9	1.5	39	288	0.572
940.4	1.7	13	1.1	32	277	1.6	24	2.1	49	316	1.1
941.1	0.807	13	0.963	29	268	0.846	12	1.8	45	307	0.617
941.8	0.571	9.0	0.828	21	205	1.1	8.2	1.5	32	235	0.768
942.5	1.1	14	0.862	26	253	0.432	16	1.6	40	290	0.315
943.2	0.728	14	0.972	31	315	1.6	11	1.8	48	360	1.2
943.8	1.3	10	0.561	27	249	1.4	19	1.0	42	284	1.0
944.5	0.800	15	1.0	31	257	1.1	12	1.9	48	294	0.785
945.2	0.712	9.5	0.698	20	197	0.920	10	1.3	31	226	0.671
945.9	0.537	14	0.702	25	254	0.991	7.8	1.3	38	291	0.723
946.6	0.619	11	1.4	33	223	1.5	8.9	2.5	51	255	1.1
947.3	1.0	10	0.622	27	231	1.5	15	1.1	41	264	1.1
948.0	1.0	12	1.0	29	268	0.906	15	1.9	45	306	0.661
948.7	0.969	11	0.856	23	290	1.1	14	1.6	36	332	0.837
949.4	1.4	10	0.730	26	247	0.776	21	1.3	39	282	0.566
950.1	0.576	12	1.0	23	271	1.5	8.3	1.9	36	309	1.1
950.8	0.575	9.7	0.630	18	179	1.2	8.3	1.1	28	205	0.889
951.5	0.393	10	0.933	28	237	1.5	5.7	1.7	44	271	1.1
952.2	0.838	6.0	1.2	23	199	1.3	12	2.2	36	227	0.921
952.9	0.614	10	1.0	25	256	1.8	8.9	1.9	38	292	1.3
953.6	0.934	11	0.911	27	254	1.5	13	1.7	42	291	1.1
954.3	0.900	12	0.938	25	242	0.824	13	1.7	39	276	0.601
955.0	0.946	9.7	1.1	23	220	0.819	14	2.1	36	251	0.598
955.7	0.393	9.9	1.1	22	229	0.834	5.7	2.0	34	262	0.608
956.4	0.848	13	1.2	21	232	1.4	12	2.2	32	265	0.991
957.1	0.901	12	1.3	27	240	1.9	13	2.3	41	275	1.4
957.8	0.757	12	1.5	23	229	0.893	11	2.8	36	262	0.652
958.5	0.891	9.6	1.1	19	231	1.1	13	2.1	29	264	0.813
959.2	0.512	11	1.0	20	300	1.9	7.4	1.8	30	343	1.4
959.9	0.756	12	1.2	23	269	1.3	11	2.2	36	308	0.940

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
960.6	1.1	12	1.5	22	214	1.4	16	2.7	34	245	1.0
961.3	0.453	13	2.2	21	253	1.7	6.5	4.1	32	290	1.2
962.0	1.0	11	1.5	20	261	1.5	15	2.8	30	298	1.1
962.7	0.876	13	1.3	18	234	1.5	13	2.4	27	267	1.1
963.4	0.666	12	1.7	21	291	1.7	9.6	3.0	32	333	1.3
964.1	0.565	13	1.0	22	265	1.6	8.2	1.9	34	303	1.1
964.8	0.743	10	1.1	21	256	1.7	11	2.0	33	293	1.2
965.5	0.631	11	1.2	20	248	1.3	9.1	2.2	31	284	0.917
966.2	1.1	10	0.921	17	227	1.3	15	1.7	26	259	0.985
966.9	0.578	11	0.827	19	250	1.5	8.4	1.5	29	286	1.1
967.6	0.803	12	0.941	17	216	1.7	12	1.7	26	247	1.2
968.3	0.465	11	1.3	17	228	0.859	6.7	2.5	26	261	0.627
969.0	0.722	13	1.0	17	233	0.970	10	1.9	26	267	0.708
969.7	0.805	14	1.2	22	251	1.1	12	2.1	34	287	0.770
970.3	0.489	12	0.870	21	233	1.2	7.1	1.6	32	266	0.880
971.0	0.405	8.6	1.2	16	262	1.9	5.8	2.3	25	300	1.4
971.7	0.393	7.9	0.967	14	245	1.4	5.7	1.8	22	280	0.994
972.4	1.1	15	0.907	21	270	1.9	15	1.7	33	308	1.4
973.1	0.393	12	1.3	18	256	1.4	5.7	2.4	28	292	0.990
973.8	0.725	13	0.863	18	245	1.5	10	1.6	28	280	1.1
974.5	0.468	12	0.688	13	204	0.863	6.8	1.3	20	234	0.629
975.2	0.687	13	0.864	19	278	1.2	9.9	1.6	29	318	0.845
975.9	0.580	13	1.1	19	238	2.0	8.4	2.0	30	272	1.5
976.6	0.847	14	1.2	17	243	2.0	12	2.2	26	278	1.5
977.3	0.634	13	0.823	16	272	1.6	9.1	1.5	24	311	1.2
978.0	0.393	12	0.854	13	274	1.9	5.7	1.6	19	313	1.4
978.7	0.548	12	0.688	10	218	1.3	7.9	1.3	16	249	0.980
979.4	0.886	14	1.1	16	292	1.9	13	2.0	25	334	1.4
980.1	0.706	16	1.2	18	245	2.4	10	2.2	27	280	1.7
980.8	0.399	13	0.926	15	231	1.3	5.8	1.7	23	265	0.945
981.5	0.706	10	1.0	16	241	0.998	10	1.9	25	275	0.728
982.2	0.887	13	0.848	17	284	2.5	13	1.5	25	325	1.8
982.9	0.648	17	0.939	18	256	2.2	9.4	1.7	27	292	1.6
983.6	0.715	14	0.948	16	288	2.1	10	1.7	25	329	1.5
984.3	1.6	13	0.823	16	232	1.4	23	1.5	24	265	1.1
985.0	0.702	11	0.926	15	240	1.4	10	1.7	23	274	1.0
985.7	0.393	11	0.898	16	272	2.1	5.7	1.6	24	311	1.6
986.4	0.656	15	0.653	16	270	2.2	9.5	1.2	24	309	1.6
987.1	0.445	14	0.893	17	258	1.1	6.4	1.6	27	295	0.828
987.8	0.802	15	1.1	14	230	1.3	12	2.0	21	263	0.929
988.5	0.425	11	0.785	15	258	1.1	6.1	1.4	23	295	0.790
989.2	0.522	13	0.921	15	227	0.964	7.5	1.7	23	260	0.703
989.9	0.924	14	0.978	20	256	1.6	13	1.8	31	293	1.2
990.6	0.626	12	1.1	18	233	1.5	9.0	2.0	27	266	1.1
991.3	0.774	13	0.878	17	250	1.8	11	1.6	26	286	1.3
992.0	0.645	11	0.933	16	261	1.6	9.3	1.7	25	298	1.1
992.7	0.492	12	0.888	16	233	1.2	7.1	1.6	25	266	0.861
993.4	0.889	16	0.817	19	316	2.6	13	1.5	29	361	1.9
994.1	1.1	17	1.1	20	289	2.0	16	2.0	31	330	1.5
994.8	0.771	12	0.964	14	228	1.4	11	1.8	22	261	1.0
995.5	0.494	12	0.969	14	253	1.1	7.1	1.8	22	289	0.814
996.2	1.4	14	1.2	17	296	1.9	20	2.3	26	338	1.4
996.8	0.574	12	0.940	21	282	2.1	8.3	1.7	32	323	1.5
997.5	0.597	11	0.730	16	207	1.3	8.6	1.3	24	237	0.923
998.2	1.0	13	1.3	18	278	1.3	15	2.4	27	318	0.924
998.9	0.890	13	0.700	14	257	1.1	13	1.3	21	293	0.769
999.6	0.611	9.7	0.875	18	247	1.7	8.8	1.6	28	282	1.2
1000.3	0.801	15	1.1	16	225	1.5	12	1.9	25	257	1.1
1001.0	0.695	14	0.894	14	229	1.2	10	1.6	22	262	0.859
1001.7	0.614	12	0.814	16	274	1.6	8.9	1.5	24	313	1.2
1002.4	0.570	12	0.611	14	258	1.0	8.2	1.1	22	295	0.766
1003.1	1.1	16	1.2	14	223	1.7	16	2.1	21	255	1.2
1003.8	0.393	12	0.726	17	236	1.8	5.7	1.3	27	270	1.3
1004.5	0.690	15	1.1	18	287	1.7	10.0	1.9	28	328	1.2
1005.2	0.393	11	0.915	12	250	2.1	5.7	1.7	18	285	1.5
1005.9	0.772	15	1.1	16	271	1.6	11	2.0	25	310	1.2
1006.6	0.745	13	0.745	18	229	1.2	11	1.4	28	262	0.845
1007.3	1.3	15	0.604	18	220	0.915	19	1.1	28	252	0.667
1008.0	0.606	11	0.720	17	224	1.2	8.8	1.3	26	256	0.881
1008.7	0.698	11	0.609	14	251	1.8	10	1.1	22	287	1.3
1009.4	0.530	12	0.991	18	301	1.4	7.6	1.8	27	345	1.0
1010.1	0.702	12	0.543	22	248	0.861	10	0.990	33	284	0.628
1010.8	0.780	13	0.581	20	237	1.1	11	1.1	31	271	0.804
1011.5	0.898	11	0.843	20	240	1.4	13	1.5	30	274	1.1
1012.2	1.6	10	0.760	24	288	0.888	24	1.4	36	329	0.648
1012.9	0.852	13	0.732	17	230	1.1	12	1.3	26	263	0.804
1013.6	0.704	12	0.590	18	205	1.3	10	1.1	27	235	0.942
1014.3	0.565	12	0.691	17	299	0.757	8.2	1.3	26	342	0.552
1015.0	0.411	11	0.713	15	246	1.3	5.9	1.3	23	281	0.925
1015.7	0.393	15	0.830	18	265	0.624	5.7	1.5	28	303	0.455
1016.4	0.393	14	0.745	19	248	2.0	5.7	1.4	29	283	1.5

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1017.1	0.572	13	0.652	21	233	1.2	8.3	1.2	33	266	0.847
1017.8	1.2	11	0.887	18	235	1.4	17	1.6	28	269	0.992
1018.5	1.1	13	0.631	18	274	1.4	15	1.2	27	314	1.0
1019.2	0.846	12	0.685	22	241	1.6	12	1.2	33	276	1.1
1019.9	0.651	12	0.593	21	214	1.9	9.4	1.1	33	245	1.4
1020.6	0.832	12	0.811	18	220	0.915	12	1.5	28	252	0.668
1021.3	0.777	11	0.836	18	235	1.0	11	1.5	27	268	0.743
1022.0	0.869	13	0.871	22	279	1.3	13	1.6	33	319	0.929
1022.7	0.957	12	1.1	22	242	0.721	14	2.1	34	277	0.526
1023.3	0.878	13	0.598	21	225	1.2	13	1.1	32	257	0.881
1024.0	0.627	12	0.788	20	230	1.5	9.1	1.4	31	263	1.1
1024.7	0.446	8.8	0.648	18	224	1.2	6.4	1.2	28	256	0.868
1025.4	0.683	11	0.945	19	261	0.772	9.9	1.7	29	298	0.563
1026.1	0.393	14	1.0	19	306	1.6	5.7	1.8	30	350	1.2
1026.8	0.846	14	0.685	24	249	1.8	12	1.2	36	284	1.3
1027.5	0.842	11	0.805	20	211	1.1	12	1.5	31	242	0.794
1028.2	0.519	10	0.674	18	224	0.957	7.5	1.2	28	256	0.698
1028.9	1.1	11	0.747	21	242	0.613	15	1.4	32	277	0.448
1029.6	0.419	12	0.796	21	209	1.6	6.0	1.5	32	239	1.2
1030.3	0.876	13	0.782	23	222	1.1	13	1.4	36	254	0.781
1031.0	0.393	11	0.735	16	225	1.5	5.7	1.3	25	257	1.1
1031.7	1.1	11	0.653	19	256	1.9	16	1.2	29	292	1.4
1032.4	0.393	12	0.794	21	276	1.6	5.7	1.4	33	315	1.2
1033.1	0.424	15	0.562	21	216	1.3	6.1	1.0	32	246	0.932
1033.8	0.819	11	0.857	25	223	1.3	12	1.6	39	255	0.940
1034.5	0.588	11	0.674	21	265	1.4	8.5	1.2	33	303	1.0
1035.2	0.559	12	0.939	20	257	0.928	8.1	1.7	30	293	0.677
1035.9	1.2	13	1.1	20	291	1.3	18	2.0	30	333	0.957
1036.6	0.969	13	0.758	18	299	0.829	14	1.4	28	342	0.605
1037.3	0.487	11	0.753	20	238	0.800	7.0	1.4	30	272	0.584
1038.0	0.432	15	0.888	15	231	1.2	6.2	1.6	22	264	0.875
1038.7	0.512	9.5	1.1	19	254	1.3	7.4	2.0	30	290	0.920
1039.4	0.568	15	1.1	19	239	1.7	8.2	2.0	29	273	1.2
1040.1	0.973	13	0.914	21	228	1.0	14	1.7	33	261	0.731
1040.8	0.943	11	0.696	22	251	0.914	14	1.3	33	287	0.667
1041.5	0.393	13	0.949	19	227	0.915	5.7	1.7	29	259	0.668
1042.2	0.832	15	1.1	16	229	1.1	12	2.0	25	261	0.796
1042.9	0.879	16	1.2	25	291	1.8	13	2.2	38	333	1.3
1043.6	0.393	13	0.844	18	209	1.0	5.7	1.5	28	239	0.730
1044.3	0.393	11	0.946	14	243	1.1	5.7	1.7	22	278	0.819
1045.0	0.393	13	0.739	17	234	0.626	5.7	1.3	26	268	0.457
1045.7	0.393	13	0.923	18	247	1.3	5.7	1.7	28	282	0.985
1046.4	0.489	13	0.853	19	244	0.907	7.1	1.6	29	279	0.662
1047.1	0.437	14	1.1	19	232	0.912	6.3	2.1	29	266	0.665
1047.8	0.591	13	1.4	12	226	1.3	8.5	2.6	18	259	0.925
1048.5	0.613	9.1	0.842	16	231	0.513	8.9	1.5	25	264	0.375
1049.2	0.685	13	1.1	14	232	1.3	9.9	2.0	21	265	0.919
1049.8	0.787	13	1.0	18	208	1.3	11	1.8	28	238	0.978
1050.5	0.393	11	0.939	17	282	1.4	5.7	1.7	25	322	1.0
1051.2	0.443	12	0.888	15	196	0.923	6.4	1.6	22	224	0.673
1051.9	0.829	15	1.0	16	342	1.4	12	1.8	24	391	1.0
1052.6	0.393	13	1.1	17	241	0.985	5.7	2.1	27	276	0.719
1053.3	0.393	12	0.686	14	205	0.902	5.7	1.3	22	234	0.658
1054.0	0.393	11	0.998	17	256	0.899	5.7	1.8	26	293	0.656
1054.7	0.393	12	1.1	14	272	1.6	5.7	2.1	21	311	1.1
1055.4	0.393	11	0.730	16	248	1.8	5.7	1.3	25	284	1.3
1056.1	0.762	12	1.1	18	268	1.8	11	2.1	27	306	1.3
1056.8	0.805	12	0.652	12	189	1.3	12	1.2	18	217	0.941
1057.5	1.1	13	1.0	17	275	1.7	15	1.9	26	315	1.3
1058.2	0.419	13	0.950	13	233	1.7	6.1	1.7	20	266	1.2
1058.9	1.0	12	1.3	12	268	1.2	15	2.4	18	306	0.870
1059.6	0.399	11	1.3	13	217	0.847	5.8	2.3	20	248	0.618
1060.3	0.817	12	0.865	13	209	1.5	12	1.6	20	239	1.1
1061.0	0.393	9.9	1.0	12	215	1.1	5.7	1.9	19	246	0.834
1061.7	0.404	10	0.937	9.7	270	1.4	5.8	1.7	15	309	1.0
1062.4	0.547	11	1.1	13	248	0.706	7.9	2.0	20	284	0.515
1063.1	0.911	12	1.3	13	240	1.6	13	2.3	21	275	1.1
1063.8	0.759	11	1.4	12	219	1.1	11	2.6	19	250	0.783
1064.5	0.451	10	1.3	12	210	1.8	6.5	2.4	18	240	1.3
1065.2	0.709	10	1.1	14	277	1.4	10	2.0	22	316	1.0
1065.9	0.633	12	1.2	16	280	0.701	9.1	2.1	24	320	0.512
1066.6	0.490	9.9	1.0	12	189	0.543	7.1	1.9	19	216	0.396
1067.3	0.393	9.5	1.0	11	197	0.933	5.7	1.9	16	225	0.681
1068.0	0.424	9.5	0.939	13	253	1.4	6.1	1.7	21	289	1.0
1068.7	0.456	13	1.1	12	278	1.8	6.6	2.0	18	318	1.3
1069.4	0.462	9.9	1.2	14	244	1.5	6.7	2.2	21	279	1.1
1070.1	0.701	10.0	0.947	12	213	1.5	10	1.7	19	244	1.1
1070.8	0.393	10	0.729	8.3	268	1.6	5.7	1.3	13	306	1.1
1071.5	0.393	11	1.0	11	224	1.2	5.7	1.9	17	257	0.896
1072.2	0.393	11	1.1	11	220	2.1	5.7	2.1	16	252	1.5
1072.9	0.828	12	1.1	12	239	1.8	12	2.1	19	274	1.3

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1073.6	0.504	13	0.888	10.0	259	1.6	7.3	1.6	15	297	1.2
1074.3	0.393	11	0.989	8.2	265	1.6	5.7	1.8	13	302	1.2
1075.0	0.393	11	0.779	9.3	211	1.2	5.7	1.4	14	242	0.876
1075.6	0.765	11	1.4	9.0	266	1.8	11	2.6	14	304	1.3
1076.3	0.744	10	1.1	8.2	217	1.7	11	1.9	13	248	1.2
1077.0	0.393	13	1.3	8.3	241	1.5	5.7	2.5	13	276	1.1
1077.7	0.908	10	0.799	6.4	219	1.6	13	1.5	9.8	251	1.1
1078.4	0.551	13	0.801	12	291	1.7	8.0	1.5	19	332	1.2
1079.1	0.617	10	1.2	10	204	0.946	8.9	2.1	15	234	0.690
1079.8	0.529	11	0.916	11	248	1.4	7.6	1.7	17	284	1.0
1080.5	0.904	12	0.930	8.3	227	1.4	13	1.7	13	259	0.994
1081.2	1.0	13	1.2	7.6	249	0.993	15	2.2	12	284	0.724
1081.9	0.393	8.4	1.3	8.0	254	1.9	5.7	2.4	12	291	1.4
1082.6	0.393	11	0.906	7.8	215	1.3	5.7	1.7	12	246	0.920
1083.3	0.591	11	0.991	10	233	1.1	8.5	1.8	16	266	0.794
1084.0	0.757	9.9	1.1	7.8	250	1.5	11	2.0	12	285	1.1
1084.7	1.2	11	1.1	10	268	2.7	18	1.9	15	306	1.9
1085.4	0.393	13	1.1	8.7	266	1.8	5.7	1.9	13	304	1.3
1086.1	0.393	8.3	0.922	6.6	237	1.8	5.7	1.7	10	271	1.3
1086.8	0.393	10	0.604	7.2	247	1.9	5.7	1.1	11	282	1.4
1087.5	0.438	7.5	0.800	6.1	249	1.6	6.3	1.5	9.3	285	1.2
1088.2	0.393	11	0.764	6.2	269	1.4	5.7	1.4	9.5	307	1.0
1088.9	0.538	11	0.657	6.9	211	2.2	7.8	1.2	11	241	1.6
1089.6	1.2	9.2	1.1	5.9	303	2.5	17	2.0	9.1	346	1.8
1090.3	0.393	10	0.917	4.8	227	1.9	5.7	1.7	7.4	260	1.4
1091.0	0.393	9.6	0.675	4.5	243	2.0	5.7	1.2	6.8	278	1.4
1091.7	0.393	13	0.889	4.9	262	1.8	5.7	1.6	7.5	299	1.3
1092.4	0.630	13	1.0	5.3	341	1.7	9.1	1.9	8.1	390	1.3
1093.1	0.395	11	0.766	7.5	259	1.3	5.7	1.4	12	297	0.918
1093.8	0.560	12	0.748	6.3	212	1.4	8.1	1.4	9.7	243	1.0
1094.5	0.577	9.9	0.575	4.4	271	2.0	8.3	1.0	6.7	310	1.5
1095.2	0.393	11	1.1	5.9	259	2.1	5.7	2.0	9.1	296	1.5
1095.9	0.415	10.0	0.615	4.2	206	1.6	6.0	1.1	6.5	235	1.2
1096.6	0.393	12	0.728	7.0	245	2.1	5.7	1.3	11	281	1.5
1097.3	0.516	13	0.760	4.6	243	2.4	7.5	1.4	7.0	278	1.7
1098.0	0.511	9.8	0.799	4.4	286	1.8	7.4	1.5	6.8	327	1.3
1098.7	0.530	13	0.549	7.1	269	2.2	7.6	1.0	11	308	1.6
1099.4	0.505	11	1.2	7.6	268	2.5	7.3	2.1	12	306	1.8
1100.1	0.393	11	0.727	6.2	292	1.7	5.7	1.3	9.5	333	1.3
1100.8	0.495	12	0.853	5.0	239	2.2	7.2	1.6	7.6	273	1.6
1101.4	0.685	11	0.925	4.9	307	2.8	9.9	1.7	7.5	351	2.0
1102.1	0.878	14	0.614	5.4	291	1.3	13	1.1	8.3	333	0.939
1102.8	0.868	12	0.751	5.9	288	1.9	13	1.4	9.1	329	1.4
1103.5	0.525	11	0.602	6.0	225	1.3	7.6	1.1	9.1	258	0.962
1104.2	0.665	11	0.643	6.2	261	2.1	9.6	1.2	9.6	298	1.5
1104.9	0.393	11	0.606	6.6	315	3.6	5.7	1.1	10	361	2.6
1105.6	0.570	12	0.555	6.2	279	1.9	8.2	1.0	9.4	319	1.4
1106.3	0.607	13	0.717	4.2	263	1.7	8.8	1.3	6.4	300	1.2
1107.0	0.393	11	0.823	6.0	310	1.1	5.7	1.5	9.2	355	0.805
1107.7	1.1	10	0.721	5.3	246	2.0	15	1.3	8.1	282	1.5
1108.4	0.393	13	1.2	5.0	267	2.0	5.7	2.2	7.7	305	1.5
1109.1	0.393	11	0.873	8.4	235	1.2	5.7	1.6	13	269	0.906
1109.8	0.393	11	0.631	7.9	226	1.3	5.7	1.2	12	258	0.970
1110.5	0.393	11	0.504	6.1	253	1.3	5.7	0.919	9.4	290	0.947
1111.2	0.401	11	0.731	4.4	241	1.6	5.8	1.3	6.8	276	1.2
1111.9	0.459	12	0.969	8.2	281	2.0	6.6	1.8	13	321	1.5
1112.6	0.393	14	1.0	7.1	252	1.9	5.7	1.8	11	288	1.4
1113.3	0.980	13	0.794	9.5	321	1.6	14	1.4	15	367	1.1
1114.0	0.480	11	0.653	6.8	239	1.4	6.9	1.2	10	274	1.0
1114.7	0.572	10	1.3	8.8	260	2.8	8.3	2.4	14	297	2.1
1115.4	0.393	13	0.823	8.1	243	3.1	5.7	1.5	12	278	2.3
1116.1	0.393	11	0.761	7.1	210	2.2	5.7	1.4	11	240	1.6
1116.8	0.393	11	1.0	6.2	218	2.1	5.7	1.9	9.4	250	1.5
1117.5	1.0	10	0.836	8.9	234	2.3	14	1.5	14	267	1.7
1118.2	0.393	13	1.2	8.6	288	1.5	5.7	2.1	13	330	1.1
1118.9	0.393	12	0.842	10	274	2.2	5.7	1.5	15	313	1.6
1119.6	1.1	13	0.771	10	260	1.7	16	1.4	16	298	1.3
1120.3	0.467	12	0.852	12	272	1.1	6.7	1.6	18	311	0.769
1121.0	0.668	11	0.783	9.9	212	1.8	9.6	1.4	15	243	1.3
1121.7	0.639	11	0.737	11	282	2.2	9.2	1.3	16	322	1.6
1122.4	0.569	13	1.2	11	278	1.2	8.2	2.2	17	318	0.904
1123.1	0.393	13	0.986	13	274	2.2	5.7	1.8	21	314	1.6
1123.8	0.927	11	0.858	9.5	225	2.3	13	1.6	15	257	1.6
1124.5	0.866	9.7	0.681	11	242	1.4	12	1.2	16	277	1.0
1125.2	0.738	15	1.4	10	257	2.3	11	2.5	16	294	1.7
1125.9	0.576	15	0.871	12	245	2.1	8.3	1.6	19	281	1.5
1126.6	0.442	10	0.863	13	279	1.5	6.4	1.6	20	319	1.1
1127.3	0.896	15	0.973	12	261	1.5	13	1.8	19	299	1.1
1127.9	0.393	14	1.2	12	297	2.0	5.7	2.2	19	339	1.5
1128.6	0.393	12	1.3	12	273	1.8	5.7	2.4	18	312	1.3
1129.3	0.712	13	1.2	12	229	2.0	10	2.1	19	262	1.4

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1130.0	1.2	9.9	0.851	14	213	1.9	17	1.6	22	244	1.4
1130.7	0.718	13	1.1	13	257	1.4	10	2.0	20	294	1.0
1131.4	0.771	13	1.6	16	333	2.5	11	2.8	24	381	1.8
1132.1	0.668	14	1.2	19	258	1.1	9.6	2.2	29	295	0.821
1132.8	0.393	15	1.4	15	255	2.1	5.7	2.5	24	292	1.5
1133.5	0.609	12	1.4	13	236	1.2	8.8	2.6	20	270	0.893
1134.2	0.393	9.6	1.4	12	264	2.9	5.7	2.5	18	302	2.1
1134.9	0.689	12	1.3	12	293	2.9	10.0	2.4	19	335	2.1
1135.6	0.898	15	1.3	13	230	1.6	13	2.3	20	263	1.2
1136.3	0.757	13	1.2	14	251	2.3	11	2.1	21	287	1.7
1137.0	0.393	11	1.2	11	238	1.5	5.7	2.2	17	272	1.1
1137.7	0.771	14	1.2	15	303	2.1	11	2.3	22	346	1.5
1138.4	0.493	14	1.0	11	245	1.3	7.1	1.8	17	280	0.961
1139.1	0.725	12	1.3	12	239	2.0	10	2.5	18	273	1.5
1139.8	0.393	12	1.1	11	235	1.0	5.7	2.1	16	268	0.735
1140.5	0.588	13	1.1	14	277	2.6	8.5	2.0	22	317	1.9
1141.2	0.393	13	0.986	11	249	1.3	5.7	1.8	17	285	0.963
1141.9	0.522	13	1.0	12	279	2.6	7.5	1.9	19	319	1.9
1142.6	1.3	15	1.1	13	286	1.3	18	2.0	20	327	0.954
1143.3	0.393	11	0.905	11	243	1.9	5.7	1.6	16	278	1.4
1144.0	0.615	14	1.1	10	232	2.8	8.9	2.0	15	265	2.1
1144.7	0.694	14	1.4	8.7	244	1.7	10	2.5	13	279	1.2
1145.4	0.584	18	0.884	11	266	2.6	8.4	1.6	17	304	1.9
1146.1	0.393	14	1.0	12	233	1.8	5.7	1.9	18	267	1.3
1146.8	0.647	13	0.949	12	292	1.9	9.3	1.7	19	333	1.4
1147.5	0.613	13	1.5	12	268	2.4	8.9	2.8	19	307	1.7
1148.2	0.417	16	1.3	11	257	2.6	6.0	2.3	17	294	1.9
1148.9	0.393	17	1.1	13	287	1.6	5.7	2.0	20	328	1.1
1149.6	0.697	12	1.4	11	252	2.6	10	2.6	17	288	1.9
1150.3	0.931	14	1.2	15	277	1.7	13	2.1	23	317	1.2
1151.0	1.4	13	1.3	12	287	2.3	20	2.4	18	329	1.7
1151.7	0.683	13	1.4	9.4	268	2.2	9.9	2.6	14	307	1.6
1152.4	0.531	16	1.0	14	252	1.9	7.7	1.8	21	288	1.4
1153.1	1.3	13	1.4	11	216	1.9	18	2.5	16	247	1.4
1153.7	0.810	14	1.3	11	222	1.3	12	2.5	17	254	0.939
1154.4	0.393	13	1.2	9.9	287	1.7	5.7	2.1	15	328	1.3
1155.1	0.805	14	1.1	11	245	2.2	12	2.0	17	281	1.6
1155.8	0.393	17	1.0	13	245	3.4	5.7	1.9	20	281	2.5
1156.5	0.478	13	1.4	10	249	1.3	6.9	2.6	16	284	0.931
1157.2	0.467	14	1.1	8.9	233	2.6	6.7	2.0	14	266	1.9
1157.9	0.448	12	1.0	9.8	236	2.1	6.5	1.9	15	270	1.5
1158.6	0.447	15	1.4	13	240	2.3	6.5	2.6	20	274	1.7
1159.3	1.3	13	1.1	9.6	246	1.8	18	2.0	15	282	1.3
1160.0	0.393	15	1.1	10	272	3.0	5.7	2.1	16	311	2.2
1160.7	0.977	14	1.0	8.2	240	1.6	14	1.9	13	274	1.2
1161.4	0.393	13	1.4	9.7	278	1.8	5.7	2.5	15	318	1.3
1162.1	0.988	14	1.1	8.6	243	2.7	14	2.1	13	278	1.9
1162.8	0.393	13	1.1	12	244	3.8	5.7	2.0	19	279	2.8
1163.5	0.407	13	1.4	11	285	2.5	5.9	2.6	16	326	1.8
1164.2	0.789	17	1.5	11	257	2.3	11	2.8	16	294	1.7
1164.9	0.442	13	1.2	10	244	2.9	6.4	2.2	16	279	2.1
1165.6	0.930	15	0.970	9.6	268	2.7	13	1.8	15	306	1.9
1166.3	0.553	14	0.998	13	267	2.3	8.0	1.8	20	306	1.7
1167.0	0.393	13	1.3	7.8	279	2.2	5.7	2.3	12	319	1.6
1167.7	1.3	14	0.993	9.8	253	3.0	19	1.8	15	289	2.2
1168.4	0.393	15	0.797	9.4	267	2.5	5.7	1.5	14	305	1.8
1169.1	1.1	15	1.4	11	247	3.9	15	2.5	16	282	2.9
1169.8	0.393	15	1.0	13	251	2.6	5.7	1.9	19	288	1.9
1170.5	0.672	14	0.951	9.9	241	2.6	9.7	1.7	15	276	1.9
1171.2	0.397	13	1.0	9.2	245	2.3	5.7	1.9	14	281	1.7
1171.9	0.981	16	1.8	12	269	3.4	14	3.3	18	308	2.5
1172.6	0.393	13	0.855	9.0	224	2.5	5.7	1.6	14	256	1.8
1173.3	0.889	14	1.1	9.4	255	1.3	13	2.0	14	292	0.965
1174.0	0.480	15	1.3	7.8	286	2.3	6.9	2.3	12	327	1.7
1174.7	0.393	14	1.2	10.0	244	3.1	5.7	2.2	15	280	2.3
1175.4	0.393	17	1.1	11	283	2.3	5.7	2.1	17	323	1.6
1176.1	0.393	13	0.910	6.8	202	2.5	5.7	1.7	10	231	1.8
1176.8	0.680	11	1.0	5.5	206	1.9	9.8	1.9	8.5	236	1.4
1177.5	0.393	8.9	1.3	6.6	235	1.6	5.7	2.4	10	269	1.2
1178.2	0.543	14	1.1	8.9	237	2.3	7.8	2.1	14	271	1.7
1178.9	0.398	15	1.2	12	261	3.1	5.7	2.3	18	299	2.2
1179.5	0.393	14	0.792	9.7	287	2.5	5.7	1.4	15	328	1.8
1180.2	0.646	12	1.1	9.1	227	3.2	9.3	2.0	14	260	2.3
1180.9	0.705	13	0.935	8.3	327	3.4	10	1.7	13	374	2.4
1181.6	0.393	16	1.0	13	274	4.3	5.7	1.9	19	313	3.2
1182.3	0.393	14	1.0	7.1	269	2.1	5.7	1.8	11	308	1.5
1183.0	0.393	17	0.981	8.3	233	3.0	5.7	1.8	13	267	2.2
1183.7	0.393	15	1.1	6.6	304	2.9	5.7	2.0	10	348	2.1
1184.4	0.393	12	0.837	7.3	314	4.2	5.7	1.5	11	360	3.1
1185.1	0.393	14	0.763	7.5	255	3.5	5.7	1.4	11	292	2.5
1185.8	0.393	14	0.947	8.3	297	3.1	5.7	1.7	13	340	2.3

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1186.5	0.393	14	1.5	9.3	330	4.2	5.7	2.7	14	378	3.0
1187.2	1.0	14	1.3	7.1	290	3.3	15	2.4	11	331	2.4
1187.9	0.393	13	0.894	6.1	233	3.5	5.7	1.6	9.3	267	2.5
1188.6	1.0	15	0.916	12	303	3.4	15	1.7	18	347	2.5
1189.3	0.429	12	1.1	8.9	299	2.4	6.2	2.0	14	341	1.7
1190.0	0.647	12	1.0	6.3	278	3.5	9.3	1.9	9.7	318	2.5
1190.7	0.587	13	0.918	6.7	270	3.8	8.5	1.7	10	309	2.8
1191.4	1.2	12	0.936	9.9	248	3.4	17	1.7	15	284	2.5
1192.1	0.835	14	0.799	8.3	278	3.3	12	1.5	13	318	2.4
1192.8	0.393	11	0.943	6.4	277	3.4	5.7	1.7	9.8	317	2.5
1193.5	0.743	13	0.832	7.4	309	3.2	11	1.5	11	353	2.3
1194.2	0.424	13	1.0	5.0	244	3.4	6.1	1.8	7.6	279	2.5
1194.9	0.393	15	0.833	9.0	265	5.0	5.7	1.5	14	303	3.7
1195.6	0.815	13	0.683	6.9	226	2.8	12	1.2	11	259	2.0
1196.3	0.393	14	0.743	7.8	288	2.4	5.7	1.4	12	329	1.8
1197.0	0.725	15	1.0	9.1	263	2.6	10	1.8	14	301	1.9
1197.7	0.670	16	0.680	8.6	246	2.9	9.7	1.2	13	281	2.1
1198.4	0.448	18	0.869	7.4	282	3.4	6.5	1.6	11	322	2.5
1199.1	0.610	13	0.669	8.1	316	3.5	8.8	1.2	12	362	2.5
1199.8	0.437	12	0.671	7.4	260	4.6	6.3	1.2	11	298	3.3
1200.5	0.547	12	0.783	7.2	233	1.9	7.9	1.4	11	267	1.4
1201.2	0.799	14	0.926	9.6	326	4.3	12	1.7	15	373	3.1
1201.9	0.393	15	0.842	8.4	308	4.0	5.7	1.5	13	352	2.9
1202.6	0.393	13	1.1	9.6	274	2.5	5.7	2.0	15	314	1.9
1203.3	0.502	13	0.698	6.0	252	4.3	7.3	1.3	9.2	288	3.1
1204.0	0.393	12	0.668	7.3	301	5.5	5.7	1.2	11	345	4.0
1204.7	0.539	14	0.809	9.4	253	5.1	7.8	1.5	14	289	3.7
1205.3	0.435	13	0.609	10	285	4.2	6.3	1.1	15	326	3.0
1206.0	1.2	13	0.848	8.8	271	3.8	18	1.5	14	310	2.8
1206.7	0.393	15	0.699	11	278	3.6	5.7	1.3	16	317	2.7
1207.4	0.393	13	0.826	11	291	5.3	5.7	1.5	17	332	3.9
1208.1	0.393	14	0.670	9.8	269	3.7	5.7	1.2	15	307	2.7
1208.8	0.878	11	0.468	7.7	271	4.5	13	0.854	12	310	3.3
1209.5	0.393	10	0.583	9.1	285	5.6	5.7	1.1	14	326	4.1
1210.2	0.969	15	0.891	13	304	6.0	14	1.6	21	347	4.4
1210.9	0.393	12	0.816	7.0	252	4.0	5.7	1.5	11	288	2.9
1211.6	0.732	15	0.591	8.9	313	4.6	11	1.1	14	357	3.4
1212.3	0.464	14	0.761	9.5	277	3.6	6.7	1.4	15	317	2.6
1213.0	0.776	11	0.648	7.6	273	6.1	11	1.2	12	312	4.5
1213.7	0.763	14	0.640	11	318	6.6	11	1.2	17	364	4.8
1214.4	0.531	15	0.871	8.7	280	8.2	7.7	1.6	13	320	6.0
1215.1	0.393	15	0.731	11	247	8.0	5.7	1.3	16	283	5.8
1215.8	1.3	13	0.944	10	274	6.3	18	1.7	16	313	4.6
1216.5	1.2	17	0.662	8.7	278	7.6	17	1.2	13	318	5.6
1217.2	0.936	14	0.468	8.9	320	7.0	14	0.853	14	365	5.1
1217.9	0.836	14	0.998	13	303	8.0	12	1.8	21	347	5.8
1218.6	0.496	13	0.528	9.6	278	8.2	7.2	0.962	15	318	6.0
1219.3	0.394	11	0.646	10	266	6.6	5.7	1.2	16	305	4.8
1220.0	0.393	12	0.907	10	285	7.8	5.7	1.7	15	326	5.7
1220.7	1.1	14	0.974	10	255	9.1	16	1.8	16	291	6.6
1221.4	0.881	15	1.0	11	296	8.9	13	1.9	17	339	6.5
1222.1	0.393	16	0.982	12	271	10	5.7	1.8	19	310	7.6
1222.8	0.393	13	0.700	10	241	7.8	5.7	1.3	15	276	5.7
1223.5	0.787	15	1.0	15	289	7.3	11	1.9	23	331	5.4
1224.2	0.926	14	1.2	10	267	9.7	13	2.2	16	305	7.1
1224.9	0.412	15	0.784	9.4	241	11	6.0	1.4	14	275	8.2
1225.6	0.665	16	0.856	11	239	6.9	9.6	1.6	17	274	5.0
1226.3	1.5	15	1.1	13	257	11	22	1.9	19	294	8.3
1227.0	0.393	15	1.2	14	302	11	5.7	2.3	22	346	8.0
1227.7	0.763	14	0.911	16	264	12	11	1.7	25	302	8.5
1228.4	0.423	12	1.0	15	299	10	6.1	1.9	22	342	7.3
1229.1	0.960	15	0.753	12	299	9.1	14	1.4	19	342	6.7
1229.8	1.2	14	1.1	13	284	10	17	2.0	21	325	7.4
1230.5	0.677	14	1.1	13	254	7.4	9.8	2.1	19	290	5.4
1231.2	0.614	15	0.774	15	241	5.0	8.9	1.4	23	275	3.7
1231.8	0.393	15	0.647	17	273	9.5	5.7	1.2	26	313	6.9
1232.5	0.615	12	1.1	14	230	8.2	8.9	1.9	22	263	6.0
1233.2	0.874	14	0.636	13	248	7.2	13	1.2	20	284	5.2
1233.9	1.2	16	1.2	18	261	8.4	17	2.3	27	298	6.1
1234.6	0.395	13	1.1	15	249	7.3	5.7	2.0	23	285	5.3
1235.3	0.512	15	0.436	17	237	6.4	7.4	0.795	26	271	4.7
1236.0	0.393	14	1.1	13	247	7.9	5.7	1.9	21	283	5.7
1236.7	0.962	13	1.2	16	292	8.5	14	2.1	24	334	6.2
1237.4	0.870	18	1.0	15	298	6.8	13	1.9	23	341	5.0
1238.1	0.480	17	1.1	17	249	7.7	6.9	2.1	26	285	5.6
1238.8	0.781	15	0.931	17	246	9.6	11	1.7	26	281	7.0
1239.5	0.438	11	1.0	20	294	8.1	6.3	1.9	31	336	5.9
1240.2	0.397	14	1.3	19	266	9.7	5.7	2.4	29	304	7.1
1240.9	0.852	16	0.933	21	260	11	12	1.7	33	298	7.9
1241.6	0.694	14	1.1	22	249	8.4	10	2.0	34	285	6.1
1242.3	0.764	18	0.911	18	262	5.6	11	1.7	28	300	4.1

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1243.0	0.539	14	1.4	16	268	8.6	7.8	2.5	25	307	6.3
1243.7	0.497	13	0.976	14	287	9.2	7.2	1.8	21	328	6.7
1244.4	0.648	14	1.0	20	260	9.8	9.4	1.9	30	297	7.2
1245.1	1.0	16	0.818	20	248	8.9	15	1.5	31	284	6.5
1245.8	0.393	14	1.4	27	274	8.6	5.7	2.5	41	313	6.3
1246.5	0.723	15	1.1	19	253	8.8	10	2.1	29	289	6.4
1247.2	0.683	15	1.3	28	276	9.7	9.9	2.4	43	315	7.1
1247.9	1.1	16	1.6	26	287	11	15	3.0	40	329	8.2
1248.6	0.478	17	0.984	23	252	9.1	6.9	1.8	36	288	6.6
1249.3	1.1	12	0.793	15	190	6.6	16	1.4	23	218	4.8
1250.0	1.0	16	1.0	19	257	8.2	14	1.9	29	294	5.9
1250.7	0.393	19	1.0	17	280	6.6	5.7	1.9	26	320	4.8
1251.4	0.490	17	1.1	23	218	9.4	7.1	2.0	36	250	6.8
1252.1	0.573	18	1.1	26	269	6.7	8.3	2.0	40	307	4.9
1252.8	0.604	17	1.0	20	232	6.8	8.7	1.8	31	265	4.9
1253.5	0.473	19	0.949	26	243	9.0	6.8	1.7	40	278	6.6
1254.2	1.0	15	1.2	25	275	8.2	15	2.2	38	315	6.0
1254.9	0.917	16	1.3	31	277	7.7	13	2.3	48	317	5.6
1255.6	0.660	15	1.2	24	254	8.1	9.5	2.1	37	291	5.9
1256.3	0.853	17	1.7	25	240	6.9	12	3.1	38	274	5.0
1257.0	1.7	21	1.4	25	287	8.2	24	2.5	39	328	6.0
1257.6	0.737	21	1.3	26	281	7.7	11	2.4	40	321	5.6
1258.3	0.476	18	1.3	28	243	7.2	6.9	2.4	43	278	5.2
1259.0	0.760	15	1.2	23	244	7.0	11	2.3	36	279	5.1
1259.7	0.849	18	1.1	27	270	7.0	12	2.0	41	308	5.1
1260.4	0.803	21	1.9	31	249	8.9	12	3.4	48	284	6.5
1261.1	0.905	21	1.5	34	236	7.0	13	2.8	52	270	5.1
1261.8	0.412	22	1.6	29	210	5.6	5.9	3.0	44	240	4.1
1262.5	0.393	18	1.0	26	200	5.9	5.7	1.9	40	229	4.3
1263.2	1.2	19	1.2	25	228	6.4	17	2.3	38	261	4.7
1263.9	0.393	21	1.5	32	262	8.8	5.7	2.8	49	300	6.4
1264.6	0.793	21	1.5	30	271	7.4	11	2.7	47	310	5.4
1265.3	1.1	21	1.9	37	274	7.9	16	3.5	56	314	5.7
1266.0	0.926	19	1.8	33	234	6.1	13	3.3	50	268	4.4
1266.7	0.490	18	1.4	22	238	6.2	7.1	2.6	33	272	4.6
1267.4	0.393	18	1.9	33	233	6.9	5.7	3.4	50	267	5.1
1268.1	0.617	19	1.6	38	267	7.7	8.9	3.0	59	305	5.6
1268.8	0.626	20	1.7	31	283	5.2	9.0	3.2	48	323	3.8
1269.5	0.989	16	1.7	28	224	7.3	14	3.0	42	256	5.4
1270.2	0.540	22	1.7	27	239	7.8	7.8	3.1	42	273	5.7
1270.9	0.393	19	1.7	30	237	5.0	5.7	3.1	46	271	3.7
1271.6	0.478	22	1.7	36	222	6.4	6.9	3.2	55	253	4.7
1272.3	0.563	20	1.4	39	277	6.2	8.1	2.6	60	317	4.6
1273.0	0.693	20	1.9	33	223	6.2	10	3.4	50	255	4.5
1273.7	0.753	20	1.5	38	224	5.2	11	2.7	58	256	3.8
1274.4	0.994	20	1.8	33	228	5.9	14	3.3	51	261	4.3
1275.1	1.2	21	1.4	47	239	5.1	17	2.5	72	273	3.7
1275.8	0.393	18	2.2	33	264	7.0	5.7	4.1	50	302	5.1
1276.5	0.486	18	2.2	35	246	6.1	7.0	4.0	54	282	4.4
1277.2	1.0	21	1.7	35	235	4.6	15	3.1	53	269	3.4
1277.9	0.393	20	1.6	34	203	6.4	5.7	2.9	52	232	4.6
1278.6	0.993	20	1.7	34	218	6.5	14	3.2	51	250	4.7
1279.3	0.858	19	1.8	27	225	5.6	12	3.3	41	258	4.1
1280.0	0.567	21	1.7	31	241	5.5	8.2	3.2	47	275	4.0
1280.7	0.598	22	2.2	33	278	5.9	8.6	4.0	51	318	4.3
1281.4	0.896	23	2.2	34	236	3.4	13	3.9	52	270	2.5
1282.1	0.393	23	1.4	37	221	5.1	5.7	2.6	56	253	3.7
1282.8	0.526	22	2.3	36	246	4.6	7.6	4.1	55	281	3.3
1283.5	0.393	17	1.9	31	239	4.7	5.7	3.4	48	274	3.5
1284.1	0.393	20	2.2	40	264	6.9	5.7	4.0	61	302	5.0
1284.8	0.641	22	2.6	42	255	5.5	9.3	4.7	64	292	4.0
1285.5	0.450	20	2.1	46	220	5.9	6.5	3.8	70	252	4.3
1286.2	0.497	18	1.8	28	202	5.0	7.2	3.3	43	231	3.6
1286.9	0.676	20	2.4	35	231	5.2	9.8	4.5	54	264	3.8
1287.6	0.393	22	1.9	36	203	3.6	5.7	3.5	55	233	2.6
1288.3	0.806	20	1.8	43	214	4.5	12	3.2	66	244	3.3
1289.0	0.622	18	1.7	33	222	5.0	9.0	3.1	51	253	3.6
1289.7	0.393	23	1.9	33	261	4.8	5.7	3.5	50	299	3.5
1290.4	0.393	18	1.6	32	188	4.8	5.7	2.9	49	215	3.5
1291.1	0.393	23	2.3	42	229	5.4	5.7	4.2	65	262	3.9
1291.8	0.992	21	1.7	38	206	5.8	14	3.1	58	236	4.3
1292.5	0.690	22	2.1	37	199	3.4	10.0	3.8	57	228	2.5
1293.2	0.393	24	1.7	35	208	6.0	5.7	3.2	54	238	4.4
1293.9	0.393	23	2.2	34	232	5.2	5.7	4.1	53	266	3.8
1294.6	0.974	26	2.0	41	238	5.5	14	3.7	63	272	4.0
1295.3	0.393	24	2.0	46	250	6.2	5.7	3.7	71	286	4.5
1296.0	0.393	20	1.9	37	248	5.2	5.7	3.5	57	284	3.8
1296.7	0.827	22	2.0	38	236	5.2	12	3.7	58	270	3.8
1297.4	1.0	26	1.9	35	246	5.6	15	3.5	54	282	4.1
1298.1	0.644	25	2.0	37	217	3.8	9.3	3.6	56	248	2.8
1298.8	0.843	24	2.1	37	225	5.5	12	3.9	56	258	4.0

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1299.5	0.601	22	1.8	32	223	5.9	8.7	3.3	49	255	4.3
1300.2	0.393	21	1.9	32	246	4.9	5.7	3.4	49	281	3.6
1300.9	0.483	25	1.9	38	230	5.3	7.0	3.5	58	263	3.9
1301.6	1.000	28	2.3	33	232	5.7	14	4.2	51	265	4.1
1302.3	0.569	23	2.2	34	212	3.9	8.2	4.0	53	242	2.9
1303.0	0.916	20	2.0	33	220	4.4	13	3.7	51	252	3.2
1303.7	0.393	23	2.5	36	244	4.6	5.7	4.5	55	279	3.3
1304.4	0.578	31	2.2	35	235	5.6	8.3	4.0	54	269	4.1
1305.1	0.742	22	1.8	32	189	5.1	11	3.3	49	217	3.7
1305.8	0.393	21	1.8	32	216	4.7	5.7	3.4	50	247	3.4
1306.5	0.457	21	1.9	28	223	4.9	6.6	3.4	43	255	3.6
1307.2	0.763	26	2.0	38	265	4.0	11	3.7	59	303	2.9
1307.9	0.500	24	1.6	35	216	4.3	7.2	2.9	53	247	3.2
1308.6	0.783	29	1.6	36	258	3.6	11	3.0	55	295	2.6
1309.3	0.679	21	1.9	30	218	4.6	9.8	3.5	45	249	3.3
1310.0	0.684	23	1.8	30	248	4.3	9.9	3.3	46	284	3.1
1310.6	1.1	28	1.8	34	230	5.2	16	3.3	52	263	3.8
1311.3	0.393	21	1.6	29	206	4.1	5.7	2.9	45	236	3.0
1312.0	0.393	22	1.7	29	233	4.7	5.7	3.0	45	266	3.4
1312.7	0.393	20	1.8	28	213	3.8	5.7	3.3	42	243	2.8
1313.4	0.689	23	1.6	25	251	4.6	9.9	2.9	39	287	3.3
1314.1	0.691	27	2.2	31	248	7.4	10.0	3.9	48	283	5.4
1314.8	0.393	26	1.7	32	229	5.5	5.7	3.0	49	262	4.0
1315.5	0.393	22	1.6	34	260	6.3	5.7	2.9	53	297	4.6
1316.2	0.811	22	1.9	25	238	4.8	12	3.4	39	272	3.5
1316.9	0.393	23	1.7	35	308	6.5	5.7	3.2	53	352	4.7
1317.6	0.498	26	1.8	31	216	5.5	7.2	3.3	48	247	4.0
1318.3	0.518	25	1.2	29	214	5.0	7.5	2.2	44	244	3.6
1319.0	0.393	20	1.6	28	214	5.4	5.7	2.8	44	245	3.9
1319.7	0.393	22	1.5	29	293	6.2	5.7	2.7	44	335	4.6
1320.4	0.393	26	1.6	27	248	7.1	5.7	3.0	42	283	5.2
1321.1	0.393	25	1.8	39	265	7.5	5.7	3.3	60	304	5.4
1321.8	0.636	23	1.4	22	217	3.7	9.2	2.5	34	248	2.7
1322.5	0.706	21	1.5	24	246	5.2	10	2.8	37	281	3.8
1323.2	0.596	26	2.1	25	272	5.9	8.6	3.9	38	311	4.3
1323.9	0.393	30	1.6	30	268	5.6	5.7	2.9	46	307	4.1
1324.6	1.1	25	1.5	36	233	5.3	15	2.8	55	267	3.9
1325.3	0.470	24	1.5	27	217	6.1	6.8	2.8	41	248	4.4
1326.0	0.608	19	1.5	29	213	5.6	8.8	2.8	44	244	4.1
1326.7	0.608	21	1.7	27	248	6.3	8.8	3.0	42	284	4.6
1327.4	0.905	28	1.5	27	251	5.9	13	2.7	42	287	4.3
1328.1	0.699	25	1.2	29	235	6.0	10	2.1	45	268	4.3
1328.8	0.711	21	1.8	30	231	5.3	10	3.3	45	264	3.9
1329.5	0.508	21	1.4	23	223	7.0	7.3	2.5	35	255	5.1
1330.2	0.502	24	2.1	29	265	6.6	7.2	3.8	45	303	4.8
1330.9	0.393	24	1.5	31	256	8.0	5.7	2.7	47	292	5.9
1331.6	0.628	26	1.7	33	234	7.5	9.1	3.1	50	268	5.4
1332.3	0.393	22	1.7	24	258	6.5	5.7	3.1	37	295	4.7
1333.0	0.700	19	1.2	25	259	8.5	10	2.3	39	297	6.2
1333.7	0.393	24	1.7	32	271	8.8	5.7	3.0	49	310	6.5
1334.4	0.427	25	1.4	31	242	7.8	6.2	2.6	48	277	5.7
1335.1	0.393	23	2.0	26	237	8.3	5.7	3.6	39	271	6.0
1335.8	0.393	23	1.6	32	252	8.0	5.7	2.9	49	288	5.8
1336.4	0.393	26	1.5	29	253	7.4	5.7	2.8	44	289	5.4
1337.1	0.515	28	1.8	27	249	7.8	7.4	3.3	41	284	5.7
1337.8	0.955	26	1.7	27	252	8.1	14	3.2	41	288	5.9
1338.5	0.775	25	1.3	26	231	4.6	11	2.4	40	264	3.4
1339.2	0.393	19	1.4	25	228	5.5	5.7	2.5	39	261	4.0
1339.9	1.1	22	1.9	36	296	6.8	16	3.4	55	338	4.9
1340.6	0.471	24	1.8	28	234	6.7	6.8	3.2	44	267	4.9
1341.3	0.393	26	1.3	35	223	6.4	5.7	2.5	54	255	4.6
1342.0	0.393	23	1.5	29	243	5.4	5.7	2.7	45	277	3.9
1342.7	0.393	21	1.7	26	268	7.7	5.7	3.2	39	306	5.6
1343.4	0.470	23	1.7	27	259	6.3	6.8	3.0	42	296	4.6
1344.1	0.402	29	1.8	35	238	6.5	5.8	3.3	54	272	4.7
1344.8	0.814	22	1.6	30	229	4.5	12	3.0	46	262	3.3
1345.5	0.393	21	2.1	32	243	6.1	5.7	3.7	49	278	4.5
1346.2	0.714	21	1.4	27	238	6.1	10	2.6	42	272	4.4
1346.9	0.664	24	1.6	32	296	6.2	9.6	2.9	50	339	4.5
1347.6	0.564	26	2.0	34	293	5.3	8.1	3.6	52	336	3.9
1348.3	0.489	20	1.8	30	223	6.3	7.1	3.3	46	255	4.6
1349.0	0.521	22	1.9	31	256	7.7	7.5	3.5	48	293	5.6
1349.7	0.393	22	1.9	29	234	6.9	5.7	3.5	45	267	5.0
1350.4	0.606	24	2.2	34	266	8.0	8.8	4.0	52	305	5.9
1351.1	0.877	26	2.1	36	254	6.9	13	3.9	55	291	5.1
1351.8	0.487	20	1.5	30	223	6.2	7.0	2.8	46	255	4.5
1352.5	0.982	22	1.9	30	235	6.6	14	3.5	45	269	4.8
1353.2	0.636	22	1.7	30	226	5.8	9.2	3.2	46	258	4.2
1353.9	0.415	27	1.6	38	253	9.0	6.0	2.8	59	289	6.6
1354.6	0.393	23	1.6	30	218	8.0	5.7	2.9	47	250	5.8
1355.3	0.393	20	1.8	32	226	8.1	5.7	3.3	50	259	5.9

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1356.0	0.902	22	1.9	28	254	9.7	13	3.5	43	291	7.1
1356.7	0.477	21	1.8	29	244	8.5	6.9	3.3	44	279	6.2
1357.4	0.779	23	1.8	35	233	7.5	11	3.3	54	266	5.4
1358.1	0.393	23	2.2	31	238	9.2	5.7	3.9	48	272	6.7
1358.8	0.393	19	1.7	32	234	8.5	5.7	3.1	49	268	6.2
1359.5	0.393	21	2.1	33	283	12	5.7	3.7	51	323	8.8
1360.2	0.393	22	2.1	34	250	12	5.7	3.9	52	286	8.8
1360.9	0.393	25	2.0	32	249	12	5.7	3.6	50	285	8.5
1361.5	0.939	22	1.5	34	222	11	14	2.7	52	254	8.4
1362.2	0.696	22	1.8	35	252	11	10	3.3	53	288	8.0
1362.9	0.479	20	1.7	26	288	11	6.9	3.0	40	329	8.0
1363.6	0.399	28	2.2	34	246	10	5.8	4.0	52	281	7.5
1364.3	0.393	25	2.0	36	239	12	5.7	3.7	56	274	8.6
1365.0	0.393	24	1.7	39	290	14	5.7	3.2	60	331	10
1365.7	0.393	31	2.0	34	276	14	5.7	3.6	52	316	10
1366.4	1.2	25	2.2	32	266	17	17	4.0	49	304	12
1367.1	1.6	30	1.5	35	250	14	23	2.7	54	286	10
1367.8	0.780	28	2.1	34	263	16	11	3.8	52	301	12
1368.5	0.780	28	1.7	33	266	13	11	3.2	50	305	9.5
1369.2	0.393	26	2.4	33	298	16	5.7	4.4	51	340	12
1369.9	0.526	31	2.5	33	247	13	7.6	4.6	50	283	9.6
1370.6	0.757	29	2.2	30	240	12	11	4.1	46	275	8.7
1371.3	0.548	23	1.9	30	268	13	7.9	3.5	46	307	9.7
1372.0	0.698	22	1.9	33	262	11	10	3.4	51	299	8.0
1372.7	0.422	21	1.8	26	249	13	6.1	3.3	39	285	9.8
1373.4	0.656	26	2.1	31	256	14	9.5	3.8	47	293	10
1374.1	0.935	29	1.8	35	263	13	14	3.4	54	300	9.5
1374.8	1.0	36	1.8	31	268	14	15	3.2	48	306	10
1375.5	0.393	30	2.0	31	284	15	5.7	3.7	48	325	11
1376.2	0.393	31	2.2	30	316	16	5.7	4.1	47	361	12
1376.9	0.402	28	1.7	31	269	17	5.8	3.2	47	308	12
1377.6	0.665	29	2.0	30	235	12	9.6	3.6	46	269	8.8
1378.3	0.658	26	1.8	37	273	14	9.5	3.3	57	312	10
1379.0	0.557	23	1.8	25	223	11	8.0	3.4	39	255	8.4
1379.7	0.393	27	1.4	29	291	13	5.7	2.5	45	333	9.7
1380.4	0.604	24	2.0	35	317	16	8.7	3.6	54	363	12
1381.1	0.988	24	2.1	35	263	15	14	3.9	53	300	11
1381.8	0.768	24	1.6	35	309	16	11	2.9	54	353	12
1382.5	0.776	25	1.6	24	259	14	11	2.9	37	296	10
1383.2	0.393	27	2.1	31	297	13	5.7	3.8	48	339	9.4
1383.9	0.704	25	2.1	33	253	15	10	3.9	51	289	11
1384.6	0.671	25	1.6	28	252	12	9.7	3.0	43	288	8.4
1385.3	0.393	20	1.6	27	250	12	5.7	2.9	42	286	8.6
1386.0	0.883	22	1.4	32	318	17	13	2.6	49	364	13
1386.7	0.488	27	2.1	34	277	15	7.0	3.8	53	317	11
1387.4	0.409	25	1.7	31	290	15	5.9	3.1	47	331	11
1388.0	0.547	24	1.3	28	278	13	7.9	2.4	43	318	9.3
1388.7	0.769	22	1.3	25	233	11	11	2.4	39	267	8.4
1389.4	0.597	23	1.9	35	296	18	8.6	3.4	53	338	13
1390.1	0.631	24	2.0	33	294	15	9.1	3.7	51	336	11
1390.8	0.950	24	1.4	30	272	17	14	2.6	46	311	13
1391.5	0.462	26	1.3	30	259	13	6.7	2.4	46	296	9.8
1392.2	0.537	19	1.4	27	258	11	7.8	2.5	41	295	8.3
1392.9	0.393	21	1.4	25	269	12	5.7	2.6	38	307	9.0
1393.6	0.492	24	1.7	32	280	13	7.1	3.0	49	320	9.2
1394.3	0.393	23	1.6	26	316	16	5.7	3.0	39	362	11
1395.0	0.968	22	1.4	28	279	16	14	2.6	43	319	11
1395.7	0.393	21	1.6	27	289	13	5.7	2.9	41	330	9.4
1396.4	1.2	21	2.0	28	293	15	18	3.6	43	335	11
1397.1	0.826	25	2.1	28	273	15	12	3.8	43	312	11
1397.8	0.637	21	1.4	30	301	15	9.2	2.6	46	344	11
1398.5	0.599	20	1.5	25	316	13	8.7	2.8	39	361	9.8
1399.2	0.478	22	1.5	25	313	10	6.9	2.8	38	357	7.5
1399.9	0.609	25	1.6	27	275	17	8.8	3.0	41	315	12
1400.6	0.814	23	1.4	36	294	17	12	2.5	56	336	12
1401.3	0.813	24	1.5	34	269	14	12	2.8	53	308	10
1402.0	0.675	25	1.5	35	283	16	9.8	2.8	54	323	12
1402.7	0.900	25	1.9	31	327	13	13	3.5	47	374	9.8
1403.4	0.611	25	1.8	31	321	19	8.8	3.2	48	367	14
1404.1	0.764	24	1.7	36	281	17	11	3.1	55	321	13
1404.8	0.393	23	1.4	33	312	12	5.7	2.6	50	356	8.8
1405.5	0.649	22	1.5	30	284	13	9.4	2.7	45	325	9.8
1406.2	0.682	30	2.0	35	323	18	9.8	3.7	53	369	13
1406.9	0.744	29	1.8	35	343	20	11	3.3	54	392	15
1407.6	0.556	25	1.7	34	308	17	8.0	3.1	52	353	12
1408.3	0.393	24	2.0	39	324	17	5.7	3.6	60	371	12
1409.0	1.0	24	1.8	29	322	19	15	3.4	45	368	14
1409.7	1.0	24	1.8	36	324	16	15	3.2	56	370	12
1410.4	0.407	32	1.6	33	294	17	5.9	2.9	50	336	13
1411.1	0.782	25	1.5	39	284	14	11	2.8	59	325	11
1411.8	0.442	25	1.6	37	311	13	6.4	3.0	57	356	9.2

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1412.5	0.393	22	1.6	44	293	17	5.7	2.8	67	335	13
1413.2	1.0	26	2.1	34	315	19	15	3.8	51	360	14
1413.9	0.393	25	1.7	38	296	19	5.7	3.1	59	338	14
1414.5	0.393	23	1.6	41	319	18	5.7	3.0	63	365	13
1415.2	0.443	21	1.8	36	305	21	6.4	3.2	55	349	15
1415.9	0.765	22	1.6	36	287	16	11	3.0	55	328	12
1416.6	0.393	29	2.0	35	329	20	5.7	3.6	53	376	15
1417.3	0.804	29	1.8	41	310	25	12	3.4	63	354	18
1418.0	0.934	22	1.3	40	302	21	13	2.3	62	346	15
1418.7	0.434	20	1.7	26	243	22	6.3	3.1	39	277	16
1419.4	0.393	19	1.7	32	313	23	5.7	3.1	49	358	17
1420.1	0.393	23	1.7	37	271	24	5.7	3.0	57	310	17
1420.8	0.555	23	1.5	35	292	26	8.0	2.8	54	333	19
1421.5	0.548	18	1.4	37	303	23	7.9	2.5	57	346	17
1422.2	0.797	17	1.7	36	284	22	12	3.2	55	324	16
1422.9	0.393	16	1.9	32	287	24	5.7	3.4	48	328	17
1423.6	0.719	19	1.9	32	288	23	10	3.5	49	330	17
1424.3	0.565	21	1.7	38	309	29	8.2	3.0	59	353	21
1425.0	0.393	20	1.5	39	334	22	5.7	2.7	60	382	16
1425.7	0.548	16	1.5	33	259	20	7.9	2.8	50	296	14
1426.4	0.717	21	1.6	33	303	27	10	3.0	51	346	20
1427.1	0.559	17	1.8	32	287	27	8.1	3.3	49	328	19
1427.8	0.866	18	1.8	33	265	29	13	3.3	51	303	21
1428.5	0.725	17	2.0	33	299	26	10	3.7	50	341	19
1429.2	0.847	19	1.6	28	271	27	12	2.8	42	309	20
1429.9	0.651	19	2.1	40	320	31	9.4	3.9	61	365	22
1430.6	0.393	18	2.0	32	307	24	5.7	3.7	49	352	17
1431.3	0.712	21	1.8	38	296	31	10	3.2	58	338	22
1432.0	0.393	19	1.7	32	298	26	5.7	3.1	49	341	19
1432.7	0.393	17	1.5	32	282	26	5.7	2.7	49	322	19
1433.4	0.643	21	1.7	41	345	29	9.3	3.2	62	395	21
1434.1	0.770	22	2.3	42	281	25	11	4.2	64	321	18
1434.8	0.566	19	1.4	38	302	22	8.2	2.6	58	345	16
1435.5	0.439	20	2.1	36	296	21	6.3	3.8	55	339	15
1436.2	0.414	20	2.4	42	335	24	6.0	4.3	64	383	17
1436.9	0.578	20	2.3	41	307	24	8.3	4.1	63	351	18
1437.6	0.393	20	2.4	43	308	23	5.7	4.4	65	353	17
1438.3	0.393	21	1.8	40	295	22	5.7	3.3	61	337	16
1439.0	0.850	16	2.0	33	257	18	12	3.6	50	293	13
1439.7	0.650	20	2.0	37	332	20	9.4	3.7	57	379	15
1440.3	1.3	23	2.0	41	299	24	18	3.7	62	342	17
1441.0	0.393	21	1.9	46	303	19	5.7	3.5	70	347	14
1441.7	0.776	20	2.4	48	285	20	11	4.3	74	326	14
1442.4	0.398	19	2.2	45	321	23	5.8	4.0	69	367	17
1443.1	0.393	18	2.1	44	309	22	5.7	3.8	68	353	16
1443.8	0.776	22	2.4	47	313	19	11	4.3	72	358	14
1444.5	0.442	20	2.0	44	259	15	6.4	3.6	67	296	11
1445.2	0.915	19	1.7	44	302	15	13	3.1	67	345	11
1445.9	0.761	20	2.1	51	295	18	11	3.9	79	337	13
1446.6	0.589	23	2.6	55	331	21	8.5	4.7	84	379	15
1447.3	0.698	22	1.9	53	310	15	10	3.4	82	355	11
1448.0	0.655	21	2.1	51	293	19	9.5	3.8	77	335	14
1448.7	0.466	20	2.0	48	291	16	6.7	3.6	74	332	12
1449.4	1.4	20	2.2	46	303	14	20	4.0	71	347	10
1450.1	0.421	21	1.8	55	331	15	6.1	3.3	84	378	11
1450.8	0.496	23	2.1	55	296	16	7.2	3.9	85	339	12
1451.5	0.553	18	2.1	52	299	12	8.0	3.7	80	342	8.7
1452.2	0.393	19	2.3	48	298	12	5.7	4.3	73	341	9.0
1452.9	0.481	19	2.2	49	270	14	6.9	4.0	75	308	9.9
1453.6	0.393	22	2.4	54	276	12	5.7	4.4	83	316	9.1
1454.3	0.549	26	2.2	63	315	13	7.9	4.0	97	360	9.8
1455.0	0.624	20	2.2	54	274	10	9.0	4.0	83	313	7.3
1455.7	0.561	23	1.9	54	289	12	8.1	3.5	83	330	8.8
1456.4	0.528	23	2.9	54	309	11	7.6	5.4	83	353	8.2
1457.1	0.893	22	2.3	52	303	15	13	4.2	80	347	11
1457.8	0.902	22	2.3	57	255	15	13	4.1	87	292	11
1458.5	0.748	20	2.3	52	272	9.0	11	4.3	80	311	6.6
1459.2	0.882	22	2.3	57	326	12	13	4.2	87	373	8.7
1459.9	0.821	26	3.0	57	350	10.0	12	5.4	87	400	7.3
1460.6	0.580	23	2.8	57	284	8.7	8.4	5.1	88	325	6.3
1461.3	0.539	23	2.5	59	297	9.7	7.8	4.6	90	340	7.0
1462.0	0.713	23	2.6	63	304	8.3	10	4.7	97	348	6.1
1462.7	0.843	21	2.1	62	335	6.8	12	3.9	94	383	5.0
1463.4	1.3	23	2.1	58	307	7.3	19	3.8	89	351	5.3
1464.1	0.964	22	2.5	58	306	7.3	14	4.5	89	350	5.3
1464.8	0.576	21	2.1	54	284	7.7	8.3	3.8	82	324	5.6
1465.5	0.813	25	2.2	56	284	5.9	12	4.0	86	325	4.3
1466.2	0.419	23	2.2	60	277	5.0	6.0	3.9	91	317	3.6
1466.9	0.781	26	2.4	58	331	7.0	11	4.4	89	378	5.1
1467.5	0.831	24	2.7	58	313	6.3	12	4.9	89	358	4.6
1468.2	0.539	24	2.2	57	304	6.7	7.8	4.0	87	348	4.9

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1468.9	0.393	29	2.6	59	372	7.2	5.7	4.7	90	426	5.3
1469.6	0.768	28	2.7	58	326	9.2	11	4.9	89	372	6.7
1470.3	0.707	27	2.9	69	287	8.9	10	5.3	105	328	6.5
1471.0	0.910	22	1.9	60	281	7.1	13	3.4	91	321	5.2
1471.7	0.742	24	3.0	63	313	6.7	11	5.5	97	358	4.9
1472.4	0.711	19	2.1	56	274	5.5	10	3.9	85	314	4.0
1473.1	0.710	25	2.3	52	307	4.5	10	4.1	80	351	3.3
1473.8	0.569	27	2.7	67	308	6.0	8.2	4.9	103	352	4.4
1474.5	0.990	24	2.6	59	290	5.1	14	4.8	90	332	3.8
1475.2	1.4	26	2.0	53	291	5.3	20	3.7	81	333	3.9
1475.9	0.648	23	2.3	55	332	4.9	9.4	4.3	84	380	3.6
1476.6	0.945	27	2.6	69	350	5.3	14	4.7	106	400	3.9
1477.3	0.873	23	2.3	61	303	6.1	13	4.3	93	346	4.4
1478.0	0.790	21	2.3	50	234	4.3	11	4.3	76	268	3.2
1478.7	0.653	23	2.5	49	280	5.8	9.4	4.6	75	320	4.2
1479.4	1.1	28	2.7	63	315	3.7	15	4.8	97	361	2.7
1480.1	1.2	28	2.2	54	300	5.1	17	4.0	83	343	3.8
1480.8	0.592	27	2.6	65	288	4.4	8.5	4.8	99	330	3.2
1481.5	0.413	22	2.2	48	258	4.5	6.0	3.9	73	295	3.3
1482.2	0.765	24	2.5	56	306	4.5	11	4.6	86	350	3.3
1482.9	0.631	29	1.8	56	309	4.0	9.1	3.3	86	353	2.9
1483.6	0.786	25	2.3	58	278	3.6	11	4.2	89	318	2.6
1484.3	0.816	25	2.4	64	298	3.6	12	4.4	98	340	2.6
1485.0	1.3	24	2.8	52	308	3.4	19	5.2	80	352	2.5
1485.7	0.948	23	2.2	50	285	3.6	14	4.1	76	326	2.6
1486.4	1.1	22	2.7	56	332	4.7	16	4.9	86	379	3.4
1487.1	1.2	26	2.5	54	289	4.0	17	4.6	83	330	2.9
1487.8	0.944	23	2.1	46	300	4.4	14	3.9	70	343	3.2
1488.5	0.493	23	2.0	48	287	2.8	7.1	3.6	74	328	2.1
1489.2	0.584	21	2.7	53	290	4.0	8.4	4.8	81	332	2.9
1489.9	1.3	24	2.7	63	297	3.5	19	5.0	96	340	2.6
1490.6	0.885	23	1.8	54	268	4.2	13	3.2	82	306	3.1
1491.3	1.2	22	2.1	51	309	3.4	17	3.8	79	354	2.5
1492.0	0.656	21	2.4	49	299	3.8	9.5	4.3	75	342	2.8
1492.7	0.846	25	2.5	46	309	5.6	12	4.6	70	354	4.1
1493.3	1.5	25	2.1	56	302	4.1	22	3.8	86	346	3.0
1494.0	0.704	20	2.4	47	297	2.6	10	4.3	72	340	1.9
1494.7	0.879	21	2.4	53	343	3.7	13	4.3	81	392	2.7
1495.4	1.1	20	2.2	52	298	2.4	16	3.9	80	340	1.8
1496.1	1.3	22	2.3	49	276	3.8	18	4.1	74	316	2.8
1496.8	0.625	23	2.1	48	293	2.6	9.0	3.8	74	336	1.9
1497.5	0.613	22	2.6	51	288	2.4	8.9	4.7	78	329	1.8
1498.2	0.680	18	2.3	53	267	2.9	9.8	4.3	82	306	2.1
1498.9	0.649	20	2.6	51	322	4.1	9.4	4.7	78	368	3.0
1499.6	0.972	24	2.8	53	299	4.1	14	5.0	82	341	3.0
1500.3	0.703	19	2.5	52	265	3.4	10	4.6	79	303	2.5
1501.0	1.1	18	2.0	45	272	3.4	16	3.7	69	311	2.5
1501.7	1.2	18	2.3	47	279	3.6	18	4.1	71	319	2.6
1502.4	0.394	20	2.4	48	347	3.5	5.7	4.4	73	397	2.5
1503.1	0.897	17	2.0	47	264	3.6	13	3.7	73	301	2.6
1503.8	0.393	20	2.5	54	279	3.2	5.7	4.5	83	319	2.3
1504.5	0.650	18	1.8	46	296	3.5	9.4	3.3	70	339	2.5
1505.2	1.5	18	2.1	50	320	2.9	22	3.9	77	366	2.1
1505.9	1.4	18	2.4	44	281	2.8	21	4.4	67	321	2.1
1506.6	0.393	20	1.5	42	270	3.2	5.7	2.8	64	308	2.3
1507.3	0.736	16	1.9	42	276	3.0	11	3.4	64	316	2.2
1508.0	0.708	15	1.9	43	331	3.9	10	3.5	65	378	2.8
1508.7	0.393	17	2.1	47	244	2.8	5.7	3.8	72	279	2.0
1509.4	1.1	18	2.5	38	265	4.2	16	4.5	58	303	3.0
1510.1	0.835	16	2.3	43	236	2.8	12	4.1	66	269	2.0
1510.8	0.739	17	2.1	43	269	1.9	11	3.8	66	308	1.4
1511.5	0.393	16	1.8	41	303	4.1	5.7	3.2	63	346	3.0
1512.2	0.576	18	2.4	45	277	4.0	8.3	4.4	69	317	2.9
1512.9	0.774	17	1.7	51	303	3.8	11	3.1	78	347	2.8
1513.6	0.430	16	2.1	41	253	2.7	6.2	3.9	63	290	2.0
1514.3	1.5	14	2.0	36	254	2.7	21	3.6	55	290	2.0
1515.0	0.920	15	1.9	41	288	3.4	13	3.5	63	329	2.5
1515.7	1.4	17	2.1	40	267	3.5	21	3.9	61	305	2.6
1516.4	1.1	19	2.0	47	293	3.4	15	3.6	72	335	2.5
1517.1	0.452	16	2.0	48	267	2.3	6.5	3.6	74	306	1.7
1517.8	1.2	15	1.8	45	263	4.0	17	3.3	69	301	2.9
1518.5	0.432	16	2.5	34	262	3.3	6.2	4.6	53	299	2.4
1519.2	0.932	22	1.7	40	261	3.1	13	3.1	61	298	2.3
1519.9	0.821	16	1.5	47	244	2.9	12	2.8	72	279	2.1
1520.5	0.719	14	1.8	37	258	1.9	10	3.2	57	295	1.4
1521.2	0.744	17	2.1	38	310	2.4	11	3.9	58	355	1.8
1521.9	1.1	13	1.7	40	266	2.5	15	3.0	61	304	1.8
1522.6	0.403	17	1.8	43	284	3.1	5.8	3.3	65	324	2.3
1523.3	0.696	16	1.9	39	267	2.3	10	3.5	59	305	1.7
1524.0	0.708	16	1.9	35	259	2.8	10	3.4	53	296	2.0
1524.7	0.639	15	1.8	37	268	2.7	9.2	3.3	57	306	2.0

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1525.4	0.907	13	2.0	39	264	2.2	13	3.6	60	302	1.6
1526.1	0.903	17	1.9	40	271	3.3	13	3.4	62	310	2.4
1526.8	0.393	15	1.6	40	279	3.5	5.7	2.9	61	319	2.5
1527.5	1.3	12	1.8	28	257	2.7	19	3.3	43	293	2.0
1528.2	0.690	11	2.5	32	250	2.0	10.0	4.6	49	285	1.5
1528.9	0.670	16	1.6	39	272	2.9	9.7	2.8	61	311	2.1
1529.6	1.1	17	1.8	38	313	2.1	15	3.3	58	358	1.6
1530.3	0.704	14	1.5	35	256	1.7	10	2.8	54	293	1.2
1531.0	1.7	13	1.8	36	265	2.8	25	3.3	56	303	2.0
1531.7	1.2	13	1.7	37	253	2.6	18	3.0	56	289	1.9
1532.4	0.934	19	1.9	37	311	2.6	13	3.5	57	356	1.9
1533.1	0.996	15	1.5	40	258	2.6	14	2.8	61	295	1.9
1533.8	0.901	15	1.5	33	246	2.2	13	2.7	50	282	1.6
1534.5	1.1	15	1.6	33	308	2.5	15	2.9	51	352	1.8
1535.2	1.3	16	1.5	32	258	2.5	18	2.7	49	295	1.9
1535.9	0.904	17	2.3	37	289	2.1	13	4.2	57	331	1.6
1536.6	1.1	16	0.944	35	272	3.0	16	1.7	54	311	2.2
1537.3	0.682	15	1.9	40	289	2.6	9.8	3.4	61	330	1.9
1538.0	0.982	12	1.4	31	318	2.1	14	2.5	47	363	1.6
1538.7	0.739	14	1.5	34	335	3.7	11	2.8	53	383	2.7
1539.4	0.857	13	0.947	34	239	3.1	12	1.7	52	273	2.3
1540.1	1.5	14	1.0	29	249	1.7	21	1.8	44	285	1.3
1540.8	0.706	12	1.4	27	267	1.5	10	2.6	41	305	1.1
1541.5	0.741	16	1.7	32	292	2.6	11	3.0	49	334	1.9
1542.2	0.614	13	1.1	30	245	2.2	8.9	2.1	45	280	1.6
1542.9	0.789	15	1.3	36	276	1.8	11	2.4	55	316	1.3
1543.6	0.507	14	1.1	31	258	2.2	7.3	2.1	48	295	1.6
1544.3	0.799	13	1.4	26	235	1.6	12	2.5	40	269	1.1
1545.0	1.0	15	1.5	31	306	2.4	15	2.8	47	350	1.8
1545.7	1.4	16	1.5	35	276	2.3	20	2.7	53	315	1.7
1546.3	0.767	12	1.3	33	252	1.2	11	2.4	50	288	0.870
1547.0	0.611	11	1.1	28	251	2.0	8.8	2.0	43	287	1.5
1547.7	0.503	12	1.1	31	263	1.4	7.3	2.1	47	301	1.1
1548.4	0.481	14	1.3	33	276	2.8	6.9	2.4	50	316	2.0
1549.1	1.2	14	0.844	36	298	2.6	18	1.5	55	341	1.9
1549.8	0.930	14	1.5	28	252	1.9	13	2.8	44	288	1.4
1550.5	0.393	14	1.5	28	282	1.2	5.7	2.7	43	322	0.912
1551.2	1.2	15	1.2	31	287	2.8	18	2.1	47	328	2.0
1551.9	1.1	16	1.2	32	300	2.1	15	2.3	50	344	1.5
1552.6	1.2	12	0.730	34	255	1.4	18	1.3	52	291	1.1
1553.3	0.393	13	0.983	30	330	1.3	5.7	1.8	47	378	0.969
1554.0	0.393	15	0.939	28	254	1.4	5.7	1.7	44	291	1.0
1554.7	0.895	15	1.0	33	278	3.0	13	1.9	50	318	2.2
1555.4	0.393	12	0.987	32	296	3.1	5.7	1.8	49	338	2.2
1556.1	0.393	13	0.893	29	234	1.6	5.7	1.6	45	268	1.1
1556.8	1.2	13	0.981	26	256	1.8	18	1.8	40	293	1.3
1557.5	1.0	12	0.940	25	286	1.4	15	1.7	39	327	1.0
1558.2	0.393	10	1.1	25	236	1.4	5.7	2.0	38	270	1.0
1558.9	0.596	14	1.1	31	284	1.1	8.6	1.9	47	325	0.802
1559.6	0.568	12	0.741	34	307	1.9	8.2	1.4	52	351	1.4
1560.3	0.393	13	0.868	30	248	2.2	5.7	1.6	46	283	1.6
1561.0	0.642	12	0.955	35	327	1.7	9.3	1.7	54	374	1.3
1561.7	0.475	14	0.953	33	298	1.5	6.9	1.7	51	341	1.1
1562.4	0.393	13	0.737	30	251	1.6	5.7	1.3	46	287	1.1
1563.1	0.581	13	1.2	29	308	2.1	8.4	2.2	45	352	1.6
1563.8	0.798	8.9	0.756	25	226	0.487	12	1.4	38	259	0.356
1564.5	1.1	13	0.824	32	258	1.8	16	1.5	48	295	1.3
1565.2	0.699	12	1.1	30	273	2.1	10	2.0	46	312	1.5
1565.9	0.401	10	0.850	28	259	0.959	5.8	1.6	42	297	0.700
1566.6	1.1	13	0.825	31	265	1.3	16	1.5	47	303	0.981
1567.3	0.500	10	0.750	29	273	1.3	7.2	1.4	44	313	0.974
1568.0	0.404	11	0.662	25	290	1.8	5.8	1.2	39	332	1.3
1568.7	0.633	14	0.655	31	287	2.3	9.1	1.2	47	328	1.7
1569.4	0.393	12	1.0	29	252	1.7	5.7	1.9	45	288	1.3
1570.1	0.971	14	0.787	31	274	2.0	14	1.4	48	313	1.4
1570.8	0.393	15	0.537	29	310	2.0	5.7	0.980	45	354	1.5
1571.5	0.393	15	0.779	29	261	1.4	5.7	1.4	44	298	0.996
1572.1	0.804	15	1.2	35	283	2.6	12	2.1	54	323	1.9
1572.8	0.393	13	0.892	38	290	2.4	5.7	1.6	58	332	1.8
1573.5	0.492	14	0.885	32	315	1.4	7.1	1.6	49	360	0.999
1574.2	0.393	13	0.652	26	272	1.6	5.7	1.2	40	311	1.2
1574.9	1.1	13	0.546	28	287	1.7	16	0.996	43	328	1.2
1575.6	0.601	15	0.709	31	246	0.886	8.7	1.3	48	282	0.647
1576.3	0.529	12	0.523	30	240	1.1	7.6	0.954	46	275	0.792
1577.0	0.404	13	0.759	32	302	1.5	5.8	1.4	49	345	1.1
1577.7	1.3	13	0.797	31	287	2.5	18	1.5	48	328	1.8
1578.4	0.896	14	0.454	27	256	1.6	13	0.827	42	293	1.2
1579.1	0.795	12	0.690	29	243	2.0	11	1.3	44	278	1.4
1579.8	0.587	16	0.571	31	241	1.8	8.5	1.0	48	275	1.3
1580.5	0.393	13	0.469	27	270	1.6	5.7	0.856	42	309	1.2
1581.2	0.424	12	0.696	29	345	2.3	6.1	1.3	44	394	1.6

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1581.9	0.557	16	0.739	36	343	1.9	8.0	1.3	56	392	1.4
1582.6	0.568	12	0.825	33	259	1.4	8.2	1.5	50	297	1.0
1583.3	0.879	14	0.542	29	250	1.2	13	0.988	44	285	0.862
1584.0	0.621	14	0.630	31	277	1.1	9.0	1.1	48	317	0.836
1584.7	0.393	15	0.720	34	291	2.3	5.7	1.3	52	333	1.7
1585.4	1.0	15	1.1	34	324	2.0	15	2.0	52	371	1.5
1586.1	0.393	14	0.645	28	227	2.0	5.7	1.2	43	260	1.4
1586.8	0.581	14	0.403	28	267	1.7	8.4	0.735	43	306	1.2
1587.5	1.2	14	0.635	25	258	1.4	17	1.2	39	295	1.0
1588.2	0.914	16	0.788	29	263	2.6	13	1.4	45	301	1.9
1588.9	0.795	17	0.820	32	325	1.0	11	1.5	49	372	0.737
1589.6	0.783	12	0.564	37	305	1.0	11	1.0	56	348	0.749
1590.3	0.917	16	0.660	24	250	1.0	13	1.2	36	286	0.748
1591.0	0.518	14	0.633	25	233	1.7	7.5	1.2	39	266	1.3
1591.7	0.393	15	0.596	35	286	2.3	5.7	1.1	54	327	1.7
1592.4	0.475	17	0.629	30	258	1.8	6.8	1.1	46	295	1.3
1593.1	0.393	13	0.531	35	311	1.2	5.7	0.969	54	355	0.885
1593.8	0.895	15	0.679	26	248	1.6	13	1.2	39	283	1.2
1594.5	0.700	16	0.644	30	290	1.5	10	1.2	46	331	1.1
1595.2	0.563	17	0.384	29	256	2.1	8.1	0.700	45	292	1.5
1595.9	0.695	19	0.681	27	230	2.0	10	1.2	42	263	1.5
1596.6	1.1	15	0.724	34	286	1.9	15	1.3	51	327	1.4
1597.3	0.630	14	0.984	29	277	1.7	9.1	1.8	44	317	1.2
1597.9	0.393	14	0.576	29	294	1.1	5.7	1.0	45	336	0.833
1598.6	0.565	16	0.847	36	292	2.3	8.2	1.5	55	334	1.7
1599.3	0.393	17	0.589	33	277	0.857	5.7	1.1	51	317	0.626
1600.0	0.644	16	0.422	28	262	2.0	9.3	0.770	42	300	1.5
1600.7	0.393	20	1.1	25	272	2.0	5.7	1.9	38	312	1.5
1601.4	1.6	17	0.402	29	265	1.9	22	0.733	45	303	1.4
1602.1	0.736	16	0.431	28	268	2.5	11	0.786	43	306	1.8
1602.8	0.792	16	0.893	29	289	1.5	11	1.6	44	331	1.1
1603.5	0.393	18	0.752	28	285	1.4	5.7	1.4	43	326	1.0
1604.2	1.4	18	0.703	29	321	1.8	21	1.3	45	367	1.3
1604.9	1.2	23	0.919	27	263	2.6	17	1.7	42	300	1.9
1605.6	0.747	18	0.629	33	263	1.8	11	1.1	51	300	1.3
1606.3	0.665	17	0.812	30	265	1.9	9.6	1.5	46	303	1.4
1607.0	0.931	16	0.777	25	241	1.8	13	1.4	39	276	1.3
1607.7	0.632	17	0.558	29	262	2.6	9.1	1.0	44	300	1.9
1608.4	1.4	21	0.469	28	285	1.8	21	0.856	43	326	1.3
1609.1	0.602	20	0.735	33	277	1.9	8.7	1.3	51	316	1.4
1609.8	0.907	17	1.2	32	268	1.4	13	2.1	50	306	1.1
1610.5	0.678	14	0.743	24	240	1.6	9.8	1.4	37	274	1.2
1611.2	0.564	22	0.820	25	262	2.7	8.1	1.5	39	299	1.9
1611.9	0.553	22	0.752	29	261	1.9	8.0	1.4	45	298	1.4
1612.6	0.393	21	0.587	33	283	2.1	5.7	1.1	50	324	1.5
1613.3	0.393	17	0.936	34	260	2.4	5.7	1.7	52	297	1.7
1614.0	0.590	19	0.845	30	284	1.7	8.5	1.5	45	325	1.3
1614.7	0.705	18	0.702	32	334	3.2	10	1.3	49	382	2.3
1615.4	1.5	21	0.685	26	252	2.2	21	1.2	40	288	1.6
1616.1	0.526	17	0.765	29	275	1.2	7.6	1.4	44	314	0.868
1616.8	0.779	19	0.854	27	280	1.3	11	1.6	42	320	0.964
1617.5	1.6	18	0.684	24	294	2.1	24	1.2	37	336	1.5
1618.2	0.962	18	0.829	28	279	1.1	14	1.5	44	319	0.804
1618.9	0.789	22	0.713	26	283	2.1	11	1.3	40	324	1.5
1619.6	0.794	21	0.431	29	307	2.6	11	0.786	44	351	1.9
1620.3	0.758	21	0.744	28	289	1.4	11	1.4	43	331	1.0
1621.0	0.905	20	0.686	24	271	1.8	13	1.3	37	310	1.3
1621.7	1.3	18	1.1	30	279	1.7	18	1.9	46	320	1.3
1622.4	0.812	20	0.864	33	305	1.5	12	1.6	51	349	1.1
1623.1	0.549	21	0.534	27	299	1.4	7.9	0.974	42	341	1.0
1623.8	0.488	19	0.877	31	287	1.9	7.0	1.6	47	328	1.4
1624.4	0.438	23	0.823	25	282	2.2	6.3	1.5	39	322	1.6
1625.1	0.784	24	0.709	30	287	1.7	11	1.3	46	328	1.2
1625.8	0.442	20	0.701	28	286	1.9	6.4	1.3	43	327	1.4
1626.5	1.3	21	0.943	29	308	1.4	19	1.7	45	352	1.0
1627.2	1.1	21	0.802	24	310	1.6	15	1.5	36	355	1.1
1627.9	0.475	24	0.555	30	288	1.9	6.9	1.0	46	330	1.4
1628.6	1.2	25	0.597	28	300	2.2	17	1.1	43	343	1.6
1629.3	0.770	24	0.819	28	305	1.1	11	1.5	43	349	0.794
1630.0	1.3	20	0.838	25	273	1.9	18	1.5	39	312	1.4
1630.7	0.835	22	1.0	28	352	2.0	12	1.9	44	403	1.5
1631.4	0.435	25	1.1	31	332	2.2	6.3	2.0	48	380	1.6
1632.1	0.526	24	1.2	29	314	2.6	7.6	2.1	45	359	1.9
1632.8	0.700	24	0.678	25	292	2.4	10	1.2	38	333	1.7
1633.5	0.770	20	0.708	27	309	2.7	11	1.3	41	354	2.0
1634.2	0.665	24	1.1	24	366	2.8	9.6	2.0	37	419	2.1
1634.9	1.2	23	0.694	26	287	2.0	18	1.3	40	328	1.5
1635.6	0.393	22	0.651	27	302	2.8	5.7	1.2	41	345	2.1
1636.3	0.776	24	0.769	24	287	2.0	11	1.4	37	328	1.4
1637.0	1.1	23	0.791	26	294	1.6	15	1.4	39	337	1.1
1637.7	0.545	25	0.915	26	370	1.7	7.9	1.7	41	423	1.2

Minnow Environmental
Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1638.4	0.393	24	0.874	29	337	3.0	5.7	1.6	45	385	2.2
1639.1	1.1	26	0.952	20	270	3.1	15	1.7	31	309	2.3
1639.8	1.2	24	1.2	29	339	2.4	17	2.1	44	387	1.7
1640.5	1.0	19	1.1	21	287	2.3	15	1.9	32	328	1.7
1641.2	0.963	23	0.781	23	323	3.3	14	1.4	36	369	2.4
1641.9	1.4	25	0.760	25	300	2.3	21	1.4	38	344	1.7
1642.6	0.864	26	1.3	26	319	2.5	12	2.3	39	365	1.8
1643.3	1.5	22	1.1	24	341	2.6	21	2.0	37	390	1.9
1644.0	0.952	23	1.0	24	354	3.4	14	1.9	37	405	2.5
1644.7	1.5	25	0.872	28	343	2.8	22	1.6	43	392	2.1
1645.4	0.903	26	0.965	27	327	2.5	13	1.8	42	374	1.8
1646.1	0.816	21	0.851	28	338	3.7	12	1.6	43	386	2.7
1646.8	0.919	26	1.2	25	356	3.4	13	2.1	38	408	2.5
1647.5	0.558	22	0.999	21	329	2.2	8.1	1.8	33	376	1.6
1648.2	1.9	25	1.3	25	359	3.1	28	2.3	39	410	2.2
1648.9	0.638	23	0.882	23	284	3.5	9.2	1.6	36	325	2.6
1649.6	0.899	23	1.0	25	337	2.4	13	1.8	38	385	1.8
1650.3	0.809	21	1.2	21	387	2.4	12	2.3	32	443	1.8
1650.9	1.3	25	1.4	22	348	1.8	18	2.6	33	398	1.3
1651.6	0.894	26	1.3	22	408	2.4	13	2.4	33	467	1.8
1652.3	1.2	23	1.2	19	332	2.4	18	2.2	29	380	1.8
1653.0	0.749	22	1.0	22	330	2.8	11	1.8	33	377	2.1
1653.7	0.656	24	0.938	23	356	3.1	9.5	1.7	36	407	2.3
1654.4	1.2	20	1.1	20	312	1.8	17	2.1	31	356	1.3
1655.1	0.517	27	1.3	23	375	3.8	7.5	2.3	35	428	2.8
1655.8	1.5	23	0.929	22	312	1.4	21	1.7	34	357	1.0
1656.5	0.464	22	1.5	21	334	2.0	6.7	2.7	33	382	1.5
1657.2	1.2	25	1.3	22	356	2.3	18	2.4	34	408	1.7
1657.9	1.2	23	0.867	19	336	2.0	18	1.6	29	385	1.4
1658.6	1.3	27	1.3	22	379	3.7	19	2.3	34	433	2.7
1659.3	0.956	25	1.4	26	383	1.9	14	2.5	41	438	1.4
1660.0	0.955	26	1.6	22	404	1.8	14	2.9	33	462	1.3
1660.7	1.2	22	1.7	20	392	2.6	18	3.2	30	448	1.9
1661.4	1.4	27	1.3	22	383	3.0	20	2.3	34	438	2.2
1662.1	0.906	28	1.5	23	411	1.5	13	2.8	35	470	1.1
1662.8	2.4	23	1.2	24	458	2.1	34	2.2	37	523	1.5
1663.5	1.5	24	1.6	24	384	2.7	22	2.8	37	439	2.0
1664.2	1.4	26	1.7	22	379	2.7	20	3.1	33	433	2.0
1664.9	1.5	29	1.4	21	364	2.3	21	2.6	33	416	1.7
1665.6	0.990	24	1.7	26	403	1.7	14	3.1	40	461	1.2
1666.3	0.671	21	1.1	19	369	1.5	9.7	2.0	29	423	1.1
1667.0	0.393	22	1.2	16	365	2.3	5.7	2.1	25	417	1.6
1667.7	1.2	28	1.4	26	476	3.9	17	2.6	40	544	2.8
1668.4	1.1	29	1.6	23	384	2.1	16	3.0	36	440	1.5
1669.1	1.1	25	1.2	23	441	1.4	16	2.2	35	504	0.987
1669.8	0.785	22	1.9	16	404	1.6	11	3.5	25	462	1.2
1670.5	1.0	28	1.9	18	372	2.2	15	3.4	27	425	1.6
1671.2	0.720	29	1.8	21	427	2.0	10	3.3	32	489	1.4
1671.9	1.4	27	1.5	21	355	2.7	20	2.7	32	407	2.0
1672.6	0.582	27	1.9	23	468	2.7	8.4	3.4	35	535	2.0
1673.3	0.819	28	1.4	15	420	2.6	12	2.6	23	481	1.9
1674.0	1.6	32	1.6	19	371	3.1	22	2.9	29	424	2.3
1674.7	1.7	34	1.7	21	429	3.3	25	3.2	33	491	2.4
1675.4	0.706	30	1.7	17	325	1.8	10	3.0	26	371	1.3
1676.1	1.4	29	1.4	19	431	3.3	20	2.5	29	492	2.4
1676.7	0.818	24	1.8	13	323	1.9	12	3.2	21	370	1.4
1677.4	1.5	28	1.8	19	427	2.9	21	3.2	29	488	2.1
1678.1	0.437	39	1.4	20	413	2.9	6.3	2.5	31	472	2.1
1678.8	0.797	33	1.4	16	402	1.6	12	2.6	25	460	1.1
1679.5	0.860	32	1.7	18	397	0.886	12	3.1	28	454	0.647
1680.2	0.514	31	2.1	17	428	3.5	7.4	3.8	25	490	2.5
1680.9	0.523	25	2.2	16	462	2.4	7.6	4.0	25	529	1.8
1681.6	1.8	42	2.2	19	388	2.5	26	4.1	30	443	1.9
1682.3	0.707	35	1.9	20	433	2.0	10	3.5	31	496	1.4
1683.0	0.774	32	2.0	17	404	2.4	11	3.6	26	462	1.8
1683.7	1.4	33	2.3	18	454	3.7	21	4.2	28	519	2.7
1684.4	1.7	36	2.2	19	474	2.7	25	4.1	29	542	2.0
1685.1	0.758	34	2.0	17	459	2.4	11	3.7	26	525	1.7
1685.8	1.3	36	1.5	16	373	2.2	19	2.7	25	427	1.6
1686.5	1.4	36	2.1	19	515	3.3	20	3.8	30	589	2.4
1687.2	1.5	30	2.3	20	468	2.0	21	4.2	31	535	1.5
1687.9	1.0	34	2.3	19	434	2.1	15	4.1	29	496	1.5
1688.6	0.923	36	2.0	19	438	1.9	13	3.6	30	501	1.4
1689.3	0.755	38	1.8	19	409	2.2	11	3.3	29	468	1.6
1690.0	1.0	32	1.8	16	384	3.1	15	3.3	24	440	2.3
1690.7	1.7	36	2.2	16	461	2.2	24	4.0	24	528	1.6
1691.4	1.1	40	2.3	20	443	3.0	16	4.3	31	507	2.2
1692.1	0.684	38	2.0	22	379	2.9	9.9	3.6	33	434	2.1
1692.8	1.7	40	2.8	21	488	3.1	24	5.1	32	558	2.3
1693.5	1.1	41	2.8	19	428	2.8	16	5.1	28	489	2.1
1694.2	1.1	41	2.5	17	430	2.3	15	4.5	26	492	1.7

Minnow Environmental
Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1694.9	0.673	38	2.2	22	437	3.2	9.7	4.0	34	500	2.3
1695.6	1.2	36	2.5	18	412	3.0	18	4.6	28	472	2.2
1696.3	1.2	35	2.4	15	382	2.3	18	4.4	23	437	1.7
1697.0	1.5	37	2.7	19	448	2.0	22	5.0	30	513	1.5
1697.7	0.802	34	2.6	20	401	1.6	12	4.8	30	458	1.2
1698.4	1.2	39	2.4	15	406	1.3	17	4.4	23	464	0.936
1699.1	1.6	30	2.1	17	443	2.8	23	3.8	26	507	2.0
1699.8	0.670	32	2.5	15	405	2.3	9.7	4.6	24	463	1.6
1700.5	1.4	28	2.7	16	467	2.2	21	4.8	24	534	1.6
1701.2	0.821	32	2.5	19	427	2.2	12	4.5	29	488	1.6
1701.9	0.965	31	2.3	19	368	2.2	14	4.1	30	421	1.6
1702.5	1.4	31	2.3	18	422	1.7	21	4.3	28	483	1.2
1703.2	0.930	34	2.8	20	427	2.5	13	5.0	31	488	1.8
1703.9	0.754	37	3.2	20	441	2.8	11	5.8	30	505	2.0
1704.6	1.4	31	2.8	18	446	2.4	21	5.2	28	510	1.7
1705.3	0.881	30	2.8	18	437	2.7	13	5.2	28	500	1.9
1706.0	0.744	27	2.2	17	383	2.2	11	4.0	26	438	1.6
1706.7	1.1	25	2.3	17	504	1.9	16	4.1	26	577	1.4
1707.4	1.3	29	2.5	17	426	2.5	18	4.6	26	487	1.8
1708.1	1.0	37	2.9	20	421	2.5	15	5.3	31	482	1.8
1708.8	1.3	28	2.3	14	365	1.7	19	4.2	21	417	1.2
1709.5	0.393	29	2.4	16	443	2.8	5.7	4.4	24	506	2.1
1710.2	1.4	30	2.6	21	460	1.4	20	4.8	32	526	1.0
1710.9	1.3	31	3.0	19	400	2.5	18	5.5	29	457	1.8
1711.6	1.2	29	2.3	20	396	1.1	18	4.2	30	453	0.774
1712.3	0.977	25	2.2	18	430	2.6	14	4.0	28	492	1.9
1713.0	1.8	31	2.3	18	417	1.6	25	4.2	27	477	1.2
1713.7	1.2	31	2.5	17	407	2.3	18	4.5	26	466	1.7
1714.4	0.944	26	2.4	15	378	2.7	14	4.3	23	432	1.9
1715.1	1.1	31	2.2	17	400	1.5	16	4.0	26	457	1.1
1715.8	1.1	23	2.2	15	420	1.3	16	4.0	24	480	0.919
1716.5	1.0	23	2.1	12	412	1.3	15	3.9	19	472	0.958
1717.2	1.3	20	3.0	15	412	1.6	18	5.4	23	471	1.1
1717.9	1.1	25	2.2	12	318	1.6	16	4.1	18	364	1.2
1718.6	0.754	23	2.3	13	488	2.4	11	4.2	20	558	1.8
1719.3	1.1	23	2.4	12	431	1.8	16	4.3	19	493	1.3
1720.0	1.1	22	2.6	17	368	2.1	16	4.8	26	421	1.5
1720.7	0.771	24	2.1	13	439	0.945	11	3.9	20	501	0.690
1721.4	1.0	25	2.3	16	394	2.3	15	4.3	24	451	1.7
1722.1	1.0	21	2.0	13	369	1.5	15	3.7	20	422	1.1
1722.8	1.1	19	2.0	11	357	1.5	16	3.6	17	408	1.1
1723.5	2.0	27	1.9	12	388	1.9	29	3.5	18	444	1.4
1724.2	0.791	42	2.0	13	446	1.5	11	3.7	20	510	1.1
1724.9	0.549	22	1.9	17	421	2.1	7.9	3.4	26	482	1.6
1725.6	1.4	23	2.0	18	435	1.5	21	3.6	28	497	1.1
1726.3	0.850	22	1.7	16	401	3.0	12	3.0	25	458	2.2
1727.0	1.5	22	1.4	18	494	2.4	21	2.6	27	565	1.7
1727.7	0.742	23	2.0	17	383	3.3	11	3.6	26	438	2.4
1728.4	0.613	24	1.3	21	391	2.7	8.9	2.3	32	447	2.0
1729.0	0.718	25	1.8	16	393	1.1	10	3.2	24	449	0.814
1729.7	0.700	24	1.7	14	375	2.4	10	3.1	22	429	1.7
1730.4	1.1	28	1.9	12	415	3.0	16	3.4	19	475	2.2
1731.1	1.4	22	1.5	17	379	2.2	20	2.8	25	433	1.6
1731.8	1.1	24	1.1	19	407	1.8	15	2.1	29	466	1.3
1732.5	0.814	23	1.9	15	394	2.8	12	3.4	23	451	2.0
1733.2	1.0	23	1.6	18	425	2.6	15	2.9	28	486	1.9
1733.9	0.563	27	1.5	24	401	2.1	8.1	2.8	36	458	1.5
1734.6	1.0	27	1.5	24	473	1.8	15	2.7	37	541	1.3
1735.3	0.583	25	1.4	20	370	2.5	8.4	2.5	31	424	1.8
1736.0	1.1	25	1.3	17	357	1.6	16	2.3	27	408	1.2
1736.7	0.690	23	1.3	18	354	3.4	10.0	2.5	27	405	2.5
1737.4	0.863	23	1.3	18	346	2.8	12	2.4	27	395	2.1
1738.1	1.1	24	1.3	22	371	2.4	15	2.4	33	424	1.7
1738.8	0.793	27	1.2	17	360	1.8	11	2.1	26	411	1.3
1739.5	0.393	23	1.4	18	389	1.4	5.7	2.5	28	445	1.0
1740.2	0.538	29	1.4	16	390	1.8	7.8	2.6	25	447	1.3
1740.9	1.0	28	1.5	22	430	5.0	15	2.7	34	492	3.6
1741.6	0.868	47	1.1	22	355	2.4	13	2.0	33	406	1.7
1742.3	1.5	26	1.1	17	398	1.7	22	2.1	26	455	1.2
1743.0	0.599	26	1.3	18	342	3.5	8.7	2.3	28	391	2.5
1743.7	0.678	31	1.2	18	392	3.0	9.8	2.1	28	448	2.2
1744.4	1.2	30	1.2	19	298	2.2	17	2.1	30	341	1.6
1745.1	0.993	24	1.2	21	341	2.8	14	2.3	32	390	2.1
1745.8	0.982	32	1.2	21	360	2.4	14	2.2	33	412	1.7
1746.5	0.788	29	1.2	25	349	2.2	11	2.3	39	399	1.6
1747.2	1.0	31	1.5	27	369	2.3	15	2.7	42	422	1.6
1747.9	0.393	29	1.3	20	338	3.1	5.7	2.4	31	387	2.3
1748.6	1.4	33	1.6	26	373	2.9	20	3.0	39	427	2.1
1749.3	0.618	30	1.5	17	326	2.2	8.9	2.7	26	373	1.6
1750.0	0.393	30	1.6	24	403	3.3	5.7	2.9	36	461	2.4
1750.7	1.2	29	1.1	26	434	3.8	17	2.0	40	496	2.8

Minnow Environmental
Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1751.4	0.750	29	1.4	22	349	3.0	11	2.5	34	399	2.2
1752.1	1.1	28	1.3	22	378	2.9	16	2.4	33	432	2.1
1752.8	0.614	27	1.3	21	350	2.5	8.9	2.4	33	401	1.8
1753.5	0.901	26	0.986	23	370	2.6	13	1.8	35	424	1.9
1754.2	0.812	31	1.3	28	342	3.8	12	2.3	42	391	2.8
1754.8	0.936	28	1.1	26	320	2.3	14	2.0	40	366	1.7
1755.5	0.925	25	1.5	25	377	2.6	13	2.7	38	431	1.9
1756.2	0.706	28	1.3	21	330	2.3	10	2.4	33	377	1.7
1756.9	1.2	31	1.4	25	362	3.1	17	2.5	38	414	2.3
1757.6	0.607	27	1.1	25	297	2.8	8.8	2.1	38	340	2.0
1758.3	0.393	26	1.1	26	285	3.1	5.7	1.9	40	326	2.2
1759.0	0.711	31	1.1	26	341	2.1	10	2.0	41	390	1.5
1759.7	0.630	25	1.5	23	353	3.2	9.1	2.8	36	403	2.3
1760.4	0.658	30	1.2	24	309	3.3	9.5	2.1	36	353	2.4
1761.1	1.0	29	1.2	30	338	2.9	15	2.2	45	387	2.1
1761.8	0.468	26	0.792	28	326	2.3	6.8	1.4	43	373	1.7
1762.5	0.998	25	0.984	24	324	3.0	14	1.8	37	370	2.2
1763.2	0.393	27	0.659	27	315	3.2	5.7	1.2	41	360	2.3
1763.9	1.3	32	1.2	24	307	2.9	18	2.2	36	351	2.1
1764.6	0.574	23	0.941	26	289	2.5	8.3	1.7	40	331	1.9
1765.3	1.1	27	1.6	28	303	2.5	16	2.8	44	346	1.8
1766.0	0.974	24	1.0	25	279	2.9	14	1.9	39	318	2.1
1766.7	0.996	28	1.2	27	282	3.2	14	2.1	42	322	2.4
1767.4	0.950	28	1.3	29	318	3.7	14	2.5	45	364	2.7
1768.1	0.533	27	1.1	30	326	2.6	7.7	2.0	45	373	1.9
1768.8	0.553	23	0.860	25	299	1.6	8.0	1.6	38	342	1.2
1769.5	0.393	28	1.0	32	375	4.1	5.7	1.9	49	429	3.0
1770.2	0.521	23	1.2	32	325	3.9	7.5	2.2	48	372	2.8
1770.9	0.648	27	0.891	28	316	3.5	9.4	1.6	42	362	2.5
1771.6	0.896	27	1.0	36	303	1.8	13	1.9	55	347	1.3
1772.3	0.486	21	0.819	27	308	2.7	7.0	1.5	41	353	2.0
1773.0	0.644	25	1.1	31	310	2.2	9.3	2.1	48	355	1.6
1773.7	1.1	24	0.918	31	327	2.9	15	1.7	48	374	2.1
1774.4	0.861	22	1.2	30	326	1.5	12	2.1	46	372	1.1
1775.1	1.1	24	0.929	33	276	2.2	16	1.7	51	316	1.6
1775.8	0.939	21	0.990	32	298	2.3	14	1.8	49	341	1.7
1776.5	0.573	22	1.3	32	314	2.2	8.3	2.5	49	359	1.6
1777.2	0.830	25	1.2	32	296	1.6	12	2.2	49	339	1.2
1777.9	1.4	27	1.3	35	297	3.1	20	2.4	54	340	2.3
1778.6	1.3	26	1.1	35	325	2.6	18	2.0	53	372	1.9
1779.3	0.743	19	1.1	35	315	1.5	11	2.1	54	360	1.1
1780.0	0.489	24	1.2	33	297	1.8	7.1	2.3	50	340	1.3
1780.7	0.410	23	1.7	39	309	2.7	5.9	3.2	60	353	2.0
1781.3	0.723	27	1.2	35	290	1.8	10	2.1	53	332	1.3
1782.0	0.815	22	1.2	35	331	2.6	12	2.2	54	378	1.9
1782.7	0.809	22	1.1	38	315	2.2	12	2.0	58	360	1.6
1783.4	0.775	20	1.2	32	284	1.9	11	2.3	49	324	1.4
1784.1	1.3	22	1.1	35	299	2.1	19	2.0	54	342	1.5
1784.8	0.393	21	1.0	34	273	0.953	5.7	1.9	53	312	0.695
1785.5	1.0	21	1.1	34	304	3.3	15	2.1	52	348	2.4
1786.2	0.451	16	1.0	30	307	1.8	6.5	1.8	46	351	1.3
1786.9	0.950	23	1.3	40	303	2.4	14	2.4	61	346	1.7
1787.6	0.487	26	1.3	35	275	1.7	7.0	2.4	54	315	1.2
1788.3	0.393	20	1.3	26	241	3.0	5.7	2.4	40	276	2.2
1789.0	0.433	20	1.3	35	301	1.6	6.3	2.3	53	345	1.2
1789.7	0.948	19	1.3	31	290	1.5	14	2.3	47	332	1.1
1790.4	1.3	19	1.2	43	315	1.3	19	2.2	65	360	0.968
1791.1	0.803	18	0.777	37	257	3.2	12	1.4	56	293	2.3
1791.8	0.475	14	0.977	37	281	2.2	6.9	1.8	57	321	1.6
1792.5	1.3	16	0.989	36	289	1.7	18	1.8	56	330	1.3
1793.2	1.3	19	1.4	34	326	1.9	19	2.6	52	373	1.4
1793.9	0.393	18	0.883	35	283	2.0	5.7	1.6	53	324	1.5
1794.6	0.605	18	0.852	42	339	2.5	8.7	1.6	64	387	1.8
1795.3	1.2	18	0.972	34	294	3.6	18	1.8	53	336	2.6
1796.0	0.552	17	0.827	31	278	1.8	8.0	1.5	47	318	1.3
1796.7	0.608	19	1.2	36	299	2.4	8.8	2.2	55	342	1.7
1797.4	0.678	15	1.1	32	265	1.6	9.8	2.1	50	303	1.1
1798.1	0.800	17	0.813	33	244	2.1	12	1.5	50	279	1.5
1798.8	0.393	13	1.1	32	239	2.4	5.7	2.1	50	274	1.7
1799.5	0.538	16	1.2	31	358	2.4	7.8	2.2	48	409	1.7
1800.2	0.544	15	1.2	36	301	2.1	7.8	2.2	55	345	1.6
1800.9	0.626	15	0.718	28	279	1.8	9.0	1.3	43	319	1.3
1801.6	1.2	15	0.913	34	278	1.2	18	1.7	52	318	0.870
1802.3	0.405	15	1.5	33	264	2.2	5.8	2.7	50	302	1.6
1803.0	1.2	20	0.721	32	312	2.7	17	1.3	49	357	1.9
1803.7	0.556	18	1.3	40	316	2.7	8.0	2.4	61	361	2.0
1804.4	0.454	15	0.934	36	238	1.6	6.6	1.7	55	272	1.2
1805.1	1.1	15	1.1	33	267	2.1	16	2.1	50	305	1.5
1805.8	0.393	13	1.3	35	278	2.2	5.7	2.4	54	318	1.6
1806.5	0.960	12	1.1	40	285	2.1	14	2.0	61	326	1.5
1807.2	1.4	14	1.5	38	270	2.1	20	2.8	58	309	1.5

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1807.8	0.825	12	1.1	46	293	2.6	12	2.1	71	335	1.9
1808.5	0.622	12	1.3	29	253	1.7	9.0	2.4	45	290	1.3
1809.2	1.1	14	1.6	38	318	2.9	16	2.9	58	364	2.1
1809.9	1.2	14	0.942	40	264	2.4	17	1.7	62	302	1.8
1810.6	0.930	16	1.9	42	265	3.3	13	3.4	64	303	2.4
1811.3	0.959	13	1.3	44	286	2.7	14	2.4	68	327	2.0
1812.0	1.0	13	1.5	37	285	1.6	15	2.7	57	326	1.2
1812.7	0.501	15	1.6	37	318	2.6	7.2	3.0	56	363	1.9
1813.4	0.899	15	1.5	38	348	2.4	13	2.7	59	398	1.7
1814.1	1.1	16	1.5	46	297	3.4	16	2.7	70	339	2.5
1814.8	0.420	13	1.4	34	312	1.7	6.1	2.5	53	357	1.2
1815.5	0.764	15	1.7	33	297	1.2	11	3.2	51	339	0.855
1816.2	0.881	15	1.6	38	355	2.2	13	2.9	59	406	1.6
1816.9	1.1	17	1.0	37	275	2.3	16	1.8	57	315	1.7
1817.6	0.658	14	1.8	50	335	2.1	9.5	3.2	76	383	1.5
1818.3	0.755	12	1.6	37	251	2.2	11	2.9	57	287	1.6
1819.0	0.393	11	1.6	34	261	2.5	5.7	2.9	53	298	1.8
1819.7	0.586	15	1.7	37	275	2.7	8.5	3.1	57	314	2.0
1820.4	0.957	13	1.9	48	296	2.3	14	3.5	73	339	1.6
1821.1	0.708	14	1.7	47	320	2.9	10	3.1	72	366	2.1
1821.8	1.2	13	1.7	45	318	2.5	17	3.2	69	363	1.8
1822.5	1.7	12	1.6	34	305	2.0	24	2.9	53	349	1.5
1823.2	0.724	15	2.0	43	314	4.0	10	3.6	66	359	2.9
1823.9	1.2	16	1.8	46	329	4.1	17	3.3	70	376	3.0
1824.6	0.956	14	1.7	47	299	3.0	14	3.1	71	342	2.2
1825.3	0.738	13	2.2	48	334	1.9	11	4.0	74	382	1.4
1826.0	1.0	14	2.0	44	315	2.8	15	3.6	68	360	2.1
1826.7	0.500	12	2.3	46	282	2.7	7.2	4.2	70	322	2.0
1827.4	1.1	14	2.1	54	285	2.5	15	3.9	83	326	1.8
1828.1	1.0	13	1.8	45	303	2.9	15	3.2	70	346	2.1
1828.8	1.5	14	1.7	49	291	1.9	21	3.2	75	332	1.4
1829.5	1.8	17	2.3	44	290	2.5	25	4.2	67	332	1.9
1830.2	1.2	14	2.4	52	324	2.4	17	4.4	79	370	1.8
1830.9	1.3	16	2.2	59	308	3.5	19	4.0	91	352	2.5
1831.6	1.0	17	1.9	53	295	1.7	15	3.4	80	337	1.2
1832.3	1.2	14	1.8	49	309	2.2	17	3.3	75	354	1.6
1833.0	1.1	14	2.4	51	279	2.0	15	4.5	79	318	1.5
1833.7	1.0	18	1.8	46	275	3.5	15	3.2	71	315	2.6
1834.3	0.593	17	2.2	57	322	3.6	8.6	4.0	87	369	2.6
1835.0	0.904	15	2.5	61	287	2.4	13	4.5	94	329	1.8
1835.7	0.421	12	2.1	52	314	2.2	6.1	3.9	80	359	1.6
1836.4	0.708	14	2.7	57	295	2.6	10	4.8	87	337	1.9
1837.1	1.7	19	2.3	55	332	3.3	25	4.2	84	380	2.4
1837.8	1.5	18	2.3	63	309	2.8	22	4.1	97	354	2.0
1838.5	0.451	19	2.3	58	281	2.8	6.5	4.2	89	322	2.0
1839.2	0.606	16	2.1	50	281	2.6	8.8	3.9	76	321	1.9
1839.9	1.1	19	2.7	63	353	2.0	16	4.9	97	403	1.5
1840.6	0.998	19	2.5	61	322	2.9	14	4.6	93	368	2.1
1841.3	1.1	17	2.3	60	339	3.0	16	4.2	93	388	2.2
1842.0	0.799	17	3.0	57	291	3.7	12	5.5	87	332	2.7
1842.7	1.2	17	2.2	55	286	2.9	18	4.0	84	327	2.1
1843.4	0.776	20	3.1	60	289	3.3	11	5.7	92	330	2.4
1844.1	0.846	19	2.4	58	257	2.9	12	4.3	89	294	2.1
1844.8	0.521	18	3.0	66	277	2.5	7.5	5.5	102	316	1.8
1845.5	0.729	17	1.9	51	266	3.0	11	3.4	79	304	2.2
1846.2	0.849	17	2.5	53	265	2.9	12	4.6	81	303	2.1
1846.9	0.816	18	2.1	60	277	3.9	12	3.8	92	317	2.8
1847.6	1.2	20	2.4	70	269	5.2	17	4.4	108	308	3.8
1848.3	1.1	21	2.3	62	280	2.1	15	4.2	95	320	1.5
1849.0	1.1	18	3.0	68	332	4.8	15	5.5	104	379	3.5
1849.7	0.709	18	2.7	55	307	4.4	10	5.0	84	351	3.2
1850.4	0.861	22	3.2	74	288	3.5	12	5.9	113	330	2.6
1851.1	0.853	18	2.5	70	307	3.6	12	4.6	107	351	2.7
1851.8	0.674	18	2.4	62	288	4.0	9.7	4.4	95	329	2.9
1852.5	0.906	21	2.8	59	319	2.8	13	5.1	91	365	2.0
1853.2	1.6	19	2.0	65	320	3.1	23	3.7	100	366	2.3
1853.9	1.3	23	2.6	82	348	5.2	19	4.7	125	398	3.8
1854.6	1.1	21	2.6	75	322	3.3	15	4.7	114	368	2.4
1855.3	0.717	19	2.6	71	317	3.5	10	4.7	109	363	2.6
1856.0	0.790	19	3.0	62	363	5.0	11	5.5	95	416	3.6
1856.7	1.1	23	2.5	65	327	4.4	15	4.5	100	373	3.2
1857.4	1.2	20	2.5	80	321	4.1	18	4.6	123	367	3.0
1858.1	0.878	16	2.3	74	318	4.9	13	4.2	113	363	3.6
1858.8	0.894	20	2.5	56	311	3.7	13	4.5	86	355	2.7
1859.5	0.516	20	2.7	68	345	3.5	7.5	5.0	105	395	2.6
1860.1	1.6	23	2.8	72	322	3.3	23	5.1	111	368	2.4
1860.8	0.586	19	2.5	68	305	3.9	8.5	4.6	105	349	2.8
1861.5	0.709	22	2.6	61	285	3.6	10	4.8	93	326	2.6
1862.2	0.660	18	2.9	66	282	3.6	9.5	5.3	102	323	2.7
1862.9	0.739	19	2.8	66	318	3.3	11	5.2	101	363	2.4
1863.6	0.460	23	2.2	72	329	4.1	6.6	4.0	111	376	3.0

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1864.3	0.487	20	2.7	71	313	5.5	7.0	4.9	109	358	4.0
1865.0	1.1	19	2.4	66	292	4.3	16	4.4	102	334	3.1
1865.7	0.671	22	2.2	65	327	5.8	9.7	4.0	99	374	4.2
1866.4	0.393	21	2.2	73	315	5.3	5.7	4.1	113	360	3.9
1867.1	1.0	26	3.0	73	357	6.4	15	5.5	111	408	4.7
1867.8	0.629	23	2.4	68	325	6.2	9.1	4.5	104	372	4.5
1868.5	0.559	23	2.3	54	294	6.0	8.1	4.2	83	336	4.4
1869.2	0.414	23	3.0	71	376	10	6.0	5.5	108	430	7.3
1869.9	0.474	27	2.7	79	380	6.6	6.8	5.0	121	434	4.8
1870.6	0.393	23	2.5	71	325	7.8	5.7	4.6	109	371	5.7
1871.3	0.534	18	2.3	80	370	8.9	7.7	4.1	122	423	6.5
1872.0	0.525	19	2.1	57	297	11	7.6	3.7	88	340	8.3
1872.7	1.4	23	2.0	64	311	10	20	3.7	98	356	7.4
1873.4	0.599	22	2.3	76	326	12	8.7	4.2	117	373	9.0
1874.1	0.815	21	2.0	78	347	13	12	3.6	119	397	9.2
1874.8	1.0	21	2.1	65	329	12	15	3.8	99	376	8.5
1875.5	0.668	21	2.0	63	268	14	9.6	3.6	96	306	9.8
1876.2	0.742	18	1.5	62	266	12	11	2.7	95	304	9.1
1876.9	0.676	24	2.3	65	298	17	9.8	4.2	100	340	12
1877.6	0.393	19	2.7	67	328	13	5.7	5.0	102	376	9.7
1878.3	0.701	24	2.2	61	329	17	10	4.0	94	376	13
1879.0	0.721	22	2.7	71	374	18	10	5.0	109	427	13
1879.7	0.761	23	2.7	73	376	24	11	4.9	111	430	17
1880.4	0.543	29	2.5	65	327	18	7.8	4.5	100	374	13
1881.1	0.864	26	2.3	70	320	22	12	4.3	108	366	16
1881.8	0.393	21	3.0	64	355	19	5.7	5.4	98	406	14
1882.5	0.393	20	2.6	64	275	21	5.7	4.7	98	315	15
1883.2	0.643	26	2.6	60	315	22	9.3	4.8	92	360	16
1883.9	0.450	22	1.9	63	292	23	6.5	3.5	96	334	17
1884.6	0.485	20	2.4	61	301	22	7.0	4.4	93	345	16
1885.3	0.625	20	1.9	56	272	19	9.0	3.4	86	311	14
1885.9	0.393	24	2.3	75	390	28	5.7	4.3	115	445	20
1886.6	0.661	22	2.4	61	323	22	9.5	4.3	93	370	16
1887.3	0.465	21	2.2	68	293	25	6.7	4.0	104	335	18
1888.0	0.393	21	2.2	61	308	20	5.7	4.1	94	352	15
1888.7	0.393	22	2.3	62	312	22	5.7	4.1	95	356	16
1889.4	0.393	24	3.0	62	318	23	5.7	5.5	96	363	17
1890.1	0.913	22	2.5	60	360	23	13	4.6	92	412	16
1890.8	1.3	17	2.3	59	313	22	19	4.2	90	358	16
1891.5	0.708	20	2.2	57	377	24	10	4.0	88	431	17
1892.2	0.965	20	2.4	57	344	21	14	4.3	88	393	15
1892.9	0.519	23	1.8	68	337	24	7.5	3.3	104	385	18
1893.6	0.685	24	1.9	57	298	22	9.9	3.5	88	341	16
1894.3	0.870	19	2.4	64	324	24	13	4.4	98	370	17
1895.0	0.983	18	2.2	64	304	23	14	3.9	98	347	16
1895.7	1.3	21	2.6	63	340	26	19	4.8	97	389	19
1896.4	0.970	26	2.0	63	381	23	14	3.6	97	435	17
1897.1	0.971	20	1.8	53	275	21	14	3.3	81	314	15
1897.8	0.964	20	1.5	48	316	19	14	2.7	74	362	14
1898.5	0.410	17	1.5	50	290	20	5.9	2.7	76	331	15
1899.2	0.651	19	2.3	55	305	27	9.4	4.2	85	348	19
1899.9	1.1	21	6.8	57	301	24	16	12	87	344	17
1900.6	0.738	19	1.9	65	326	26	11	3.4	100	373	19
1901.3	0.523	19	1.8	55	399	23	7.5	3.3	84	456	17
1902.0	0.636	21	2.4	54	347	28	9.2	4.4	83	397	21
1902.7	1.1	23	2.0	53	327	26	16	3.6	82	374	19
1903.4	0.612	23	2.0	61	355	27	8.8	3.6	94	406	20
1904.1	0.716	20	1.4	48	273	18	10	2.5	73	312	13
1904.8	0.393	18	1.5	46	253	21	5.7	2.7	70	289	15
1905.5	0.707	20	1.7	50	289	22	10	3.1	76	331	16
1906.2	0.758	21	1.9	57	303	24	11	3.4	88	347	18
1906.9	0.393	18	1.4	58	283	18	5.7	2.6	89	324	13
1907.6	0.930	17	1.9	52	345	24	13	3.4	80	394	18
1908.3	0.439	14	1.8	49	263	20	6.3	3.2	75	300	14
1909.0	0.393	18	1.7	50	312	22	5.7	3.0	76	356	16
1909.7	0.470	21	1.6	60	275	25	6.8	2.8	92	315	18
1910.4	0.393	20	1.8	43	258	16	5.7	3.3	66	295	11
1911.1	0.393	14	1.3	46	276	18	5.7	2.3	70	316	13
1911.7	0.783	16	1.8	35	283	17	11	3.2	54	324	12
1912.4	1.0	16	1.6	47	289	23	15	3.0	72	330	17
1913.1	0.758	18	1.8	45	294	20	11	3.3	70	336	14
1913.8	0.893	16	1.3	48	352	20	13	2.3	74	402	15
1914.5	0.420	13	1.3	43	367	22	6.1	2.3	66	420	16
1915.2	0.843	14	1.1	39	252	21	12	2.0	60	288	15
1915.9	0.450	16	1.5	42	373	24	6.5	2.8	64	426	17
1916.6	0.564	13	1.2	43	271	18	8.1	2.2	66	309	13
1917.3	0.801	15	1.1	36	336	18	12	1.9	55	384	13
1918.0	0.810	13	1.3	32	316	14	12	2.4	50	361	10
1918.7	1.6	15	1.2	36	301	19	23	2.2	54	344	14
1919.4	0.393	13	1.4	35	289	18	5.7	2.6	53	330	13
1920.1	0.393	14	1.1	41	291	19	5.7	2.1	64	333	14

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1920.8	0.639	12	0.805	30	282	17	9.2	1.5	47	322	12
1921.5	0.531	15	1.0	33	292	19	7.7	1.9	51	334	14
1922.2	0.393	14	1.0	38	307	18	5.7	1.9	58	351	13
1922.9	1.1	13	1.0	35	266	14	16	1.9	53	304	10
1923.6	0.631	13	0.981	38	330	17	9.1	1.8	58	378	12
1924.3	0.451	11	0.786	33	308	14	6.5	1.4	50	352	10
1925.0	0.928	14	1.1	31	353	15	13	1.9	47	403	11
1925.7	0.867	15	0.958	35	278	14	13	1.7	53	318	10
1926.4	0.784	13	1.0	41	314	17	11	1.8	63	359	13
1927.1	1.9	15	0.600	31	274	12	28	1.1	47	314	9.1
1927.8	0.393	12	0.556	25	276	11	5.7	1.0	39	316	7.9
1928.5	0.829	17	0.882	35	342	17	12	1.6	54	391	12
1929.2	0.797	14	1.1	32	306	13	12	2.0	50	350	9.3
1929.9	0.415	15	0.829	36	303	11	6.0	1.5	55	346	8.0
1930.6	0.559	12	0.683	36	349	13	8.1	1.2	54	400	9.6
1931.3	1.6	14	0.481	32	311	13	23	0.877	50	356	9.2
1932.0	0.828	14	0.643	31	340	13	12	1.2	47	389	9.6
1932.7	0.930	14	0.925	29	253	8.6	13	1.7	45	289	6.3
1933.4	0.448	13	0.870	42	305	13	6.5	1.6	64	348	9.7
1934.1	0.611	13	0.632	32	307	9.1	8.8	1.2	50	351	6.6
1934.8	1.4	13	0.986	33	292	12	20	1.8	51	334	8.9
1935.5	0.569	16	0.906	30	295	10	8.2	1.7	46	337	7.5
1936.2	0.702	16	0.885	32	301	10	10	1.6	50	344	7.6
1936.9	0.658	12	0.904	33	279	10	9.5	1.6	50	318	7.5
1937.6	0.605	14	0.538	32	276	7.9	8.7	0.981	49	316	5.8
1938.2	0.614	14	1.2	31	377	12	8.9	2.2	48	431	8.5
1938.9	0.393	17	0.801	34	326	11	5.7	1.5	52	373	7.7
1939.6	0.847	14	0.761	40	295	8.9	12	1.4	62	337	6.5
1940.3	0.699	14	0.540	29	259	7.5	10	0.985	44	297	5.5
1941.0	0.591	12	0.820	33	308	8.5	8.5	1.5	50	353	6.2
1941.7	0.393	16	1.1	36	314	8.2	5.7	2.1	55	360	6.0
1942.4	0.393	16	0.972	27	246	7.2	5.7	1.8	42	281	5.3
1943.1	0.393	14	1.1	38	265	8.9	5.7	2.1	57	303	6.5
1943.8	0.393	13	1.5	34	287	7.5	5.7	2.7	52	328	5.5
1944.5	0.728	13	0.890	30	274	7.3	11	1.6	45	313	5.3
1945.2	0.511	12	1.1	34	264	6.0	7.4	2.0	53	302	4.4
1945.9	0.963	16	1.5	34	308	8.5	14	2.7	53	353	6.2
1946.6	0.636	18	0.989	47	276	8.7	9.2	1.8	73	315	6.3
1947.3	0.510	16	0.970	36	272	8.8	7.4	1.8	55	311	6.4
1948.0	0.393	15	1.1	39	257	6.4	5.7	2.1	59	293	4.7
1948.7	0.990	14	1.6	39	281	6.9	14	2.9	60	322	5.1
1949.4	1.1	17	1.4	39	277	7.5	16	2.5	60	317	5.4
1950.1	0.393	15	1.5	43	271	8.9	5.7	2.7	65	310	6.5
1950.8	0.393	14	1.1	34	276	8.6	5.7	1.9	52	315	6.3
1951.5	1.2	16	1.4	35	272	6.5	17	2.5	54	311	4.8
1952.2	0.631	15	1.7	47	312	6.2	9.1	3.1	72	357	4.5
1952.9	0.462	16	1.8	47	290	5.5	6.7	3.2	72	331	4.0
1953.6	0.648	16	1.6	50	310	5.2	9.4	2.9	77	355	3.8
1954.3	0.393	16	1.8	45	250	5.9	5.7	3.3	69	286	4.3
1955.0	0.575	17	1.2	41	254	7.0	8.3	2.2	64	290	5.1
1955.7	0.935	18	1.5	47	251	5.5	14	2.7	72	287	4.0
1956.4	0.472	20	1.4	50	258	6.6	6.8	2.6	77	295	4.8
1957.1	0.393	18	1.5	45	268	5.7	5.7	2.8	69	307	4.2
1957.8	0.438	15	1.3	49	219	5.1	6.3	2.3	75	250	3.7
1958.5	0.393	15	1.6	54	253	4.2	5.7	2.9	83	289	3.1
1959.2	0.393	17	1.9	47	234	5.8	5.7	3.4	72	268	4.2
1959.9	0.393	18	1.5	49	273	6.4	5.7	2.8	75	313	4.6
1960.6	0.458	18	1.8	48	216	4.3	6.6	3.2	74	247	3.2
1961.3	0.393	14	1.6	49	269	5.3	5.7	2.9	76	308	3.9
1962.0	0.393	18	1.8	49	226	4.9	5.7	3.2	75	259	3.6
1962.7	0.393	18	1.6	60	275	5.4	5.7	2.9	91	314	3.9
1963.4	0.393	20	1.5	52	217	5.2	5.7	2.6	80	248	3.8
1964.0	0.393	17	1.4	51	202	4.0	5.7	2.6	78	231	2.9
1964.7	0.586	15	1.5	50	232	3.6	8.5	2.7	76	265	2.6
1965.4	0.393	15	2.0	52	268	6.0	5.7	3.7	80	307	4.4
1966.1	0.576	18	2.0	47	252	4.2	8.3	3.6	72	288	3.1
1966.8	0.393	20	1.8	58	269	6.1	5.7	3.3	89	307	4.4
1967.5	0.712	18	1.6	57	224	5.9	10	2.9	87	256	4.3
1968.2	0.393	17	1.9	49	231	4.7	5.7	3.5	75	265	3.4
1968.9	0.393	16	1.8	49	231	5.4	5.7	3.2	75	264	3.9
1969.6	0.460	19	1.8	48	230	5.1	6.6	3.2	74	263	3.7
1970.3	0.393	19	2.1	53	243	4.2	5.7	3.8	81	278	3.0
1971.0	0.393	18	1.7	53	249	4.9	5.7	3.0	81	285	3.6
1971.7	0.638	18	1.8	55	245	4.8	9.2	3.3	85	280	3.5
1972.4	0.722	20	2.3	63	274	3.6	10	4.2	97	314	2.6
1973.1	0.795	21	1.7	56	235	6.3	11	3.0	86	268	4.6
1973.8	0.393	21	1.5	53	214	4.3	5.7	2.7	81	245	3.1
1974.5	0.925	18	1.4	54	278	4.3	13	2.6	82	318	3.1
1975.2	0.508	19	1.6	49	238	5.4	7.3	2.9	76	272	4.0
1975.9	0.553	19	1.8	59	240	5.8	8.0	3.3	90	275	4.2
1976.6	1.4	20	1.9	68	239	4.8	20	3.4	104	274	3.5

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1977.3	0.393	20	2.0	61	231	5.4	5.7	3.6	94	264	3.9
1978.0	0.802	17	1.6	53	223	4.7	12	2.9	81	255	3.4
1978.7	0.720	18	1.5	60	229	3.8	10	2.7	92	262	2.8
1979.4	0.580	18	1.6	57	221	4.5	8.4	2.9	88	253	3.3
1980.1	0.817	20	1.9	59	238	5.5	12	3.5	91	273	4.0
1980.8	0.725	17	1.9	68	241	4.5	10	3.4	105	275	3.3
1981.5	0.393	18	2.1	54	243	3.8	5.7	3.8	82	278	2.8
1982.2	0.625	21	2.3	58	263	5.3	9.0	4.2	89	300	3.8
1982.9	0.827	22	1.5	64	210	3.5	12	2.7	98	240	2.6
1983.6	0.393	19	1.6	55	219	4.1	5.7	2.9	84	251	3.0
1984.3	0.393	17	1.4	62	220	3.4	5.7	2.6	95	251	2.5
1985.0	0.706	17	2.4	61	232	3.9	10	4.3	93	265	2.8
1985.7	0.554	23	1.9	70	242	6.0	8.0	3.5	107	277	4.4
1986.4	0.564	18	1.9	66	212	4.8	8.1	3.4	101	242	3.5
1987.1	0.393	19	1.9	55	213	3.2	5.7	3.4	85	243	2.3
1987.8	0.583	17	1.9	52	210	3.7	8.4	3.4	79	240	2.7
1988.5	0.926	20	1.7	56	233	6.1	13	3.1	86	267	4.5
1989.2	0.480	20	1.9	70	244	5.7	6.9	3.5	108	279	4.1
1989.9	0.393	19	1.8	63	198	2.9	5.7	3.3	97	226	2.1
1990.5	0.557	20	1.4	56	249	4.3	8.0	2.6	86	285	3.1
1991.2	0.867	17	1.6	53	189	4.1	13	3.0	80	217	3.0
1991.9	0.393	24	2.4	73	228	4.8	5.7	4.3	112	260	3.5
1992.6	0.463	21	1.8	65	237	4.9	6.7	3.2	100	271	3.6
1993.3	0.817	20	1.4	64	233	4.0	12	2.5	98	267	2.9
1994.0	0.538	17	1.5	69	215	5.6	7.8	2.8	106	246	4.1
1994.7	0.878	18	1.5	53	254	3.9	13	2.7	81	290	2.8
1995.4	0.619	17	1.9	62	259	3.9	8.9	3.4	95	297	2.9
1996.1	1.2	18	1.7	62	238	4.3	17	3.0	95	273	3.1
1996.8	0.495	15	1.8	58	209	3.2	7.1	3.2	89	239	2.3
1997.5	0.774	16	1.4	55	206	4.3	11	2.5	84	236	3.1
1998.2	0.738	16	1.7	57	199	4.9	11	3.0	88	227	3.6
1998.9	0.467	19	1.6	60	222	8.3	6.7	2.9	93	253	6.1
1999.6	0.920	18	1.6	67	273	4.6	13	2.8	103	312	3.4
2000.3	0.546	16	1.4	70	229	5.8	7.9	2.5	107	261	4.3
2001.0	0.860	18	1.8	62	266	5.0	12	3.3	95	305	3.6
2001.7	0.480	18	1.9	65	235	6.5	6.9	3.5	100	268	4.8
2002.4	1.1	18	1.6	56	218	9.2	17	3.0	85	249	6.7
2003.1	0.430	20	1.5	54	230	6.5	6.2	2.8	82	263	4.7
2003.8	0.606	18	1.7	56	256	4.1	8.7	3.1	86	293	3.0
2004.5	0.721	15	1.4	58	237	8.2	10	2.6	89	271	5.9
2005.2	0.808	19	1.9	70	260	6.8	12	3.5	107	297	4.9
2005.9	0.714	20	1.6	57	249	8.9	10	2.9	88	285	6.5
2006.6	0.778	20	1.4	56	222	6.7	11	2.5	85	254	4.9
2007.3	0.393	16	1.4	50	212	7.6	5.7	2.5	77	243	5.5
2008.0	0.701	16	1.3	49	285	7.6	10	2.3	75	326	5.6
2008.7	0.408	19	1.5	54	279	11	5.9	2.7	83	319	7.8
2009.4	0.797	20	1.5	56	215	9.5	12	2.7	85	246	7.0
2010.1	0.944	19	1.5	55	277	7.7	14	2.8	84	317	5.6
2010.8	0.873	17	1.6	53	257	9.7	13	2.8	81	294	7.1
2011.5	0.485	18	1.6	53	265	8.0	7.0	2.9	82	303	5.8
2012.2	0.773	17	1.7	49	211	9.6	11	3.0	75	241	7.0
2012.9	0.960	18	1.4	65	242	7.4	14	2.5	100	277	5.4
2013.6	0.393	18	1.8	66	279	10	5.7	3.2	102	319	7.6
2014.3	0.881	18	1.6	53	229	8.7	13	3.0	80	261	6.3
2015.0	0.799	20	1.5	54	301	11	12	2.8	83	344	7.8
2015.7	0.735	17	1.3	59	286	10	11	2.4	90	328	7.3
2016.3	0.554	18	1.3	51	241	6.8	8.0	2.3	78	275	5.0
2017.0	0.613	16	1.1	39	223	6.4	8.8	2.0	60	255	4.7
2017.7	0.836	13	1.3	46	258	7.1	12	2.4	71	295	5.1
2018.4	0.567	18	1.4	52	290	10	8.2	2.5	80	332	7.5
2019.1	0.933	17	1.4	53	252	7.3	13	2.5	82	288	5.3
2019.8	0.477	14	1.2	45	281	7.2	6.9	2.2	69	321	5.2
2020.5	0.393	15	1.3	53	262	6.8	5.7	2.4	81	299	5.0
2021.2	0.863	20	1.5	45	291	8.8	12	2.7	69	332	6.4
2021.9	0.559	17	1.6	50	249	8.5	8.1	2.9	77	285	6.2
2022.6	0.680	16	0.855	51	269	9.0	9.8	1.6	77	308	6.5
2023.3	0.771	17	1.4	50	246	9.1	11	2.5	76	281	6.6
2024.0	0.810	16	1.2	44	242	9.3	12	2.1	67	277	6.8
2024.7	0.977	18	1.4	47	271	10	14	2.6	72	310	7.6
2025.4	0.711	18	1.3	53	301	9.7	10	2.3	81	344	7.1
2026.1	0.393	20	1.3	53	269	7.9	5.7	2.3	82	307	5.8
2026.8	0.533	16	1.3	48	263	8.4	7.7	2.4	74	301	6.2
2027.5	0.894	19	1.3	44	265	8.3	13	2.3	68	303	6.1
2028.2	0.563	15	1.4	42	236	9.9	8.1	2.5	65	270	7.2
2028.9	0.393	17	1.4	47	282	8.5	5.7	2.5	72	323	6.2
2029.6	0.601	16	1.1	50	291	8.6	8.7	2.0	76	333	6.3
2030.3	1.3	17	1.2	53	252	10	18	2.2	81	289	7.6
2031.0	0.593	16	1.4	50	261	9.5	8.6	2.5	76	299	7.0
2031.7	1.5	16	1.4	48	305	12	22	2.6	74	349	8.5
2032.4	0.758	20	1.3	41	243	9.4	11	2.4	64	278	6.9
2033.1	0.393	18	1.5	44	229	11	5.7	2.7	68	262	7.7

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2033.8	0.908	16	1.3	45	277	9.2	13	2.5	69	316	6.7
2034.5	0.637	18	1.1	49	262	8.3	9.2	2.1	75	300	6.1
2035.2	0.660	18	0.853	40	243	7.9	9.5	1.6	62	278	5.8
2035.9	0.393	20	1.3	43	227	6.5	5.7	2.3	66	260	4.8
2036.6	1.2	16	1.1	39	238	7.5	18	1.9	59	273	5.5
2037.3	0.393	17	1.1	51	273	8.0	5.7	2.0	78	312	5.9
2038.0	0.393	18	1.5	43	295	11	5.7	2.8	66	337	7.8
2038.7	0.994	17	0.908	45	255	9.2	14	1.7	68	292	6.7
2039.4	0.825	19	1.3	56	347	8.7	12	2.4	86	397	6.4
2040.1	0.446	15	1.4	45	269	7.4	6.4	2.6	68	308	5.4
2040.8	1.1	15	1.2	49	264	11	16	2.2	75	302	7.9
2041.5	0.521	16	1.1	41	239	9.8	7.5	2.0	62	274	7.2
2042.2	0.835	19	1.2	48	288	9.6	12	2.3	74	329	7.0
2042.8	0.693	15	1.3	48	275	9.5	10	2.5	73	314	6.9
2043.5	1.3	16	1.4	45	290	9.7	18	2.5	70	331	7.1
2044.2	1.2	14	0.959	34	270	7.2	17	1.7	53	309	5.3
2044.9	0.598	18	1.1	43	268	9.5	8.6	2.0	66	306	6.9
2045.6	0.718	18	0.952	39	288	8.7	10	1.7	60	329	6.3
2046.3	0.473	15	0.973	41	302	8.8	6.8	1.8	63	345	6.4
2047.0	0.556	17	0.680	40	284	7.8	8.0	1.2	61	324	5.7
2047.7	0.683	16	1.2	38	245	10	9.9	2.2	58	280	7.6
2048.4	0.393	16	1.1	41	252	8.5	5.7	2.0	63	288	6.2
2049.1	0.393	14	1.2	40	266	7.6	5.7	2.2	61	304	5.6
2049.8	0.579	14	0.973	32	245	7.3	8.4	1.8	50	280	5.3
2050.5	0.517	15	1.0	33	282	9.4	7.5	1.9	51	322	6.8
2051.2	0.907	15	1.2	44	285	7.1	13	2.2	68	326	5.2
2051.9	1.1	18	1.1	43	296	11	16	2.0	65	338	7.7
2052.6	0.611	16	1.2	40	308	8.1	8.8	2.2	61	352	5.9
2053.3	0.847	14	0.982	39	355	8.7	12	1.8	60	406	6.4
2054.0	1.3	15	0.900	36	308	8.5	19	1.6	55	352	6.2
2054.7	0.705	13	1.2	33	256	11	10	2.2	51	292	7.9
2055.4	0.595	17	1.3	40	262	9.4	8.6	2.3	61	299	6.9
2056.1	0.464	14	0.761	36	270	8.6	6.7	1.4	55	309	6.3
2056.8	1.1	11	0.906	29	257	6.7	15	1.7	45	294	4.9
2057.5	0.838	12	0.830	29	279	7.2	12	1.5	44	319	5.3
2058.2	0.917	14	1.1	29	246	6.0	13	2.0	44	281	4.4
2058.9	0.584	16	0.982	36	243	9.5	8.4	1.8	55	278	6.9
2059.6	0.604	11	0.823	28	224	7.1	8.7	1.5	42	256	5.2
2060.3	0.393	12	0.683	25	256	6.0	5.7	1.2	38	292	4.4
2061.0	1.1	14	1.2	33	282	9.2	15	2.2	51	323	6.7
2061.7	0.742	15	1.1	33	347	8.0	11	1.9	50	397	5.8
2062.4	0.555	16	0.884	35	274	7.5	8.0	1.6	54	313	5.5
2063.1	0.718	13	0.810	29	250	6.0	10	1.5	44	286	4.4
2063.8	0.945	14	0.818	31	268	6.5	14	1.5	47	307	4.7
2064.5	0.514	14	0.762	29	308	8.8	7.4	1.4	45	353	6.4
2065.2	0.655	13	0.850	28	259	7.1	9.5	1.6	43	296	5.2
2065.9	0.396	12	0.871	39	325	5.8	5.7	1.6	59	372	4.2
2066.6	0.661	13	1.1	29	289	7.6	9.5	2.1	45	331	5.5
2067.3	0.393	14	0.476	30	293	7.5	5.7	0.868	46	335	5.5
2068.0	0.617	14	0.661	26	279	7.7	8.9	1.2	40	320	5.6
2068.6	1.2	14	1.0	32	329	6.8	17	1.8	49	377	5.0
2069.3	0.393	11	1.2	26	235	6.1	5.7	2.2	40	269	4.5
2070.0	0.413	11	0.825	26	305	7.2	6.0	1.5	40	348	5.3
2070.7	0.674	11	0.591	25	272	6.0	9.7	1.1	38	311	4.4
2071.4	1.1	14	0.621	25	266	6.9	16	1.1	38	304	5.0
2072.1	0.994	14	0.677	26	296	6.3	14	1.2	39	339	4.6
2072.8	0.393	13	0.871	22	244	3.8	5.7	1.6	34	279	2.8
2073.5	0.710	13	1.5	23	269	5.7	10	2.7	35	308	4.2
2074.2	0.735	10	0.665	25	254	4.5	11	1.2	39	291	3.3
2074.9	0.393	13	0.842	32	259	6.3	5.7	1.5	49	296	4.6
2075.6	0.460	9.4	0.681	26	274	5.6	6.6	1.2	39	313	4.1
2076.3	0.534	13	0.677	24	265	3.8	7.7	1.2	37	303	2.8
2077.0	0.393	9.0	0.694	27	259	6.1	5.7	1.3	42	296	4.4
2077.7	0.393	12	0.889	27	298	6.4	5.7	1.6	41	341	4.7
2078.4	0.439	16	0.983	26	322	5.4	6.3	1.8	40	368	3.9
2079.1	0.638	14	0.806	28	341	6.0	9.2	1.5	43	390	4.4
2079.8	0.393	11	0.616	23	299	4.9	5.7	1.1	35	342	3.6
2080.5	0.941	9.8	0.568	24	267	5.6	14	1.0	37	305	4.1
2081.2	0.567	13	1.0	25	286	4.1	8.2	1.8	38	327	3.0
2081.9	1.3	13	0.498	24	267	5.0	19	0.909	37	305	3.7
2082.6	1.1	14	0.584	23	286	5.0	16	1.1	35	327	3.6
2083.3	0.393	11	0.664	19	270	5.3	5.7	1.2	29	309	3.8
2084.0	0.393	14	0.867	22	284	3.2	5.7	1.6	34	324	2.4
2084.7	0.393	12	0.513	26	320	5.9	5.7	0.935	40	366	4.3
2085.4	0.393	11	0.811	24	276	3.2	5.7	1.5	37	316	2.3
2086.1	0.393	13	0.462	24	291	5.1	5.7	0.843	37	333	3.7
2086.8	0.968	12	0.837	22	332	5.2	14	1.5	34	380	3.8
2087.5	0.393	11	0.555	24	275	4.5	5.7	1.0	36	315	3.3
2088.2	0.808	13	0.473	24	313	4.8	12	0.863	36	357	3.5
2088.9	0.393	10	0.401	21	266	3.8	5.7	0.731	33	304	2.8
2089.6	0.393	10	0.656	19	269	4.0	5.7	1.2	30	308	2.9

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2090.3	0.527	13	1.1	22	319	4.4	7.6	1.9	34	365	3.2
2091.0	0.393	13	0.631	24	309	5.6	5.7	1.2	37	353	4.1
2091.7	0.816	15	0.732	20	239	3.4	12	1.3	31	274	2.5
2092.4	1.0	11	0.755	22	299	2.6	15	1.4	34	342	1.9
2093.1	0.777	16	0.896	23	295	5.8	11	1.6	36	338	4.3
2093.8	0.696	13	0.610	21	303	4.3	10	1.1	33	346	3.1
2094.4	0.867	14	0.845	23	285	4.0	13	1.5	35	326	2.9
2095.1	1.0	12	0.968	25	308	3.8	15	1.8	38	352	2.8
2095.8	0.638	12	0.673	30	315	3.8	9.2	1.2	46	360	2.7
2096.5	0.393	11	0.664	23	283	4.9	5.7	1.2	36	324	3.6
2097.2	0.633	11	0.641	21	281	3.6	9.1	1.2	33	322	2.6
2097.9	0.393	12	0.735	24	284	3.2	5.7	1.3	37	325	2.3
2098.6	0.393	11	0.634	21	238	3.9	5.7	1.2	32	272	2.8
2099.3	0.393	11	0.621	21	293	3.8	5.7	1.1	32	335	2.8
2100.0	0.393	10	0.464	21	349	4.8	5.7	0.847	32	399	3.5
2100.7	0.631	14	0.745	25	283	4.2	9.1	1.4	39	323	3.1
2101.4	0.540	14	0.828	22	303	4.3	7.8	1.5	34	347	3.1
2102.1	0.475	14	0.828	27	281	3.5	6.9	1.5	42	321	2.6
2102.8	0.393	15	0.875	22	281	3.9	5.7	1.6	34	322	2.9
2103.5	0.393	11	1.1	18	261	2.8	5.7	2.0	28	299	2.0
2104.2	0.598	14	0.631	26	310	3.4	8.6	1.2	40	355	2.5
2104.9	0.547	16	1.2	28	286	4.0	7.9	2.2	43	327	3.0
2105.6	0.393	13	0.698	32	319	4.3	5.7	1.3	49	364	3.1
2106.3	0.393	13	0.961	23	307	3.3	5.7	1.8	35	351	2.4
2107.0	0.979	12	0.996	21	239	3.1	14	1.8	32	274	2.3
2107.7	0.393	13	0.763	25	310	4.3	5.7	1.4	39	355	3.2
2108.4	0.558	15	0.630	29	259	3.7	8.1	1.1	45	296	2.7
2109.1	0.393	12	1.1	28	276	3.7	5.7	1.9	43	315	2.7
2109.8	1.2	12	1.2	26	296	2.6	17	2.2	40	339	1.9
2110.5	0.693	14	1.3	34	277	3.1	10	2.3	52	316	2.3
2111.2	0.393	14	1.0	22	273	4.0	5.7	1.9	34	312	2.9
2111.9	0.774	12	1.3	27	257	2.6	11	2.4	41	294	1.9
2112.6	0.393	13	0.645	25	282	2.3	5.7	1.2	38	323	1.7
2113.3	0.393	12	0.759	28	266	2.9	5.7	1.4	43	304	2.1
2114.0	0.556	16	1.2	26	290	2.2	8.0	2.3	40	332	1.6
2114.7	1.1	14	0.932	29	254	4.2	17	1.7	45	291	3.1
2115.4	0.393	14	0.964	26	267	2.9	5.7	1.8	40	305	2.1
2116.1	0.670	13	0.920	33	293	1.7	9.7	1.7	51	335	1.2
2116.8	0.763	12	0.843	26	300	2.6	11	1.5	40	344	1.9
2117.5	0.393	14	1.3	20	252	1.6	5.7	2.3	31	288	1.1
2118.2	0.704	17	1.2	29	331	2.6	10	2.2	44	379	1.9
2118.9	0.430	14	1.2	31	313	3.0	6.2	2.3	48	358	2.2
2119.6	0.393	12	1.0	24	266	2.4	5.7	1.9	36	305	1.8
2120.3	0.393	13	0.897	30	270	2.5	5.7	1.6	46	308	1.8
2120.9	0.393	13	0.828	27	256	2.1	5.7	1.5	41	293	1.5
2121.6	0.476	15	1.3	33	289	3.1	6.9	2.4	51	330	2.3
2122.3	0.733	13	0.947	37	292	3.0	11	1.7	56	334	2.2
2123.0	0.560	14	0.988	23	256	3.0	8.1	1.8	36	293	2.2
2123.7	0.798	13	0.929	25	301	2.4	12	1.7	38	345	1.8
2124.4	1.1	14	0.998	31	276	1.6	15	1.8	47	316	1.2
2125.1	0.865	16	1.1	31	342	2.2	12	2.1	48	391	1.6
2125.8	0.518	15	0.849	32	273	2.3	7.5	1.5	49	312	1.7
2126.5	0.648	13	0.988	32	276	2.3	9.3	1.8	49	316	1.7
2127.2	0.979	13	1.0	29	235	2.5	14	1.9	44	268	1.8
2127.9	0.393	14	1.1	31	246	2.0	5.7	2.1	48	282	1.5
2128.6	0.879	13	1.2	26	251	2.3	13	2.1	40	287	1.7
2129.3	0.677	15	1.2	38	294	2.8	9.8	2.2	58	337	2.1
2130.0	0.810	13	0.918	29	266	2.1	12	1.7	44	305	1.5
2130.7	0.853	12	1.1	24	285	1.9	12	1.9	36	326	1.4
2131.4	0.714	12	1.1	31	238	2.1	10	2.0	47	272	1.5
2132.1	0.500	14	0.888	32	260	2.6	7.2	1.6	50	298	1.9
2132.8	0.605	14	1.2	30	262	2.7	8.7	2.2	46	299	2.0
2133.5	0.602	13	1.1	25	248	2.7	8.7	2.0	38	284	2.0
2134.2	1.0	14	0.993	27	279	3.1	15	1.8	41	320	2.2
2134.9	0.393	15	1.2	35	262	3.2	5.7	2.2	53	300	2.3
2135.6	0.626	16	0.837	28	272	2.9	9.0	1.5	42	311	2.1
2136.3	0.393	13	0.913	30	251	2.4	5.7	1.7	46	287	1.7
2137.0	0.958	17	1.6	29	289	3.7	14	2.9	45	330	2.7
2137.7	0.857	15	1.4	31	287	1.9	12	2.5	47	328	1.4
2138.4	0.803	15	0.982	28	250	2.1	12	1.8	43	286	1.5
2139.1	0.693	15	1.2	27	256	1.9	10	2.2	42	293	1.4
2139.8	0.393	13	1.0	29	292	2.6	5.7	1.8	44	334	1.9
2140.5	0.393	17	0.880	29	271	3.4	5.7	1.6	44	310	2.5
2141.2	0.894	13	0.986	30	266	2.2	13	1.8	46	304	1.6
2141.9	0.393	15	0.910	29	252	1.6	5.7	1.7	45	288	1.2
2142.6	0.646	13	0.857	24	240	2.2	9.3	1.6	36	275	1.6
2143.3	0.648	14	0.949	29	272	2.6	9.4	1.7	44	311	1.9
2144.0	0.519	15	1.2	27	248	2.8	7.5	2.2	42	284	2.0
2144.7	0.476	14	1.1	36	334	2.0	6.9	1.9	56	382	1.4
2145.4	0.630	13	1.2	31	283	1.8	9.1	2.1	47	323	1.3
2146.1	0.750	15	0.813	31	273	1.5	11	1.5	47	312	1.1

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2146.7	0.393	14	1.1	30	242	2.1	5.7	2.0	47	276	1.6
2147.4	0.419	14	1.0	27	265	2.1	6.0	1.9	42	303	1.5
2148.1	0.393	15	0.851	29	245	2.1	5.7	1.6	45	280	1.5
2148.8	0.393	17	1.1	31	324	2.8	5.7	2.0	47	370	2.0
2149.5	0.725	12	0.888	18	235	1.7	10	1.6	27	268	1.2
2150.2	0.393	11	0.646	26	263	1.9	5.7	1.2	40	301	1.4
2150.9	0.563	15	0.844	27	299	3.5	8.1	1.5	41	342	2.5
2151.6	0.393	14	0.839	24	269	2.3	5.7	1.5	36	308	1.7
2152.3	0.455	14	0.992	25	283	2.4	6.6	1.8	38	324	1.8
2153.0	0.393	13	0.636	25	263	2.4	5.7	1.2	39	301	1.7
2153.7	0.393	13	0.932	25	298	2.8	5.7	1.7	38	340	2.1
2154.4	0.393	13	0.896	24	247	3.5	5.7	1.6	37	283	2.5
2155.1	0.393	14	0.642	21	257	1.7	5.7	1.2	31	294	1.3
2155.8	0.551	12	1.2	22	298	2.5	7.9	2.1	33	341	1.8
2156.5	0.497	16	1.3	23	294	3.0	7.2	2.4	36	337	2.2
2157.2	0.865	15	0.987	20	256	2.4	12	1.8	31	293	1.8
2157.9	0.805	12	1.2	21	309	2.0	12	2.2	32	354	1.4
2158.6	0.485	13	0.390	25	250	2.7	7.0	0.711	38	286	2.0
2159.3	0.393	14	1.0	25	281	2.6	5.7	1.9	38	321	1.9
2160.0	0.425	13	0.926	20	302	2.0	6.1	1.7	30	345	1.5
2160.7	0.393	14	1.1	22	310	2.6	5.7	1.9	34	355	1.9
2161.4	0.662	13	1.4	27	330	2.0	9.6	2.5	42	377	1.4
2162.1	0.514	13	0.771	22	278	1.9	7.4	1.4	33	318	1.4
2162.8	0.465	9.9	0.633	23	248	1.5	6.7	1.2	36	283	1.1
2163.5	0.766	12	0.566	23	302	2.7	11	1.0	34	345	2.0
2164.2	0.605	14	0.588	21	281	3.9	8.7	1.1	32	321	2.9
2164.9	0.494	15	0.784	22	260	1.5	7.1	1.4	34	298	1.1
2165.6	0.619	12	0.782	18	276	2.2	8.9	1.4	27	316	1.6
2166.3	0.393	11	1.1	18	320	2.0	5.7	2.0	27	366	1.4
2167.0	0.794	11	0.869	21	260	1.9	11	1.6	32	298	1.4
2167.7	0.393	12	0.433	21	244	2.0	5.7	0.790	32	279	1.4
2168.4	0.393	10	0.727	23	257	2.6	5.7	1.3	36	293	1.9
2169.1	0.548	13	0.754	19	312	2.4	7.9	1.4	30	357	1.8
2169.8	0.413	11	0.529	18	255	1.8	6.0	0.965	28	291	1.3
2170.5	0.537	13	0.767	21	357	3.0	7.7	1.4	32	409	2.2
2171.2	0.393	10	0.732	22	306	2.5	5.7	1.3	34	350	1.8
2171.9	0.754	11	0.585	21	233	2.3	11	1.1	33	267	1.7
2172.6	0.393	11	0.743	17	222	1.4	5.7	1.4	26	254	1.0
2173.2	0.393	12	0.616	20	289	2.6	5.7	1.1	31	331	1.9
2173.9	0.459	11	0.808	17	292	3.3	6.6	1.5	27	334	2.4
2174.6	0.603	10	0.737	19	286	2.6	8.7	1.3	29	327	1.9
2175.3	0.393	11	0.490	19	274	2.5	5.7	0.894	29	313	1.8
2176.0	0.777	12	0.603	13	267	1.9	11	1.1	20	305	1.4
2176.7	1.0	12	0.457	24	318	2.6	15	0.834	37	363	1.9
2177.4	0.930	13	0.727	18	253	1.4	13	1.3	28	289	0.995
2178.1	0.868	11	0.453	20	283	1.8	13	0.825	31	324	1.3
2178.8	0.587	9.2	0.527	18	298	3.1	8.5	0.961	28	341	2.3
2179.5	0.758	9.7	0.658	15	248	1.8	11	1.2	23	283	1.3
2180.2	0.393	13	1.0	17	273	2.2	5.7	1.8	25	312	1.6
2180.9	0.393	14	0.904	21	311	2.7	5.7	1.6	32	356	2.0
2181.6	0.742	10	1.0	19	288	2.2	11	1.9	29	329	1.6
2182.3	0.600	10.0	0.558	20	284	2.1	8.7	1.0	30	325	1.5
2183.0	0.916	10	0.716	16	285	2.8	13	1.3	25	326	2.0
2183.7	0.393	11	1.1	18	307	2.4	5.7	1.9	27	351	1.7
2184.4	0.621	14	0.759	16	362	2.2	9.0	1.4	24	414	1.6
2185.1	0.627	11	0.505	14	232	2.4	9.0	0.922	21	265	1.8
2185.8	0.393	8.4	0.773	16	226	2.0	5.7	1.4	24	258	1.5
2186.5	0.723	13	0.939	20	285	2.7	10	1.7	30	326	1.9
2187.2	0.459	12	1.1	16	334	2.3	6.6	2.0	24	382	1.7
2187.9	0.393	11	0.618	19	326	2.3	5.7	1.1	29	373	1.7
2188.6	0.393	8.6	0.449	18	282	1.5	5.7	0.819	28	322	1.1
2189.3	0.687	11	0.934	17	247	2.2	9.9	1.7	26	282	1.6
2190.0	0.393	11	0.950	20	334	2.6	5.7	1.7	31	382	1.9
2190.7	0.440	12	0.696	18	249	1.3	6.4	1.3	28	284	0.939
2191.4	0.511	11	0.865	20	300	1.4	7.4	1.6	31	343	1.0
2192.1	0.509	12	0.461	20	306	2.5	7.3	0.841	31	350	1.8
2192.8	1.1	10	0.475	19	267	2.1	16	0.866	29	305	1.5
2193.5	0.393	10	0.773	20	245	2.1	5.7	1.4	31	280	1.5
2194.2	0.748	12	0.992	17	261	1.4	11	1.8	25	299	1.0
2194.9	0.616	13	0.676	19	254	1.3	8.9	1.2	29	291	0.912
2195.6	0.393	9.8	0.818	22	264	1.7	5.7	1.5	33	302	1.3
2196.3	0.393	11	0.771	20	215	1.2	5.7	1.4	31	246	0.865
2197.0	0.493	10	0.990	20	261	1.9	7.1	1.8	30	298	1.4
2197.7	1.3	13	0.825	24	293	1.8	19	1.5	36	335	1.3
2198.4	0.393	9.9	0.862	21	282	0.801	5.7	1.6	32	323	0.585
2199.0	0.393	10.0	0.756	26	299	2.1	5.7	1.4	40	342	1.5
2199.7	0.393	13	0.631	20	315	2.0	5.7	1.2	30	360	1.5
2200.4	0.393	11	0.975	19	279	2.3	5.7	1.8	29	319	1.6
2201.1	0.393	10	0.770	20	250	2.2	5.7	1.4	31	286	1.6
2201.8	0.574	9.3	0.726	28	248	1.8	8.3	1.3	43	284	1.3
2202.5	0.498	11	1.2	25	314	2.2	7.2	2.2	38	359	1.6

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2203.2	0.393	11	0.835	22	249	1.9	5.7	1.5	34	284	1.4
2203.9	0.393	14	0.629	23	252	2.1	5.7	1.1	35	289	1.5
2204.6	0.728	10	1.1	27	258	1.1	11	1.9	41	295	0.826
2205.3	0.652	11	0.774	26	259	1.5	9.4	1.4	39	296	1.1
2206.0	0.416	11	0.783	23	267	2.5	6.0	1.4	35	305	1.9
2206.7	0.795	13	0.972	26	332	1.2	11	1.8	40	380	0.901
2207.4	0.775	13	1.0	24	237	1.3	11	1.8	37	271	0.968
2208.1	1.2	13	0.841	30	257	1.5	18	1.5	46	293	1.1
2208.8	0.542	11	0.612	30	321	1.9	7.8	1.1	45	367	1.4
2209.5	0.393	11	0.660	23	269	1.3	5.7	1.2	36	308	0.936
2210.2	0.783	16	0.957	21	287	1.9	11	1.7	32	328	1.4
2210.9	0.393	12	0.766	28	234	1.7	5.7	1.4	42	267	1.2
2211.6	0.393	9.9	0.952	23	250	2.3	5.7	1.7	36	286	1.6
2212.3	0.407	11	0.604	19	233	1.5	5.9	1.1	29	267	1.1
2213.0	0.393	11	0.845	26	277	0.635	5.7	1.5	40	317	0.463
2213.7	0.393	12	0.998	24	229	2.2	5.7	1.8	37	262	1.6
2214.4	0.861	12	1.0	28	265	1.5	12	1.8	43	303	1.1
2215.1	0.847	13	1.0	22	230	1.4	12	1.9	34	264	1.1
2215.8	0.727	11	1.1	30	256	1.2	10	2.0	46	293	0.904
2216.5	0.490	13	1.2	30	294	0.805	7.1	2.1	46	336	0.587
2217.2	0.929	13	0.753	25	244	1.1	13	1.4	38	279	0.827
2217.9	0.757	15	1.0	26	235	2.1	11	1.9	40	269	1.6
2218.6	0.393	11	1.0	27	271	0.972	5.7	1.9	41	310	0.709
2219.3	1.1	13	1.1	26	259	0.912	15	2.0	39	296	0.665
2220.0	1.5	13	0.920	20	260	1.7	21	1.7	31	297	1.3
2220.7	0.393	14	0.883	29	250	1.8	5.7	1.6	44	285	1.3
2221.4	0.604	13	0.789	31	267	0.892	8.7	1.4	47	305	0.651
2222.1	0.654	15	1.1	25	242	1.4	9.4	2.0	38	277	1.0
2222.8	0.935	13	0.854	27	217	1.6	13	1.6	41	249	1.2
2223.5	0.960	12	0.671	29	301	1.2	14	1.2	45	344	0.856
2224.2	1.0	16	0.685	33	259	1.6	15	1.2	51	296	1.1
2224.9	0.393	13	0.969	30	272	1.4	5.7	1.8	46	311	1.0
2225.5	0.703	12	0.689	28	287	0.754	10	1.3	43	329	0.550
2226.2	1.1	12	0.811	29	313	1.3	15	1.5	45	358	0.983
2226.9	0.737	14	0.784	23	233	1.7	11	1.4	36	266	1.2
2227.6	0.393	13	0.743	29	261	2.2	5.7	1.4	45	298	1.6
2228.3	0.917	13	0.824	30	275	1.2	13	1.5	46	315	0.877
2229.0	0.393	13	0.634	27	259	1.4	5.7	1.2	42	296	1.0
2229.7	0.393	13	0.908	24	282	1.2	5.7	1.7	36	323	0.865
2230.4	0.665	11	0.762	26	230	1.9	9.6	1.4	39	263	1.4
2231.1	0.488	14	0.825	25	259	1.8	7.0	1.5	39	296	1.3
2231.8	0.677	14	0.827	27	263	1.6	9.8	1.5	41	301	1.2
2232.5	0.393	10	0.825	24	256	1.7	5.7	1.5	37	293	1.2
2233.2	0.681	11	0.729	26	262	1.3	9.8	1.3	40	299	0.915
2233.9	0.755	12	0.682	27	286	1.8	11	1.2	41	326	1.3
2234.6	0.393	13	1.0	27	260	1.3	5.7	1.8	41	297	0.967
2235.3	0.622	11	0.869	20	261	1.2	9.0	1.6	31	298	0.905
2236.0	1.2	13	0.883	21	258	1.9	18	1.6	33	295	1.4
2236.7	0.753	12	0.921	20	239	0.986	11	1.7	31	273	0.720
2237.4	0.658	13	0.623	25	231	1.3	9.5	1.1	39	264	0.957
2238.1	0.393	14	0.871	30	227	1.9	5.7	1.6	46	260	1.4
2238.8	0.628	13	0.637	22	279	1.3	9.1	1.2	34	319	0.983
2239.5	0.588	14	0.694	31	262	2.3	8.5	1.3	47	300	1.7
2240.2	0.973	14	0.864	25	268	1.3	14	1.6	39	307	0.976
2240.9	0.792	15	0.594	21	270	0.726	11	1.1	32	308	0.530
2241.6	0.393	12	1.3	21	236	2.1	5.7	2.3	33	270	1.6
2242.3	0.754	12	0.513	24	299	1.6	11	0.936	37	342	1.2
2243.0	0.716	11	0.495	21	219	1.3	10	0.903	33	250	0.959
2243.7	0.997	13	0.954	22	245	1.3	14	1.7	34	281	0.940
2244.4	0.738	13	0.785	21	252	2.3	11	1.4	32	289	1.7
2245.1	0.434	11	0.712	20	262	1.5	6.3	1.3	30	299	1.1
2245.8	0.620	10	0.805	19	239	2.5	8.9	1.5	29	273	1.8
2246.5	0.393	10	0.643	22	244	1.4	5.7	1.2	34	279	0.987
2247.2	0.545	14	0.742	24	265	1.6	7.9	1.4	37	303	1.1
2247.9	0.393	9.8	0.621	26	251	2.1	5.7	1.1	39	287	1.6
2248.6	0.393	10	0.803	23	270	1.5	5.7	1.5	36	309	1.1
2249.3	0.947	13	0.538	20	263	1.1	14	0.980	31	301	0.819
2250.0	0.394	12	0.952	24	264	1.8	5.7	1.7	37	302	1.3
2250.7	0.824	11	0.795	18	209	2.1	12	1.4	28	239	1.5
2251.3	0.922	14	0.699	21	250	1.8	13	1.3	32	286	1.3
2252.0	0.568	11	0.773	19	244	1.9	8.2	1.4	29	279	1.4
2252.7	0.393	11	0.826	17	253	1.6	5.7	1.5	27	289	1.2
2253.4	0.393	11	0.947	24	256	2.0	5.7	1.7	36	293	1.5
2254.1	0.393	9.5	0.953	27	307	1.0	5.7	1.7	42	351	0.742
2254.8	0.423	12	1.0	21	261	1.8	6.1	1.9	32	298	1.3
2255.5	0.550	8.5	0.900	14	259	2.1	7.9	1.6	22	296	1.5
2256.2	0.948	12	0.842	17	250	1.6	14	1.5	26	286	1.2
2256.9	1.1	10	1.2	21	292	2.2	16	2.1	31	334	1.6
2257.6	0.557	9.7	1.2	17	236	1.5	8.0	2.2	26	270	1.1
2258.3	0.393	9.0	0.605	16	265	1.2	5.7	1.1	24	303	0.891
2259.0	0.487	12	0.912	17	235	1.2	7.0	1.7	26	269	0.877

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2259.7	0.620	12	1.2	18	258	1.7	8.9	2.1	28	296	1.3
2260.4	0.448	11	0.708	17	305	1.3	6.5	1.3	26	349	0.956
2261.1	0.393	12	1.2	20	230	1.7	5.7	2.2	31	263	1.3
2261.8	0.650	10	1.2	21	275	2.1	9.4	2.2	32	315	1.5
2262.5	0.748	8.2	1.0	17	273	1.6	11	1.9	27	312	1.2
2263.2	0.549	9.9	1.8	17	324	1.4	7.9	3.2	26	370	1.0
2263.9	0.393	9.3	1.1	21	285	2.5	5.7	2.0	32	326	1.8
2264.6	0.626	11	0.908	15	236	1.8	9.0	1.7	23	270	1.3
2265.3	0.513	9.3	0.864	20	236	1.7	7.4	1.6	31	270	1.2
2266.0	0.700	11	1.1	23	265	1.5	10	2.0	35	303	1.1
2266.7	0.985	11	1.5	19	265	2.0	14	2.7	30	303	1.5
2267.4	0.698	9.9	0.998	20	285	1.4	10	1.8	31	326	1.0
2268.1	0.517	11	1.2	17	290	1.4	7.5	2.2	26	331	1.0
2268.8	0.393	9.8	1.1	21	283	2.2	5.7	2.0	33	324	1.6
2269.5	0.393	9.6	0.997	16	225	1.1	5.7	1.8	25	257	0.817
2270.2	0.608	11	1.0	18	288	2.8	8.8	1.9	28	329	2.0
2270.9	0.609	10	1.2	23	265	1.3	8.8	2.2	35	303	0.984
2271.6	0.393	11	1.2	28	319	1.9	5.7	2.1	42	365	1.4
2272.3	0.435	9.7	0.894	17	248	1.3	6.3	1.6	26	284	0.955
2273.0	0.594	9.4	1.0	18	293	2.0	8.6	1.9	28	336	1.5
2273.7	0.393	12	1.3	23	272	1.1	5.7	2.3	35	311	0.786
2274.4	0.505	12	1.4	22	255	1.3	7.3	2.6	34	291	0.983
2275.1	0.427	10	1.2	23	257	1.6	6.2	2.2	36	294	1.2
2275.8	0.867	8.7	0.998	19	256	1.4	13	1.8	29	293	1.0
2276.5	0.393	10	0.905	20	225	1.5	5.7	1.7	30	258	1.1
2277.1	0.697	9.3	0.925	20	260	0.748	10	1.7	31	297	0.546
2277.8	0.875	9.3	0.853	22	273	1.9	13	1.6	34	312	1.4
2278.5	0.393	9.2	0.932	16	237	0.699	5.7	1.7	24	272	0.510
2279.2	1.1	10	1.1	18	247	1.4	16	1.9	28	282	1.0
2279.9	0.770	10	1.2	14	237	1.5	11	2.1	22	271	1.1
2280.6	0.393	11	1.2	22	259	2.3	5.7	2.2	34	296	1.7
2281.3	0.921	9.2	0.971	24	295	0.893	13	1.8	37	338	0.652
2282.0	0.747	10	1.1	21	240	1.3	11	2.0	32	274	0.929
2282.7	0.847	10	0.992	21	257	1.1	12	1.8	32	294	0.778
2283.4	0.681	11	1.2	22	256	1.6	9.8	2.1	33	293	1.1
2284.1	0.856	11	0.859	22	246	0.837	12	1.6	34	281	0.611
2284.8	0.923	8.2	0.791	20	227	0.844	13	1.4	30	260	0.616
2285.5	0.393	9.0	0.985	20	249	0.886	5.7	1.8	31	285	0.646
2286.2	0.710	9.6	0.890	19	231	2.5	10	1.6	29	264	1.8
2286.9	0.393	11	1.0	22	302	2.1	5.7	1.9	34	345	1.5
2287.6	0.393	10	0.941	20	255	0.635	5.7	1.7	31	292	0.464
2288.3	0.781	8.5	0.771	19	268	0.819	11	1.4	30	306	0.598
2289.0	0.425	11	1.0	20	308	1.8	6.1	1.8	30	353	1.3
2289.7	0.519	9.6	0.537	19	225	0.782	7.5	0.978	29	257	0.571
2290.4	1.1	11	0.623	24	256	1.7	15	1.1	36	293	1.2
2291.1	0.393	13	1.2	23	261	1.2	5.7	2.2	35	298	0.912
2291.8	0.393	8.6	0.701	20	238	1.3	5.7	1.3	31	272	0.940
2292.5	0.728	13	0.815	24	235	0.781	11	1.5	36	269	0.570
2293.2	0.393	9.6	0.680	23	254	1.2	5.7	1.2	35	290	0.885
2293.9	0.670	12	0.564	19	229	0.719	9.7	1.0	29	262	0.524
2294.6	0.743	9.0	1.2	20	233	0.735	11	2.3	31	266	0.536
2295.3	0.960	10	0.902	20	261	1.5	14	1.6	31	299	1.1
2296.0	0.751	12	0.727	20	267	2.0	11	1.3	30	305	1.5
2296.7	1.0	10	0.710	20	236	1.8	15	1.3	31	270	1.3
2297.4	0.456	9.7	0.853	21	217	1.0	6.6	1.6	32	249	0.752
2298.1	0.435	11	0.896	16	248	1.4	6.3	1.6	25	283	1.0
2298.8	0.914	10	0.882	20	268	1.6	13	1.6	30	306	1.1
2299.5	0.568	10	0.766	22	255	0.629	8.2	1.4	33	292	0.459
2300.2	0.681	9.5	0.810	20	312	0.940	9.8	1.5	31	356	0.686
2300.9	0.649	9.1	0.695	21	264	1.5	9.4	1.3	32	302	1.1
2301.6	0.393	9.0	0.787	21	231	0.913	5.7	1.4	32	264	0.666
2302.3	0.728	9.0	0.977	15	229	1.4	11	1.8	23	262	1.0
2302.9	1.0	9.1	0.816	20	288	1.5	15	1.5	31	329	1.1
2303.6	0.393	12	1.2	22	253	1.1	5.7	2.3	33	289	0.828
2304.3	0.529	10	0.745	20	271	1.5	7.6	1.4	31	310	1.1
2305.0	0.597	8.5	0.581	17	265	1.3	8.6	1.1	27	303	0.964
2305.7	0.498	9.2	0.478	16	291	1.4	7.2	0.872	25	333	1.0
2306.4	1.0	10	0.972	21	266	0.829	15	1.8	32	304	0.605
2307.1	1.0	8.5	0.528	18	243	1.1	15	0.963	28	278	0.800
2307.8	0.393	10	1.1	23	262	0.932	5.7	2.0	35	299	0.680
2308.5	0.967	9.3	0.808	23	265	2.0	14	1.5	35	303	1.5
2309.2	0.489	8.7	1.1	19	278	1.8	7.1	1.9	29	318	1.3
2309.9	0.455	9.3	0.699	18	217	1.2	6.6	1.3	27	248	0.847
2310.6	0.393	8.2	0.767	15	248	1.5	5.7	1.4	22	283	1.1
2311.3	0.809	8.6	0.966	17	233	0.955	12	1.8	26	266	0.697
2312.0	0.393	8.8	0.834	16	258	0.968	5.7	1.5	24	295	0.706
2312.7	0.684	11	0.706	16	295	0.916	9.9	1.3	25	338	0.668
2313.4	0.477	10	0.782	19	233	1.7	6.9	1.4	29	266	1.2
2314.1	0.658	9.9	0.577	15	261	0.504	9.5	1.1	23	299	0.368
2314.8	0.528	7.7	0.890	20	240	0.868	7.6	1.6	31	275	0.634
2315.5	0.393	9.3	0.886	18	265	1.6	5.7	1.6	27	303	1.2

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2316.2	0.672	9.4	0.618	17	267	1.2	9.7	1.1	26	305	0.902
2316.9	0.653	10	0.527	19	232	1.4	9.4	0.961	29	265	1.0
2317.6	0.691	7.4	0.606	17	256	1.5	10.0	1.1	27	293	1.1
2318.3	1.3	8.0	0.814	19	292	1.1	19	1.5	30	334	0.780
2319.0	1.8	10	1.0	18	308	2.9	26	1.8	28	352	2.1
2319.7	0.990	9.6	0.981	18	261	1.9	14	1.8	28	299	1.4
2320.4	0.393	8.7	1.2	18	277	1.3	5.7	2.1	28	316	0.979
2321.1	0.876	8.0	1.3	14	270	1.6	13	2.3	22	309	1.2
2321.8	0.617	9.6	1.2	15	250	1.9	8.9	2.1	22	286	1.4
2322.5	1.1	6.9	0.992	13	234	0.544	15	1.8	20	268	0.397
2323.2	0.590	9.6	0.819	19	234	1.1	8.5	1.5	29	268	0.794
2323.9	1.4	10	1.0	15	266	1.2	20	1.9	24	304	0.886
2324.6	1.2	9.1	1.1	18	242	1.4	17	2.0	28	277	1.0
2325.3	0.393	9.0	0.909	17	263	2.2	5.7	1.7	27	301	1.6
2326.0	1.4	8.9	1.0	14	283	1.9	20	1.8	22	324	1.4
2326.7	0.393	7.9	0.844	12	228	2.2	5.7	1.5	19	260	1.6
2327.4	0.393	7.4	1.1	18	247	1.9	5.7	2.1	27	282	1.4
2328.1	1.1	8.2	0.897	13	250	1.2	16	1.6	20	286	0.877
2328.7	0.393	8.3	1.1	19	281	1.8	5.7	2.0	28	321	1.3
2329.4	0.393	7.2	0.838	19	254	1.6	5.7	1.5	28	291	1.2
2330.1	0.393	11	1.0	19	258	1.7	5.7	1.9	29	295	1.2
2330.8	1.2	8.9	1.5	19	278	1.2	17	2.7	29	318	0.840
2331.5	0.837	7.4	1.3	18	256	1.8	12	2.5	28	293	1.3
2332.2	0.860	9.3	1.4	14	260	1.4	12	2.5	21	298	0.987
2332.9	1.2	9.2	0.993	17	234	1.4	17	1.8	26	268	1.0
2333.6	1.1	9.2	1.1	18	260	1.6	16	2.1	27	298	1.2
2334.3	0.395	7.3	0.979	16	227	1.4	5.7	1.8	24	260	0.995
2335.0	1.2	7.6	1.1	17	257	1.6	17	1.9	26	294	1.2
2335.7	0.812	7.1	0.897	15	294	2.4	12	1.6	23	336	1.8
2336.4	0.644	9.9	1.6	18	267	2.3	9.3	2.9	27	306	1.7
2337.1	0.906	9.1	1.3	18	298	1.2	13	2.3	27	341	0.888
2337.8	0.410	8.8	1.5	15	250	1.3	5.9	2.7	22	286	0.953
2338.5	0.393	9.5	1.2	20	295	1.1	5.7	2.2	31	338	0.793
2339.2	0.457	8.6	1.3	20	304	1.2	6.6	2.3	31	348	0.849
2339.9	1.3	8.7	1.5	16	273	2.5	19	2.7	24	312	1.9
2340.6	0.862	9.5	1.3	15	252	2.0	12	2.4	23	289	1.4
2341.3	0.393	8.1	1.2	14	250	1.3	5.7	2.1	21	286	0.982
2342.0	1.0	6.9	1.4	15	250	2.3	14	2.5	23	286	1.7
2342.7	1.1	8.3	1.4	20	265	1.3	15	2.5	30	303	0.921
2343.4	0.481	8.9	1.2	19	261	1.4	6.9	2.2	28	299	1.1
2344.1	0.562	9.0	1.4	17	273	1.6	8.1	2.6	26	312	1.2
2344.8	0.872	6.4	1.2	19	281	1.7	13	2.3	30	321	1.2
2345.5	0.512	9.4	1.1	17	318	1.1	7.4	1.9	27	364	0.779
2346.2	1.2	8.7	1.0	19	260	1.6	17	1.9	29	297	1.1
2346.9	0.393	9.8	1.4	15	263	1.4	5.7	2.6	23	301	0.989
2347.6	0.393	10	1.4	17	279	1.3	5.7	2.5	26	319	0.953
2348.3	0.710	8.8	1.2	21	228	1.6	10	2.1	32	261	1.2
2349.0	0.427	10	1.3	20	263	1.6	6.2	2.3	30	301	1.2
2349.7	0.393	8.7	1.5	24	298	1.6	5.7	2.8	37	341	1.2
2350.4	0.393	9.6	0.922	22	257	1.3	5.7	1.7	33	294	0.957
2351.1	0.393	9.2	1.4	21	316	1.9	5.7	2.5	31	362	1.4
2351.8	0.393	9.9	1.1	21	312	1.7	5.7	2.0	33	356	1.3
2352.5	0.393	11	1.1	23	288	2.3	5.7	2.0	35	330	1.7
2353.2	0.493	9.6	0.886	19	247	2.6	7.1	1.6	29	283	1.9
2353.9	0.755	8.9	1.7	18	271	2.0	11	3.1	27	309	1.5
2354.5	0.393	8.2	1.7	24	317	1.1	5.7	3.1	37	363	0.818
2355.2	0.577	10	1.1	21	275	1.8	8.3	2.1	32	315	1.3
2355.9	0.833	11	1.2	26	269	1.9	12	2.1	40	308	1.4
2356.6	0.566	6.9	1.2	23	259	1.5	8.2	2.2	36	296	1.1
2357.3	0.839	11	1.2	21	261	1.3	12	2.2	32	299	0.981
2358.0	0.518	8.2	1.3	21	273	2.0	7.5	2.4	32	312	1.5
2358.7	0.709	9.9	1.4	25	243	0.902	10	2.6	39	278	0.658
2359.4	0.517	13	1.1	24	260	1.7	7.5	2.0	36	297	1.2
2360.1	0.488	11	0.959	24	246	1.3	7.0	1.7	37	282	0.951
2360.8	0.393	10	1.5	24	257	1.0	5.7	2.8	37	293	0.765
2361.5	0.394	9.5	1.4	20	292	1.2	5.7	2.6	30	334	0.841
2362.2	0.847	11	1.3	26	292	1.9	12	2.4	40	334	1.4
2362.9	0.581	9.5	1.7	30	305	1.2	8.4	3.0	46	349	0.870
2363.6	0.803	9.9	0.921	23	218	1.0	12	1.7	35	250	0.738
2364.3	0.393	9.3	1.4	29	271	0.773	5.7	2.5	44	310	0.564
2365.0	0.775	11	1.5	24	309	1.9	11	2.8	36	353	1.4
2365.7	0.427	8.5	1.2	28	260	0.791	6.2	2.2	43	298	0.577
2366.4	0.794	12	0.743	32	259	0.786	11	1.4	48	297	0.573
2367.1	0.679	14	1.3	35	310	1.1	9.8	2.4	53	354	0.830
2367.8	0.671	12	1.4	28	280	0.720	9.7	2.6	42	320	0.525
2368.5	0.787	11	1.3	25	240	1.3	11	2.3	39	274	0.912
2369.2	0.503	12	1.5	33	254	1.4	7.3	2.7	50	290	1.1
2369.9	0.870	9.8	1.2	33	317	1.7	13	2.2	50	362	1.2
2370.6	0.517	12	1.5	25	303	0.850	7.5	2.7	38	347	0.620
2371.3	0.393	9.0	1.2	26	259	1.1	5.7	2.2	39	297	0.781
2372.0	0.588	11	1.2	27	292	0.966	8.5	2.3	42	334	0.705

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Parameter	7Li	24Mg	55Mn	66Zn	88Sr	137Ba	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
DL (ppm)	0.393	0.403	0.079	0.702	0.005	0.003					
Length (µm)											
2372.7	0.393	13	1.4	36	292	1.4	5.7	2.5	55	334	1.0
2373.4	0.414	9.4	1.3	30	286	1.3	6.0	2.3	47	327	0.962
2374.1	0.506	9.0	1.0	31	302	1.1	7.3	1.9	48	346	0.835
2374.8	0.526	12	1.4	22	279	1.4	7.6	2.5	34	319	0.992
2375.5	0.841	12	1.7	24	305	1.4	12	3.1	37	349	1.0
2376.2	1.0	12	0.908	30	273	1.2	15	1.7	45	312	0.873
2376.9	0.673	11	1.4	28	272	1.2	9.7	2.6	43	311	0.902
2377.6	0.438	11	1.3	30	308	1.0	6.3	2.3	46	352	0.741
2378.3	0.911	12	1.4	25	293	1.3	13	2.5	38	335	0.913
2379.0	0.621	13	1.6	32	281	1.1	9.0	3.0	48	321	0.834
2379.7	0.632	13	1.2	28	309	1.2	9.1	2.1	43	353	0.848
2380.3	0.393	11	1.4	27	256	1.4	5.7	2.6	42	293	0.995
2381.0	0.393	13	1.5	31	360	1.2	5.7	2.8	47	412	0.906
2381.7	0.683	10	1.0	28	282	1.6	9.9	1.9	43	322	1.1
2382.4	0.901	11	0.978	33	285	1.3	13	1.8	50	326	0.964
2383.1	0.393	11	1.1	30	267	1.1	5.7	2.0	46	305	0.812
2383.8	0.471	13	1.2	25	295	1.7	6.8	2.2	39	337	1.3
2384.5	0.567	11	1.0	27	313	1.9	8.2	1.9	41	357	1.4
2385.2	1.0	11	0.690	26	237	0.917	14	1.3	40	271	0.669
2385.9	0.500	14	1.3	31	300	0.821	7.2	2.3	47	343	0.599
2386.6	0.670	12	1.0	26	307	1.7	9.7	1.8	40	351	1.3
2387.3	0.640	11	0.916	25	263	1.5	9.2	1.7	38	301	1.1
2388.0	0.588	11	1.3	24	286	0.689	8.5	2.4	36	327	0.503
2388.7	0.847	9.3	1.1	29	271	0.873	12	2.0	44	310	0.637
2389.4	0.393	14	1.4	33	319	2.2	5.7	2.6	50	364	1.6
2390.1	0.545	10	1.1	22	254	1.2	7.9	2.1	34	290	0.865
2390.8	0.393	10	1.1	27	291	1.1	5.7	2.1	41	332	0.831
2391.5	0.485	11	1.3	23	279	1.4	7.0	2.4	36	320	1.0
2392.2	1.1	11	1.2	25	309	1.8	16	2.2	38	353	1.3
2392.9	1.0	10.0	1.5	25	262	1.5	15	2.7	39	300	1.1
2393.6	0.458	14	1.1	27	320	1.5	6.6	2.0	41	366	1.1
2394.3	1.4	11	1.2	26	319	1.8	21	2.2	40	365	1.3
2395.0	0.843	10	1.2	23	330	1.1	12	2.2	36	378	0.774
2395.7	0.654	12	1.2	25	285	1.9	9.4	2.2	39	326	1.4
2396.4	0.393	15	1.1	27	307	1.2	5.7	1.9	42	352	0.899
2397.1	0.563	12	1.1	24	312	1.2	8.1	2.1	36	357	0.910
2397.8	0.393	8.9	1.4	20	252	0.933	5.7	2.5	30	288	0.681
2398.5	0.672	11	1.1	23	294	1.3	9.7	2.0	36	336	0.985
2399.2	0.825	9.5	1.0	22	284	0.850	12	1.8	34	325	0.620
2399.9	0.501	11	0.890	23	281	1.3	7.2	1.6	35	321	0.975
2400.6	0.675	9.0	0.825	23	278	0.724	9.7	1.5	35	317	0.528
2401.3	0.843	8.8	1.1	17	264	1.4	12	2.0	25	302	0.993
2402.0	0.599	11	0.891	19	289	1.6	8.6	1.6	29	330	1.2
2402.7	0.932	10	0.996	19	297	1.2	13	1.8	30	339	0.857
2403.4	0.393	13	1.3	23	335	0.629	5.7	2.3	35	383	0.459
2404.1	0.393	10	0.878	22	302	1.3	5.7	1.6	34	346	0.914
2404.8	0.773	9.9	0.694	25	289	1.7	11	1.3	38	331	1.3
2405.5	0.865	11	0.879	25	327	1.7	12	1.6	38	373	1.2
2406.2	0.890	12	0.770	18	329	1.9	13	1.4	27	376	1.3
2406.8	0.710	9.7	0.778	18	290	1.2	10	1.4	27	332	0.878
2407.5	0.590	7.6	1.1	18	351	2.0	8.5	1.9	27	402	1.4
2408.2	0.393	9.4	0.916	17	350	1.6	5.7	1.7	27	400	1.2
2408.9	0.855	8.9	0.995	21	313	1.8	12	1.8	32	357	1.3
2409.6	0.393	9.6	0.638	16	275	1.8	5.7	1.2	24	315	1.3
2410.3	0.617	11	0.856	15	335	1.7	8.9	1.6	23	383	1.2
2411.0	1.0	9.3	0.864	17	285	1.3	15	1.6	26	326	0.972
2411.7	0.651	8.5	0.693	11	270	1.2	9.4	1.3	17	309	0.873
2412.4	0.393	8.0	0.900	14	308	1.8	5.7	1.6	22	352	1.3
2413.1	0.754	9.3	1.3	15	315	1.6	11	2.3	23	360	1.2
2413.8	0.998	8.7	0.832	13	302	1.5	14	1.5	21	346	1.1
2414.5	0.393	11	1.0	13	281	1.7	5.7	1.8	19	321	1.3
2415.2	0.393	8.1	0.894	15	274	1.4	5.7	1.6	22	314	1.0
2415.9	1.0	9.5	1.0	17	319	1.8	15	1.9	27	364	1.3
2416.6	0.393	7.2	0.701	15	264	1.6	5.7	1.3	23	302	1.2
2417.3	0.393	8.1	1.0	10	243	1.8	5.7	1.8	16	278	1.3
2418.0	0.856	11	1.2	15	300	1.9	12	2.1	23	343	1.4
2418.7	0.481	11	1.2	15	313	2.1	6.9	2.2	23	358	1.5
2419.4	0.393	12	0.786	15	271	1.9	5.7	1.4	22	310	1.4
2420.1	0.393	10	0.805	14	251	1.7	5.7	1.5	21	287	1.2
2420.8	0.689	8.2	0.937	13	306	1.6	9.9	1.7	20	350	1.2
2421.5	0.399	9.3	1.2	16	335	1.9	5.8	2.2	24	383	1.4
2422.2	1.5	10	1.5	14	306	1.5	21	2.7	22	350	1.1
2422.9	0.393	9.6	0.836	18	339	2.3	5.7	1.5	27	388	1.7
2423.6	1.2	10	0.623	16	333	2.3	17	1.1	24	381	1.7
2424.3	0.565	9.7	1.1	16	315	1.6	8.2	1.9	24	360	1.1
2425.0	0.991	8.1	0.690	20	300	1.8	14	1.3	31	343	1.3
2425.7	0.661	11	0.908	19	364	1.5	9.5	1.7	29	416	1.1
2426.4	0.440	12	1.0	20	296	0.935	6.4	1.9	30	338	0.683
2427.1	0.393	10	1.1	15	300	1.4	5.7	1.9	23	344	1.1
2427.8	0.560	9.4	1.3	16	312	1.3	8.1	2.3	25	357	0.980
2428.5	0.904	11	0.896	14	332	2.0	13	1.6	21	379	1.4

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2429.2	0.596	10	1.000	15	305	2.1	8.6	1.8	23	349	1.5
2429.9	0.432	10	1.0	18	308	1.2	6.2	1.9	28	352	0.906
2430.6	0.393	11	1.1	18	290	1.4	5.7	2.0	28	332	1.0
2431.3	0.447	10	0.850	16	274	2.3	6.5	1.5	25	314	1.7
2432.0	0.696	13	1.3	22	308	1.7	10	2.3	34	352	1.3
2432.6	0.393	10	1.2	19	359	1.5	5.7	2.2	30	410	1.1
2433.3	0.393	10	1.2	19	348	2.1	5.7	2.2	29	398	1.5
2434.0	0.393	11	0.972	19	286	2.2	5.7	1.8	29	327	1.6
2434.7	0.758	10.0	1.2	21	308	1.8	11	2.1	32	352	1.3
2435.4	0.444	12	0.984	22	358	1.9	6.4	1.8	33	409	1.4
2436.1	0.393	10	1.3	19	320	0.854	5.7	2.4	30	366	0.623
2436.8	0.402	14	1.2	21	347	0.962	5.8	2.2	32	397	0.702
2437.5	0.830	9.6	1.3	16	290	1.3	12	2.3	25	332	0.971
2438.2	0.447	13	1.1	22	334	1.3	6.5	2.0	34	381	0.938
2438.9	0.853	13	1.3	26	343	1.3	12	2.4	40	392	0.938
2439.6	0.393	11	1.2	23	372	1.8	5.7	2.1	35	426	1.3
2440.3	0.569	14	1.3	23	327	1.2	8.2	2.3	36	374	0.904
2441.0	0.393	11	1.4	18	290	0.902	5.7	2.5	28	332	0.658
2441.7	0.643	14	1.3	25	319	1.7	9.3	2.5	39	364	1.3
2442.4	0.910	12	1.1	31	329	1.6	13	2.0	47	376	1.1
2443.1	0.560	14	1.2	24	345	1.0	8.1	2.3	36	394	0.753
2443.8	0.445	14	1.6	28	345	1.8	6.4	2.9	43	394	1.3
2444.5	0.393	12	0.964	24	305	0.829	5.7	1.8	37	348	0.605
2445.2	0.706	12	1.6	24	331	1.2	10	2.9	37	379	0.874
2445.9	0.640	14	1.5	21	290	1.3	9.2	2.8	33	331	0.923
2446.6	0.403	13	1.5	25	270	1.0	5.8	2.7	38	309	0.749
2447.3	0.538	12	1.6	23	308	0.993	7.8	2.8	36	353	0.724
2448.0	0.393	14	1.0	28	320	1.6	5.7	1.9	43	366	1.2
2448.7	0.408	13	1.3	26	281	1.4	5.9	2.4	39	321	1.0
2449.4	0.458	10	1.4	19	273	1.4	6.6	2.6	30	312	0.986
2450.1	0.393	14	1.2	23	270	1.2	5.7	2.2	36	309	0.880
2450.8	0.393	13	1.6	25	306	0.714	5.7	2.8	39	350	0.521
2451.5	0.444	12	1.7	28	346	0.823	6.4	3.1	43	396	0.600
2452.2	0.399	15	1.7	28	322	1.4	5.8	3.1	43	368	1.0
2452.9	0.558	16	1.6	29	298	0.824	8.1	2.9	45	340	0.601
2453.6	0.393	12	1.7	27	338	0.627	5.7	3.0	42	386	0.458
2454.3	0.400	11	1.3	20	296	1.3	5.8	2.4	31	338	0.947
2455.0	0.393	13	1.1	25	327	1.2	5.7	2.0	39	374	0.875
2455.7	0.583	9.7	1.4	24	288	0.894	8.4	2.5	36	329	0.652
2456.4	0.697	13	1.3	25	288	1.8	10	2.4	38	330	1.3
2457.1	0.781	12	1.2	31	286	1.1	11	2.1	48	327	0.835
2457.8	0.393	14	1.1	24	335	1.2	5.7	2.1	36	383	0.899
2458.5	0.688	11	1.1	24	348	1.1	9.9	2.0	37	398	0.780
2459.1	0.393	12	1.1	23	302	1.3	5.7	2.0	36	346	0.956
2459.8	0.393	14	1.8	28	296	1.2	5.7	3.2	44	338	0.910
2460.5	0.393	12	1.2	26	361	1.4	5.7	2.2	40	413	1.0
2461.2	0.393	11	1.4	27	318	1.4	5.7	2.5	41	363	1.0
2461.9	0.393	13	1.2	20	330	1.1	5.7	2.1	30	378	0.782
2462.6	0.393	11	0.884	22	300	0.948	5.7	1.6	34	343	0.691
2463.3	0.665	13	0.750	24	319	1.6	9.6	1.4	36	365	1.2
2464.0	0.393	11	0.907	17	260	0.906	5.7	1.7	26	297	0.661
2464.7	0.393	11	0.862	20	317	1.1	5.7	1.6	30	363	0.779
2465.4	0.393	12	1.1	25	324	1.3	5.7	1.9	39	370	0.935
2466.1	0.738	13	1.0	23	290	1.4	11	1.9	35	331	0.991
2466.8	0.393	11	0.874	22	277	1.3	5.7	1.6	34	317	0.958
2467.5	0.516	11	0.781	19	320	0.952	7.4	1.4	30	365	0.694
2468.2	0.772	12	0.902	20	313	0.943	11	1.6	30	358	0.688
2468.9	0.393	10	0.973	19	264	0.624	5.7	1.8	29	301	0.455
2469.6	0.393	11	0.749	16	256	0.939	5.7	1.4	24	292	0.685
2470.3	0.428	9.0	0.702	16	292	1.1	6.2	1.3	25	334	0.796
2471.0	0.393	12	0.982	19	349	1.3	5.7	1.8	30	399	0.921
2471.7	0.393	8.8	0.985	16	309	1.4	5.7	1.8	24	354	1.0
2472.4	0.469	13	0.965	20	309	2.3	6.8	1.8	30	354	1.7
2473.1	0.612	9.5	0.854	20	275	1.6	8.8	1.6	31	314	1.2
2473.8	0.393	12	0.791	22	332	1.4	5.7	1.4	33	380	0.997
2474.5	0.440	10.0	0.803	14	303	1.4	6.4	1.5	21	347	1.1
2475.2	0.393	11	0.911	15	256	0.652	5.7	1.7	23	293	0.476
2475.9	0.532	11	0.849	19	290	1.9	7.7	1.5	29	332	1.4
2476.6	0.393	11	0.917	11	306	1.2	5.7	1.7	18	350	0.910
2477.3	0.393	8.7	0.840	16	304	2.4	5.7	1.5	25	348	1.8
2478.0	0.443	10	1.1	16	281	1.6	6.4	2.0	25	321	1.2
2478.7	0.753	10	1.3	14	292	1.6	11	2.3	21	333	1.1
2479.4	0.393	12	0.717	16	335	1.7	5.7	1.3	25	383	1.2
2480.1	0.449	12	0.778	15	294	1.5	6.5	1.4	23	336	1.1
2480.8	0.393	11	1.1	13	277	1.8	5.7	2.1	20	316	1.3
2481.5	0.496	11	1.2	13	332	2.1	7.2	2.2	21	380	1.5
2482.2	0.625	8.8	0.937	15	276	1.9	9.0	1.7	24	315	1.4
2482.9	0.393	13	0.965	15	307	2.1	5.7	1.8	24	351	1.5
2483.6	0.730	11	1.1	18	298	1.4	11	2.0	27	341	1.0
2484.3	0.393	10	0.978	14	292	1.6	5.7	1.8	21	334	1.2
2485.0	0.417	12	0.902	18	312	1.5	6.0	1.6	27	357	1.1

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2485.6	0.393	9.8	1.1	19	293	0.505	5.7	2.0	29	335	0.368
2486.3	0.393	11	1.1	19	308	1.4	5.7	2.1	29	352	1.1
2487.0	0.544	7.8	0.748	16	280	1.5	7.9	1.4	24	320	1.1
2487.7	0.468	8.4	1.3	19	306	1.9	6.8	2.4	29	350	1.4
2488.4	0.394	11	1.3	17	336	1.6	5.7	2.3	26	384	1.1
2489.1	0.393	12	1.3	17	322	1.7	5.7	2.4	26	368	1.3
2489.8	0.393	12	0.973	16	256	1.4	5.7	1.8	25	293	1.0
2490.5	0.393	10	1.0	14	290	1.2	5.7	1.9	22	332	0.899
2491.2	0.771	13	0.968	16	327	2.3	11	1.8	25	374	1.7
2491.9	0.393	10	1.1	15	307	1.8	5.7	2.1	23	351	1.3
2492.6	0.393	9.5	1.2	15	246	1.6	5.7	2.1	23	281	1.2
2493.3	0.770	9.9	0.942	17	300	1.5	11	1.7	26	343	1.1
2494.0	0.393	9.2	1.4	15	300	1.4	5.7	2.5	23	343	1.1
2494.7	1.0	11	1.1	19	288	1.7	15	2.0	29	329	1.3
2495.4	0.393	9.9	1.2	13	303	1.7	5.7	2.1	21	347	1.2
2496.1	0.393	12	1.2	20	308	1.2	5.7	2.3	31	352	0.860
2496.8	0.393	9.6	0.842	20	285	1.6	5.7	1.5	30	326	1.2
2497.5	0.841	9.9	1.0	16	291	1.1	12	1.9	25	333	0.825
2498.2	0.593	11	0.680	15	286	1.5	8.6	1.2	24	327	1.1
2498.9	0.415	11	0.875	17	269	2.5	6.0	1.6	26	307	1.8
2499.6	0.393	9.8	1.1	15	246	1.8	5.7	2.0	23	282	1.3
2500.3	0.393	11	0.882	13	237	1.4	5.7	1.6	20	271	1.0
2501.0	0.393	10.0	1.6	17	313	1.2	5.7	2.9	26	358	0.910
2501.7	0.771	12	1.0	20	330	1.2	11	1.9	31	377	0.874
2502.4	0.393	10	1.0	15	262	1.6	5.7	1.9	22	299	1.2
2503.1	0.729	12	1.1	19	290	2.4	11	2.0	30	332	1.7
2503.8	0.393	13	1.3	15	311	0.986	5.7	2.5	23	356	0.720
2504.5	0.460	12	0.925	15	297	1.4	6.6	1.7	22	340	1.0
2505.2	0.393	12	1.1	16	283	0.859	5.7	2.1	24	324	0.627
2505.9	0.393	11	0.720	20	285	1.3	5.7	1.3	30	325	0.948
2506.6	0.421	12	1.4	16	308	0.976	6.1	2.5	25	352	0.712
2507.3	0.694	10.0	1.0	20	305	1.3	10	1.8	31	349	0.930
2508.0	0.597	12	1.2	21	305	1.2	8.6	2.2	32	348	0.875
2508.7	0.969	12	1.5	20	297	1.0	14	2.7	30	339	0.761
2509.4	0.393	11	1.3	19	267	0.909	5.7	2.4	29	306	0.663
2510.1	0.394	11	0.836	17	286	1.0	5.7	1.5	25	327	0.764
2510.8	0.552	12	1.2	21	291	0.917	8.0	2.2	32	333	0.669
2511.5	0.449	12	0.878	25	291	1.8	6.5	1.6	38	333	1.3
2512.1	0.393	13	1.4	23	290	0.619	5.7	2.5	35	332	0.452
2512.8	0.662	13	1.2	21	286	1.9	9.6	2.1	33	327	1.4
2513.5	0.393	11	1.1	20	278	1.3	5.7	2.0	30	318	0.913
2514.2	0.834	11	1.3	17	327	1.3	12	2.4	26	373	0.967
2514.9	0.514	13	1.5	19	349	0.528	7.4	2.7	29	399	0.385
2515.6	0.586	12	1.1	24	296	1.8	8.5	2.1	36	338	1.3
2516.3	0.549	12	0.858	16	263	1.5	7.9	1.6	25	301	1.1
2517.0	0.393	11	0.761	21	309	1.2	5.7	1.4	32	353	0.859
2517.7	0.393	14	1.0	21	301	0.527	5.7	1.8	32	344	0.385
2518.4	0.393	14	1.4	16	256	0.899	5.7	2.5	25	292	0.656
2519.1	0.399	12	0.917	19	306	1.2	5.8	1.7	30	350	0.851
2519.8	0.590	12	0.854	18	290	1.7	8.5	1.6	28	331	1.2
2520.5	0.832	11	0.846	15	257	2.0	12	1.5	24	294	1.5
2521.2	0.393	10	0.808	17	294	1.1	5.7	1.5	26	336	0.837
2521.9	0.393	13	0.978	20	290	0.920	5.7	1.8	30	332	0.672
2522.6	0.393	14	0.769	21	278	1.8	5.7	1.4	32	318	1.3
2523.3	0.844	11	0.898	18	234	0.944	12	1.6	28	267	0.689
2524.0	0.653	12	1.1	19	291	1.6	9.4	2.0	29	332	1.2
2524.7	0.628	15	0.846	16	329	1.4	9.1	1.5	25	377	1.0
2525.4	0.628	13	0.673	22	270	0.842	9.1	1.2	33	308	0.614
2526.1	0.393	13	1.1	22	296	1.9	5.7	2.0	34	338	1.4
2526.8	0.510	10.0	1.0	16	318	0.837	7.4	1.8	25	364	0.611
2527.5	0.549	12	1.1	19	328	0.811	7.9	1.9	30	375	0.591
2528.2	0.595	14	0.827	21	311	0.989	8.6	1.5	32	356	0.721
2528.9	0.618	12	1.1	19	288	1.4	8.9	2.0	29	330	1.1
2529.6	0.839	11	1.3	21	265	0.990	12	2.5	32	302	0.722
2530.3	0.521	11	1.0	18	290	0.963	7.5	1.9	27	331	0.702
2531.0	0.393	12	1.3	19	293	1.6	5.7	2.4	28	335	1.2
2531.7	0.561	12	1.5	20	282	1.2	8.1	2.7	30	322	0.907
2532.4	0.393	12	0.955	17	243	1.6	5.7	1.7	26	278	1.2
2533.1	0.393	10.0	1.1	18	279	1.7	5.7	1.9	28	319	1.2
2533.8	0.571	10	1.2	19	299	2.1	8.2	2.3	29	342	1.5
2534.5	0.545	13	0.575	19	306	1.2	7.9	1.0	29	350	0.880
2535.2	0.393	14	1.1	20	314	1.6	5.7	2.0	31	359	1.1
2535.9	0.393	11	0.619	20	255	1.9	5.7	1.1	31	292	1.4
2536.6	0.476	11	1.1	21	306	1.2	6.9	2.0	32	350	0.885
2537.3	0.412	13	0.898	20	291	1.9	5.9	1.6	30	333	1.4
2538.0	0.393	13	0.815	19	318	0.946	5.7	1.5	29	363	0.690
2538.7	0.492	13	0.669	18	286	0.808	7.1	1.2	28	327	0.589
2539.3	0.657	10.0	0.720	19	282	0.557	9.5	1.3	29	322	0.406
2540.0	0.797	9.4	0.666	15	293	1.1	12	1.2	23	335	0.799
2540.7	0.761	13	0.931	19	323	0.646	11	1.7	29	369	0.471
2541.4	0.550	13	1.2	20	256	0.812	7.9	2.2	31	292	0.592

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2542.1	1.1	12	0.912	19	306	2.2	16	1.7	28	350	1.6
2542.8	0.414	13	0.928	15	307	1.4	6.0	1.7	23	351	1.0
2543.5	1.4	11	0.732	20	328	0.621	20	1.3	31	376	0.453
2544.2	0.393	11	0.835	16	334	0.868	5.7	1.5	25	382	0.633
2544.9	0.471	13	0.662	16	250	1.3	6.8	1.2	24	286	0.917
2545.6	0.393	11	0.749	18	250	1.0	5.7	1.4	28	285	0.733
2546.3	0.799	9.0	0.647	21	305	1.6	12	1.2	33	349	1.1
2547.0	0.393	11	0.782	20	326	0.504	5.7	1.4	30	373	0.368
2547.7	0.393	11	1.4	17	320	1.9	5.7	2.5	26	366	1.4
2548.4	0.393	12	0.612	19	336	1.7	5.7	1.1	29	384	1.2
2549.1	0.474	12	0.909	14	247	0.390	6.8	1.7	22	282	0.284
2549.8	0.651	12	1.2	19	304	1.9	9.4	2.2	30	348	1.4
2550.5	0.601	11	0.939	15	282	1.5	8.7	1.7	22	322	1.1
2551.2	0.393	11	0.704	17	303	1.4	5.7	1.3	26	347	1.0
2551.9	0.525	11	1.0	20	273	0.539	7.6	1.8	30	312	0.393
2552.6	0.393	11	1.0	19	299	1.1	5.7	1.8	30	341	0.824
2553.3	0.393	9.1	1.1	16	297	0.989	5.7	2.1	24	339	0.721
2554.0	0.735	9.9	0.711	19	280	1.6	11	1.3	29	320	1.1
2554.7	0.471	10	0.838	19	298	1.3	6.8	1.5	29	341	0.918
2555.4	0.610	11	0.809	21	257	1.8	8.8	1.5	32	294	1.3
2556.1	0.928	9.6	0.604	15	247	1.3	13	1.1	22	282	0.964
2556.8	0.393	10	0.767	16	291	1.7	5.7	1.4	24	332	1.2
2557.5	0.393	9.4	0.805	12	302	1.0	5.7	1.5	18	345	0.736
2558.2	0.393	9.8	0.781	20	268	1.7	5.7	1.4	30	307	1.2
2558.9	0.436	11	0.373	16	287	2.3	6.3	0.680	25	329	1.7
2559.6	0.971	8.3	0.748	15	261	0.710	14	1.4	23	299	0.518
2560.3	0.393	8.7	0.810	16	306	1.1	5.7	1.5	24	350	0.819
2561.0	0.393	7.7	0.718	16	292	0.913	5.7	1.3	24	334	0.666
2561.7	0.393	13	0.802	15	277	1.2	5.7	1.5	23	317	0.855
2562.4	0.510	12	0.836	22	296	1.3	7.4	1.5	34	339	0.917
2563.1	0.393	9.1	0.744	16	266	0.746	5.7	1.4	24	304	0.544
2563.8	0.760	11	1.1	19	310	1.1	11	2.1	29	354	0.784
2564.5	1.4	11	0.895	18	302	1.7	20	1.6	27	346	1.2
2565.1	0.613	11	0.981	21	361	1.0	8.8	1.8	32	413	0.749
2565.8	0.393	12	0.782	20	296	0.831	5.7	1.4	31	338	0.606
2566.5	0.509	11	0.787	17	326	0.836	7.3	1.4	26	373	0.610
2567.2	0.978	12	0.900	22	357	1.3	14	1.6	34	408	0.960
2567.9	0.393	12	1.0	20	267	1.0	5.7	1.8	31	305	0.751
2568.6	0.415	11	0.606	20	293	2.0	6.0	1.1	31	335	1.4
2569.3	0.393	9.9	0.755	18	324	0.747	5.7	1.4	27	370	0.545
2570.0	0.710	8.4	0.794	17	345	0.761	10	1.4	27	394	0.555
2570.7	0.932	12	1.0	15	284	0.960	13	1.9	23	325	0.701
2571.4	0.393	11	0.755	17	255	0.828	5.7	1.4	25	292	0.604
2572.1	0.394	12	1.0	20	316	0.733	5.7	1.9	31	362	0.535
2572.8	0.690	11	0.701	17	244	0.452	10.0	1.3	26	279	0.330
2573.5	0.393	18	0.911	17	293	0.648	5.7	1.7	25	335	0.473
2574.2	0.579	13	0.949	19	319	0.714	8.4	1.7	28	365	0.521
2574.9	0.707	13	0.571	17	280	1.4	10	1.0	26	320	1.0
2575.6	0.460	10	0.826	20	287	0.853	6.6	1.5	30	328	0.622
2576.3	0.952	10	1.2	19	289	0.465	14	2.2	29	331	0.340
2577.0	0.631	12	0.628	16	283	1.1	9.1	1.1	25	323	0.770
2577.7	0.579	12	0.842	18	312	0.833	8.4	1.5	27	357	0.608
2578.4	0.393	9.4	0.776	18	300	1.4	5.7	1.4	28	343	1.0
2579.1	0.393	14	0.912	21	323	0.727	5.7	1.7	32	369	0.530
2579.8	0.617	11	0.985	17	307	1.0	8.9	1.8	26	351	0.747
2580.5	1.0	12	0.805	17	340	1.5	15	1.5	26	389	1.1
2581.2	0.539	13	0.742	20	300	0.874	7.8	1.4	31	343	0.637
2581.9	0.393	11	0.734	22	270	0.750	5.7	1.3	33	309	0.547
2582.6	0.783	11	1.0	18	257	0.774	11	1.9	28	294	0.565
2583.3	0.643	12	0.786	15	312	1.4	9.3	1.4	23	357	1.0
2584.0	0.485	11	1.0	17	323	1.1	7.0	1.9	26	369	0.821
2584.7	0.393	12	0.972	20	328	1.2	5.7	1.8	30	376	0.864
2585.4	0.949	10	0.795	18	295	1.2	14	1.4	28	338	0.847
2586.1	0.751	9.6	0.710	18	316	1.3	11	1.3	28	361	0.923
2586.8	0.767	11	0.816	18	299	0.758	11	1.5	28	341	0.553
2587.5	0.825	10	0.896	17	299	1.2	12	1.6	26	342	0.883
2588.2	1.2	12	0.649	20	376	1.6	18	1.2	31	430	1.2
2588.9	0.677	11	1.1	25	308	0.415	9.8	2.0	38	353	0.303
2589.6	0.393	11	1.1	19	353	1.8	5.7	2.0	29	403	1.3
2590.2	0.393	9.7	0.838	13	266	1.3	5.7	1.5	20	304	0.969
2590.9	0.900	12	0.835	19	323	0.944	13	1.5	28	370	0.689
2591.6	0.393	9.3	1.3	18	310	1.5	5.7	2.3	28	355	1.1
2592.3	0.735	9.2	0.946	21	316	0.727	11	1.7	32	361	0.531
2593.0	1.4	9.9	1.2	17	308	0.719	20	2.2	25	352	0.525
2593.7	0.723	11	1.0	19	407	1.6	10	1.9	29	466	1.1
2594.4	0.851	12	1.1	27	392	1.4	12	2.1	41	448	1.1
2595.1	1.5	10	1.2	21	388	0.836	22	2.1	32	443	0.610
2595.8	1.2	9.5	1.2	21	353	1.1	18	2.3	32	403	0.829
2596.5	1.5	11	1.3	14	405	0.997	21	2.3	21	463	0.728
2597.2	1.5	9.0	1.1	21	361	1.0	22	2.1	32	413	0.747
2597.9	1.8	9.6	1.0	24	449	1.1	27	1.9	36	514	0.814

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2598.6	1.3	12	1.1	25	486	1.0	18	2.0	39	555	0.762
2599.3	1.4	12	1.9	20	520	0.722	20	3.5	31	595	0.527
2600.0	1.8	11	1.1	20	564	1.4	26	2.1	30	645	1.0
2600.7	1.5	11	1.0	22	432	2.2	22	1.9	34	494	1.6
2601.4	1.1	9.4	1.4	26	489	1.8	16	2.6	40	560	1.3
2602.1	1.0	9.6	0.839	23	476	2.4	15	1.5	35	544	1.7
2602.8	1.0	12	1.3	24	450	1.3	15	2.3	36	515	0.928
2603.5	1.9	11	1.6	21	565	1.3	27	3.0	32	646	0.946
2604.2	2.8	13	1.0	24	506	1.7	40	1.9	37	579	1.3
2604.9	2.1	11	1.1	24	613	0.864	31	2.1	37	700	0.630
2605.6	1.3	11	1.6	22	470	0.935	18	2.9	33	538	0.682
2606.3	2.1	9.8	1.5	22	521	1.0	30	2.8	33	596	0.739
2607.0	1.6	11	1.9	24	606	2.4	24	3.4	36	693	1.8
2607.7	2.2	12	1.8	27	654	1.8	32	3.2	42	748	1.3
2608.4	2.3	13	1.6	27	841	1.0	34	2.9	42	962	0.759
2609.1	2.7	12	1.5	29	804	2.0	39	2.7	44	919	1.4
2609.8	3.2	12	1.6	22	668	1.7	46	2.8	34	763	1.3
2610.5	2.6	12	1.8	24	717	1.4	37	3.3	37	820	1.0
2611.2	2.0	13	2.5	26	664	1.4	29	4.6	40	760	0.995
2611.9	2.7	11	2.2	29	731	1.4	39	3.9	44	836	0.994
2612.6	2.4	12	1.9	23	746	0.948	35	3.4	36	853	0.691
2613.3	2.6	11	2.1	27	727	1.4	38	3.8	41	831	1.0
2614.0	3.8	11	1.9	28	787	1.3	55	3.5	43	900	0.957
2614.7	2.5	13	1.8	30	745	1.8	36	3.3	46	852	1.3
2615.4	2.0	13	1.8	30	772	1.0	29	3.2	46	883	0.763
2616.1	3.2	11	2.2	31	791	0.605	46	4.1	47	905	0.441
2616.7	3.2	14	1.8	27	920	1.8	46	3.3	42	1052	1.3
2617.4	4.0	11	2.3	27	976	2.4	57	4.2	42	1116	1.7
2618.1	3.6	14	2.5	29	1180	1.2	52	4.6	45	1350	0.854
2618.8	3.5	13	2.7	32	968	2.3	51	4.9	49	1107	1.7
2619.5	4.2	11	2.5	30	931	1.9	60	4.5	46	1065	1.4
2620.2	2.8	11	2.5	34	1007	1.5	40	4.5	52	1152	1.1
2620.9	3.0	11	2.6	38	1170	1.3	43	4.7	59	1338	0.957
2621.6	4.5	14	2.4	36	1019	1.4	66	4.3	55	1165	1.0
2622.3	4.0	11	2.2	26	1042	0.817	58	4.1	39	1192	0.596
2623.0	4.0	9.8	2.7	36	1042	0.986	58	4.8	55	1192	0.719
2623.7	5.0	12	2.7	32	1179	1.7	73	4.9	50	1348	1.2
2624.4	4.6	14	2.7	35	1240	2.5	66	5.0	54	1418	1.8
2625.1	4.6	14	2.3	38	1015	2.0	66	4.3	58	1160	1.5
2625.8	4.1	14	3.3	30	1192	2.0	59	6.0	46	1363	1.4
2626.5	4.8	12	3.1	34	1247	1.6	69	5.7	53	1426	1.2
2627.2	4.7	12	3.1	30	1092	1.9	68	5.7	46	1248	1.4
2627.9	3.6	16	2.8	39	1269	2.7	51	5.2	60	1451	2.0
2628.6	4.3	12	2.7	37	1173	1.2	62	4.9	56	1342	0.899
2629.3	3.9	11	3.1	37	1392	2.2	57	5.7	57	1591	1.6
2630.0	4.2	12	3.1	31	1321	1.2	61	5.7	48	1510	0.891
2630.7	4.3	13	2.8	35	1273	1.9	62	5.1	53	1456	1.4
2631.4	3.8	13	2.9	41	1459	2.4	54	5.3	63	1669	1.8
2632.1	3.5	14	3.0	39	1354	1.9	51	5.5	60	1548	1.4
2632.8	4.5	13	3.4	35	1329	2.1	64	6.2	53	1520	1.5
2633.5	4.4	12	3.0	38	1416	0.873	64	5.5	58	1619	0.637
2634.2	5.1	15	4.0	45	1388	1.3	73	7.3	69	1587	0.956
2634.9	5.3	13	3.5	36	1395	1.5	77	6.3	55	1595	1.1
2635.6	4.5	15	3.3	41	1402	1.6	64	6.1	63	1603	1.2
2636.3	4.3	10	3.5	35	1406	2.2	62	6.3	54	1608	1.6
2637.0	4.4	12	3.0	37	1629	2.0	63	5.5	56	1862	1.4
2637.7	3.5	14	3.8	40	1442	2.4	51	6.9	61	1649	1.7
2638.4	3.8	19	4.6	51	1772	1.5	54	8.4	79	2026	1.1
2639.1	6.0	13	3.0	37	1407	2.0	86	5.5	57	1609	1.4
2639.8	4.8	15	3.4	35	1590	2.0	69	6.2	54	1818	1.5
2640.5	7.0	15	4.5	43	1756	2.4	101	8.1	66	2008	1.7
2641.2	4.1	17	3.6	48	1675	1.4	60	6.6	73	1916	1.1
2641.9	4.9	13	3.6	43	1529	1.7	70	6.6	65	1749	1.3
2642.6	5.0	13	3.4	41	1716	1.7	72	6.2	63	1962	1.2
2643.2	5.6	13	3.9	41	1813	1.5	81	7.2	62	2074	1.1
2643.9	4.3	17	4.0	47	1941	2.4	62	7.4	72	2220	1.7
2644.6	4.7	16	3.8	39	1705	2.9	67	6.9	60	1950	2.1
2645.3	4.2	15	3.2	50	1677	1.9	61	5.8	76	1918	1.4
2646.0	5.0	16	4.3	41	1776	2.3	72	7.8	63	2031	1.7
2646.7	4.6	16	3.6	45	1829	2.3	66	6.6	69	2091	1.7
2647.4	5.3	16	3.6	44	1638	1.5	77	6.6	67	1873	1.1
2648.1	4.3	14	3.4	46	1721	2.1	62	6.2	71	1968	1.5
2648.8	3.2	15	3.2	42	1547	1.6	46	5.8	65	1770	1.1
2649.5	4.5	15	3.6	45	1630	1.3	65	6.6	68	1864	0.973
2650.2	3.5	13	4.4	41	1731	2.1	51	8.1	63	1979	1.5
2650.9	4.0	17	4.1	45	1672	1.8	58	7.6	69	1912	1.3
2651.6	4.2	16	3.8	49	1783	2.2	61	6.9	76	2038	1.6
2652.3	4.2	18	3.3	45	1585	2.7	60	6.0	69	1813	2.0
2653.0	3.5	16	3.4	43	1678	1.8	50	6.2	65	1919	1.3
2653.7	4.6	15	3.4	46	1689	2.0	66	6.2	70	1931	1.5
2654.4	4.1	17	3.5	42	1651	2.1	60	6.4	64	1887	1.5

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2655.1	3.9	17	3.6	52	1792	2.8	56	6.6	80	2050	2.0
2655.8	3.5	15	4.0	44	1660	2.4	51	7.3	68	1898	1.7
2656.5	3.8	14	3.3	37	1540	1.8	54	5.9	56	1761	1.3
2657.2	3.1	16	3.5	40	1625	3.6	45	6.4	62	1858	2.6
2657.9	3.3	19	3.7	48	1792	2.2	48	6.8	73	2049	1.6
2658.6	2.9	18	3.2	43	1536	2.4	42	5.9	66	1757	1.7
2659.3	3.5	17	4.2	41	1677	2.0	50	7.6	63	1918	1.5
2660.0	3.3	15	3.6	41	1673	3.0	48	6.6	64	1914	2.2
2660.7	3.9	17	3.3	45	1709	3.0	57	6.1	69	1954	2.2
2661.4	4.2	16	2.9	47	1634	2.5	60	5.3	72	1868	1.8
2662.1	3.2	16	2.7	42	1553	1.5	46	4.9	65	1776	1.1
2662.8	3.5	16	3.1	39	1529	1.9	51	5.6	59	1749	1.4
2663.5	4.1	16	3.2	40	1428	2.0	58	5.9	61	1633	1.4
2664.2	3.3	17	3.1	40	1476	2.2	47	5.7	61	1688	1.6
2664.9	3.2	20	2.8	38	1398	2.1	46	5.1	58	1599	1.5
2665.6	3.2	15	2.2	35	1557	2.4	46	4.0	53	1780	1.7
2666.3	3.3	16	3.2	39	1625	1.5	47	5.8	59	1859	1.1
2667.0	3.0	15	3.0	35	1534	2.9	44	5.5	54	1754	2.1
2667.7	3.5	18	2.9	46	1541	2.1	51	5.3	71	1762	1.6
2668.4	3.1	17	3.2	45	1481	1.8	45	5.8	68	1694	1.3
2669.1	2.4	14	2.5	30	1382	1.5	34	4.5	46	1580	1.1
2669.8	2.1	17	3.4	38	1519	2.4	30	6.2	58	1737	1.8
2670.4	1.7	19	2.7	36	1325	1.6	25	4.8	55	1515	1.1
2671.1	2.4	18	2.6	40	1550	1.3	35	4.7	61	1773	0.930
2671.8	1.6	18	2.1	31	1460	1.6	24	3.7	48	1670	1.2
2672.5	1.9	19	2.4	33	1365	2.6	28	4.4	51	1561	1.9
2673.2	2.3	17	2.5	34	1591	1.9	33	4.5	52	1820	1.4
2673.9	1.9	17	2.0	35	1345	1.7	27	3.6	53	1538	1.2
2674.6	2.0	15	2.1	33	1335	3.3	28	3.8	51	1527	2.4
2675.3	2.0	15	1.8	31	1130	1.3	28	3.3	47	1292	0.958
2676.0	2.1	18	1.8	30	1267	2.2	30	3.3	47	1449	1.6
2676.7	2.0	15	2.7	27	1225	2.6	29	5.0	41	1401	1.9
2677.4	1.6	16	2.3	34	1263	2.0	23	4.2	52	1444	1.4
2678.1	1.1	17	1.7	28	1228	1.7	15	3.0	44	1405	1.2
2678.8	1.7	14	1.5	29	1210	1.4	25	2.8	45	1384	1.0
2679.5	1.4	13	1.9	22	1202	1.9	20	3.5	34	1375	1.4
2680.2	0.823	13	2.3	28	1102	1.7	12	4.1	42	1260	1.3
2680.9	2.1	16	1.7	28	1186	3.1	31	3.1	42	1357	2.2
2681.6	1.4	15	1.3	31	1180	1.8	20	2.4	48	1349	1.3
2682.3	0.604	15	1.6	24	1141	2.2	8.7	3.0	37	1304	1.6
2683.0	1.5	10	2.0	21	1021	1.9	22	3.7	32	1168	1.4
2683.7	1.2	16	1.3	23	1324	0.891	17	2.4	36	1514	0.650
2684.4	1.4	14	1.3	24	984	2.4	20	2.3	36	1125	1.7
2685.1	0.971	13	1.2	22	1028	2.0	14	2.2	34	1176	1.5
2685.8	1.3	13	1.2	21	1115	1.6	18	2.2	32	1275	1.2
2686.5	1.4	15	1.3	23	1141	2.2	21	2.3	36	1305	1.6
2687.2	1.3	20	1.3	27	1172	2.8	18	2.4	41	1340	2.1
2687.9	1.5	16	1.1	26	1077	2.4	21	2.1	40	1231	1.8
2688.6	1.2	15	1.3	23	976	2.2	18	2.3	36	1116	1.6
2689.3	1.6	12	1.4	19	893	1.7	24	2.6	29	1021	1.2
2690.0	2.1	14	0.996	17	945	1.1	30	1.8	26	1080	0.776
2690.7	2.1	13	1.2	22	998	1.2	31	2.2	34	1141	0.891
2691.4	2.0	17	1.5	21	1021	2.7	29	2.8	33	1168	2.0
2692.1	1.7	13	1.2	21	1132	1.8	25	2.2	32	1295	1.3
2692.8	2.6	13	1.4	17	1008	1.7	38	2.5	27	1152	1.3
2693.5	2.7	15	1.4	21	858	2.5	39	2.5	32	981	1.8
2694.2	1.8	18	1.8	19	1052	2.5	25	3.3	29	1203	1.8
2694.9	3.2	15	1.3	21	955	2.1	47	2.4	32	1092	1.5
2695.6	2.7	15	1.7	19	1036	1.2	39	3.2	29	1184	0.878
2696.3	2.8	12	1.7	21	990	2.7	40	3.1	31	1132	2.0
2697.0	2.2	12	1.4	19	907	3.2	32	2.6	29	1037	2.3
2697.6	3.1	15	1.7	19	1262	2.3	44	3.1	29	1443	1.7
2698.3	4.6	15	2.1	22	1066	3.1	66	3.8	34	1219	2.3
2699.0	2.9	14	1.7	18	977	1.3	41	3.2	28	1117	0.927
2699.7	2.0	12	1.8	21	1092	2.6	29	3.2	33	1248	1.9
2700.4	3.3	15	2.7	23	1024	2.9	48	5.0	35	1170	2.2
2701.1	5.3	13	1.7	16	987	1.6	76	3.2	24	1129	1.1
2701.8	2.6	14	1.5	23	1041	2.8	38	2.8	35	1190	2.0
2702.5	3.1	14	1.7	17	1042	2.9	45	3.1	27	1191	2.1
2703.2	4.4	18	2.3	21	1102	3.0	63	4.3	32	1260	2.2
2703.9	3.4	13	2.4	19	1005	3.2	49	4.4	30	1150	2.4
2704.6	2.9	13	2.4	23	1094	2.6	42	4.4	36	1250	1.9
2705.3	3.5	12	2.3	20	1061	1.6	51	4.2	31	1213	1.2
2706.0	3.6	12	2.5	18	1020	1.6	51	4.5	28	1166	1.1
2706.7	3.5	12	2.0	16	1143	1.1	51	3.7	24	1307	0.794
2707.4	3.6	14	2.5	23	1076	2.1	52	4.6	35	1231	1.6
2708.1	3.9	15	2.2	19	1044	1.9	56	4.0	29	1194	1.4
2708.8	2.7	13	2.2	25	1276	2.4	39	4.0	38	1459	1.8
2709.5	3.5	13	2.5	18	1234	2.1	51	4.5	27	1411	1.5
2710.2	2.4	13	2.5	23	1180	3.3	34	4.6	35	1349	2.4
2710.9	2.9	15	2.1	23	1226	2.0	41	3.8	36	1402	1.5

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Parameter	7Li	24Mg	55Mn	66Zn	88Sr	137Ba	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
DL (ppm)	0.393	0.403	0.079	0.702	0.005	0.003					
Length (µm)											
2711.6	3.6	16	1.9	27	1184	1.1	53	3.5	41	1354	0.829
2712.3	2.7	13	2.6	20	1293	2.0	39	4.7	30	1479	1.4
2713.0	2.8	16	2.4	27	1237	1.4	41	4.3	41	1414	1.0
2713.7	2.2	16	2.3	23	1184	2.3	32	4.2	35	1354	1.6
2714.4	2.6	16	2.1	27	1141	1.9	37	3.9	41	1305	1.4
2715.1	2.2	15	2.5	25	1227	1.4	32	4.6	38	1403	0.985
2715.8	3.2	16	2.3	20	1181	2.0	46	4.2	31	1351	1.5
2716.5	3.2	16	2.3	25	1320	2.9	47	4.2	39	1510	2.1
2717.2	3.7	16	2.3	22	1094	2.4	54	4.2	33	1251	1.7
2717.9	2.5	17	2.4	25	1178	2.0	36	4.4	38	1347	1.5
2718.6	3.4	14	2.5	30	1335	1.7	49	4.5	46	1527	1.2
2719.3	3.8	16	3.0	19	1212	2.4	55	5.5	29	1386	1.8
2720.0	3.5	16	2.8	22	1140	1.1	50	5.2	34	1304	0.777
2720.7	2.4	19	2.7	22	1184	3.1	34	5.0	34	1354	2.3
2721.4	3.1	16	2.5	27	1158	2.7	45	4.6	41	1324	2.0
2722.1	2.6	15	2.5	21	1179	2.2	38	4.5	32	1348	1.6
2722.8	3.5	16	2.9	23	1147	2.4	51	5.2	36	1311	1.8
2723.4	3.8	15	3.1	26	1271	2.1	54	5.6	40	1454	1.5
2724.1	3.0	19	2.7	23	1189	3.8	44	5.0	36	1360	2.8
2724.8	3.2	14	2.6	22	1220	1.8	47	4.7	34	1396	1.3
2725.5	3.2	15	2.4	26	1213	2.3	46	4.4	39	1387	1.7
2726.2	3.5	17	3.5	21	1152	1.7	50	6.5	33	1317	1.3
2726.9	2.9	16	3.3	23	1125	2.4	42	6.0	36	1287	1.8
2727.6	3.8	17	2.3	23	1261	2.4	54	4.1	35	1442	1.8
2728.3	2.9	15	2.6	26	1286	1.8	42	4.7	39	1471	1.3
2729.0	3.2	16	2.6	23	1148	1.7	46	4.7	36	1312	1.2
2729.7	4.2	20	3.5	27	1361	2.8	61	6.4	42	1557	2.1
2730.4	3.0	18	3.3	25	1205	1.9	44	6.0	38	1377	1.4
2731.1	2.1	16	2.4	23	1135	2.2	31	4.3	36	1298	1.6
2731.8	3.0	18	3.1	29	1259	2.1	44	5.7	45	1440	1.6
2732.5	2.9	17	3.0	26	1283	1.7	42	5.5	40	1467	1.3
2733.2	2.8	18	3.6	32	1409	2.5	40	6.5	49	1612	1.8
2733.9	2.9	20	3.4	29	1332	2.1	42	6.2	44	1523	1.5
2734.6	2.9	17	3.7	29	1389	2.3	43	6.7	45	1589	1.7
2735.3	3.0	15	3.7	32	1242	1.4	43	6.8	50	1420	1.0
2736.0	3.3	16	3.5	27	1384	3.3	47	6.4	42	1583	2.4
2736.7	2.5	17	4.1	33	1428	2.5	36	7.4	50	1633	1.8
2737.4	2.7	19	2.8	34	1445	2.1	39	5.1	53	1653	1.5
2738.1	2.6	18	3.2	25	1350	2.9	37	5.8	38	1544	2.1
2738.8	2.2	14	3.3	28	1359	2.2	31	6.0	43	1554	1.6
2739.5	2.4	19	3.2	33	1506	3.3	35	5.7	50	1722	2.4
2740.2	3.1	18	3.6	35	1375	2.5	45	6.5	53	1573	1.8
2740.9	2.2	16	3.4	33	1360	1.5	32	6.2	51	1555	1.1
2741.6	2.2	16	3.5	30	1514	2.7	32	6.3	47	1731	1.9
2742.3	2.4	17	2.8	26	1367	2.2	34	5.2	40	1563	1.6
2743.0	1.9	18	3.2	33	1409	2.4	28	5.9	51	1611	1.7
2743.7	1.9	17	2.3	32	1397	2.8	28	4.2	49	1598	2.0
2744.4	2.8	14	3.2	28	1347	1.9	40	5.8	43	1541	1.4
2745.1	2.3	16	3.5	30	1393	2.3	34	6.3	46	1593	1.7
2745.8	2.6	17	3.1	26	1478	2.2	38	5.7	39	1691	1.6
2746.5	2.0	20	3.1	29	1677	2.6	29	5.7	45	1917	1.9
2747.2	0.867	16	2.8	32	1459	1.7	13	5.2	50	1668	1.2
2747.9	1.1	14	2.0	27	1479	1.6	15	3.7	41	1691	1.2
2748.6	2.0	15	2.1	27	1280	2.3	30	3.9	41	1463	1.7
2749.2	1.4	17	2.3	29	1297	2.3	21	4.1	44	1483	1.7
2749.9	1.9	17	2.8	29	1392	3.5	28	5.2	45	1591	2.6
2750.6	1.7	15	2.1	26	1505	2.1	25	3.9	40	1721	1.5
2751.3	1.8	15	2.1	27	1301	2.2	25	3.8	41	1488	1.6
2752.0	1.1	9.9	2.1	24	1148	1.4	17	3.7	37	1313	1.0
2752.7	1.2	18	2.2	25	1293	2.9	17	3.9	39	1478	2.1
2753.4	2.0	16	2.0	23	1244	2.9	29	3.7	36	1422	2.1
2754.1	1.4	12	1.8	24	1266	1.2	19	3.2	37	1447	0.857
2754.8	0.606	14	1.6	23	1356	1.8	8.7	2.9	35	1550	1.3
2755.5	0.933	15	1.5	22	1291	1.6	13	2.8	34	1476	1.2
2756.2	1.6	16	1.7	25	1401	1.9	23	3.1	38	1602	1.4
2756.9	1.1	15	1.5	26	1387	1.1	16	2.7	40	1586	0.824
2757.6	1.1	13	1.4	22	1197	1.9	16	2.5	34	1368	1.4
2758.3	0.894	15	1.1	22	1535	2.1	13	2.0	34	1755	1.6
2759.0	1.4	15	1.3	24	1327	2.2	20	2.4	37	1518	1.6
2759.7	0.830	17	1.4	26	1367	1.9	12	2.6	40	1563	1.4
2760.4	1.9	15	1.2	24	1228	2.2	27	2.2	37	1405	1.6
2761.1	1.5	12	1.4	21	1258	1.8	21	2.6	33	1439	1.3
2761.8	0.757	12	0.882	19	1327	2.2	11	1.6	29	1518	1.6
2762.5	0.786	16	0.962	23	1468	2.5	11	1.8	35	1679	1.8
2763.2	0.895	16	1.0	21	1236	2.1	13	1.9	33	1414	1.5
2763.9	0.881	13	0.896	19	1222	2.5	13	1.6	29	1397	1.8
2764.6	1.5	14	1.0	20	1226	2.4	21	1.8	31	1402	1.7
2765.3	1.4	14	1.0	21	1259	1.4	20	1.9	32	1439	1.0
2766.0	0.985	13	0.770	17	1117	1.3	14	1.4	26	1277	0.966
2766.7	0.801	14	1.3	22	1182	2.7	12	2.4	34	1352	2.0
2767.4	0.989	14	0.929	19	1258	1.4	14	1.7	30	1439	0.991

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Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2768.1	1.1	11	0.880	19	1253	3.2	15	1.6	30	1432	2.3
2768.8	0.984	17	1.0	19	1259	3.1	14	1.9	29	1439	2.2
2769.5	1.4	14	1.0	24	1214	1.9	20	1.9	37	1389	1.4
2770.2	1.1	15	0.940	20	1229	2.1	16	1.7	31	1405	1.5
2770.9	1.2	14	0.955	21	1353	2.2	17	1.7	33	1547	1.6
2771.6	0.804	11	0.651	19	1263	2.6	12	1.2	29	1444	1.9
2772.3	1.3	13	0.866	20	1204	2.1	18	1.6	30	1377	1.5
2773.0	1.1	13	0.651	17	1065	2.0	15	1.2	26	1218	1.5
2773.7	0.537	12	1.1	22	1318	1.9	7.8	2.0	34	1507	1.4
2774.4	1.1	12	0.836	20	1169	1.5	15	1.5	30	1337	1.1
2775.0	1.3	11	0.691	17	1230	2.3	19	1.3	26	1406	1.7
2775.7	1.2	13	0.640	20	1388	1.5	18	1.2	30	1587	1.1
2776.4	1.2	13	0.988	22	1243	2.1	17	1.8	34	1421	1.5
2777.1	1.4	13	0.730	22	1190	1.4	20	1.3	34	1360	1.0
2777.8	0.868	11	0.704	17	1103	2.2	13	1.3	26	1262	1.6
2778.5	1.2	14	0.799	20	1139	1.7	17	1.5	30	1302	1.2
2779.2	1.5	15	0.877	25	1333	2.3	22	1.6	39	1524	1.7
2779.9	0.468	15	0.816	21	1309	2.7	6.8	1.5	32	1497	2.0
2780.6	1.5	14	0.977	20	1114	1.3	22	1.8	31	1274	0.948
2781.3	0.732	13	0.452	16	1241	2.2	11	0.824	25	1420	1.6
2782.0	1.4	15	0.776	20	1489	1.6	21	1.4	31	1703	1.2
2782.7	0.866	14	0.702	18	1122	2.5	13	1.3	28	1283	1.8
2783.4	1.5	13	0.976	19	1187	2.6	21	1.8	29	1358	1.9
2784.1	0.790	12	0.733	19	1287	2.2	11	1.3	30	1472	1.6
2784.8	1.7	12	0.790	22	1250	1.6	24	1.4	34	1429	1.1
2785.5	0.657	13	1.2	20	1121	2.8	9.5	2.1	31	1282	2.0
2786.2	0.781	14	1.1	19	1283	2.8	11	2.0	30	1467	2.0
2786.9	0.609	14	0.745	21	1201	3.3	8.8	1.4	33	1374	2.4
2787.6	1.2	13	0.765	19	1263	1.7	17	1.4	29	1445	1.2
2788.3	1.1	15	0.912	16	1133	1.7	15	1.7	25	1296	1.3
2789.0	0.822	12	1.0	16	1147	2.3	12	1.8	24	1311	1.7
2789.7	0.808	12	0.473	16	1117	1.8	12	0.862	25	1278	1.3
2790.4	0.715	13	0.751	20	1250	1.5	10	1.4	30	1430	1.1
2791.1	0.741	11	0.386	17	1169	1.8	11	0.705	26	1337	1.3
2791.8	0.987	14	0.968	18	1172	2.3	14	1.8	27	1340	1.7
2792.5	1.3	11	0.719	22	1191	2.1	19	1.3	34	1362	1.6
2793.2	0.802	14	1.2	20	1210	1.7	12	2.1	30	1383	1.3
2793.9	1.4	14	0.679	18	1130	1.5	20	1.2	27	1292	1.1
2794.6	0.441	9.7	0.803	15	1168	2.2	6.4	1.5	23	1336	1.6
2795.3	1.2	12	0.717	21	1247	2.0	18	1.3	31	1426	1.5
2796.0	1.2	12	0.969	21	1154	2.0	17	1.8	32	1320	1.4
2796.7	1.1	12	0.635	19	1147	2.2	16	1.2	29	1311	1.6
2797.4	0.663	15	0.810	23	1213	2.0	9.6	1.5	35	1387	1.5
2798.1	0.926	11	1.1	16	1186	2.2	13	2.0	25	1356	1.6
2798.8	0.667	14	1.1	18	1211	1.5	9.6	2.0	27	1384	1.1
2799.5	1.9	15	0.977	18	1203	2.1	27	1.8	28	1376	1.6
2800.2	0.712	15	0.674	19	1259	2.6	10	1.2	29	1440	1.9
2800.9	1.4	14	0.797	17	1163	1.4	20	1.5	26	1330	1.0
2801.5	1.5	13	1.2	20	1126	1.6	21	2.2	30	1287	1.1
2802.2	1.4	12	0.935	14	1186	2.4	20	1.7	21	1357	1.8
2802.9	1.7	14	0.915	25	1197	1.7	24	1.7	39	1369	1.2
2803.6	1.3	14	0.714	21	1090	2.1	19	1.3	32	1247	1.5
2804.3	2.4	13	1.3	15	1036	2.1	34	2.3	23	1184	1.5
2805.0	2.3	14	0.907	13	1181	2.3	33	1.7	20	1351	1.7
2805.7	2.4	12	1.4	17	1092	1.9	34	2.5	25	1249	1.4
2806.4	1.7	13	1.3	17	1200	2.8	24	2.3	26	1372	2.0
2807.1	2.1	15	1.3	23	1267	1.8	31	2.3	36	1448	1.3
2807.8	2.1	14	1.3	18	1066	1.6	30	2.4	27	1219	1.2
2808.5	1.7	10	1.2	16	1092	1.6	25	2.2	24	1248	1.2
2809.2	3.3	13	1.8	21	1276	2.6	47	3.2	32	1459	1.9
2809.9	1.3	13	1.3	25	1058	2.7	18	2.3	38	1210	1.9
2810.6	2.8	12	0.954	22	1177	0.992	41	1.7	33	1346	0.724
2811.3	2.2	15	1.5	20	1418	3.0	32	2.7	30	1621	2.2
2812.0	2.9	11	1.3	23	1385	1.0	41	2.3	36	1584	0.745
2812.7	2.5	15	1.7	23	1313	1.9	35	3.1	35	1502	1.4
2813.4	2.1	12	1.6	26	1172	2.2	30	2.9	40	1340	1.6
2814.1	2.6	12	1.4	22	1169	2.0	38	2.6	33	1337	1.4
2814.8	2.7	10	1.5	19	1244	2.1	40	2.8	29	1422	1.5
2815.5	2.3	12	2.4	19	1154	1.8	33	4.4	30	1319	1.3
2816.2	3.8	19	1.8	21	1280	2.7	54	3.3	33	1464	1.9
2816.9	1.7	15	1.3	26	1299	2.1	25	2.4	39	1485	1.5
2817.6	3.9	13	1.7	28	1505	1.7	57	3.0	43	1721	1.2
2818.3	3.3	13	1.9	25	1301	2.8	48	3.5	39	1487	2.0
2819.0	3.4	15	1.7	30	1359	2.1	49	3.0	46	1554	1.5
2819.7	2.8	16	2.0	24	1337	2.1	41	3.7	37	1529	1.5
2820.4	2.5	13	2.0	27	1330	1.9	36	3.6	42	1521	1.4
2821.1	3.8	12	2.4	27	1382	1.2	55	4.4	41	1581	0.899
2821.8	2.4	16	2.2	22	1189	1.4	35	4.0	34	1359	1.0
2822.5	2.8	16	1.9	30	1509	2.8	41	3.4	46	1725	2.1
2823.2	3.1	17	2.3	23	1302	3.6	44	4.2	36	1488	2.6
2823.9	2.6	16	2.4	34	1421	2.2	38	4.3	51	1625	1.6

Minnow Environmental
Sample ID: 017

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2824.6	3.7	16	2.7	20	1338	1.3	54	4.9	31	1530	0.940
2825.3	3.1	16	2.4	25	1128	1.9	45	4.4	38	1290	1.4
2826.0	4.9	18	2.4	30	1520	2.9	70	4.4	46	1738	2.1
2826.7	4.4	17	1.9	33	1275	3.8	64	3.5	50	1458	2.8
2827.3	2.3	13	2.0	24	1187	2.6	33	3.6	37	1358	1.9
2828.0	3.3	14	2.0	26	1539	2.5	47	3.7	39	1759	1.8
2828.7	3.7	12	2.2	21	1246	1.7	54	4.1	32	1425	1.2
2829.4	3.5	15	2.4	27	1386	3.5	50	4.5	42	1585	2.5
2830.1	3.9	16	2.1	30	1386	1.4	56	3.8	46	1584	1.0
2830.8	1.8	13	1.8	23	1195	1.8	26	3.3	36	1367	1.3
2831.5	2.6	13	2.0	22	1124	2.0	37	3.6	34	1286	1.5
2832.2	2.7	16	2.1	26	1265	2.4	39	3.8	40	1447	1.8
2832.9	1.7	17	1.7	28	1126	2.6	24	3.2	44	1288	1.9
2833.6	1.7	19	1.6	25	1308	1.4	24	2.9	38	1496	1.000
2834.3	1.9	13	2.5	28	1194	2.9	27	4.6	42	1366	2.1
2835.0	1.9	19	2.0	26	1396	2.7	27	3.7	40	1597	2.0
2835.7	3.2	19	2.5	31	1316	3.1	46	4.6	47	1504	2.3
2836.4	1.5	16	1.6	26	1168	2.7	21	2.9	39	1336	2.0
2837.1	2.2	16	2.0	31	1192	2.0	31	3.7	47	1363	1.4
2837.8	2.2	16	2.3	25	1245	2.0	32	4.2	38	1424	1.5
2838.5	2.9	17	2.1	29	1336	2.9	42	3.8	44	1528	2.1
2839.2	2.8	20	1.8	29	1124	2.3	40	3.3	45	1285	1.7
2839.9	2.7	14	1.6	26	1082	2.4	39	2.9	40	1237	1.7
2840.6	3.1	15	1.6	23	1192	1.4	44	2.9	34	1363	1.0
2841.3	3.2	15	2.3	25	1196	2.0	47	4.1	39	1367	1.5
2842.0	2.5	13	1.9	25	1155	2.1	36	3.4	38	1321	1.5
2842.7	2.0	18	1.5	29	1091	2.9	29	2.8	45	1248	2.1
2843.4	3.1	16	2.0	26	1248	2.9	44	3.7	40	1427	2.1
2844.1	1.9	15	1.3	27	1162	2.5	27	2.3	42	1329	1.8
2844.8	1.6	15	1.6	28	1203	1.8	23	2.9	44	1375	1.3
2845.5	2.9	16	1.6	26	1171	2.4	42	3.0	39	1339	1.7
2846.2	1.6	17	1.6	28	1387	3.4	24	2.9	42	1586	2.5
2846.9	1.8	17	1.4	24	1076	3.0	25	2.6	37	1231	2.2
2847.6	1.7	17	1.2	25	1101	2.4	24	2.3	39	1259	1.8
2848.3	2.0	16	2.0	21	1205	2.9	29	3.7	33	1378	2.1
2849.0	2.2	16	1.8	28	1259	3.7	31	3.3	43	1440	2.7
2849.7	1.2	15	1.5	23	1121	2.3	18	2.7	35	1282	1.7
2850.4	1.1	16	1.7	26	1048	2.0	16	3.2	41	1199	1.4
2851.1	2.4	16	1.5	21	1147	2.4	35	2.7	31	1311	1.8
2851.8	1.1	14	1.7	23	1198	2.8	15	3.0	35	1370	2.0
2852.5	1.6	19	1.6	25	1164	2.7	24	2.9	39	1331	1.9
2853.1	1.5	16	1.9	24	1273	1.5	21	3.4	37	1456	1.1
2853.8	1.5	16	1.6	21	1172	2.2	22	2.8	33	1340	1.6
2854.5	1.4	14	1.6	25	1183	1.9	21	2.8	38	1353	1.4
2855.2	1.4	18	1.6	22	1092	2.3	20	3.0	33	1249	1.7
2855.9	1.8	15	1.6	24	1083	1.7	27	2.9	37	1239	1.2
2856.6	1.0	16	1.7	25	1146	2.4	15	3.1	38	1311	1.8
2857.3	1.4	14	1.5	21	909	2.5	20	2.7	32	1039	1.8
2858.0	2.6	16	1.6	22	1123	2.5	37	2.9	34	1284	1.8
2858.7	1.2	15	0.970	24	1162	1.9	18	1.8	36	1328	1.4
2859.4	2.1	13	1.6	22	986	2.4	31	3.0	34	1128	1.7
2860.1	1.8	13	1.4	22	976	1.4	26	2.5	34	1117	1.0
2860.8	1.5	15	1.8	18	892	2.6	21	3.2	28	1020	1.9
2861.5	2.0	16	1.3	21	1039	2.2	29	2.3	32	1188	1.6
2862.2	2.2	15	1.4	22	1084	2.6	31	2.6	34	1240	1.9
2862.9	1.6	14	1.5	20	961	2.5	23	2.7	30	1099	1.8
2863.6	2.1	15	1.4	25	1124	2.4	31	2.5	38	1285	1.7
2864.3	2.6	14	0.821	23	1126	2.1	38	1.5	36	1288	1.5
2865.0	2.0	17	1.4	20	1251	2.2	29	2.6	31	1430	1.6
2865.7	3.0	19	1.4	20	1194	1.8	44	2.6	30	1365	1.3
2866.4	2.0	16	1.2	25	1075	2.4	29	2.2	39	1229	1.7
2867.1	1.7	14	1.3	19	1202	2.0	25	2.3	29	1374	1.5
2867.8	1.6	14	1.4	19	1270	3.1	24	2.5	29	1453	2.3
2868.5	2.0	14	0.915	13	1103	1.5	29	1.7	20	1262	1.1
2869.2	1.8	18	1.1	17	1029	1.9	25	2.1	27	1176	1.4
2869.9	1.6	13	0.948	23	1264	2.5	23	1.7	35	1446	1.8
2870.6	1.1	14	1.6	20	1093	2.6	16	3.0	31	1250	1.9
2871.3	1.7	14	1.3	21	1092	1.4	24	2.4	31	1249	1.0
2872.0	2.7	14	1.3	19	1089	2.1	39	2.4	30	1245	1.5
2872.7	1.6	14	1.9	23	1129	1.9	23	3.5	35	1291	1.4
2873.4	1.4	16	0.805	17	1044	2.4	20	1.5	27	1194	1.7
2874.1	1.3	10	2.0	21	1136	2.1	19	3.6	33	1299	1.5
2874.8	1.8	13	1.6	22	1254	1.8	26	2.9	33	1434	1.3
2875.5	1.7	16	1.5	19	1336	2.5	24	2.7	30	1528	1.8
2876.2	2.0	13	1.3	21	1199	2.0	29	2.4	32	1371	1.4
2876.9	1.4	15	1.5	24	1343	3.0	21	2.7	36	1536	2.2
2877.6	2.0	13	1.6	18	1313	2.8	29	3.0	28	1501	2.0
2878.3	2.5	17	1.8	22	1435	2.5	36	3.3	34	1641	1.9
2879.0	2.2	17	1.6	24	1269	1.5	32	2.9	37	1452	1.1
2879.7	1.4	14	1.1	19	1254	3.3	20	2.0	28	1434	2.4
2880.3	1.6	15	1.3	17	1157	1.6	23	2.3	26	1323	1.1

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Parameter	7Li	24Mg	55Mn	66Zn	88Sr	137Ba	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
DL (ppm)	0.393	0.403	0.079	0.702	0.005	0.003					
Length (µm)											
2881.0	1.8	14	1.7	19	1453	2.8	26	3.0	30	1662	2.0
2881.7	2.2	14	1.4	22	1311	2.6	31	2.5	34	1499	1.9
2882.4	2.4	17	1.2	22	1443	2.2	35	2.2	34	1650	1.6
2883.1	1.9	18	1.7	20	1230	2.5	28	3.1	30	1406	1.8
2883.8	1.8	18	1.5	20	1217	3.0	26	2.7	31	1391	2.2
2884.5	1.4	15	1.5	18	1381	2.9	20	2.8	28	1579	2.1
2885.2	2.1	17	1.2	22	1401	3.4	30	2.3	34	1602	2.5
2885.9	1.6	16	1.1	17	1108	2.7	23	2.0	26	1267	1.9
2886.6	1.5	18	1.4	17	1176	2.9	21	2.5	26	1345	2.1
2887.3	1.8	16	1.3	19	1089	1.5	26	2.3	28	1245	1.1
2888.0	2.2	14	1.1	22	1209	2.1	32	1.9	34	1383	1.5
2888.7	3.5	18	1.1	21	1248	1.8	50	2.1	33	1428	1.3
2889.4	2.8	15	1.2	17	1064	2.8	41	2.1	26	1216	2.0
2890.1	1.4	16	0.905	14	1153	2.3	21	1.6	21	1318	1.7
2890.8	1.5	15	1.2	17	1109	2.3	22	2.2	26	1269	1.7
2891.5	2.0	16	1.1	19	1350	2.8	28	2.0	30	1543	2.0
2892.2	2.1	18	1.2	22	1184	2.6	31	2.1	34	1354	1.9
2892.9	1.1	19	1.2	20	1167	2.3	16	2.2	31	1335	1.6
2893.6	1.7	15	1.6	19	1147	3.2	25	2.9	29	1312	2.3
2894.3	1.4	16	1.5	19	1216	2.8	20	2.8	30	1391	2.1
2895.0	1.2	19	1.4	21	1222	0.996	18	2.5	32	1398	0.727
2895.7	1.8	16	1.5	16	1171	1.8	26	2.7	25	1339	1.3
2896.4	1.3	18	1.3	17	1176	0.932	18	2.4	26	1345	0.680
2897.1	2.0	18	1.8	19	1266	2.4	29	3.3	29	1447	1.8
2897.8	2.0	19	1.2	14	1098	2.8	28	2.2	22	1255	2.0
2898.5	1.5	18	1.2	18	1172	2.6	21	2.2	28	1340	1.9
2899.2	1.7	18	1.4	20	1141	2.4	25	2.5	30	1305	1.8
2899.9	1.0	17	1.4	18	1136	2.3	15	2.5	27	1299	1.7
2900.6	0.418	20	1.2	14	1135	2.6	6.0	2.1	22	1298	1.9
2901.3	1.2	18	1.3	13	982	1.3	17	2.3	21	1122	0.937
2902.0	1.2	18	1.4	16	1097	1.7	17	2.6	24	1254	1.3
2902.7	1.7	21	1.3	19	1178	1.3	25	2.4	28	1347	0.937
2903.4	1.3	17	1.4	17	1009	1.8	19	2.5	26	1154	1.3
2904.1	2.3	19	1.0	16	1014	0.838	33	1.9	25	1159	0.612
2904.8	1.5	16	1.2	19	1078	1.9	21	2.2	29	1233	1.4
2905.5	1.2	22	0.991	14	1090	2.0	17	1.8	22	1247	1.5
2906.2	0.492	24	1.2	14	988	1.3	7.1	2.2	22	1130	0.915
2906.8	1.0	24	1.5	12	950	2.3	15	2.7	19	1086	1.7
2907.5	2.6	23	1.1	15	972	2.0	37	2.0	23	1112	1.5
2908.2	1.5	28	1.3	18	987	1.8	22	2.4	28	1128	1.3
2908.9	1.3	30	0.906	16	1159	2.1	19	1.7	25	1325	1.5
2909.6	1.1	27	1.1	15	988	1.1	16	2.0	23	1130	0.821
2910.3	1.4	34	1.2	19	1036	1.2	20	2.2	29	1185	0.866
2911.0	0.924	31	1.3	17	1021	2.2	13	2.4	27	1167	1.6
2911.7	1.6	35	1.5	18	1042	2.4	23	2.8	28	1191	1.8
2912.4	1.0	33	1.4	14	884	1.4	15	2.6	21	1011	1.0
2913.1	1.1	34	1.6	15	887	2.4	17	2.9	22	1014	1.7
2913.8	0.977	33	1.1	13	912	1.4	14	2.0	20	1043	1.0
2914.5	1.1	31	1.2	9.0	880	1.5	16	2.2	14	1007	1.1
2915.2	0.976	35	1.2	15	887	1.5	14	2.3	22	1015	1.1
2915.9	0.888	38	1.5	14	987	2.4	13	2.8	22	1129	1.7
2916.6	0.809	40	0.968	10.0	791	1.9	12	1.8	15	904	1.4
2917.3	0.713	40	0.830	12	852	1.8	10	1.5	18	974	1.3
2918.0	0.722	47	1.2	12	932	1.3	10	2.2	18	1065	0.967
2918.7	0.627	39	1.2	8.9	914	1.4	9.0	2.3	14	1046	1.0
2919.4	0.402	52	0.890	10.0	799	2.0	5.8	1.6	15	914	1.5
2920.1	0.643	43	1.0	10	877	1.3	9.3	1.8	16	1003	0.934
2920.8	0.757	45	1.2	14	870	1.9	11	2.2	22	994	1.4
2921.5	0.393	40	1.0	10	814	0.934	5.7	1.9	16	931	0.682
2922.2	0.502	44	0.509	7.5	748	1.6	7.2	0.928	11	856	1.1
2922.9	0.658	46	0.930	8.9	775	1.3	9.5	1.7	14	887	0.949
2923.6	0.587	54	1.3	8.2	827	0.758	8.5	2.3	13	946	0.553
2924.3	0.768	47	0.537	9.5	721	1.6	11	0.980	14	825	1.2
2925.0	0.393	37	0.906	8.3	740	2.3	5.7	1.7	13	846	1.7
2925.7	0.393	49	0.773	9.1	791	1.8	5.7	1.4	14	905	1.3
2926.4	0.599	43	0.710	7.6	754	0.903	8.7	1.3	12	863	0.659
2927.1	0.393	43	0.672	6.8	764	1.2	5.7	1.2	10	874	0.859
2927.8	0.477	52	0.757	10.0	838	1.4	6.9	1.4	15	958	1.0
2928.5	0.393	52	0.530	8.9	709	5.9	5.7	0.966	14	811	4.3
2929.2	0.906	45	0.570	10	789	0.934	13	1.0	16	902	0.681
2929.9	0.393	48	0.336	8.2	690	0.581	5.7	0.612	13	789	0.424
2930.6	0.393	43	0.592	6.9	819	1.1	5.7	1.1	11	936	0.799
2931.3	0.397	45	0.588	7.1	626	0.827	5.7	1.1	11	715	0.604
2932.0	0.725	49	0.394	7.3	635	0.950	10	0.718	11	726	0.693
2932.6	0.830	43	0.439	5.6	609	0.798	12	0.800	8.6	696	0.583
2933.3	0.459	47	0.408	6.8	604	0.846	6.6	0.743	10	691	0.617
2934.0	0.393	45	0.406	5.4	728	0.465	5.7	0.740	8.3	833	0.339
2934.7	0.527	51	0.271	5.7	724	0.972	7.6	0.494	8.7	828	0.709
2935.4	0.473	44	0.424	5.8	654	0.874	6.8	0.773	8.9	748	0.637
2936.1	0.846	45	0.316	6.2	585	0.820	12	0.575	9.4	669	0.598
2936.8	0.558	47	0.333	4.9	689	0.617	8.1	0.608	7.6	788	0.450

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2937.5	0.393	40	0.306	6.0	624	0.884	5.7	0.559	9.2	713	0.645
2938.2	0.393	49	0.365	3.7	682	1.3	5.7	0.665	5.7	780	0.937
2938.9	0.491	39	0.436	3.1	652	0.815	7.1	0.796	4.8	745	0.594
2939.6	0.393	41	0.309	5.0	735	1.2	5.7	0.564	7.6	841	0.906
2940.3	0.393	38	0.332	5.0	550	1.2	5.7	0.606	7.6	628	0.866
2941.0	0.393	45	0.515	1.9	676	1.2	5.7	0.939	3.0	773	0.894
2941.7	0.393	47	0.490	2.9	601	1.1	5.7	0.894	4.4	687	0.816
2942.4	0.532	45	0.163	5.0	672	0.883	7.7	0.297	7.6	768	0.644
2943.1	0.393	43	0.305	2.8	494	1.1	5.7	0.556	4.2	564	0.784
2943.8	0.682	50	0.268	4.3	746	1.3	9.9	0.489	6.6	854	0.916
2944.5	0.511	49	0.603	3.4	660	1.0	7.4	1.1	5.2	755	0.756
2945.2	0.393	49	0.211	5.0	613	1.4	5.7	0.385	7.7	701	1.1
2945.9	0.592	50	0.305	3.1	658	0.546	8.6	0.556	4.7	752	0.399
2946.6	0.588	52	0.230	6.4	615	0.591	8.5	0.419	9.8	703	0.431
2947.3	0.393	49	0.371	3.6	619	1.3	5.7	0.677	5.6	708	0.954
2948.0	0.737	54	0.288	4.5	761	1.5	11	0.526	6.8	871	1.1
2948.7	1.1	54	0.554	3.5	617	0.989	16	1.0	5.4	705	0.721
2949.4	0.971	46	0.528	4.6	626	0.941	14	0.962	7.0	716	0.687
2950.1	0.393	54	0.347	6.0	575	0.428	5.7	0.632	9.2	657	0.312
2950.8	0.393	52	0.532	5.4	611	0.975	5.7	0.970	8.2	699	0.711
2951.5	0.899	57	0.383	6.3	635	0.635	13	0.698	9.6	727	0.463
2952.2	0.540	50	0.349	6.2	659	1.0	7.8	0.636	9.4	754	0.730
2952.9	1.1	47	0.230	4.1	637	0.488	15	0.420	6.3	728	0.356
2953.6	0.393	55	0.180	4.4	777	1.1	5.7	0.328	6.7	888	0.824
2954.3	0.795	47	0.147	3.4	627	0.731	11	0.268	5.3	717	0.533
2955.0	0.492	53	0.276	5.7	606	0.392	7.1	0.503	8.8	693	0.286
2955.7	0.393	59	0.574	7.2	632	1.1	5.7	1.0	11	723	0.767
2956.4	0.393	55	0.266	6.0	621	0.378	5.7	0.485	9.3	710	0.276
2957.1	0.583	47	0.324	4.3	551	0.646	8.4	0.591	6.6	630	0.471
2957.8	0.393	65	0.205	5.7	680	1.0	5.7	0.375	8.8	777	0.732
2958.4	1.5	53	0.259	2.8	629	1.3	21	0.472	4.3	719	0.984
2959.1	0.393	54	0.330	6.2	611	1.1	5.7	0.601	9.5	698	0.824
2959.8	0.393	47	0.332	4.8	710	0.648	5.7	0.605	7.4	812	0.473
2960.5	0.648	61	0.587	5.6	583	0.750	9.3	1.1	8.6	667	0.547
2961.2	0.393	53	0.275	6.0	549	0.729	5.7	0.501	9.2	628	0.532
2961.9	1.1	61	0.150	5.3	587	1.7	16	0.273	8.1	671	1.2
2962.6	0.420	74	0.440	6.5	614	1.4	6.1	0.803	10	703	1.0
2963.3	1.2	60	0.697	5.3	643	0.759	17	1.3	8.1	736	0.554
2964.0	0.393	56	0.498	3.1	524	0.431	5.7	0.908	4.7	600	0.314
2964.7	0.393	57	0.120	3.6	768	1.4	5.7	0.219	5.6	878	1.0
2965.4	0.393	52	0.230	2.8	608	0.972	5.7	0.420	4.3	695	0.709
2966.1	1.3	59	0.367	4.4	670	1.1	19	0.669	6.8	766	0.802
2966.8	0.712	50	0.485	5.3	506	0.394	10	0.884	8.1	578	0.287
2967.5	0.393	57	0.295	5.6	618	0.699	5.7	0.538	8.6	707	0.510
2968.2	0.393	60	0.602	6.6	656	0.154	5.7	1.1	10	750	0.112
2968.9	0.393	66	0.466	5.6	681	0.576	5.7	0.850	8.5	778	0.420
2969.6	0.474	51	0.145	4.0	557	0.885	6.8	0.264	6.1	637	0.646
2970.3	0.393	60	0.272	6.4	606	0.985	5.7	0.497	9.7	693	0.719
2971.0	0.393	61	0.308	6.0	548	1.0	5.7	0.562	9.3	626	0.746
2971.7	0.393	51	0.263	3.9	529	1.3	5.7	0.480	6.0	605	0.916
2972.4	0.487	54	0.525	5.5	519	0.455	7.0	0.958	8.4	593	0.332
2973.1	0.393	51	0.695	6.8	520	0.796	5.7	1.3	10	594	0.581
2973.8	0.728	63	0.394	5.4	620	0.844	11	0.719	8.3	709	0.616
2974.5	0.689	68	0.193	2.8	700	1.1	9.9	0.351	4.3	801	0.815
2975.2	0.608	65	0.596	6.5	583	1.3	8.8	1.1	9.9	667	0.943
2975.9	0.393	58	0.177	6.8	590	0.294	5.7	0.323	10	675	0.214
2976.6	0.393	56	0.432	1.9	518	0.169	5.7	0.788	2.8	593	0.123
2977.3	0.962	54	0.455	5.7	770	1.4	14	0.829	8.7	880	1.0
2978.0	0.393	70	0.416	4.0	710	0.987	5.7	0.760	6.1	812	0.720
2978.7	0.472	45	0.236	4.7	566	0.752	6.8	0.431	7.2	647	0.548
2979.4	0.393	64	0.317	8.7	537	0.574	5.7	0.579	13	614	0.418
2980.1	1.5	115	0.876	7.9	618	1.4	22	1.6	12	706	1.0
2980.8	0.393	79	0.506	10	541	0.649	5.7	0.922	15	619	0.474
2981.5	0.393	63	0.391	7.8	578	0.830	5.7	0.713	12	661	0.606
2982.2	0.522	61	0.547	4.2	716	0.784	7.5	0.997	6.5	819	0.572
2982.9	0.393	98	0.386	3.2	459	0.915	5.7	0.704	4.9	524	0.668
2983.6	0.890	92	0.947	4.2	570	0.824	13	1.7	6.4	652	0.602
2984.2	0.724	72	0.354	3.8	485	1.2	10	0.645	5.9	554	0.856
2984.9	0.414	69	0.503	7.3	439	0.589	6.0	0.918	11	502	0.430
2985.6	0.497	68	0.338	10	560	0.236	7.2	0.616	16	640	0.172
2986.3	0.393	81	0.742	5.7	552	0.799	5.7	1.4	8.8	632	0.583
2987.0	0.449	89	1.2	7.0	551	0.577	6.5	2.2	11	630	0.421
2987.7	0.393	65	0.347	6.4	549	1.3	5.7	0.632	9.9	628	0.914
2988.4	0.393	87	0.261	7.1	572	1.9	5.7	0.476	11	654	1.4
2989.1	0.393	70	0.442	8.8	491	0.469	5.7	0.805	13	561	0.342
2989.8	0.393	102	0.702	2.3	541	1.1	5.7	1.3	3.5	619	0.799
2990.5	0.537	74	0.653	8.9	539	1.5	7.8	1.2	14	616	1.1
2991.2	0.406	79	0.786	4.9	529	1.0	5.9	1.4	7.6	604	0.761
2991.9	0.393	78	0.649	8.8	393	0.003	5.7	1.2	13	450	0.002
2992.6	0.393	88	0.827	10.0	558	0.354	5.7	1.5	15	638	0.258
2993.3	0.393	107	0.941	5.0	698	1.2	5.7	1.7	7.6	798	0.881

Minnow Environmental
Sample ID: 017

Parameter	7Li	24Mg	55Mn	66Zn	88Sr	137Ba	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
DL (ppm)	0.393	0.403	0.079	0.702	0.005	0.003					
Length (µm)											
2994.0	0.393	95	1.0	5.5	617	0.311	5.7	1.8	8.4	706	0.227
2994.7	0.393	68	0.383	7.2	412	0.535	5.7	0.699	11	471	0.390
2995.4	1.0	82	0.385	6.9	570	0.003	15	0.702	11	652	0.002
2996.1	0.393	87	0.079	9.1	458	1.4	5.7	0.144	14	523	1.0
2996.8	0.571	122	0.857	9.4	459	0.367	8.2	1.6	14	525	0.268
2997.5	0.393	105	0.517	9.2	435	1.7	5.7	0.942	14	497	1.2
2998.2	0.393	77	0.364	5.1	432	0.370	5.7	0.663	7.7	494	0.270
2998.9	0.393	93	0.315	8.4	438	0.416	5.7	0.574	13	501	0.304
2999.6	0.393	110	1.7	12	422	1.4	5.7	3.1	19	483	1.0
3000.3	0.393	110	0.079	8.5	502	0.962	5.7	0.144	13	574	0.702
3001.0	0.393	67	0.743	8.1	287	0.318	5.7	1.4	12	328	0.232
3001.7	0.393	89	0.229	4.7	348	0.431	5.7	0.418	7.3	398	0.315
3002.4	0.393	113	2.5	10	515	0.689	5.7	4.6	16	589	0.503
3003.1	0.393	139	2.5	7.2	712	1.3	5.7	4.6	11	814	0.949
3003.8	0.393	101	1.7	7.4	427	4.0	5.7	3.1	11	488	2.9
3004.5	0.393	129	3.6	19	572	0.820	5.7	6.5	29	654	0.598

Minnow Environmental
Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
0.0	0.393	4489	145	4817	1422	0.003	5.7	265	7382	1626	0.002
0.7	0.393	818	8.1	0.702	1006	0.003	5.7	15	1.1	1151	0.002
1.4	8.1	127	1.3	28	325	7.1	117	2.4	42	371	5.1
2.1	0.393	224	2.2	26	642	0.003	5.7	4.0	39	734	0.002
2.8	7.4	272	0.708	25	982	4.3	107	1.3	39	1123	3.2
3.5	2.6	200	2.5	11	622	0.003	38	4.5	18	711	0.002
4.2	0.769	191	1.4	10	601	3.4	11	2.6	16	688	2.5
4.9	0.393	123	0.931	7.5	532	2.6	5.7	1.7	12	609	1.9
5.6	0.709	139	0.711	0.708	537	4.6	10	1.3	1.1	614	3.4
6.3	0.700	147	2.0	6.7	744	2.9	10	3.6	10	851	2.1
7.0	0.788	138	0.745	8.7	511	1.3	11	1.4	13	584	0.970
7.7	0.393	90	0.447	8.1	632	2.2	5.7	0.816	12	723	1.6
8.4	0.393	96	0.828	6.9	627	1.1	5.7	1.5	11	717	0.769
9.1	0.826	112	0.516	8.8	746	1.8	12	0.941	14	853	1.3
9.8	0.393	127	0.658	0.702	561	2.2	5.7	1.2	1.1	641	1.6
10.5	0.627	101	0.695	5.3	579	2.2	9.1	1.3	8.1	663	1.6
11.2	0.393	77	0.237	1.5	541	2.1	5.7	0.432	2.4	619	1.6
11.9	0.393	68	0.868	1.9	505	0.834	5.7	1.6	2.9	577	0.609
12.6	0.393	72	0.571	2.4	568	2.0	5.7	1.0	3.7	649	1.5
13.3	0.393	72	0.703	2.6	631	1.0	5.7	1.3	4.0	722	0.735
14.0	0.536	75	0.396	2.4	572	1.7	7.7	0.723	3.7	654	1.2
14.7	0.742	64	0.570	3.6	504	0.981	11	1.0	5.6	576	0.716
15.4	0.393	67	0.320	1.5	601	1.7	5.7	0.583	2.3	687	1.2
16.0	0.393	73	0.079	4.2	583	2.0	5.7	0.144	6.4	667	1.4
16.7	0.393	81	0.164	2.4	572	1.6	5.7	0.299	3.6	654	1.2
17.4	0.393	56	0.414	3.1	520	0.736	5.7	0.754	4.7	595	0.537
18.1	0.583	46	0.274	1.7	544	0.642	8.4	0.500	2.6	622	0.468
18.8	0.487	59	0.270	1.7	646	1.4	7.0	0.493	2.6	739	1.0
19.5	0.547	62	0.079	2.9	663	0.796	7.9	0.144	4.5	758	0.581
20.2	0.393	48	0.486	3.4	522	1.2	5.7	0.887	5.3	597	0.860
20.9	0.393	36	0.406	2.9	616	0.748	5.7	0.741	4.5	704	0.545
21.6	0.393	37	0.454	1.9	640	1.4	5.7	0.828	2.9	732	1.0
22.3	0.393	42	0.139	1.4	610	0.414	5.7	0.253	2.2	697	0.302
23.0	0.393	40	0.215	3.5	530	1.0	5.7	0.391	5.4	606	0.745
23.7	0.393	37	0.362	4.2	618	0.774	5.7	0.661	6.5	707	0.565
24.4	0.533	32	0.224	1.4	582	1.1	7.7	0.408	2.1	666	0.770
25.1	0.393	38	0.079	0.702	648	2.6	5.7	0.144	1.1	741	1.9
25.8	0.393	30	0.140	2.4	557	0.681	5.7	0.255	3.7	637	0.497
26.5	0.393	29	0.164	2.1	633	1.1	5.7	0.299	3.2	723	0.820
27.2	0.393	24	0.090	2.7	635	0.919	5.7	0.163	4.2	726	0.671
27.9	0.393	32	0.146	2.8	697	1.3	5.7	0.266	4.3	797	0.952
28.6	0.393	25	0.336	3.5	702	1.1	5.7	0.612	5.3	803	0.784
29.3	0.393	29	0.079	2.6	654	0.818	5.7	0.144	4.0	748	0.597
30.0	0.393	24	0.160	1.1	712	0.770	5.7	0.292	1.8	814	0.562
30.7	0.434	21	0.079	3.3	703	0.544	6.3	0.144	5.0	804	0.397
31.4	0.732	19	0.252	2.6	738	0.827	11	0.460	4.0	844	0.604
32.1	0.536	18	0.079	2.8	785	0.826	7.7	0.144	4.3	898	0.603
32.8	0.393	21	0.149	2.1	897	1.3	5.7	0.272	3.2	1025	0.972
33.5	0.393	19	0.079	2.7	826	1.3	5.7	0.144	4.2	945	0.951
34.2	0.562	17	0.236	2.6	840	0.743	8.1	0.431	4.0	961	0.542
34.9	0.689	15	0.079	1.7	900	1.1	9.9	0.144	2.7	1030	0.812
35.6	0.393	17	0.102	3.7	781	1.9	5.7	0.186	5.7	893	1.4
36.3	0.393	16	0.079	2.4	907	0.756	5.7	0.144	3.7	1038	0.551
37.0	0.393	15	0.174	3.5	992	1.1	5.7	0.317	5.3	1135	0.785
37.7	0.393	17	0.079	2.7	870	1.5	5.7	0.144	4.1	994	1.1
38.4	0.393	17	0.110	2.0	841	1.5	5.7	0.201	3.1	961	1.1
39.1	0.393	14	0.079	2.4	994	1.1	5.7	0.144	3.7	1137	0.792
39.8	0.393	17	0.163	3.8	893	0.874	5.7	0.298	5.9	1021	0.638
40.5	0.393	16	0.134	4.0	984	1.5	5.7	0.244	6.1	1125	1.1
41.2	0.568	15	0.112	3.8	895	1.0	8.2	0.204	5.8	1024	0.732
41.9	0.393	16	0.198	3.5	811	1.1	5.7	0.361	5.4	928	0.832
42.6	0.393	16	0.151	4.9	867	0.932	5.7	0.275	7.5	992	0.680
43.2	0.393	19	0.106	5.0	954	1.6	5.7	0.193	7.7	1090	1.2
43.9	0.393	17	0.187	5.9	881	2.1	5.7	0.340	9.1	1008	1.5
44.6	0.393	18	0.080	6.0	906	0.613	5.7	0.145	9.3	1036	0.447
45.3	0.393	18	0.197	5.2	807	1.5	5.7	0.359	8.0	923	1.1
46.0	0.393	16	0.454	5.4	1050	0.885	5.7	0.828	8.3	1201	0.646
46.7	0.393	19	0.178	7.5	947	1.3	5.7	0.325	12	1083	0.929
47.4	0.393	20	0.528	8.4	1037	2.4	5.7	0.962	13	1185	1.8
48.1	0.393	20	0.229	8.2	1053	2.3	5.7	0.417	13	1204	1.6
48.8	0.393	22	0.437	7.5	1170	3.3	5.7	0.797	11	1338	2.4
49.5	0.393	22	0.523	11	1113	2.1	5.7	0.954	16	1272	1.5
50.2	0.393	19	0.569	11	1185	3.0	5.7	1.0	18	1355	2.2
50.9	0.393	17	0.765	9.3	1315	3.5	5.7	1.4	14	1504	2.6
51.6	0.393	20	0.388	12	1267	2.7	5.7	0.708	18	1448	2.0
52.3	0.393	18	0.767	12	1342	1.9	5.7	1.4	19	1535	1.4
53.0	0.393	17	0.500	9.0	1464	3.2	5.7	0.911	14	1674	2.3
53.7	0.393	18	0.697	11	1471	3.0	5.7	1.3	16	1682	2.2
54.4	0.393	16	0.696	15	1689	3.9	5.7	1.3	23	1932	2.8
55.1	0.393	19	0.749	11	1443	2.4	5.7	1.4	17	1650	1.8
55.8	0.741	18	0.927	12	1732	3.1	11	1.7	18	1980	2.3

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Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
56.5	0.642	18	1.2	14	1814	3.6	9.3	2.1	21	2074	2.6
57.2	0.713	19	1.2	13	1970	3.9	10	2.2	20	2253	2.9
57.9	0.847	17	1.2	14	2005	4.4	12	2.2	21	2293	3.2
58.6	0.642	20	0.946	12	1801	3.1	9.3	1.7	18	2060	2.3
59.3	0.775	16	1.2	13	2118	2.8	11	2.2	20	2422	2.0
60.0	1.4	18	0.992	13	2106	3.2	20	1.8	20	2408	2.3
60.7	1.8	19	1.5	16	1889	4.2	26	2.8	25	2160	3.1
61.4	2.2	18	1.5	15	1936	2.8	32	2.7	24	2213	2.1
62.1	1.7	16	1.3	13	1928	3.1	25	2.4	20	2205	2.3
62.8	2.1	14	1.5	14	1944	3.4	30	2.8	21	2223	2.5
63.5	2.2	15	0.911	11	1738	2.1	31	1.7	17	1987	1.5
64.2	1.3	16	1.1	11	1888	3.5	18	2.0	17	2159	2.5
64.9	2.1	17	1.4	11	1711	3.1	30	2.6	16	1957	2.2
65.6	3.2	14	1.4	10	1706	2.7	46	2.6	15	1951	1.9
66.3	2.4	16	1.1	13	1573	2.4	35	1.9	20	1799	1.8
67.0	2.8	13	0.966	10	1591	2.1	41	1.8	15	1819	1.5
67.7	1.9	13	0.706	10	1416	2.3	27	1.3	16	1619	1.6
68.4	2.7	15	1.0	10	1636	3.0	40	1.9	16	1870	2.2
69.1	2.3	13	1.0	11	1516	1.8	34	1.9	17	1734	1.3
69.7	2.8	14	0.602	6.7	1211	1.9	41	1.1	10	1385	1.4
70.4	2.1	11	0.724	8.2	1201	2.1	30	1.3	13	1373	1.5
71.1	1.6	13	0.793	8.7	1138	2.0	23	1.4	13	1301	1.5
71.8	1.0	11	0.462	7.0	1042	2.0	15	0.842	11	1191	1.5
72.5	1.4	15	0.589	5.9	1123	1.6	21	1.1	9.0	1284	1.2
73.2	1.0	10	0.463	6.5	1010	0.903	15	0.844	9.9	1154	0.659
73.9	1.5	12	0.079	7.3	1048	1.6	22	0.144	11	1198	1.2
74.6	0.779	13	0.203	5.9	973	2.6	11	0.371	9.0	1113	1.9
75.3	0.552	15	0.142	5.4	956	2.1	8.0	0.260	8.3	1093	1.5
76.0	0.724	11	0.167	4.7	830	1.9	10	0.304	7.2	949	1.4
76.7	0.826	14	0.295	6.2	986	2.2	12	0.539	9.5	1128	1.6
77.4	0.774	12	0.178	4.3	939	0.636	11	0.325	6.6	1074	0.464
78.1	0.641	13	0.127	5.7	874	1.7	9.3	0.232	8.8	1000	1.2
78.8	1.0	13	0.103	4.7	945	1.2	15	0.187	7.2	1080	0.896
79.5	0.393	12	0.173	1.8	945	1.0	5.7	0.316	2.7	1081	0.752
80.2	0.393	14	0.107	2.9	853	1.2	5.7	0.195	4.5	975	0.856
80.9	0.393	15	0.085	4.7	943	0.655	5.7	0.155	7.3	1079	0.478
81.6	0.393	15	0.215	6.5	876	0.906	5.7	0.392	10.0	1002	0.661
82.3	0.542	16	0.201	6.4	1002	0.836	7.8	0.366	9.9	1146	0.610
83.0	0.590	13	0.293	6.0	896	1.1	8.5	0.535	9.3	1025	0.838
83.7	0.393	15	0.125	5.5	840	1.9	5.7	0.228	8.4	961	1.4
84.4	0.393	17	0.180	7.9	879	1.2	5.7	0.329	12	1005	0.861
85.1	0.393	16	0.118	4.5	840	0.862	5.7	0.215	7.0	960	0.629
85.8	0.393	19	0.240	8.4	898	1.0	5.7	0.437	13	1027	0.738
86.5	0.677	20	0.159	9.4	811	1.1	9.8	0.290	14	928	0.797
87.2	0.393	17	0.367	7.8	871	0.948	5.7	0.670	12	996	0.692
87.9	0.393	16	0.268	9.1	823	0.725	5.7	0.488	14	941	0.529
88.6	0.393	15	0.485	10	936	0.774	5.7	0.885	16	1070	0.564
89.3	0.439	15	0.309	12	880	2.0	6.3	0.564	19	1007	1.4
90.0	0.393	15	0.283	10	891	1.5	5.7	0.516	15	1019	1.1
90.7	0.496	15	0.602	16	867	1.7	7.2	1.1	24	991	1.3
91.4	0.393	18	0.544	13	963	0.786	5.7	0.991	21	1101	0.573
92.1	0.393	15	0.371	15	933	2.0	5.7	0.677	23	1067	1.5
92.8	0.393	16	0.583	16	1022	1.9	5.7	1.1	25	1169	1.4
93.5	0.393	17	0.638	13	1078	1.1	5.7	1.2	20	1233	0.779
94.2	0.453	17	0.628	16	1011	1.4	6.5	1.1	25	1156	0.996
94.9	0.393	17	0.401	12	996	2.2	5.7	0.731	19	1139	1.6
95.5	0.393	19	0.797	20	1305	1.7	5.7	1.5	31	1492	1.2
96.2	0.393	19	0.972	14	1235	1.7	5.7	1.8	22	1412	1.3
96.9	0.393	19	0.790	21	1472	3.0	5.7	1.4	33	1683	2.2
97.6	0.393	21	1.1	18	1800	1.8	5.7	2.0	27	2058	1.3
98.3	0.393	22	0.928	24	1392	2.1	5.7	1.7	37	1592	1.5
99.0	0.619	20	0.863	19	1837	1.7	8.9	1.6	30	2101	1.2
99.7	0.393	18	1.5	20	1733	1.9	5.7	2.7	31	1981	1.4
100.4	1.2	18	1.7	22	1870	2.5	17	3.1	33	2139	1.8
101.1	0.817	20	1.5	26	1793	1.2	12	2.7	39	2050	0.866
101.8	0.987	20	1.5	30	1885	1.5	14	2.7	46	2156	1.1
102.5	0.943	16	1.6	26	2088	1.8	14	2.9	40	2388	1.3
103.2	0.851	22	1.9	28	1707	2.6	12	3.4	43	1952	1.9
103.9	0.744	22	1.8	29	1937	1.7	11	3.3	44	2214	1.3
104.6	1.6	18	2.4	33	1914	3.0	23	4.4	50	2189	2.2
105.3	1.1	20	1.4	29	1888	1.9	15	2.5	44	2159	1.4
106.0	1.4	20	2.6	31	2319	2.8	20	4.7	47	2651	2.0
106.7	1.2	22	2.8	26	1935	2.2	18	5.0	39	2213	1.6
107.4	1.1	19	2.9	33	2056	2.2	16	5.3	50	2352	1.6
108.1	0.695	20	2.8	32	2041	2.5	10	5.1	50	2334	1.8
108.8	2.8	20	2.1	30	1909	3.2	40	3.9	46	2183	2.3
109.5	2.3	25	2.8	30	2079	2.3	33	5.1	46	2377	1.7
110.2	1.8	20	2.8	33	1946	1.8	26	5.0	51	2226	1.3
110.9	2.7	17	3.0	27	1777	1.6	39	5.4	41	2031	1.2
111.6	2.8	17	2.9	31	1897	2.0	41	5.4	47	2169	1.5
112.3	2.5	20	3.6	35	2218	3.7	36	6.6	53	2536	2.7

Minnow Environmental
Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
113.0	3.7	18	3.3	33	1828	2.7	53	6.1	51	2090	2.0
113.7	2.0	17	3.3	29	1619	3.4	29	6.0	44	1851	2.5
114.4	3.0	16	3.2	30	1646	2.7	44	5.9	46	1882	2.0
115.1	2.9	15	3.8	25	1915	2.2	42	6.9	38	2190	1.6
115.8	4.2	16	3.2	27	1781	3.5	60	5.8	42	2037	2.6
116.5	3.8	18	2.9	26	1654	3.1	55	5.3	40	1891	2.3
117.2	3.9	14	3.2	23	1644	2.3	56	5.9	35	1880	1.7
117.9	4.0	16	2.8	26	1592	1.7	58	5.2	39	1820	1.2
118.6	4.3	15	2.6	23	1494	1.3	62	4.8	36	1708	0.916
119.3	4.6	13	3.0	22	1461	2.8	67	5.5	34	1671	2.1
120.0	4.5	14	2.6	23	1473	2.4	66	4.7	36	1685	1.8
120.7	4.9	15	2.2	19	1463	4.2	71	3.9	29	1673	3.1
121.4	5.0	12	2.3	16	1424	2.8	72	4.2	25	1629	2.0
122.0	3.3	11	2.4	17	1224	3.0	48	4.4	26	1399	2.2
122.7	3.5	13	2.2	17	1122	2.5	51	4.0	27	1283	1.8
123.4	3.9	17	1.9	16	1299	3.0	56	3.4	24	1485	2.2
124.1	5.3	13	1.4	13	1061	2.1	76	2.6	20	1214	1.5
124.8	4.1	12	1.3	14	1199	3.0	59	2.4	22	1371	2.2
125.5	4.6	14	1.4	13	1142	2.6	66	2.6	20	1305	1.9
126.2	3.0	11	0.885	11	1060	2.2	43	1.6	17	1212	1.6
126.9	3.3	12	1.1	13	1133	2.2	47	2.1	20	1296	1.6
127.6	4.2	14	1.2	17	1097	2.5	61	2.2	26	1255	1.9
128.3	3.2	11	0.924	11	919	2.1	46	1.7	17	1050	1.5
129.0	2.9	12	0.886	11	898	1.6	42	1.6	17	1026	1.2
129.7	2.4	12	0.525	12	833	3.2	35	0.958	19	952	2.3
130.4	2.6	13	0.614	8.6	950	1.6	38	1.1	13	1086	1.1
131.1	2.3	14	0.373	8.6	899	1.6	33	0.680	13	1028	1.2
131.8	0.998	13	0.628	11	990	1.7	14	1.1	17	1132	1.2
132.5	1.2	15	0.387	9.3	924	1.4	18	0.705	14	1057	1.1
133.2	0.880	13	0.337	8.9	979	1.6	13	0.614	14	1119	1.1
133.9	1.7	14	0.327	8.2	926	1.5	24	0.596	12	1059	1.1
134.6	1.1	13	0.175	10.0	954	1.3	16	0.319	15	1091	0.963
135.3	1.4	16	0.372	11	874	1.8	20	0.678	16	999	1.3
136.0	0.754	13	0.397	11	939	1.9	11	0.724	17	1073	1.4
136.7	0.670	17	0.334	7.3	922	1.8	9.7	0.608	11	1055	1.3
137.4	0.730	18	0.251	8.8	866	1.2	11	0.458	14	990	0.859
138.1	0.562	16	0.403	12	920	1.2	8.1	0.736	19	1052	0.903
138.8	0.393	16	0.504	9.6	959	2.3	5.7	0.918	15	1097	1.7
139.5	0.675	16	0.768	12	867	1.9	9.7	1.4	18	992	1.4
140.2	0.601	18	0.581	14	951	2.3	8.7	1.1	22	1087	1.6
140.9	0.603	18	0.433	11	967	1.9	8.7	0.791	17	1106	1.4
141.6	0.393	20	0.528	13	1127	2.4	5.7	0.962	19	1288	1.8
142.3	1.3	18	0.724	11	1196	2.4	18	1.3	16	1367	1.7
143.0	0.574	20	0.641	14	1030	2.1	8.3	1.2	21	1178	1.6
143.7	0.393	18	0.974	18	1238	2.6	5.7	1.8	28	1415	1.9
144.4	0.550	19	0.696	17	1133	1.3	7.9	1.3	26	1296	0.972
145.1	0.393	18	0.933	19	1352	2.7	5.7	1.7	29	1546	2.0
145.8	0.430	20	0.748	18	1211	2.6	6.2	1.4	28	1385	1.9
146.5	0.393	18	0.569	17	1336	1.8	5.7	1.0	25	1528	1.3
147.2	0.440	19	1.1	18	1564	4.0	6.3	2.1	27	1788	2.9
147.9	0.662	19	0.859	19	1541	4.1	9.6	1.6	29	1763	3.0
148.5	0.480	17	0.679	20	1425	3.2	6.9	1.2	30	1630	2.3
149.2	0.393	20	0.996	20	1318	2.9	5.7	1.8	30	1507	2.1
149.9	0.412	18	1.1	22	1506	3.4	5.9	1.9	33	1722	2.4
150.6	0.617	18	1.1	21	1344	3.9	8.9	2.1	33	1537	2.9
151.3	0.393	20	1.2	19	1404	4.3	5.7	2.2	30	1605	3.2
152.0	0.393	17	1.2	23	1530	2.6	5.7	2.3	36	1750	1.9
152.7	1.1	22	0.910	22	1473	3.2	17	1.7	34	1684	2.3
153.4	0.785	18	0.739	21	1371	3.7	11	1.3	33	1568	2.7
154.1	1.2	17	1.1	23	1524	2.6	17	2.1	36	1743	1.9
154.8	0.936	19	1.1	21	1357	3.2	14	2.0	32	1552	2.4
155.5	0.393	17	0.680	19	1318	2.7	5.7	1.2	29	1507	2.0
156.2	0.605	16	0.789	21	1460	1.8	8.7	1.4	33	1669	1.3
156.9	0.554	18	1.0	24	1397	1.8	8.0	1.8	37	1597	1.3
157.6	0.445	17	0.717	25	1501	1.9	6.4	1.3	38	1717	1.4
158.3	0.892	17	0.753	23	1489	2.1	13	1.4	35	1703	1.5
159.0	1.0	18	1.3	20	1301	2.2	15	2.3	31	1488	1.6
159.7	1.1	15	1.4	20	1258	1.8	16	2.5	30	1439	1.3
160.4	0.669	16	0.761	20	1301	2.4	9.7	1.4	31	1487	1.7
161.1	0.466	15	0.619	24	1339	2.7	6.7	1.1	37	1532	2.0
161.8	0.743	14	0.856	22	1296	3.0	11	1.6	34	1482	2.2
162.5	0.544	18	0.661	19	1225	2.7	7.8	1.2	29	1401	1.9
163.2	1.1	17	0.884	22	1211	2.3	16	1.6	33	1385	1.7
163.9	1.5	15	0.778	18	1297	2.1	21	1.4	28	1483	1.5
164.6	1.1	14	0.796	18	1270	2.6	16	1.5	27	1452	1.9
165.3	0.456	14	0.579	15	1174	2.5	6.6	1.1	23	1342	1.8
166.0	0.393	15	0.667	14	1029	2.5	5.7	1.2	21	1177	1.8
166.7	0.393	15	0.529	16	1114	3.2	5.7	0.965	25	1274	2.3
167.4	0.492	15	0.542	15	1195	3.5	7.1	0.988	24	1367	2.5
168.1	1.0	16	0.369	21	1191	2.7	15	0.673	32	1362	1.9
168.8	0.393	14	0.545	15	1023	2.3	5.7	0.995	23	1170	1.6

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
169.5	0.393	15	0.284	16	1064	2.0	5.7	0.518	25	1216	1.5
170.2	0.393	13	0.354	14	1108	2.1	5.7	0.646	21	1267	1.5
170.9	0.393	13	0.232	12	933	1.5	5.7	0.424	19	1067	1.1
171.6	0.393	14	0.409	18	1183	1.3	5.7	0.747	27	1353	0.916
172.3	0.393	14	0.316	13	1042	2.0	5.7	0.576	20	1191	1.5
173.0	0.393	14	0.366	8.2	1107	2.3	5.7	0.667	13	1266	1.7
173.7	0.725	11	0.253	8.9	941	1.9	10	0.462	14	1076	1.4
174.3	0.546	13	0.338	9.7	1017	2.0	7.9	0.616	15	1162	1.5
175.0	0.393	11	0.418	8.9	1050	1.1	5.7	0.763	14	1201	0.822
175.7	1.3	12	0.663	7.4	1135	2.2	18	1.2	11	1298	1.6
176.4	0.393	12	0.265	9.3	1109	2.1	5.7	0.484	14	1268	1.6
177.1	0.393	13	0.392	10.0	1141	1.9	5.7	0.716	15	1305	1.4
177.8	0.595	13	0.296	6.2	968	1.6	8.6	0.540	9.6	1107	1.2
178.5	0.393	12	0.134	8.6	1124	2.0	5.7	0.244	13	1286	1.4
179.2	0.760	12	0.367	8.5	1009	1.5	11	0.670	13	1153	1.1
179.9	0.393	14	0.252	12	1124	1.5	5.7	0.460	19	1285	1.1
180.6	0.518	15	0.346	8.1	1028	1.1	7.5	0.631	12	1175	0.832
181.3	0.393	16	0.266	14	1109	2.5	5.7	0.485	21	1268	1.8
182.0	0.393	12	0.516	11	1069	1.3	5.7	0.941	17	1223	0.933
182.7	0.488	14	0.181	13	982	1.5	7.0	0.330	20	1122	1.1
183.4	0.393	18	0.432	9.4	954	1.3	5.7	0.788	14	1091	0.960
184.1	0.393	16	0.353	12	1045	1.4	5.7	0.644	18	1195	1.0
184.8	0.393	18	0.590	13	1016	2.7	5.7	1.1	20	1162	2.0
185.5	0.393	18	0.365	16	1001	1.3	5.7	0.665	25	1145	0.947
186.2	0.488	19	0.427	18	1020	2.0	7.0	0.779	27	1167	1.4
186.9	0.393	18	0.587	15	1022	1.5	5.7	1.1	23	1169	1.1
187.6	0.393	23	0.545	18	1018	2.5	5.7	0.993	28	1164	1.8
188.3	0.393	19	0.432	13	985	1.0	5.7	0.789	20	1126	0.758
189.0	0.393	21	0.440	16	1004	2.3	5.7	0.803	25	1148	1.7
189.7	0.393	23	0.791	16	891	2.8	5.7	1.4	25	1019	2.1
190.4	0.393	22	0.478	19	923	1.2	5.7	0.871	29	1056	0.906
191.1	0.393	19	0.619	20	1022	1.2	5.7	1.1	30	1169	0.865
191.8	0.393	23	0.673	22	981	3.6	5.7	1.2	33	1122	2.6
192.5	0.393	23	0.718	20	1079	2.9	5.7	1.3	30	1234	2.1
193.2	0.393	24	0.902	23	1017	2.6	5.7	1.6	36	1163	1.9
193.9	0.393	23	0.955	27	1095	2.2	5.7	1.7	42	1252	1.6
194.6	0.393	24	0.892	24	1043	2.9	5.7	1.6	37	1192	2.1
195.3	0.393	18	0.970	23	1023	1.6	5.7	1.8	35	1169	1.2
196.0	0.393	19	0.887	25	1226	3.5	5.7	1.6	38	1402	2.6
196.7	0.495	23	1.4	26	1200	3.5	7.1	2.5	40	1372	2.5
197.4	0.393	23	1.3	26	1205	1.4	5.7	2.4	40	1378	1.1
198.1	0.393	19	1.7	26	1195	2.3	5.7	3.1	40	1367	1.7
198.8	0.393	22	1.9	26	1285	3.4	5.7	3.6	40	1470	2.4
199.5	0.410	23	1.9	25	1234	2.3	5.9	3.5	39	1411	1.6
200.2	0.477	23	2.3	31	1564	1.9	6.9	4.3	48	1788	1.4
200.9	0.393	19	2.4	33	1596	1.8	5.7	4.4	51	1825	1.3
201.5	0.854	21	1.8	30	1408	2.9	12	3.4	47	1610	2.1
202.2	0.393	25	2.6	29	1519	1.9	5.7	4.7	44	1737	1.4
202.9	0.911	23	2.9	30	1370	2.5	13	5.2	45	1567	1.8
203.6	1.0	18	2.6	34	1667	3.8	15	4.7	52	1907	2.8
204.3	0.417	20	2.4	31	1523	1.5	6.0	4.4	47	1742	1.1
205.0	0.514	18	3.1	28	1643	2.7	7.4	5.6	43	1878	2.0
205.7	0.551	23	3.5	41	1918	2.7	8.0	6.5	62	2193	1.9
206.4	0.393	21	3.6	36	1817	4.2	5.7	6.5	56	2078	3.1
207.1	0.541	19	3.7	38	1740	2.3	7.8	6.7	58	1990	1.7
207.8	0.467	23	3.6	56	1760	3.3	6.7	6.6	85	2013	2.4
208.5	0.848	18	3.1	34	1539	2.3	12	5.7	51	1760	1.7
209.2	0.733	21	3.6	36	1950	2.4	11	6.6	56	2229	1.7
209.9	1.1	23	5.0	38	1896	2.6	16	9.0	58	2168	1.9
210.6	1.1	22	4.2	46	2038	2.8	16	7.6	71	2331	2.1
211.3	1.4	22	5.2	38	2155	2.4	21	9.5	58	2465	1.7
212.0	1.6	21	4.0	45	2003	3.0	23	7.3	68	2291	2.2
212.7	1.5	21	3.7	47	2167	2.6	22	6.7	73	2478	1.9
213.4	2.3	19	5.2	47	2334	3.1	34	9.4	71	2670	2.3
214.1	2.6	20	4.6	45	2185	2.7	38	8.3	69	2498	2.0
214.8	1.5	22	4.6	48	2213	3.5	22	8.4	73	2531	2.5
215.5	2.6	23	4.6	46	2198	2.6	38	8.4	70	2513	1.9
216.2	2.8	24	5.4	50	2224	3.1	40	9.9	76	2543	2.2
216.9	2.5	19	5.1	37	2038	2.7	36	9.4	57	2331	2.0
217.6	2.4	18	4.9	44	2224	3.2	34	8.9	67	2543	2.3
218.3	2.1	19	4.8	48	2135	3.2	31	8.8	73	2441	2.3
219.0	3.2	20	4.7	45	2352	2.9	46	8.6	69	2690	2.1
219.7	2.8	20	4.9	52	2123	4.7	40	9.0	80	2428	3.4
220.4	3.0	19	4.1	50	2221	2.8	44	7.5	77	2540	2.0
221.1	2.4	22	5.1	48	2308	3.9	35	9.4	73	2639	2.9
221.8	3.4	17	4.5	43	2095	4.3	49	8.3	66	2395	3.1
222.5	3.2	20	4.3	44	2335	2.6	46	7.9	68	2670	1.9
223.2	4.1	15	3.9	46	2189	2.7	59	7.1	70	2503	1.9
223.9	3.2	18	3.8	43	1995	2.6	46	7.0	66	2282	1.9
224.6	3.6	18	3.9	35	1986	2.5	51	7.0	53	2271	1.8
225.3	3.7	16	3.3	31	1805	3.2	54	5.9	48	2064	2.3

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Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
226.0	4.6	19	3.6	36	1883	3.2	66	6.7	56	2153	2.3
226.7	2.9	15	4.1	37	1754	2.8	42	7.5	57	2006	2.0
227.4	4.1	17	3.2	29	1777	3.5	59	5.9	45	2032	2.6
228.0	4.3	15	3.8	29	1644	3.2	62	7.0	45	1880	2.3
228.7	6.6	16	3.3	27	1578	3.8	96	6.0	42	1805	2.8
229.4	5.0	16	3.3	28	1498	3.3	72	6.0	43	1713	2.4
230.1	3.7	14	2.9	26	1544	3.1	54	5.3	39	1766	2.3
230.8	4.3	14	3.2	23	1372	3.6	62	5.8	35	1569	2.6
231.5	4.5	13	2.7	22	1381	2.9	65	4.9	33	1579	2.1
232.2	4.2	14	2.3	21	1351	3.7	60	4.3	33	1545	2.7
232.9	3.9	12	2.4	20	1238	3.3	57	4.4	30	1415	2.4
233.6	5.4	15	2.2	20	1240	3.0	79	4.0	30	1417	2.2
234.3	4.2	13	1.7	15	982	2.2	60	3.1	23	1123	1.6
235.0	4.1	12	1.5	14	1133	2.6	59	2.8	21	1296	1.9
235.7	2.6	12	1.3	15	947	2.4	38	2.4	23	1083	1.8
236.4	3.4	11	1.0	10	1027	2.1	49	1.9	15	1175	1.6
237.1	2.8	11	1.3	12	982	3.0	40	2.3	18	1123	2.2
237.8	1.8	11	0.811	13	991	2.7	26	1.5	19	1133	2.0
238.5	2.2	13	0.636	11	1023	1.7	31	1.2	16	1170	1.2
239.2	1.2	11	0.718	11	1087	1.3	18	1.3	17	1242	0.949
239.9	2.1	10	0.445	11	1087	2.2	31	0.812	17	1244	1.6
240.6	1.7	8.3	0.439	8.1	992	2.7	24	0.801	12	1134	2.0
241.3	1.5	9.2	0.721	7.4	1069	1.1	22	1.3	11	1223	0.819
242.0	0.919	11	0.297	7.1	1121	2.0	13	0.542	11	1282	1.5
242.7	1.3	11	0.666	8.9	1089	2.1	19	1.2	14	1246	1.5
243.4	1.2	11	0.427	11	1055	1.4	17	0.779	17	1207	1.0
244.1	0.592	11	0.300	10	1124	1.6	8.5	0.548	16	1285	1.2
244.8	0.945	13	0.214	9.0	1055	1.9	14	0.391	14	1207	1.4
245.5	0.941	13	0.295	7.5	1020	1.2	14	0.538	11	1166	0.843
246.2	1.2	12	0.203	9.4	1166	2.3	18	0.371	14	1333	1.7
246.9	1.4	18	0.811	13	1154	3.2	20	1.5	20	1319	2.3
247.6	0.608	18	0.453	12	1177	2.3	8.8	0.825	18	1346	1.6
248.3	0.648	23	0.508	11	1089	3.0	9.4	0.927	16	1245	2.2
249.0	0.569	18	0.510	12	1090	3.2	8.2	0.931	18	1246	2.4
249.7	0.903	20	0.374	15	1031	2.3	13	0.683	23	1178	1.7
250.4	0.417	20	0.578	15	1086	3.1	6.0	1.1	23	1242	2.3
251.1	0.550	21	0.472	17	991	2.3	7.9	0.861	26	1134	1.7
251.8	0.393	19	0.321	18	922	1.8	5.7	0.585	28	1054	1.3
252.5	0.393	22	0.365	18	1018	2.5	5.7	0.665	28	1165	1.8
253.2	0.420	18	0.469	20	865	2.4	6.1	0.855	31	989	1.8
253.8	0.393	22	0.477	22	1057	2.2	5.7	0.870	33	1209	1.6
254.5	0.741	23	0.606	24	1133	1.9	11	1.1	37	1295	1.4
255.2	0.634	19	0.611	21	1047	2.6	9.2	1.1	33	1197	1.9
255.9	0.393	22	0.711	24	1120	2.4	5.7	1.3	37	1281	1.8
256.6	0.393	20	0.886	26	1100	2.5	5.7	1.6	40	1258	1.9
257.3	0.634	21	0.703	20	1077	2.8	9.1	1.3	31	1231	2.0
258.0	0.393	20	0.734	27	1105	3.5	5.7	1.3	42	1264	2.6
258.7	0.393	21	1.2	28	1239	2.2	5.7	2.3	42	1417	1.6
259.4	0.393	20	1.2	21	1151	4.0	5.7	2.2	33	1316	2.9
260.1	0.527	19	1.2	28	1232	2.4	7.6	2.2	42	1408	1.8
260.8	0.393	16	0.539	24	1160	2.1	5.7	0.984	38	1326	1.5
261.5	0.393	18	0.791	28	1285	3.5	5.7	1.4	44	1469	2.5
262.2	0.586	14	1.1	26	1196	2.7	8.5	2.1	39	1367	2.0
262.9	0.393	17	0.953	30	1339	2.1	5.7	1.7	46	1531	1.6
263.6	0.393	17	1.4	25	1290	1.5	5.7	2.5	39	1475	1.1
264.3	0.393	15	1.2	29	1405	1.8	5.7	2.3	44	1606	1.3
265.0	0.478	18	1.9	33	1651	2.0	6.9	3.5	51	1888	1.5
265.7	0.393	17	1.6	35	1435	2.3	5.7	2.9	53	1641	1.7
266.4	0.423	15	1.8	31	1461	2.0	6.1	3.3	48	1671	1.5
267.1	0.393	18	1.3	33	1484	2.5	5.7	2.4	50	1697	1.8
267.8	1.1	15	1.1	35	1716	1.8	16	2.0	53	1963	1.3
268.5	0.527	15	2.4	34	1708	2.1	7.6	4.3	52	1954	1.5
269.2	0.419	17	2.0	34	1768	1.3	6.0	3.7	52	2022	0.978
269.9	0.590	15	2.4	33	1821	1.0	8.5	4.3	51	2082	0.761
270.6	0.393	15	2.4	36	1962	2.8	5.7	4.4	56	2244	2.1
271.3	0.931	20	2.6	41	2067	1.5	13	4.7	62	2363	1.1
272.0	0.741	19	2.6	39	1990	1.3	11	4.7	60	2276	0.960
272.7	1.0	21	2.2	37	1928	1.1	15	4.0	57	2205	0.819
273.4	0.693	22	3.0	38	2170	1.7	10	5.4	58	2482	1.3
274.1	0.455	22	2.0	39	1855	1.7	6.6	3.6	60	2121	1.2
274.8	0.801	23	2.9	43	2065	1.8	12	5.4	66	2362	1.3
275.5	0.486	19	3.0	43	2029	1.3	7.0	5.4	65	2321	0.978
276.2	0.832	18	3.2	37	1932	2.1	12	5.8	57	2209	1.5
276.9	0.965	21	2.8	43	2068	1.8	14	5.1	65	2365	1.3
277.6	0.393	22	3.1	38	2173	2.2	5.7	5.7	58	2485	1.6
278.3	0.722	26	3.7	41	2226	1.5	10	6.8	62	2545	1.1
279.0	0.641	25	3.9	42	2191	1.1	9.3	7.2	64	2505	0.829
279.7	0.935	22	3.6	41	2015	1.2	14	6.6	63	2304	0.869
280.3	0.749	17	3.5	51	2109	1.8	11	6.4	78	2412	1.3
281.0	0.611	20	3.7	45	2043	1.8	8.8	6.8	68	2336	1.3
281.7	0.789	19	3.9	44	2167	1.9	11	7.1	67	2478	1.4

Minnow Environmental
Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
282.4	0.624	23	3.0	41	2128	2.2	9.0	5.4	63	2433	1.6
283.1	1.1	20	2.8	43	1925	1.1	16	5.1	65	2201	0.789
283.8	1.4	23	2.8	41	2021	1.2	21	5.1	63	2311	0.907
284.5	1.3	23	3.3	49	2033	1.1	18	6.0	75	2325	0.833
285.2	0.858	19	3.1	46	2333	1.4	12	5.7	70	2667	1.0
285.9	1.5	20	2.2	57	2478	1.4	21	4.1	87	2833	1.0
286.6	1.6	21	2.2	46	1938	1.5	24	4.0	71	2216	1.1
287.3	1.1	25	2.7	47	2012	1.5	16	4.9	72	2301	1.1
288.0	1.3	19	1.9	52	2252	2.4	19	3.5	80	2575	1.7
288.7	1.2	25	2.1	51	2258	1.8	18	3.9	77	2582	1.3
289.4	2.1	22	1.5	49	2176	2.3	30	2.8	75	2488	1.7
290.1	1.4	18	1.9	54	2151	1.4	20	3.5	83	2460	1.0
290.8	2.8	21	1.9	60	2390	2.4	40	3.5	92	2734	1.8
291.5	3.1	23	1.8	55	2251	2.0	45	3.2	85	2574	1.5
292.2	3.0	22	2.1	62	2356	1.6	43	3.8	95	2694	1.2
292.9	2.4	18	2.2	50	2209	1.4	35	4.0	77	2526	0.997
293.6	2.3	20	1.2	50	2348	1.9	33	2.2	76	2685	1.4
294.3	2.4	16	2.0	57	2449	1.9	35	3.6	88	2800	1.4
295.0	3.9	18	2.0	62	2346	2.1	56	3.7	95	2682	1.6
295.7	3.0	20	2.3	52	2321	2.0	43	4.1	80	2654	1.4
296.4	2.3	21	2.0	51	2406	1.4	33	3.6	78	2752	1.0
297.1	2.2	20	1.4	52	1830	2.0	31	2.6	80	2092	1.5
297.8	4.2	17	1.9	48	1832	1.2	60	3.4	74	2095	0.879
298.5	4.4	16	1.5	45	1778	1.4	63	2.8	69	2034	0.992
299.2	3.7	20	1.8	51	1806	2.1	54	3.3	78	2065	1.5
299.9	2.3	15	1.4	52	1679	1.5	34	2.6	80	1920	1.1
300.6	3.7	16	1.8	48	1476	2.3	53	3.2	74	1688	1.7
301.3	3.8	18	1.3	46	1483	1.4	55	2.3	71	1696	1.0
302.0	4.0	18	1.6	48	1513	1.3	58	2.9	73	1730	0.939
302.7	4.0	17	1.8	51	1406	1.5	58	3.4	78	1608	1.1
303.4	3.0	17	1.6	42	1223	0.756	43	3.0	64	1399	0.552
304.1	4.5	19	1.3	37	1104	0.632	65	2.3	56	1263	0.461
304.8	2.9	15	1.6	39	1083	2.7	42	2.9	59	1238	1.9
305.5	2.6	17	1.5	33	881	1.1	37	2.8	51	1007	0.812
306.2	2.6	16	1.2	34	745	1.4	38	2.3	52	852	1.0
306.8	3.1	15	1.1	34	688	1.3	44	2.0	52	787	0.962
307.5	2.4	15	1.1	37	758	1.8	34	2.0	56	867	1.3
308.2	3.2	17	1.0	41	796	1.2	47	1.8	63	910	0.853
308.9	0.951	14	1.3	29	675	1.6	14	2.4	44	772	1.2
309.6	1.7	14	1.0	29	619	1.9	25	1.9	44	708	1.4
310.3	1.3	13	1.1	31	600	1.5	19	2.0	47	687	1.1
311.0	1.5	11	1.4	31	606	1.4	21	2.6	47	693	1.0
311.7	0.838	11	1.5	25	502	2.5	12	2.7	38	574	1.8
312.4	1.3	12	1.4	30	495	2.0	19	2.5	47	566	1.4
313.1	1.7	13	1.6	24	484	0.927	24	2.9	36	553	0.676
313.8	1.3	13	1.7	25	445	1.8	19	3.1	38	508	1.3
314.5	1.3	12	0.798	30	444	2.0	19	1.5	46	507	1.5
315.2	0.964	14	0.877	28	404	3.0	14	1.6	43	462	2.2
315.9	0.962	14	1.1	27	422	2.6	14	2.1	41	482	1.9
316.6	0.663	14	0.860	26	411	2.2	9.6	1.6	40	470	1.6
317.3	0.722	14	0.933	20	338	2.6	10	1.7	30	387	1.9
318.0	0.393	15	0.895	17	347	2.4	5.7	1.6	26	396	1.7
318.7	0.718	13	1.0	21	359	2.4	10	1.9	32	411	1.8
319.4	0.634	11	1.0	18	350	1.4	9.1	1.9	27	401	0.999
320.1	0.842	12	0.491	16	381	2.4	12	0.896	25	436	1.7
320.8	0.436	10	0.471	21	338	1.6	6.3	0.859	32	386	1.2
321.5	0.455	13	0.760	19	302	1.5	6.6	1.4	29	345	1.1
322.2	0.393	13	0.668	18	336	2.1	5.7	1.2	27	384	1.6
322.9	0.393	12	0.583	9.6	270	1.8	5.7	1.1	15	309	1.3
323.6	0.554	12	0.477	12	276	1.1	8.0	0.871	19	316	0.794
324.3	0.393	14	0.678	9.3	276	2.7	5.7	1.2	14	316	2.0
325.0	0.393	12	0.474	13	262	2.4	5.7	0.864	20	300	1.8
325.7	0.393	13	0.403	13	321	2.8	5.7	0.735	20	367	2.0
326.4	1.000	13	0.243	12	304	1.1	14	0.443	18	348	0.836
327.1	0.393	11	0.512	12	310	2.8	5.7	0.934	19	355	2.0
327.8	0.976	13	0.321	13	269	3.5	14	0.586	21	308	2.5
328.5	0.412	12	0.499	12	293	2.4	5.9	0.911	19	335	1.7
329.2	0.874	11	0.288	10	237	0.779	13	0.524	16	271	0.568
329.9	0.818	13	0.395	14	308	2.3	12	0.721	21	352	1.7
330.6	0.707	12	0.437	9.4	258	1.9	10	0.797	14	295	1.4
331.3	0.631	14	0.432	13	269	3.1	9.1	0.788	20	308	2.3
332.0	0.393	15	0.339	13	253	1.6	5.7	0.619	20	290	1.1
332.6	0.640	15	0.439	12	294	3.1	9.2	0.800	18	337	2.3
333.3	0.393	12	0.188	12	244	3.0	5.7	0.343	18	280	2.2
334.0	0.437	13	0.457	10	229	1.5	6.3	0.833	15	262	1.1
334.7	0.563	10	0.685	14	252	3.2	8.1	1.2	21	288	2.4
335.4	0.672	15	0.522	18	250	3.8	9.7	0.953	28	285	2.8
336.1	0.426	13	0.264	15	240	2.1	6.1	0.482	24	275	1.5
336.8	0.678	13	0.392	17	245	3.4	9.8	0.715	26	280	2.5
337.5	0.476	14	0.497	14	259	3.7	6.9	0.907	21	296	2.7
338.2	0.393	15	0.096	14	241	1.9	5.7	0.176	22	276	1.4

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Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
338.9	0.393	15	0.560	16	246	3.3	5.7	1.0	25	281	2.4
339.6	0.551	13	0.451	17	258	2.4	8.0	0.822	26	296	1.8
340.3	0.393	12	0.357	16	235	3.0	5.7	0.651	25	269	2.2
341.0	0.428	12	0.716	12	264	1.5	6.2	1.3	19	301	1.1
341.7	0.398	16	0.587	20	234	3.5	5.7	1.1	31	267	2.5
342.4	0.393	14	0.333	19	236	1.5	5.7	0.607	29	270	1.1
343.1	0.393	14	0.445	17	237	2.1	5.7	0.812	26	271	1.6
343.8	0.489	12	0.538	22	238	2.2	7.1	0.982	33	273	1.6
344.5	0.400	14	0.406	21	222	2.6	5.8	0.741	32	253	1.9
345.2	0.393	12	0.227	20	219	1.3	5.7	0.414	31	250	0.931
345.9	0.393	13	0.405	18	234	2.0	5.7	0.738	27	268	1.4
346.6	0.393	14	0.615	25	295	1.6	5.7	1.1	38	337	1.2
347.3	0.393	16	0.383	23	250	1.2	5.7	0.698	35	286	0.857
348.0	0.393	13	0.604	24	232	1.6	5.7	1.1	37	265	1.1
348.7	0.393	13	0.397	23	251	1.5	5.7	0.725	36	287	1.1
349.4	0.393	12	0.388	26	247	1.5	5.7	0.707	41	282	1.1
350.1	0.393	12	0.577	22	240	0.875	5.7	1.1	34	275	0.639
350.8	0.393	14	0.616	25	260	1.6	5.7	1.1	39	297	1.2
351.5	0.393	12	0.942	25	276	1.6	5.7	1.7	39	316	1.2
352.2	0.739	12	0.739	29	258	1.2	11	1.3	44	296	0.870
352.9	0.393	12	0.732	24	256	0.945	5.7	1.3	37	293	0.690
353.6	0.393	12	0.659	25	216	0.993	5.7	1.2	39	247	0.724
354.3	0.393	12	0.738	24	254	1.2	5.7	1.3	37	290	0.843
355.0	0.393	11	1.1	26	238	1.3	5.7	2.0	40	273	0.981
355.7	0.916	11	0.565	26	220	0.700	13	1.0	40	251	0.511
356.4	0.393	13	1.2	23	262	1.1	5.7	2.2	35	299	0.787
357.1	0.393	13	0.710	20	256	0.663	5.7	1.3	30	293	0.484
357.8	0.393	13	0.754	19	235	0.851	5.7	1.4	29	269	0.621
358.5	0.393	10	0.904	25	242	1.6	5.7	1.6	38	277	1.1
359.1	0.393	14	0.846	22	274	0.985	5.7	1.5	34	314	0.718
359.8	0.440	14	0.648	22	271	1.0	6.3	1.2	33	310	0.747
360.5	0.393	13	0.743	20	223	1.4	5.7	1.4	31	255	1.0
361.2	0.449	15	0.958	24	281	1.4	6.5	1.7	37	321	1.0
361.9	0.393	15	1.0	26	281	2.0	5.7	1.8	40	321	1.5
362.6	0.393	14	0.610	26	274	2.0	5.7	1.1	40	313	1.5
363.3	0.534	15	0.942	23	265	1.8	7.7	1.7	36	303	1.3
364.0	0.393	13	0.699	20	278	2.1	5.7	1.3	31	318	1.6
364.7	0.393	15	0.849	21	267	1.7	5.7	1.5	32	306	1.3
365.4	0.411	11	1.1	22	286	1.7	5.9	1.9	34	328	1.2
366.1	0.393	12	0.753	20	273	2.4	5.7	1.4	30	313	1.8
366.8	0.393	12	0.963	21	284	1.7	5.7	1.8	32	325	1.3
367.5	0.393	10	1.4	19	269	2.4	5.7	2.5	30	307	1.7
368.2	0.561	14	1.5	21	250	2.7	8.1	2.8	32	286	2.0
368.9	0.411	12	1.4	17	253	2.3	5.9	2.5	26	289	1.7
369.6	0.481	9.6	1.3	19	273	2.1	6.9	2.4	29	313	1.5
370.3	0.393	12	1.5	22	274	1.6	5.7	2.8	33	313	1.2
371.0	0.393	13	1.5	20	293	3.2	5.7	2.8	31	335	2.3
371.7	0.393	11	1.2	17	294	2.1	5.7	2.2	25	336	1.6
372.4	0.393	11	1.0	13	238	2.9	5.7	1.9	20	272	2.1
373.1	0.393	8.9	0.947	18	234	2.6	5.7	1.7	27	268	1.9
373.8	0.393	10	0.875	17	232	3.3	5.7	1.6	26	265	2.4
374.5	0.393	13	1.1	13	262	2.5	5.7	2.1	19	300	1.8
375.2	0.522	11	0.713	12	257	2.8	7.5	1.3	18	294	2.0
375.9	0.459	12	0.765	12	243	2.9	6.6	1.4	18	278	2.1
376.6	0.393	12	0.636	13	256	3.5	5.7	1.2	20	293	2.5
377.3	0.393	14	0.680	16	241	3.1	5.7	1.2	25	275	2.2
378.0	0.393	13	0.832	11	275	2.2	5.7	1.5	17	314	1.6
378.7	0.393	11	0.595	9.7	262	4.0	5.7	1.1	15	300	2.9
379.4	0.510	13	0.619	14	285	3.7	7.4	1.1	22	326	2.7
380.1	0.393	12	0.438	13	232	3.0	5.7	0.799	20	265	2.2
380.8	0.470	13	0.278	13	301	3.4	6.8	0.507	20	344	2.5
381.5	0.393	13	0.397	10	257	3.9	5.7	0.724	15	294	2.8
382.2	0.393	10	0.468	9.2	230	3.1	5.7	0.854	14	263	2.3
382.9	0.393	14	0.663	13	285	3.9	5.7	1.2	20	326	2.8
383.6	0.393	13	0.452	8.8	238	4.3	5.7	0.824	14	272	3.1
384.3	0.393	14	0.449	12	255	4.9	5.7	0.819	18	292	3.6
384.9	0.393	14	0.548	11	263	5.5	5.7	1.0	17	301	4.0
385.6	0.393	13	0.443	13	265	3.7	5.7	0.809	21	303	2.7
386.3	0.393	14	0.321	12	258	3.8	5.7	0.585	19	295	2.8
387.0	0.393	11	0.158	9.6	265	5.9	5.7	0.288	15	303	4.3
387.7	0.393	15	0.467	13	250	4.8	5.7	0.852	21	286	3.5
388.4	0.393	13	0.689	12	248	4.0	5.7	1.3	18	283	2.9
389.1	0.393	12	0.486	14	267	6.4	5.7	0.887	21	306	4.7
389.8	0.393	10	0.419	11	239	4.1	5.7	0.764	16	274	3.0
390.5	0.540	12	0.489	14	224	6.2	7.8	0.892	21	256	4.5
391.2	0.532	12	0.593	11	235	5.9	7.7	1.1	17	269	4.3
391.9	0.393	16	0.690	15	246	5.8	5.7	1.3	22	281	4.2
392.6	0.393	11	0.361	12	230	5.8	5.7	0.659	18	263	4.2
393.3	0.393	14	0.630	14	260	5.2	5.7	1.1	21	297	3.8
394.0	0.393	14	0.842	17	226	5.4	5.7	1.5	27	259	3.9
394.7	0.428	14	0.687	16	241	4.6	6.2	1.3	25	276	3.4

Minnow Environmental
Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
395.4	0.393	15	0.643	17	248	5.2	5.7	1.2	26	283	3.8
396.1	0.393	12	0.588	13	211	4.1	5.7	1.1	19	241	3.0
396.8	0.741	17	0.903	19	253	4.5	11	1.6	28	289	3.3
397.5	0.393	14	0.406	16	221	6.1	5.7	0.741	25	253	4.4
398.2	0.393	13	0.719	18	246	6.1	5.7	1.3	27	281	4.5
398.9	0.393	13	0.538	19	223	4.5	5.7	0.981	30	256	3.3
399.6	0.393	10	0.558	19	234	3.0	5.7	1.0	29	267	2.2
400.3	0.620	11	0.878	18	255	4.6	8.9	1.6	27	292	3.4
401.0	0.393	11	0.467	16	225	3.5	5.7	0.851	24	257	2.6
401.7	0.393	15	0.710	19	257	3.2	5.7	1.3	29	294	2.3
402.4	0.393	12	0.340	21	232	2.9	5.7	0.621	32	265	2.1
403.1	0.393	14	0.789	16	293	2.6	5.7	1.4	25	335	1.9
403.8	0.393	13	0.691	19	248	2.6	5.7	1.3	29	284	1.9
404.5	0.393	15	0.828	19	263	2.5	5.7	1.5	29	301	1.8
405.2	0.393	12	0.549	23	247	3.4	5.7	1.0	35	282	2.5
405.9	0.393	12	0.675	20	229	2.0	5.7	1.2	30	262	1.5
406.6	0.393	13	0.861	23	272	2.1	5.7	1.6	36	311	1.6
407.3	0.514	11	0.727	22	220	2.5	7.4	1.3	34	252	1.8
408.0	0.393	13	0.629	21	241	3.0	5.7	1.1	33	275	2.2
408.7	0.393	13	0.582	22	227	2.6	5.7	1.1	33	259	1.9
409.4	0.393	11	0.672	21	238	2.1	5.7	1.2	32	273	1.5
410.1	0.393	11	0.710	22	245	1.9	5.7	1.3	34	280	1.4
410.7	0.393	12	0.742	20	246	1.4	5.7	1.4	30	281	1.0
411.4	0.393	13	0.831	26	260	2.6	5.7	1.5	39	297	1.9
412.1	0.393	12	0.866	26	259	1.9	5.7	1.6	40	296	1.4
412.8	0.393	14	0.720	28	243	1.7	5.7	1.3	42	278	1.2
413.5	0.393	13	0.744	23	265	0.783	5.7	1.4	35	303	0.572
414.2	1.4	12	0.875	27	259	2.3	20	1.6	41	296	1.7
414.9	0.393	13	0.906	25	254	1.6	5.7	1.7	38	291	1.2
415.6	0.393	13	0.836	21	238	2.2	5.7	1.5	32	272	1.6
416.3	0.393	13	0.895	22	269	1.1	5.7	1.6	34	308	0.817
417.0	0.393	14	0.669	27	254	1.7	5.7	1.2	41	291	1.3
417.7	0.608	11	0.955	25	250	1.6	8.8	1.7	38	286	1.1
418.4	0.393	14	0.821	28	258	1.7	5.7	1.5	43	295	1.2
419.1	0.393	12	0.666	21	239	1.0	5.7	1.2	32	273	0.732
419.8	0.393	13	1.2	30	267	1.7	5.7	2.1	46	305	1.2
420.5	0.436	14	1.1	27	285	1.7	6.3	2.0	41	326	1.2
421.2	0.393	13	0.992	28	268	1.8	5.7	1.8	43	306	1.3
421.9	0.393	11	0.923	27	268	1.6	5.7	1.7	41	306	1.1
422.6	0.393	14	0.997	24	253	1.3	5.7	1.8	37	289	0.956
423.3	0.494	12	1.1	24	238	1.2	7.1	2.0	37	272	0.873
424.0	0.393	9.2	1.3	28	270	0.917	5.7	2.4	43	309	0.669
424.7	0.393	14	0.732	26	241	2.0	5.7	1.3	39	276	1.5
425.4	0.393	11	0.830	21	215	1.4	5.7	1.5	32	246	1.0
426.1	0.393	12	0.867	23	233	1.1	5.7	1.6	36	266	0.769
426.8	0.393	10	1.3	23	241	1.6	5.7	2.3	35	276	1.2
427.5	0.393	14	0.875	27	242	1.9	5.7	1.6	42	276	1.4
428.2	0.393	13	1.3	27	267	2.2	5.7	2.3	42	305	1.6
428.9	0.393	15	1.1	24	241	1.6	5.7	2.0	37	275	1.2
429.6	0.456	13	1.0	23	283	2.4	6.6	1.9	36	323	1.8
430.3	0.393	14	0.942	22	267	2.0	5.7	1.7	33	305	1.4
431.0	0.393	12	1.2	25	262	0.753	5.7	2.1	38	300	0.550
431.7	0.393	13	0.712	21	229	1.5	5.7	1.3	32	262	1.1
432.4	0.393	14	1.2	22	262	1.3	5.7	2.1	34	300	0.939
433.1	0.393	12	1.1	20	275	1.9	5.7	2.1	31	315	1.4
433.8	0.393	12	1.3	22	244	2.7	5.7	2.4	34	279	2.0
434.5	0.393	11	1.3	23	264	1.6	5.7	2.3	36	302	1.2
435.2	0.393	13	1.2	21	232	1.7	5.7	2.2	32	265	1.2
435.9	0.987	11	1.2	18	244	2.1	14	2.2	28	278	1.5
436.6	0.393	13	1.1	24	257	2.0	5.7	2.1	37	293	1.5
437.2	0.393	12	0.940	20	272	2.3	5.7	1.7	31	311	1.7
437.9	0.393	13	1.3	23	273	2.0	5.7	2.5	35	313	1.4
438.6	0.393	11	1.3	16	254	1.7	5.7	2.3	25	291	1.2
439.3	0.393	10	1.1	18	255	1.5	5.7	2.0	28	292	1.1
440.0	0.393	12	1.3	13	237	1.1	5.7	2.3	20	271	0.779
440.7	0.393	11	0.715	20	304	1.7	5.7	1.3	31	348	1.2
441.4	0.688	11	1.1	17	269	2.9	9.9	2.0	27	307	2.1
442.1	0.393	9.8	0.889	14	263	1.9	5.7	1.6	21	301	1.4
442.8	0.393	8.8	0.600	13	270	1.7	5.7	1.1	20	309	1.2
443.5	0.393	11	0.978	14	288	1.8	5.7	1.8	21	329	1.3
444.2	0.791	11	0.791	14	283	3.2	11	1.4	21	324	2.3
444.9	0.393	13	0.403	15	258	3.8	5.7	0.735	23	295	2.8
445.6	0.393	10	0.475	16	274	3.2	5.7	0.867	24	313	2.3
446.3	0.393	12	0.716	16	261	2.0	5.7	1.3	24	299	1.5
447.0	0.393	11	0.476	12	263	3.7	5.7	0.869	19	301	2.7
447.7	0.393	12	0.367	14	299	2.7	5.7	0.670	21	342	1.9
448.4	0.393	12	0.699	13	266	3.2	5.7	1.3	20	304	2.3
449.1	0.398	10.0	0.404	9.3	245	2.7	5.7	0.737	14	280	1.9
449.8	0.393	10	0.342	14	265	2.1	5.7	0.623	21	304	1.6
450.5	0.393	10	0.438	9.5	311	2.9	5.7	0.798	15	356	2.1
451.2	0.445	11	0.464	11	246	2.8	6.4	0.847	16	281	2.0

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Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
451.9	0.393	12	0.349	11	240	1.8	5.7	0.637	17	274	1.3
452.6	0.393	13	0.357	9.9	268	3.0	5.7	0.651	15	306	2.2
453.3	0.393	14	0.379	8.9	252	1.9	5.7	0.692	14	289	1.4
454.0	0.393	9.2	0.308	12	254	2.9	5.7	0.562	19	290	2.1
454.7	0.700	12	0.292	13	275	2.7	10	0.533	19	314	2.0
455.4	0.393	13	0.254	9.9	239	3.2	5.7	0.463	15	273	2.3
456.1	0.393	11	0.484	12	250	2.6	5.7	0.882	19	286	1.9
456.8	0.499	14	0.507	11	249	3.3	7.2	0.925	17	285	2.4
457.5	0.393	11	0.512	14	268	3.7	5.7	0.934	21	307	2.7
458.2	0.393	13	0.670	10	267	2.8	5.7	1.2	16	305	2.0
458.9	0.445	13	0.414	10	238	2.6	6.4	0.755	16	272	1.9
459.6	0.393	14	0.597	12	259	4.2	5.7	1.1	18	296	3.1
460.3	0.395	12	0.245	15	261	4.8	5.7	0.447	23	298	3.5
461.0	0.393	14	0.679	15	245	3.7	5.7	1.2	23	280	2.7
461.7	0.414	11	0.502	17	255	2.8	6.0	0.915	27	291	2.0
462.4	0.393	11	0.470	12	230	2.9	5.7	0.857	19	263	2.1
463.0	0.393	10	0.427	15	222	3.5	5.7	0.779	23	254	2.5
463.7	0.393	14	0.588	14	272	3.4	5.7	1.1	22	311	2.5
464.4	0.450	11	0.649	19	251	3.4	6.5	1.2	29	287	2.5
465.1	0.393	13	0.669	21	268	2.5	5.7	1.2	32	307	1.8
465.8	0.609	13	0.742	20	268	2.6	8.8	1.4	31	307	1.9
466.5	0.393	15	0.505	18	254	3.3	5.7	0.921	28	291	2.4
467.2	0.393	12	0.609	25	251	2.3	5.7	1.1	38	287	1.7
467.9	0.393	12	0.761	25	332	2.5	5.7	1.4	39	380	1.8
468.6	0.393	14	0.951	27	276	3.8	5.7	1.7	42	315	2.8
469.3	0.393	14	0.901	24	214	2.7	5.7	1.6	36	245	1.9
470.0	0.393	15	0.675	26	262	2.8	5.7	1.2	40	299	2.1
470.7	0.393	15	0.514	26	251	1.6	5.7	0.938	40	287	1.2
471.4	0.393	17	0.467	30	266	2.3	5.7	0.851	46	304	1.6
472.1	0.393	14	0.463	24	275	2.0	5.7	0.844	37	314	1.5
472.8	0.393	16	0.613	29	273	1.8	5.7	1.1	44	313	1.3
473.5	0.539	16	0.602	26	267	0.950	7.8	1.1	40	306	0.693
474.2	0.393	16	0.504	28	276	2.3	5.7	0.919	42	315	1.7
474.9	0.393	13	0.788	32	247	1.3	5.7	1.4	48	282	0.972
475.6	0.393	13	0.581	30	281	0.918	5.7	1.1	47	321	0.670
476.3	0.661	14	0.382	34	236	1.6	9.5	0.697	52	270	1.2
477.0	0.393	16	1.0	30	286	2.0	5.7	1.8	46	327	1.5
477.7	0.393	14	0.594	28	268	0.938	5.7	1.1	43	306	0.685
478.4	0.393	10	0.585	29	231	1.5	5.7	1.1	45	264	1.1
479.1	0.399	13	0.484	27	237	0.600	5.8	0.883	42	271	0.438
479.8	0.393	12	0.656	34	254	0.635	5.7	1.2	52	290	0.463
480.5	0.393	13	0.428	30	270	0.859	5.7	0.780	46	308	0.627
481.2	0.393	15	0.767	39	255	1.4	5.7	1.4	60	292	1.0
481.9	0.393	13	0.651	36	295	1.2	5.7	1.2	56	338	0.897
482.6	0.393	13	0.521	33	264	0.678	5.7	0.951	50	302	0.494
483.3	0.393	17	0.705	36	263	1.3	5.7	1.3	55	301	0.948
484.0	0.393	13	0.806	33	261	0.726	5.7	1.5	51	299	0.529
484.7	0.393	14	0.990	38	285	1.0	5.7	1.8	59	326	0.749
485.4	0.393	14	0.676	37	264	0.545	5.7	1.2	56	302	0.398
486.1	0.393	11	0.806	30	259	0.415	5.7	1.5	47	296	0.303
486.8	0.393	14	0.935	34	259	0.114	5.7	1.7	52	296	0.083
487.5	0.393	11	0.727	37	302	1.1	5.7	1.3	56	345	0.826
488.2	0.393	15	0.861	38	277	0.570	5.7	1.6	59	317	0.416
488.8	0.393	14	1.2	38	256	0.596	5.7	2.2	58	293	0.435
489.5	0.393	12	0.875	33	280	1.3	5.7	1.6	51	321	0.930
490.2	0.393	13	0.884	41	289	1.4	5.7	1.6	62	330	1.1
490.9	0.393	18	1.1	43	287	0.637	5.7	2.0	65	329	0.465
491.6	0.393	14	0.978	37	251	0.463	5.7	1.8	57	287	0.338
492.3	0.393	12	1.1	34	287	0.666	5.7	2.0	52	328	0.486
493.0	0.393	12	0.794	32	316	0.671	5.7	1.4	49	361	0.490
493.7	0.393	14	1.0	35	268	0.374	5.7	1.9	53	307	0.273
494.4	0.393	13	1.3	32	284	0.943	5.7	2.3	49	325	0.688
495.1	0.393	11	1.2	38	249	0.964	5.7	2.3	58	285	0.704
495.8	0.393	12	1.2	33	259	0.730	5.7	2.1	50	296	0.533
496.5	0.393	14	1.2	41	295	1.4	5.7	2.1	63	337	0.997
497.2	0.393	12	0.985	33	266	0.838	5.7	1.8	51	304	0.611
497.9	0.393	14	0.751	40	292	1.1	5.7	1.4	61	334	0.826
498.6	0.698	14	1.1	38	260	0.866	10	2.0	57	298	0.632
499.3	0.393	13	1.3	36	301	1.5	5.7	2.4	56	344	1.1
500.0	0.393	14	1.2	33	269	0.683	5.7	2.2	51	308	0.498
500.7	0.393	12	1.0	30	306	0.581	5.7	1.8	47	350	0.424
501.4	0.393	10	1.4	26	239	1.2	5.7	2.6	41	273	0.906
502.1	0.393	12	1.4	35	298	1.2	5.7	2.5	54	341	0.895
502.8	0.393	10	1.3	31	271	1.4	5.7	2.3	47	310	1.1
503.5	0.408	13	1.6	28	227	1.1	5.9	2.9	42	259	0.779
504.2	0.393	12	1.7	31	270	1.3	5.7	3.2	48	309	0.975
504.9	0.393	11	1.6	23	247	1.7	5.7	2.9	35	282	1.3
505.6	0.393	11	1.5	27	295	1.9	5.7	2.7	42	338	1.4
506.3	0.393	9.8	1.8	24	244	1.5	5.7	3.2	37	279	1.1
507.0	0.393	13	1.9	27	252	1.2	5.7	3.5	41	288	0.898
507.7	0.393	11	1.1	29	230	1.6	5.7	1.9	44	263	1.2

Minnow Environmental
Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
508.4	0.393	12	1.5	28	226	1.0	5.7	2.8	42	259	0.744
509.1	0.393	10	1.6	18	239	2.4	5.7	3.0	27	273	1.8
509.8	0.393	9.9	1.6	26	243	2.2	5.7	2.9	39	278	1.6
510.5	0.632	11	1.5	21	250	2.2	9.1	2.7	33	286	1.6
511.2	0.393	12	1.7	16	234	2.9	5.7	3.1	25	267	2.1
511.9	0.393	12	1.6	20	270	3.1	5.7	2.9	31	309	2.3
512.6	0.393	14	1.0	16	237	2.3	5.7	1.9	25	271	1.7
513.3	0.393	12	1.1	19	258	2.7	5.7	2.0	29	295	1.9
514.0	0.393	13	1.1	14	268	1.9	5.7	2.1	21	307	1.4
514.7	0.393	13	1.1	14	248	1.5	5.7	2.0	21	283	1.1
515.3	0.393	12	1.6	14	246	1.1	5.7	2.9	21	281	0.771
516.0	0.393	12	0.828	15	270	2.0	5.7	1.5	24	308	1.4
516.7	0.393	14	1.0	14	253	1.4	5.7	1.9	21	290	1.1
517.4	0.393	12	0.964	14	255	1.9	5.7	1.8	22	291	1.4
518.1	0.485	10	0.809	12	254	2.7	7.0	1.5	18	291	2.0
518.8	0.393	13	0.643	12	255	2.2	5.7	1.2	18	292	1.6
519.5	0.393	11	0.427	13	238	3.3	5.7	0.779	20	272	2.4
520.2	0.533	13	0.798	14	324	1.7	7.7	1.5	22	370	1.3
520.9	0.507	11	0.364	9.9	251	1.5	7.3	0.664	15	287	1.1
521.6	0.393	12	0.491	10	263	2.1	5.7	0.896	16	301	1.5
522.3	0.393	12	0.219	11	254	2.2	5.7	0.399	16	290	1.6
523.0	0.393	11	0.471	9.8	279	2.0	5.7	0.859	15	319	1.5
523.7	0.393	11	0.395	10	291	2.0	5.7	0.721	16	332	1.5
524.4	0.393	11	0.428	10	256	2.9	5.7	0.781	16	292	2.1
525.1	0.592	13	0.300	8.9	270	1.3	8.5	0.548	14	309	0.933
525.8	0.393	12	0.348	13	252	1.9	5.7	0.634	20	288	1.4
526.5	0.411	14	0.282	11	258	1.8	5.9	0.515	17	295	1.3
527.2	0.393	13	0.320	9.5	281	1.5	5.7	0.584	15	321	1.1
527.9	0.393	11	0.185	11	247	2.1	5.7	0.337	16	283	1.5
528.6	0.393	10	0.372	14	289	1.6	5.7	0.678	22	330	1.2
529.3	0.528	13	0.405	14	279	1.3	7.6	0.739	21	319	0.933
530.0	0.393	14	0.418	9.9	246	1.5	5.7	0.762	15	281	1.1
530.7	0.419	11	0.398	15	309	1.5	6.1	0.726	24	354	1.1
531.4	0.393	10	0.318	13	202	1.1	5.7	0.579	20	231	0.812
532.1	0.393	14	0.487	16	264	1.6	5.7	0.888	25	302	1.2
532.8	0.417	14	0.643	19	297	2.1	6.0	1.2	30	339	1.5
533.5	0.393	14	0.654	20	280	1.1	5.7	1.2	30	320	0.831
534.2	0.393	14	0.478	19	294	1.5	5.7	0.873	30	337	1.1
534.9	0.688	15	0.370	20	322	1.6	9.9	0.675	30	369	1.2
535.6	0.393	15	0.320	22	291	2.4	5.7	0.583	33	333	1.7
536.3	0.393	14	0.488	23	272	1.6	5.7	0.890	35	311	1.1
537.0	0.393	13	0.648	20	228	0.523	5.7	1.2	30	261	0.381
537.7	0.393	13	0.423	20	261	1.6	5.7	0.771	31	299	1.2
538.4	0.393	15	0.381	21	286	0.701	5.7	0.695	32	327	0.512
539.1	0.393	14	0.501	23	252	1.4	5.7	0.913	35	288	0.999
539.8	0.393	15	0.573	27	294	1.4	5.7	1.0	41	336	1.0
540.5	0.393	18	0.279	25	255	1.6	5.7	0.509	39	291	1.2
541.2	0.393	16	0.287	30	286	0.729	5.7	0.523	47	327	0.532
541.8	0.393	14	0.585	27	248	1.3	5.7	1.1	41	284	0.967
542.5	0.393	13	0.432	28	292	1.9	5.7	0.787	43	334	1.4
543.2	0.393	12	0.181	28	231	1.3	5.7	0.330	43	264	0.944
543.9	0.393	13	0.370	33	267	1.0	5.7	0.675	50	305	0.745
544.6	0.393	13	0.513	35	251	1.2	5.7	0.936	54	287	0.900
545.3	0.393	14	0.315	31	246	1.1	5.7	0.574	48	281	0.800
546.0	0.393	14	0.519	32	243	2.0	5.7	0.947	49	278	1.5
546.7	0.393	15	0.431	35	290	0.990	5.7	0.787	54	331	0.722
547.4	0.393	16	0.254	35	262	1.2	5.7	0.464	54	299	0.870
548.1	0.393	12	0.399	32	236	1.8	5.7	0.728	50	269	1.3
548.8	0.393	13	0.869	34	249	1.3	5.7	1.6	53	284	0.924
549.5	0.393	13	0.598	34	257	0.904	5.7	1.1	52	294	0.659
550.2	0.393	13	0.236	36	255	1.4	5.7	0.431	55	291	1.0
550.9	0.545	13	0.711	30	242	0.856	7.9	1.3	46	276	0.625
551.6	0.393	15	0.337	38	253	0.783	5.7	0.615	59	289	0.571
552.3	0.664	11	0.543	35	257	1.1	9.6	0.990	54	294	0.772
553.0	0.444	15	0.841	33	229	1.2	6.4	1.5	50	262	0.894
553.7	0.393	12	0.742	36	250	0.782	5.7	1.4	55	286	0.570
554.4	0.393	14	0.853	38	261	0.931	5.7	1.6	58	298	0.680
555.1	0.393	15	0.732	38	243	0.881	5.7	1.3	58	278	0.643
555.8	0.393	14	0.620	40	244	0.112	5.7	1.1	61	279	0.082
556.5	0.393	13	1.0	37	225	1.2	5.7	1.8	57	258	0.902
557.2	0.393	15	0.809	37	289	1.2	5.7	1.5	57	331	0.887
557.9	0.723	12	0.832	37	232	1.7	10	1.5	56	266	1.2
558.6	0.393	14	0.670	34	229	1.4	5.7	1.2	51	262	1.0
559.3	0.495	9.9	0.774	32	237	1.6	7.1	1.4	49	271	1.2
560.0	0.547	9.7	0.617	37	234	1.2	7.9	1.1	57	268	0.861
560.7	0.393	15	0.960	36	258	1.2	5.7	1.7	55	295	0.851
561.4	0.814	14	0.917	33	228	0.892	12	1.7	50	260	0.650
562.1	0.393	14	0.862	35	262	0.685	5.7	1.6	53	300	0.500
562.8	0.393	12	0.815	40	234	0.668	5.7	1.5	61	267	0.487
563.5	0.393	14	0.765	35	259	0.618	5.7	1.4	54	296	0.451
564.2	0.393	12	0.750	36	252	1.1	5.7	1.4	55	288	0.767

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
564.9	0.393	12	0.735	35	246	1.5	5.7	1.3	53	281	1.1
565.6	0.393	14	0.732	32	257	1.3	5.7	1.3	49	294	0.914
566.3	0.393	13	0.918	34	242	1.2	5.7	1.7	53	277	0.872
567.0	0.393	15	1.0	35	247	0.223	5.7	1.9	53	282	0.163
567.7	0.419	13	0.590	34	248	1.1	6.0	1.1	52	284	0.801
568.3	0.393	12	0.975	39	268	1.2	5.7	1.8	60	306	0.842
569.0	0.393	14	0.766	35	250	1.5	5.7	1.4	54	286	1.1
569.7	0.393	13	0.899	40	282	1.8	5.7	1.6	61	322	1.3
570.4	0.393	16	1.0	35	245	0.742	5.7	1.9	54	280	0.541
571.1	0.393	13	1.3	39	251	0.799	5.7	2.4	60	287	0.583
571.8	0.393	13	0.894	35	234	1.6	5.7	1.6	53	268	1.2
572.5	0.465	13	1.3	35	241	1.6	6.7	2.4	54	275	1.2
573.2	0.393	12	1.2	39	264	1.3	5.7	2.2	60	302	0.937
573.9	0.393	16	1.3	38	275	0.690	5.7	2.3	58	314	0.503
574.6	0.393	13	1.1	34	232	1.1	5.7	2.0	52	265	0.802
575.3	0.393	12	1.1	38	261	0.969	5.7	1.9	59	298	0.707
576.0	0.427	13	0.827	39	278	0.995	6.2	1.5	60	318	0.726
576.7	0.393	11	0.738	35	252	1.1	5.7	1.3	54	289	0.812
577.4	0.393	12	1.3	38	257	1.3	5.7	2.4	58	293	0.949
578.1	0.393	12	1.1	36	245	1.2	5.7	2.0	55	280	0.855
578.8	0.611	14	1.3	32	271	1.3	8.8	2.4	50	309	0.964
579.5	0.393	14	1.1	31	262	1.5	5.7	1.9	48	299	1.1
580.2	0.393	14	1.3	33	296	1.4	5.7	2.3	50	339	1.000
580.9	0.393	12	1.2	31	251	1.8	5.7	2.2	48	286	1.3
581.6	0.393	12	1.3	28	295	1.5	5.7	2.4	43	337	1.1
582.3	0.393	12	0.980	31	252	1.9	5.7	1.8	47	288	1.4
583.0	0.393	12	1.6	31	277	2.6	5.7	2.9	48	317	1.9
583.7	0.443	13	1.1	29	262	2.7	6.4	2.0	45	300	2.0
584.4	0.393	12	1.1	30	264	2.5	5.7	2.0	46	302	1.8
585.1	0.393	14	1.2	27	297	1.3	5.7	2.2	42	339	0.946
585.8	0.393	12	1.2	30	269	1.2	5.7	2.2	47	308	0.885
586.5	0.393	14	1.5	25	263	3.1	5.7	2.7	39	301	2.2
587.2	0.393	12	1.2	28	232	1.5	5.7	2.3	43	265	1.1
587.9	0.393	13	1.1	25	260	2.2	5.7	2.0	39	298	1.6
588.6	0.393	13	1.6	25	296	2.1	5.7	2.9	38	339	1.5
589.3	0.393	13	1.6	27	256	2.4	5.7	2.8	41	292	1.8
590.0	0.639	13	1.6	24	264	2.7	9.2	2.9	36	302	2.0
590.7	0.528	11	1.0	27	261	2.1	7.6	1.8	41	298	1.5
591.4	0.494	10	1.5	24	249	1.7	7.1	2.8	37	284	1.3
592.1	0.393	13	1.1	21	255	2.5	5.7	1.9	32	291	1.8
592.8	0.393	13	1.1	22	258	2.7	5.7	2.0	34	295	2.0
593.5	0.393	11	1.5	21	269	3.4	5.7	2.8	32	308	2.5
594.2	0.393	12	1.3	25	309	2.0	5.7	2.3	38	354	1.4
594.8	0.393	12	1.0	23	240	2.0	5.7	1.9	36	274	1.5
595.5	0.393	11	1.2	23	248	2.0	5.7	2.2	36	283	1.4
596.2	0.393	12	1.2	22	257	2.0	5.7	2.2	33	294	1.5
596.9	0.393	14	0.947	18	249	3.0	5.7	1.7	28	284	2.2
597.6	0.393	11	0.760	21	220	1.7	5.7	1.4	32	251	1.3
598.3	0.393	11	1.2	21	277	2.4	5.7	2.2	32	317	1.7
599.0	0.393	11	0.964	21	258	2.5	5.7	1.8	32	296	1.8
599.7	0.393	12	1.2	20	279	3.0	5.7	2.1	31	319	2.2
600.4	0.528	13	1.2	21	254	3.7	7.6	2.2	32	291	2.7
601.1	0.393	14	0.892	20	258	1.8	5.7	1.6	30	295	1.3
601.8	0.393	12	0.593	20	227	1.5	5.7	1.1	31	260	1.1
602.5	0.393	11	1.1	16	259	3.4	5.7	2.0	25	297	2.5
603.2	0.393	13	0.850	20	273	3.2	5.7	1.6	31	312	2.4
603.9	0.393	12	1.1	20	242	1.8	5.7	2.0	30	277	1.3
604.6	0.517	13	0.551	14	254	3.4	7.5	1.0	22	291	2.5
605.3	0.393	14	0.701	12	231	2.2	5.7	1.3	19	264	1.6
606.0	0.393	10	0.636	15	240	4.8	5.7	1.2	23	274	3.5
606.7	0.393	13	0.891	20	265	1.9	5.7	1.6	31	303	1.4
607.4	0.393	12	0.751	11	298	4.2	5.7	1.4	17	341	3.1
608.1	0.393	12	0.587	15	234	2.4	5.7	1.1	23	267	1.8
608.8	0.393	12	0.517	17	258	2.6	5.7	0.943	27	295	1.9
609.5	0.393	11	0.246	15	217	3.2	5.7	0.449	23	248	2.4
610.2	0.393	13	0.493	14	231	5.0	5.7	0.900	22	264	3.7
610.9	0.393	13	0.476	15	324	2.2	5.7	0.869	23	371	1.6
611.6	0.393	13	0.302	12	249	2.9	5.7	0.550	18	285	2.1
612.3	1.0	13	0.424	16	257	2.3	15	0.774	25	294	1.7
613.0	0.393	11	0.302	14	239	4.0	5.7	0.551	22	273	2.9
613.7	0.393	12	0.384	13	252	5.2	5.7	0.700	19	288	3.8
614.4	0.393	13	0.255	16	249	3.5	5.7	0.464	24	285	2.5
615.1	0.393	12	0.357	14	273	2.9	5.7	0.652	21	312	2.1
615.8	0.685	14	0.670	17	307	2.4	9.9	1.2	25	351	1.8
616.5	0.393	14	0.648	16	270	3.6	5.7	1.2	24	309	2.7
617.2	0.393	14	0.242	14	249	2.3	5.7	0.442	21	285	1.7
617.9	0.393	10	0.439	13	251	3.5	5.7	0.800	20	287	2.5
618.6	0.393	12	0.168	14	268	2.7	5.7	0.307	21	306	1.9
619.3	0.409	15	0.335	14	247	3.3	5.9	0.611	21	283	2.4
620.0	0.393	12	0.399	15	274	3.3	5.7	0.727	24	314	2.4
620.6	0.393	12	0.333	15	291	2.2	5.7	0.608	23	333	1.6

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
621.3	0.411	13	0.363	15	265	3.2	5.9	0.662	23	303	2.4
622.0	0.393	16	0.564	15	321	4.0	5.7	1.0	23	367	2.9
622.7	0.393	14	0.318	14	242	2.0	5.7	0.580	21	277	1.5
623.4	0.691	14	0.364	13	239	2.0	10.0	0.663	20	273	1.5
624.1	0.551	14	0.314	15	235	3.2	8.0	0.572	23	268	2.3
624.8	0.393	12	0.397	16	257	3.2	5.7	0.724	24	294	2.3
625.5	0.494	16	0.655	20	334	2.7	7.1	1.2	30	382	2.0
626.2	0.393	14	0.591	16	233	2.2	5.7	1.1	24	266	1.6
626.9	0.393	15	0.483	18	231	2.9	5.7	0.881	28	264	2.1
627.6	0.393	16	0.582	18	236	2.0	5.7	1.1	27	270	1.4
628.3	0.393	14	0.671	20	233	1.8	5.7	1.2	31	267	1.3
629.0	0.393	11	0.575	20	269	2.6	5.7	1.0	30	307	1.9
629.7	0.393	14	0.674	21	220	1.3	5.7	1.2	33	251	0.953
630.4	0.512	15	0.317	25	241	2.4	7.4	0.578	38	276	1.7
631.1	0.393	14	0.673	23	258	1.6	5.7	1.2	36	294	1.2
631.8	0.393	14	0.459	28	271	1.9	5.7	0.836	43	310	1.4
632.5	0.393	14	0.751	23	245	1.7	5.7	1.4	35	280	1.2
633.2	0.470	14	0.863	28	235	1.8	6.8	1.6	44	269	1.3
633.9	0.894	15	0.654	27	238	1.4	13	1.2	42	273	0.997
634.6	0.393	16	1.1	31	247	2.1	5.7	2.0	47	282	1.5
635.3	0.393	13	0.984	31	295	0.957	5.7	1.8	47	337	0.698
636.0	0.393	11	0.888	26	229	1.6	5.7	1.6	40	261	1.1
636.7	0.475	15	0.980	27	252	1.7	6.9	1.8	42	288	1.2
637.4	0.393	12	1.5	35	255	1.7	5.7	2.8	54	291	1.2
638.1	0.393	13	1.2	34	254	1.0	5.7	2.2	52	290	0.741
638.8	0.393	12	1.4	32	280	1.0	5.7	2.6	48	320	0.760
639.5	0.393	12	0.863	31	242	1.4	5.7	1.6	47	277	1.1
640.2	0.393	14	0.982	37	281	0.982	5.7	1.8	57	321	0.717
640.9	0.393	14	1.1	34	234	0.871	5.7	2.0	52	268	0.635
641.6	0.393	15	1.0	32	250	1.5	5.7	1.8	48	286	1.1
642.3	0.481	12	1.2	35	275	1.6	6.9	2.2	54	314	1.1
643.0	0.393	15	1.3	31	248	0.817	5.7	2.3	48	283	0.596
643.7	0.433	13	1.3	30	263	1.1	6.3	2.4	47	300	0.828
644.4	0.393	16	0.816	31	259	1.1	5.7	1.5	48	296	0.806
645.1	0.393	14	1.2	33	268	1.5	5.7	2.2	50	306	1.1
645.8	0.393	16	1.2	26	271	1.5	5.7	2.1	41	310	1.1
646.5	0.537	16	1.4	31	236	1.2	7.8	2.6	47	270	0.864
647.1	0.447	16	1.1	36	277	2.2	6.5	2.0	56	317	1.6
647.8	0.393	13	0.884	34	260	1.6	5.7	1.6	51	297	1.2
648.5	0.436	12	1.7	29	281	2.2	6.3	3.1	44	322	1.6
649.2	0.393	14	1.4	32	283	1.4	5.7	2.5	49	324	1.0
649.9	0.393	14	1.2	30	239	1.5	5.7	2.1	47	273	1.1
650.6	0.393	15	1.2	30	235	1.6	5.7	2.2	47	269	1.1
651.3	0.393	13	1.1	28	275	1.9	5.7	2.1	43	314	1.4
652.0	0.393	13	1.1	25	265	0.881	5.7	1.9	39	303	0.643
652.7	0.557	14	1.2	30	290	2.1	8.0	2.1	46	332	1.5
653.4	0.612	14	1.3	29	255	1.8	8.8	2.4	45	292	1.3
654.1	0.393	13	1.3	29	259	2.0	5.7	2.3	45	296	1.5
654.8	0.393	13	0.854	22	261	1.5	5.7	1.6	33	299	1.1
655.5	0.393	14	0.989	24	265	1.9	5.7	1.8	36	303	1.4
656.2	0.404	17	0.967	22	255	2.5	5.8	1.8	34	291	1.8
656.9	0.393	12	0.914	21	238	1.6	5.7	1.7	32	272	1.2
657.6	0.393	12	0.953	24	249	1.8	5.7	1.7	36	285	1.3
658.3	0.393	14	0.628	21	262	2.5	5.7	1.1	33	300	1.8
659.0	0.393	13	1.2	20	263	3.2	5.7	2.1	31	300	2.3
659.7	0.530	12	0.457	22	224	2.7	7.7	0.834	34	256	2.0
660.4	0.393	12	0.416	18	235	2.0	5.7	0.760	27	268	1.5
661.1	0.393	11	0.550	16	230	2.1	5.7	1.0	25	263	1.5
661.8	0.393	14	0.762	19	270	3.0	5.7	1.4	29	308	2.2
662.5	0.393	15	0.471	17	224	2.4	5.7	0.860	26	256	1.7
663.2	0.393	11	0.369	19	244	2.4	5.7	0.672	30	279	1.7
663.9	0.393	10	0.255	18	244	3.2	5.7	0.465	27	279	2.4
664.6	0.393	12	0.466	18	232	2.5	5.7	0.851	28	265	1.8
665.3	0.393	11	0.430	19	215	3.1	5.7	0.784	30	246	2.2
666.0	0.647	15	0.501	16	267	3.6	9.3	0.913	24	306	2.6
666.7	0.573	14	0.668	18	271	1.6	8.3	1.2	28	310	1.2
667.4	0.393	12	0.392	15	236	2.5	5.7	0.715	23	270	1.8
668.1	0.393	11	0.313	17	265	2.7	5.7	0.571	26	303	1.9
668.8	0.393	12	0.289	15	241	3.5	5.7	0.528	23	275	2.5
669.5	0.393	12	0.273	13	246	3.2	5.7	0.498	20	281	2.4
670.2	0.393	11	0.460	15	252	3.5	5.7	0.839	23	288	2.6
670.9	0.427	13	0.265	17	247	1.9	6.2	0.484	25	283	1.4
671.6	0.393	11	0.323	14	242	3.3	5.7	0.590	21	276	2.4
672.3	0.393	10.0	0.184	15	230	3.3	5.7	0.335	23	262	2.4
673.0	0.394	12	0.244	14	244	3.1	5.7	0.446	22	279	2.3
673.6	0.393	11	0.472	13	248	3.4	5.7	0.861	20	283	2.4
674.3	0.418	12	0.342	19	264	2.3	6.0	0.623	29	302	1.7
675.0	0.393	9.9	0.274	16	296	3.1	5.7	0.499	24	338	2.3
675.7	0.393	11	0.270	15	257	3.9	5.7	0.492	23	294	2.9
676.4	0.769	13	0.545	17	272	2.9	11	0.994	25	310	2.1
677.1	0.393	12	0.284	17	229	3.5	5.7	0.518	26	262	2.5

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
677.8	0.393	12	0.553	14	246	4.0	5.7	1.0	21	281	2.9
678.5	0.393	11	0.470	17	257	3.5	5.7	0.857	26	294	2.6
679.2	0.393	13	0.225	14	268	3.3	5.7	0.410	22	307	2.4
679.9	0.393	12	0.610	18	289	5.0	5.7	1.1	28	331	3.6
680.6	0.393	12	0.567	17	253	3.9	5.7	1.0	26	289	2.8
681.3	0.434	12	0.552	15	293	4.5	6.3	1.0	23	335	3.3
682.0	0.393	13	0.507	19	288	4.8	5.7	0.924	29	330	3.5
682.7	0.393	14	0.437	20	257	4.7	5.7	0.797	30	293	3.4
683.4	0.393	19	0.633	16	244	4.9	5.7	1.2	25	279	3.5
684.1	0.393	15	0.517	21	251	3.7	5.7	0.942	33	287	2.7
684.8	0.393	14	0.731	23	253	3.1	5.7	1.3	35	289	2.3
685.5	0.393	18	0.757	25	271	3.2	5.7	1.4	38	310	2.3
686.2	0.393	17	0.753	25	270	3.2	5.7	1.4	38	308	2.3
686.9	0.393	18	0.651	27	244	3.1	5.7	1.2	41	279	2.2
687.6	0.393	19	0.562	25	251	3.4	5.7	1.0	38	288	2.5
688.3	0.393	19	0.905	24	261	3.2	5.7	1.6	37	299	2.3
689.0	0.393	21	0.688	29	262	2.3	5.7	1.3	44	299	1.7
689.7	0.393	19	0.840	33	269	1.7	5.7	1.5	50	308	1.3
690.4	0.535	18	0.769	30	260	1.6	7.7	1.4	46	297	1.1
691.1	0.393	20	0.697	33	258	3.3	5.7	1.3	50	295	2.4
691.8	0.393	18	0.827	33	287	3.5	5.7	1.5	50	329	2.6
692.5	0.393	20	1.0	44	267	2.6	5.7	1.9	67	306	1.9
693.2	0.393	20	0.910	35	287	2.9	5.7	1.7	53	328	2.1
693.9	0.393	21	1.2	42	266	3.0	5.7	2.2	64	304	2.2
694.6	0.393	19	0.851	38	280	2.5	5.7	1.6	58	320	1.8
695.3	0.393	21	0.831	42	264	4.6	5.7	1.5	65	302	3.3
696.0	0.393	19	1.3	40	246	2.6	5.7	2.3	61	282	1.9
696.7	0.490	17	1.5	37	228	2.1	7.1	2.7	56	261	1.5
697.4	0.393	20	1.1	44	249	2.5	5.7	1.9	67	285	1.8
698.1	0.393	21	1.0	41	246	2.7	5.7	1.9	63	281	2.0
698.8	0.393	16	1.2	39	206	2.3	5.7	2.2	60	236	1.7
699.5	0.393	19	0.814	42	214	2.9	5.7	1.5	64	245	2.1
700.1	0.393	21	1.6	42	220	3.6	5.7	3.0	65	252	2.6
700.8	0.393	19	1.6	32	202	2.9	5.7	2.8	49	231	2.1
701.5	0.393	17	1.3	39	208	3.7	5.7	2.3	60	238	2.7
702.2	0.393	17	1.3	47	218	2.8	5.7	2.4	72	249	2.1
702.9	0.393	17	1.1	33	179	2.6	5.7	2.1	51	204	1.9
703.6	0.393	18	1.1	44	210	3.2	5.7	2.0	67	240	2.4
704.3	0.393	15	1.2	37	204	4.3	5.7	2.1	56	233	3.1
705.0	0.393	18	1.6	40	179	3.9	5.7	2.8	61	205	2.8
705.7	0.393	16	1.3	39	176	4.7	5.7	2.5	59	202	3.4
706.4	0.393	16	1.5	49	177	5.0	5.7	2.7	75	202	3.7
707.1	0.516	20	1.3	42	176	3.5	7.5	2.3	65	201	2.6
707.8	0.393	17	1.6	43	177	4.5	5.7	2.9	65	203	3.3
708.5	0.393	19	1.3	41	192	5.0	5.7	2.4	63	219	3.6
709.2	0.393	18	1.5	41	195	4.0	5.7	2.7	63	222	2.9
709.9	0.393	15	1.2	34	166	2.6	5.7	2.2	53	190	1.9
710.6	0.393	17	1.2	41	181	5.0	5.7	2.3	62	207	3.7
711.3	0.393	17	1.3	37	224	4.1	5.7	2.5	57	256	3.0
712.0	0.393	20	1.5	39	184	5.4	5.7	2.7	59	211	3.9
712.7	0.497	20	1.0	36	202	3.2	7.2	1.9	56	231	2.3
713.4	0.576	18	1.2	34	196	4.7	8.3	2.2	53	225	3.5
714.1	0.559	16	1.1	31	192	3.0	8.1	1.9	48	220	2.2
714.8	0.464	15	1.6	34	203	4.2	6.7	2.8	52	232	3.1
715.5	0.438	14	1.0	30	200	4.4	6.3	1.9	46	229	3.2
716.2	0.393	15	1.3	39	222	4.8	5.7	2.4	60	254	3.5
716.9	0.393	16	1.1	38	206	2.9	5.7	2.1	58	235	2.1
717.6	0.393	17	1.1	35	216	4.0	5.7	2.0	53	247	2.9
718.3	0.393	15	1.4	31	230	4.1	5.7	2.5	47	263	3.0
719.0	0.393	19	1.5	27	228	2.4	5.7	2.7	42	261	1.8
719.7	0.393	13	1.6	30	210	4.4	5.7	2.9	46	240	3.2
720.4	0.393	16	0.913	29	202	3.2	5.7	1.7	45	231	2.3
721.1	0.393	13	0.954	27	209	4.2	5.7	1.7	42	239	3.0
721.8	0.393	14	0.974	25	200	3.7	5.7	1.8	38	229	2.7
722.5	0.393	15	1.1	28	203	4.3	5.7	2.1	42	232	3.1
723.2	0.452	14	0.728	23	200	3.2	6.5	1.3	36	228	2.3
723.9	0.393	17	1.1	27	207	3.9	5.7	2.1	42	237	2.8
724.6	0.393	13	0.808	22	181	2.8	5.7	1.5	34	207	2.0
725.3	0.393	14	0.702	26	231	3.9	5.7	1.3	40	264	2.9
725.9	0.393	14	0.525	22	191	3.1	5.7	0.958	34	219	2.3
726.6	0.409	15	0.792	22	184	3.7	5.9	1.4	33	211	2.7
727.3	0.393	14	0.676	23	197	2.6	5.7	1.2	35	225	1.9
728.0	0.393	12	0.728	23	207	3.4	5.7	1.3	35	237	2.5
728.7	0.393	13	0.946	23	170	2.5	5.7	1.7	36	195	1.8
729.4	0.393	11	0.354	20	168	2.5	5.7	0.646	30	192	1.8
730.1	0.428	17	0.688	23	181	3.7	6.2	1.3	35	207	2.7
730.8	0.393	12	0.327	18	194	4.2	5.7	0.597	27	222	3.1
731.5	0.393	12	0.206	14	166	3.1	5.7	0.375	22	190	2.3
732.2	0.439	12	0.618	21	210	2.4	6.3	1.1	33	240	1.8
732.9	0.393	13	0.193	16	168	2.3	5.7	0.351	25	192	1.7
733.6	0.393	12	0.447	20	170	2.8	5.7	0.815	31	194	2.0

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Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
734.3	0.393	13	0.558	18	196	4.7	5.7	1.0	28	224	3.4
735.0	0.393	11	0.471	14	169	1.5	5.7	0.859	22	193	1.1
735.7	0.393	11	0.557	17	190	3.3	5.7	1.0	26	218	2.4
736.4	0.393	13	0.086	14	181	3.2	5.7	0.158	22	207	2.4
737.1	0.393	12	0.444	16	180	5.1	5.7	0.811	24	206	3.7
737.8	0.393	9.8	0.091	15	173	3.3	5.7	0.166	24	198	2.4
738.5	0.393	10	0.366	12	178	3.5	5.7	0.667	19	203	2.5
739.2	0.393	14	0.479	20	189	3.4	5.7	0.873	30	216	2.5
739.9	0.393	10	0.362	14	180	3.7	5.7	0.660	21	205	2.7
740.6	0.393	11	0.542	14	197	4.1	5.7	0.988	21	226	3.0
741.3	0.393	8.5	0.295	13	163	2.7	5.7	0.538	20	186	2.0
742.0	0.393	12	0.365	12	174	4.1	5.7	0.665	19	199	3.0
742.7	0.393	8.2	0.638	18	180	3.4	5.7	1.2	28	206	2.5
743.4	0.393	11	0.454	17	176	3.3	5.7	0.828	26	202	2.4
744.1	0.393	11	0.214	11	184	2.6	5.7	0.391	17	210	1.9
744.8	0.393	12	0.521	17	183	3.4	5.7	0.951	25	209	2.5
745.5	0.393	13	0.699	18	178	4.7	5.7	1.3	28	204	3.4
746.2	0.393	11	0.387	17	190	3.5	5.7	0.705	26	217	2.6
746.9	0.393	12	0.629	14	189	3.7	5.7	1.1	21	217	2.7
747.6	0.393	11	0.632	17	181	4.6	5.7	1.2	27	207	3.4
748.3	0.393	14	0.966	17	190	5.0	5.7	1.8	25	217	3.6
749.0	0.393	13	0.476	16	189	3.3	5.7	0.868	24	216	2.4
749.7	0.393	15	0.660	21	201	4.0	5.7	1.2	33	230	2.9
750.4	0.393	16	0.820	19	177	3.7	5.7	1.5	29	202	2.7
751.1	0.393	16	0.722	21	198	4.9	5.7	1.3	31	227	3.6
751.7	0.393	14	0.481	24	175	3.9	5.7	0.877	37	200	2.9
752.4	0.393	14	0.970	22	180	5.9	5.7	1.8	33	206	4.3
753.1	0.393	13	0.592	23	192	6.2	5.7	1.1	35	220	4.5
753.8	0.541	15	0.792	25	174	5.7	7.8	1.4	38	199	4.2
754.5	0.571	16	0.796	26	185	4.8	8.2	1.5	39	212	3.5
755.2	0.393	16	1.1	27	162	5.7	5.7	2.1	42	185	4.2
755.9	0.393	15	0.439	24	144	5.3	5.7	0.800	37	164	3.8
756.6	0.393	15	0.559	23	136	5.3	5.7	1.0	35	155	3.9
757.3	0.393	16	0.821	23	143	5.3	5.7	1.5	35	163	3.9
758.0	0.393	16	1.3	22	142	5.4	5.7	2.4	34	163	3.9
758.7	0.393	18	0.978	26	144	6.3	5.7	1.8	40	164	4.6
759.4	0.393	16	1.0	28	149	5.9	5.7	1.9	43	170	4.3
760.1	0.418	18	1.2	26	158	7.4	6.0	2.1	40	181	5.4
760.8	0.393	18	0.915	28	148	6.0	5.7	1.7	43	169	4.4
761.5	0.638	18	1.4	36	150	8.6	9.2	2.6	56	171	6.3
762.2	0.569	18	1.3	31	133	6.8	8.2	2.4	47	152	5.0
762.9	0.393	17	0.833	26	130	7.6	5.7	1.5	39	148	5.6
763.6	0.393	16	1.5	30	135	6.8	5.7	2.7	45	154	4.9
764.3	0.393	17	1.2	29	139	5.5	5.7	2.1	45	159	4.0
765.0	0.393	18	1.2	26	129	8.8	5.7	2.2	40	148	6.4
765.7	0.393	19	1.3	28	122	7.3	5.7	2.4	43	139	5.4
766.4	0.393	18	1.0	34	149	8.3	5.7	1.9	52	170	6.1
767.1	0.393	18	1.4	39	141	9.2	5.7	2.6	60	162	6.7
767.8	0.393	19	1.2	37	124	8.8	5.7	2.1	57	142	6.4
768.5	0.555	19	1.4	34	118	7.1	8.0	2.5	52	135	5.2
769.2	0.444	18	1.5	36	121	8.6	6.4	2.7	55	138	6.3
769.9	0.393	19	1.4	34	135	9.8	5.7	2.5	52	154	7.2
770.6	0.393	18	1.1	29	123	7.6	5.7	1.9	45	141	5.5
771.3	0.393	18	1.4	34	117	7.8	5.7	2.6	53	134	5.7
772.0	0.393	18	1.6	32	133	9.2	5.7	2.8	49	152	6.7
772.7	0.393	14	1.6	34	130	9.9	5.7	2.9	52	149	7.2
773.4	0.393	18	1.3	41	126	9.6	5.7	2.4	63	145	7.0
774.1	0.393	17	0.853	37	131	8.7	5.7	1.6	57	150	6.4
774.8	0.393	17	1.7	34	129	9.4	5.7	3.2	52	147	6.9
775.5	0.393	16	1.3	33	120	9.1	5.7	2.4	51	138	6.7
776.2	0.393	18	1.4	35	114	9.8	5.7	2.5	54	131	7.1
776.9	0.393	16	1.4	34	110	11	5.7	2.6	52	126	7.9
777.5	0.393	15	1.5	33	115	9.0	5.7	2.8	50	131	6.6
778.2	0.524	18	1.4	46	111	9.8	7.6	2.6	71	127	7.2
778.9	0.557	18	1.8	34	114	11	8.0	3.3	53	131	8.1
779.6	0.393	17	2.3	42	117	9.4	5.7	4.2	65	134	6.8
780.3	0.393	19	1.8	45	131	12	5.7	3.3	68	150	8.8
781.0	0.393	20	1.8	39	123	11	5.7	3.3	60	141	7.8
781.7	0.393	18	2.7	42	118	8.1	5.7	4.9	64	135	5.9
782.4	0.393	17	2.0	45	126	9.1	5.7	3.6	68	144	6.7
783.1	0.393	21	2.3	53	127	12	5.7	4.1	81	145	8.6
783.8	0.669	18	2.3	45	134	8.1	9.7	4.2	69	153	5.9
784.5	0.393	17	2.5	46	123	9.8	5.7	4.6	71	141	7.2
785.2	0.393	17	2.2	50	127	9.9	5.7	4.0	76	145	7.2
785.9	0.393	19	2.9	49	140	10	5.7	5.3	76	160	7.6
786.6	0.393	17	1.9	42	123	11	5.7	3.4	64	140	7.7
787.3	0.393	20	2.4	49	131	12	5.7	4.4	75	150	8.5
788.0	0.393	20	2.1	48	127	11	5.7	3.8	74	146	8.2
788.7	0.393	21	2.8	54	129	10	5.7	5.1	83	148	7.6
789.4	0.393	22	3.1	53	136	11	5.7	5.7	81	155	8.3
790.1	0.393	19	2.5	56	138	9.5	5.7	4.6	86	158	6.9

Minnow Environmental
Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
790.8	0.393	19	2.5	52	133	9.8	5.7	4.6	80	152	7.1
791.5	0.393	20	3.4	51	140	10.0	5.7	6.2	79	161	7.3
792.2	0.393	20	3.2	52	136	11	5.7	5.9	80	156	7.8
792.9	0.393	19	3.1	58	132	11	5.7	5.7	89	151	7.8
793.6	0.393	21	2.9	49	128	9.0	5.7	5.3	75	147	6.6
794.3	0.393	18	3.3	50	116	9.0	5.7	6.0	76	132	6.6
795.0	0.393	20	3.4	54	134	11	5.7	6.1	83	153	7.7
795.7	0.393	21	3.1	56	144	11	5.7	5.6	85	165	8.0
796.4	0.393	24	3.5	63	139	9.2	5.7	6.4	96	159	6.7
797.1	0.393	17	3.7	56	126	9.7	5.7	6.7	85	144	7.1
797.8	0.393	19	3.8	58	150	12	5.7	7.0	89	171	9.1
798.5	0.393	19	3.1	59	147	9.6	5.7	5.7	90	168	7.0
799.2	0.393	17	3.2	58	140	8.3	5.7	5.8	89	160	6.1
799.9	0.738	19	3.5	57	156	9.8	11	6.4	88	178	7.1
800.6	0.406	22	3.3	64	147	8.7	5.9	6.0	98	169	6.4
801.3	0.393	19	3.3	55	149	9.7	5.7	6.1	84	170	7.0
802.0	0.393	20	3.9	56	163	10	5.7	7.1	86	187	7.4
802.7	0.393	20	3.0	63	162	10	5.7	5.5	96	185	7.3
803.4	0.393	21	3.2	51	139	7.7	5.7	5.9	78	159	5.6
804.1	0.393	19	3.2	50	158	7.6	5.7	5.8	77	181	5.5
804.7	0.393	17	3.1	52	158	9.8	5.7	5.7	80	180	7.1
805.4	0.393	17	3.1	56	154	8.3	5.7	5.7	87	176	6.1
806.1	0.393	17	2.9	61	174	7.9	5.7	5.2	93	199	5.8
806.8	0.393	15	2.4	50	146	6.2	5.7	4.5	77	167	4.5
807.5	0.874	19	2.6	51	154	8.3	13	4.8	77	176	6.1
808.2	0.393	19	2.9	57	162	5.0	5.7	5.2	87	185	3.7
808.9	0.739	16	2.1	48	190	6.0	11	3.9	73	217	4.4
809.6	0.393	16	2.7	46	187	6.1	5.7	4.9	71	214	4.4
810.3	0.393	16	2.1	45	201	6.1	5.7	3.8	69	230	4.4
811.0	0.393	15	1.8	39	181	3.7	5.7	3.3	60	207	2.7
811.7	0.393	15	1.6	38	183	3.7	5.7	3.0	59	209	2.7
812.4	0.393	17	2.2	46	206	5.7	5.7	4.0	70	235	4.2
813.1	0.393	17	1.7	42	213	4.4	5.7	3.2	64	243	3.2
813.8	0.393	16	1.6	41	198	2.9	5.7	2.9	63	227	2.1
814.5	0.393	15	2.2	35	215	2.7	5.7	3.9	53	245	2.0
815.2	0.393	15	1.3	32	213	3.4	5.7	2.3	50	244	2.5
815.9	0.393	14	1.6	24	225	1.9	5.7	2.9	37	257	1.4
816.6	0.393	13	1.3	28	228	3.6	5.7	2.4	42	260	2.7
817.3	0.393	12	1.1	30	238	3.9	5.7	1.9	45	272	2.8
818.0	0.393	13	0.895	30	243	2.0	5.7	1.6	46	277	1.5
818.7	0.393	11	0.933	21	255	2.5	5.7	1.7	31	291	1.8
819.4	0.393	13	0.747	24	234	2.6	5.7	1.4	36	268	1.9
820.1	0.393	12	0.722	21	256	2.7	5.7	1.3	32	292	2.0
820.8	0.393	12	0.647	22	264	2.1	5.7	1.2	33	302	1.5
821.5	0.393	10	0.701	19	228	2.2	5.7	1.3	30	260	1.6
822.2	0.393	11	0.658	19	274	1.4	5.7	1.2	29	314	0.998
822.9	0.393	12	0.922	22	249	1.4	5.7	1.7	34	285	1.0
823.6	0.393	12	0.506	22	301	2.7	5.7	0.922	33	344	2.0
824.3	0.393	10	0.610	22	266	3.1	5.7	1.1	33	304	2.3
825.0	0.393	14	0.861	21	291	2.6	5.7	1.6	32	332	1.9
825.7	0.581	12	0.527	23	280	1.6	8.4	0.960	35	320	1.2
826.4	0.393	10	0.518	17	297	2.0	5.7	0.945	26	340	1.5
827.1	0.393	9.4	0.586	15	283	2.9	5.7	1.1	24	323	2.1
827.8	0.393	10	0.487	15	299	2.2	5.7	0.888	22	342	1.6
828.5	0.393	11	0.864	13	274	1.8	5.7	1.6	19	314	1.3
829.2	0.393	10	0.478	16	281	1.7	5.7	0.872	25	322	1.3
829.9	0.393	10	0.556	15	244	1.0	5.7	1.0	23	279	0.754
830.5	0.393	10	0.783	14	325	2.2	5.7	1.4	22	372	1.6
831.2	0.393	10	0.356	14	259	1.5	5.7	0.650	21	296	1.1
831.9	0.393	13	0.357	15	302	2.4	5.7	0.650	23	346	1.8
832.6	0.393	9.9	0.295	9.9	313	2.7	5.7	0.538	15	358	2.0
833.3	0.393	10	0.900	16	295	1.9	5.7	1.6	24	338	1.4
834.0	0.393	9.9	0.340	13	309	1.6	5.7	0.621	19	353	1.1
834.7	0.393	9.4	0.783	17	311	1.7	5.7	1.4	26	355	1.2
835.4	0.527	11	0.431	16	289	2.2	7.6	0.787	24	330	1.6
836.1	0.393	11	0.589	18	424	2.6	5.7	1.1	27	485	1.9
836.8	0.393	12	0.452	20	291	2.3	5.7	0.824	30	333	1.7
837.5	0.393	11	0.769	18	304	2.5	5.7	1.4	27	348	1.8
838.2	0.393	13	0.489	21	326	2.4	5.7	0.891	33	373	1.7
838.9	0.393	12	0.362	22	296	2.1	5.7	0.661	33	339	1.5
839.6	0.393	13	0.799	16	277	2.0	5.7	1.5	25	317	1.5
840.3	0.393	12	0.571	22	320	2.0	5.7	1.0	34	366	1.5
841.0	0.393	11	0.851	24	295	2.9	5.7	1.6	36	338	2.1
841.7	0.420	11	0.891	24	317	1.6	6.1	1.6	37	362	1.2
842.4	0.393	14	0.550	22	305	2.3	5.7	1.0	33	349	1.7
843.1	0.393	13	0.492	21	283	1.9	5.7	0.897	33	324	1.4
843.8	0.569	13	0.794	30	278	2.1	8.2	1.4	46	317	1.6
844.5	0.393	15	0.885	27	301	2.5	5.7	1.6	41	344	1.8
845.2	0.787	15	1.4	28	312	2.2	11	2.5	42	357	1.6
845.9	0.393	13	1.2	22	268	3.1	5.7	2.1	33	306	2.3
846.6	0.582	15	1.1	22	324	2.4	8.4	2.0	34	371	1.8

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
847.3	0.393	14	0.857	31	305	2.6	5.7	1.6	47	348	1.9
848.0	0.393	16	0.783	38	315	2.9	5.7	1.4	58	360	2.1
848.7	0.393	16	1.1	32	294	2.1	5.7	2.0	50	336	1.5
849.4	0.393	15	0.861	38	325	2.4	5.7	1.6	58	371	1.7
850.1	0.393	17	0.849	36	310	2.8	5.7	1.5	55	354	2.0
850.8	0.393	14	1.1	35	286	2.7	5.7	2.0	54	327	2.0
851.5	0.469	15	0.968	38	292	4.2	6.8	1.8	59	334	3.1
852.2	0.393	18	1.2	44	307	4.0	5.7	2.3	67	351	2.9
852.9	0.393	18	1.2	43	297	3.2	5.7	2.1	66	339	2.4
853.6	0.702	19	1.3	38	284	3.7	10	2.4	58	325	2.7
854.3	0.750	17	1.3	40	279	2.6	11	2.4	62	319	1.9
855.0	0.393	15	1.7	44	357	3.9	5.7	3.1	67	409	2.8
855.7	0.635	17	1.5	44	310	3.6	9.2	2.7	67	355	2.6
856.4	0.393	18	1.8	47	299	3.5	5.7	3.3	72	342	2.5
857.0	0.393	17	1.4	49	309	2.8	5.7	2.6	74	353	2.1
857.7	0.393	18	1.3	43	306	3.8	5.7	2.4	65	350	2.8
858.4	0.962	17	1.1	39	283	3.4	14	1.9	60	324	2.5
859.1	0.393	15	0.819	43	312	4.4	5.7	1.5	66	357	3.2
859.8	0.902	20	1.6	45	318	3.6	13	2.9	69	364	2.6
860.5	0.443	16	0.864	43	288	3.1	6.4	1.6	66	330	2.3
861.2	0.393	15	1.2	42	316	3.1	5.7	2.1	65	361	2.3
861.9	0.393	18	1.2	39	288	3.5	5.7	2.2	60	329	2.6
862.6	0.393	16	1.4	51	290	2.3	5.7	2.6	78	332	1.7
863.3	0.393	18	1.8	52	360	3.1	5.7	3.3	79	412	2.3
864.0	0.393	18	1.4	48	306	3.4	5.7	2.5	74	350	2.5
864.7	0.393	18	1.6	51	306	2.7	5.7	2.9	78	350	2.0
865.4	0.393	19	1.2	52	298	3.9	5.7	2.2	80	341	2.9
866.1	0.393	17	1.4	48	341	2.7	5.7	2.5	73	389	2.0
866.8	0.850	18	1.8	46	334	3.3	12	3.2	70	382	2.4
867.5	0.393	17	1.2	59	302	3.1	5.7	2.2	90	346	2.3
868.2	0.393	19	1.4	60	294	2.6	5.7	2.6	92	336	1.9
868.9	0.393	19	1.5	58	323	3.2	5.7	2.6	89	370	2.4
869.6	0.393	17	1.2	51	332	2.8	5.7	2.2	78	380	2.1
870.3	0.393	19	1.9	54	351	4.0	5.7	3.4	83	401	2.9
871.0	0.393	20	1.2	60	308	3.0	5.7	2.1	92	352	2.2
871.7	0.393	19	1.4	60	329	2.8	5.7	2.5	91	376	2.0
872.4	0.393	19	1.2	64	389	6.2	5.7	2.3	98	445	4.5
873.1	0.393	19	1.2	61	327	3.5	5.7	2.2	94	373	2.6
873.8	0.569	21	1.7	66	349	3.0	8.2	3.2	102	399	2.2
874.5	0.393	21	1.4	58	349	5.6	5.7	2.6	88	399	4.1
875.2	0.393	19	1.4	55	315	2.7	5.7	2.5	84	360	2.0
875.9	0.393	22	1.2	70	324	2.8	5.7	2.2	107	371	2.0
876.6	0.648	16	1.6	59	316	2.0	9.4	2.9	90	362	1.4
877.3	0.393	17	1.6	61	323	2.8	5.7	3.0	93	369	2.0
878.0	0.393	19	1.4	66	327	3.4	5.7	2.6	100	374	2.5
878.7	0.587	22	1.4	68	332	3.7	8.5	2.5	104	380	2.7
879.4	0.393	18	1.5	62	311	2.1	5.7	2.7	95	355	1.6
880.1	0.393	21	1.2	58	288	1.9	5.7	2.2	88	330	1.4
880.8	0.393	21	1.6	69	313	3.0	5.7	3.0	105	358	2.2
881.5	0.438	20	1.4	62	278	3.0	6.3	2.6	95	318	2.2
882.2	0.393	21	1.5	66	303	2.5	5.7	2.7	101	346	1.8
882.9	0.541	22	1.8	64	294	2.9	7.8	3.3	98	336	2.1
883.5	0.393	18	1.9	73	310	1.5	5.7	3.5	111	354	1.1
884.2	0.393	21	1.6	67	305	2.5	5.7	3.0	103	349	1.8
884.9	0.393	20	1.6	70	277	2.3	5.7	3.0	108	317	1.7
885.6	0.513	19	1.9	67	280	2.5	7.4	3.4	103	320	1.8
886.3	0.393	19	1.8	74	305	2.3	5.7	3.4	114	349	1.7
887.0	0.393	19	2.1	65	300	2.9	5.7	3.9	100	343	2.1
887.7	0.691	18	1.7	72	300	2.0	10.0	3.1	111	344	1.5
888.4	0.501	21	2.3	69	326	2.1	7.2	4.2	106	373	1.5
889.1	0.393	19	2.0	72	300	3.8	5.7	3.6	110	343	2.8
889.8	0.601	20	1.9	61	251	2.1	8.7	3.4	93	287	1.6
890.5	0.427	20	2.7	66	308	3.2	6.2	4.9	102	353	2.4
891.2	0.461	20	1.4	71	285	2.1	6.7	2.6	109	326	1.5
891.9	0.629	21	2.0	67	264	2.7	9.1	3.6	102	302	2.0
892.6	0.393	20	2.1	61	265	1.8	5.7	3.8	93	303	1.3
893.3	0.393	21	1.8	74	277	2.1	5.7	3.3	113	317	1.6
894.0	0.646	19	1.8	63	281	3.1	9.3	3.3	96	321	2.3
894.7	0.393	25	1.8	70	293	3.1	5.7	3.3	108	336	2.3
895.4	0.393	20	2.3	69	295	2.5	5.7	4.2	106	337	1.8
896.1	0.393	23	1.6	66	295	3.1	5.7	2.9	102	337	2.3
896.8	0.393	21	2.1	66	263	1.9	5.7	3.9	101	300	1.4
897.5	0.460	21	2.0	56	242	2.8	6.6	3.6	85	277	2.1
898.2	0.393	21	1.9	61	257	3.5	5.7	3.4	94	294	2.6
898.9	0.594	22	2.3	75	278	3.3	8.6	4.2	115	317	2.4
899.6	0.393	20	2.4	67	291	3.2	5.7	4.3	102	333	2.3
900.3	0.597	20	2.3	56	262	2.4	8.6	4.1	86	300	1.8
901.0	0.393	22	2.3	70	237	3.7	5.7	4.2	107	271	2.7
901.7	0.452	26	2.2	59	264	3.5	6.5	3.9	91	302	2.6
902.4	0.393	23	1.8	59	223	3.0	5.7	3.4	90	255	2.2
903.1	0.519	22	1.7	62	241	3.4	7.5	3.0	95	276	2.5

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
903.8	0.417	19	1.6	54	229	2.7	6.0	2.9	83	262	2.0
904.5	0.502	22	1.9	54	254	2.3	7.2	3.5	83	290	1.7
905.2	0.393	21	2.2	69	262	2.4	5.7	4.0	106	299	1.7
905.9	0.393	23	2.5	64	224	2.6	5.7	4.5	98	256	1.9
906.6	0.393	21	2.7	63	259	3.5	5.7	5.0	97	297	2.6
907.3	0.597	24	1.7	56	234	3.0	8.6	3.2	86	268	2.2
908.0	0.393	20	1.7	62	233	3.1	5.7	3.1	96	267	2.3
908.7	0.433	22	2.3	64	251	3.8	6.2	4.2	98	287	2.8
909.4	0.393	23	1.8	60	227	2.8	5.7	3.3	93	259	2.0
910.0	0.583	20	2.2	64	214	2.0	8.4	3.9	98	245	1.4
910.7	0.393	19	2.1	63	229	4.5	5.7	3.8	96	262	3.3
911.4	0.393	20	1.7	57	209	2.1	5.7	3.0	88	239	1.6
912.1	0.528	24	2.5	73	240	3.0	7.6	4.5	112	275	2.2
912.8	0.466	22	2.0	58	226	3.7	6.7	3.6	89	259	2.7
913.5	0.393	24	1.7	68	226	4.6	5.7	3.1	105	258	3.3
914.2	0.393	23	2.1	66	226	3.8	5.7	3.9	102	259	2.8
914.9	0.445	24	2.4	69	231	3.8	6.4	4.4	106	264	2.8
915.6	0.393	21	1.8	57	207	3.8	5.7	3.3	88	237	2.8
916.3	0.393	23	2.3	63	207	5.6	5.7	4.2	97	236	4.1
917.0	0.393	19	2.0	54	211	3.4	5.7	3.6	82	241	2.5
917.7	0.393	24	2.4	60	216	4.0	5.7	4.3	92	247	2.9
918.4	0.393	22	2.4	62	206	4.1	5.7	4.4	95	236	3.0
919.1	0.393	21	2.3	65	229	3.5	5.7	4.2	100	262	2.5
919.8	0.393	22	2.4	66	216	3.2	5.7	4.4	101	247	2.3
920.5	0.393	22	2.3	56	217	3.1	5.7	4.1	86	248	2.3
921.2	0.393	22	2.4	60	223	3.3	5.7	4.4	92	255	2.4
921.9	0.393	21	2.2	63	217	6.0	5.7	4.0	96	249	4.3
922.6	0.393	22	2.6	64	223	4.2	5.7	4.7	97	254	3.0
923.3	0.617	23	1.7	65	214	3.9	8.9	3.2	100	244	2.9
924.0	0.468	19	2.5	55	196	3.2	6.8	4.6	84	224	2.3
924.7	0.393	24	2.2	67	244	4.3	5.7	4.0	103	278	3.1
925.4	0.393	20	2.6	59	240	4.4	5.7	4.8	90	275	3.2
926.1	0.393	21	2.4	55	235	5.3	5.7	4.3	85	268	3.9
926.8	0.393	20	2.5	56	257	4.5	5.7	4.5	86	294	3.3
927.5	0.393	21	1.7	50	238	4.2	5.7	3.2	76	272	3.1
928.2	0.393	23	2.6	61	254	4.9	5.7	4.7	93	290	3.5
928.9	0.393	22	2.3	63	231	6.1	5.7	4.2	96	264	4.5
929.6	0.393	21	1.9	63	285	4.0	5.7	3.5	96	326	2.9
930.3	0.393	21	2.4	62	261	5.5	5.7	4.3	95	298	4.0
931.0	0.393	21	2.2	55	257	4.9	5.7	3.9	85	294	3.5
931.7	0.393	21	2.0	64	240	6.0	5.7	3.7	98	274	4.4
932.4	0.393	19	1.9	59	255	5.1	5.7	3.5	90	291	3.7
933.1	0.393	20	1.5	54	273	6.8	5.7	2.8	82	312	4.9
933.8	0.393	21	2.1	50	282	5.3	5.7	3.8	77	322	3.9
934.5	0.393	18	2.1	62	270	6.8	5.7	3.8	95	308	5.0
935.2	0.393	18	1.8	61	322	6.0	5.7	3.3	94	368	4.4
935.9	0.393	21	1.8	56	300	7.4	5.7	3.3	86	343	5.4
936.5	0.393	19	2.2	51	333	5.3	5.7	4.0	79	380	3.8
937.2	0.393	20	2.1	56	332	7.0	5.7	3.8	85	380	5.1
937.9	0.393	20	1.7	55	308	6.2	5.7	3.2	84	352	4.5
938.6	0.393	19	1.9	51	306	7.6	5.7	3.5	79	350	5.5
939.3	0.393	17	1.5	52	382	8.2	5.7	2.8	80	437	6.0
940.0	0.393	18	1.2	50	369	9.5	5.7	2.2	76	422	7.0
940.7	0.393	16	1.5	49	414	11	5.7	2.7	75	473	7.9
941.4	0.393	17	1.2	50	381	10	5.7	2.3	76	435	7.4
942.1	0.393	18	1.4	46	379	11	5.7	2.5	70	434	8.0
942.8	0.393	18	1.3	41	472	10	5.7	2.3	64	540	7.5
943.5	0.393	17	1.3	46	453	11	5.7	2.4	71	518	8.3
944.2	0.393	19	1.7	49	499	11	5.7	3.1	75	571	8.2
944.9	0.393	19	1.4	50	531	16	5.7	2.6	76	608	12
945.6	0.393	18	1.1	42	518	12	5.7	2.0	65	592	8.8
946.3	0.393	13	0.927	39	533	17	5.7	1.7	60	609	12
947.0	0.393	16	1.0	39	602	18	5.7	1.9	60	688	13
947.7	0.393	15	1.3	34	601	20	5.7	2.4	51	687	14
948.4	0.393	15	0.850	38	531	14	5.7	1.5	58	608	10
949.1	0.430	15	0.973	45	662	22	6.2	1.8	69	757	16
949.8	0.393	15	0.868	30	653	20	5.7	1.6	46	747	14
950.5	0.393	14	1.1	29	679	20	5.7	2.0	45	777	14
951.2	0.393	11	0.946	33	647	21	5.7	1.7	50	740	16
951.9	0.393	16	0.909	33	692	26	5.7	1.7	50	791	19
952.6	0.393	14	0.586	32	698	21	5.7	1.1	49	798	15
953.3	0.649	15	0.738	27	716	19	9.4	1.3	42	819	14
954.0	0.393	13	0.761	25	696	19	5.7	1.4	39	795	14
954.7	0.393	13	0.609	25	843	28	5.7	1.1	38	963	21
955.4	0.393	14	0.478	26	832	27	5.7	0.872	40	951	20
956.1	0.393	12	0.704	26	926	33	5.7	1.3	40	1059	24
956.8	0.393	14	0.585	23	888	34	5.7	1.1	35	1016	25
957.5	0.393	14	0.891	29	1000	34	5.7	1.6	45	1143	25
958.2	0.393	11	0.859	24	916	44	5.7	1.6	37	1047	32
958.9	0.393	9.5	0.864	22	825	30	5.7	1.6	34	944	22
959.6	0.393	12	0.965	22	790	29	5.7	1.8	34	903	21

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
960.3	0.393	10	0.517	22	737	29	5.7	0.943	33	843	21
961.0	0.393	12	0.673	25	655	25	5.7	1.2	39	749	18
961.7	0.784	9.2	0.458	22	681	27	11	0.835	33	778	19
962.3	0.393	10	0.534	22	593	25	5.7	0.974	34	678	18
963.0	0.393	11	0.806	24	738	26	5.7	1.5	36	844	19
963.7	0.393	13	1.1	23	659	23	5.7	2.0	36	754	17
964.4	0.393	12	0.631	27	700	26	5.7	1.2	42	801	19
965.1	0.393	13	0.615	27	564	19	5.7	1.1	41	645	14
965.8	0.393	8.9	0.620	25	593	18	5.7	1.1	38	679	13
966.5	0.393	11	0.811	23	586	19	5.7	1.5	36	670	14
967.2	0.393	12	0.655	25	583	17	5.7	1.2	38	666	13
967.9	0.393	12	0.931	25	673	19	5.7	1.7	38	770	14
968.6	0.393	11	0.865	25	538	20	5.7	1.6	39	615	14
969.3	0.393	12	0.927	27	572	20	5.7	1.7	41	654	14
970.0	0.393	11	0.905	27	540	19	5.7	1.7	42	617	14
970.7	0.393	13	0.505	30	528	20	5.7	0.922	46	604	15
971.4	0.638	11	0.828	24	481	17	9.2	1.5	37	550	12
972.1	0.679	11	0.718	24	595	19	9.8	1.3	36	681	14
972.8	0.393	13	0.941	26	543	18	5.7	1.7	39	621	13
973.5	0.393	13	1.1	25	544	23	5.7	2.0	38	622	17
974.2	0.393	14	0.586	26	537	20	5.7	1.1	40	614	15
974.9	0.393	11	0.942	27	517	22	5.7	1.7	42	592	16
975.6	0.393	13	0.675	27	492	18	5.7	1.2	42	563	13
976.3	0.393	13	0.879	31	453	16	5.7	1.6	47	518	12
977.0	0.393	13	0.705	30	416	17	5.7	1.3	45	476	12
977.7	0.393	16	0.993	32	520	19	5.7	1.8	50	595	14
978.4	0.393	13	0.840	30	456	20	5.7	1.5	45	522	15
979.1	0.393	13	1.0	31	408	19	5.7	1.9	48	467	14
979.8	0.859	14	0.628	28	378	15	12	1.1	43	432	11
980.5	0.393	13	1.4	31	534	18	5.7	2.6	48	611	13
981.2	0.393	12	0.684	37	439	18	5.7	1.2	57	502	13
981.9	0.393	12	0.826	33	374	14	5.7	1.5	51	428	9.9
982.6	0.399	15	0.850	31	391	15	5.8	1.6	47	447	11
983.3	0.393	12	0.914	34	434	15	5.7	1.7	51	496	11
984.0	0.679	14	1.6	33	373	16	9.8	2.8	51	426	12
984.7	0.393	13	0.811	32	359	13	5.7	1.5	48	410	9.4
985.4	0.589	13	1.4	39	348	15	8.5	2.6	59	398	11
986.1	0.393	13	0.757	34	386	14	5.7	1.4	52	441	10
986.8	0.393	16	0.805	40	367	17	5.7	1.5	62	419	13
987.5	0.426	16	1.3	38	381	16	6.2	2.4	58	435	12
988.2	0.489	12	1.4	34	401	16	7.1	2.5	52	459	12
988.8	0.939	14	0.902	41	428	15	14	1.6	63	490	11
989.5	0.393	14	1.4	39	353	13	5.7	2.5	60	404	9.7
990.2	0.457	16	0.969	47	355	20	6.6	1.8	72	406	14
990.9	0.567	12	1.4	39	329	14	8.2	2.5	60	376	10
991.6	0.393	16	1.6	49	359	17	5.7	2.9	76	411	12
992.3	0.393	15	1.3	43	382	18	5.7	2.4	66	437	13
993.0	0.393	17	0.963	47	420	20	5.7	1.8	72	480	14
993.7	0.393	16	1.3	43	342	16	5.7	2.4	65	391	12
994.4	0.404	15	1.2	37	350	16	5.8	2.2	57	401	12
995.1	0.393	14	1.1	43	340	13	5.7	2.0	66	389	9.8
995.8	0.393	14	1.2	45	354	17	5.7	2.3	69	405	12
996.5	0.555	13	0.971	42	300	15	8.0	1.8	65	343	11
997.2	0.393	14	1.3	47	360	18	5.7	2.3	72	412	13
997.9	0.393	13	1.4	57	286	18	5.7	2.5	87	327	13
998.6	0.393	17	1.4	48	317	17	5.7	2.5	73	363	12
999.3	0.393	17	1.4	49	312	18	5.7	2.6	74	357	13
1000.0	0.393	13	1.8	41	283	14	5.7	3.3	63	324	11
1000.7	0.393	17	1.2	50	321	14	5.7	2.3	76	367	9.9
1001.4	0.957	16	1.3	44	305	16	14	2.3	68	349	12
1002.1	0.497	16	1.6	44	309	17	7.2	3.0	68	353	12
1002.8	0.393	12	1.7	53	318	17	5.7	3.1	82	364	12
1003.5	0.393	16	1.3	51	324	15	5.7	2.4	78	371	11
1004.2	0.393	19	1.4	48	321	18	5.7	2.6	74	367	13
1004.9	0.393	16	1.8	58	346	23	5.7	3.2	88	396	17
1005.6	0.666	14	1.2	53	339	17	9.6	2.3	81	388	12
1006.3	0.393	17	1.4	50	295	15	5.7	2.6	77	338	11
1007.0	0.393	17	1.9	52	355	20	5.7	3.5	79	406	14
1007.7	0.636	15	2.0	48	332	17	9.2	3.6	74	380	13
1008.4	0.393	14	1.7	48	303	16	5.7	3.1	73	347	12
1009.1	0.393	15	1.6	63	318	18	5.7	2.9	96	363	13
1009.8	0.393	16	1.5	56	371	21	5.7	2.7	85	424	15
1010.5	0.393	16	1.4	60	334	20	5.7	2.5	91	382	14
1011.2	0.416	17	1.4	64	361	20	6.0	2.6	98	413	14
1011.9	0.393	19	1.3	57	350	19	5.7	2.4	87	401	14
1012.6	0.393	16	1.6	53	319	16	5.7	3.0	81	364	12
1013.3	0.433	15	1.5	64	336	17	6.3	2.8	98	384	12
1014.0	0.393	17	1.7	63	336	21	5.7	3.0	96	384	15
1014.7	0.473	18	1.7	61	325	21	6.8	3.1	93	371	15
1015.3	0.393	17	2.5	62	359	22	5.7	4.6	95	410	16
1016.0	0.474	16	2.1	68	352	20	6.8	3.8	105	402	14

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1016.7	0.756	18	2.0	59	346	21	11	3.6	91	396	16
1017.4	0.398	17	2.0	61	318	22	5.7	3.6	93	363	16
1018.1	0.393	15	1.3	54	280	19	5.7	2.4	83	321	14
1018.8	0.393	16	1.8	66	328	20	5.7	3.3	101	375	15
1019.5	0.393	17	2.0	65	348	22	5.7	3.7	99	398	16
1020.2	0.588	19	2.1	65	366	23	8.5	3.8	99	418	17
1020.9	0.784	17	2.0	70	346	22	11	3.7	108	396	16
1021.6	0.543	21	2.2	61	308	21	7.8	4.0	94	353	16
1022.3	0.393	14	2.0	68	351	24	5.7	3.6	104	401	18
1023.0	0.393	17	2.1	63	308	23	5.7	3.7	96	353	17
1023.7	0.460	16	1.6	50	284	19	6.6	2.9	77	325	14
1024.4	0.393	18	1.9	70	338	24	5.7	3.5	108	387	17
1025.1	0.393	18	2.1	66	368	27	5.7	3.8	102	420	20
1025.8	0.393	18	2.0	71	336	23	5.7	3.7	108	384	17
1026.5	0.393	16	1.9	67	359	24	5.7	3.5	102	411	17
1027.2	0.393	15	2.0	69	353	24	5.7	3.6	106	404	18
1027.9	0.438	18	1.9	65	345	23	6.3	3.5	100	395	17
1028.6	0.947	18	2.4	61	327	27	14	4.4	93	374	19
1029.3	0.393	19	2.1	62	326	24	5.7	3.9	95	373	17
1030.0	0.625	19	2.7	68	359	25	9.0	4.9	105	411	18
1030.7	0.393	19	2.7	70	373	24	5.7	4.9	107	426	18
1031.4	0.882	17	2.0	71	397	23	13	3.6	109	454	17
1032.1	0.393	17	2.0	64	313	25	5.7	3.6	99	358	18
1032.8	0.393	20	2.3	71	385	23	5.7	4.2	109	440	17
1033.5	0.393	17	2.6	73	335	21	5.7	4.7	111	383	15
1034.2	0.393	21	1.8	68	331	25	5.7	3.3	104	379	18
1034.9	0.393	19	2.2	70	325	23	5.7	4.1	107	371	17
1035.6	0.393	16	2.8	67	420	21	5.7	5.2	102	480	15
1036.3	0.453	18	2.6	69	308	21	6.5	4.8	105	352	15
1037.0	0.393	19	2.4	71	415	21	5.7	4.3	109	475	16
1037.7	0.393	19	1.8	68	327	22	5.7	3.2	104	374	16
1038.4	0.393	19	2.7	81	365	29	5.7	5.0	125	418	21
1039.1	0.393	19	1.6	76	343	18	5.7	3.0	117	392	13
1039.8	0.393	20	2.1	68	356	23	5.7	3.7	104	407	16
1040.5	0.393	20	2.4	78	315	25	5.7	4.3	120	360	18
1041.1	0.393	22	2.0	69	344	21	5.7	3.7	106	393	15
1041.8	0.393	20	2.3	70	322	23	5.7	4.1	107	368	16
1042.5	0.393	19	2.3	80	381	24	5.7	4.2	123	435	18
1043.2	1.0	18	2.1	77	345	22	15	3.9	118	394	16
1043.9	0.393	18	2.3	74	323	22	5.7	4.2	114	370	16
1044.6	0.768	21	2.0	86	371	23	11	3.7	131	424	17
1045.3	0.393	18	2.1	72	333	21	5.7	3.8	110	381	15
1046.0	0.479	19	2.5	69	338	19	6.9	4.6	105	387	14
1046.7	0.457	20	2.6	69	354	20	6.6	4.7	105	405	15
1047.4	0.393	23	2.4	77	364	25	5.7	4.3	117	417	18
1048.1	0.393	22	2.7	70	331	20	5.7	5.0	107	379	14
1048.8	0.609	19	2.5	76	329	16	8.8	4.6	117	376	12
1049.5	0.395	21	2.4	80	338	21	5.7	4.3	122	386	15
1050.2	0.538	20	2.9	73	336	21	7.8	5.3	112	384	15
1050.9	0.462	18	2.5	72	308	15	6.7	4.6	111	352	11
1051.6	0.393	18	2.1	81	369	18	5.7	3.9	124	422	13
1052.3	0.645	21	2.5	79	387	19	9.3	4.5	121	442	14
1053.0	0.439	21	2.4	77	305	18	6.3	4.3	119	348	13
1053.7	0.393	19	2.4	70	366	16	5.7	4.4	108	419	12
1054.4	0.436	20	2.0	78	332	17	6.3	3.7	119	379	13
1055.1	0.663	19	2.2	69	339	16	9.6	4.1	106	388	12
1055.8	0.563	21	1.9	81	309	18	8.1	3.5	124	353	13
1056.5	0.441	21	2.4	74	335	15	6.4	4.3	113	383	11
1057.2	0.393	22	2.2	65	342	14	5.7	4.0	99	391	11
1057.9	0.393	20	1.9	80	339	14	5.7	3.5	123	388	10.0
1058.6	0.828	21	2.2	71	305	11	12	3.9	109	349	8.4
1059.3	0.633	21	2.9	64	308	11	9.1	5.3	99	353	8.0
1060.0	0.515	22	2.2	77	312	15	7.4	4.0	119	357	11
1060.7	0.393	21	2.1	63	342	13	5.7	3.8	97	391	9.8
1061.4	0.393	20	2.3	75	321	12	5.7	4.2	115	367	9.0
1062.1	0.393	21	2.3	73	293	11	5.7	4.1	112	335	7.9
1062.8	0.393	24	2.5	76	312	10	5.7	4.6	116	357	7.6
1063.5	0.457	21	2.2	68	292	11	6.6	4.0	104	334	8.0
1064.2	0.393	22	2.0	66	285	12	5.7	3.7	102	326	8.5
1064.9	0.393	19	2.2	71	279	9.5	5.7	4.0	108	319	6.9
1065.6	0.466	24	2.4	65	279	14	6.7	4.3	99	319	10.0
1066.3	0.393	22	2.0	65	289	11	5.7	3.7	100	331	7.8
1067.0	0.393	22	2.3	69	331	8.6	5.7	4.3	106	379	6.3
1067.6	0.393	22	2.2	67	263	9.7	5.7	4.0	102	300	7.1
1068.3	0.393	22	1.5	80	328	13	5.7	2.7	122	375	9.2
1069.0	0.665	21	1.9	70	296	9.9	9.6	3.5	107	339	7.2
1069.7	0.393	23	1.8	64	298	9.1	5.7	3.3	98	340	6.6
1070.4	0.393	21	1.9	72	295	7.0	5.7	3.5	110	337	5.1
1071.1	0.526	27	2.0	60	280	9.2	7.6	3.6	92	321	6.7
1071.8	0.393	24	2.1	65	290	7.2	5.7	3.9	100	332	5.2
1072.5	0.503	20	1.8	71	278	7.8	7.3	3.3	109	318	5.7

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1073.2	0.393	22	2.2	64	277	7.1	5.7	4.0	98	316	5.2
1073.9	0.393	24	2.3	70	284	9.2	5.7	4.2	107	324	6.7
1074.6	0.550	22	2.3	65	260	7.2	7.9	4.2	99	298	5.3
1075.3	0.680	21	1.7	67	271	5.4	9.8	3.1	102	310	3.9
1076.0	0.393	19	2.3	62	266	7.2	5.7	4.3	95	304	5.2
1076.7	0.462	21	1.8	63	283	9.8	6.7	3.4	97	324	7.2
1077.4	0.457	21	1.3	65	254	6.3	6.6	2.4	100	290	4.6
1078.1	0.518	24	2.2	59	239	7.1	7.5	4.0	90	274	5.2
1078.8	0.393	21	2.0	51	260	7.2	5.7	3.7	78	298	5.3
1079.5	0.393	17	1.8	64	224	6.4	5.7	3.4	97	257	4.7
1080.2	0.393	23	2.1	59	256	5.7	5.7	3.8	91	292	4.1
1080.9	0.453	20	2.1	58	249	8.3	6.5	3.8	88	284	6.1
1081.6	0.608	22	1.6	57	260	8.0	8.8	3.0	87	297	5.8
1082.3	0.600	26	2.0	63	231	6.1	8.7	3.7	97	264	4.5
1083.0	0.420	24	1.8	59	252	9.3	6.1	3.2	91	288	6.8
1083.7	0.393	20	2.0	59	249	8.7	5.7	3.6	90	284	6.3
1084.4	0.393	20	1.8	60	228	6.1	5.7	3.2	93	261	4.4
1085.1	0.393	19	1.3	56	208	7.0	5.7	2.5	86	238	5.1
1085.8	0.393	20	1.5	63	247	7.2	5.7	2.8	96	283	5.3
1086.5	0.393	22	2.0	59	219	6.8	5.7	3.6	90	251	4.9
1087.2	0.398	19	1.9	55	207	7.1	5.7	3.4	84	237	5.2
1087.9	0.563	21	1.6	66	233	6.8	8.1	2.8	102	266	5.0
1088.6	0.508	20	1.6	62	228	6.8	7.3	2.9	95	261	5.0
1089.3	0.393	18	1.5	52	218	10	5.7	2.7	80	249	7.4
1090.0	0.393	20	2.0	61	231	7.1	5.7	3.7	93	264	5.2
1090.7	0.393	16	1.8	62	207	7.1	5.7	3.2	94	237	5.2
1091.4	0.393	22	1.5	58	204	5.9	5.7	2.7	89	233	4.3
1092.1	0.393	21	2.2	54	203	8.4	5.7	3.9	83	233	6.1
1092.8	0.393	20	2.3	62	218	9.5	5.7	4.1	95	250	6.9
1093.4	0.393	19	1.5	57	220	6.1	5.7	2.7	87	251	4.4
1094.1	0.634	18	1.5	52	213	5.8	9.1	2.7	79	244	4.3
1094.8	0.393	16	1.8	56	187	7.1	5.7	3.3	85	214	5.2
1095.5	0.393	16	2.4	59	227	7.9	5.7	4.3	90	259	5.8
1096.2	0.393	18	1.6	56	204	5.5	5.7	3.0	86	233	4.0
1096.9	1.1	19	1.4	65	224	6.6	15	2.6	99	257	4.8
1097.6	0.580	17	1.3	59	212	6.5	8.4	2.5	90	242	4.7
1098.3	0.543	21	1.8	52	203	8.2	7.8	3.3	80	232	6.0
1099.0	0.393	19	2.2	54	200	6.7	5.7	3.9	83	228	4.9
1099.7	0.393	19	1.7	47	223	6.9	5.7	3.1	72	255	5.0
1100.4	0.393	19	2.1	55	232	10	5.7	3.8	84	266	7.4
1101.1	0.393	17	1.8	50	210	5.3	5.7	3.2	77	240	3.9
1101.8	0.393	17	1.5	56	233	6.6	5.7	2.8	86	267	4.8
1102.5	0.393	16	1.9	55	255	5.7	5.7	3.6	85	291	4.1
1103.2	1.2	20	2.2	53	249	8.5	17	4.0	81	285	6.2
1103.9	0.673	17	1.6	47	233	4.7	9.7	2.9	72	266	3.4
1104.6	0.393	18	1.5	55	261	6.1	5.7	2.8	85	298	4.4
1105.3	0.393	17	1.7	56	257	5.7	5.7	3.0	86	294	4.1
1106.0	0.393	17	1.6	51	246	4.5	5.7	2.9	78	282	3.3
1106.7	0.654	18	1.7	55	258	5.0	9.4	3.2	84	295	3.6
1107.4	0.393	16	1.6	60	255	5.6	5.7	2.9	91	292	4.1
1108.1	0.540	17	1.4	42	301	5.0	7.8	2.5	65	344	3.6
1108.8	0.722	20	1.7	52	321	3.5	10	3.2	79	367	2.6
1109.5	0.393	18	1.5	51	282	4.3	5.7	2.7	78	323	3.1
1110.2	0.393	17	1.0	48	278	2.8	5.7	1.8	73	318	2.0
1110.9	0.548	15	1.6	50	283	4.3	7.9	3.0	77	323	3.2
1111.6	0.393	21	1.4	54	321	4.4	5.7	2.6	83	367	3.2
1112.3	0.393	18	1.2	45	267	3.4	5.7	2.2	69	305	2.5
1113.0	0.393	18	1.5	47	278	4.3	5.7	2.8	73	318	3.1
1113.7	0.393	18	0.831	46	307	3.1	5.7	1.5	70	351	2.3
1114.4	0.681	18	1.5	45	300	2.1	9.8	2.8	70	343	1.5
1115.1	0.509	18	1.5	42	305	3.4	7.3	2.7	65	349	2.5
1115.8	0.393	20	1.9	45	305	4.2	5.7	3.5	68	349	3.1
1116.5	0.393	17	1.4	46	275	2.9	5.7	2.6	70	315	2.1
1117.2	0.881	21	1.1	51	341	4.1	13	2.0	79	390	3.0
1117.9	0.434	18	1.1	49	295	3.9	6.3	2.0	75	337	2.9
1118.6	0.393	16	1.1	46	297	3.9	5.7	2.1	71	339	2.8
1119.2	0.530	19	1.5	48	339	2.9	7.7	2.7	73	388	2.1
1119.9	0.612	18	1.6	53	342	3.2	8.8	3.0	81	391	2.4
1120.6	0.592	19	1.1	43	296	2.9	8.5	1.9	65	339	2.1
1121.3	0.393	19	1.4	36	303	2.7	5.7	2.5	55	347	2.0
1122.0	0.393	20	1.8	48	334	2.7	5.7	3.2	74	382	2.0
1122.7	0.393	18	1.7	44	311	3.3	5.7	3.2	68	356	2.4
1123.4	0.393	19	1.2	46	330	2.9	5.7	2.2	71	377	2.1
1124.1	0.393	20	1.5	40	299	3.6	5.7	2.8	61	342	2.6
1124.8	0.393	19	1.2	38	312	3.5	5.7	2.3	59	357	2.6
1125.5	0.393	18	1.5	44	331	4.1	5.7	2.7	68	379	3.0
1126.2	0.393	20	1.3	40	308	3.0	5.7	2.4	61	352	2.2
1126.9	0.393	20	1.5	46	308	3.6	5.7	2.8	70	352	2.6
1127.6	0.393	21	1.7	44	306	2.6	5.7	3.2	67	350	1.9
1128.3	0.393	21	1.4	46	331	4.3	5.7	2.6	70	379	3.2
1129.0	0.393	19	1.2	40	293	2.1	5.7	2.2	61	335	1.5

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1129.7	0.511	19	1.8	41	329	2.8	7.4	3.3	62	376	2.1
1130.4	0.459	22	1.6	36	305	3.1	6.6	3.0	56	349	2.3
1131.1	0.393	21	1.2	44	298	1.8	5.7	2.2	67	341	1.3
1131.8	0.393	20	1.1	41	357	3.3	5.7	1.9	62	408	2.4
1132.5	0.486	20	1.7	40	319	3.5	7.0	3.0	61	364	2.6
1133.2	0.393	20	1.7	48	362	2.1	5.7	3.0	74	414	1.5
1133.9	0.460	24	1.1	43	319	3.1	6.6	2.0	65	364	2.3
1134.6	0.393	22	1.8	45	347	4.3	5.7	3.2	69	397	3.1
1135.3	0.487	23	1.3	38	336	3.1	7.0	2.4	59	384	2.3
1136.0	0.473	24	1.7	47	392	2.7	6.8	3.1	72	449	2.0
1136.7	0.393	22	1.1	52	359	2.8	5.7	2.0	79	410	2.0
1137.4	0.393	20	1.4	41	321	3.1	5.7	2.6	63	367	2.2
1138.1	0.393	21	1.8	37	329	1.8	5.7	3.4	57	376	1.3
1138.8	0.393	21	1.6	36	306	1.6	5.7	3.0	55	350	1.2
1139.5	0.393	23	1.5	42	344	2.3	5.7	2.7	65	393	1.7
1140.2	0.642	19	1.4	37	362	3.2	9.3	2.6	57	414	2.3
1140.9	0.684	24	1.5	37	323	3.9	9.9	2.8	57	370	2.8
1141.6	0.393	24	1.2	42	363	3.7	5.7	2.2	64	415	2.7
1142.3	0.393	24	1.5	41	338	3.2	5.7	2.7	62	387	2.3
1143.0	0.438	25	1.6	39	353	3.5	6.3	3.0	59	404	2.6
1143.7	0.393	24	1.3	37	307	2.5	5.7	2.3	57	351	1.8
1144.4	0.393	24	1.6	35	332	1.7	5.7	2.9	53	380	1.2
1145.1	0.393	24	1.7	42	407	3.3	5.7	3.1	64	466	2.4
1145.7	0.446	24	1.6	35	351	3.2	6.4	2.9	54	401	2.4
1146.4	0.725	26	1.5	40	364	2.9	10	2.8	61	416	2.1
1147.1	0.393	23	1.9	36	358	2.5	5.7	3.6	55	409	1.8
1147.8	0.699	27	1.6	42	344	2.1	10	2.9	65	393	1.6
1148.5	0.393	22	1.6	36	341	2.8	5.7	2.9	56	390	2.1
1149.2	0.735	25	1.3	35	390	3.4	11	2.4	54	446	2.5
1149.9	0.393	23	1.8	36	358	3.3	5.7	3.3	55	410	2.4
1150.6	0.393	21	1.2	38	346	3.1	5.7	2.3	58	396	2.3
1151.3	0.393	23	1.8	37	350	3.9	5.7	3.3	56	400	2.8
1152.0	0.393	25	1.4	43	353	3.3	5.7	2.6	65	404	2.4
1152.7	0.393	24	1.7	37	364	3.0	5.7	3.2	56	416	2.2
1153.4	0.766	24	1.5	38	344	2.9	11	2.7	58	393	2.2
1154.1	0.665	25	1.3	39	392	3.3	9.6	2.4	59	448	2.4
1154.8	0.393	24	1.5	39	336	2.9	5.7	2.8	60	385	2.1
1155.5	0.393	24	2.4	34	369	2.1	5.7	4.5	52	422	1.6
1156.2	0.843	24	1.8	32	376	4.6	12	3.3	48	429	3.4
1156.9	0.393	24	2.3	36	348	3.7	5.7	4.1	56	398	2.7
1157.6	0.498	24	1.8	33	389	2.6	7.2	3.3	50	444	1.9
1158.3	0.393	25	1.8	30	353	2.8	5.7	3.2	46	403	2.1
1159.0	0.421	27	1.9	34	367	3.3	6.1	3.6	52	419	2.4
1159.7	0.393	26	2.2	34	388	3.3	5.7	4.0	53	444	2.4
1160.4	0.677	27	2.1	34	374	2.2	9.8	3.8	52	428	1.6
1161.1	0.648	23	1.9	33	334	3.0	9.3	3.5	50	382	2.2
1161.8	0.826	25	2.0	37	410	4.1	12	3.7	56	469	3.0
1162.5	0.630	27	2.7	30	404	3.9	9.1	4.8	46	463	2.8
1163.2	0.393	23	2.3	32	377	3.8	5.7	4.2	49	432	2.8
1163.9	0.460	26	2.2	29	420	3.1	6.6	4.0	45	480	2.3
1164.6	0.393	21	1.9	34	381	4.2	5.7	3.5	52	435	3.1
1165.3	0.473	23	2.1	33	371	2.9	6.8	3.9	50	425	2.1
1166.0	0.393	26	2.1	29	390	2.9	5.7	3.9	44	446	2.1
1166.7	0.393	26	2.0	29	362	3.3	5.7	3.7	45	414	2.4
1167.4	0.426	25	2.2	34	380	3.0	6.1	3.9	51	434	2.2
1168.1	0.393	24	2.0	28	393	4.8	5.7	3.7	44	450	3.5
1168.8	0.592	26	2.8	28	424	5.1	8.5	5.0	42	485	3.7
1169.5	0.393	23	2.0	31	399	3.8	5.7	3.7	48	457	2.8
1170.2	0.393	26	2.4	31	450	4.1	5.7	4.3	48	515	3.0
1170.9	0.619	26	2.0	32	433	3.1	8.9	3.7	48	495	2.2
1171.5	0.778	23	2.3	32	394	3.1	11	4.2	48	451	2.3
1172.2	0.403	22	2.7	32	399	3.6	5.8	4.8	50	456	2.7
1172.9	0.393	25	2.2	29	384	2.8	5.7	3.9	45	440	2.0
1173.6	0.598	27	2.3	28	390	2.3	8.6	4.3	44	446	1.7
1174.3	0.511	21	2.7	31	425	2.7	7.4	4.9	47	486	2.0
1175.0	0.393	22	2.6	29	380	2.6	5.7	4.8	44	434	1.9
1175.7	1.2	28	2.6	30	403	3.4	18	4.8	46	460	2.4
1176.4	0.481	25	2.9	30	440	3.5	7.0	5.3	46	504	2.6
1177.1	0.393	26	2.6	29	352	4.4	5.7	4.7	44	403	3.2
1177.8	0.393	24	2.8	32	378	4.2	5.7	5.1	50	432	3.0
1178.5	0.765	26	3.5	25	446	3.6	11	6.4	38	511	2.6
1179.2	0.393	26	3.3	28	434	4.1	5.7	6.0	43	496	3.0
1179.9	0.629	23	2.8	25	402	2.6	9.1	5.0	38	460	1.9
1180.6	0.393	31	2.8	27	399	3.5	5.7	5.1	41	457	2.5
1181.3	0.393	28	2.7	28	387	4.0	5.7	5.0	43	442	2.9
1182.0	0.686	39	2.3	27	404	3.6	9.9	4.3	42	462	2.7
1182.7	0.393	25	3.0	26	386	3.2	5.7	5.5	40	441	2.3
1183.4	0.393	30	2.8	25	391	2.8	5.7	5.1	38	447	2.1
1184.1	0.393	31	3.2	26	386	2.4	5.7	5.9	40	442	1.8
1184.8	0.485	29	3.1	21	410	3.6	7.0	5.7	32	469	2.7
1185.5	0.393	26	3.8	25	496	3.4	5.7	7.0	38	567	2.5

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1186.2	0.495	29	3.0	24	462	3.7	7.1	5.5	37	529	2.7
1186.9	0.393	32	3.6	27	477	2.9	5.7	6.5	42	546	2.1
1187.6	0.393	30	3.3	26	410	3.1	5.7	6.1	40	468	2.2
1188.3	0.779	28	3.4	26	407	2.8	11	6.2	40	465	2.0
1189.0	0.832	28	3.3	22	386	4.3	12	6.0	34	441	3.2
1189.7	0.393	30	3.8	23	479	2.6	5.7	6.9	35	547	1.9
1190.4	0.393	32	3.4	26	429	2.9	5.7	6.2	40	490	2.1
1191.1	0.615	38	3.5	23	410	2.9	8.9	6.4	35	469	2.1
1191.8	0.393	30	3.3	22	433	4.5	5.7	6.0	34	495	3.3
1192.5	0.393	35	3.3	25	413	3.4	5.7	5.9	39	472	2.5
1193.2	0.426	37	3.4	24	464	3.6	6.2	6.3	36	531	2.7
1193.9	0.393	31	3.6	29	460	4.2	5.7	6.7	44	526	3.1
1194.6	0.393	34	3.2	21	353	3.8	5.7	5.9	32	403	2.8
1195.3	0.441	33	3.6	28	386	3.4	6.4	6.6	42	441	2.5
1196.0	0.393	34	3.2	27	398	3.5	5.7	5.8	42	455	2.6
1196.7	0.393	38	4.7	28	416	3.1	5.7	8.5	43	476	2.2
1197.4	0.513	29	3.4	26	370	2.5	7.4	6.2	40	423	1.8
1198.1	0.684	36	5.1	25	379	2.8	9.9	9.3	38	433	2.0
1198.7	1.3	39	4.7	27	423	4.0	19	8.5	41	483	2.9
1199.4	0.767	39	5.1	27	397	3.2	11	9.2	41	454	2.3
1200.1	0.393	40	4.6	25	403	2.5	5.7	8.5	39	461	1.8
1200.8	0.393	41	4.7	28	412	3.4	5.7	8.6	42	471	2.5
1201.5	0.720	34	4.3	20	345	3.5	10	7.9	30	395	2.6
1202.2	0.393	39	4.7	23	491	2.1	5.7	8.6	35	562	1.5
1202.9	0.426	38	5.4	27	408	2.6	6.2	9.9	41	466	1.9
1203.6	0.547	61	5.6	20	372	2.2	7.9	10	31	425	1.6
1204.3	0.530	52	5.6	25	444	2.5	7.7	10	38	508	1.8
1205.0	0.467	50	5.6	24	372	2.1	6.7	10	36	425	1.5
1205.7	0.393	47	6.6	25	421	2.4	5.7	12	38	482	1.7
1206.4	0.393	59	5.8	23	437	2.6	5.7	11	36	499	1.9
1207.1	0.433	49	6.0	20	392	3.3	6.2	11	30	448	2.4
1207.8	0.770	49	5.1	23	432	2.6	11	9.3	36	494	1.9
1208.5	0.393	56	6.7	22	414	3.4	5.7	12	33	474	2.5
1209.2	0.616	56	5.6	28	408	3.5	8.9	10	42	467	2.5
1209.9	0.393	44	5.8	23	386	1.9	5.7	11	35	442	1.4
1210.6	0.664	45	4.6	27	355	2.7	9.6	8.4	41	406	2.0
1211.3	0.525	52	4.2	23	388	2.6	7.6	7.7	35	444	1.9
1212.0	0.393	58	3.9	21	385	2.6	5.7	7.0	32	440	1.9
1212.7	0.785	42	4.4	24	437	2.7	11	8.0	36	500	2.0
1213.4	0.637	43	5.1	22	413	3.7	9.2	9.3	34	473	2.7
1214.1	0.393	43	4.7	24	377	3.1	5.7	8.6	37	431	2.3
1214.8	0.756	40	4.1	27	406	3.8	11	7.4	41	465	2.8
1215.5	0.393	34	3.6	21	357	2.3	5.7	6.5	32	408	1.7
1216.2	0.393	39	4.1	24	383	3.0	5.7	7.5	37	438	2.2
1216.9	0.550	39	5.9	28	386	3.8	7.9	11	43	441	2.8
1217.6	0.393	35	3.3	27	370	2.9	5.7	6.0	42	423	2.1
1218.3	0.571	39	3.6	25	386	2.8	8.2	6.5	38	442	2.0
1219.0	0.705	34	3.5	28	425	4.2	10	6.4	43	486	3.1
1219.7	0.458	30	2.9	27	430	2.4	6.6	5.3	42	491	1.8
1220.4	0.670	34	2.2	28	384	3.6	9.7	4.1	43	439	2.6
1221.1	0.393	36	2.9	26	411	2.5	5.7	5.2	40	470	1.8
1221.8	0.393	30	2.5	26	424	3.0	5.7	4.5	39	485	2.2
1222.5	0.393	31	1.8	30	399	2.8	5.7	3.3	45	457	2.0
1223.2	0.475	31	2.7	30	434	2.4	6.9	4.9	46	496	1.7
1223.9	0.899	31	2.2	27	395	2.6	13	4.0	42	452	1.9
1224.6	0.393	29	2.9	29	419	2.6	5.7	5.2	44	480	1.9
1225.2	0.393	26	2.2	30	417	1.5	5.7	4.0	46	477	1.1
1225.9	0.502	27	2.3	31	421	2.8	7.2	4.2	48	482	2.0
1226.6	1.5	29	1.8	34	425	3.8	21	3.3	52	486	2.8
1227.3	0.393	27	2.1	33	353	2.1	5.7	3.8	50	403	1.5
1228.0	0.421	21	1.7	29	390	3.4	6.1	3.0	45	446	2.5
1228.7	0.876	28	2.0	28	409	4.0	13	3.6	42	468	2.9
1229.4	0.739	25	2.1	28	408	3.6	11	3.9	43	466	2.6
1230.1	0.814	27	2.2	31	407	3.9	12	4.0	47	465	2.8
1230.8	0.393	26	1.9	31	429	2.6	5.7	3.5	47	491	1.9
1231.5	0.580	23	1.7	28	413	2.2	8.4	3.1	43	472	1.6
1232.2	0.393	27	2.3	33	420	2.6	5.7	4.1	50	480	1.9
1232.9	0.596	27	1.6	32	417	2.3	8.6	2.9	50	477	1.7
1233.6	0.943	22	1.7	31	382	2.2	14	3.1	48	437	1.6
1234.3	0.400	27	1.7	37	421	2.7	5.8	3.0	56	482	2.0
1235.0	0.393	23	1.5	25	396	2.9	5.7	2.7	39	453	2.1
1235.7	0.591	25	1.8	31	411	2.9	8.5	3.3	47	470	2.1
1236.4	0.393	30	1.4	36	373	2.7	5.7	2.6	55	427	2.0
1237.1	0.765	27	1.6	32	416	3.3	11	3.0	50	476	2.4
1237.8	0.796	26	1.5	28	412	3.5	11	2.8	43	471	2.5
1238.5	0.393	24	1.8	33	399	3.9	5.7	3.3	50	456	2.8
1239.2	0.393	28	1.7	34	374	3.4	5.7	3.1	52	472	2.5
1239.9	0.393	28	1.5	31	424	3.4	5.7	2.8	48	485	2.5
1240.6	0.393	27	1.6	35	375	2.6	5.7	2.9	54	429	1.9
1241.3	0.393	24	1.3	33	399	2.8	5.7	2.4	51	456	2.0
1242.0	0.428	26	1.6	32	396	3.2	6.2	2.8	49	453	2.3

Minnow Environmental
Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1242.7	0.551	28	1.5	35	422	1.9	8.0	2.7	54	483	1.4
1243.4	0.849	23	1.8	38	358	2.4	12	3.3	58	409	1.8
1244.1	0.403	22	1.3	30	368	3.6	5.8	2.3	46	421	2.7
1244.8	0.393	26	1.3	36	419	3.3	5.7	2.4	56	479	2.4
1245.5	1.1	24	1.3	31	383	3.0	16	2.4	48	438	2.2
1246.2	0.839	25	1.6	39	431	2.4	12	3.0	60	493	1.8
1246.9	0.393	27	1.7	37	362	2.5	5.7	3.1	56	414	1.8
1247.6	0.393	24	1.3	37	356	3.0	5.7	2.5	56	407	2.2
1248.3	0.558	24	1.5	35	381	3.0	8.1	2.7	53	436	2.2
1249.0	0.393	24	1.8	37	404	3.0	5.7	3.3	56	462	2.2
1249.7	0.393	27	2.0	33	380	3.8	5.7	3.7	51	434	2.7
1250.4	0.639	23	1.1	37	349	2.8	9.2	2.1	57	399	2.0
1251.1	0.432	23	1.2	34	365	3.4	6.2	2.2	53	417	2.4
1251.7	0.567	25	1.6	35	449	3.1	8.2	3.0	53	514	2.3
1252.4	0.393	25	1.6	36	351	2.6	5.7	3.0	54	401	1.9
1253.1	0.561	22	1.2	38	377	2.5	8.1	2.2	58	431	1.8
1253.8	0.393	22	0.842	33	353	2.2	5.7	1.5	51	404	1.6
1254.5	0.393	22	1.3	36	398	2.5	5.7	2.3	55	455	1.8
1255.2	0.693	21	1.6	37	353	1.8	10	3.0	56	403	1.3
1255.9	0.393	25	1.5	33	405	1.6	5.7	2.7	51	463	1.2
1256.6	0.676	24	1.3	37	380	2.4	9.8	2.4	57	435	1.8
1257.3	0.393	21	1.3	41	388	3.1	5.7	2.3	62	443	2.3
1258.0	0.393	22	1.4	34	389	3.2	5.7	2.6	53	444	2.3
1258.7	0.393	20	1.3	36	384	2.4	5.7	2.4	55	439	1.8
1259.4	0.393	23	1.5	37	379	3.9	5.7	2.7	57	434	2.9
1260.1	0.672	22	1.3	38	354	3.6	9.7	2.3	58	405	2.6
1260.8	0.393	19	1.3	38	341	2.9	5.7	2.3	58	390	2.1
1261.5	0.393	21	1.5	39	388	4.0	5.7	2.7	60	444	2.9
1262.2	0.393	22	1.2	38	453	3.5	5.7	2.2	59	518	2.5
1262.9	0.393	20	1.2	41	363	2.8	5.7	2.1	62	415	2.0
1263.6	0.393	23	1.7	42	376	2.8	5.7	3.1	64	430	2.1
1264.3	0.393	19	1.3	40	411	3.4	5.7	2.4	61	470	2.5
1265.0	0.393	20	1.2	36	370	2.7	5.7	2.1	55	423	1.9
1265.7	0.546	20	1.2	38	366	3.4	7.9	2.2	59	419	2.5
1266.4	0.946	20	1.1	43	404	2.1	14	2.0	66	462	1.6
1267.1	0.393	21	1.0	38	333	2.2	5.7	1.8	58	381	1.6
1267.8	0.393	18	1.3	35	339	2.4	5.7	2.4	54	388	1.8
1268.5	0.393	22	1.2	40	356	1.9	5.7	2.2	61	407	1.4
1269.2	0.393	20	1.5	37	376	2.7	5.7	2.8	57	430	2.0
1269.9	0.393	18	1.4	34	352	3.6	5.7	2.6	52	403	2.6
1270.6	0.956	22	1.2	47	354	2.8	14	2.3	72	405	2.1
1271.3	0.393	18	1.4	40	331	2.8	5.7	2.6	61	378	2.1
1272.0	0.544	22	1.3	45	329	2.7	7.9	2.4	68	376	1.9
1272.7	0.587	20	1.5	41	395	1.8	8.5	2.8	63	452	1.3
1273.4	0.576	20	1.1	44	385	2.1	8.3	2.0	68	440	1.6
1274.1	0.393	19	1.6	45	366	1.3	5.7	3.0	68	418	0.959
1274.8	0.393	18	1.5	41	360	2.1	5.7	2.8	63	411	1.5
1275.5	0.393	23	1.6	44	426	2.6	5.7	3.0	67	487	1.9
1276.2	0.498	19	1.6	43	360	3.0	7.2	2.9	66	412	2.2
1276.9	0.393	18	1.4	43	360	2.2	5.7	2.5	66	412	1.6
1277.6	0.393	18	1.2	39	344	2.5	5.7	2.1	60	393	1.8
1278.2	0.393	18	1.1	37	349	2.5	5.7	2.0	57	399	1.9
1278.9	0.398	21	1.1	43	355	2.3	5.7	1.9	67	405	1.7
1279.6	0.393	17	1.3	39	365	3.6	5.7	2.4	60	417	2.6
1280.3	0.393	16	1.4	41	336	2.9	5.7	2.5	63	384	2.1
1281.0	0.393	17	1.5	39	335	3.2	5.7	2.7	60	383	2.4
1281.7	0.393	16	1.3	38	363	2.2	5.7	2.5	59	416	1.6
1282.4	0.501	22	1.4	43	367	2.9	7.2	2.5	66	419	2.1
1283.1	0.393	19	1.0	41	376	2.7	5.7	1.9	63	430	2.0
1283.8	0.393	20	1.4	40	340	2.1	5.7	2.6	62	389	1.5
1284.5	0.393	17	1.4	39	341	2.6	5.7	2.6	60	390	1.9
1285.2	0.393	23	1.3	40	330	3.6	5.7	2.4	61	377	2.6
1285.9	0.976	21	1.2	45	352	2.7	14	2.2	69	402	2.0
1286.6	0.720	20	1.2	45	314	2.3	10	2.1	69	359	1.7
1287.3	0.393	19	1.2	40	316	2.0	5.7	2.2	62	361	1.4
1288.0	0.566	17	1.3	44	319	2.4	8.2	2.4	67	364	1.8
1288.7	0.635	21	1.7	50	369	3.1	9.2	3.0	77	422	2.3
1289.4	0.527	15	1.3	45	322	1.9	7.6	2.3	68	369	1.4
1290.1	0.393	19	1.3	49	341	3.2	5.7	2.4	75	390	2.3
1290.8	0.975	18	1.9	46	342	4.1	14	3.4	70	391	3.0
1291.5	0.520	19	1.3	40	314	2.0	7.5	2.4	62	359	1.5
1292.2	0.393	20	0.962	51	324	3.3	5.7	1.8	78	370	2.4
1292.9	0.393	21	1.3	49	308	2.4	5.7	2.3	76	352	1.7
1293.6	0.393	17	1.2	51	307	2.5	5.7	2.2	78	351	1.8
1294.3	0.393	18	1.3	45	314	4.1	5.7	2.3	69	359	3.0
1295.0	0.633	18	1.3	45	314	3.9	9.1	2.3	70	359	2.8
1295.7	0.393	21	1.5	48	345	2.7	5.7	2.7	74	394	2.0
1296.4	0.393	20	1.4	48	312	3.4	5.7	2.6	74	357	2.5
1297.1	0.393	19	1.3	49	312	3.5	5.7	2.4	75	356	2.5
1297.8	0.393	20	1.3	48	310	3.3	5.7	2.4	74	354	2.4
1298.5	0.393	18	1.1	50	293	2.3	5.7	2.1	77	335	1.7

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1299.2	0.393	19	1.2	46	301	3.1	5.7	2.3	71	344	2.3
1299.9	0.393	21	1.6	54	326	3.6	5.7	2.9	83	373	2.6
1300.6	0.538	19	1.7	48	284	3.3	7.8	3.1	74	325	2.4
1301.3	0.393	16	1.8	49	312	3.9	5.7	3.2	75	356	2.8
1302.0	0.393	19	1.7	48	286	2.9	5.7	3.0	73	328	2.1
1302.7	0.393	17	1.8	52	276	3.5	5.7	3.2	79	316	2.6
1303.4	0.393	19	1.5	47	291	3.2	5.7	2.8	71	333	2.3
1304.1	0.489	18	1.3	43	256	5.8	7.1	2.4	66	292	4.2
1304.7	0.393	18	1.6	44	272	4.9	5.7	2.8	68	311	3.6
1305.4	0.816	19	1.3	55	268	3.1	12	2.3	84	306	2.3
1306.1	0.393	18	1.5	52	289	3.9	5.7	2.8	80	331	2.9
1306.8	0.393	22	1.3	54	322	3.1	5.7	2.3	83	369	2.3
1307.5	0.393	16	1.5	48	309	4.4	5.7	2.7	73	353	3.2
1308.2	0.393	19	1.3	55	313	4.1	5.7	2.3	85	358	3.0
1308.9	0.393	20	1.9	56	268	4.2	5.7	3.5	85	306	3.0
1309.6	0.393	20	1.6	50	273	5.2	5.7	2.9	77	312	3.8
1310.3	0.393	18	1.4	50	310	3.8	5.7	2.5	77	354	2.8
1311.0	0.393	16	1.7	49	316	5.3	5.7	3.0	74	362	3.9
1311.7	0.393	20	1.3	48	276	5.0	5.7	2.3	74	316	3.6
1312.4	0.393	19	1.5	57	271	5.4	5.7	2.7	88	310	4.0
1313.1	0.393	21	1.5	53	254	6.2	5.7	2.7	81	290	4.6
1313.8	0.605	16	1.3	53	263	4.4	8.7	2.4	82	301	3.2
1314.5	0.661	21	1.3	56	316	4.7	9.5	2.3	86	361	3.4
1315.2	0.827	22	1.7	61	287	5.7	12	3.1	94	328	4.1
1315.9	0.732	21	1.5	51	253	5.0	11	2.7	78	289	3.6
1316.6	0.804	19	1.3	51	284	6.8	12	2.3	78	325	5.0
1317.3	0.393	20	1.7	50	264	3.8	5.7	3.1	77	302	2.8
1318.0	0.462	25	1.8	54	296	6.3	6.7	3.4	83	339	4.6
1318.7	0.393	21	1.3	57	282	4.0	5.7	2.4	87	322	2.9
1319.4	0.581	22	1.7	50	273	6.6	8.4	3.1	77	313	4.8
1320.1	0.393	25	1.6	53	298	4.2	5.7	3.0	81	341	3.1
1320.8	0.393	19	1.5	51	270	4.1	5.7	2.8	78	309	3.0
1321.5	0.393	20	1.5	58	264	5.0	5.7	2.7	89	302	3.6
1322.2	0.393	19	1.6	57	270	6.0	5.7	2.9	87	309	4.4
1322.9	0.411	22	1.7	55	326	3.7	5.9	3.0	85	373	2.7
1323.6	0.594	21	1.6	57	276	5.3	8.6	2.9	87	316	3.8
1324.3	0.776	19	1.4	55	267	4.6	11	2.5	85	305	3.3
1325.0	0.557	19	1.3	50	251	4.5	8.0	2.5	76	287	3.3
1325.7	0.393	23	2.3	56	297	5.2	5.7	4.1	85	340	3.8
1326.4	0.393	21	1.1	64	331	7.5	5.7	2.1	98	379	5.5
1327.1	0.488	19	1.2	56	257	6.0	7.0	2.2	86	294	4.4
1327.8	0.393	19	1.6	64	276	6.6	5.7	3.0	98	316	4.8
1328.5	0.393	17	1.7	64	309	4.8	5.7	3.0	97	353	3.5
1329.2	0.668	21	2.1	66	257	5.0	9.6	3.8	102	294	3.6
1329.9	0.609	18	1.1	58	291	4.1	8.8	2.0	89	333	3.0
1330.5	0.393	22	1.7	61	299	6.0	5.7	3.1	94	342	4.4
1331.2	0.393	18	1.5	61	301	5.8	5.7	2.7	94	344	4.2
1331.9	0.393	24	1.9	55	275	7.1	5.7	3.4	84	315	5.2
1332.6	0.393	19	1.8	75	292	7.2	5.7	3.2	115	334	5.2
1333.3	0.393	22	1.6	66	279	5.6	5.7	3.0	101	320	4.1
1334.0	0.393	19	1.7	56	254	5.1	5.7	3.1	85	291	3.7
1334.7	0.393	19	1.9	65	261	4.0	5.7	3.4	99	299	2.9
1335.4	0.741	22	1.8	65	263	6.1	11	3.2	99	301	4.5
1336.1	0.393	23	1.3	75	295	8.3	5.7	2.4	115	338	6.0
1336.8	0.589	18	1.4	66	227	4.6	8.5	2.6	101	259	3.4
1337.5	0.453	18	1.7	69	266	4.7	6.5	3.1	106	304	3.4
1338.2	0.599	20	1.7	71	264	5.2	8.7	3.1	109	302	3.8
1338.9	0.470	23	1.6	72	275	5.7	6.8	2.9	110	315	4.1
1339.6	0.393	22	1.8	74	267	7.1	5.7	3.2	113	305	5.2
1340.3	0.679	21	1.5	61	249	5.1	9.8	2.7	93	285	3.7
1341.0	0.394	22	2.1	70	265	8.0	5.7	3.8	108	303	5.9
1341.7	0.393	22	2.2	74	292	5.7	5.7	4.1	114	334	4.2
1342.4	0.935	23	2.1	73	262	5.8	13	3.9	111	299	4.2
1343.1	0.393	21	1.8	64	284	5.7	5.7	3.3	98	325	4.2
1343.8	0.393	20	1.9	63	252	7.0	5.7	3.4	96	288	5.1
1344.5	0.393	21	1.7	64	266	8.2	5.7	3.1	97	305	6.0
1345.2	0.393	20	1.7	74	302	8.5	5.7	3.1	114	346	6.2
1345.9	0.399	18	2.0	82	276	7.8	5.8	3.7	126	315	5.7
1346.6	0.525	24	2.0	77	242	7.2	7.6	3.7	117	277	5.2
1347.3	0.393	18	1.8	68	284	7.7	5.7	3.2	105	325	5.6
1348.0	0.393	23	1.6	70	296	10	5.7	2.9	107	338	7.4
1348.7	0.563	20	2.2	75	249	8.6	8.1	4.1	116	285	6.3
1349.4	0.393	20	1.2	72	265	8.2	5.7	2.1	110	303	6.0
1350.1	0.427	18	1.5	66	249	7.9	6.2	2.8	102	285	5.8
1350.8	0.565	20	1.5	77	275	8.7	8.2	2.8	118	315	6.3
1351.5	0.464	19	1.9	80	276	9.9	6.7	3.5	122	316	7.2
1352.2	0.502	21	1.6	78	264	7.6	7.2	3.0	120	302	5.6
1352.9	0.393	16	1.6	66	258	8.4	5.7	2.9	101	295	6.1
1353.6	0.603	19	2.0	74	306	8.1	8.7	3.6	113	350	5.9
1354.3	0.393	19	1.9	76	273	9.0	5.7	3.5	116	312	6.6
1355.0	0.393	21	1.9	78	268	9.7	5.7	3.4	119	307	7.1

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1355.7	0.520	21	2.2	83	294	10	7.5	4.0	128	337	7.5
1356.3	0.393	19	1.6	83	268	11	5.7	2.9	128	306	7.7
1357.0	0.393	17	2.4	82	285	11	5.7	4.3	125	326	7.7
1357.7	0.464	20	1.8	77	263	9.5	6.7	3.2	117	301	6.9
1358.4	0.471	18	2.0	78	298	9.8	6.8	3.6	119	340	7.1
1359.1	0.393	20	1.9	82	284	12	5.7	3.5	126	325	8.6
1359.8	0.393	21	2.1	78	269	11	5.7	3.8	120	308	8.3
1360.5	0.393	17	2.0	77	268	13	5.7	3.7	117	306	9.8
1361.2	0.393	20	1.9	81	326	14	5.7	3.4	124	373	10
1361.9	0.393	24	2.3	91	313	18	5.7	4.1	139	358	13
1362.6	0.393	22	1.6	92	349	14	5.7	2.9	141	399	10
1363.3	0.393	15	2.1	91	351	14	5.7	3.9	139	401	10
1364.0	0.766	21	2.3	92	358	14	11	4.1	140	409	10
1364.7	0.393	19	2.0	90	312	14	5.7	3.7	138	357	10
1365.4	0.393	19	2.1	102	292	15	5.7	3.8	156	334	11
1366.1	0.519	20	2.1	92	292	13	7.5	3.8	141	333	9.3
1366.8	0.639	14	2.0	84	308	16	9.2	3.6	128	352	12
1367.5	0.713	16	2.1	91	365	17	10	3.9	139	418	13
1368.2	0.823	20	2.2	81	288	15	12	4.0	124	329	11
1368.9	0.393	19	1.8	97	293	15	5.7	3.2	149	335	11
1369.6	0.888	16	2.4	92	298	14	13	4.4	141	340	10
1370.3	0.633	18	1.9	85	298	16	9.1	3.4	130	340	12
1371.0	0.393	19	2.1	91	321	15	5.7	3.8	140	367	11
1371.7	0.393	21	2.2	94	357	21	5.7	4.0	144	408	15
1372.4	0.393	19	2.1	93	360	16	5.7	3.8	142	412	12
1373.1	0.393	17	2.3	83	262	16	5.7	4.2	128	300	12
1373.8	0.393	22	2.5	83	300	17	5.7	4.5	128	343	13
1374.5	0.393	18	2.4	98	354	18	5.7	4.4	150	405	13
1375.2	0.605	19	2.3	88	280	16	8.7	4.1	134	320	12
1375.9	0.393	17	2.5	98	292	17	5.7	4.6	150	334	12
1376.6	0.422	16	1.8	74	269	16	6.1	3.3	114	307	12
1377.3	0.808	18	2.6	100	326	17	12	4.7	153	373	12
1378.0	0.926	21	2.4	95	371	18	13	4.4	146	424	13
1378.7	0.645	21	2.7	103	327	20	9.3	5.0	158	374	14
1379.4	0.393	20	2.3	103	320	18	5.7	4.2	157	366	13
1380.1	0.393	17	1.9	84	297	20	5.7	3.5	128	340	15
1380.8	0.393	22	2.4	98	316	22	5.7	4.4	150	362	16
1381.5	0.490	22	2.8	89	366	21	7.1	5.1	136	418	16
1382.2	0.393	20	2.3	99	384	18	5.7	4.1	152	439	13
1382.8	0.393	17	2.6	89	340	16	5.7	4.7	137	388	12
1383.5	0.393	20	2.4	110	355	19	5.7	4.4	168	406	14
1384.2	0.418	18	1.8	86	291	16	6.0	3.2	131	333	12
1384.9	0.393	19	2.2	86	300	17	5.7	4.0	131	343	13
1385.6	0.393	17	2.6	93	351	20	5.7	4.8	142	402	14
1386.3	0.650	17	2.0	99	280	19	9.4	3.7	152	320	14
1387.0	0.393	16	1.5	87	338	19	5.7	2.7	133	386	14
1387.7	0.586	21	2.2	93	340	18	8.5	4.0	142	389	13
1388.4	0.393	20	2.3	100	336	19	5.7	4.2	154	384	14
1389.1	0.393	19	2.0	96	332	16	5.7	3.6	147	380	11
1389.8	0.393	19	2.3	100	308	20	5.7	4.2	154	352	15
1390.5	0.497	18	2.3	101	367	20	7.2	4.3	155	419	15
1391.2	0.393	21	2.0	92	351	21	5.7	3.7	142	401	16
1391.9	0.454	18	2.1	94	298	17	6.5	3.9	143	340	13
1392.6	0.393	19	2.2	89	302	19	5.7	4.0	137	345	14
1393.3	0.393	18	2.0	90	333	21	5.7	3.6	138	380	15
1394.0	0.393	18	2.1	104	383	22	5.7	3.8	160	438	16
1394.7	0.393	18	2.2	90	291	18	5.7	3.9	138	333	13
1395.4	0.393	15	2.1	102	349	21	5.7	3.8	156	399	16
1396.1	0.393	15	1.7	87	305	20	5.7	3.1	134	349	15
1396.8	0.393	16	2.7	98	344	23	5.7	4.9	150	394	17
1397.5	1.1	17	2.0	95	361	23	16	3.7	145	413	17
1398.2	0.627	15	2.2	85	301	17	9.0	4.0	131	344	13
1398.9	0.393	18	2.0	95	337	19	5.7	3.7	146	385	14
1399.6	0.393	19	2.1	94	340	20	5.7	3.9	144	389	15
1400.3	0.393	17	2.3	79	305	20	5.7	4.3	121	348	15
1401.0	0.393	16	2.3	96	345	22	5.7	4.2	147	395	16
1401.7	0.513	16	2.2	84	291	21	7.4	4.0	128	332	15
1402.4	0.496	18	2.1	74	269	21	7.2	3.8	114	308	15
1403.1	0.393	17	2.1	86	323	18	5.7	3.9	131	370	13
1403.8	0.393	15	1.7	86	299	20	5.7	3.1	131	342	15
1404.5	0.679	18	2.3	85	329	20	9.8	4.1	131	376	14
1405.2	0.393	16	1.9	98	310	20	5.7	3.4	150	355	15
1405.9	0.393	16	1.7	75	282	18	5.7	3.1	116	322	13
1406.6	0.393	16	2.2	83	335	19	5.7	4.0	128	383	14
1407.3	0.393	14	1.8	86	350	20	5.7	3.3	132	400	15
1408.0	0.393	15	1.7	77	291	21	5.7	3.2	118	333	16
1408.6	0.656	18	1.9	92	364	23	9.5	3.5	141	416	17
1409.3	0.503	20	1.9	85	332	22	7.3	3.4	130	380	16
1410.0	0.393	16	1.6	83	322	23	5.7	2.8	128	368	17
1410.7	0.433	16	1.8	71	302	19	6.2	3.3	109	345	14
1411.4	0.393	17	2.1	83	330	24	5.7	3.9	127	378	17

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Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1412.1	0.393	16	1.7	81	314	20	5.7	3.0	124	359	15
1412.8	0.832	17	1.9	81	317	22	12	3.4	123	363	16
1413.5	0.485	16	1.6	97	373	20	7.0	2.9	148	427	15
1414.2	0.393	15	1.6	79	328	21	5.7	3.0	121	376	15
1414.9	0.757	18	2.3	95	337	20	11	4.2	146	385	15
1415.6	0.393	18	1.8	94	354	17	5.7	3.3	145	405	12
1416.3	0.393	15	1.9	72	375	22	5.7	3.5	110	429	16
1417.0	0.393	13	1.7	68	303	16	5.7	3.1	105	346	11
1417.7	0.393	16	1.9	84	323	20	5.7	3.5	128	369	14
1418.4	0.681	15	1.6	72	321	20	9.8	2.9	110	367	14
1419.1	0.393	17	1.9	81	344	22	5.7	3.5	124	393	16
1419.8	0.393	15	2.2	78	426	24	5.7	4.1	119	488	18
1420.5	0.393	15	1.9	73	324	22	5.7	3.5	112	370	16
1421.2	0.676	18	1.7	74	304	18	9.8	3.1	113	347	13
1421.9	0.393	15	1.7	77	306	20	5.7	3.1	117	350	14
1422.6	0.393	15	1.6	78	318	22	5.7	2.9	119	363	16
1423.3	0.393	13	2.3	80	312	18	5.7	4.3	122	357	13
1424.0	0.393	14	1.8	74	342	26	5.7	3.3	113	392	19
1424.7	0.393	18	1.4	80	410	27	5.7	2.5	123	469	20
1425.4	0.393	14	1.1	71	350	19	5.7	2.1	109	400	14
1426.1	0.393	16	1.3	72	310	17	5.7	2.4	110	355	13
1426.8	0.393	15	1.9	66	386	20	5.7	3.5	101	441	15
1427.5	0.423	18	2.2	77	431	24	6.1	4.0	117	492	17
1428.2	0.393	18	1.7	76	363	20	5.7	3.1	117	415	14
1428.9	0.393	17	1.7	72	445	25	5.7	3.1	111	509	18
1429.6	0.393	14	1.5	66	381	24	5.7	2.7	101	435	18
1430.3	0.393	14	0.956	73	387	15	5.7	1.7	111	443	11
1431.0	0.393	19	1.6	62	449	29	5.7	2.9	95	514	21
1431.7	0.393	17	1.1	78	381	21	5.7	2.0	119	436	15
1432.4	0.393	13	1.6	65	393	20	5.7	2.8	99	449	14
1433.1	0.393	17	1.6	75	411	20	5.7	3.0	114	470	15
1433.8	0.393	13	1.7	70	401	23	5.7	3.1	108	459	17
1434.4	0.393	12	2.1	70	409	24	5.7	3.8	108	468	17
1435.1	0.393	14	1.1	56	350	21	5.7	2.1	86	400	15
1435.8	0.393	14	1.3	58	321	18	5.7	2.4	89	367	13
1436.5	0.393	19	1.5	57	389	18	5.7	2.6	87	445	13
1437.2	0.393	16	1.4	56	402	19	5.7	2.5	86	459	14
1437.9	0.393	15	1.5	63	402	20	5.7	2.8	96	460	15
1438.6	0.393	13	1.1	66	409	21	5.7	2.0	101	468	15
1439.3	0.393	15	0.985	72	389	23	5.7	1.8	111	445	16
1440.0	0.393	15	1.5	55	430	20	5.7	2.8	84	492	15
1440.7	0.393	14	1.4	60	413	18	5.7	2.5	92	472	13
1441.4	0.393	16	1.5	57	448	20	5.7	2.7	87	512	15
1442.1	0.393	14	0.949	66	382	18	5.7	1.7	101	437	13
1442.8	0.393	16	1.4	61	420	17	5.7	2.5	93	480	12
1443.5	0.393	17	1.0	58	432	19	5.7	1.8	89	494	14
1444.2	0.393	14	1.2	54	478	21	5.7	2.2	83	547	15
1444.9	0.412	16	1.3	52	432	18	5.9	2.3	79	494	13
1445.6	0.393	14	1.2	62	400	19	5.7	2.3	96	457	14
1446.3	0.393	17	1.1	49	380	15	5.7	2.1	75	435	11
1447.0	0.553	14	1.0	56	365	17	8.0	1.9	85	418	12
1447.7	0.393	15	0.930	53	418	17	5.7	1.7	81	478	12
1448.4	0.393	17	1.6	57	427	19	5.7	2.9	87	488	14
1449.1	0.393	12	1.1	51	398	13	5.7	1.9	78	455	9.4
1449.8	0.639	16	1.2	55	417	19	9.2	2.1	84	477	14
1450.5	0.393	14	1.4	53	390	18	5.7	2.6	82	447	13
1451.2	0.393	14	1.3	68	378	14	5.7	2.4	103	433	11
1451.9	0.393	16	1.1	55	368	14	5.7	2.0	85	421	10
1452.6	0.393	14	1.4	50	420	16	5.7	2.5	77	481	12
1453.3	0.393	14	1.4	51	405	16	5.7	2.5	78	463	12
1454.0	0.393	13	1.4	54	411	18	5.7	2.6	83	470	13
1454.7	0.436	17	1.5	56	407	19	6.3	2.7	86	466	14
1455.4	0.501	15	0.833	48	456	16	7.2	1.5	74	522	12
1456.1	0.393	14	0.967	51	387	13	5.7	1.8	78	443	9.3
1456.8	0.393	15	1.5	53	398	16	5.7	2.8	81	455	11
1457.5	0.393	15	1.3	48	402	15	5.7	2.4	74	460	11
1458.2	0.393	18	1.3	55	349	16	5.7	2.4	84	399	12
1458.9	0.393	12	0.848	47	373	13	5.7	1.5	72	427	9.6
1459.6	0.393	13	1.1	53	426	13	5.7	1.9	81	488	9.8
1460.2	0.773	15	1.2	49	409	15	11	2.2	75	468	11
1460.9	0.430	17	1.2	53	434	14	6.2	2.1	82	496	10
1461.6	0.393	17	1.1	50	389	10	5.7	2.0	77	445	7.6
1462.3	0.471	14	1.5	53	352	11	6.8	2.8	81	403	8.0
1463.0	0.393	16	1.2	53	392	14	5.7	2.2	81	448	11
1463.7	0.561	14	1.5	51	413	16	8.1	2.7	79	472	12
1464.4	0.620	307	1.4	60	340	12	9.0	2.6	92	389	9.1
1465.1	0.393	17	1.1	51	378	14	5.7	2.0	78	432	10
1465.8	0.393	15	1.3	54	365	11	5.7	2.4	83	417	8.1
1466.5	0.393	14	1.3	61	435	12	5.7	2.4	93	498	8.7
1467.2	0.695	16	1.5	50	399	11	10	2.7	76	456	7.7
1467.9	0.545	17	1.3	55	419	12	7.9	2.3	85	479	8.4

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1468.6	0.450	14	1.8	212	355	13	6.5	3.3	324	406	9.3
1469.3	0.393	14	1.6	56	389	8.7	5.7	3.0	86	445	6.4
1470.0	0.393	13	1.2	57	371	13	5.7	2.2	87	425	9.5
1470.7	0.558	15	1.5	49	443	12	8.1	2.8	76	506	8.7
1471.4	0.393	18	0.896	64	454	12	5.7	1.6	98	519	8.5
1472.1	0.393	14	1.5	51	344	11	5.7	2.8	79	394	7.7
1472.8	0.393	14	1.4	58	363	7.9	5.7	2.6	88	415	5.8
1473.5	0.393	16	1.7	59	436	13	5.7	3.1	91	499	9.2
1474.2	0.393	14	1.6	57	392	9.9	5.7	2.9	88	448	7.2
1474.9	0.393	18	1.6	59	379	12	5.7	2.8	90	434	9.1
1475.6	0.393	18	1.6	56	391	12	5.7	2.9	86	448	8.5
1476.3	0.445	14	1.4	61	404	12	6.4	2.6	93	462	8.5
1477.0	0.393	15	1.3	49	421	9.3	5.7	2.4	75	482	6.8
1477.7	0.393	15	1.6	58	436	12	5.7	3.0	89	499	8.7
1478.4	0.393	14	1.7	56	375	10	5.7	3.1	87	429	7.5
1479.1	0.393	15	1.5	57	341	9.9	5.7	2.7	88	390	7.2
1479.8	0.393	15	1.7	62	369	9.6	5.7	3.1	94	422	7.0
1480.5	0.393	15	1.8	59	409	10	5.7	3.2	91	467	7.4
1481.2	0.393	16	1.4	69	372	12	5.7	2.6	106	426	9.0
1481.9	0.393	15	1.4	62	363	7.7	5.7	2.5	95	415	5.6
1482.6	0.393	15	1.4	66	444	10	5.7	2.6	101	508	7.4
1483.3	0.393	16	1.7	58	400	9.0	5.7	3.2	89	458	6.5
1484.0	0.461	19	1.3	64	349	8.8	6.7	2.5	97	399	6.4
1484.7	0.393	18	2.4	68	353	11	5.7	4.3	105	403	7.8
1485.4	0.393	17	2.0	64	317	11	5.7	3.7	98	362	7.9
1486.1	0.393	14	1.4	75	345	7.6	5.7	2.6	115	394	5.5
1486.7	0.393	17	1.4	59	365	8.1	5.7	2.6	91	418	5.9
1487.4	0.393	15	1.6	63	329	9.8	5.7	2.9	97	376	7.2
1488.1	0.393	15	1.5	74	371	7.7	5.7	2.8	113	425	5.6
1488.8	0.393	15	1.7	79	367	11	5.7	3.0	121	420	7.9
1489.5	0.393	18	1.5	74	347	8.9	5.7	2.8	113	396	6.5
1490.2	0.393	19	2.1	71	333	7.0	5.7	3.9	109	380	5.1
1490.9	0.393	17	1.7	81	319	7.7	5.7	3.1	124	365	5.6
1491.6	0.393	17	1.5	80	277	7.1	5.7	2.8	122	316	5.2
1492.3	0.393	17	1.9	70	318	6.7	5.7	3.5	107	364	4.9
1493.0	0.393	15	1.9	68	329	6.7	5.7	3.5	104	376	4.9
1493.7	0.393	21	2.0	69	319	7.7	5.7	3.7	106	365	5.6
1494.4	0.393	15	1.7	67	267	4.7	5.7	3.0	103	305	3.4
1495.1	0.393	18	1.8	76	256	6.2	5.7	3.3	117	293	4.5
1495.8	0.393	17	2.0	71	270	4.4	5.7	3.7	108	309	3.2
1496.5	0.393	16	1.9	84	267	5.7	5.7	3.4	128	305	4.1
1497.2	0.393	18	2.0	65	263	5.0	5.7	3.6	100	301	3.6
1497.9	0.393	15	2.0	81	228	4.1	5.7	3.6	124	261	3.0
1498.6	0.393	16	2.0	72	263	4.9	5.7	3.7	110	301	3.6
1499.3	0.393	19	2.3	79	290	4.7	5.7	4.2	122	332	3.4
1500.0	0.393	16	1.9	81	247	3.8	5.7	3.5	124	283	2.8
1500.7	0.393	17	1.8	71	271	5.1	5.7	3.3	110	310	3.7
1501.4	0.393	20	1.9	94	240	4.5	5.7	3.5	144	274	3.3
1502.1	0.393	18	1.9	95	267	4.4	5.7	3.4	146	305	3.2
1502.8	0.393	19	1.6	85	242	4.3	5.7	2.9	131	277	3.1
1503.5	0.393	15	2.0	78	260	3.9	5.7	3.6	119	297	2.9
1504.2	0.576	19	2.2	85	247	3.9	8.3	3.9	130	282	2.8
1504.9	0.393	15	1.6	79	193	2.9	5.7	3.0	121	221	2.1
1505.6	0.393	14	1.7	97	235	4.1	5.7	3.1	149	268	3.0
1506.3	0.393	16	2.2	87	266	3.5	5.7	4.0	134	304	2.6
1507.0	0.586	17	2.2	83	234	2.8	8.5	4.0	127	267	2.0
1507.7	0.393	18	2.7	119	252	2.5	5.7	4.9	182	288	1.8
1508.4	0.393	14	2.0	76	209	2.8	5.7	3.7	117	239	2.0
1509.1	0.393	18	1.7	90	234	3.3	5.7	3.1	138	268	2.4
1509.8	0.393	17	2.4	88	226	3.4	5.7	4.3	135	259	2.5
1510.5	0.393	16	2.2	102	240	3.9	5.7	4.1	156	274	2.9
1511.2	0.393	17	2.2	82	213	3.4	5.7	4.0	125	244	2.5
1511.9	0.393	19	2.4	85	251	3.0	5.7	4.5	130	287	2.2
1512.5	0.393	18	1.7	83	210	2.4	5.7	3.2	127	240	1.7
1513.2	0.393	16	2.4	79	229	3.6	5.7	4.4	121	262	2.6
1513.9	0.393	17	2.3	90	237	2.8	5.7	4.2	137	271	2.0
1514.6	0.393	17	1.9	91	255	2.1	5.7	3.6	140	292	1.6
1515.3	0.393	16	2.1	95	253	2.6	5.7	3.8	146	289	1.9
1516.0	0.393	17	1.9	82	266	3.3	5.7	3.5	126	304	2.4
1516.7	0.393	16	1.8	81	234	2.7	5.7	3.3	124	268	2.0
1517.4	0.543	18	2.3	79	271	2.2	7.8	4.3	121	310	1.6
1518.1	0.393	18	2.2	81	201	2.7	5.7	4.0	124	229	1.9
1518.8	0.393	17	1.4	79	229	2.1	5.7	2.6	122	262	1.5
1519.5	0.393	20	1.9	86	238	2.9	5.7	3.5	132	272	2.1
1520.2	0.393	16	2.1	99	240	2.5	5.7	3.8	152	274	1.8
1520.9	0.393	18	2.0	87	255	2.9	5.7	3.6	134	292	2.1
1521.6	0.393	17	1.9	87	261	2.7	5.7	3.5	133	299	2.0
1522.3	0.393	18	1.6	87	259	1.7	5.7	2.8	134	296	1.2
1523.0	0.393	16	1.7	82	257	2.8	5.7	3.1	125	294	2.0
1523.7	0.393	18	1.8	90	256	2.6	5.7	3.3	138	293	1.9
1524.4	0.393	19	1.9	86	270	3.1	5.7	3.4	131	309	2.3

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1525.1	0.393	19	2.0	85	243	2.0	5.7	3.6	131	278	1.4
1525.8	0.393	14	1.5	67	229	2.3	5.7	2.7	102	262	1.7
1526.5	0.393	15	2.1	91	275	1.3	5.7	3.9	140	314	0.942
1527.2	0.393	19	1.7	76	263	3.4	5.7	3.1	116	301	2.4
1527.9	0.670	21	1.9	89	302	2.5	9.7	3.4	136	345	1.8
1528.6	0.393	17	2.4	97	312	2.2	5.7	4.3	149	357	1.6
1529.3	0.459	18	1.8	90	275	3.0	6.6	3.3	138	315	2.2
1530.0	0.393	20	1.7	86	281	3.7	5.7	3.0	132	322	2.7
1530.7	0.393	15	2.0	78	276	2.9	5.7	3.6	119	316	2.1
1531.4	0.393	20	1.5	76	263	2.5	5.7	2.8	117	301	1.8
1532.1	0.393	25	1.7	108	285	3.2	5.7	3.1	165	326	2.3
1532.8	0.393	15	1.6	72	259	3.0	5.7	2.9	111	297	2.2
1533.5	0.393	15	1.7	73	255	2.6	5.7	3.1	112	292	1.9
1534.2	0.393	17	1.8	82	283	3.0	5.7	3.4	125	324	2.2
1534.9	0.393	20	1.4	72	289	1.9	5.7	2.6	110	330	1.4
1535.6	0.393	19	1.6	71	272	1.9	5.7	3.0	109	311	1.4
1536.3	0.393	19	1.7	73	302	2.1	5.7	3.1	112	345	1.6
1537.0	0.489	21	1.9	92	295	2.5	7.1	3.5	142	338	1.8
1537.7	0.393	22	1.6	74	257	2.6	5.7	3.0	113	294	1.9
1538.4	0.393	20	1.4	71	264	3.5	5.7	2.6	109	302	2.6
1539.0	0.426	18	1.6	79	312	2.3	6.2	2.9	121	357	1.6
1539.7	0.393	20	1.9	72	306	2.9	5.7	3.4	111	349	2.1
1540.4	0.393	21	1.8	70	303	2.7	5.7	3.2	108	346	2.0
1541.1	0.974	22	1.9	65	275	2.7	14	3.4	100	315	1.9
1541.8	0.393	25	1.1	68	269	3.3	5.7	1.9	104	307	2.4
1542.5	0.393	21	1.4	64	314	2.1	5.7	2.6	98	359	1.5
1543.2	0.393	21	1.7	68	309	3.2	5.7	3.1	104	354	2.3
1543.9	0.669	22	1.7	64	280	3.6	9.7	3.0	98	320	2.6
1544.6	1.0	24	1.6	62	323	4.6	15	2.9	95	370	3.4
1545.3	0.393	22	1.8	61	289	2.6	5.7	3.3	93	331	1.9
1546.0	0.393	20	0.907	62	274	2.6	5.7	1.7	94	313	1.9
1546.7	0.393	22	1.6	64	305	1.8	5.7	2.9	98	348	1.3
1547.4	0.532	20	1.6	60	292	3.0	7.7	2.9	92	334	2.2
1548.1	0.393	24	1.6	79	287	2.9	5.7	2.9	122	328	2.2
1548.8	0.393	24	1.3	67	296	3.9	5.7	2.4	102	339	2.8
1549.5	0.393	23	1.2	69	300	2.5	5.7	2.2	105	343	1.8
1550.2	0.411	23	1.2	65	284	3.5	5.9	2.2	100	324	2.6
1550.9	0.393	22	1.4	71	296	2.9	5.7	2.6	109	338	2.1
1551.6	0.393	21	1.4	61	272	3.2	5.7	2.6	93	311	2.4
1552.3	0.978	20	1.0	70	376	2.6	14	1.9	108	430	1.9
1553.0	0.393	19	1.3	63	285	2.5	5.7	2.3	97	326	1.8
1553.7	0.711	24	1.1	74	346	2.8	10	2.0	113	396	2.1
1554.4	0.393	19	1.3	69	278	2.8	5.7	2.4	106	318	2.1
1555.1	0.422	20	1.7	71	338	2.3	6.1	3.1	108	387	1.7
1555.8	0.393	20	1.8	63	320	3.1	5.7	3.3	97	366	2.3
1556.5	0.393	17	1.4	71	401	2.1	5.7	2.5	108	459	1.6
1557.2	0.393	17	1.7	67	315	2.7	5.7	3.0	102	360	2.0
1557.9	0.410	18	1.1	67	290	2.2	5.9	2.1	102	331	1.6
1558.6	0.412	17	1.4	86	327	2.8	5.9	2.6	132	374	2.0
1559.3	0.393	16	1.3	77	317	2.7	5.7	2.3	119	362	2.0
1560.0	0.393	17	1.4	66	356	2.8	5.7	2.6	101	407	2.0
1560.7	0.393	19	1.4	82	387	3.1	5.7	2.6	126	443	2.2
1561.4	0.393	18	1.6	82	330	3.6	5.7	2.9	126	377	2.6
1562.1	0.664	17	1.2	86	334	2.6	9.6	2.3	131	382	1.9
1562.8	0.694	18	1.6	75	332	2.5	10	3.0	115	379	1.8
1563.5	0.462	21	1.2	83	377	2.3	6.7	2.2	128	431	1.7
1564.2	0.393	20	1.4	75	358	3.3	5.7	2.6	114	409	2.4
1564.9	0.393	14	1.5	74	331	3.0	5.7	2.8	114	378	2.2
1565.5	0.393	15	1.3	81	356	2.8	5.7	2.4	125	407	2.0
1566.2	0.393	17	1.3	67	312	2.4	5.7	2.4	103	357	1.7
1566.9	0.393	16	1.8	74	302	2.7	5.7	3.3	113	346	2.0
1567.6	0.393	17	1.1	69	317	3.2	5.7	2.1	105	363	2.3
1568.3	0.393	13	1.0	62	286	2.8	5.7	1.8	96	327	2.0
1569.0	0.393	16	1.4	70	354	2.0	5.7	2.5	107	405	1.5
1569.7	0.393	15	1.2	65	377	3.2	5.7	2.1	99	432	2.3
1570.4	0.393	15	1.9	78	354	2.4	5.7	3.5	120	405	1.8
1571.1	0.460	17	1.7	82	383	2.2	6.6	3.1	125	438	1.6
1571.8	0.393	15	1.2	67	303	2.8	5.7	2.1	102	347	2.0
1572.5	0.393	15	1.1	66	330	3.4	5.7	2.0	101	378	2.4
1573.2	0.393	16	1.3	72	361	2.3	5.7	2.4	111	413	1.7
1573.9	0.393	17	1.1	69	346	2.6	5.7	2.0	106	396	1.9
1574.6	0.453	15	1.3	68	335	2.5	6.5	2.4	104	383	1.8
1575.3	0.393	17	1.2	69	336	3.0	5.7	2.1	106	384	2.2
1576.0	0.393	15	1.3	64	351	2.9	5.7	2.4	98	402	2.1
1576.7	0.393	15	1.3	63	333	2.1	5.7	2.4	97	381	1.5
1577.4	0.393	18	1.3	52	302	2.8	5.7	2.4	79	346	2.1
1578.1	0.542	16	0.852	59	293	3.3	7.8	1.6	91	335	2.4
1578.8	0.393	16	0.827	54	323	1.7	5.7	1.5	83	369	1.2
1579.5	0.393	16	1.4	65	381	3.4	5.7	2.5	100	436	2.5
1580.2	0.393	16	1.2	63	308	2.3	5.7	2.3	96	353	1.7
1580.9	0.393	15	1.0	51	281	2.7	5.7	1.9	78	321	2.0

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1581.6	0.393	17	1.1	58	317	3.5	5.7	2.0	88	363	2.6
1582.3	0.393	13	0.933	50	304	2.5	5.7	1.7	76	348	1.8
1583.0	0.393	15	0.955	56	301	2.8	5.7	1.7	86	344	2.0
1583.7	0.393	14	1.1	70	295	2.3	5.7	2.0	108	338	1.7
1584.4	0.393	16	1.7	57	304	1.7	5.7	3.2	87	348	1.2
1585.1	0.393	15	0.858	51	295	3.3	5.7	1.6	79	338	2.4
1585.8	0.393	16	0.853	57	290	3.7	5.7	1.6	87	332	2.7
1586.5	0.393	15	0.988	49	277	3.5	5.7	1.8	76	317	2.5
1587.2	0.393	17	1.3	59	332	3.0	5.7	2.4	90	380	2.2
1587.9	0.744	17	1.5	52	317	2.9	11	2.8	80	363	2.1
1588.6	0.393	16	1.3	50	282	3.3	5.7	2.3	77	322	2.4
1589.3	0.393	15	1.3	49	315	4.4	5.7	2.5	76	360	3.2
1590.0	0.393	16	1.3	50	283	1.7	5.7	2.4	77	323	1.2
1590.7	0.393	17	1.2	46	247	3.9	5.7	2.2	70	283	2.9
1591.4	0.393	18	0.963	44	310	2.4	5.7	1.8	67	354	1.7
1592.0	0.393	17	1.2	43	279	5.1	5.7	2.3	66	319	3.7
1592.7	0.393	17	1.0	43	294	2.4	5.7	1.8	67	336	1.7
1593.4	0.393	14	1.3	40	330	2.5	5.7	2.4	62	377	1.8
1594.1	0.419	14	1.3	52	252	3.0	6.0	2.3	80	289	2.2
1594.8	0.393	16	1.1	45	244	2.9	5.7	2.0	68	278	2.1
1595.5	0.873	19	1.0	41	298	3.7	13	1.9	63	341	2.7
1596.2	0.393	18	1.2	41	316	3.9	5.7	2.2	63	362	2.8
1596.9	0.393	17	1.0	40	314	3.0	5.7	1.9	61	359	2.2
1597.6	0.393	16	0.845	36	234	2.4	5.7	1.5	55	267	1.7
1598.3	0.437	18	1.3	36	293	3.2	6.3	2.4	54	335	2.3
1599.0	0.393	17	1.2	43	308	2.7	5.7	2.3	66	352	2.0
1599.7	0.393	17	0.953	43	271	3.2	5.7	1.7	66	310	2.3
1600.4	0.393	16	1.3	45	280	3.3	5.7	2.3	69	320	2.4
1601.1	0.393	18	1.6	35	303	4.4	5.7	2.9	53	346	3.2
1601.8	0.393	17	1.4	42	295	2.9	5.7	2.5	64	337	2.1
1602.5	0.393	14	1.2	33	255	3.2	5.7	2.1	50	292	2.4
1603.2	0.393	17	1.4	41	273	2.6	5.7	2.6	62	312	1.9
1603.9	0.393	18	1.4	38	226	1.6	5.7	2.5	58	259	1.1
1604.6	0.393	17	1.5	34	256	2.0	5.7	2.6	53	293	1.5
1605.3	0.393	15	1.6	37	274	3.1	5.7	3.0	57	313	2.2
1606.0	0.393	17	1.6	44	250	3.1	5.7	2.9	68	286	2.3
1606.7	0.393	17	1.6	43	257	3.2	5.7	3.0	65	294	2.4
1607.4	0.393	14	1.0	44	249	2.9	5.7	1.9	68	285	2.1
1608.1	0.442	14	0.954	35	215	2.1	6.4	1.7	54	246	1.6
1608.8	0.393	15	1.3	33	231	3.4	5.7	2.4	50	264	2.5
1609.5	0.393	17	1.8	39	249	4.5	5.7	3.3	59	285	3.3
1610.2	0.393	18	1.4	40	239	4.2	5.7	2.5	62	273	3.1
1610.9	0.393	16	1.1	38	247	2.7	5.7	2.0	58	283	1.9
1611.6	0.393	14	1.3	36	233	2.8	5.7	2.4	54	266	2.1
1612.3	0.393	16	0.956	32	232	2.8	5.7	1.7	49	266	2.1
1613.0	0.393	18	2.1	52	243	3.8	5.7	3.8	80	278	2.8
1613.7	0.393	14	1.7	39	219	3.4	5.7	3.0	60	251	2.5
1614.4	0.393	16	1.7	46	236	3.3	5.7	3.0	71	270	2.4
1615.1	0.393	16	1.7	47	217	3.1	5.7	3.1	73	248	2.2
1615.8	0.393	15	1.4	39	229	2.8	5.7	2.6	60	261	2.1
1616.5	0.393	15	1.5	40	187	3.3	5.7	2.7	61	214	2.4
1617.2	0.393	16	1.3	40	218	4.4	5.7	2.4	62	249	3.2
1617.8	0.393	14	1.5	41	181	5.1	5.7	2.8	63	207	3.7
1618.5	0.393	17	1.8	48	220	4.4	5.7	3.3	73	251	3.2
1619.2	0.393	16	2.0	45	211	4.9	5.7	3.7	69	242	3.6
1619.9	0.393	18	2.1	46	213	5.1	5.7	3.8	70	243	3.7
1620.6	0.393	16	2.1	44	210	3.9	5.7	3.8	67	240	2.8
1621.3	0.393	16	2.4	46	193	5.1	5.7	4.4	70	221	3.7
1622.0	0.468	14	1.8	47	230	5.5	6.8	3.2	72	263	4.0
1622.7	0.393	16	2.0	45	207	5.4	5.7	3.6	69	237	3.9
1623.4	0.393	19	2.5	49	242	6.1	5.7	4.6	75	277	4.5
1624.1	0.393	13	2.5	51	229	4.8	5.7	4.5	78	262	3.5
1624.8	0.393	15	2.1	49	179	3.7	5.7	3.9	75	204	2.7
1625.5	0.393	14	1.9	49	180	6.5	5.7	3.5	76	205	4.7
1626.2	0.393	14	2.6	51	184	4.7	5.7	4.8	78	210	3.4
1626.9	0.393	13	2.4	51	211	8.1	5.7	4.3	78	241	5.9
1627.6	0.393	15	2.6	59	187	5.0	5.7	4.8	90	214	3.7
1628.3	0.393	13	3.1	56	185	6.3	5.7	5.6	87	212	4.6
1629.0	0.393	15	2.8	54	166	5.5	5.7	5.1	83	190	4.0
1629.7	0.393	19	3.3	61	175	6.4	5.7	5.9	93	200	4.7
1630.4	0.393	16	2.8	51	188	6.3	5.7	5.1	78	215	4.6
1631.1	0.393	16	2.7	57	181	7.1	5.7	5.0	88	207	5.2
1631.8	0.393	17	3.1	58	164	5.6	5.7	5.6	88	188	4.1
1632.5	0.393	16	3.2	53	163	6.6	5.7	5.7	81	186	4.8
1633.2	0.393	17	2.7	56	167	7.8	5.7	4.9	86	191	5.7
1633.9	0.393	18	3.7	67	176	8.0	5.7	6.8	102	202	5.9
1634.6	0.393	17	3.3	68	177	7.5	5.7	6.0	104	202	5.5
1635.3	0.393	19	3.5	57	172	7.8	5.7	6.4	87	196	5.7
1636.0	0.393	18	3.3	63	195	7.4	5.7	6.1	96	223	5.4
1636.7	0.393	17	3.1	68	159	7.8	5.7	5.7	104	181	5.7
1637.4	0.393	19	4.0	69	165	6.1	5.7	7.3	106	188	4.4

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1638.1	0.393	20	3.8	75	159	7.6	5.7	6.9	115	182	5.6
1638.8	0.393	17	3.1	58	155	9.0	5.7	5.7	90	178	6.6
1639.5	0.393	20	3.5	73	158	8.9	5.7	6.4	111	181	6.5
1640.2	0.393	21	4.3	67	188	8.2	5.7	7.9	103	215	6.0
1640.9	0.393	20	4.0	68	145	8.7	5.7	7.3	104	166	6.3
1641.6	0.393	17	3.8	81	151	6.9	5.7	6.8	124	173	5.1
1642.3	0.393	19	4.0	68	154	11	5.7	7.3	104	176	7.7
1643.0	0.393	16	3.7	72	146	7.2	5.7	6.8	110	167	5.3
1643.7	0.393	18	3.6	65	141	8.8	5.7	6.5	100	161	6.4
1644.3	0.393	20	3.6	69	135	7.2	5.7	6.7	106	154	5.2
1645.0	0.393	20	3.3	74	149	8.0	5.7	6.0	114	170	5.8
1645.7	0.393	20	3.4	70	138	7.8	5.7	6.3	107	158	5.7
1646.4	0.393	21	3.6	82	141	9.2	5.7	6.5	126	161	6.7
1647.1	0.393	20	3.5	77	152	9.7	5.7	6.4	117	174	7.1
1647.8	0.393	20	3.4	65	142	8.9	5.7	6.2	100	162	6.5
1648.5	0.393	17	3.2	75	150	7.0	5.7	5.9	115	172	5.1
1649.2	0.452	18	3.3	62	145	8.7	6.5	6.0	95	166	6.3
1649.9	0.393	20	3.8	65	140	9.0	5.7	7.0	100	160	6.6
1650.6	0.393	21	3.6	83	147	8.8	5.7	6.6	127	168	6.4
1651.3	0.393	19	3.8	68	133	8.2	5.7	6.9	105	152	6.0
1652.0	0.393	21	3.5	66	134	10	5.7	6.3	102	153	7.4
1652.7	0.393	17	3.4	72	130	8.7	5.7	6.1	110	148	6.4
1653.4	0.393	20	3.7	60	127	8.5	5.7	6.7	93	145	6.2
1654.1	0.393	24	4.3	76	145	10	5.7	7.8	116	166	7.6
1654.8	0.393	20	3.2	68	125	9.2	5.7	5.9	104	143	6.7
1655.5	0.393	21	3.3	68	138	10	5.7	5.9	105	158	7.5
1656.2	0.393	22	3.6	71	144	13	5.7	6.5	109	165	9.5
1656.9	0.393	19	3.1	70	130	8.7	5.7	5.7	107	149	6.4
1657.6	0.393	22	3.7	74	130	11	5.7	6.7	114	149	8.1
1658.3	0.393	19	3.2	71	134	10	5.7	5.9	109	153	7.5
1659.0	0.393	17	2.8	65	113	7.7	5.7	5.1	99	129	5.6
1659.7	0.393	19	3.9	70	136	12	5.7	7.2	107	155	8.7
1660.4	0.393	24	3.3	74	127	11	5.7	6.1	114	145	8.1
1661.1	0.393	21	3.8	81	145	9.2	5.7	7.0	125	165	6.7
1661.8	0.393	23	3.6	76	145	9.9	5.7	6.6	117	165	7.2
1662.5	0.393	24	3.6	72	137	10	5.7	6.5	111	156	7.3
1663.2	0.393	23	3.7	76	139	11	5.7	6.8	117	158	8.2
1663.9	0.393	22	3.6	72	135	12	5.7	6.5	110	154	8.8
1664.6	0.393	19	3.0	84	125	9.0	5.7	5.5	128	143	6.6
1665.3	0.393	19	2.4	74	115	9.0	5.7	4.4	113	132	6.5
1666.0	0.393	20	3.3	69	130	11	5.7	6.1	105	148	8.1
1666.7	0.393	21	2.7	76	139	14	5.7	4.9	117	159	10
1667.4	0.393	21	3.0	73	130	14	5.7	5.4	112	148	9.9
1668.1	0.393	21	2.8	84	125	12	5.7	5.1	129	143	8.5
1668.8	0.393	22	3.1	80	141	10.0	5.7	5.7	123	161	7.3
1669.5	0.393	22	2.4	66	133	12	5.7	4.3	101	152	8.4
1670.1	0.403	20	3.1	66	120	11	5.8	5.6	101	137	7.7
1670.8	0.393	21	2.8	73	118	11	5.7	5.1	111	135	7.7
1671.5	0.465	17	2.8	69	119	9.6	6.7	5.1	106	136	7.0
1672.2	0.393	18	2.5	63	122	11	5.7	4.5	96	139	8.1
1672.9	0.393	17	2.3	52	105	9.9	5.7	4.1	80	120	7.2
1673.6	0.393	22	2.5	74	124	13	5.7	4.5	113	142	9.2
1674.3	0.393	21	2.5	66	115	9.9	5.7	4.5	101	132	7.3
1675.0	0.393	20	1.8	61	123	11	5.7	3.3	94	141	7.7
1675.7	0.393	19	2.7	68	122	11	5.7	4.8	104	139	8.2
1676.4	0.393	17	2.9	65	125	9.9	5.7	5.2	99	143	7.2
1677.1	0.393	23	2.0	70	126	11	5.7	3.6	108	144	7.7
1677.8	0.393	23	2.4	67	127	10	5.7	4.4	102	145	7.6
1678.5	0.530	20	2.1	63	129	9.9	7.7	3.8	97	148	7.2
1679.2	0.393	22	2.6	65	119	11	5.7	4.7	100	136	7.8
1679.9	0.393	18	2.1	57	108	10	5.7	3.9	87	123	7.5
1680.6	0.393	25	2.8	60	121	9.4	5.7	5.1	92	139	6.9
1681.3	0.441	19	2.2	56	118	9.1	6.4	3.9	85	135	6.7
1682.0	0.393	19	2.2	61	122	9.0	5.7	4.0	93	139	6.6
1682.7	0.393	20	2.0	59	130	13	5.7	3.6	91	148	9.8
1683.4	0.393	21	1.5	52	117	9.8	5.7	2.8	80	133	7.1
1684.1	0.393	18	2.1	61	116	9.5	5.7	3.8	94	133	7.0
1684.8	0.393	19	1.9	57	128	8.2	5.7	3.5	88	146	6.0
1685.5	0.393	18	1.5	61	126	12	5.7	2.8	93	144	8.5
1686.2	0.393	17	1.8	52	114	9.2	5.7	3.3	80	131	6.7
1686.9	0.393	18	1.8	51	113	9.8	5.7	3.4	79	129	7.1
1687.6	0.393	17	2.0	56	119	9.4	5.7	3.7	86	136	6.9
1688.3	0.393	18	2.2	53	119	9.0	5.7	4.1	81	136	6.5
1689.0	0.393	20	1.6	50	122	10	5.7	3.0	77	139	7.3
1689.7	0.393	21	1.8	53	124	11	5.7	3.4	81	142	8.0
1690.4	0.393	20	1.5	54	129	13	5.7	2.7	83	148	9.8
1691.1	0.393	18	1.4	48	115	7.1	5.7	2.6	74	131	5.2
1691.8	0.393	17	1.8	47	116	9.7	5.7	3.3	72	133	7.1
1692.5	0.393	16	1.2	43	109	11	5.7	2.3	66	124	8.1
1693.2	0.393	21	1.3	51	117	12	5.7	2.3	79	134	8.6
1693.9	0.393	20	1.5	50	116	11	5.7	2.8	76	133	7.9

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1694.6	0.393	20	2.1	54	127	9.4	5.7	3.9	82	146	6.8
1695.3	0.393	18	1.8	47	123	8.5	5.7	3.3	73	140	6.2
1696.0	0.393	17	1.6	45	125	9.9	5.7	2.9	69	143	7.2
1696.6	0.393	19	2.0	58	118	9.8	5.7	3.6	89	135	7.2
1697.3	0.393	18	1.3	48	115	9.0	5.7	2.4	74	131	6.6
1698.0	0.393	20	1.4	49	124	12	5.7	2.6	75	142	8.7
1698.7	0.393	24	1.5	45	117	9.3	5.7	2.8	69	134	6.8
1699.4	0.393	21	1.3	46	112	8.7	5.7	2.4	70	128	6.3
1700.1	0.393	23	1.5	44	129	9.6	5.7	2.7	68	147	7.0
1700.8	0.393	23	1.7	42	118	10	5.7	3.0	64	135	7.3
1701.5	0.393	25	1.1	43	132	9.4	5.7	2.1	66	151	6.9
1702.2	0.817	24	1.4	46	119	7.7	12	2.6	71	136	5.6
1702.9	0.393	21	1.2	42	120	9.3	5.7	2.2	64	138	6.8
1703.6	0.393	24	1.4	41	124	10.0	5.7	2.5	63	142	7.3
1704.3	0.393	25	1.1	40	125	10	5.7	2.0	62	143	7.4
1705.0	0.393	27	0.916	38	131	7.8	5.7	1.7	58	150	5.7
1705.7	0.393	28	1.6	37	120	6.5	5.7	2.9	56	137	4.8
1706.4	0.393	31	0.991	38	138	8.4	5.7	1.8	58	158	6.1
1707.1	0.393	34	1.5	33	124	6.3	5.7	2.7	50	142	4.6
1707.8	0.393	33	1.4	38	133	7.6	5.7	2.5	59	152	5.5
1708.5	0.393	33	0.841	39	149	6.6	5.7	1.5	59	171	4.8
1709.2	0.393	39	1.1	36	137	6.2	5.7	2.0	55	157	4.5
1709.9	0.674	40	1.0	41	138	9.2	9.7	1.9	63	158	6.7
1710.6	0.393	44	0.823	36	138	6.9	5.7	1.5	56	158	5.1
1711.3	0.393	41	0.924	35	144	6.4	5.7	1.7	53	164	4.6
1712.0	0.393	42	1.1	29	131	7.2	5.7	2.1	45	150	5.3
1712.7	0.393	51	1.1	33	139	6.4	5.7	1.9	51	159	4.6
1713.4	0.393	48	1.1	33	133	7.0	5.7	2.0	51	153	5.1
1714.1	0.393	51	1.3	31	128	7.3	5.7	2.3	48	147	5.3
1714.8	0.393	60	0.858	31	165	6.5	5.7	1.6	48	188	4.8
1715.5	0.393	54	1.2	32	141	6.3	5.7	2.1	48	161	4.6
1716.2	0.393	70	0.999	34	148	7.1	5.7	1.8	52	169	5.2
1716.9	0.393	73	0.906	24	140	7.3	5.7	1.7	36	160	5.3
1717.6	0.393	73	0.906	32	152	7.1	5.7	1.7	50	174	5.2
1718.3	0.393	64	0.761	30	143	5.9	5.7	1.4	46	164	4.3
1719.0	0.393	68	1.1	37	158	5.5	5.7	2.0	57	181	4.0
1719.7	0.393	65	0.736	29	149	4.3	5.7	1.3	44	170	3.2
1720.4	0.393	82	0.644	30	159	5.9	5.7	1.2	47	182	4.3
1721.1	0.393	72	0.853	29	155	6.7	5.7	1.6	44	178	4.9
1721.8	0.393	73	0.696	33	166	4.9	5.7	1.3	50	190	3.6
1722.4	0.393	74	0.835	23	163	4.1	5.7	1.5	35	186	3.0
1723.1	0.393	72	0.668	26	148	6.0	5.7	1.2	39	170	4.4
1723.8	0.393	71	0.832	28	162	4.4	5.7	1.5	42	185	3.2
1724.5	0.393	77	1.1	25	151	4.8	5.7	2.0	38	172	3.5
1725.2	0.393	85	1.1	26	179	3.5	5.7	1.9	40	204	2.6
1725.9	0.393	84	0.826	28	164	4.8	5.7	1.5	43	188	3.5
1726.6	0.393	95	0.865	35	215	5.3	5.7	1.6	54	246	3.9
1727.3	0.595	79	1.1	28	160	4.4	8.6	2.0	43	183	3.2
1728.0	0.393	80	0.806	22	168	4.1	5.7	1.5	33	193	3.0
1728.7	0.393	74	0.703	29	171	5.7	5.7	1.3	45	196	4.2
1729.4	0.393	77	0.771	32	174	4.1	5.7	1.4	50	199	3.0
1730.1	0.393	77	0.918	27	181	3.9	5.7	1.7	41	207	2.8
1730.8	0.444	76	0.639	27	180	3.0	6.4	1.2	41	206	2.2
1731.5	0.393	72	1.1	26	184	5.3	5.7	2.0	40	211	3.8
1732.2	0.393	65	1.3	29	186	2.5	5.7	2.3	44	212	1.8
1732.9	0.393	59	0.587	25	153	3.1	5.7	1.1	38	175	2.2
1733.6	0.393	72	0.728	29	178	3.5	5.7	1.3	44	203	2.6
1734.3	0.393	62	0.658	22	176	4.4	5.7	1.2	34	201	3.2
1735.0	0.393	65	0.407	24	201	5.1	5.7	0.742	37	229	3.7
1735.7	0.393	59	1.0	21	193	4.0	5.7	1.9	33	220	2.9
1736.4	0.393	63	0.890	26	175	4.5	5.7	1.6	40	200	3.2
1737.1	0.393	53	0.935	27	175	3.5	5.7	1.7	41	200	2.5
1737.8	0.393	43	0.831	25	163	2.8	5.7	1.5	38	186	2.0
1738.5	0.393	48	0.973	22	182	3.3	5.7	1.8	33	208	2.4
1739.2	0.393	55	0.929	24	182	4.9	5.7	1.7	37	208	3.5
1739.9	0.393	44	0.493	24	211	3.0	5.7	0.899	36	242	2.2
1740.6	0.428	44	0.568	29	185	3.8	6.2	1.0	45	212	2.7
1741.3	0.393	38	0.544	23	210	3.2	5.7	0.992	36	240	2.3
1742.0	0.393	41	0.730	31	193	4.5	5.7	1.3	47	220	3.3
1742.7	0.751	36	0.823	27	180	3.1	11	1.5	41	206	2.3
1743.4	0.393	41	0.670	26	167	3.0	5.7	1.2	40	191	2.2
1744.1	0.393	39	0.935	27	194	3.5	5.7	1.7	42	222	2.6
1744.8	0.393	35	0.837	24	175	2.6	5.7	1.5	37	200	1.9
1745.5	0.393	39	0.509	28	192	2.4	5.7	0.928	43	220	1.8
1746.2	0.393	35	0.830	28	189	3.2	5.7	1.5	42	216	2.3
1746.9	0.393	38	0.747	32	197	3.0	5.7	1.4	50	225	2.2
1747.6	0.393	31	0.612	36	193	4.1	5.7	1.1	55	221	3.0
1748.3	0.393	31	0.678	27	196	3.8	5.7	1.2	42	224	2.8
1748.9	0.393	27	0.894	29	197	3.8	5.7	1.6	44	225	2.8
1749.6	0.393	28	0.675	33	204	3.1	5.7	1.2	50	233	2.2
1750.3	0.393	28	0.861	31	185	4.1	5.7	1.6	47	212	3.0

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1751.0	0.393	27	1.3	29	199	4.5	5.7	2.3	45	227	3.2
1751.7	0.455	25	0.824	27	182	3.8	6.6	1.5	41	208	2.8
1752.4	0.393	25	0.902	34	203	4.1	5.7	1.6	52	232	3.0
1753.1	0.393	26	1.2	32	184	3.4	5.7	2.2	50	211	2.5
1753.8	0.393	23	0.866	34	189	3.0	5.7	1.6	52	216	2.2
1754.5	0.393	23	0.787	31	169	3.3	5.7	1.4	47	194	2.4
1755.2	0.393	24	0.760	32	207	3.5	5.7	1.4	50	237	2.6
1755.9	0.393	22	1.0	36	188	3.1	5.7	1.8	55	214	2.3
1756.6	0.393	26	0.793	38	178	4.3	5.7	1.4	58	203	3.2
1757.3	0.471	21	1.0	34	187	3.8	6.8	1.9	52	214	2.8
1758.0	0.393	20	1.1	30	201	3.5	5.7	1.9	47	230	2.5
1758.7	0.393	17	0.932	30	167	1.8	5.7	1.7	45	191	1.3
1759.4	0.393	20	1.3	38	198	3.1	5.7	2.4	59	226	2.2
1760.1	0.393	20	0.644	38	189	3.3	5.7	1.2	58	216	2.4
1760.8	0.393	20	0.908	35	181	2.9	5.7	1.7	54	207	2.1
1761.5	0.393	18	1.1	36	187	3.3	5.7	2.1	55	214	2.4
1762.2	0.393	19	1.6	33	170	4.0	5.7	2.8	51	194	2.9
1762.9	0.393	24	1.1	40	189	3.4	5.7	2.1	61	216	2.5
1763.6	0.393	19	0.720	34	159	4.3	5.7	1.3	52	182	3.1
1764.3	0.393	21	1.1	32	190	4.2	5.7	2.1	49	217	3.1
1765.0	0.393	22	1.2	36	188	4.1	5.7	2.1	55	216	3.0
1765.7	0.393	18	0.737	34	167	3.9	5.7	1.3	52	191	2.8
1766.4	0.393	20	1.4	38	186	5.3	5.7	2.6	58	212	3.8
1767.1	0.393	19	1.0	37	180	2.9	5.7	1.9	56	205	2.1
1767.8	0.461	21	1.0	41	188	3.9	6.7	1.9	63	215	2.8
1768.5	0.393	17	1.2	47	194	3.7	5.7	2.1	72	221	2.7
1769.2	0.393	20	1.1	44	182	4.3	5.7	1.9	67	208	3.1
1769.9	0.450	18	1.4	44	181	4.1	6.5	2.6	68	207	3.0
1770.6	0.393	20	1.4	39	168	3.6	5.7	2.5	60	193	2.6
1771.3	0.393	18	1.1	41	186	3.7	5.7	2.0	63	212	2.7
1772.0	0.393	20	1.6	43	199	3.3	5.7	2.9	66	227	2.4
1772.7	0.393	21	1.4	60	196	4.9	5.7	2.6	93	224	3.6
1773.4	0.393	21	1.4	44	196	5.0	5.7	2.5	67	224	3.7
1774.1	0.393	18	1.6	46	196	4.8	5.7	2.8	71	224	3.5
1774.7	0.393	18	1.5	44	186	2.8	5.7	2.7	67	212	2.1
1775.4	0.393	19	1.2	49	195	3.0	5.7	2.3	75	223	2.2
1776.1	0.393	17	1.1	44	167	2.8	5.7	2.0	67	191	2.0
1776.8	0.393	18	1.4	44	196	3.6	5.7	2.6	68	224	2.7
1777.5	0.393	17	1.7	42	173	4.5	5.7	3.0	64	198	3.3
1778.2	0.393	19	1.6	53	200	2.3	5.7	2.9	81	228	1.7
1778.9	0.393	19	1.5	56	192	3.8	5.7	2.8	86	220	2.7
1779.6	0.393	20	1.8	54	188	4.0	5.7	3.2	83	215	2.9
1780.3	0.393	18	1.4	50	181	4.6	5.7	2.6	77	207	3.3
1781.0	0.393	18	1.3	45	195	4.6	5.7	2.4	68	223	3.4
1781.7	0.688	16	1.3	43	205	4.0	9.9	2.3	66	234	2.9
1782.4	0.393	17	1.5	51	194	3.4	5.7	2.7	78	222	2.5
1783.1	0.393	17	1.6	55	188	3.5	5.7	2.9	85	215	2.6
1783.8	0.393	15	1.1	51	191	3.3	5.7	2.0	77	218	2.4
1784.5	0.521	18	0.934	49	204	3.0	7.5	1.7	74	233	2.2
1785.2	0.393	19	1.6	55	209	3.1	5.7	2.9	85	239	2.3
1785.9	0.393	19	1.6	54	237	3.2	5.7	3.0	82	272	2.3
1786.6	0.393	18	1.1	54	213	4.0	5.7	2.1	83	244	2.9
1787.3	0.393	15	1.4	55	192	3.2	5.7	2.5	84	220	2.4
1788.0	0.393	16	1.6	49	185	3.6	5.7	2.9	75	211	2.6
1788.7	0.482	17	1.3	52	212	3.7	7.0	2.3	79	243	2.7
1789.4	0.393	21	1.2	55	219	3.2	5.7	2.3	85	251	2.3
1790.1	0.393	15	1.6	53	191	3.7	5.7	2.9	82	218	2.7
1790.8	0.393	15	1.2	54	209	4.1	5.7	2.2	83	239	3.0
1791.5	0.393	19	1.2	44	231	3.5	5.7	2.2	68	264	2.6
1792.2	0.393	16	1.4	50	208	3.8	5.7	2.5	77	238	2.8
1792.9	0.393	16	1.3	52	202	3.3	5.7	2.4	80	231	2.4
1793.6	0.473	17	1.3	59	201	2.6	6.8	2.3	90	230	1.9
1794.3	0.393	17	1.1	53	221	4.3	5.7	2.1	81	252	3.2
1795.0	0.470	17	0.988	53	199	2.5	6.8	1.8	81	227	1.8
1795.7	0.393	16	1.2	50	211	3.1	5.7	2.3	77	241	2.2
1796.4	0.393	16	1.1	55	221	2.3	5.7	2.1	84	252	1.7
1797.1	0.393	17	1.3	48	225	3.4	5.7	2.3	73	258	2.5
1797.8	0.393	15	1.2	48	198	3.6	5.7	2.2	74	226	2.6
1798.5	0.393	17	1.0	46	268	2.6	5.7	1.9	71	307	1.9
1799.2	0.393	15	0.946	52	221	3.5	5.7	1.7	79	253	2.5
1799.9	0.393	16	0.960	46	221	2.5	5.7	1.8	70	253	1.8
1800.5	0.393	15	0.968	48	221	2.7	5.7	1.8	73	253	2.0
1801.2	0.393	14	1.1	50	228	2.4	5.7	2.0	77	261	1.8
1801.9	0.393	17	1.5	54	244	3.3	5.7	2.7	82	279	2.4
1802.6	0.393	17	1.2	49	210	2.4	5.7	2.2	75	240	1.7
1803.3	0.393	17	1.0	46	223	2.0	5.7	1.9	70	255	1.5
1804.0	0.393	17	1.0	50	232	3.0	5.7	1.9	76	265	2.2
1804.7	0.393	18	1.3	38	237	2.0	5.7	2.4	59	271	1.4
1805.4	0.393	13	1.2	43	256	3.6	5.7	2.2	66	292	2.7
1806.1	0.393	17	0.585	50	242	3.3	5.7	1.1	77	276	2.4
1806.8	0.393	21	0.835	43	258	4.6	5.7	1.5	66	295	3.4

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1807.5	0.393	13	1.1	48	232	3.6	5.7	1.9	73	266	2.7
1808.2	0.393	19	0.880	38	265	2.4	5.7	1.6	58	303	1.7
1808.9	0.459	18	1.1	48	265	3.7	6.6	2.1	74	303	2.7
1809.6	0.393	17	0.701	43	248	3.5	5.7	1.3	67	283	2.5
1810.3	0.393	18	0.862	43	250	2.5	5.7	1.6	66	285	1.8
1811.0	0.393	17	0.959	40	276	2.5	5.7	1.7	62	316	1.8
1811.7	0.393	18	0.978	35	257	3.9	5.7	1.8	54	294	2.8
1812.4	0.393	19	1.0	42	304	1.8	5.7	1.8	65	348	1.3
1813.1	0.393	16	0.767	40	242	2.7	5.7	1.4	61	277	2.0
1813.8	0.409	17	0.705	35	251	1.8	5.9	1.3	54	287	1.3
1814.5	0.393	14	0.568	35	271	2.6	5.7	1.0	54	310	1.9
1815.2	0.828	17	0.701	34	251	2.8	12	1.3	52	287	2.1
1815.9	0.393	17	0.797	37	304	3.7	5.7	1.5	57	348	2.7
1816.6	0.393	13	0.494	33	251	2.8	5.7	0.901	51	288	2.0
1817.3	0.393	17	0.721	35	276	2.5	5.7	1.3	53	316	1.9
1818.0	0.393	18	0.392	35	251	3.1	5.7	0.714	54	287	2.2
1818.7	0.393	16	0.542	32	221	3.3	5.7	0.988	49	252	2.4
1819.4	0.393	18	0.693	34	249	2.5	5.7	1.3	52	284	1.8
1820.1	0.393	17	0.825	29	254	2.4	5.7	1.5	45	290	1.8
1820.8	0.393	14	0.827	30	236	2.6	5.7	1.5	46	270	1.9
1821.5	0.393	16	0.822	32	262	3.6	5.7	1.5	49	300	2.6
1822.2	0.393	18	0.884	32	284	3.1	5.7	1.6	49	325	2.3
1822.9	0.393	19	0.551	31	268	3.3	5.7	1.0	47	306	2.4
1823.6	0.393	16	0.480	26	235	1.9	5.7	0.876	39	269	1.4
1824.3	0.393	16	0.562	28	260	2.0	5.7	1.0	43	298	1.5
1825.0	0.676	13	0.462	22	241	3.2	9.8	0.843	34	276	2.3
1825.7	0.393	21	0.792	27	283	3.0	5.7	1.4	41	324	2.2
1826.3	0.393	17	0.499	25	243	3.0	5.7	0.910	39	278	2.2
1827.0	0.393	17	0.521	26	240	2.2	5.7	0.950	41	275	1.6
1827.7	0.393	17	0.545	23	250	4.3	5.7	0.994	35	286	3.1
1828.4	0.393	18	0.645	27	236	3.0	5.7	1.2	41	270	2.2
1829.1	0.428	17	0.762	29	260	3.3	6.2	1.4	44	297	2.4
1829.8	0.393	16	0.559	23	225	3.3	5.7	1.0	36	257	2.4
1830.5	0.393	15	0.498	24	267	3.3	5.7	0.909	36	305	2.4
1831.2	0.448	15	0.594	24	265	3.6	6.5	1.1	37	303	2.6
1831.9	0.393	13	0.292	21	230	2.3	5.7	0.532	32	263	1.7
1832.6	0.402	14	0.466	22	214	2.9	5.8	0.849	33	245	2.1
1833.3	0.393	13	0.712	19	245	2.5	5.7	1.3	30	280	1.8
1834.0	0.393	14	0.445	22	224	2.6	5.7	0.812	34	256	1.9
1834.7	0.393	16	0.835	19	226	2.3	5.7	1.5	29	259	1.6
1835.4	0.393	17	0.573	30	251	2.3	5.7	1.0	46	287	1.7
1836.1	0.585	19	1.1	29	254	3.6	8.4	2.0	45	290	2.6
1836.8	0.393	17	0.525	24	291	3.3	5.7	0.957	37	333	2.4
1837.5	0.393	15	0.665	29	252	2.8	5.7	1.2	45	289	2.0
1838.2	0.393	16	1.0	23	274	2.1	5.7	1.9	35	313	1.5
1838.9	0.393	16	0.581	24	239	2.5	5.7	1.1	37	273	1.8
1839.6	0.440	15	0.759	27	248	2.9	6.4	1.4	42	284	2.1
1840.3	0.537	18	0.868	25	312	2.7	7.8	1.6	38	357	2.0
1841.0	0.393	13	0.504	24	236	2.9	5.7	0.919	36	270	2.1
1841.7	0.473	19	0.739	21	275	2.9	6.8	1.3	32	314	2.1
1842.4	0.393	14	0.445	26	262	1.5	5.7	0.812	40	300	1.1
1843.1	0.448	15	0.500	23	225	2.5	6.5	0.912	36	258	1.8
1843.8	0.393	13	0.644	25	214	1.9	5.7	1.2	38	244	1.4
1844.5	0.393	18	0.827	27	245	2.1	5.7	1.5	42	280	1.5
1845.2	0.393	17	0.726	32	256	2.5	5.7	1.3	49	293	1.8
1845.9	0.393	12	0.790	23	225	2.3	5.7	1.4	35	257	1.7
1846.6	0.393	15	0.894	25	246	1.8	5.7	1.6	39	281	1.3
1847.3	0.393	15	0.597	25	245	3.0	5.7	1.1	38	280	2.2
1848.0	0.393	14	0.552	29	262	1.5	5.7	1.0	45	300	1.1
1848.7	0.393	14	0.668	28	238	2.6	5.7	1.2	42	273	1.9
1849.4	0.393	13	0.871	30	251	2.5	5.7	1.6	47	287	1.9
1850.1	0.393	14	0.871	28	234	2.3	5.7	1.6	44	267	1.7
1850.8	0.393	14	0.785	24	240	2.7	5.7	1.4	36	274	2.0
1851.5	0.393	14	0.975	25	253	2.5	5.7	1.8	38	289	1.8
1852.2	0.393	13	0.715	28	228	2.3	5.7	1.3	43	261	1.7
1852.9	0.393	16	1.2	29	264	2.2	5.7	2.2	44	302	1.6
1853.5	0.393	14	1.4	28	244	1.7	5.7	2.6	44	279	1.2
1854.2	0.393	13	1.0	28	252	2.0	5.7	1.9	43	288	1.5
1854.9	0.393	14	1.1	35	249	1.4	5.7	2.1	54	285	1.0
1855.6	0.393	16	0.793	40	261	1.6	5.7	1.4	61	298	1.2
1856.3	0.393	14	1.0	31	235	2.1	5.7	1.9	48	268	1.6
1857.0	0.482	15	0.921	34	272	1.5	7.0	1.7	52	311	1.1
1857.7	0.393	14	1.4	35	272	1.8	5.7	2.6	54	312	1.3
1858.4	0.393	15	0.796	30	250	1.3	5.7	1.5	46	286	0.971
1859.1	0.393	14	1.1	37	228	2.5	5.7	2.1	56	260	1.8
1859.8	0.417	14	0.859	32	222	1.6	6.0	1.6	48	254	1.1
1860.5	0.417	16	1.1	39	242	1.8	6.0	1.9	59	276	1.3
1861.2	0.393	13	1.4	33	248	2.7	5.7	2.6	51	283	2.0
1861.9	0.393	16	1.4	35	268	2.3	5.7	2.6	53	307	1.7
1862.6	0.393	15	1.1	36	258	1.9	5.7	2.1	55	295	1.4
1863.3	0.393	14	0.941	33	218	1.5	5.7	1.7	51	250	1.1

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1864.0	0.393	13	1.4	35	238	1.2	5.7	2.5	53	272	0.888
1864.7	0.393	14	1.1	37	288	2.1	5.7	1.9	56	329	1.5
1865.4	0.393	14	1.4	37	272	1.5	5.7	2.6	56	311	1.1
1866.1	0.393	15	1.3	36	244	1.5	5.7	2.4	55	280	1.1
1866.8	0.393	14	0.821	31	246	1.7	5.7	1.5	48	281	1.3
1867.5	0.393	12	1.2	38	244	1.3	5.7	2.2	58	279	0.923
1868.2	0.717	12	1.6	43	243	1.9	10	2.9	66	278	1.4
1868.9	0.393	14	1.6	43	254	2.8	5.7	3.0	65	291	2.1
1869.6	0.393	10	1.3	40	223	1.1	5.7	2.3	61	255	0.812
1870.3	0.393	13	1.2	43	235	1.4	5.7	2.2	65	268	1.0
1871.0	0.393	12	1.2	40	296	1.5	5.7	2.1	61	339	1.1
1871.7	0.437	14	1.4	47	286	1.3	6.3	2.6	72	328	0.960
1872.4	0.393	12	1.6	42	290	1.5	5.7	2.9	65	332	1.1
1873.1	0.393	14	1.4	47	296	1.1	5.7	2.6	73	339	0.773
1873.8	0.393	13	1.4	41	227	1.3	5.7	2.6	63	259	0.978
1874.5	0.393	11	1.1	47	247	2.2	5.7	1.9	71	283	1.6
1875.2	0.442	13	1.5	49	259	1.9	6.4	2.7	75	297	1.4
1875.9	0.393	12	1.4	45	230	1.7	5.7	2.5	70	264	1.2
1876.6	0.393	10	1.2	40	258	1.3	5.7	2.2	61	295	0.972
1877.3	0.393	12	1.2	43	252	1.2	5.7	2.2	67	288	0.875
1878.0	0.393	12	1.1	47	258	1.5	5.7	2.1	72	295	1.1
1878.7	0.393	12	1.2	36	247	1.3	5.7	2.1	56	282	0.949
1879.3	0.393	10	1.9	41	271	1.4	5.7	3.4	63	310	1.0
1880.0	0.393	13	1.3	38	262	0.975	5.7	2.4	58	299	0.712
1880.7	0.393	11	1.8	44	260	2.7	5.7	3.4	67	298	2.0
1881.4	0.393	11	1.3	48	223	0.855	5.7	2.4	74	255	0.624
1882.1	0.393	11	1.5	45	263	1.5	5.7	2.7	69	301	1.1
1882.8	0.393	14	0.843	46	235	1.2	5.7	1.5	71	269	0.870
1883.5	0.393	11	1.0	41	241	1.1	5.7	1.8	63	276	0.787
1884.2	0.393	15	1.1	43	253	0.923	5.7	1.9	67	289	0.673
1884.9	0.393	12	1.5	52	242	1.3	5.7	2.7	80	277	0.914
1885.6	0.393	12	1.3	43	227	0.640	5.7	2.3	66	260	0.467
1886.3	0.393	14	1.1	44	249	1.000	5.7	2.1	68	284	0.729
1887.0	0.393	12	0.963	42	263	1.4	5.7	1.8	64	300	1.1
1887.7	0.393	13	1.1	49	274	1.5	5.7	2.0	75	313	1.1
1888.4	0.393	14	1.1	42	249	1.1	5.7	1.9	65	284	0.786
1889.1	0.393	12	1.4	43	308	1.6	5.7	2.5	66	352	1.2
1889.8	0.393	10	1.000	38	281	1.4	5.7	1.8	58	321	1.0
1890.5	0.393	12	1.4	42	234	1.2	5.7	2.5	64	268	0.852
1891.2	0.393	12	1.0	45	251	1.2	5.7	1.8	69	287	0.891
1891.9	0.393	13	0.660	35	268	1.2	5.7	1.2	54	307	0.855
1892.6	0.393	12	1.1	41	237	0.966	5.7	2.0	63	271	0.705
1893.3	0.393	13	0.964	39	240	1.2	5.7	1.8	60	275	0.848
1894.0	0.393	14	1.0	29	233	1.1	5.7	1.8	45	267	0.828
1894.7	0.581	10	1.0	35	224	1.9	8.4	1.9	53	256	1.4
1895.4	0.393	13	0.971	35	237	2.1	5.7	1.8	54	272	1.5
1896.1	0.393	11	0.865	33	221	1.4	5.7	1.6	50	253	1.0
1896.8	0.393	14	0.711	28	242	1.6	5.7	1.3	42	277	1.1
1897.5	0.393	13	1.0	31	244	1.8	5.7	1.8	48	279	1.3
1898.2	0.454	13	1.0	29	237	1.7	6.5	1.9	44	271	1.2
1898.9	0.393	14	0.697	32	316	3.0	5.7	1.3	50	361	2.2
1899.6	0.393	15	0.494	23	221	3.0	5.7	0.902	36	253	2.2
1900.3	0.393	15	0.710	29	223	2.0	5.7	1.3	44	255	1.4
1901.0	0.393	14	0.750	28	255	3.2	5.7	1.4	43	292	2.3
1901.7	0.393	13	0.584	29	247	2.0	5.7	1.1	45	283	1.4
1902.4	0.393	12	0.422	24	240	3.2	5.7	0.770	37	274	2.3
1903.1	0.453	12	0.641	22	242	2.7	6.5	1.2	33	277	2.0
1903.8	0.393	15	0.635	25	245	2.7	5.7	1.2	39	280	1.9
1904.5	0.393	13	0.890	22	237	2.7	5.7	1.6	34	271	1.9
1905.1	0.626	13	0.738	23	277	2.2	9.0	1.3	35	317	1.6
1905.8	0.393	12	0.532	22	262	2.0	5.7	0.970	34	300	1.4
1906.5	0.393	12	0.435	20	240	2.5	5.7	0.794	31	274	1.9
1907.2	0.393	12	0.520	21	221	3.6	5.7	0.948	32	253	2.7
1907.9	0.393	11	0.717	18	234	3.3	5.7	1.3	28	268	2.4
1908.6	0.393	14	0.594	21	229	2.2	5.7	1.1	32	262	1.6
1909.3	0.393	13	0.788	21	253	2.4	5.7	1.4	33	290	1.7
1910.0	0.393	13	0.467	23	263	2.7	5.7	0.851	36	301	2.0
1910.7	0.446	14	0.390	19	263	3.0	6.4	0.711	29	301	2.2
1911.4	0.393	14	0.286	16	237	4.2	5.7	0.521	25	271	3.1
1912.1	0.393	14	0.742	21	237	3.2	5.7	1.4	32	271	2.4
1912.8	0.393	12	0.345	16	268	3.3	5.7	0.629	25	306	2.4
1913.5	0.393	13	0.744	18	232	3.9	5.7	1.4	27	265	2.8
1914.2	0.393	13	0.518	23	247	2.7	5.7	0.945	36	282	1.9
1914.9	0.393	12	0.652	19	261	3.6	5.7	1.2	30	298	2.6
1915.6	0.393	13	0.902	19	231	2.6	5.7	1.6	29	264	1.9
1916.3	0.393	12	0.832	18	234	3.2	5.7	1.5	27	268	2.4
1917.0	0.393	14	0.948	24	233	2.6	5.7	1.7	37	266	1.9
1917.7	0.393	16	0.773	18	201	4.0	5.7	1.4	27	229	2.9
1918.4	0.458	14	0.918	23	246	3.4	6.6	1.7	35	281	2.5
1919.1	0.393	13	1.1	22	232	2.8	5.7	1.9	33	265	2.0
1919.8	0.393	14	1.2	21	262	2.9	5.7	2.3	33	299	2.1

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1920.5	0.393	12	1.3	22	243	2.8	5.7	2.3	33	278	2.1
1921.2	0.393	12	1.0	20	241	3.2	5.7	1.8	30	276	2.3
1921.9	0.393	13	1.3	19	248	2.7	5.7	2.3	29	284	2.0
1922.6	0.393	12	1.2	22	227	2.7	5.7	2.2	33	259	1.9
1923.3	0.393	13	1.2	20	265	4.2	5.7	2.2	30	303	3.1
1924.0	0.393	13	1.3	21	243	3.3	5.7	2.4	33	277	2.4
1924.7	0.393	12	1.0	28	238	3.7	5.7	1.9	43	272	2.7
1925.4	0.393	13	1.1	27	234	2.2	5.7	2.1	41	267	1.6
1926.1	0.393	13	1.0	29	242	2.0	5.7	1.9	45	277	1.5
1926.8	0.393	9.9	1.1	27	221	2.6	5.7	2.1	42	252	1.9
1927.5	0.393	14	1.9	25	252	2.7	5.7	3.5	38	289	2.0
1928.2	0.393	12	1.6	33	244	3.5	5.7	3.0	51	279	2.6
1928.9	0.393	16	1.4	31	260	2.0	5.7	2.6	47	298	1.5
1929.6	0.393	11	1.4	32	261	2.2	5.7	2.6	49	299	1.6
1930.3	0.393	13	1.2	30	249	1.7	5.7	2.2	46	285	1.2
1931.0	0.393	14	1.1	26	229	2.9	5.7	2.1	40	262	2.1
1931.6	0.608	12	0.964	32	224	3.3	8.8	1.8	49	256	2.4
1932.3	0.393	13	1.3	37	248	1.7	5.7	2.4	56	283	1.2
1933.0	0.393	13	1.3	32	246	1.8	5.7	2.3	49	281	1.3
1933.7	0.393	13	1.2	31	232	2.8	5.7	2.1	48	265	2.0
1934.4	0.417	14	1.4	34	258	1.7	6.0	2.5	52	295	1.2
1935.1	0.393	16	1.6	43	271	0.871	5.7	2.9	66	310	0.636
1935.8	0.393	15	1.4	39	247	2.6	5.7	2.5	60	283	1.9
1936.5	0.393	15	1.2	37	262	1.4	5.7	2.3	57	300	0.992
1937.2	0.393	14	1.4	36	233	1.4	5.7	2.6	55	267	1.0
1937.9	0.393	15	1.5	40	252	2.6	5.7	2.7	62	288	1.9
1938.6	0.393	14	1.1	37	239	1.6	5.7	2.0	57	273	1.1
1939.3	0.393	13	1.4	38	240	2.0	5.7	2.6	57	275	1.5
1940.0	0.393	14	1.6	44	245	0.836	5.7	2.9	67	281	0.610
1940.7	0.393	14	1.5	39	246	1.6	5.7	2.8	59	281	1.2
1941.4	0.393	13	1.4	42	238	1.2	5.7	2.6	64	272	0.908
1942.1	0.393	14	1.6	50	292	1.8	5.7	2.9	76	334	1.3
1942.8	0.393	14	1.5	44	282	2.3	5.7	2.6	68	322	1.7
1943.5	0.393	14	1.3	45	291	2.2	5.7	2.4	69	333	1.6
1944.2	0.460	15	1.3	48	244	1.6	6.6	2.4	73	279	1.2
1944.9	0.393	13	1.2	41	250	1.8	5.7	2.2	63	286	1.3
1945.6	0.393	16	1.3	45	251	2.0	5.7	2.3	69	287	1.4
1946.3	0.393	14	1.3	41	243	1.1	5.7	2.3	62	278	0.809
1947.0	0.393	13	1.7	43	229	2.0	5.7	3.0	66	261	1.5
1947.7	0.393	15	1.1	48	290	0.921	5.7	2.0	73	332	0.672
1948.4	0.393	16	1.6	50	269	1.2	5.7	2.8	76	308	0.861
1949.1	0.393	13	0.955	47	252	0.997	5.7	1.7	72	288	0.727
1949.8	0.393	14	1.1	40	222	1.1	5.7	2.0	61	254	0.814
1950.5	0.393	16	1.2	47	262	1.3	5.7	2.3	71	299	0.926
1951.2	0.393	13	1.1	57	268	1.5	5.7	2.0	88	306	1.1
1951.9	0.393	15	1.2	43	249	2.2	5.7	2.2	67	285	1.6
1952.6	0.393	19	0.918	45	248	0.883	5.7	1.7	69	284	0.644
1953.3	0.421	15	1.3	48	253	0.844	6.1	2.3	73	290	0.616
1954.0	0.393	15	1.1	48	260	1.2	5.7	2.1	74	298	0.878
1954.7	0.393	17	1.2	53	253	1.7	5.7	2.1	81	289	1.3
1955.4	0.393	14	1.5	48	239	1.2	5.7	2.7	74	273	0.885
1956.1	0.393	18	0.818	51	247	2.1	5.7	1.5	79	283	1.6
1956.8	0.702	16	1.0	54	282	1.4	10	1.9	82	322	0.986
1957.5	0.393	18	1.1	52	272	0.992	5.7	1.9	80	311	0.723
1958.1	0.393	16	0.907	51	263	0.894	5.7	1.7	79	301	0.652
1958.8	0.393	16	0.864	49	294	0.920	5.7	1.6	75	336	0.672
1959.5	0.569	17	1.1	52	271	1.5	8.2	2.1	80	310	1.1
1960.2	0.393	17	1.3	54	278	1.5	5.7	2.5	82	318	1.1
1960.9	0.393	16	1.0	51	253	0.537	5.7	1.8	78	289	0.392
1961.6	0.798	16	0.628	51	263	1.2	12	1.1	79	301	0.877
1962.3	0.393	17	0.765	47	238	0.835	5.7	1.4	72	272	0.610
1963.0	0.635	15	1.1	48	271	1.5	9.2	1.9	74	310	1.1
1963.7	0.393	16	0.578	47	234	1.5	5.7	1.1	72	268	1.1
1964.4	0.393	15	1.1	57	261	2.0	5.7	2.0	87	299	1.5
1965.1	0.393	16	0.822	55	262	1.2	5.7	1.5	85	300	0.845
1965.8	0.393	16	1.1	49	247	1.2	5.7	2.1	74	283	0.892
1966.5	0.600	15	0.634	43	243	1.9	8.7	1.2	66	278	1.4
1967.2	0.393	16	1.2	49	271	1.3	5.7	2.1	74	310	0.971
1967.9	0.393	18	0.856	50	283	1.4	5.7	1.6	77	323	1.0
1968.6	0.393	14	0.612	51	247	1.4	5.7	1.1	78	283	1.0
1969.3	0.488	15	0.641	50	249	0.967	7.0	1.2	76	285	0.705
1970.0	0.513	16	0.851	46	291	1.6	7.4	1.6	70	333	1.2
1970.7	0.682	14	0.955	46	274	1.1	9.8	1.7	71	313	0.803
1971.4	0.393	17	0.694	55	272	1.6	5.7	1.3	84	312	1.1
1972.1	0.393	16	0.937	48	249	2.2	5.7	1.7	73	285	1.6
1972.8	0.393	18	1.2	47	273	1.3	5.7	2.3	72	312	0.968
1973.5	0.393	15	0.796	42	246	1.6	5.7	1.5	64	281	1.2
1974.2	0.393	16	0.702	50	258	1.4	5.7	1.3	76	296	1.0
1974.9	0.393	17	0.751	46	257	1.1	5.7	1.4	70	294	0.772
1975.6	0.396	14	0.737	39	244	1.2	5.7	1.3	60	279	0.891
1976.3	0.393	16	0.838	45	246	1.2	5.7	1.5	69	281	0.892

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1977.0	0.393	18	0.448	49	270	2.0	5.7	0.816	75	309	1.5
1977.7	0.393	17	0.710	48	292	1.7	5.7	1.3	74	333	1.2
1978.4	0.393	19	0.704	46	276	1.4	5.7	1.3	70	315	1.0
1979.1	0.393	14	0.537	48	275	2.1	5.7	0.980	74	315	1.6
1979.8	0.393	13	0.698	43	247	1.3	5.7	1.3	66	283	0.973
1980.5	0.393	16	0.999	40	282	1.8	5.7	1.8	61	323	1.3
1981.2	0.393	17	1.3	42	290	2.0	5.7	2.3	65	332	1.4
1981.9	0.393	19	0.986	38	268	1.7	5.7	1.8	58	307	1.2
1982.6	0.393	18	1.0	39	223	1.8	5.7	1.8	60	255	1.3
1983.3	0.393	18	0.896	38	269	1.5	5.7	1.6	58	308	1.1
1983.9	0.393	16	1.1	45	244	1.6	5.7	1.9	68	279	1.2
1984.6	0.393	17	0.931	37	275	0.928	5.7	1.7	56	314	0.677
1985.3	0.393	18	0.857	41	255	1.3	5.7	1.6	62	292	0.913
1986.0	0.393	17	0.968	39	272	1.2	5.7	1.8	60	311	0.845
1986.7	0.393	19	1.0	39	265	1.8	5.7	1.9	59	303	1.3
1987.4	0.393	18	1.3	35	269	1.8	5.7	2.4	54	307	1.3
1988.1	0.549	17	1.4	33	258	1.5	7.9	2.5	51	295	1.1
1988.8	0.393	17	0.874	34	249	2.6	5.7	1.6	52	285	1.9
1989.5	0.393	20	0.867	35	267	1.6	5.7	1.6	54	305	1.2
1990.2	0.500	17	1.0	36	275	0.982	7.2	1.9	56	315	0.717
1990.9	0.393	17	0.923	38	287	1.5	5.7	1.7	59	328	1.1
1991.6	0.393	17	0.748	37	254	2.2	5.7	1.4	56	290	1.6
1992.3	0.393	18	0.983	37	281	2.1	5.7	1.8	57	321	1.5
1993.0	0.393	18	0.748	31	262	2.8	5.7	1.4	48	300	2.0
1993.7	0.543	16	1.2	32	270	1.3	7.8	2.2	49	309	0.983
1994.4	0.393	20	0.914	36	276	1.2	5.7	1.7	56	315	0.855
1995.1	0.393	19	1.2	38	301	1.7	5.7	2.1	58	344	1.2
1995.8	0.393	18	0.777	35	274	1.8	5.7	1.4	53	313	1.3
1996.5	0.393	18	1.1	35	297	1.2	5.7	2.0	54	339	0.856
1997.2	0.467	18	1.2	38	276	2.2	6.7	2.2	58	315	1.6
1997.9	0.393	18	0.951	35	255	1.8	5.7	1.7	53	291	1.3
1998.6	0.393	17	1.1	38	266	1.5	5.7	2.0	58	304	1.1
1999.3	0.393	18	0.999	33	257	1.7	5.7	1.8	51	294	1.2
2000.0	0.393	16	1.2	39	283	1.5	5.7	2.2	59	323	1.1
2000.7	0.403	18	1.1	37	259	1.4	5.8	2.1	57	296	1.0
2001.4	0.393	16	0.999	43	267	1.9	5.7	1.8	67	305	1.4
2002.1	0.393	16	0.966	37	256	2.1	5.7	1.8	56	293	1.5
2002.8	0.393	19	1.2	39	281	1.5	5.7	2.2	59	322	1.1
2003.5	0.393	17	1.2	37	267	1.7	5.7	2.1	57	305	1.2
2004.2	0.393	19	1.0	44	282	2.2	5.7	1.9	68	323	1.6
2004.9	0.393	23	0.854	43	294	2.2	5.7	1.6	65	336	1.6
2005.6	0.860	18	1.6	41	274	2.3	12	3.0	62	314	1.7
2006.3	0.393	15	1.5	37	264	2.1	5.7	2.7	57	302	1.5
2007.0	0.393	18	1.5	46	293	1.7	5.7	2.8	71	335	1.3
2007.7	0.393	16	1.2	43	267	1.9	5.7	2.2	66	305	1.4
2008.4	0.393	18	1.2	48	257	2.2	5.7	2.2	74	294	1.6
2009.1	0.393	16	1.2	39	287	2.0	5.7	2.2	59	329	1.5
2009.7	0.393	20	1.7	51	274	1.9	5.7	3.1	78	313	1.4
2010.4	0.393	21	1.1	50	280	2.3	5.7	2.1	77	321	1.7
2011.1	0.393	17	1.3	48	290	1.5	5.7	2.3	74	332	1.1
2011.8	0.393	15	1.1	46	262	1.6	5.7	2.1	70	299	1.2
2012.5	0.393	20	1.3	49	296	1.6	5.7	2.3	74	339	1.1
2013.2	0.393	15	1.2	51	279	1.4	5.7	2.2	78	319	1.0
2013.9	0.393	19	1.5	45	272	1.9	5.7	2.7	69	311	1.4
2014.6	0.393	15	1.2	53	271	0.967	5.7	2.2	81	310	0.706
2015.3	0.393	16	1.2	46	246	0.756	5.7	2.2	71	281	0.552
2016.0	0.393	18	1.3	49	291	0.916	5.7	2.3	75	332	0.668
2016.7	0.393	15	1.0	44	270	1.2	5.7	1.8	67	309	0.876
2017.4	0.393	16	0.881	50	272	2.0	5.7	1.6	76	311	1.4
2018.1	0.393	18	1.5	55	279	1.5	5.7	2.8	85	320	1.1
2018.8	0.393	18	1.2	50	257	1.1	5.7	2.2	76	293	0.832
2019.5	0.494	16	0.995	47	284	1.1	7.1	1.8	72	325	0.779
2020.2	0.393	18	1.2	57	281	1.3	5.7	2.3	87	321	0.975
2020.9	0.393	15	1.3	53	252	1.5	5.7	2.4	80	289	1.1
2021.6	0.393	18	1.1	56	286	1.3	5.7	2.0	86	327	0.980
2022.3	0.393	17	1.3	56	259	1.9	5.7	2.3	85	296	1.4
2023.0	0.393	15	0.995	57	244	1.0	5.7	1.8	87	279	0.740
2023.7	0.393	14	0.871	52	273	1.3	5.7	1.6	80	312	0.927
2024.4	0.537	15	1.2	56	279	1.2	7.7	2.2	86	319	0.846
2025.1	0.393	17	1.3	59	256	1.6	5.7	2.4	91	293	1.2
2025.8	0.393	15	1.1	54	245	0.817	5.7	2.0	83	281	0.596
2026.5	0.393	19	1.3	53	265	1.5	5.7	2.4	82	303	1.1
2027.2	0.393	17	1.5	58	285	1.0	5.7	2.8	89	326	0.752
2027.9	0.393	16	1.2	55	299	1.3	5.7	2.3	85	341	0.919
2028.6	0.393	17	1.1	60	270	0.846	5.7	2.0	92	309	0.617
2029.3	0.393	16	0.905	51	248	0.871	5.7	1.7	79	284	0.636
2030.0	0.393	14	0.969	64	298	1.1	5.7	1.8	98	340	0.812
2030.7	0.572	19	1.3	66	277	1.7	8.3	2.3	101	316	1.3
2031.4	0.393	17	1.1	59	250	1.6	5.7	2.0	91	286	1.2
2032.1	0.393	16	1.0	56	264	1.4	5.7	1.9	87	302	0.999
2032.8	0.615	13	0.729	47	243	1.5	8.9	1.3	72	278	1.1

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2033.5	0.393	17	1.1	51	338	1.5	5.7	2.1	79	387	1.1
2034.2	0.393	18	0.913	56	279	1.1	5.7	1.7	85	319	0.767
2034.9	0.393	16	0.622	53	250	1.1	5.7	1.1	81	286	0.777
2035.5	0.393	16	0.871	64	298	0.871	5.7	1.6	98	341	0.635
2036.2	0.524	15	1.1	50	277	1.1	7.6	1.9	77	317	0.825
2036.9	0.393	15	1.0	59	282	2.1	5.7	1.9	90	322	1.5
2037.6	0.393	18	1.0	61	273	1.4	5.7	1.9	94	312	0.998
2038.3	0.393	16	0.671	58	264	1.0	5.7	1.2	89	302	0.736
2039.0	0.393	18	0.900	55	271	2.7	5.7	1.6	84	310	2.0
2039.7	0.393	15	0.908	52	295	1.6	5.7	1.7	80	337	1.1
2040.4	0.393	18	0.763	51	249	1.6	5.7	1.4	79	285	1.2
2041.1	0.393	17	0.688	50	281	1.5	5.7	1.3	77	322	1.1
2041.8	0.393	19	1.2	49	291	2.0	5.7	2.2	76	333	1.5
2042.5	0.393	14	0.649	53	276	0.878	5.7	1.2	82	316	0.641
2043.2	0.393	18	0.549	49	253	0.796	5.7	1.0	75	289	0.581
2043.9	0.393	16	0.542	51	274	1.8	5.7	0.989	79	313	1.3
2044.6	0.659	19	0.781	52	256	1.8	9.5	1.4	80	293	1.3
2045.3	0.393	19	0.832	50	312	2.0	5.7	1.5	76	357	1.4
2046.0	0.393	17	0.922	41	277	2.3	5.7	1.7	63	317	1.7
2046.7	0.393	16	0.686	45	250	1.6	5.7	1.3	69	286	1.2
2047.4	0.393	17	0.768	46	279	1.2	5.7	1.4	71	319	0.865
2048.1	0.616	19	0.972	52	300	2.2	8.9	1.8	79	343	1.6
2048.8	0.393	15	0.902	49	249	2.1	5.7	1.6	75	285	1.5
2049.5	0.742	16	1.1	41	284	1.7	11	2.0	62	325	1.3
2050.2	0.393	16	1.0	45	277	2.2	5.7	1.8	69	317	1.6
2050.9	0.393	16	0.870	53	273	2.6	5.7	1.6	81	312	1.9
2051.6	0.393	15	0.950	39	253	1.8	5.7	1.7	60	290	1.3
2052.3	0.393	14	0.801	41	265	3.5	5.7	1.5	63	303	2.6
2053.0	0.393	15	1.2	48	279	2.4	5.7	2.3	74	319	1.8
2053.7	0.393	15	1.1	48	253	2.5	5.7	2.1	74	290	1.9
2054.4	0.393	16	0.892	48	262	3.0	5.7	1.6	73	300	2.2
2055.1	0.578	15	0.934	43	245	1.8	8.3	1.7	66	281	1.3
2055.8	0.393	15	1.1	40	253	1.9	5.7	1.9	62	290	1.4
2056.5	0.393	17	0.968	43	274	2.7	5.7	1.8	66	313	2.0
2057.2	0.393	19	0.762	43	264	1.8	5.7	1.4	66	302	1.3
2057.9	0.393	19	0.862	43	280	0.913	5.7	1.6	66	320	0.666
2058.6	0.393	17	0.683	46	269	2.4	5.7	1.2	70	308	1.8
2059.3	0.393	16	1.1	36	259	2.1	5.7	2.1	55	297	1.6
2060.0	0.393	20	0.929	41	270	2.0	5.7	1.7	63	308	1.4
2060.7	0.521	16	1.0	44	264	3.4	7.5	1.9	68	302	2.5
2061.4	0.393	16	1.1	40	261	2.7	5.7	2.1	62	299	2.0
2062.0	0.393	16	1.1	43	284	2.9	5.7	2.0	66	325	2.1
2062.7	0.393	18	1.0	38	302	2.6	5.7	1.9	58	345	1.9
2063.4	0.393	20	1.4	47	280	2.7	5.7	2.5	73	320	1.9
2064.1	0.393	17	0.860	36	271	2.3	5.7	1.6	55	310	1.6
2064.8	0.482	17	1.2	35	293	4.0	7.0	2.2	53	335	2.9
2065.5	0.393	14	0.829	33	263	3.1	5.7	1.5	51	301	2.3
2066.2	0.393	15	0.900	36	256	2.9	5.7	1.6	54	293	2.1
2066.9	0.393	18	1.2	32	259	3.4	5.7	2.1	48	296	2.5
2067.6	0.393	16	1.0	32	289	3.0	5.7	1.9	49	330	2.2
2068.3	0.436	18	1.2	35	274	3.1	6.3	2.2	53	313	2.2
2069.0	0.393	17	1.4	34	272	2.3	5.7	2.5	53	311	1.7
2069.7	0.393	17	1.2	33	255	2.6	5.7	2.2	51	291	1.9
2070.4	0.393	17	0.992	34	272	2.4	5.7	1.8	51	311	1.8
2071.1	0.393	18	1.3	30	273	2.7	5.7	2.3	46	312	2.0
2071.8	0.658	17	1.1	32	306	3.1	9.5	2.0	49	350	2.2
2072.5	0.393	16	0.629	32	255	2.5	5.7	1.1	49	292	1.9
2073.2	0.393	18	1.2	34	256	2.6	5.7	2.3	52	292	1.9
2073.9	0.393	16	1.4	35	241	3.1	5.7	2.5	53	275	2.2
2074.6	0.393	18	1.5	33	251	2.3	5.7	2.7	50	287	1.7
2075.3	0.393	18	1.3	38	261	2.9	5.7	2.4	59	298	2.1
2076.0	0.393	14	1.3	35	276	2.7	5.7	2.4	54	316	2.0
2076.7	0.393	16	0.885	32	254	3.1	5.7	1.6	49	290	2.3
2077.4	0.393	12	1.5	34	262	2.9	5.7	2.7	52	300	2.1
2078.1	0.393	17	1.6	36	243	3.8	5.7	2.8	56	278	2.7
2078.8	0.393	16	1.2	32	268	3.7	5.7	2.2	49	306	2.7
2079.5	0.393	16	1.0	34	250	2.2	5.7	1.8	52	286	1.6
2080.2	0.393	16	1.0	42	244	1.8	5.7	1.9	65	279	1.3
2080.9	0.393	17	1.6	38	267	3.0	5.7	2.9	59	306	2.2
2081.6	0.393	14	1.2	35	265	2.0	5.7	2.1	53	303	1.5
2082.3	0.393	17	1.4	34	274	2.4	5.7	2.6	52	313	1.7
2083.0	0.393	19	1.3	45	261	2.4	5.7	2.4	69	299	1.7
2083.7	0.393	18	1.8	39	279	3.0	5.7	3.4	60	319	2.2
2084.4	0.393	16	1.6	42	254	2.8	5.7	2.9	65	291	2.0
2085.1	0.393	19	1.2	43	259	2.3	5.7	2.2	65	296	1.7
2085.8	0.393	20	1.5	40	257	3.9	5.7	2.7	61	294	2.8
2086.5	0.393	19	1.2	41	261	1.8	5.7	2.2	63	299	1.3
2087.2	0.393	17	1.5	41	278	1.7	5.7	2.7	63	318	1.3
2087.8	0.694	18	1.4	40	274	3.4	10	2.6	62	313	2.5
2088.5	0.393	18	1.3	34	252	2.4	5.7	2.4	53	288	1.8
2089.2	0.583	16	1.4	36	263	2.3	8.4	2.5	55	301	1.6

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2089.9	0.393	18	0.735	36	293	2.6	5.7	1.3	55	335	1.9
2090.6	0.393	18	1.3	38	262	2.5	5.7	2.4	59	299	1.9
2091.3	0.393	20	1.1	39	262	2.5	5.7	2.0	59	300	1.8
2092.0	0.393	17	1.2	42	325	2.4	5.7	2.1	65	372	1.8
2092.7	0.393	18	1.0	42	274	2.2	5.7	1.9	64	313	1.6
2093.4	0.393	19	1.2	42	261	1.7	5.7	2.2	65	298	1.3
2094.1	0.393	18	1.1	41	278	2.2	5.7	1.9	64	318	1.6
2094.8	0.393	16	0.819	37	227	2.3	5.7	1.5	56	259	1.7
2095.5	0.393	18	1.2	43	261	2.4	5.7	2.1	66	298	1.8
2096.2	0.393	18	1.1	48	282	2.2	5.7	2.1	73	322	1.6
2096.9	0.393	19	1.3	41	291	2.3	5.7	2.3	63	333	1.7
2097.6	0.393	16	0.742	40	253	1.9	5.7	1.4	61	289	1.4
2098.3	0.393	19	0.872	38	276	2.1	5.7	1.6	58	315	1.5
2099.0	0.393	16	0.999	38	253	2.5	5.7	1.8	58	289	1.9
2099.7	0.393	18	1.4	47	291	2.4	5.7	2.5	73	333	1.8
2100.4	0.393	19	1.0	45	258	2.4	5.7	1.9	69	295	1.8
2101.1	0.393	17	0.900	39	260	2.2	5.7	1.6	60	298	1.6
2101.8	0.393	18	0.787	44	307	2.5	5.7	1.4	68	351	1.9
2102.5	0.393	20	0.801	41	281	2.5	5.7	1.5	62	321	1.8
2103.2	0.528	16	1.3	45	314	3.4	7.6	2.3	70	359	2.5
2103.9	0.393	20	1.1	49	326	2.4	5.7	2.0	75	373	1.7
2104.6	0.774	16	0.800	45	291	2.5	11	1.5	68	333	1.9
2105.3	0.393	16	0.817	45	262	2.6	5.7	1.5	68	300	1.9
2106.0	0.393	17	0.771	42	317	3.0	5.7	1.4	64	362	2.2
2106.7	0.694	19	0.821	51	342	1.9	10	1.5	78	391	1.4
2107.4	0.393	18	0.744	42	324	3.2	5.7	1.4	65	370	2.3
2108.1	0.393	18	0.907	43	324	1.8	5.7	1.7	66	371	1.3
2108.8	0.393	18	0.633	48	335	2.2	5.7	1.2	74	383	1.6
2109.5	0.393	18	1.2	47	284	2.8	5.7	2.2	72	325	2.1
2110.2	0.393	18	1.0	42	342	1.9	5.7	1.8	64	391	1.4
2110.9	0.393	22	0.781	45	352	2.3	5.7	1.4	69	403	1.7
2111.6	0.393	17	0.823	51	339	2.5	5.7	1.5	78	387	1.8
2112.3	0.671	15	0.840	41	281	2.6	9.7	1.5	62	321	1.9
2113.0	0.393	20	1.1	38	356	1.4	5.7	2.0	58	407	1.0
2113.6	0.674	18	0.870	41	376	2.8	9.7	1.6	63	430	2.1
2114.3	0.393	19	0.878	43	352	3.2	5.7	1.6	66	402	2.4
2115.0	0.393	21	0.814	45	322	3.4	5.7	1.5	68	369	2.5
2115.7	0.580	20	0.936	43	346	3.4	8.4	1.7	66	396	2.5
2116.4	0.393	19	0.694	42	345	2.8	5.7	1.3	64	395	2.1
2117.1	0.607	19	0.642	42	378	3.1	8.8	1.2	65	433	2.3
2117.8	0.891	17	0.748	38	353	1.9	13	1.4	58	404	1.4
2118.5	0.393	21	0.911	38	423	3.9	5.7	1.7	58	484	2.8
2119.2	0.553	20	0.697	43	396	3.9	8.0	1.3	66	453	2.9
2119.9	0.736	21	1.0	41	335	2.8	11	1.9	64	383	2.1
2120.6	0.393	18	1.2	40	329	3.5	5.7	2.2	61	376	2.5
2121.3	0.405	15	1.2	45	413	3.5	5.8	2.2	70	472	2.5
2122.0	0.543	18	1.1	38	370	3.7	7.8	2.0	59	423	2.7
2122.7	0.634	19	1.1	40	339	2.5	9.2	2.0	61	388	1.8
2123.4	1.0	18	1.0	38	349	5.7	15	1.9	58	399	4.1
2124.1	0.503	17	0.887	43	402	3.8	7.3	1.6	65	460	2.7
2124.8	0.393	18	0.948	37	420	3.9	5.7	1.7	57	481	2.9
2125.5	0.393	17	0.830	30	347	3.7	5.7	1.5	46	397	2.7
2126.2	0.510	19	1.1	41	362	3.7	7.4	2.1	63	413	2.7
2126.9	0.393	22	1.1	38	376	3.2	5.7	1.9	58	430	2.3
2127.6	0.623	18	0.783	41	411	4.5	9.0	1.4	62	470	3.3
2128.3	0.670	20	1.2	39	426	4.3	9.7	2.1	59	487	3.2
2129.0	0.421	19	1.1	36	501	4.2	6.1	2.0	55	572	3.1
2129.7	0.571	23	1.3	42	478	3.4	8.2	2.4	65	547	2.5
2130.4	0.640	20	1.1	35	406	3.6	9.2	2.0	54	464	2.6
2131.1	0.393	19	1.2	42	375	2.9	5.7	2.1	65	429	2.2
2131.8	0.920	16	1.1	31	406	3.0	13	2.0	48	465	2.2
2132.5	1.4	24	1.1	37	461	2.9	20	2.0	56	527	2.1
2133.2	0.393	20	1.6	44	430	2.8	5.7	3.0	67	492	2.0
2133.9	0.604	21	1.3	39	468	5.2	8.7	2.3	60	535	3.8
2134.6	0.564	20	1.0	42	521	3.5	8.1	1.8	65	595	2.6
2135.3	0.526	17	0.915	36	442	1.9	7.6	1.7	55	506	1.4
2136.0	0.776	20	1.1	46	453	2.9	11	2.0	70	518	2.1
2136.7	1.1	22	1.3	47	518	2.7	16	2.5	72	593	2.0
2137.4	0.891	19	0.931	40	415	3.0	13	1.7	62	474	2.2
2138.1	0.853	17	1.5	37	502	3.0	12	2.8	56	574	2.2
2138.8	0.984	18	1.0	36	500	2.9	14	1.8	55	571	2.1
2139.4	0.684	19	1.1	45	472	2.7	9.9	2.0	68	540	2.0
2140.1	0.571	16	1.3	45	476	2.2	8.2	2.3	69	544	1.6
2140.8	1.2	17	1.6	37	447	2.1	18	2.8	57	511	1.5
2141.5	1.1	19	1.7	43	487	3.7	16	3.1	66	556	2.7
2142.2	0.393	15	1.5	32	407	2.1	5.7	2.7	48	465	1.5
2142.9	1.0	16	1.2	39	471	2.2	15	2.2	60	539	1.6
2143.6	1.0	18	1.2	46	520	2.2	15	2.1	71	595	1.6
2144.3	1.1	21	1.2	46	558	2.8	16	2.2	70	639	2.0
2145.0	0.863	18	1.2	40	597	2.0	12	2.3	61	683	1.4
2145.7	2.4	19	1.6	45	605	2.8	34	2.9	69	692	2.1

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Parameter	7Li	24Mg	55Mn	66Zn	88Sr	137Ba	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
DL (ppm)	0.393	0.403	0.079	0.702	0.005	0.003					
Length (µm)											
2146.4	1.2	21	1.5	47	584	2.3	17	2.8	73	667	1.7
2147.1	0.768	18	1.1	47	591	2.6	11	2.0	72	675	1.9
2147.8	1.2	19	1.1	44	534	2.0	18	2.1	67	610	1.5
2148.5	1.1	17	1.5	47	478	2.1	16	2.8	71	547	1.5
2149.2	0.655	19	1.3	56	520	1.6	9.5	2.3	85	594	1.2
2149.9	1.0	17	0.984	44	522	2.4	15	1.8	68	597	1.7
2150.6	1.7	18	1.2	49	600	3.4	24	2.2	75	686	2.5
2151.3	0.982	19	1.6	43	563	2.3	14	3.0	66	643	1.7
2152.0	1.1	22	1.2	53	536	2.1	16	2.2	81	613	1.5
2152.7	1.2	18	1.4	48	484	1.8	17	2.5	74	553	1.3
2153.4	1.5	16	0.991	51	541	1.2	21	1.8	78	618	0.850
2154.1	0.650	19	1.4	54	458	2.0	9.4	2.6	83	524	1.5
2154.8	0.940	19	1.1	53	593	2.1	14	2.0	82	678	1.5
2155.5	1.5	19	1.2	48	527	1.3	22	2.1	74	602	0.943
2156.2	1.4	21	1.2	57	615	1.4	20	2.1	87	703	1.0
2156.9	1.2	18	1.4	50	599	1.2	17	2.5	77	685	0.889
2157.6	1.6	19	0.990	51	567	1.9	22	1.8	78	648	1.4
2158.3	1.6	20	1.3	51	580	1.2	23	2.4	79	664	0.846
2159.0	0.932	21	1.5	53	654	1.5	13	2.7	81	747	1.1
2159.7	2.0	19	1.4	60	733	2.3	29	2.6	92	839	1.7
2160.4	1.3	19	1.2	56	694	2.4	19	2.2	86	793	1.7
2161.1	0.848	18	1.2	56	684	1.5	12	2.2	85	782	1.1
2161.8	1.0	23	1.3	53	787	2.1	15	2.3	81	900	1.5
2162.5	1.8	19	1.2	61	661	3.0	26	2.2	94	756	2.2
2163.2	1.5	19	1.3	55	590	1.8	22	2.4	84	674	1.3
2163.9	1.2	18	1.3	53	623	1.8	17	2.4	81	712	1.3
2164.6	1.2	19	1.7	60	725	1.9	17	3.1	93	829	1.4
2165.3	1.7	21	1.6	58	677	2.0	25	2.8	88	775	1.5
2165.9	1.1	21	1.6	59	661	1.8	16	3.0	90	755	1.3
2166.6	1.1	22	1.2	62	654	1.7	15	2.3	95	748	1.2
2167.3	1.1	17	1.2	60	613	2.2	16	2.2	91	701	1.6
2168.0	0.465	20	1.2	56	597	1.5	6.7	2.1	85	683	1.1
2168.7	1.5	21	1.2	55	696	1.9	22	2.3	84	795	1.4
2169.4	0.998	22	1.6	54	654	2.4	14	2.9	83	747	1.8
2170.1	1.7	16	1.3	58	661	3.4	24	2.4	88	756	2.4
2170.8	0.892	21	1.1	58	720	1.9	13	2.0	88	823	1.4
2171.5	1.3	22	1.8	63	812	2.8	18	3.3	97	928	2.1
2172.2	1.7	18	1.3	59	803	1.3	25	2.4	90	918	0.962
2172.9	1.7	20	1.1	63	748	2.5	24	2.1	96	855	1.8
2173.6	1.1	23	1.4	57	743	3.0	17	2.5	87	850	2.2
2174.3	1.9	23	1.1	49	672	2.1	28	2.0	76	769	1.5
2175.0	1.7	20	1.3	63	700	2.2	24	2.4	97	800	1.6
2175.7	1.9	19	1.4	58	796	1.9	27	2.6	88	910	1.4
2176.4	1.2	26	1.3	69	852	2.0	17	2.5	106	975	1.5
2177.1	2.5	22	1.5	57	735	2.2	37	2.7	87	840	1.6
2177.8	1.3	20	1.3	61	815	2.2	19	2.3	93	932	1.6
2178.5	2.2	20	1.3	64	720	1.6	32	2.3	97	823	1.2
2179.2	1.9	19	1.5	54	754	2.2	27	2.8	83	863	1.6
2179.9	1.7	21	1.5	61	783	1.6	24	2.7	94	895	1.2
2180.6	1.1	21	1.6	69	814	2.8	16	2.8	106	931	2.0
2181.3	3.1	14	1.6	54	722	2.7	45	3.0	83	825	2.0
2182.0	2.4	17	1.2	58	719	1.9	34	2.1	89	822	1.4
2182.7	2.2	18	1.7	63	857	2.3	31	3.1	96	980	1.7
2183.4	2.8	24	1.6	68	864	3.5	41	2.9	105	988	2.5
2184.1	1.8	18	1.3	58	819	2.3	26	2.5	88	937	1.7
2184.8	2.2	18	1.2	60	757	2.0	32	2.3	92	866	1.5
2185.5	2.4	18	1.4	60	1033	2.2	34	2.5	92	1181	1.6
2186.2	2.6	20	1.5	68	1035	2.4	37	2.7	104	1183	1.8
2186.9	2.4	18	1.7	61	970	2.7	34	3.2	93	1110	2.0
2187.6	2.2	19	1.5	64	859	2.4	32	2.8	98	982	1.7
2188.3	3.2	18	1.4	59	989	3.7	46	2.6	91	1131	2.7
2189.0	2.7	17	1.5	68	1013	2.8	39	2.7	104	1159	2.1
2189.7	2.8	22	1.9	67	1041	3.8	41	3.4	103	1191	2.8
2190.4	3.5	20	1.9	71	1046	2.1	50	3.4	108	1196	1.5
2191.1	3.0	18	1.7	71	1107	2.0	44	3.1	110	1266	1.5
2191.8	3.3	20	1.6	72	1218	2.1	48	3.0	111	1393	1.6
2192.4	3.4	23	1.7	72	1114	1.7	49	3.0	110	1273	1.2
2193.1	4.2	19	2.0	68	1044	2.5	60	3.6	104	1194	1.8
2193.8	4.2	18	2.2	77	1206	2.8	61	3.9	117	1379	2.1
2194.5	3.6	20	2.0	75	1409	2.4	52	3.7	114	1611	1.7
2195.2	3.8	19	1.6	73	1291	1.8	55	2.9	113	1476	1.3
2195.9	3.2	20	1.7	69	1159	2.5	46	3.2	106	1325	1.8
2196.6	3.5	24	1.9	81	1250	2.2	51	3.5	125	1430	1.6
2197.3	3.0	19	1.5	74	1207	1.7	44	2.7	113	1381	1.2
2198.0	3.6	17	1.4	81	1256	2.0	52	2.5	123	1436	1.5
2198.7	4.7	19	1.9	85	1366	2.2	67	3.4	130	1562	1.6
2199.4	3.8	17	1.9	83	1487	2.2	55	3.4	127	1701	1.6
2200.1	4.4	19	2.0	80	1509	2.1	63	3.7	122	1726	1.6
2200.8	3.0	21	1.7	77	1387	1.7	43	3.1	118	1586	1.3
2201.5	3.4	17	1.7	78	1341	2.1	49	3.1	119	1534	1.6
2202.2	4.9	18	1.8	93	1578	0.708	71	3.2	142	1804	0.516

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Parameter	7Li	24Mg	55Mn	66Zn	88Sr	137Ba	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
DL (ppm)	0.393	0.403	0.079	0.702	0.005	0.003					
Length (µm)											
2202.9	4.2	23	1.7	79	1691	2.3	60	3.1	122	1934	1.7
2203.6	3.0	19	1.7	99	1568	1.6	43	3.1	152	1793	1.2
2204.3	3.4	16	1.7	82	1612	1.9	49	3.0	125	1843	1.4
2205.0	3.5	16	1.5	78	1503	1.5	50	2.7	120	1718	1.1
2205.7	3.8	20	1.7	99	1798	2.0	55	3.1	151	2056	1.5
2206.4	3.3	17	1.7	92	1551	1.5	48	3.1	140	1774	1.1
2207.1	3.6	15	1.3	88	1730	2.4	52	2.4	134	1978	1.8
2207.8	4.4	16	1.2	83	1693	1.8	63	2.2	127	1936	1.3
2208.5	4.6	18	1.7	90	1877	2.2	66	3.0	138	2146	1.6
2209.2	4.9	19	2.1	110	2104	1.0	71	3.8	169	2406	0.748
2209.9	4.5	17	1.4	100	1824	2.3	65	2.6	154	2085	1.7
2210.6	4.1	19	1.6	97	1827	1.3	60	2.9	149	2089	0.943
2211.3	4.3	19	2.4	99	1924	0.982	62	4.4	152	2201	0.716
2212.0	4.1	19	1.7	91	2035	2.3	60	3.1	139	2327	1.7
2212.7	3.6	16	1.6	100	1917	1.1	52	2.8	153	2192	0.819
2213.4	3.7	20	2.1	90	2043	1.4	54	3.8	138	2336	1.0
2214.1	4.4	21	1.7	100	2170	1.8	64	3.1	153	2481	1.3
2214.8	3.6	17	1.6	83	1950	1.5	52	2.9	127	2230	1.1
2215.5	3.9	20	2.4	94	2138	1.8	56	4.3	143	2445	1.3
2216.2	3.5	17	1.8	95	2085	2.2	51	3.2	145	2384	1.6
2216.9	3.9	20	1.8	96	2240	2.0	56	3.2	146	2562	1.5
2217.6	2.9	20	2.5	100	2084	1.9	42	4.6	154	2383	1.4
2218.3	4.5	17	2.1	100	2385	1.4	65	3.9	153	2727	1.0
2218.9	3.8	17	2.1	106	2346	1.8	54	3.8	162	2683	1.3
2219.6	2.1	21	1.9	101	2162	1.5	30	3.5	154	2473	1.1
2220.3	3.8	18	2.0	98	2189	1.9	54	3.6	150	2503	1.4
2221.0	2.2	22	2.3	89	2228	1.9	32	4.2	137	2547	1.4
2221.7	3.9	16	1.6	89	2384	1.8	57	3.0	136	2726	1.3
2222.4	2.7	18	2.2	87	2210	2.1	40	3.9	133	2527	1.5
2223.1	2.7	18	2.0	103	2026	1.6	39	3.7	159	2317	1.1
2223.8	3.0	19	2.2	95	2237	1.4	43	4.0	146	2558	1.0
2224.5	4.1	19	1.6	110	2380	2.1	59	2.9	168	2722	1.5
2225.2	2.9	21	2.2	99	2363	2.3	41	4.0	152	2702	1.7
2225.9	2.7	19	2.5	97	2449	1.6	39	4.6	148	2801	1.2
2226.6	2.0	19	2.5	103	2243	1.9	29	4.6	158	2565	1.4
2227.3	2.5	19	2.4	110	2342	1.2	36	4.4	168	2678	0.906
2228.0	2.1	16	2.8	96	2382	1.9	30	5.0	147	2724	1.4
2228.7	2.3	18	2.9	85	2401	2.4	33	5.3	130	2746	1.8
2229.4	1.9	24	3.6	91	2244	1.6	27	6.6	140	2566	1.2
2230.1	1.7	20	3.2	103	2409	1.9	25	5.9	158	2755	1.4
2230.8	1.7	19	3.6	97	2181	2.1	25	6.6	148	2494	1.1
2231.5	1.5	17	3.4	83	2322	1.3	22	6.3	128	2655	0.973
2232.2	1.6	16	3.5	94	2291	1.9	23	6.5	144	2620	1.4
2232.9	1.8	19	4.2	87	2024	1.5	26	7.7	133	2315	1.1
2233.6	1.1	18	4.0	85	2410	1.8	16	7.2	131	2756	1.3
2234.3	0.842	17	4.2	90	2268	2.4	12	7.6	138	2593	1.7
2235.0	1.2	24	4.4	77	2195	1.4	17	8.1	119	2509	1.0
2235.7	1.4	20	4.2	96	2285	2.1	20	7.7	147	2613	1.5
2236.4	1.2	17	4.6	85	2150	2.3	17	8.5	130	2459	1.7
2237.1	0.713	17	3.7	85	2172	1.5	10	6.7	131	2484	1.1
2237.8	1.3	16	4.4	80	2138	2.2	19	8.0	123	2444	1.6
2238.5	1.3	23	3.7	83	2216	2.1	18	6.7	128	2534	1.5
2239.2	1.0	20	3.7	82	2042	1.8	15	6.7	125	2335	1.3
2239.9	0.783	18	3.9	78	1951	1.4	11	7.1	120	2231	1.0
2240.6	0.970	18	4.0	94	2327	1.7	14	7.2	144	2661	1.3
2241.3	0.937	19	3.7	81	2088	1.8	14	6.7	123	2388	1.3
2242.0	0.799	21	4.2	77	2253	1.3	12	7.7	117	2576	0.966
2242.7	0.725	20	4.2	90	1949	1.8	10	7.6	137	2229	1.3
2243.4	1.1	18	3.7	78	2048	1.4	16	6.8	119	2342	1.0
2244.0	0.859	18	4.1	73	2299	0.959	12	7.5	112	2629	0.699
2244.7	0.885	18	4.0	87	2197	1.9	13	7.4	133	2512	1.4
2245.4	0.975	19	4.0	82	2313	1.6	14	7.2	126	2644	1.1
2246.1	0.778	15	3.8	77	1999	1.4	11	7.0	118	2286	1.0
2246.8	1.2	17	3.8	82	2365	1.9	17	6.9	126	2705	1.4
2247.5	0.435	17	4.1	71	2137	1.2	6.3	7.5	109	2444	0.908
2248.2	0.399	18	3.6	71	2259	2.0	5.8	6.5	109	2584	1.5
2248.9	1.0	18	4.3	90	2416	2.1	14	7.9	137	2762	1.5
2249.6	0.453	17	4.0	72	2150	2.0	6.5	7.2	110	2459	1.5
2250.3	1.3	17	3.5	70	1833	1.4	19	6.4	107	2096	0.987
2251.0	0.754	16	3.3	67	1821	1.6	11	6.0	103	2082	1.2
2251.7	0.642	20	3.9	79	2255	2.1	9.3	7.1	121	2579	1.5
2252.4	0.835	19	4.2	75	2043	0.696	12	7.7	115	2336	0.508
2253.1	0.393	19	3.4	74	1886	1.8	5.7	6.2	114	2157	1.3
2253.8	0.393	21	4.1	63	1908	0.924	5.7	7.6	96	2182	0.675
2254.5	0.393	17	2.9	69	1944	1.3	5.7	5.3	106	2223	0.959
2255.2	0.393	18	2.5	65	1995	0.685	5.7	4.5	99	2281	0.500
2255.9	0.393	18	3.0	80	2091	2.1	5.7	5.5	123	2391	1.5
2256.6	0.729	18	2.5	61	1826	1.6	11	4.6	94	2088	1.2
2257.3	0.430	20	3.0	66	1880	1.6	6.2	5.5	101	2150	1.2
2258.0	0.850	17	2.5	63	1770	2.1	12	4.5	96	2024	1.5
2258.7	0.393	17	2.7	67	1734	3.1	5.7	4.8	102	1983	2.2

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2259.4	0.393	18	2.4	71	1888	2.6	5.7	4.3	108	2159	1.9
2260.1	0.747	17	2.6	62	1722	1.7	11	4.8	95	1969	1.3
2260.8	0.698	20	2.6	61	1668	2.3	10	4.8	94	1907	1.7
2261.5	0.393	18	2.2	61	1532	2.6	5.7	3.9	94	1751	1.9
2262.2	0.849	19	2.9	61	1838	3.1	12	5.2	94	2102	2.3
2262.9	0.421	16	1.7	70	1545	2.6	6.1	3.1	107	1766	1.9
2263.6	0.393	18	2.6	62	1500	2.3	5.7	4.7	95	1715	1.7
2264.3	0.722	16	1.8	56	1531	3.1	10	3.3	86	1750	2.3
2265.0	0.393	21	2.0	62	1744	3.2	5.7	3.6	96	1994	2.4
2265.7	0.450	19	1.9	57	1561	3.0	6.5	3.4	87	1785	2.2
2266.4	0.694	19	2.1	58	1565	1.9	10	3.7	88	1790	1.4
2267.1	0.393	14	1.8	43	1352	1.9	5.7	3.3	65	1546	1.4
2267.8	0.393	16	1.5	51	1371	2.3	5.7	2.8	78	1568	1.7
2268.5	0.393	19	1.6	49	1279	2.2	5.7	2.9	75	1463	1.6
2269.2	0.393	19	2.0	55	1460	2.3	5.7	3.6	84	1669	1.7
2269.9	0.393	17	1.3	47	1308	2.7	5.7	2.4	72	1496	2.0
2270.5	0.401	15	1.5	51	1293	2.3	5.8	2.7	78	1479	1.7
2271.2	0.393	17	1.1	38	1221	2.1	5.7	1.9	58	1396	1.6
2271.9	0.606	17	1.2	42	1249	2.5	8.7	2.2	64	1429	1.9
2272.6	0.393	18	1.1	38	1122	3.0	5.7	2.0	59	1283	2.2
2273.3	0.393	17	0.697	32	1273	1.2	5.7	1.3	50	1455	0.888
2274.0	0.393	16	0.571	37	1094	2.5	5.7	1.0	56	1251	1.8
2274.7	0.393	15	0.782	27	1184	2.4	5.7	1.4	41	1353	1.7
2275.4	0.661	17	0.718	33	1208	1.7	9.5	1.3	51	1381	1.2
2276.1	0.523	16	0.590	34	1189	2.8	7.5	1.1	53	1359	2.0
2276.8	0.393	16	0.788	26	1032	2.0	5.7	1.4	40	1180	1.4
2277.5	0.441	13	0.624	27	1084	1.5	6.4	1.1	41	1240	1.1
2278.2	0.393	15	0.618	18	954	1.9	5.7	1.1	27	1091	1.4
2278.9	0.604	16	0.639	23	1065	2.0	8.7	1.2	35	1218	1.5
2279.6	1.3	11	0.483	21	990	0.762	18	0.880	33	1132	0.556
2280.3	1.2	14	0.479	14	963	1.9	18	0.874	21	1101	1.4
2281.0	0.968	13	0.618	11	913	2.5	14	1.1	17	1044	1.8
2281.7	2.4	12	0.781	16	1047	1.9	35	1.4	25	1198	1.4
2282.4	1.4	14	0.665	16	942	2.4	21	1.2	24	1077	1.8
2283.1	1.9	11	0.674	15	1046	1.6	27	1.2	23	1197	1.2
2283.8	1.8	14	0.943	19	1033	1.1	26	1.7	29	1182	0.809
2284.5	1.8	11	0.977	20	1002	1.8	25	1.8	30	1146	1.3
2285.2	2.4	14	0.994	19	911	2.2	35	1.8	29	1042	1.6
2285.9	2.5	14	1.3	18	847	1.4	36	2.3	28	969	0.994
2286.6	2.2	11	1.4	17	896	2.6	32	2.5	26	1025	1.9
2287.3	3.5	12	1.3	20	976	1.7	51	2.4	31	1117	1.2
2288.0	3.6	13	2.2	20	905	3.4	52	4.0	31	1035	2.5
2288.7	4.4	12	2.0	23	1035	2.6	64	3.7	35	1183	1.9
2289.4	4.8	13	2.7	22	1116	3.6	69	5.0	33	1277	2.6
2290.1	4.4	12	2.4	25	1004	2.8	64	4.3	38	1149	2.1
2290.8	4.7	12	3.0	22	1138	2.9	68	5.4	34	1301	2.1
2291.5	4.3	16	3.5	30	1132	3.3	63	6.5	46	1295	2.4
2292.2	4.7	15	3.1	30	1249	1.8	68	5.7	46	1429	1.3
2292.9	5.0	15	2.9	29	1166	3.0	73	5.3	45	1334	2.2
2293.6	5.1	14	3.0	28	1317	3.2	74	5.5	43	1507	2.3
2294.3	4.1	13	2.8	45	1313	3.6	59	5.1	68	1501	2.6
2295.0	5.2	18	3.8	38	1377	2.3	75	7.0	59	1574	1.7
2295.7	5.2	16	3.5	35	1358	4.1	74	6.4	54	1553	3.0
2296.4	5.3	18	3.7	44	1421	3.6	77	6.8	68	1625	2.6
2297.0	4.9	13	3.3	42	1406	3.1	70	6.0	65	1607	2.3
2297.7	4.7	15	4.1	41	1513	3.8	68	7.5	63	1731	2.8
2298.4	5.0	16	3.9	41	1555	3.0	73	7.1	63	1778	2.2
2299.1	4.5	15	4.1	42	1673	4.8	65	7.5	64	1913	3.5
2299.8	3.9	15	4.1	45	1528	3.1	57	7.5	70	1747	2.2
2300.5	5.7	15	4.4	47	1766	4.4	82	8.0	73	2020	3.2
2301.2	4.3	15	4.2	50	1778	3.8	62	7.7	76	2034	2.7
2301.9	4.3	18	4.4	51	1753	3.1	61	8.0	78	2004	2.2
2302.6	3.3	17	4.0	50	1888	3.6	47	7.3	77	2158	2.6
2303.3	3.6	16	3.8	56	1914	3.4	52	7.0	86	2188	2.5
2304.0	3.4	16	4.8	53	2230	3.5	49	8.7	81	2550	2.6
2304.7	2.8	19	4.6	50	2180	3.9	40	8.5	77	2493	2.9
2305.4	3.0	18	3.8	61	1940	3.6	44	6.9	94	2219	2.6
2306.1	3.5	16	4.6	58	2141	3.5	50	8.4	88	2448	2.6
2306.8	3.0	16	4.0	62	2049	2.6	43	7.3	96	2343	1.9
2307.5	3.4	15	5.0	65	2355	3.6	48	9.1	100	2693	2.6
2308.2	3.7	18	5.6	61	2019	2.7	53	10	94	2308	2.0
2308.9	4.1	17	5.0	57	2070	3.4	59	9.0	87	2367	2.5
2309.6	3.4	16	6.0	57	2253	2.5	49	11	87	2576	1.9
2310.3	3.3	17	5.6	65	2346	2.6	47	10	99	2683	1.9
2311.0	4.9	16	7.3	69	2409	3.2	71	13	106	2754	2.3
2311.7	4.7	17	6.5	67	2152	3.2	68	12	102	2461	2.3
2312.4	4.6	19	7.0	64	2357	3.9	66	13	98	2695	2.8
2313.1	4.2	18	6.8	74	2433	4.5	61	12	114	2782	3.3
2313.8	4.3	19	7.2	65	2261	2.8	62	13	99	2585	2.1
2314.5	3.4	19	6.7	63	2352	5.1	50	12	97	2689	3.7
2315.2	3.1	15	7.0	64	2533	2.9	44	13	98	2896	2.1

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Sample ID: 018

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2315.9	3.5	17	8.1	64	2277	4.4	51	15	98	2604	3.2
2316.6	3.8	19	7.7	61	2082	3.6	55	14	93	2381	2.6
2317.3	4.1	16	7.5	58	2068	3.6	59	14	88	2365	2.6
2318.0	2.9	18	8.9	62	2291	3.9	42	16	96	2619	2.8
2318.7	3.3	19	8.8	77	2194	3.5	47	16	118	2508	2.5
2319.4	2.0	20	7.6	66	2074	2.9	29	14	101	2372	2.1
2320.1	2.3	17	7.4	61	2096	3.6	33	13	93	2397	2.6
2320.8	1.7	18	7.4	58	2179	3.4	24	14	89	2492	2.5
2321.5	1.5	16	5.1	56	1872	3.4	22	9.3	85	2140	2.5
2322.2	2.1	20	6.0	66	2047	3.1	30	11	100	2340	2.3
2322.8	1.4	20	5.6	58	1909	3.7	20	10	90	2183	2.7
2323.5	1.3	18	5.2	56	1965	2.6	19	9.5	86	2247	1.9
2324.2	1.0	19	4.6	56	1812	2.3	15	8.4	85	2072	1.6
2324.9	1.4	17	5.0	55	1730	2.6	20	9.1	84	1979	1.9
2325.6	1.4	20	5.8	60	1963	2.6	20	10	92	2245	1.9
2326.3	1.0	20	5.7	54	1868	3.2	14	10	83	2136	2.3
2327.0	0.393	18	5.5	56	1950	1.7	5.7	10	85	2230	1.3
2327.7	1.2	17	5.1	57	1875	1.8	17	9.3	87	2144	1.3
2328.4	0.867	16	4.8	49	1694	2.6	13	8.8	75	1937	1.9
2329.1	0.438	17	5.6	58	1833	2.6	6.3	10	89	2097	1.9
2329.8	0.393	18	4.7	58	1745	2.3	5.7	8.6	88	1996	1.7
2330.5	0.638	17	4.5	54	1723	3.2	9.2	8.2	83	1970	2.4
2331.2	1.3	19	5.5	56	1962	2.6	18	10.0	85	2244	1.9
2331.9	0.809	20	4.4	53	1986	2.6	12	8.0	82	2271	1.9
2332.6	0.531	17	4.9	48	1714	2.2	7.7	9.0	73	1960	1.6
2333.3	0.393	17	4.7	45	1733	2.5	5.7	8.5	69	1982	1.8
2334.0	0.436	18	5.4	47	1801	2.2	6.3	9.8	73	2059	1.6
2334.7	0.415	17	4.4	48	1761	3.5	6.0	8.1	74	2014	2.5
2335.4	0.559	21	4.5	46	1818	2.5	8.1	8.1	70	2079	1.8
2336.1	0.501	19	4.0	49	1879	3.1	7.2	7.3	76	2149	2.3
2336.8	0.393	20	5.0	43	2044	3.4	5.7	9.1	66	2337	2.5
2337.5	0.757	20	3.9	41	1803	2.9	11	7.2	63	2061	2.1
2338.2	0.393	20	4.0	45	1583	2.8	5.7	7.4	69	1810	2.1
2338.9	0.393	22	3.7	41	1647	3.3	5.7	6.8	63	1883	2.4
2339.6	0.393	18	3.3	43	1640	4.0	5.7	6.1	65	1876	2.9
2340.3	0.393	19	3.0	33	1444	2.2	5.7	5.5	50	1652	1.6
2341.0	0.393	20	2.5	38	1543	3.3	5.7	4.6	58	1765	2.4
2341.7	0.393	20	2.7	34	1402	3.0	5.7	4.9	52	1604	2.2
2342.4	0.614	22	2.4	33	1327	3.2	8.9	4.3	50	1517	2.3
2343.1	0.393	20	1.8	34	1332	2.5	5.7	3.3	52	1523	1.8
2343.8	0.393	19	2.1	31	1228	2.3	5.7	3.8	48	1404	1.7
2344.5	0.453	20	1.8	35	1225	2.2	6.5	3.3	54	1401	1.6
2345.2	0.740	21	1.4	31	1088	1.9	11	2.5	48	1244	1.4
2345.9	0.393	22	1.3	30	1032	2.7	5.7	2.5	46	1180	2.0
2346.6	0.393	23	1.0	26	1014	2.0	5.7	1.9	39	1160	1.4
2347.3	0.393	21	1.2	23	1062	1.4	5.7	2.2	36	1215	1.0
2348.0	0.598	19	1.1	25	1023	2.2	8.6	2.1	38	1170	1.6
2348.7	0.393	22	1.2	25	994	2.3	5.7	2.3	38	1137	1.7
2349.3	0.416	21	1.1	23	954	2.4	6.0	2.1	35	1091	1.7
2350.0	0.393	17	1.0	25	933	2.2	5.7	1.9	38	1067	1.6
2350.7	0.393	17	1.0	19	942	1.3	5.7	1.8	29	1077	0.947
2351.4	0.424	18	1.1	22	928	1.4	6.1	2.0	34	1061	1.0
2352.1	0.815	20	0.908	19	1055	2.2	12	1.7	29	1206	1.6
2352.8	0.393	18	0.799	19	968	2.5	5.7	1.5	29	1107	1.8
2353.5	0.508	16	0.659	18	1100	1.4	7.3	1.2	28	1257	1.0
2354.2	0.393	17	0.633	13	947	1.1	5.7	1.2	20	1082	0.781
2354.9	0.529	18	0.729	17	1060	2.2	7.6	1.3	27	1212	1.6
2355.6	0.393	16	0.725	13	934	1.6	5.7	1.3	21	1068	1.2
2356.3	0.393	17	0.585	14	878	2.0	5.7	1.1	22	1004	1.5
2357.0	0.510	14	0.510	13	979	0.577	7.4	0.931	20	1119	0.421
2357.7	0.400	14	0.704	12	1060	1.8	5.8	1.3	18	1212	1.3
2358.4	0.393	17	0.717	14	974	1.9	5.7	1.3	22	1114	1.4
2359.1	0.393	14	0.309	10	935	2.1	5.7	0.564	16	1069	1.6
2359.8	0.393	14	0.652	14	924	1.5	5.7	1.2	21	1056	1.1
2360.5	0.613	13	0.843	16	981	1.3	8.9	1.5	24	1122	0.981
2361.2	0.393	14	0.529	15	894	1.8	5.7	0.964	23	1023	1.3
2361.9	0.706	14	0.577	11	953	1.5	10	1.1	16	1090	1.1
2362.6	0.637	13	0.500	11	888	1.8	9.2	0.912	17	1015	1.3
2363.3	0.393	15	0.520	12	994	1.6	5.7	0.949	19	1137	1.2
2364.0	0.493	15	0.491	13	964	2.2	7.1	0.895	20	1102	1.6
2364.7	0.393	13	0.477	10	904	2.3	5.7	0.870	16	1033	1.7
2365.4	0.448	13	0.500	15	1027	1.8	6.5	0.911	23	1174	1.3
2366.1	0.393	14	0.368	12	962	2.2	5.7	0.671	18	1100	1.6
2366.8	0.393	15	0.425	9.5	863	1.7	5.7	0.775	15	987	1.2
2367.5	0.393	12	0.637	8.7	954	1.7	5.7	1.2	13	1091	1.2
2368.2	0.393	14	0.434	10	942	1.5	5.7	0.792	16	1078	1.1
2368.9	0.576	13	0.448	12	1054	1.7	8.3	0.817	19	1205	1.3
2369.6	0.393	12	0.340	10	936	1.7	5.7	0.621	16	1071	1.2
2370.3	0.393	13	0.519	9.1	817	1.4	5.7	0.947	14	934	1.0
2371.0	0.393	12	0.526	13	997	3.2	5.7	0.958	20	1140	2.4
2371.7	0.414	12	0.380	12	1061	1.6	6.0	0.692	18	1213	1.2

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2372.4	0.393	12	0.281	11	1006	2.0	5.7	0.512	16	1150	1.5
2373.1	0.393	13	0.230	9.5	881	1.3	5.7	0.420	15	1007	0.975
2373.8	0.393	12	0.440	13	984	1.9	5.7	0.803	20	1126	1.4
2374.5	0.393	16	0.398	12	959	1.1	5.7	0.726	18	1096	0.812
2375.2	0.393	13	0.565	13	962	2.2	5.7	1.0	20	1100	1.6
2375.8	0.393	13	0.384	12	852	2.0	5.7	0.700	18	974	1.5
2376.5	0.393	11	0.145	9.6	833	1.6	5.7	0.265	15	953	1.1
2377.2	0.393	11	0.383	13	956	1.1	5.7	0.698	20	1093	0.780
2377.9	0.695	13	0.150	11	912	3.1	10	0.273	17	1042	2.3
2378.6	0.393	13	0.511	13	954	1.7	5.7	0.931	20	1091	1.2
2379.3	0.597	11	0.553	12	818	1.3	8.6	1.0	18	936	0.914
2380.0	0.393	11	0.454	14	978	1.8	5.7	0.828	21	1118	1.3
2380.7	0.399	13	0.552	14	975	2.6	5.8	1.0	22	1115	1.9
2381.4	0.393	13	0.411	14	818	2.2	5.7	0.749	21	936	1.6
2382.1	0.393	12	0.415	14	848	2.3	5.7	0.757	22	970	1.7
2382.8	0.447	12	0.343	13	1004	2.5	6.5	0.626	20	1148	1.8
2383.5	0.528	12	0.453	12	910	1.3	7.6	0.825	18	1040	0.955
2384.2	0.462	13	0.447	16	964	2.3	6.7	0.816	24	1103	1.7
2384.9	0.694	13	0.521	15	1083	2.9	10	0.951	22	1239	2.1
2385.6	1.3	12	0.583	18	942	1.3	18	1.1	28	1077	0.962
2386.3	0.442	14	0.581	15	1016	2.4	6.4	1.1	23	1162	1.8
2387.0	0.393	14	0.484	18	958	2.1	5.7	0.882	27	1096	1.5
2387.7	0.393	13	0.561	15	1062	1.6	5.7	1.0	22	1214	1.2
2388.4	0.625	15	0.898	18	1017	2.4	9.0	1.6	28	1162	1.8
2389.1	0.393	15	0.820	16	1111	2.6	5.7	1.5	24	1271	1.9
2389.8	0.897	13	0.530	19	1087	2.3	13	0.967	29	1243	1.7
2390.5	0.895	11	0.371	17	1028	1.8	13	0.677	25	1178	1.3
2391.2	0.901	13	0.712	22	1150	1.7	13	1.3	34	1315	1.3
2391.9	0.833	15	0.920	22	1142	2.0	12	1.7	34	1306	1.5
2392.6	1.1	14	1.2	22	1101	1.4	16	2.1	34	1259	1.0
2393.3	0.721	13	1.4	23	1170	1.7	10	2.6	36	1338	1.2
2394.0	1.4	16	0.801	19	1215	1.4	20	1.5	30	1389	1.0
2394.7	0.839	15	1.1	24	1129	1.7	12	2.1	37	1291	1.2
2395.4	1.3	16	1.4	26	1480	0.869	19	2.5	40	1693	0.634
2396.1	1.3	15	1.2	23	1175	1.1	18	2.2	35	1343	0.823
2396.8	0.857	15	0.701	22	1321	1.9	12	1.3	34	1511	1.4
2397.5	1.7	13	0.853	27	1216	1.7	24	1.6	41	1390	1.3
2398.2	1.4	14	0.789	26	1203	2.0	20	1.4	40	1376	1.4
2398.9	0.835	16	0.884	24	1429	2.5	12	1.6	37	1634	1.8
2399.6	0.960	14	0.968	29	1149	2.3	14	1.8	44	1314	1.6
2400.3	0.552	15	0.938	22	1282	1.6	8.0	1.7	33	1466	1.1
2401.0	0.849	15	0.876	27	1295	2.1	12	1.6	41	1481	1.5
2401.6	0.739	17	0.947	27	1254	2.4	11	1.7	42	1434	1.8
2402.3	0.449	17	1.3	26	1292	2.4	6.5	2.3	40	1477	1.7
2403.0	1.2	19	1.2	27	1452	2.5	18	2.1	41	1661	1.8
2403.7	0.890	15	1.1	28	1476	2.8	13	2.0	42	1688	2.0
2404.4	0.766	17	1.3	28	1234	2.4	11	2.4	43	1411	1.7
2405.1	0.673	18	1.2	22	1355	3.2	9.7	2.2	34	1550	2.4
2405.8	0.393	17	1.1	23	1324	1.8	5.7	2.0	35	1514	1.3
2406.5	0.520	16	0.945	25	1332	3.4	7.5	1.7	38	1523	2.5
2407.2	0.393	17	0.880	23	1428	3.3	5.7	1.6	35	1633	2.4
2407.9	0.777	18	1.4	26	1468	3.1	11	2.6	40	1678	2.2
2408.6	0.542	19	1.1	25	1471	5.4	7.8	1.9	38	1682	3.9
2409.3	0.393	19	1.2	24	1439	3.5	5.7	2.1	37	1646	2.6
2410.0	0.393	18	0.857	24	1735	4.1	5.7	1.6	37	1983	3.0
2410.7	0.531	19	0.604	22	1543	4.2	7.7	1.1	34	1764	3.1
2411.4	0.677	20	1.1	23	1632	4.0	9.8	2.0	35	1867	2.9
2412.1	0.700	18	1.2	25	1566	3.8	10	2.2	39	1791	2.8
2412.8	0.393	16	1.4	24	1560	3.5	5.7	2.5	36	1783	2.5
2413.5	0.935	16	1.4	20	1748	4.0	13	2.6	31	1999	2.9
2414.2	0.656	18	1.0	23	1597	3.7	9.5	1.9	36	1826	2.7
2414.9	0.393	18	0.997	24	1461	2.7	5.7	1.8	37	1671	2.0
2415.6	0.417	16	0.984	20	1406	3.1	6.0	1.8	30	1608	2.3
2416.3	0.393	16	1.5	23	1424	2.3	5.7	2.8	36	1629	1.7
2417.0	0.393	16	0.941	25	1561	3.1	5.7	1.7	39	1785	2.3
2417.7	0.393	18	1.2	22	1538	2.6	5.7	2.1	34	1759	1.9
2418.4	0.393	18	1.1	25	1419	2.4	5.7	2.0	38	1622	1.7
2419.1	0.393	13	1.2	22	1309	2.2	5.7	2.3	33	1497	1.6
2419.8	0.393	15	1.5	23	1299	1.7	5.7	2.7	36	1485	1.2
2420.5	0.620	13	1.4	21	1384	3.5	9.0	2.5	32	1583	2.6
2421.2	0.393	16	1.2	20	1412	3.1	5.7	2.2	30	1615	2.3
2421.9	0.393	16	1.5	26	1366	2.9	5.7	2.7	40	1562	2.1
2422.6	0.393	15	1.4	24	1274	2.8	5.7	2.5	36	1457	2.0
2423.3	0.454	16	1.6	23	1268	2.7	6.5	2.9	35	1450	2.0
2424.0	0.622	19	1.3	20	1157	2.1	9.0	2.4	30	1323	1.5
2424.7	0.393	18	1.6	28	1298	2.9	5.7	2.9	43	1484	2.1
2425.4	0.393	17	1.2	20	960	2.2	5.7	2.2	31	1097	1.6
2426.1	0.393	16	1.6	19	1004	2.7	5.7	3.0	29	1148	2.0
2426.8	0.393	16	1.4	19	1035	3.1	5.7	2.6	30	1183	2.2
2427.5	0.393	18	1.1	21	1040	3.3	5.7	2.1	33	1189	2.4
2428.2	0.393	17	0.955	24	968	1.8	5.7	1.7	37	1107	1.3

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Parameter	7Li	24Mg	55Mn	66Zn	88Sr	137Ba	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
DL (ppm)	0.393	0.403	0.079	0.702	0.005	0.003					
Length (µm)											
2428.8	0.548	15	0.869	18	723	1.6	7.9	1.6	28	827	1.2
2429.5	0.393	16	1.2	23	909	2.1	5.7	2.1	36	1040	1.5
2430.2	0.393	17	1.1	20	974	2.1	5.7	2.0	31	1114	1.5
2430.9	0.393	16	0.851	20	979	1.1	5.7	1.6	30	1120	0.808
2431.6	0.462	18	1.1	22	989	1.9	6.7	1.9	34	1131	1.4
2432.3	0.453	16	0.776	21	896	2.5	6.5	1.4	33	1025	1.8
2433.0	0.393	17	0.645	18	872	2.0	5.7	1.2	28	997	1.5
2433.7	0.393	16	0.852	21	913	1.7	5.7	1.6	32	1045	1.3
2434.4	0.393	19	0.835	20	1020	1.9	5.7	1.5	31	1166	1.4
2435.1	0.393	18	0.735	20	928	1.8	5.7	1.3	30	1061	1.3
2435.8	0.502	20	0.521	19	860	2.0	7.2	0.951	29	984	1.4
2436.5	0.393	19	0.685	19	867	1.2	5.7	1.2	29	991	0.845
2437.2	0.393	19	0.756	14	893	2.0	5.7	1.4	22	1021	1.4
2437.9	0.820	16	0.505	14	781	1.3	12	0.921	22	893	0.935
2438.6	1.2	17	0.681	16	856	1.9	18	1.2	24	979	1.4
2439.3	1.1	19	0.549	13	840	1.8	16	1.0	19	961	1.3
2440.0	1.2	14	0.687	13	854	1.5	18	1.3	19	976	1.1
2440.7	0.938	19	0.611	11	942	1.3	14	1.1	17	1077	0.935
2441.4	1.0	18	0.714	15	945	1.6	15	1.3	23	1081	1.2
2442.1	1.8	19	0.372	13	964	1.4	26	0.679	21	1103	1.0
2442.8	1.5	18	0.617	13	844	1.9	22	1.1	20	965	1.4
2443.5	1.1	18	0.758	10	905	1.6	16	1.4	15	1035	1.1
2444.2	1.7	17	0.852	17	868	1.4	25	1.6	26	993	1.0
2444.9	1.3	15	0.607	11	856	1.2	19	1.1	17	979	0.902
2445.6	1.9	14	0.730	11	807	1.8	27	1.3	16	923	1.3
2446.3	1.6	19	0.914	9.4	977	2.0	23	1.7	14	1117	1.5
2447.0	2.1	15	0.822	13	1059	1.3	30	1.5	21	1210	0.923
2447.7	2.4	19	0.980	11	954	1.6	34	1.8	16	1091	1.2
2448.4	1.6	17	0.828	11	1057	2.3	23	1.5	16	1209	1.7
2449.1	1.6	14	1.0	11	970	2.4	23	1.9	17	1109	1.8
2449.8	2.0	15	0.955	10	852	1.8	29	1.7	16	974	1.3
2450.5	2.7	16	1.2	12	1076	1.6	39	2.2	19	1231	1.2
2451.2	2.1	15	1.2	12	958	2.1	30	2.1	19	1095	1.5
2451.9	2.3	14	1.7	13	1016	1.7	33	3.1	19	1162	1.2
2452.6	2.6	15	1.4	14	1031	1.8	37	2.6	21	1179	1.3
2453.3	3.4	14	1.2	13	1030	2.4	49	2.3	19	1178	1.7
2454.0	2.9	14	1.5	14	1018	1.0	42	2.8	22	1164	0.730
2454.7	2.5	15	1.5	12	943	1.1	36	2.7	18	1078	0.828
2455.3	2.9	15	1.7	18	1060	1.8	42	3.2	28	1213	1.3
2456.0	3.2	12	1.8	11	923	1.1	47	3.3	17	1055	0.783
2456.7	2.8	15	1.6	16	1085	2.7	40	2.9	24	1241	2.0
2457.4	3.0	15	2.2	16	1154	1.6	44	3.9	25	1320	1.2
2458.1	4.0	17	2.6	16	1243	2.4	57	4.8	24	1421	1.8
2458.8	2.9	17	1.8	14	1104	2.0	42	3.3	21	1262	1.4
2459.5	3.0	15	2.1	15	1098	1.6	43	3.9	23	1255	1.1
2460.2	3.5	13	2.5	17	1217	2.6	51	4.6	25	1391	1.9
2460.9	3.5	15	2.7	18	1237	2.3	50	4.9	27	1415	1.7
2461.6	3.5	16	2.8	19	1382	2.3	50	5.1	28	1580	1.7
2462.3	3.5	14	3.0	18	1236	2.7	51	5.4	28	1414	2.0
2463.0	3.4	15	3.6	19	1460	2.7	50	6.5	29	1670	2.0
2463.7	3.8	14	3.4	19	1502	1.6	54	6.2	29	1717	1.2
2464.4	3.4	15	3.8	19	1473	2.7	49	6.8	30	1684	2.0
2465.1	3.6	21	3.3	25	1641	2.1	52	6.0	38	1876	1.6
2465.8	3.1	16	3.4	17	1523	2.4	44	6.2	25	1742	1.7
2466.5	3.3	16	3.5	21	1709	2.8	48	6.4	31	1954	2.0
2467.2	3.0	15	3.6	20	1672	2.8	44	6.5	31	1912	2.0
2467.9	3.1	16	3.5	22	1717	2.2	44	6.5	34	1964	1.6
2468.6	2.6	15	3.7	22	1618	2.8	37	6.7	34	1851	2.0
2469.3	2.6	16	3.3	27	1668	1.8	38	6.1	41	1907	1.3
2470.0	2.4	18	3.1	23	1705	1.4	34	5.7	35	1949	0.999
2470.7	2.6	15	3.4	21	1732	2.1	38	6.1	32	1981	1.6
2471.4	2.3	15	2.9	29	1839	2.2	33	5.4	45	2103	1.6
2472.1	1.7	16	3.4	25	1938	2.1	25	6.1	39	2216	1.6
2472.8	2.6	14	3.6	23	1858	1.4	37	6.5	35	2124	1.0
2473.5	2.4	16	3.1	19	1786	2.2	35	5.6	28	2042	1.6
2474.2	2.4	18	3.0	24	1912	1.5	35	5.4	36	2186	1.1
2474.9	2.5	20	3.5	26	1983	2.1	36	6.4	40	2268	1.6
2475.6	2.4	20	3.3	27	1773	2.2	34	6.1	41	2027	1.6
2476.3	1.5	18	3.6	26	2099	2.2	22	6.6	40	2400	1.6
2477.0	1.9	18	3.0	22	1972	2.6	27	5.4	34	2256	1.9
2477.7	1.4	16	3.2	22	1774	1.9	21	5.8	34	2029	1.4
2478.4	2.2	19	2.9	22	1734	1.7	32	5.3	34	1983	1.2
2479.1	2.1	17	2.7	25	1897	1.6	30	4.9	38	2170	1.2
2479.8	2.0	17	3.2	25	1953	2.2	28	5.9	38	2233	1.6
2480.5	2.1	16	2.3	24	1800	1.3	31	4.1	37	2059	0.926
2481.1	1.1	19	2.4	29	1894	1.9	16	4.4	44	2166	1.4
2481.8	1.1	17	2.6	32	2036	2.3	16	4.7	50	2328	1.7
2482.5	1.4	17	2.8	26	1851	2.4	21	5.1	41	2117	1.7
2483.2	1.0	20	3.4	29	1934	2.7	15	6.1	44	2212	2.0
2483.9	1.0	17	2.6	29	1952	1.5	15	4.7	45	2232	1.1
2484.6	1.0	18	2.0	25	1905	1.6	15	3.6	38	2179	1.2

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2485.3	0.522	22	3.1	30	2128	1.8	7.5	5.6	47	2434	1.3
2486.0	0.762	16	2.6	22	1821	2.1	11	4.7	34	2083	1.5
2486.7	0.480	15	3.3	27	1811	1.7	6.9	6.0	41	2071	1.2
2487.4	1.2	20	2.5	31	1943	1.7	18	4.6	48	2222	1.3
2488.1	1.0	19	2.4	29	1816	1.8	15	4.4	45	2077	1.3
2488.8	0.503	19	2.1	26	1923	1.8	7.3	3.8	40	2199	1.3
2489.5	0.735	18	2.5	22	2014	1.4	11	4.5	34	2303	1.0
2490.2	0.393	19	2.1	25	1962	2.1	5.7	3.8	38	2244	1.5
2490.9	0.800	17	3.0	24	1864	2.0	12	5.4	37	2132	1.5
2491.6	0.601	18	2.4	22	1773	2.0	8.7	4.3	34	2027	1.5
2492.3	0.393	19	1.9	20	1982	2.2	5.7	3.4	31	2267	1.6
2493.0	0.538	16	2.1	21	1763	1.0	7.8	3.8	33	2016	0.765
2493.7	0.393	19	2.1	23	1855	3.0	5.7	3.8	35	2121	2.2
2494.4	0.393	17	1.7	22	1797	1.6	5.7	3.1	33	2055	1.2
2495.1	0.393	19	1.9	23	1584	2.5	5.7	3.4	35	1811	1.8
2495.8	0.393	16	1.4	17	1512	2.1	5.7	2.6	26	1729	1.5
2496.5	0.393	16	1.6	21	1710	1.7	5.7	2.9	32	1956	1.2
2497.2	0.858	19	1.8	22	1662	1.4	12	3.3	33	1900	1.0
2497.9	0.722	21	1.6	23	1676	3.2	10	3.0	36	1917	2.3
2498.6	0.393	17	1.5	20	1413	2.5	5.7	2.7	30	1615	1.8
2499.3	0.393	17	1.5	17	1485	2.4	5.7	2.7	26	1698	1.7
2500.0	0.393	17	1.9	21	1495	1.6	5.7	3.5	32	1710	1.2
2500.7	0.393	18	1.3	21	1462	1.3	5.7	2.4	32	1672	0.973
2501.4	0.393	16	1.3	21	1382	2.0	5.7	2.4	33	1581	1.4
2502.1	0.393	13	1.2	19	1191	1.0	5.7	2.2	29	1362	0.734
2502.8	0.393	20	1.5	18	1193	1.5	5.7	2.8	28	1364	1.1
2503.5	0.393	15	1.8	20	1306	1.5	5.7	3.2	30	1494	1.1
2504.2	0.480	17	1.0	22	1267	1.7	6.9	1.9	34	1449	1.2
2504.9	0.393	16	1.1	19	1238	1.8	5.7	2.1	30	1416	1.3
2505.6	0.393	14	0.937	19	1001	1.5	5.7	1.7	28	1144	1.1
2506.3	0.393	18	1.0	19	1068	1.7	5.7	1.9	29	1221	1.2
2507.0	0.393	17	1.1	17	1026	1.8	5.7	2.1	25	1173	1.3
2507.7	0.393	15	0.913	16	900	2.0	5.7	1.7	24	1029	1.5
2508.3	0.393	19	0.881	17	984	1.4	5.7	1.6	26	1126	1.0
2509.0	0.446	18	0.853	14	977	1.4	6.4	1.6	22	1117	1.0
2509.7	0.393	17	1.1	15	966	0.984	5.7	2.1	23	1105	0.718
2510.4	0.597	18	0.988	17	892	1.3	8.6	1.8	26	1020	0.984
2511.1	0.393	17	1.1	17	917	1.6	5.7	2.0	25	1049	1.2
2511.8	0.393	18	0.837	16	864	1.2	5.7	1.5	24	987	0.867
2512.5	0.393	19	0.926	16	886	1.1	5.7	1.7	24	1013	0.826
2513.2	0.393	19	0.515	12	850	0.584	5.7	0.939	18	972	0.426
2513.9	0.393	16	0.861	16	812	1.2	5.7	1.6	24	929	0.864
2514.6	0.393	19	0.549	18	837	1.1	5.7	1.0	28	958	0.833
2515.3	0.393	19	0.516	16	846	0.390	5.7	0.942	25	968	0.285
2516.0	0.393	18	0.535	13	851	1.9	5.7	0.976	20	973	1.4
2516.7	0.393	20	1.0	13	802	0.795	5.7	1.9	19	917	0.580
2517.4	0.393	18	0.654	13	919	0.739	5.7	1.2	19	1051	0.539
2518.1	0.559	19	0.747	15	831	1.5	8.1	1.4	24	950	1.1
2518.8	0.393	18	0.630	14	807	0.883	5.7	1.1	21	923	0.644
2519.5	0.393	17	0.526	12	877	0.381	5.7	0.959	18	1003	0.278
2520.2	0.393	20	0.629	13	773	0.980	5.7	1.1	21	884	0.715
2520.9	0.393	18	0.429	13	778	1.4	5.7	0.782	20	890	1.0
2521.6	0.393	18	0.595	12	749	0.598	5.7	1.1	19	856	0.437
2522.3	0.604	17	0.362	12	836	0.682	8.7	0.660	18	956	0.498
2523.0	0.393	17	0.475	11	786	0.987	5.7	0.866	16	899	0.720
2523.7	0.393	18	0.373	12	815	1.4	5.7	0.679	19	932	1.0
2524.4	0.393	18	0.392	11	747	1.0	5.7	0.715	17	854	0.756
2525.1	0.393	19	0.576	12	782	0.675	5.7	1.0	18	895	0.492
2525.8	0.393	18	0.601	10.0	834	0.872	5.7	1.1	15	954	0.637
2526.5	0.508	20	0.595	10	937	1.5	7.3	1.1	15	1072	1.1
2527.2	0.574	18	0.448	12	868	1.4	8.3	0.818	18	992	1.0
2527.9	0.468	19	0.672	9.3	823	1.4	6.7	1.2	14	941	1.0
2528.6	0.668	19	0.257	9.3	793	0.915	9.6	0.469	14	907	0.667
2529.3	0.711	17	0.516	8.0	911	1.3	10	0.940	12	1042	0.924
2530.0	0.503	19	0.479	8.3	930	1.6	7.3	0.873	13	1063	1.2
2530.7	0.552	19	0.385	6.8	880	0.979	8.0	0.703	10	1006	0.714
2531.4	0.393	19	0.618	8.7	980	1.2	5.7	1.1	13	1121	0.842
2532.1	0.505	18	0.474	6.4	953	0.627	7.3	0.864	9.8	1090	0.457
2532.8	0.831	18	0.512	6.0	1117	1.2	12	0.934	9.2	1277	0.880
2533.5	0.393	17	0.519	7.3	935	1.3	5.7	0.946	11	1070	0.977
2534.1	0.514	17	0.482	4.4	994	1.1	7.4	0.878	6.8	1137	0.797
2534.8	0.400	19	0.644	5.4	1149	1.3	5.8	1.2	8.3	1314	0.951
2535.5	0.585	18	0.606	5.1	1044	1.5	8.4	1.1	7.8	1194	1.1
2536.2	0.393	18	0.638	4.7	1193	2.0	5.7	1.2	7.3	1364	1.4
2536.9	0.956	18	1.0	4.5	1182	1.1	14	1.8	6.9	1351	0.806
2537.6	0.833	20	0.748	4.6	1141	1.7	12	1.4	7.0	1305	1.2
2538.3	0.542	16	0.487	3.5	1179	0.864	7.8	0.887	5.4	1348	0.631
2539.0	0.469	18	0.508	3.1	1035	1.8	6.8	0.926	4.8	1183	1.3
2539.7	0.650	16	0.632	5.5	1008	1.2	9.4	1.2	8.4	1153	0.844
2540.4	0.640	18	0.566	4.5	1074	1.1	9.2	1.0	6.9	1228	0.831
2541.1	0.648	17	0.530	6.7	1190	1.4	9.4	0.966	10	1361	1.1

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2541.8	0.393	16	0.570	4.3	911	1.1	5.7	1.0	6.5	1042	0.787
2542.5	0.857	17	0.416	3.8	1038	1.5	12	0.759	5.8	1187	1.1
2543.2	0.677	16	0.631	3.6	992	1.6	9.8	1.2	5.6	1135	1.1
2543.9	0.687	18	0.641	4.3	1133	1.8	9.9	1.2	6.5	1296	1.3
2544.6	1.1	17	0.491	3.5	1051	1.9	16	0.896	5.4	1202	1.4
2545.3	0.869	16	0.732	3.8	1060	1.8	13	1.3	5.9	1212	1.3
2546.0	0.764	18	0.427	2.9	1230	1.8	11	0.779	4.5	1407	1.3
2546.7	0.393	17	0.840	3.7	1144	1.9	5.7	1.5	5.7	1308	1.4
2547.4	0.486	18	0.613	4.6	1111	1.4	7.0	1.1	7.1	1270	1.0
2548.1	0.916	16	0.605	3.8	1095	2.5	13	1.1	5.9	1252	1.8
2548.8	0.647	15	0.529	5.5	1126	2.0	9.3	0.965	8.4	1288	1.5
2549.5	0.576	15	0.827	5.5	1120	2.0	8.3	1.5	8.4	1281	1.4
2550.2	0.393	15	0.400	4.6	1040	2.1	5.7	0.730	7.0	1189	1.5
2550.9	0.790	17	0.752	5.2	1169	2.3	11	1.4	8.0	1336	1.6
2551.6	0.557	16	0.557	3.5	1074	2.3	8.0	1.0	5.4	1228	1.7
2552.3	0.495	14	0.484	3.0	1100	2.5	7.2	0.883	4.6	1258	1.9
2553.0	0.427	15	0.794	4.2	1266	2.9	6.2	1.4	6.4	1448	2.1
2553.7	0.609	19	0.654	5.6	1357	2.2	8.8	1.2	8.5	1551	1.6
2554.4	0.492	17	0.750	5.2	1148	3.3	7.1	1.4	8.0	1313	2.4
2555.1	0.575	14	0.847	4.9	1297	2.7	8.3	1.5	7.5	1483	2.0
2555.8	0.654	16	0.863	5.2	1470	2.6	9.4	1.6	8.0	1681	1.9
2556.5	0.817	19	1.1	4.9	1456	2.8	12	2.1	7.5	1665	2.0
2557.2	0.393	17	1.3	7.8	1512	2.4	5.7	2.3	12	1729	1.8
2557.9	0.812	16	0.992	7.6	1394	3.0	12	1.8	12	1594	2.2
2558.6	0.393	13	1.0	4.7	1484	3.2	5.7	1.9	7.2	1697	2.3
2559.3	0.393	15	1.5	7.0	1737	3.0	5.7	2.8	11	1987	2.2
2559.9	0.393	16	1.1	7.3	1558	2.6	5.7	2.0	11	1781	1.9
2560.6	0.796	14	1.2	5.6	1528	3.4	11	2.2	8.6	1747	2.5
2561.3	0.434	15	0.959	6.7	1603	1.8	6.3	1.7	10	1833	1.3
2562.0	0.393	13	1.3	7.2	1573	3.8	5.7	2.4	11	1798	2.8
2562.7	0.393	15	1.2	7.6	1839	2.9	5.7	2.1	12	2103	2.1
2563.4	0.397	16	1.4	8.5	1761	2.6	5.7	2.5	13	2014	1.9
2564.1	0.393	17	1.0	7.2	1693	2.7	5.7	1.9	11	1936	2.0
2564.8	0.393	16	1.2	10.0	1687	2.5	5.7	2.2	15	1930	1.8
2565.5	0.393	15	1.3	9.2	1583	2.4	5.7	2.4	14	1810	1.8
2566.2	0.393	14	1.4	6.9	1708	2.1	5.7	2.6	11	1953	1.5
2566.9	0.393	16	1.5	6.8	1597	2.1	5.7	2.7	10	1826	1.5
2567.6	0.393	18	0.994	6.5	1626	2.6	5.7	1.8	10	1859	1.9
2568.3	0.393	17	1.5	11	1839	2.5	5.7	2.7	17	2103	1.9
2569.0	0.393	18	1.3	8.6	1689	2.9	5.7	2.5	13	1931	2.1
2569.7	0.393	20	1.2	8.5	1635	2.4	5.7	2.2	13	1869	1.8
2570.4	0.393	18	1.1	9.1	1468	1.9	5.7	1.9	14	1679	1.4
2571.1	0.393	19	1.4	11	1417	2.1	5.7	2.6	16	1620	1.5
2571.8	0.393	15	0.996	7.8	1435	2.9	5.7	1.8	12	1641	2.1
2572.5	0.393	13	0.977	8.5	1281	2.9	5.7	1.8	13	1464	2.1
2573.2	0.393	15	1.1	8.5	1294	3.5	5.7	1.9	13	1480	2.6
2573.9	0.393	19	1.2	9.6	1313	1.9	5.7	2.2	15	1502	1.4
2574.6	0.393	19	0.813	8.9	1114	2.6	5.7	1.5	14	1274	1.9
2575.3	0.393	15	0.882	5.2	1166	2.5	5.7	1.6	8.0	1333	1.9
2576.0	0.393	18	0.984	9.8	1067	2.1	5.7	1.8	15	1220	1.5
2576.7	0.393	15	0.776	7.2	1131	2.1	5.7	1.4	11	1294	1.5
2577.4	0.393	17	0.857	11	1082	1.8	5.7	1.6	17	1237	1.3
2578.1	0.393	18	0.607	9.5	975	2.0	5.7	1.1	15	1115	1.4
2578.8	0.393	17	0.638	8.0	1068	2.2	5.7	1.2	12	1221	1.6
2579.5	0.393	19	0.472	9.8	1049	1.8	5.7	0.860	15	1199	1.3
2580.2	0.393	24	0.535	6.9	994	2.3	5.7	0.975	11	1137	1.7
2580.9	0.393	24	0.519	7.9	918	2.4	5.7	0.947	12	1049	1.7
2581.6	0.393	26	0.569	8.4	945	2.0	5.7	1.0	13	1081	1.5
2582.3	0.393	42	0.609	7.0	858	2.9	5.7	1.1	11	981	2.1
2583.0	0.532	47	0.499	5.5	939	1.3	7.7	0.910	8.4	1073	0.964
2583.7	0.393	48	0.383	5.7	921	2.4	5.7	0.698	8.7	1054	1.7
2584.4	0.393	50	0.539	5.9	718	1.7	5.7	0.983	9.0	821	1.2
2585.1	0.393	75	0.297	7.0	900	2.6	5.7	0.542	11	1029	1.9
2585.7	0.393	90	0.682	6.6	876	2.4	5.7	1.2	10	1002	1.8
2586.4	0.393	106	0.431	7.1	811	2.4	5.7	0.786	11	928	1.8
2587.1	0.393	136	0.660	5.6	730	2.9	5.7	1.2	8.6	835	2.1
2587.8	0.393	162	0.916	7.5	793	3.5	5.7	1.7	11	907	2.5
2588.5	0.393	160	0.789	7.2	789	3.3	5.7	1.4	11	903	2.4
2589.2	0.393	176	0.788	5.9	877	3.1	5.7	1.4	9.0	1003	2.3
2589.9	0.393	152	0.758	5.4	797	3.3	5.7	1.4	8.3	911	2.4
2590.6	0.393	157	0.817	3.6	706	2.4	5.7	1.5	5.5	807	1.8
2591.3	0.393	164	0.554	5.1	785	2.0	5.7	1.0	7.8	898	1.4
2592.0	0.393	185	0.704	5.1	747	3.2	5.7	1.3	7.9	854	2.3
2592.7	0.393	183	0.976	3.5	883	3.4	5.7	1.8	5.3	1009	2.5
2593.4	0.393	203	0.821	7.4	732	3.6	5.7	1.5	11	837	2.6
2594.1	0.393	220	0.787	7.2	952	3.7	5.7	1.4	11	1088	2.7
2594.8	0.393	215	0.619	6.0	684	3.3	5.7	1.1	9.2	782	2.4
2595.5	0.393	192	0.832	5.2	846	2.5	5.7	1.5	7.9	968	1.8
2596.2	0.393	196	0.951	5.5	709	3.7	5.7	1.7	8.4	811	2.7
2596.9	0.534	219	0.673	8.0	743	2.4	7.7	1.2	12	850	1.8
2597.6	0.393	241	0.913	7.6	819	3.0	5.7	1.7	12	937	2.2

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2598.3	0.393	211	0.902	10	777	3.5	5.7	1.6	16	888	2.5
2599.0	0.393	207	1.0	12	779	3.5	5.7	1.9	18	891	2.6
2599.7	0.393	175	0.563	6.4	675	3.0	5.7	1.0	9.8	772	2.2
2600.4	0.393	207	0.866	6.3	664	3.1	5.7	1.6	9.6	759	2.2
2601.1	0.393	270	1.0	7.1	777	4.1	5.7	1.9	11	888	3.0
2601.8	0.393	215	0.855	7.2	731	2.3	5.7	1.6	11	836	1.7
2602.5	0.393	278	1.1	10	655	3.7	5.7	2.0	16	749	2.7
2603.2	0.393	265	0.677	9.3	897	3.1	5.7	1.2	14	1026	2.3
2603.9	0.393	205	1.1	11	741	3.4	5.7	2.0	17	847	2.5
2604.6	0.393	284	1.4	8.5	861	4.4	5.7	2.5	13	984	3.2
2605.3	0.393	274	0.841	5.5	693	3.6	5.7	1.5	8.4	793	2.6
2606.0	1.7	272	1.1	12	1125	2.1	25	1.9	18	1287	1.6
2606.7	0.393	318	0.936	6.2	1061	4.0	5.7	1.7	9.6	1213	2.9
2607.4	0.393	279	0.792	12	689	7.1	5.7	1.4	18	788	5.1
2608.1	0.393	258	0.807	6.1	754	2.5	5.7	1.5	9.3	862	1.9
2608.8	0.393	245	0.994	12	744	2.9	5.7	1.8	18	851	2.2
2609.5	0.393	154	1.8	5.4	456	3.6	5.7	3.2	8.3	521	2.6
2610.2	0.393	267	1.4	8.4	1081	3.4	5.7	2.5	13	1236	2.5
2610.9	0.393	260	1.1	9.4	874	2.2	5.7	1.9	14	1000	1.6
2611.6	0.393	304	2.0	11	885	4.8	5.7	3.7	18	1012	3.5
2612.2	0.393	285	1.6	14	789	3.8	5.7	2.8	21	902	2.8
2612.9	0.393	265	1.6	11	848	4.3	5.7	3.0	16	970	3.1
2613.6	0.393	260	0.781	7.0	932	4.8	5.7	1.4	11	1066	3.5
2614.3	0.393	274	1.3	16	795	4.3	5.7	2.3	25	909	3.1
2615.0	0.393	269	2.4	12	1325	3.4	5.7	4.3	18	1515	2.5
2615.7	0.953	240	0.659	18	880	4.8	14	1.2	27	1007	3.5
2616.4	0.393	289	1.6	12	983	6.1	5.7	2.9	18	1124	4.4
2617.1	0.393	234	0.764	15	594	4.3	5.7	1.4	24	679	3.2
2617.8	0.413	230	0.753	16	590	0.003	6.0	1.4	25	674	0.002
2618.5	0.393	298	0.971	19	1771	0.967	5.7	1.8	29	2026	0.705
2619.2	0.661	371	0.984	8.9	698	3.9	9.5	1.8	14	798	2.9
2619.9	0.393	253	0.789	7.9	894	2.0	5.7	1.4	12	1022	1.5

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
0.5	0.393	128	1.6	32	520	0.003	5.7	2.9	49	595	0.002
1.2	0.393	127	1.7	7.7	495	0.003	5.7	3.1	12	566	0.002
1.9	0.982	111	0.079	3.5	422	0.003	14	0.144	5.3	483	0.002
2.6	2.6	118	1.1	9.3	436	0.003	38	2.1	14	499	0.002
3.3	7.0	100	2.3	14	503	0.003	101	4.1	21	575	0.002
4.0	1.3	117	3.7	17	545	3.8	19	6.8	26	623	2.8
4.7	1.1	122	1.5	13	506	0.003	16	2.7	20	578	0.002
5.3	2.1	114	0.881	4.2	446	0.939	30	1.6	6.5	510	0.685
6.0	0.393	95	0.644	8.6	386	0.003	5.7	1.2	13	441	0.002
6.7	0.393	83	1.0	2.8	382	0.617	5.7	1.8	4.3	437	0.450
7.4	1.1	118	0.923	9.2	458	3.3	16	1.7	14	524	2.4
8.1	0.393	105	1.6	8.0	424	1.8	5.7	2.9	12	485	1.3
8.8	2.3	102	2.1	10	495	2.4	33	3.9	16	566	1.7
9.5	2.3	83	1.7	10	466	1.4	34	3.1	16	533	1.0
10.2	0.393	85	0.908	7.2	444	0.003	5.7	1.7	11	507	0.002
10.9	0.435	128	0.286	8.8	456	0.811	6.3	0.521	14	521	0.592
11.6	0.393	99	0.808	6.9	458	2.4	5.7	1.5	11	523	1.7
12.3	0.393	103	0.222	5.2	431	0.629	5.7	0.404	7.9	493	0.459
13.0	0.393	84	0.660	6.4	453	0.787	5.7	1.2	9.8	518	0.574
13.7	0.393	80	0.605	7.5	469	1.9	5.7	1.1	11	537	1.4
14.4	0.393	115	1.2	5.2	502	1.7	5.7	2.2	8.0	574	1.2
15.1	0.393	120	1.3	5.1	446	1.2	5.7	2.5	7.9	510	0.866
15.8	0.393	99	0.359	7.1	425	0.783	5.7	0.655	11	486	0.571
16.5	0.393	72	0.373	4.4	441	0.979	5.7	0.680	6.7	504	0.714
17.2	0.483	79	0.803	4.7	511	1.0	7.0	1.5	7.3	584	0.752
17.9	0.393	102	0.478	7.4	564	1.3	5.7	0.872	11	645	0.973
18.6	0.393	104	0.642	4.5	425	1.2	5.7	1.2	6.9	486	0.901
19.3	0.393	86	0.175	3.7	390	1.2	5.7	0.319	5.6	446	0.887
20.0	0.901	76	0.590	2.8	455	0.545	13	1.1	4.2	520	0.398
20.7	0.393	67	0.490	3.7	604	1.6	5.7	0.894	5.7	691	1.2
21.4	0.393	89	0.597	4.7	434	1.7	5.7	1.1	7.3	496	1.2
22.1	0.393	82	0.828	3.7	453	1.6	5.7	1.5	5.7	518	1.2
22.8	0.547	70	0.454	5.2	457	0.748	7.9	0.828	7.9	523	0.545
23.5	0.393	73	0.314	7.9	632	1.4	5.7	0.573	12	722	1.0
24.2	0.541	65	0.424	3.4	489	1.3	7.8	0.772	5.2	559	0.960
24.9	0.393	67	0.204	3.6	473	0.222	5.7	0.373	5.5	541	0.162
25.6	0.393	62	0.550	3.0	506	1.3	5.7	1.0	4.5	579	0.965
26.3	0.393	60	0.380	3.6	486	1.2	5.7	0.694	5.5	556	0.895
27.0	0.393	67	0.282	2.7	568	1.2	5.7	0.514	4.2	649	0.902
27.7	0.393	64	0.308	2.2	507	1.5	5.7	0.561	3.4	580	1.1
28.4	0.436	64	0.852	2.5	580	1.9	6.3	1.6	3.8	663	1.4
29.1	0.393	59	0.304	2.0	481	1.3	5.7	0.554	3.1	551	0.975
29.8	0.393	54	0.367	3.5	557	1.7	5.7	0.670	5.4	637	1.3
30.5	0.393	63	0.349	4.0	522	1.2	5.7	0.637	6.1	597	0.911
31.2	0.393	61	0.436	4.7	528	0.532	5.7	0.795	7.2	604	0.388
31.8	0.393	55	0.284	4.4	567	1.9	5.7	0.517	6.7	648	1.4
32.5	0.440	50	0.365	3.4	575	2.2	6.4	0.666	5.2	657	1.6
33.2	0.393	54	0.553	4.4	551	1.8	5.7	1.0	6.7	630	1.3
33.9	0.393	49	0.311	4.3	630	1.5	5.7	0.566	6.6	720	1.1
34.6	0.393	51	0.318	4.7	664	2.0	5.7	0.581	7.2	759	1.5
35.3	0.393	48	0.590	5.8	661	1.3	5.7	1.1	8.8	756	0.984
36.0	0.476	42	0.518	2.1	785	1.5	6.9	0.944	3.2	898	1.1
36.7	0.393	47	0.457	2.4	767	1.2	5.7	0.833	3.7	878	0.881
37.4	0.393	39	0.671	6.2	743	1.4	5.7	1.2	9.4	850	1.0
38.1	0.393	47	0.651	6.3	823	2.6	5.7	1.2	9.6	942	1.9
38.8	0.393	43	0.818	4.6	849	2.5	5.7	1.5	7.0	971	1.9
39.5	0.597	39	0.516	7.6	937	2.3	8.6	0.941	12	1071	1.7
40.2	0.393	35	0.473	7.2	874	2.4	5.7	0.863	11	1000	1.7
40.9	0.492	41	0.903	7.3	928	3.3	7.1	1.6	11	1061	2.4
41.6	0.393	39	0.929	8.9	977	2.2	5.7	1.7	14	1118	1.6
42.3	0.393	42	1.0	9.6	989	2.4	5.7	1.8	15	1131	1.8
43.0	0.432	42	1.1	11	1173	3.6	6.2	2.0	17	1341	2.6
43.7	0.438	48	1.3	13	1056	2.3	6.3	2.4	20	1208	1.7
44.4	0.393	35	0.387	11	1039	2.6	5.7	0.705	17	1188	1.9
45.1	0.393	38	1.1	17	1159	2.4	5.7	2.0	25	1326	1.8
45.8	0.393	36	1.0	14	1145	2.9	5.7	1.8	22	1309	2.1
46.5	0.393	36	1.1	14	1138	3.1	5.7	2.0	21	1301	2.3
47.2	0.570	34	1.1	14	1254	2.1	8.2	2.1	21	1434	1.5
47.9	0.393	37	1.3	16	1270	2.8	5.7	2.4	24	1453	2.0
48.6	0.448	34	1.1	17	1272	3.4	6.5	2.0	26	1455	2.5
49.3	0.393	42	1.4	17	1368	2.4	5.7	2.5	26	1565	1.8
50.0	0.393	35	0.930	17	1353	2.7	5.7	1.7	26	1547	2.0
50.7	0.487	37	0.738	16	1357	2.6	7.0	1.3	24	1551	1.9
51.4	0.393	37	0.978	13	1473	2.8	5.7	1.8	20	1685	2.1
52.1	0.393	31	0.851	16	1407	2.7	5.7	1.6	25	1609	1.9
52.8	0.393	34	1.4	16	1484	2.9	5.7	2.5	25	1697	2.1
53.5	0.603	26	1.0	15	1503	3.4	8.7	1.9	23	1719	2.5
54.2	0.713	30	1.6	15	1472	2.5	10	2.9	23	1684	1.8
54.9	0.884	26	1.4	16	1482	4.6	13	2.6	24	1694	3.4
55.6	0.393	26	1.5	17	1497	2.4	5.7	2.7	26	1711	1.8
56.3	0.719	26	1.5	21	1484	2.8	10	2.7	32	1697	2.1

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Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
57.0	0.393	27	1.5	26	1555	3.1	5.7	2.7	40	1778	2.3
57.6	1.1	25	1.1	21	1433	2.3	16	2.1	33	1639	1.7
58.3	0.393	25	1.4	19	1427	2.7	5.7	2.6	30	1631	2.0
59.0	0.737	24	1.3	21	1432	2.6	11	2.4	32	1638	1.9
59.7	0.868	24	1.7	24	1442	3.0	13	3.1	36	1649	2.2
60.4	0.514	26	1.6	22	1555	2.2	7.4	3.0	34	1778	1.6
61.1	0.456	22	1.5	20	1481	2.7	6.6	2.8	30	1693	2.0
61.8	0.393	23	1.4	23	1476	2.6	5.7	2.6	35	1688	1.9
62.5	1.5	25	2.0	20	1427	2.2	22	3.7	30	1632	1.6
63.2	0.977	20	1.3	19	1282	3.7	14	2.4	29	1466	2.7
63.9	1.0	18	1.9	22	1301	3.4	14	3.5	33	1488	2.5
64.6	0.940	21	1.4	20	1436	2.7	14	2.6	31	1642	2.0
65.3	0.776	23	1.3	22	1308	2.7	11	2.3	34	1496	2.0
66.0	0.880	19	1.2	22	1307	2.3	13	2.2	33	1494	1.7
66.7	0.737	21	1.5	26	1705	3.3	11	2.8	40	1950	2.4
67.4	1.1	23	2.1	20	1317	2.3	16	3.7	31	1506	1.7
68.1	1.2	21	1.5	23	1345	1.8	17	2.7	36	1538	1.3
68.8	0.686	17	0.990	18	1254	2.8	9.9	1.8	28	1434	2.1
69.5	0.562	18	0.951	24	1322	2.7	8.1	1.7	37	1512	1.9
70.2	0.871	18	1.3	22	1326	2.6	13	2.3	34	1517	1.9
70.9	0.769	20	1.1	21	1246	3.2	11	1.9	32	1425	2.3
71.6	1.3	18	1.5	25	1200	3.5	19	2.7	38	1372	2.6
72.3	0.810	19	0.906	20	1121	2.6	12	1.7	30	1282	1.9
73.0	0.865	21	1.2	20	1184	2.3	12	2.2	30	1354	1.7
73.7	1.0	16	0.985	19	1022	3.1	15	1.8	29	1169	2.2
74.4	1.1	19	0.738	19	1085	4.1	16	1.3	30	1241	3.0
75.1	0.910	18	0.983	20	1154	2.6	13	1.8	31	1320	1.9
75.8	1.3	19	0.812	18	1041	3.1	19	1.5	27	1191	2.3
76.5	0.833	16	1.1	17	960	2.1	12	1.9	26	1098	1.6
77.2	1.1	18	1.0	19	1123	3.3	16	1.8	29	1284	2.4
77.9	1.0	21	0.512	20	1014	1.8	15	0.935	30	1160	1.3
78.6	0.410	19	0.805	18	905	1.6	5.9	1.5	28	1035	1.2
79.3	1.0	18	0.821	17	853	2.4	15	1.5	26	976	1.8
80.0	1.1	19	0.974	22	1048	2.3	16	1.8	34	1199	1.7
80.7	0.584	19	0.843	20	848	3.0	8.4	1.5	31	970	2.2
81.4	0.832	17	0.837	20	850	2.6	12	1.5	30	972	1.9
82.1	0.714	18	0.841	20	891	2.8	10	1.5	30	1019	2.0
82.8	0.393	20	0.830	25	915	4.2	5.7	1.5	39	1046	3.0
83.5	0.931	21	0.695	28	1037	3.1	13	1.3	43	1186	2.2
84.1	0.393	18	0.863	27	1013	3.1	5.7	1.6	41	1158	2.3
84.8	0.754	19	0.737	21	858	2.0	11	1.3	33	981	1.4
85.5	1.1	18	0.840	24	952	3.1	16	1.5	36	1088	2.2
86.2	0.957	17	0.932	24	776	3.0	14	1.7	36	887	2.2
86.9	0.393	18	1.2	26	979	3.2	5.7	2.2	39	1120	2.4
87.6	0.523	18	1.1	26	919	2.6	7.5	2.0	41	1050	1.9
88.3	0.710	18	0.981	25	971	1.9	10	1.8	39	1110	1.4
89.0	0.656	21	1.2	29	1101	2.3	9.5	2.2	44	1259	1.7
89.7	0.393	19	1.1	28	1109	2.0	5.7	2.0	43	1268	1.5
90.4	0.823	22	1.5	31	1019	3.0	12	2.7	47	1166	2.2
91.1	0.477	18	1.2	29	1063	2.3	6.9	2.2	45	1216	1.7
91.8	0.393	18	1.8	32	1121	3.9	5.7	3.3	49	1282	2.9
92.5	0.393	18	1.4	31	1366	3.7	5.7	2.5	48	1562	2.7
93.2	0.393	20	1.7	30	1212	2.2	5.7	3.1	46	1386	1.6
93.9	0.747	21	1.6	34	1355	3.2	11	3.0	53	1549	2.4
94.6	1.1	21	1.8	37	1181	2.1	15	3.3	56	1351	1.5
95.3	0.425	21	1.8	37	1355	1.9	6.1	3.2	57	1550	1.4
96.0	0.505	20	2.1	36	1358	3.1	7.3	3.8	55	1552	2.2
96.7	0.768	21	2.4	37	1463	4.1	11	4.3	57	1673	3.0
97.4	0.393	19	2.3	34	1374	2.8	5.7	4.2	51	1572	2.1
98.1	0.393	21	2.1	37	1248	2.3	5.7	3.8	57	1427	1.6
98.8	0.997	23	2.1	40	1424	3.1	14	3.8	62	1629	2.2
99.5	0.737	23	2.7	46	1640	3.0	11	5.0	71	1875	2.2
100.2	0.393	23	2.6	43	1480	2.2	5.7	4.7	66	1692	1.6
100.9	0.393	23	2.4	39	1422	3.0	5.7	4.4	60	1627	2.2
101.6	0.393	21	3.2	41	1514	2.6	5.7	5.8	63	1732	1.9
102.3	0.393	25	3.0	46	1728	3.3	5.7	5.5	71	1976	2.4
103.0	0.822	23	2.7	41	1664	2.6	12	5.0	63	1903	1.9
103.7	1.3	25	3.2	49	1611	2.3	18	5.8	75	1843	1.7
104.4	0.749	25	3.6	46	1786	2.4	11	6.5	71	2042	1.8
105.1	0.962	22	4.0	47	1568	2.8	14	7.2	72	1793	2.0
105.8	0.654	21	3.8	46	1609	3.5	9.4	6.9	71	1840	2.5
106.5	1.0	22	3.4	40	1474	2.6	15	6.2	62	1686	1.9
107.2	1.3	25	4.1	54	1580	3.2	19	7.5	83	1807	2.3
107.9	1.2	21	4.1	48	1650	3.4	18	7.4	74	1887	2.5
108.6	0.729	23	4.3	60	1680	3.6	11	7.8	91	1921	2.6
109.3	1.5	23	4.2	54	1676	3.3	22	7.7	82	1916	2.4
110.0	1.3	25	4.2	54	1866	3.9	19	7.6	83	2134	2.8
110.6	0.611	28	4.8	63	1910	4.8	8.8	8.8	96	2184	3.5
111.3	0.977	24	4.8	55	1862	4.1	14	8.8	84	2129	3.0
112.0	2.2	25	4.4	52	1823	3.6	32	8.1	80	2085	2.6
112.7	1.6	24	4.7	56	1776	4.0	24	8.5	85	2031	2.9

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
113.4	1.6	22	5.7	53	1718	4.4	23	10	81	1964	3.2
114.1	1.5	23	4.7	56	1589	3.4	22	8.5	86	1817	2.5
114.8	1.8	25	4.8	55	1674	3.4	26	8.8	85	1914	2.5
115.5	1.3	25	4.9	64	1774	3.1	18	8.9	98	2029	2.3
116.2	1.8	23	5.5	58	1703	3.0	26	10	89	1948	2.2
116.9	1.5	24	5.8	58	1561	3.9	22	11	89	1785	2.8
117.6	2.9	26	5.7	67	1937	3.5	41	10	102	2215	2.5
118.3	2.5	22	5.0	55	1552	3.5	37	9.1	84	1775	2.5
119.0	1.6	25	6.2	58	1627	4.4	24	11	89	1861	3.2
119.7	2.8	23	6.4	59	1708	2.5	40	12	90	1953	1.8
120.4	4.7	22	6.1	51	1468	4.4	68	11	79	1679	3.2
121.1	3.4	23	5.7	61	1746	3.6	48	10	94	1997	2.7
121.8	3.7	24	5.6	50	1459	3.2	54	10	76	1669	2.4
122.5	4.4	23	5.7	51	1585	3.3	64	10	79	1813	2.4
123.2	5.3	25	5.5	59	1512	4.5	76	10.0	91	1729	3.3
123.9	5.4	23	5.4	44	1437	4.8	78	9.9	67	1643	3.5
124.6	6.7	21	5.3	50	1531	5.3	97	9.6	76	1751	3.8
125.3	6.4	23	5.2	46	1536	3.2	93	9.4	71	1756	2.3
126.0	6.8	23	5.1	52	1710	4.9	98	9.3	80	1955	3.6
126.7	6.3	21	4.4	45	1353	3.5	92	8.0	68	1547	2.6
127.4	8.4	22	5.1	45	1345	5.0	122	9.3	69	1537	3.6
128.1	8.1	20	4.6	46	1473	4.1	118	8.4	70	1685	3.0
128.8	8.3	20	4.2	40	1201	2.9	119	7.6	62	1373	2.1
129.5	7.8	20	4.2	38	1195	4.1	113	7.6	58	1367	3.0
130.2	7.7	18	3.9	43	1439	3.5	111	7.1	65	1646	2.6
130.9	6.8	19	3.3	39	1167	3.1	98	6.0	60	1334	2.3
131.6	6.6	21	3.2	39	1084	4.3	95	5.8	60	1240	3.1
132.3	8.1	21	3.2	32	1186	4.1	117	5.9	49	1357	3.0
133.0	5.7	18	2.7	35	977	4.2	82	4.9	53	1118	3.1
133.7	7.1	18	2.9	37	1219	4.2	102	5.3	57	1394	3.0
134.4	5.3	17	3.1	33	1018	2.5	76	5.7	50	1164	1.8
135.1	4.6	16	3.0	34	1026	3.1	67	5.4	52	1173	2.2
135.8	5.0	16	2.6	35	932	2.7	72	4.8	54	1065	1.9
136.4	5.7	15	2.3	33	1016	2.3	83	4.2	51	1162	1.7
137.1	5.4	17	2.7	31	1006	1.5	78	5.0	48	1150	1.1
137.8	4.1	15	1.9	29	1003	3.4	59	3.5	45	1147	2.5
138.5	3.4	17	1.4	27	1099	2.2	49	2.6	42	1256	1.6
139.2	4.7	13	1.6	24	852	2.0	67	2.9	37	974	1.4
139.9	4.3	15	1.4	20	913	3.9	62	2.5	30	1044	2.8
140.6	4.0	14	1.8	26	1024	1.8	57	3.3	40	1171	1.3
141.3	3.7	14	1.5	22	893	2.6	53	2.7	34	1021	1.9
142.0	4.0	16	1.4	23	907	1.9	58	2.6	35	1037	1.4
142.7	2.8	13	1.2	20	1020	2.8	41	2.2	31	1167	2.1
143.4	3.2	14	0.949	22	847	2.0	47	1.7	34	969	1.5
144.1	3.5	15	0.936	20	873	2.3	51	1.7	31	998	1.7
144.8	3.2	15	0.865	21	862	2.6	46	1.6	33	986	1.9
145.5	2.5	14	0.763	22	889	1.7	36	1.4	34	1016	1.2
146.2	2.0	14	0.784	20	841	2.1	28	1.4	31	962	1.5
146.9	2.2	14	0.918	19	848	2.0	32	1.7	29	970	1.4
147.6	0.872	14	0.438	23	833	2.6	13	0.798	35	952	1.9
148.3	1.1	15	0.646	22	909	2.0	16	1.2	34	1039	1.4
149.0	0.476	19	1.0	24	998	2.7	6.9	1.8	36	1141	2.0
149.7	1.4	14	0.313	22	848	2.5	21	0.571	34	970	1.8
150.4	2.0	16	0.451	23	846	2.3	28	0.822	36	968	1.7
151.1	0.940	13	0.530	24	913	1.8	14	0.967	38	1044	1.3
151.8	1.2	15	0.717	29	952	2.2	18	1.3	45	1088	1.6
152.5	0.808	18	1.0	26	937	2.9	12	1.9	40	1072	2.1
153.2	1.2	16	0.985	28	925	2.8	18	1.8	42	1058	2.0
153.9	1.7	18	0.900	32	1053	1.9	24	1.6	49	1204	1.4
154.6	0.873	14	0.831	31	1051	2.9	13	1.5	47	1202	2.1
155.3	1.1	14	1.4	34	1101	3.3	16	2.5	53	1259	2.4
156.0	1.2	15	0.888	35	1125	2.8	17	1.6	53	1286	2.1
156.7	0.711	16	1.0	33	1066	3.0	10	1.8	50	1219	2.2
157.4	0.615	18	1.6	30	1149	3.5	8.9	2.9	46	1314	2.5
158.1	0.646	18	1.0	31	1139	2.3	9.3	1.9	47	1302	1.6
158.8	0.661	13	1.5	30	1091	2.3	9.5	2.8	47	1248	1.7
159.5	1.1	19	1.4	32	1175	3.0	16	2.6	49	1343	2.2
160.2	0.430	17	0.866	34	1192	3.0	6.2	1.6	52	1363	2.2
160.9	1.7	16	0.921	27	1219	2.9	24	1.7	42	1394	2.1
161.6	1.0	17	1.4	36	1371	1.8	15	2.5	55	1568	1.3
162.3	0.536	16	0.907	33	1335	3.5	7.7	1.7	51	1527	2.6
162.9	0.519	16	1.7	34	1413	2.4	7.5	3.1	52	1616	1.7
163.6	0.731	19	1.3	37	1314	2.9	11	2.4	57	1503	2.1
164.3	1.0	15	1.2	35	1371	3.4	15	2.1	54	1568	2.5
165.0	0.689	18	1.5	35	1309	3.4	10.0	2.7	54	1497	2.5
165.7	0.548	18	1.1	36	1365	2.7	7.9	2.0	54	1561	2.0
166.4	0.982	17	1.5	43	1508	3.7	14	2.8	66	1724	2.7
167.1	1.1	15	1.2	36	1448	3.5	16	2.3	55	1656	2.6
167.8	1.0	17	1.1	35	1576	3.4	15	1.9	54	1802	2.4
168.5	0.782	18	0.782	40	1517	5.1	11	1.4	62	1735	3.7
169.2	0.768	20	1.1	42	1514	4.1	11	2.1	65	1731	3.0

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
169.9	0.523	19	0.768	36	1443	3.6	7.5	1.4	56	1650	2.6
170.6	0.646	16	1.4	39	1729	3.7	9.3	2.5	59	1977	2.7
171.3	0.544	19	1.2	34	1457	3.6	7.8	2.1	52	1666	2.6
172.0	1.1	19	1.4	37	1578	6.5	16	2.6	57	1804	4.7
172.7	0.704	19	1.0	33	1554	4.9	10	1.8	51	1777	3.6
173.4	0.401	18	1.3	48	1470	5.0	5.8	2.4	73	1681	3.7
174.1	0.719	19	1.4	40	1540	4.0	10	2.5	61	1761	2.9
174.8	0.393	14	1.2	35	1455	4.5	5.7	2.2	54	1664	3.3
175.5	0.447	19	0.878	40	1596	4.9	6.5	1.6	61	1825	3.6
176.2	0.759	18	1.3	34	1581	4.6	11	2.5	52	1807	3.3
176.9	0.676	18	1.2	41	1601	3.3	9.8	2.1	63	1831	2.4
177.6	1.3	19	1.2	40	1642	4.2	19	2.2	61	1877	3.0
178.3	1.4	17	1.5	40	1678	4.4	20	2.8	61	1919	3.2
179.0	1.2	18	1.2	43	1486	4.5	17	2.3	65	1700	3.3
179.7	1.2	21	1.2	37	1506	3.5	17	2.1	57	1722	2.5
180.4	0.894	17	1.5	44	1513	5.0	13	2.8	67	1730	3.6
181.1	1.5	19	1.5	40	1510	3.7	21	2.6	61	1727	2.7
181.8	1.8	19	1.5	43	1460	3.3	26	2.7	66	1670	2.4
182.5	1.0	21	1.1	45	1561	4.1	15	2.0	69	1784	3.0
183.2	1.4	19	1.2	43	1394	5.0	20	2.1	65	1594	3.7
183.9	1.9	20	0.937	39	1347	2.0	27	1.7	60	1540	1.4
184.6	1.1	20	0.970	38	1525	3.2	16	1.8	58	1744	2.3
185.3	1.1	21	1.2	39	1391	3.3	16	2.2	59	1591	2.4
186.0	1.3	17	1.6	41	1496	3.0	18	2.9	62	1711	2.2
186.7	1.6	18	1.1	44	1451	4.7	23	1.9	67	1659	3.4
187.4	1.4	18	1.0	37	1379	4.7	20	1.8	57	1577	3.4
188.1	0.827	15	1.2	44	1173	2.1	12	2.1	68	1341	1.5
188.8	1.2	17	1.1	39	1314	4.2	18	2.1	60	1502	3.1
189.4	1.3	19	1.3	41	1256	3.1	19	2.4	63	1436	2.2
190.1	1.2	17	1.1	43	1313	2.4	17	1.9	66	1501	1.7
190.8	1.4	15	0.739	34	1176	1.8	21	1.3	52	1345	1.3
191.5	0.466	17	0.856	31	1215	2.3	6.7	1.6	48	1389	1.7
192.2	0.977	16	0.930	36	1154	3.3	14	1.7	55	1320	2.4
192.9	1.3	15	1.2	40	1132	3.1	19	2.2	62	1295	2.3
193.6	1.3	15	1.4	32	1007	2.9	19	2.6	50	1151	2.1
194.3	1.2	16	0.728	35	1049	2.6	18	1.3	54	1199	1.9
195.0	1.3	16	1.3	39	1151	3.3	18	2.3	59	1317	2.4
195.7	0.939	16	1.2	35	1103	3.0	14	2.3	53	1262	2.2
196.4	0.418	16	0.865	36	1099	2.6	6.0	1.6	55	1257	1.9
197.1	0.578	15	0.859	35	1167	2.9	8.3	1.6	53	1335	2.2
197.8	0.984	15	0.785	36	1181	2.3	14	1.4	55	1351	1.7
198.5	1.5	13	0.695	36	1146	3.8	21	1.3	55	1310	2.8
199.2	1.0	16	0.727	29	1161	2.4	15	1.3	45	1328	1.8
199.9	0.846	14	0.849	29	1065	2.8	12	1.5	45	1217	2.0
200.6	0.491	17	0.856	29	1178	2.9	7.1	1.6	45	1348	2.1
201.3	0.546	13	0.811	29	1119	3.1	7.9	1.5	44	1280	2.3
202.0	0.755	15	0.790	33	1062	2.9	11	1.4	51	1214	2.1
202.7	0.790	17	0.752	30	1065	1.8	11	1.4	46	1217	1.3
203.4	0.769	14	0.845	31	1200	3.4	11	1.5	48	1372	2.5
204.1	1.1	14	0.650	31	1072	2.9	15	1.2	47	1226	2.1
204.8	1.2	15	0.879	29	1154	2.7	17	1.6	45	1320	2.0
205.5	0.593	20	0.668	31	1181	2.8	8.6	1.2	47	1351	2.0
206.2	0.780	18	0.689	32	1083	2.7	11	1.3	48	1238	2.0
206.9	0.743	18	1.2	29	1113	2.7	11	2.2	45	1272	2.0
207.6	1.0	18	1.0	29	1162	2.5	15	1.9	45	1328	1.8
208.3	0.813	17	1.0	31	1048	3.9	12	1.9	47	1198	2.9
209.0	0.877	18	1.1	34	1178	2.9	13	2.0	53	1347	2.1
209.7	1.2	16	0.746	31	1082	2.7	17	1.4	47	1237	2.0
210.4	1.2	15	1.1	30	1228	3.1	17	2.0	46	1404	2.3
211.1	0.651	16	0.939	25	1281	3.9	9.4	1.7	39	1465	2.9
211.8	1.0	18	1.1	29	1165	3.2	15	2.1	44	1332	2.4
212.5	0.941	17	0.630	31	1105	3.1	14	1.1	47	1264	2.3
213.2	0.825	17	1.1	31	1196	3.9	12	2.0	48	1368	2.8
213.9	0.880	17	1.2	34	1272	2.2	13	2.2	52	1455	1.6
214.6	1.4	15	1.0	34	1176	2.5	21	1.9	52	1345	1.8
215.2	1.7	18	1.4	31	1167	3.5	25	2.5	47	1335	2.5
215.9	1.4	15	0.827	31	1092	2.7	20	1.5	48	1249	1.9
216.6	0.940	16	1.1	33	1154	3.5	14	2.0	51	1320	2.6
217.3	1.2	15	1.2	27	1108	3.4	18	2.1	41	1267	2.5
218.0	1.0	14	1.1	31	1125	3.0	15	2.0	47	1286	2.2
218.7	0.606	16	1.1	31	1193	4.1	8.8	2.0	47	1365	3.0
219.4	0.614	18	0.938	39	1201	4.3	8.9	1.7	59	1373	3.1
220.1	1.6	20	0.836	33	1289	3.0	23	1.5	50	1474	2.2
220.8	0.772	17	0.863	34	1126	2.7	11	1.6	53	1288	2.0
221.5	1.3	21	1.1	35	1244	2.6	19	2.0	53	1422	1.9
222.2	0.416	18	1.0	30	1212	3.0	6.0	1.9	46	1386	2.2
222.9	0.393	19	1.3	34	1138	2.8	5.7	2.3	51	1302	2.0
223.6	0.468	15	1.3	33	1116	3.7	6.8	2.3	51	1276	2.7
224.3	0.741	17	1.2	33	1150	2.4	11	2.1	51	1315	1.8
225.0	0.640	18	1.3	38	1218	2.8	9.2	2.4	58	1392	2.0
225.7	0.515	18	1.3	33	1262	3.2	7.4	2.5	50	1443	2.4

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
226.4	1.1	18	0.476	31	1145	2.6	16	0.869	48	1309	1.9
227.1	0.883	17	1.5	34	1310	3.7	13	2.8	53	1498	2.7
227.8	0.612	20	1.7	39	1343	3.0	8.8	3.1	59	1535	2.2
228.5	0.716	17	1.6	36	1277	3.5	10	3.0	55	1460	2.5
229.2	0.740	20	1.2	38	1184	3.2	11	2.2	58	1354	2.3
229.9	1.3	17	1.0	36	1232	2.6	19	1.8	56	1408	1.9
230.6	0.804	16	1.3	36	1260	2.6	12	2.5	55	1441	1.9
231.3	0.922	18	1.6	34	1226	2.6	13	3.0	53	1402	1.9
232.0	0.393	19	1.8	35	1193	3.9	5.7	3.2	54	1364	2.8
232.7	1.1	20	1.5	37	1292	4.0	16	2.8	56	1477	2.9
233.4	0.838	16	1.3	42	1164	2.6	12	2.3	64	1331	1.9
234.1	1.3	18	1.3	33	1178	3.0	19	2.3	51	1347	2.2
234.8	0.606	19	1.3	41	1272	4.4	8.7	2.4	63	1455	3.2
235.5	1.3	20	1.6	34	1171	4.2	19	2.9	52	1339	3.1
236.2	0.393	19	1.5	45	1230	2.1	5.7	2.8	69	1406	1.5
236.9	0.891	18	1.5	38	1305	3.2	13	2.8	58	1492	2.4
237.6	0.393	19	1.8	39	1335	4.5	5.7	3.3	59	1526	3.3
238.3	0.562	21	1.7	37	1173	3.8	8.1	3.2	57	1342	2.8
239.0	1.0	20	1.9	44	1211	3.6	15	3.5	67	1384	2.6
239.7	1.4	19	1.9	39	1223	3.6	20	3.5	60	1398	2.7
240.4	0.619	22	1.4	41	1344	3.3	8.9	2.5	63	1537	2.4
241.0	0.393	18	1.7	35	1356	3.4	5.7	3.1	54	1551	2.5
241.7	0.780	19	1.9	40	1162	3.2	11	3.4	61	1329	2.4
242.4	1.5	20	1.9	40	1239	2.0	22	3.4	61	1417	1.5
243.1	0.521	17	1.5	41	1248	1.5	7.5	2.7	62	1427	1.1
243.8	0.566	13	1.6	39	1235	3.3	8.2	2.9	59	1412	2.4
244.5	0.913	16	1.4	43	1191	2.9	13	2.6	65	1362	2.1
245.2	1.1	18	1.7	47	1223	4.0	16	3.1	73	1398	2.9
245.9	0.929	19	1.6	41	1139	3.0	13	2.9	63	1303	2.2
246.6	0.803	16	1.8	35	1151	2.8	12	3.3	54	1316	2.1
247.3	0.626	16	1.3	35	1203	1.6	9.0	2.4	54	1375	1.1
248.0	0.706	18	1.6	43	1357	2.3	10	3.0	65	1552	1.6
248.7	0.983	20	1.8	40	1318	2.1	14	3.3	61	1507	1.5
249.4	0.805	19	1.8	44	1366	2.9	12	3.3	68	1563	2.1
250.1	0.761	16	1.5	39	1386	2.5	11	2.7	60	1585	1.8
250.8	0.739	18	1.8	47	1266	3.7	11	3.3	72	1447	2.7
251.5	0.458	18	1.7	41	1340	1.9	6.6	3.1	63	1532	1.4
252.2	0.876	20	1.8	40	1321	2.9	13	3.3	62	1511	2.1
252.9	0.908	19	2.0	43	1372	2.5	13	3.7	65	1569	1.8
253.6	0.454	16	2.3	45	1453	2.2	6.6	4.1	69	1662	1.6
254.3	0.574	16	2.2	42	1381	3.6	8.3	3.9	64	1579	2.6
255.0	1.3	19	2.0	43	1365	3.6	18	3.6	66	1561	2.6
255.7	0.814	17	2.4	48	1266	3.0	12	4.4	73	1447	2.2
256.4	0.913	18	2.1	40	1352	3.9	13	3.8	61	1546	2.9
257.1	1.4	17	2.4	45	1499	3.4	20	4.3	69	1714	2.5
257.8	0.967	23	2.7	49	1509	3.5	14	4.9	76	1725	2.6
258.5	1.2	18	2.6	48	1463	2.8	17	4.8	73	1674	2.0
259.2	1.1	19	2.4	49	1434	2.0	16	4.3	75	1640	1.5
259.9	0.594	19	2.3	47	1246	1.9	8.6	4.1	71	1425	1.4
260.6	0.872	19	2.3	52	1663	3.1	13	4.1	79	1901	2.2
261.3	0.933	20	3.6	45	1400	3.8	13	6.6	69	1601	2.8
262.0	0.812	21	3.4	54	1569	3.1	12	6.3	83	1795	2.2
262.7	1.7	15	3.0	58	1516	2.9	25	5.5	88	1733	2.1
263.4	1.6	15	2.6	46	1345	2.4	22	4.8	71	1538	1.8
264.1	1.7	15	2.4	45	1365	3.6	25	4.5	69	1561	2.6
264.8	1.2	18	2.6	50	1422	2.9	17	4.7	77	1626	2.1
265.5	1.0	22	2.5	53	1399	3.4	15	4.5	81	1599	2.5
266.2	0.989	22	2.5	55	1463	2.2	14	4.5	84	1673	1.6
266.8	1.7	18	3.1	49	1625	3.9	25	5.6	75	1858	2.8
267.5	1.7	17	3.0	47	1504	3.3	24	5.5	71	1719	2.4
268.2	0.773	19	2.0	56	1386	4.9	11	3.6	86	1585	3.6
268.9	0.969	18	2.6	51	1413	3.2	14	4.7	79	1616	2.3
269.6	1.3	15	2.5	45	1350	2.4	19	4.6	68	1544	1.7
270.3	1.5	17	3.2	49	1648	3.7	21	5.8	75	1884	2.7
271.0	1.6	16	2.8	54	1564	4.1	23	5.1	83	1789	3.0
271.7	1.6	19	1.8	48	1468	3.6	23	3.2	73	1678	2.7
272.4	1.7	18	1.9	54	1523	2.7	25	3.6	82	1742	2.0
273.1	1.0	15	1.9	51	1399	2.2	15	3.4	78	1600	1.6
273.8	1.2	19	2.5	43	1375	2.6	18	4.5	66	1573	1.9
274.5	1.4	15	2.3	42	1571	3.5	20	4.1	64	1796	2.6
275.2	1.5	19	1.8	45	1488	4.1	22	3.3	69	1702	3.0
275.9	1.7	16	2.1	43	1398	4.2	25	3.9	65	1599	3.0
276.6	0.900	16	1.8	37	1264	2.2	13	3.3	57	1445	1.6
277.3	1.7	17	1.6	37	1449	3.6	25	2.9	57	1657	2.6
278.0	1.1	17	1.7	45	1389	3.9	17	3.0	69	1588	2.8
278.7	0.459	16	1.4	37	1261	2.4	6.6	2.6	57	1442	1.8
279.4	1.0	18	1.9	44	1328	3.2	15	3.5	68	1518	2.3
280.1	0.832	14	1.5	39	1169	3.2	12	2.7	60	1337	2.4
280.8	0.731	16	1.1	37	1255	2.9	11	2.1	57	1436	2.1
281.5	1.1	19	1.7	47	1343	3.7	16	3.1	73	1535	2.7
282.2	0.448	17	0.833	30	1099	3.3	6.5	1.5	46	1257	2.4

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
282.9	0.789	15	1.0	41	1136	2.2	11	1.9	62	1299	1.6
283.6	0.393	15	1.6	40	1157	2.6	5.7	2.9	61	1324	1.9
284.3	0.859	18	1.3	41	1212	2.8	12	2.4	63	1386	2.1
285.0	1.1	15	1.4	40	1192	3.2	17	2.5	61	1363	2.4
285.7	0.621	18	1.7	44	1292	2.9	9.0	3.0	68	1477	2.1
286.4	0.711	15	1.4	47	1161	3.1	10	2.5	72	1328	2.3
287.1	0.916	17	1.7	45	1171	3.5	13	3.1	70	1339	2.6
287.8	0.459	18	1.8	49	1190	3.2	6.6	3.3	75	1361	2.4
288.5	1.3	18	1.8	43	1223	2.6	18	3.3	66	1399	1.9
289.2	0.431	19	1.4	49	1206	2.7	6.2	2.6	75	1379	1.9
289.9	0.885	14	1.8	37	1071	2.5	13	3.3	57	1224	1.8
290.6	0.556	15	2.1	48	1220	3.4	8.0	3.8	73	1395	2.5
291.3	0.722	17	1.6	46	1214	2.8	10	3.0	70	1389	2.1
292.0	0.624	19	2.4	55	1307	3.8	9.0	4.4	85	1495	2.8
292.7	0.780	17	2.0	55	1296	2.1	11	3.7	84	1482	1.5
293.3	0.393	17	2.5	49	1278	2.6	5.7	4.6	76	1461	1.9
294.0	0.615	18	1.7	53	1504	3.3	8.9	3.1	81	1720	2.4
294.7	0.931	20	2.5	63	1474	2.9	13	4.6	97	1686	2.1
295.4	0.700	17	2.4	54	1479	3.7	10	4.3	83	1691	2.7
296.1	0.423	17	3.4	68	1475	2.4	6.1	6.1	104	1686	1.8
296.8	0.752	17	3.7	54	1403	3.0	11	6.8	83	1604	2.2
297.5	1.1	19	3.6	61	1597	3.6	16	6.6	93	1826	2.6
298.2	0.957	18	3.8	71	1637	3.4	14	6.9	108	1872	2.5
298.9	0.624	19	3.3	58	1622	3.4	9.0	6.1	89	1854	2.5
299.6	0.633	18	3.7	65	1731	2.7	9.1	6.7	100	1980	2.0
300.3	1.7	17	4.3	61	1685	3.4	25	7.8	94	1927	2.5
301.0	0.639	19	4.2	70	1895	3.4	9.2	7.6	107	2167	2.5
301.7	1.1	17	3.5	62	1705	4.2	16	6.3	96	1949	3.1
302.4	0.768	19	4.2	62	1755	3.8	11	7.7	95	2007	2.8
303.1	1.0	19	4.1	66	1824	3.0	15	7.4	100	2085	2.2
303.8	1.2	18	4.4	62	1695	3.5	18	8.1	95	1939	2.6
304.5	1.9	19	4.5	75	1845	4.7	28	8.2	115	2110	3.4
305.2	1.1	16	4.6	74	1691	4.3	17	8.4	113	1934	3.1
305.9	0.915	19	5.2	76	1810	4.2	13	9.4	117	2070	3.0
306.6	1.8	20	5.0	79	1863	3.9	27	9.1	120	2130	2.8
307.3	1.6	18	4.9	72	1797	3.2	23	8.9	111	2054	2.4
308.0	1.3	18	5.4	67	1833	2.7	19	9.9	103	2096	2.0
308.7	1.8	16	5.4	82	1854	3.0	27	9.9	125	2120	2.2
309.4	2.3	22	5.9	76	1890	4.2	33	11	116	2161	3.1
310.1	1.5	18	6.3	72	1926	3.4	21	12	110	2202	2.5
310.8	1.5	17	6.0	72	1776	3.6	22	11	111	2031	2.6
311.5	2.5	19	5.9	80	1958	4.2	36	11	122	2239	3.1
312.2	2.3	20	6.4	83	1914	4.9	34	12	128	2188	3.5
312.9	2.7	18	6.1	83	1825	2.9	39	11	128	2087	2.1
313.6	2.5	18	5.9	84	1867	3.8	36	11	128	2135	2.8
314.3	2.4	15	6.3	75	1704	3.4	34	11	115	1949	2.5
315.0	2.6	20	6.6	87	1993	4.9	38	12	134	2279	3.6
315.7	2.2	18	5.4	78	1669	3.9	32	9.8	119	1909	2.9
316.4	2.4	18	6.3	80	1847	4.1	35	12	123	2112	3.0
317.1	2.3	21	6.1	87	2089	5.8	34	11	133	2389	4.2
317.8	2.5	20	7.2	82	1930	3.7	37	13	126	2207	2.7
318.5	2.7	21	5.8	82	1850	4.2	39	11	126	2115	3.1
319.1	2.0	19	6.0	83	1723	3.2	29	11	127	1970	2.3
319.8	2.8	19	6.1	72	1947	4.8	40	11	111	2227	3.5
320.5	2.7	18	5.7	77	2030	4.0	39	10	119	2321	2.9
321.2	2.8	19	6.0	80	1987	5.8	40	11	123	2272	4.2
321.9	2.2	19	6.3	76	1890	4.3	32	11	116	2161	3.2
322.6	2.3	17	5.3	78	1745	3.9	34	9.6	119	1995	2.9
323.3	2.7	19	7.0	78	1828	3.6	39	13	119	2090	2.6
324.0	2.1	21	5.8	82	1982	3.9	30	11	125	2267	2.8
324.7	2.7	23	7.3	81	2004	4.0	39	13	124	2291	2.9
325.4	2.9	21	6.0	87	1811	5.3	42	11	134	2071	3.9
326.1	2.9	20	7.2	80	1960	4.4	42	13	123	2242	3.2
326.8	3.8	21	6.6	76	1880	5.5	55	12	116	2150	4.0
327.5	3.1	21	6.9	83	1935	3.8	44	12	126	2213	2.8
328.2	2.3	20	5.7	75	1837	3.5	34	10	115	2100	2.6
328.9	2.5	19	4.8	73	1653	3.3	36	8.7	112	1890	2.4
329.6	2.6	19	5.7	79	1890	5.4	37	10	121	2161	3.9
330.3	2.4	18	6.3	74	1774	3.5	35	12	113	2028	2.6
331.0	2.9	18	6.0	81	1940	4.5	42	11	125	2219	3.3
331.7	2.3	20	5.8	79	1835	3.5	33	11	122	2098	2.6
332.4	2.6	20	5.8	75	1850	5.2	38	11	115	2116	3.8
333.1	3.0	22	6.0	73	1704	3.1	43	11	112	1949	2.3
333.8	3.6	20	5.9	82	1860	4.3	52	11	126	2127	3.2
334.5	3.9	21	7.1	89	2066	4.4	57	13	137	2363	3.2
335.2	3.4	20	7.0	85	1834	4.3	50	13	130	2097	3.1
335.9	2.7	15	6.0	77	1742	4.5	39	11	118	1992	3.3
336.6	3.2	20	5.9	82	1759	5.4	47	11	126	2012	3.9
337.3	3.3	19	5.0	70	1783	4.3	47	9.2	108	2039	3.1
338.0	3.0	18	5.7	66	1751	4.3	43	10	102	2003	3.1
338.7	3.3	17	5.6	66	1614	3.8	47	10	101	1845	2.8

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
339.4	4.5	20	5.7	66	1634	3.4	65	10	101	1869	2.5
340.1	3.7	21	5.1	62	1828	5.0	53	9.3	95	2090	3.7
340.8	4.0	21	4.8	64	1894	4.3	58	8.7	98	2166	3.2
341.5	4.2	23	4.9	78	1771	3.9	60	9.0	120	2025	2.8
342.2	4.1	21	5.3	67	1667	4.2	59	9.7	103	1907	3.1
342.9	3.5	18	4.6	68	1683	3.6	50	8.4	105	1925	2.6
343.6	3.1	20	4.9	60	1686	4.7	45	8.9	93	1928	3.4
344.3	3.9	21	4.8	65	1564	3.8	56	8.7	99	1788	2.8
345.0	4.4	20	5.2	68	1814	5.0	63	9.5	105	2074	3.7
345.6	3.9	21	5.2	60	1597	3.9	56	9.4	92	1826	2.9
346.3	3.8	22	4.8	63	1685	4.6	55	8.7	97	1927	3.4
347.0	3.5	21	4.8	61	1749	3.8	50	8.8	94	2001	2.8
347.7	3.5	19	5.4	63	1668	3.7	51	9.8	97	1907	2.7
348.4	3.2	19	4.6	59	1629	3.3	46	8.4	90	1863	2.4
349.1	2.8	18	5.0	59	1526	4.3	40	9.1	90	1745	3.2
349.8	2.4	21	4.6	59	1435	3.5	35	8.3	90	1641	2.5
350.5	3.0	18	4.3	63	1680	4.1	43	7.8	97	1921	3.0
351.2	2.3	20	4.2	67	1665	3.8	33	7.7	102	1904	2.8
351.9	2.5	22	5.0	66	1594	4.5	36	9.1	101	1822	3.3
352.6	2.5	19	5.0	58	1645	3.3	36	9.1	89	1882	2.4
353.3	2.8	16	4.3	55	1550	4.8	41	7.8	85	1773	3.5
354.0	3.5	17	4.5	55	1646	4.1	51	8.2	84	1882	3.0
354.7	2.4	19	4.1	60	1593	2.8	35	7.5	93	1822	2.1
355.4	2.0	18	4.3	62	1614	4.0	30	7.8	94	1846	2.9
356.1	3.1	18	4.5	62	1603	3.2	45	8.1	96	1833	2.4
356.8	3.3	19	4.5	60	1622	3.2	47	8.2	91	1855	2.3
357.5	3.8	16	4.6	66	1771	3.8	55	8.4	100	2025	2.8
358.2	2.9	21	4.7	63	1553	5.4	41	8.6	97	1776	3.9
358.9	2.6	19	4.6	59	1585	4.3	38	8.4	91	1813	3.2
359.6	2.2	17	3.8	60	1527	3.7	31	6.8	92	1746	2.7
360.3	2.6	19	5.2	59	1663	4.4	37	9.4	91	1902	3.2
361.0	2.9	22	4.7	75	1774	4.8	42	8.6	115	2029	3.5
361.7	2.6	18	4.8	67	1608	3.8	37	8.7	102	1839	2.8
362.4	3.3	20	5.1	59	1581	4.9	47	9.4	90	1808	3.6
363.1	2.2	17	4.2	54	1438	3.2	31	7.6	83	1644	2.4
363.8	2.9	18	4.7	57	1679	3.7	41	8.5	87	1920	2.7
364.5	3.0	19	4.3	60	1548	3.9	43	7.8	92	1770	2.8
365.2	2.5	20	3.9	62	1619	4.5	37	7.1	95	1851	3.3
365.9	3.3	18	4.2	56	1636	4.0	48	7.6	86	1871	2.9
366.6	2.8	19	3.9	52	1404	2.6	40	7.1	79	1606	1.9
367.3	3.0	17	4.1	56	1441	3.7	44	7.5	85	1648	2.7
368.0	2.7	20	3.2	58	1446	5.2	38	5.7	88	1653	3.8
368.7	2.5	19	2.9	58	1352	3.0	35	5.2	89	1546	2.2
369.4	3.0	19	3.1	48	1358	3.4	43	5.6	73	1553	2.5
370.1	2.7	20	3.5	49	1421	4.0	39	6.4	76	1625	2.9
370.8	2.7	23	3.2	57	1403	3.3	39	5.8	88	1605	2.4
371.4	4.6	21	2.8	51	1305	4.0	66	5.1	79	1492	3.0
372.1	4.0	19	3.1	61	1390	4.6	57	5.7	94	1590	3.3
372.8	2.3	20	2.9	53	1343	3.0	33	5.4	81	1536	2.2
373.5	2.3	22	3.1	56	1375	3.9	34	5.6	85	1572	2.8
374.2	2.9	21	3.1	56	1282	2.6	41	5.6	85	1466	1.9
374.9	1.8	19	2.4	58	1305	2.3	26	4.3	89	1493	1.7
375.6	1.8	22	2.5	57	1351	4.4	27	4.6	87	1545	3.2
376.3	1.7	17	2.6	53	1246	2.5	25	4.7	81	1425	1.8
377.0	2.0	19	2.3	58	1306	2.3	28	4.2	89	1493	1.7
377.7	1.3	21	3.6	56	1325	3.0	18	6.5	86	1516	2.2
378.4	2.1	19	2.6	61	1336	4.0	31	4.7	93	1527	2.9
379.1	1.4	18	2.8	52	1254	2.7	20	5.2	80	1434	1.9
379.8	1.2	19	3.2	51	1181	3.1	17	5.9	78	1351	2.3
380.5	1.5	21	2.9	53	1341	2.2	21	5.2	82	1533	1.6
381.2	1.7	18	2.6	64	1450	3.2	25	4.8	98	1658	2.4
381.9	1.3	18	2.6	61	1296	3.2	18	4.7	93	1482	2.4
382.6	1.0	17	2.7	54	1335	3.4	15	5.0	82	1527	2.5
383.3	1.6	19	3.2	56	1297	4.3	23	5.9	85	1483	3.1
384.0	2.2	20	2.6	63	1323	3.5	31	4.7	96	1513	2.6
384.7	2.5	22	2.8	61	1332	3.7	36	5.0	93	1524	2.7
385.4	1.8	21	2.9	62	1341	3.3	26	5.2	95	1534	2.4
386.1	1.6	22	2.7	54	1307	3.4	23	4.9	82	1495	2.5
386.8	2.7	23	2.3	61	1394	4.1	39	4.3	94	1595	3.0
387.5	2.1	20	2.9	54	1115	2.8	31	5.3	82	1275	2.1
388.2	0.912	18	3.0	56	1355	2.9	13	5.5	86	1550	2.1
388.9	0.966	20	2.4	49	1230	3.2	14	4.4	76	1407	2.3
389.6	1.3	19	3.0	54	1306	3.4	19	5.5	82	1493	2.5
390.3	1.2	23	2.8	56	1438	4.0	18	5.2	85	1645	2.9
391.0	0.962	22	3.2	56	1401	2.2	14	5.9	85	1602	1.6
391.7	1.1	20	3.1	58	1330	2.7	16	5.7	89	1521	1.9
392.4	1.3	20	3.2	50	1308	2.3	19	5.8	77	1496	1.7
393.1	1.7	20	3.4	56	1557	2.9	24	6.2	86	1781	2.1
393.8	1.8	20	3.8	67	1446	3.7	25	6.9	103	1654	2.7
394.5	1.5	22	2.9	52	1417	3.7	21	5.3	80	1620	2.7
395.2	1.4	22	3.4	59	1464	3.4	20	6.3	90	1674	2.5

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
395.9	1.7	19	3.0	51	1374	4.2	25	5.5	78	1571	3.1
396.6	2.4	23	4.0	58	1527	3.6	35	7.4	89	1746	2.7
397.2	2.4	25	3.6	61	1624	3.2	35	6.6	93	1857	2.3
397.9	2.2	20	3.6	61	1440	3.7	32	6.5	94	1646	2.7
398.6	2.4	23	3.5	60	1540	2.4	35	6.3	91	1761	1.7
399.3	2.1	19	3.6	55	1410	3.1	31	6.6	84	1613	2.3
400.0	1.8	22	3.3	49	1458	3.9	25	6.0	76	1668	2.8
400.7	1.7	23	2.9	67	1464	5.9	24	5.2	102	1674	4.3
401.4	1.9	21	3.0	52	1305	3.6	28	5.4	79	1492	2.6
402.1	2.3	25	3.6	53	1436	2.1	34	6.5	81	1643	1.6
402.8	2.8	25	3.2	57	1360	3.2	41	5.9	88	1555	2.3
403.5	1.9	25	3.1	48	1553	4.1	28	5.7	73	1776	3.0
404.2	1.8	24	3.7	56	1379	3.8	27	6.7	86	1577	2.7
404.9	2.0	23	2.4	52	1317	3.1	29	4.4	79	1507	2.3
405.6	1.5	21	2.8	58	1423	3.9	22	5.0	89	1627	2.8
406.3	1.7	24	2.4	60	1345	3.4	25	4.4	92	1538	2.5
407.0	1.4	25	2.6	52	1298	3.1	20	4.8	80	1484	2.3
407.7	1.3	24	2.8	49	1280	3.5	19	5.2	76	1464	2.6
408.4	2.5	22	2.8	55	1366	3.9	35	5.0	84	1563	2.8
409.1	0.633	24	2.5	51	1281	3.7	9.1	4.6	78	1465	2.7
409.8	1.1	24	2.6	52	1356	3.0	16	4.8	80	1550	2.2
410.5	1.2	23	2.7	54	1308	3.0	17	4.9	83	1496	2.2
411.2	0.969	26	2.3	50	1336	2.5	14	4.3	76	1527	1.9
411.9	1.4	27	2.5	47	1375	3.0	20	4.6	73	1573	2.2
412.6	1.4	22	2.5	50	1349	2.7	21	4.5	77	1543	2.0
413.3	1.5	25	2.9	53	1424	3.1	21	5.3	82	1629	2.3
414.0	1.1	26	2.6	47	1350	4.6	17	4.7	73	1543	3.4
414.7	1.0	27	2.2	50	1297	2.3	15	4.0	77	1484	1.7
415.4	1.5	25	3.1	47	1340	2.4	22	5.6	72	1532	1.8
416.1	1.3	24	2.4	45	1330	2.6	18	4.4	69	1521	1.9
416.8	1.3	26	2.4	39	1350	4.2	19	4.4	60	1544	3.1
417.5	1.0	26	2.9	51	1333	3.1	14	5.2	79	1525	2.3
418.2	1.0	26	2.1	44	1298	2.6	15	3.8	67	1484	1.9
418.9	1.5	26	2.5	45	1317	2.2	21	4.6	69	1506	1.6
419.6	1.0	25	2.4	42	1365	3.2	15	4.4	64	1561	2.3
420.3	0.891	24	2.6	44	1371	3.9	13	4.7	68	1568	2.8
421.0	1.4	25	2.3	55	1406	2.8	21	4.3	85	1608	2.1
421.7	1.5	26	2.7	52	1365	4.6	21	5.0	80	1561	3.3
422.4	1.6	21	2.2	46	1312	2.9	23	4.1	71	1500	2.1
423.1	0.956	20	2.0	44	1304	2.9	14	3.6	68	1491	2.1
423.7	1.3	22	2.0	49	1581	3.0	18	3.6	75	1808	2.2
424.4	1.4	22	2.4	48	1353	4.6	20	4.3	73	1547	3.4
425.1	1.4	23	2.2	46	1260	2.6	20	4.1	71	1441	1.9
425.8	1.5	23	2.4	52	1445	3.0	21	4.3	80	1652	2.2
426.5	1.2	20	2.4	41	1446	3.8	17	4.4	62	1654	2.8
427.2	1.2	18	2.3	50	1320	3.4	17	4.3	76	1510	2.5
427.9	1.1	23	1.8	52	1404	3.9	16	3.4	80	1605	2.9
428.6	1.2	21	2.3	43	1456	2.9	17	4.1	66	1665	2.1
429.3	1.9	22	2.2	43	1337	2.7	27	4.1	65	1528	2.0
430.0	0.943	23	2.5	44	1382	2.6	14	4.6	68	1580	1.9
430.7	0.918	21	2.0	49	1318	2.1	13	3.7	75	1507	1.5
431.4	1.8	20	2.3	46	1272	1.8	26	4.2	70	1454	1.3
432.1	1.2	20	2.0	44	1365	3.0	18	3.7	67	1560	2.2
432.8	1.1	18	2.0	45	1286	2.1	16	3.6	68	1471	1.5
433.5	1.1	19	2.6	45	1492	3.7	16	4.7	69	1706	2.7
434.2	0.819	20	2.4	42	1317	3.4	12	4.5	65	1506	2.5
434.9	1.2	17	2.5	43	1288	3.0	18	4.6	66	1472	2.2
435.6	0.674	20	1.8	43	1230	2.5	9.7	3.3	66	1407	1.8
436.3	0.962	19	2.3	42	1312	3.5	14	4.2	64	1501	2.6
437.0	1.0	20	1.8	45	1487	3.8	15	3.3	69	1701	2.8
437.7	1.4	18	2.9	53	1631	4.2	20	5.3	81	1865	3.1
438.4	0.788	20	2.9	44	1493	1.8	11	5.4	67	1708	1.3
439.1	0.892	22	2.1	58	1489	3.0	13	3.8	88	1703	2.2
439.8	1.7	16	3.0	54	1604	3.1	24	5.4	82	1835	2.2
440.5	1.1	19	3.2	56	1733	3.5	17	5.8	85	1981	2.6
441.2	1.4	19	3.0	55	1622	3.9	20	5.5	84	1855	2.9
441.9	1.8	17	3.3	53	1475	2.8	27	6.0	81	1687	2.0
442.6	0.922	16	2.7	49	1571	4.4	13	5.0	76	1797	3.2
443.3	0.910	19	3.3	47	1357	3.0	13	6.0	72	1551	2.2
444.0	0.890	17	2.9	55	1509	3.4	13	5.3	85	1725	2.5
444.7	1.5	18	2.8	50	1427	3.2	22	5.0	76	1632	2.3
445.4	0.927	18	3.2	52	1488	2.3	13	5.9	80	1701	1.7
446.1	1.3	20	3.2	47	1501	2.7	19	5.8	72	1716	1.9
446.8	1.1	18	2.7	52	1462	3.2	15	4.9	79	1672	2.3
447.5	1.7	21	2.8	54	1580	2.4	24	5.1	82	1806	1.8
448.2	1.6	21	3.0	50	1631	3.2	24	5.5	76	1865	2.3
448.9	1.4	17	3.0	48	1478	3.6	20	5.6	74	1690	2.6
449.6	1.9	20	3.1	47	1460	2.5	27	5.6	72	1670	1.8
450.3	1.8	20	3.6	58	1600	3.3	26	6.5	90	1829	2.4
450.9	1.9	20	3.7	63	1809	3.0	27	6.7	97	2069	2.2
451.6	1.3	18	2.8	53	1599	3.8	19	5.1	80	1828	2.8

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
452.3	1.8	19	2.6	54	1482	4.0	27	4.7	82	1695	2.9
453.0	1.9	23	3.6	56	1624	3.4	27	6.6	85	1857	2.5
453.7	2.0	17	3.1	56	1504	4.1	29	5.6	85	1720	3.0
454.4	0.943	20	3.0	52	1541	4.5	14	5.5	80	1762	3.3
455.1	1.5	20	2.7	53	1440	3.5	21	5.0	81	1646	2.6
455.8	0.997	18	3.0	58	1505	4.2	14	5.4	89	1721	3.1
456.5	1.7	21	2.8	62	1440	2.5	24	5.1	95	1647	1.9
457.2	1.4	19	2.7	56	1369	3.4	20	4.9	86	1565	2.5
457.9	1.4	19	2.2	48	1313	3.0	20	4.1	74	1501	2.2
458.6	1.4	16	2.7	64	1621	2.5	20	5.0	98	1853	1.9
459.3	1.4	18	3.3	56	1352	3.2	20	6.0	85	1546	2.3
460.0	2.7	19	3.0	56	1530	4.3	40	5.5	85	1750	3.1
460.7	1.3	16	3.0	66	1510	3.6	18	5.4	101	1727	2.7
461.4	1.4	21	3.0	56	1544	3.5	20	5.5	86	1765	2.6
462.1	1.7	17	3.0	54	1518	3.3	25	5.5	83	1736	2.4
462.8	3.0	20	3.3	64	1575	4.0	44	6.0	98	1801	2.9
463.5	2.0	20	2.8	75	1576	3.0	28	5.1	114	1803	2.2
464.2	2.1	22	3.4	73	1419	3.0	30	6.3	112	1623	2.2
464.9	1.4	15	2.5	63	1481	3.6	20	4.6	97	1693	2.6
465.6	1.5	19	3.2	68	1666	4.1	21	5.8	105	1906	3.0
466.3	1.2	19	3.6	81	1724	2.7	17	6.5	124	1971	1.9
467.0	1.5	19	3.9	75	1516	3.0	22	7.1	115	1734	2.2
467.7	1.6	17	3.4	78	1587	2.3	23	6.1	119	1814	1.7
468.4	1.3	17	3.8	78	1685	2.4	19	7.0	120	1927	1.8
469.1	1.6	18	4.5	84	1801	2.8	24	8.2	129	2060	2.0
469.8	1.1	16	3.6	74	1955	2.0	16	6.5	113	2235	1.5
470.5	1.4	20	4.0	78	1653	2.8	20	7.3	119	1890	2.0
471.2	2.0	17	3.8	80	1732	4.7	29	6.9	123	1980	3.4
471.9	2.1	21	4.5	78	1639	3.9	31	8.1	120	1874	2.8
472.6	1.9	18	4.9	80	1765	2.9	27	8.9	123	2018	2.1
473.3	2.1	18	4.2	78	1625	2.6	30	7.7	120	1858	1.9
474.0	2.9	22	4.5	81	1876	2.7	42	8.2	125	2146	2.0
474.7	1.9	20	4.9	85	1840	2.5	28	8.9	130	2104	1.8
475.4	2.5	24	5.1	91	1854	3.6	36	9.3	140	2121	2.6
476.1	2.3	22	5.3	93	1844	3.6	33	9.6	142	2109	2.6
476.7	3.7	21	4.7	97	1766	3.4	53	8.5	149	2019	2.5
477.4	3.2	21	4.3	84	1708	2.9	47	7.8	128	1954	2.1
478.1	2.9	22	4.1	93	1822	4.1	42	7.5	143	2084	3.0
478.8	2.5	20	3.8	87	1901	4.3	35	6.9	134	2174	3.2
479.5	2.8	23	5.5	95	1893	3.7	41	10	146	2164	2.7
480.2	2.9	20	4.9	99	1844	2.5	42	8.9	151	2108	1.8
480.9	3.2	22	5.7	97	1743	2.5	46	10	148	1993	1.8
481.6	2.9	22	5.3	85	1541	3.5	42	9.7	131	1762	2.6
482.3	2.4	17	4.1	85	1535	2.9	34	7.5	130	1755	2.1
483.0	3.3	22	4.2	83	1567	3.4	48	7.7	128	1792	2.5
483.7	3.4	25	4.5	104	1640	3.4	49	8.2	160	1876	2.5
484.4	2.7	20	4.7	98	1834	2.6	38	8.6	150	2097	1.9
485.1	3.3	17	4.4	92	1687	3.0	48	8.1	141	1930	2.2
485.8	2.8	21	4.9	93	1848	3.2	41	8.9	143	2114	2.4
486.5	4.1	23	4.9	94	1948	3.7	60	8.9	144	2228	2.7
487.2	4.5	20	5.2	93	1648	3.0	66	9.5	143	1884	2.2
487.9	3.3	18	4.5	102	1858	3.4	47	8.3	156	2125	2.4
488.6	3.5	18	4.8	90	1501	3.8	50	8.7	137	1717	2.8
489.3	4.2	18	4.9	96	1508	2.2	61	9.0	147	1725	1.6
490.0	4.3	22	4.1	99	1762	3.2	62	7.4	152	2015	2.3
490.7	3.2	19	4.0	88	1427	3.4	46	7.2	136	1632	2.5
491.4	3.4	21	3.7	91	1497	3.4	49	6.8	139	1712	2.5
492.1	3.0	17	4.1	84	1406	3.6	43	7.5	129	1608	2.6
492.8	3.1	17	4.1	86	1391	1.6	45	7.5	132	1591	1.2
493.5	3.5	20	4.1	90	1400	3.4	50	7.5	138	1601	2.5
494.2	3.7	19	3.6	81	1318	2.6	53	6.6	124	1507	1.9
494.9	2.5	14	3.7	86	1283	2.6	35	6.7	131	1467	1.9
495.6	3.4	17	3.8	64	1212	2.7	49	6.9	98	1385	1.9
496.3	2.5	16	3.3	79	1245	3.1	36	6.1	121	1424	2.2
497.0	3.3	19	2.7	78	1242	3.2	48	4.9	119	1420	2.3
497.7	2.4	19	3.5	68	1162	2.1	35	6.3	104	1329	1.5
498.4	2.9	15	2.9	68	1119	3.4	42	5.3	105	1280	2.4
499.1	3.0	19	3.4	63	963	1.6	43	6.2	97	1102	1.2
499.8	2.5	19	2.4	70	1040	2.9	35	4.4	107	1190	2.1
500.5	2.0	18	2.9	63	966	2.3	28	5.3	97	1105	1.7
501.2	2.0	17	2.7	85	1113	3.7	29	5.0	130	1273	2.7
501.9	2.5	17	2.8	65	978	2.5	37	5.1	100	1119	1.8
502.5	2.1	17	2.3	63	935	2.6	31	4.3	97	1069	1.9
503.2	2.0	18	3.0	70	967	2.2	29	5.4	107	1105	1.6
503.9	2.4	18	2.5	56	930	1.5	34	4.5	85	1063	1.1
504.6	2.3	15	2.9	60	812	1.8	34	5.4	92	928	1.3
505.3	2.2	17	2.4	61	959	1.8	32	4.4	93	1096	1.3
506.0	2.1	17	2.7	59	877	2.6	31	5.0	91	1003	1.9
506.7	2.2	15	2.1	62	736	1.9	31	3.8	95	842	1.4
507.4	1.6	14	2.2	53	743	2.5	22	3.9	81	850	1.8
508.1	0.876	15	2.2	50	730	1.9	13	4.1	77	835	1.4

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
508.8	1.5	17	2.7	54	691	1.9	22	4.9	83	790	1.4
509.5	2.4	18	2.5	56	784	2.0	34	4.6	85	897	1.4
510.2	1.3	16	2.1	53	733	1.2	19	3.8	81	838	0.846
510.9	1.8	17	1.6	58	692	2.0	26	3.0	89	791	1.5
511.6	1.8	17	1.9	52	637	1.3	26	3.5	79	728	0.959
512.3	1.5	15	2.1	51	614	2.2	22	3.9	78	702	1.6
513.0	0.783	15	1.8	48	607	1.4	11	3.3	74	694	1.0
513.7	1.3	15	2.3	52	572	1.2	19	4.2	80	654	0.910
514.4	0.805	17	1.7	46	591	3.1	12	3.0	70	676	2.2
515.1	0.496	15	1.8	44	580	1.5	7.2	3.3	68	663	1.1
515.8	0.753	16	1.8	43	532	0.842	11	3.3	67	608	0.614
516.5	0.624	19	1.6	41	513	2.0	9.0	3.0	63	587	1.5
517.2	0.652	15	1.5	41	491	2.1	9.4	2.7	63	561	1.5
517.9	1.3	14	1.5	39	525	1.6	19	2.8	59	600	1.2
518.6	0.707	15	1.8	41	542	1.3	10	3.3	62	620	0.938
519.3	0.393	17	1.3	41	576	1.6	5.7	2.4	62	659	1.2
520.0	1.1	16	1.5	48	653	1.4	16	2.7	74	746	1.0
520.7	1.2	17	2.3	43	647	1.8	18	4.1	65	740	1.3
521.4	0.668	18	2.2	48	604	1.4	9.6	4.0	74	691	1.0
522.1	0.564	16	1.8	46	610	1.8	8.1	3.3	71	698	1.3
522.8	1.2	16	1.5	41	506	0.995	17	2.6	63	579	0.726
523.5	0.906	14	1.8	48	517	1.3	13	3.2	74	591	0.944
524.2	1.1	14	1.7	48	485	0.970	15	3.1	73	555	0.708
524.9	0.426	13	1.3	44	472	1.7	6.1	2.4	67	539	1.2
525.6	0.796	15	2.0	41	484	1.4	11	3.7	63	553	1.1
526.3	0.652	15	1.2	42	491	1.5	9.4	2.2	64	562	1.1
527.0	1.0	16	1.1	45	404	0.836	15	2.1	68	462	0.610
527.7	0.723	14	1.4	39	348	1.4	10	2.6	60	398	1.0
528.3	0.393	16	1.5	44	419	2.6	5.7	2.7	68	479	1.9
529.0	0.544	15	1.5	43	412	2.3	7.9	2.8	65	471	1.7
529.7	1.1	14	1.4	44	396	1.5	15	2.5	68	453	1.1
530.4	1.3	16	1.8	47	431	1.8	19	3.3	72	493	1.3
531.1	0.833	14	1.7	43	434	2.1	12	3.2	66	497	1.5
531.8	0.506	14	1.8	40	378	0.923	7.3	3.3	61	432	0.673
532.5	0.427	16	1.4	47	391	1.3	6.2	2.6	71	447	0.975
533.2	0.500	13	1.2	41	376	2.4	7.2	2.1	62	430	1.7
533.9	0.483	16	1.9	39	413	1.9	7.0	3.5	60	472	1.4
534.6	0.393	15	0.992	38	358	1.2	5.7	1.8	58	409	0.891
535.3	1.1	14	1.7	40	364	2.0	16	3.0	61	416	1.4
536.0	0.393	15	1.1	42	429	1.5	5.7	2.0	64	490	1.1
536.7	0.426	14	1.4	45	360	0.666	6.1	2.6	69	411	0.486
537.4	0.713	13	1.2	42	341	1.7	10	2.2	64	390	1.3
538.1	0.393	15	1.5	40	390	2.0	5.7	2.7	61	446	1.4
538.8	0.403	14	1.3	43	361	1.5	5.8	2.3	65	413	1.1
539.5	0.494	13	1.4	45	381	0.788	7.1	2.6	70	436	0.575
540.2	1.0	15	1.3	47	403	0.758	15	2.4	71	460	0.553
540.9	0.747	14	1.4	42	347	1.8	11	2.5	64	397	1.3
541.6	0.406	15	0.985	47	345	1.1	5.9	1.8	72	394	0.774
542.3	1.1	14	1.2	47	340	1.1	16	2.2	73	389	0.831
543.0	0.772	17	1.1	44	291	2.2	11	2.1	67	333	1.6
543.7	0.393	17	1.3	43	313	1.6	5.7	2.4	66	358	1.2
544.4	0.409	13	0.992	41	283	1.4	5.9	1.8	62	324	1.0
545.1	0.393	12	1.7	41	297	1.1	5.7	3.0	64	340	0.788
545.8	0.393	13	1.5	38	268	0.855	5.7	2.7	58	306	0.624
546.5	0.432	13	1.5	47	351	1.7	6.2	2.7	72	401	1.2
547.2	0.393	12	1.5	53	311	1.0	5.7	2.7	81	356	0.740
547.9	0.409	14	1.4	49	343	1.6	5.9	2.6	76	392	1.2
548.6	0.483	13	1.1	44	339	1.4	7.0	2.0	68	388	1.0
549.3	0.635	15	1.3	46	310	1.3	9.2	2.3	71	354	0.928
550.0	0.462	14	1.4	50	305	1.7	6.7	2.5	76	349	1.2
550.7	0.393	14	1.4	51	314	1.5	5.7	2.6	78	359	1.1
551.4	0.393	16	1.3	42	273	0.789	5.7	2.4	64	312	0.576
552.1	0.393	12	1.6	42	320	0.510	5.7	2.9	65	366	0.372
552.8	0.433	15	1.9	50	284	1.7	6.2	3.4	76	325	1.2
553.5	0.723	15	1.6	50	276	1.1	10	3.0	76	315	0.800
554.1	0.411	13	1.8	48	269	1.3	5.9	3.4	74	308	0.940
554.8	0.621	10	1.7	41	271	0.925	9.0	3.1	63	310	0.675
555.5	0.551	14	1.7	46	311	1.8	7.9	3.0	70	356	1.3
556.2	0.393	13	1.8	50	266	1.6	5.7	3.3	77	304	1.2
556.9	0.672	12	1.7	42	265	1.2	9.7	3.2	65	303	0.892
557.6	0.393	11	1.8	43	302	1.3	5.7	3.3	66	345	0.979
558.3	0.393	15	2.2	43	261	1.0	5.7	3.9	66	298	0.735
559.0	0.591	14	2.4	39	284	2.7	8.5	4.4	60	325	2.0
559.7	0.393	15	1.9	46	337	1.8	5.7	3.4	71	386	1.3
560.4	0.393	12	1.9	43	300	0.880	5.7	3.6	65	343	0.642
561.1	0.393	16	2.1	44	280	2.1	5.7	3.9	67	320	1.5
561.8	0.874	12	1.9	51	274	2.2	13	3.5	78	313	1.6
562.5	0.640	12	2.0	42	252	1.1	9.2	3.7	65	289	0.773
563.2	0.393	12	2.2	38	257	2.9	5.7	4.0	59	294	2.1
563.9	0.393	12	2.2	43	260	0.787	5.7	4.1	65	298	0.574
564.6	0.471	12	2.4	41	246	1.3	6.8	4.4	63	281	0.974

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
565.3	0.393	14	1.9	43	263	0.888	5.7	3.4	67	301	0.648
566.0	0.393	13	2.2	45	264	1.1	5.7	3.9	69	302	0.816
566.7	0.393	13	1.9	47	241	1.1	5.7	3.5	73	276	0.830
567.4	0.393	12	1.9	40	243	1.9	5.7	3.5	62	278	1.4
568.1	0.393	12	1.9	39	262	1.1	5.7	3.5	60	300	0.781
568.8	0.393	12	2.3	42	241	1.4	5.7	4.1	64	276	1.0
569.5	0.456	12	1.8	44	272	2.1	6.6	3.3	67	311	1.5
570.2	0.393	14	1.9	36	270	1.7	5.7	3.5	55	309	1.3
570.9	0.393	13	2.3	39	250	1.3	5.7	4.2	59	286	0.964
571.6	0.604	11	2.1	39	253	1.0	8.7	3.8	59	289	0.735
572.3	0.404	14	2.3	46	272	1.2	5.8	4.2	71	311	0.847
573.0	0.760	12	2.0	46	265	1.1	11	3.6	70	304	0.776
573.7	0.501	13	1.7	42	246	1.1	7.2	3.1	64	281	0.815
574.4	0.765	13	1.9	35	265	1.4	11	3.5	54	303	1.0
575.1	0.393	16	2.2	46	287	2.6	5.7	4.0	71	329	1.9
575.8	0.558	17	2.1	41	263	1.5	8.1	3.9	62	301	1.1
576.5	0.393	15	1.7	40	284	0.921	5.7	3.0	62	325	0.672
577.2	0.578	15	2.0	44	275	0.526	8.3	3.7	67	314	0.383
577.9	0.393	14	2.2	41	273	1.4	5.7	4.0	63	312	1.1
578.6	0.888	15	2.3	39	282	1.7	13	4.1	61	322	1.3
579.3	0.393	15	2.0	39	275	2.1	5.7	3.6	60	315	1.5
580.0	0.393	16	1.9	41	262	1.1	5.7	3.4	63	299	0.816
580.6	0.393	14	2.2	39	265	1.4	5.7	4.0	60	303	1.1
581.3	0.532	15	1.9	45	277	1.7	7.7	3.5	69	317	1.3
582.0	0.393	16	2.3	44	260	1.4	5.7	4.2	68	297	1.0
582.7	0.393	13	1.9	44	252	0.958	5.7	3.4	68	288	0.699
583.4	0.393	17	2.4	45	273	2.3	5.7	4.3	68	313	1.7
584.1	0.393	15	1.9	46	319	1.7	5.7	3.4	70	365	1.2
584.8	0.595	17	1.7	40	270	1.6	8.6	3.2	62	309	1.1
585.5	0.766	15	2.1	42	271	2.6	11	3.8	64	310	1.9
586.2	0.701	16	1.5	44	286	1.6	10	2.8	68	327	1.2
586.9	0.580	17	1.5	36	247	1.8	8.4	2.7	54	282	1.3
587.6	0.530	17	1.5	42	300	0.724	7.6	2.7	64	343	0.528
588.3	0.393	14	1.6	48	272	0.992	5.7	3.0	73	312	0.724
589.0	0.475	17	1.7	48	290	1.5	6.9	3.1	74	331	1.1
589.7	0.757	14	1.3	43	271	1.6	11	2.4	66	310	1.2
590.4	0.573	14	1.6	46	273	1.4	8.3	3.0	70	312	0.990
591.1	0.393	16	1.4	55	279	1.0	5.7	2.6	84	319	0.756
591.8	0.434	14	1.5	51	257	0.989	6.3	2.7	79	294	0.722
592.5	0.393	15	1.2	51	262	1.4	5.7	2.2	79	300	1.0
593.2	0.398	14	1.1	48	249	1.1	5.7	1.9	74	284	0.834
593.9	0.487	15	1.3	49	264	1.4	7.0	2.3	75	302	1.0
594.6	0.393	16	1.5	51	284	1.1	5.7	2.8	78	324	0.778
595.3	0.393	16	1.3	51	257	0.640	5.7	2.4	79	294	0.467
596.0	0.393	18	1.5	46	270	0.868	5.7	2.7	71	309	0.633
596.7	0.393	14	1.1	45	248	0.815	5.7	2.0	69	283	0.595
597.4	0.393	16	1.3	55	242	0.585	5.7	2.4	84	277	0.427
598.1	0.393	12	1.6	49	265	0.522	5.7	3.0	75	303	0.381
598.8	0.393	16	1.5	48	264	1.0	5.7	2.7	74	301	0.759
599.5	0.393	17	1.5	60	272	1.2	5.7	2.8	92	311	0.841
600.2	0.415	17	1.3	53	273	1.1	6.0	2.3	81	313	0.790
600.9	0.393	14	1.3	50	262	0.599	5.7	2.4	77	300	0.437
601.6	0.419	15	1.4	50	267	0.547	6.1	2.6	76	305	0.399
602.3	0.805	17	1.7	59	274	1.6	12	3.2	90	313	1.2
603.0	0.469	14	1.0	49	247	0.962	6.8	1.9	74	282	0.702
603.7	0.854	15	1.2	55	282	1.3	12	2.2	84	323	0.971
604.4	0.611	17	0.883	59	250	0.667	8.8	1.6	90	285	0.487
605.1	0.477	16	1.4	60	267	2.2	6.9	2.6	92	305	1.6
605.8	0.423	14	1.3	59	251	0.993	6.1	2.3	90	287	0.725
606.4	0.393	17	1.1	63	264	1.3	5.7	2.0	96	301	0.933
607.1	0.393	15	1.1	61	250	1.1	5.7	2.1	94	285	0.800
607.8	0.393	16	1.6	62	271	1.9	5.7	2.9	95	309	1.4
608.5	0.393	16	1.2	61	273	1.5	5.7	2.2	93	312	1.1
609.2	0.400	14	1.3	62	259	1.3	5.8	2.4	95	296	0.914
609.9	0.631	16	1.5	62	241	0.834	9.1	2.8	95	276	0.609
610.6	0.393	14	0.918	62	260	1.4	5.7	1.7	95	297	1.0
611.3	0.393	15	1.0	70	265	1.5	5.7	1.8	107	302	1.1
612.0	0.400	16	1.2	71	287	1.0	5.8	2.1	109	329	0.762
612.7	0.393	15	0.803	54	239	1.8	5.7	1.5	83	273	1.3
613.4	0.393	16	1.5	60	238	1.4	5.7	2.8	92	273	0.991
614.1	0.393	17	1.5	63	235	0.775	5.7	2.8	97	269	0.565
614.8	0.452	15	0.819	64	256	0.929	6.5	1.5	97	292	0.677
615.5	0.393	16	1.2	58	286	1.3	5.7	2.3	90	327	0.941
616.2	0.393	17	1.5	75	252	1.3	5.7	2.8	115	288	0.973
616.9	0.393	15	1.6	65	242	0.775	5.7	3.0	100	276	0.565
617.6	0.393	17	1.3	72	262	1.5	5.7	2.4	110	300	1.1
618.3	0.559	15	0.991	74	261	1.3	8.1	1.8	114	298	0.965
619.0	0.586	15	1.1	69	261	0.640	8.5	2.0	106	299	0.467
619.7	0.789	16	1.0	68	251	0.922	11	1.9	104	287	0.673
620.4	0.393	16	1.4	69	261	1.2	5.7	2.6	105	298	0.841
621.1	0.393	15	1.5	76	264	1.7	5.7	2.7	116	302	1.2

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
621.8	0.393	13	1.3	60	248	1.5	5.7	2.4	91	284	1.1
622.5	0.662	16	1.5	69	267	1.2	9.6	2.8	106	305	0.879
623.2	0.495	16	2.1	71	294	1.5	7.1	3.9	109	337	1.1
623.9	0.393	14	1.8	66	261	1.4	5.7	3.3	101	299	1.0
624.6	0.393	15	1.7	58	239	2.2	5.7	3.2	89	273	1.6
625.3	0.393	14	1.2	65	256	1.4	5.7	2.1	99	293	1.0
626.0	0.393	14	2.0	64	250	1.4	5.7	3.6	98	286	1.0
626.7	0.393	17	1.3	61	254	0.787	5.7	2.4	93	290	0.574
627.4	0.393	14	1.6	63	267	1.5	5.7	2.8	96	305	1.1
628.1	0.563	14	1.7	51	245	1.3	8.1	3.2	78	280	0.973
628.8	0.395	15	2.3	60	260	2.0	5.7	4.2	92	297	1.4
629.5	0.393	15	2.1	56	227	2.3	5.7	3.7	87	259	1.7
630.2	0.393	14	2.8	56	240	2.2	5.7	5.1	85	274	1.6
630.9	0.733	18	3.2	70	300	2.7	11	5.8	108	343	1.9
631.6	0.393	14	3.0	64	252	2.3	5.7	5.5	98	288	1.7
632.3	0.453	16	3.0	58	251	1.6	6.5	5.4	88	287	1.1
632.9	0.393	16	3.6	72	289	1.7	5.7	6.5	110	330	1.2
633.6	0.393	16	3.2	59	256	1.2	5.7	5.9	91	292	0.850
634.3	0.393	15	2.5	58	267	1.3	5.7	4.6	89	306	0.980
635.0	0.438	15	3.3	56	255	2.4	6.3	6.1	85	292	1.7
635.7	0.415	15	3.7	57	257	2.2	6.0	6.7	88	294	1.6
636.4	0.393	13	3.4	57	245	2.1	5.7	6.2	87	281	1.6
637.1	0.393	13	3.5	51	253	1.8	5.7	6.3	79	289	1.3
637.8	0.529	15	3.1	51	252	1.9	7.6	5.7	78	288	1.4
638.5	0.393	15	3.5	59	290	1.5	5.7	6.4	91	332	1.1
639.2	0.529	16	3.1	42	242	1.4	7.6	5.7	65	277	0.985
639.9	0.393	17	3.1	57	260	2.3	5.7	5.7	87	297	1.7
640.6	0.393	13	2.5	41	261	1.2	5.7	4.6	63	298	0.880
641.3	0.393	13	3.1	43	266	1.5	5.7	5.6	66	304	1.1
642.0	1.0	18	3.3	43	271	1.5	15	5.9	66	310	1.1
642.7	0.588	17	2.8	42	286	1.2	8.5	5.1	65	327	0.859
643.4	0.418	16	2.3	39	244	1.7	6.0	4.3	60	279	1.3
644.1	0.393	16	1.7	36	284	1.7	5.7	3.2	55	325	1.2
644.8	0.393	17	2.3	39	254	1.8	5.7	4.2	59	290	1.3
645.5	0.468	17	2.1	45	270	1.7	6.8	3.7	69	309	1.2
646.2	0.393	16	2.0	42	288	1.2	5.7	3.6	64	329	0.875
646.9	0.393	15	1.9	40	265	1.6	5.7	3.4	62	303	1.2
647.6	0.393	17	1.9	44	276	1.5	5.7	3.4	67	316	1.1
648.3	0.393	15	1.6	42	294	1.9	5.7	2.9	64	336	1.4
649.0	0.393	13	1.7	44	252	1.5	5.7	3.1	68	288	1.1
649.7	0.393	12	1.6	40	242	1.4	5.7	3.0	62	277	1.0
650.4	0.393	14	1.2	40	230	1.1	5.7	2.3	61	263	0.786
651.1	0.393	15	1.3	50	241	1.2	5.7	2.3	77	276	0.892
651.8	0.393	18	1.3	51	261	1.2	5.7	2.4	78	298	0.875
652.5	0.461	15	1.5	45	238	0.736	6.7	2.7	69	272	0.537
653.2	0.393	14	1.2	43	245	0.826	5.7	2.3	66	281	0.603
653.9	0.538	14	1.2	48	244	0.544	7.8	2.2	74	279	0.397
654.6	0.393	16	1.2	56	253	1.4	5.7	2.3	86	289	1.0
655.3	0.393	14	0.783	48	230	0.768	5.7	1.4	73	263	0.560
656.0	0.393	14	0.726	51	226	1.4	5.7	1.3	78	258	1.0
656.7	0.481	16	1.1	56	256	1.2	7.0	2.1	86	292	0.881
657.4	0.393	14	1.0	57	276	1.8	5.7	1.9	87	316	1.3
658.1	0.393	12	0.940	59	238	0.505	5.7	1.7	90	272	0.368
658.7	0.393	14	0.952	57	275	0.538	5.7	1.7	87	314	0.392
659.4	0.393	13	1.3	58	268	0.671	5.7	2.3	89	307	0.490
660.1	0.393	14	1.1	65	257	1.0	5.7	2.0	99	294	0.733
660.8	0.393	14	1.0	56	236	1.5	5.7	1.9	85	270	1.1
661.5	0.483	12	1.3	53	210	1.2	7.0	2.4	81	240	0.857
662.2	0.594	15	1.0	68	264	1.3	8.6	1.9	104	302	0.947
662.9	0.393	14	1.0	55	227	0.367	5.7	1.9	84	259	0.268
663.6	0.393	13	1.1	69	268	1.2	5.7	2.0	105	306	0.905
664.3	0.393	15	1.1	62	233	1.7	5.7	2.1	95	267	1.2
665.0	0.393	13	1.7	65	293	1.8	5.7	3.0	100	335	1.3
665.7	0.393	11	1.2	59	215	0.643	5.7	2.2	91	246	0.469
666.4	0.393	17	1.3	58	249	0.535	5.7	2.4	89	284	0.391
667.1	0.393	13	1.4	64	248	1.8	5.7	2.6	98	284	1.3
667.8	0.393	14	1.6	61	235	0.674	5.7	2.9	94	269	0.492
668.5	0.807	13	1.7	58	264	0.390	12	3.1	89	302	0.285
669.2	0.515	16	1.4	65	240	0.521	7.4	2.5	99	275	0.380
669.9	0.665	15	1.4	67	265	1.0	9.6	2.6	102	303	0.736
670.6	0.393	15	1.7	53	246	1.2	5.7	3.2	80	281	0.847
671.3	0.566	14	1.7	65	257	1.6	8.2	3.1	99	294	1.2
672.0	0.393	16	1.5	53	282	1.9	5.7	2.7	81	323	1.4
672.7	0.818	13	1.6	52	231	1.2	12	2.9	79	264	0.868
673.4	0.626	14	1.9	53	237	1.2	9.0	3.6	82	271	0.908
674.1	0.393	11	1.7	53	244	0.904	5.7	3.2	82	279	0.659
674.8	0.393	12	1.3	48	275	0.972	5.7	2.4	74	315	0.709
675.5	0.393	16	1.7	56	249	0.531	5.7	3.2	85	285	0.387
676.2	0.492	16	1.7	61	245	1.5	7.1	3.2	94	280	1.1
676.9	0.550	16	1.5	55	264	0.445	7.9	2.8	84	302	0.325
677.6	0.393	12	2.1	44	226	2.2	5.7	3.8	68	258	1.6

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
678.3	0.393	13	2.2	61	256	1.7	5.7	4.0	93	293	1.2
679.0	0.546	12	1.9	55	258	1.9	7.9	3.4	84	295	1.4
679.7	0.393	13	1.6	49	257	1.4	5.7	3.0	74	294	1.0
680.4	0.405	13	1.8	40	238	1.1	5.8	3.3	61	272	0.772
681.1	0.393	14	1.9	49	245	1.3	5.7	3.5	75	281	0.942
681.8	0.393	14	2.2	51	247	1.5	5.7	3.9	78	282	1.1
682.5	0.536	12	2.4	42	237	1.8	7.7	4.4	65	271	1.3
683.2	0.393	14	2.3	47	232	1.2	5.7	4.3	72	266	0.896
683.9	0.489	12	2.0	45	267	1.8	7.1	3.7	70	306	1.3
684.5	0.393	15	2.0	44	237	1.3	5.7	3.7	68	271	0.952
685.2	0.393	14	2.2	42	304	1.2	5.7	4.1	64	348	0.876
685.9	0.393	15	1.7	40	256	1.1	5.7	3.2	61	293	0.814
686.6	0.416	12	1.5	39	248	2.0	6.0	2.6	60	283	1.4
687.3	0.393	14	2.0	43	284	1.3	5.7	3.6	67	325	0.968
688.0	0.393	14	1.4	40	260	2.0	5.7	2.6	61	297	1.4
688.7	0.427	15	1.7	40	277	1.3	6.2	3.1	61	317	0.976
689.4	0.534	16	1.4	38	255	1.5	7.7	2.5	58	292	1.1
690.1	0.393	16	1.6	36	312	1.0	5.7	3.0	55	356	0.751
690.8	0.458	12	1.1	34	251	2.0	6.6	2.0	52	287	1.4
691.5	0.393	16	1.3	42	272	1.2	5.7	2.4	64	311	0.861
692.2	0.393	15	1.3	42	272	1.8	5.7	2.5	65	311	1.3
692.9	0.393	15	0.949	44	266	0.792	5.7	1.7	67	304	0.578
693.6	0.393	17	1.1	33	234	1.3	5.7	2.0	51	268	0.960
694.3	0.393	16	1.0	38	271	1.6	5.7	1.9	58	310	1.2
695.0	0.393	17	1.1	37	250	0.943	5.7	2.0	57	286	0.688
695.7	0.538	17	1.2	50	266	0.872	7.8	2.2	77	304	0.636
696.4	1.0	14	1.1	42	272	1.1	15	2.1	64	311	0.769
697.1	0.498	15	0.914	40	279	1.2	7.2	1.7	62	319	0.883
697.8	0.393	15	1.5	51	286	0.854	5.7	2.7	78	327	0.623
698.5	0.402	17	1.0	44	264	1.5	5.8	1.9	68	302	1.1
699.2	0.393	20	1.0	53	323	0.671	5.7	1.9	82	369	0.490
699.9	0.526	18	0.844	46	294	1.5	7.6	1.5	71	336	1.1
700.6	0.467	14	0.965	45	241	1.4	6.7	1.8	70	275	1.0
701.3	0.393	12	0.965	44	273	1.1	5.7	1.8	67	312	0.834
702.0	0.393	15	1.2	45	271	0.815	5.7	2.3	69	310	0.595
702.7	0.836	15	1.4	55	259	0.977	12	2.6	84	296	0.713
703.4	0.446	17	1.2	54	242	1.0	6.4	2.1	83	277	0.743
704.1	0.990	15	1.4	49	262	1.1	14	2.6	75	300	0.772
704.8	0.525	14	0.931	42	241	0.669	7.6	1.7	65	276	0.488
705.5	0.393	14	1.2	52	256	1.4	5.7	2.2	80	293	1.0
706.2	0.393	16	1.6	52	241	0.958	5.7	2.9	79	275	0.699
706.9	0.393	16	1.1	50	305	1.2	5.7	2.1	76	349	0.858
707.6	0.393	15	1.4	54	274	1.4	5.7	2.6	82	313	0.998
708.3	0.393	14	1.6	52	272	1.6	5.7	3.0	79	311	1.2
709.0	0.393	16	2.1	52	272	1.5	5.7	3.8	80	311	1.1
709.7	0.407	18	1.5	48	252	0.955	5.9	2.7	73	289	0.697
710.4	0.523	15	1.8	49	270	1.2	7.6	3.2	75	309	0.851
711.0	0.393	17	1.9	57	293	1.6	5.7	3.5	88	335	1.2
711.7	0.393	17	1.8	61	305	1.8	5.7	3.3	94	349	1.3
712.4	0.474	16	2.0	53	249	1.5	6.8	3.7	81	284	1.1
713.1	0.393	14	1.9	54	277	1.5	5.7	3.4	82	316	1.1
713.8	0.393	15	1.9	51	274	1.2	5.7	3.4	78	313	0.887
714.5	0.442	13	1.6	46	261	1.4	6.4	3.0	70	299	1.0
715.2	0.393	15	1.8	44	280	1.4	5.7	3.3	68	320	1.0
715.9	0.393	16	1.7	58	241	1.1	5.7	3.2	89	275	0.831
716.6	0.393	16	1.7	44	237	1.1	5.7	3.1	68	272	0.818
717.3	0.393	13	1.8	47	270	1.6	5.7	3.4	72	308	1.2
718.0	0.393	12	1.5	48	289	0.662	5.7	2.6	73	330	0.483
718.7	0.393	14	1.6	49	279	1.1	5.7	2.9	76	320	0.778
719.4	0.393	13	1.7	49	243	11	5.7	3.1	75	278	8.2
720.1	0.393	12	1.5	38	228	1.8	5.7	2.6	58	261	1.3
720.8	0.393	14	2.3	50	278	1.4	5.7	4.2	76	318	1.000
721.5	0.393	15	2.0	45	261	2.0	5.7	3.6	69	299	1.4
722.2	0.753	14	1.7	47	250	2.0	11	3.1	71	286	1.5
722.9	0.402	14	2.0	44	264	1.2	5.8	3.6	67	302	0.842
723.6	0.393	13	2.4	37	241	0.834	5.7	4.4	56	275	0.609
724.3	0.393	12	1.9	40	253	1.7	5.7	3.4	61	290	1.2
725.0	0.393	14	2.0	40	245	0.930	5.7	3.6	61	281	0.679
725.7	0.393	13	1.8	38	246	1.5	5.7	3.4	58	281	1.1
726.4	0.393	11	2.0	40	275	1.0	5.7	3.6	61	314	0.747
727.1	0.393	15	2.4	38	271	1.7	5.7	4.4	59	310	1.2
727.8	0.393	13	1.8	31	263	0.800	5.7	3.3	48	301	0.584
728.5	0.715	14	1.7	34	294	2.0	10	3.0	52	336	1.4
729.2	0.600	15	1.7	32	264	2.2	8.7	3.0	49	302	1.6
729.9	0.393	13	1.7	29	249	1.9	5.7	3.0	45	284	1.4
730.6	0.393	16	2.0	29	281	1.0	5.7	3.6	45	322	0.734
731.3	0.393	14	1.2	22	235	1.3	5.7	2.2	34	269	0.934
732.0	0.393	15	1.8	26	257	0.763	5.7	3.2	40	293	0.557
732.7	0.393	14	2.0	26	239	0.776	5.7	3.6	40	273	0.566
733.4	0.393	14	1.6	28	257	1.6	5.7	2.9	43	294	1.1
734.1	0.393	18	1.2	27	320	2.2	5.7	2.2	42	366	1.6

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
734.8	0.437	16	1.3	23	282	2.1	6.3	2.3	35	323	1.5
735.5	0.393	14	1.1	20	259	0.672	5.7	2.1	30	297	0.491
736.2	0.393	14	1.1	24	273	1.4	5.7	2.0	36	312	1.0
736.8	0.393	14	1.1	23	278	1.1	5.7	2.0	36	318	0.826
737.5	0.393	17	1.4	25	255	1.7	5.7	2.6	38	291	1.3
738.2	0.393	13	0.918	26	275	1.9	5.7	1.7	40	315	1.4
738.9	0.393	17	0.788	21	284	2.1	5.7	1.4	33	324	1.5
739.6	0.878	18	1.1	23	279	1.5	13	2.0	36	319	1.1
740.3	0.639	19	1.2	27	271	1.9	9.2	2.1	42	310	1.4
741.0	0.393	17	0.667	24	267	0.980	5.7	1.2	37	306	0.715
741.7	0.524	18	0.817	26	263	1.6	7.6	1.5	40	301	1.2
742.4	0.402	18	0.903	26	271	1.8	5.8	1.6	40	310	1.3
743.1	0.584	15	1.1	31	259	0.851	8.4	2.1	48	296	0.621
743.8	0.419	17	0.991	31	283	2.2	6.0	1.8	47	324	1.6
744.5	0.393	16	0.745	30	266	2.5	5.7	1.4	46	304	1.8
745.2	0.393	19	0.964	31	293	1.7	5.7	1.8	48	335	1.2
745.9	0.393	16	1.0	35	290	1.4	5.7	1.9	54	331	1.0
746.6	0.393	15	0.784	35	263	1.0	5.7	1.4	54	301	0.751
747.3	0.433	14	1.1	30	276	1.3	6.3	2.0	46	316	0.938
748.0	0.393	14	1.2	30	228	1.3	5.7	2.3	46	261	0.944
748.7	0.482	17	0.823	38	234	1.2	7.0	1.5	58	268	0.883
749.4	0.543	15	0.740	35	222	0.989	7.8	1.3	53	253	0.722
750.1	0.393	15	0.958	37	230	1.3	5.7	1.7	56	263	0.949
750.8	0.393	13	1.0	42	231	1.2	5.7	1.9	64	264	0.889
751.5	0.431	13	1.4	38	260	0.787	6.2	2.5	59	297	0.574
752.2	0.393	13	0.971	38	238	1.3	5.7	1.8	59	272	0.915
752.9	0.393	18	1.3	45	253	1.6	5.7	2.4	69	289	1.1
753.6	0.393	16	0.770	48	240	1.4	5.7	1.4	73	274	0.992
754.3	0.393	13	1.2	46	265	1.2	5.7	2.2	70	303	0.874
755.0	0.393	16	1.3	41	237	1.1	5.7	2.4	63	271	0.772
755.7	0.393	14	1.4	45	236	0.749	5.7	2.5	70	269	0.546
756.4	0.942	14	1.3	37	220	1.3	14	2.3	57	251	0.955
757.1	0.393	13	1.1	53	239	0.865	5.7	2.0	82	274	0.631
757.8	0.393	14	1.5	46	226	0.538	5.7	2.7	71	258	0.392
758.5	0.393	14	1.9	49	262	0.481	5.7	3.5	74	300	0.351
759.2	0.749	12	1.7	51	235	0.523	11	3.0	78	269	0.382
759.9	0.393	15	1.9	52	260	1.1	5.7	3.5	79	298	0.778
760.6	0.393	15	1.4	49	231	0.888	5.7	2.5	75	264	0.648
761.3	0.393	14	1.9	49	247	0.543	5.7	3.5	75	282	0.396
762.0	0.466	14	2.0	48	247	1.1	6.7	3.6	73	283	0.776
762.7	0.393	14	1.7	47	246	1.3	5.7	3.0	73	281	0.956
763.4	0.515	12	1.7	52	236	1.3	7.4	3.1	79	270	0.913
764.0	0.393	20	1.8	51	241	1.0	5.7	3.2	78	276	0.743
764.7	0.393	16	2.2	49	247	1.0	5.7	4.0	75	282	0.764
765.4	0.393	13	1.6	49	228	1.0	5.7	2.9	75	260	0.744
766.1	0.393	15	2.1	49	232	1.1	5.7	3.8	75	266	0.827
766.8	0.393	14	2.0	43	238	1.3	5.7	3.7	66	273	0.923
767.5	0.393	15	1.9	44	222	1.8	5.7	3.4	67	254	1.3
768.2	0.393	13	1.8	46	270	1.7	5.7	3.3	71	309	1.2
768.9	0.393	13	1.4	43	218	0.908	5.7	2.6	67	249	0.663
769.6	0.393	14	1.5	41	211	1.5	5.7	2.8	63	242	1.1
770.3	0.393	13	2.3	46	242	1.2	5.7	4.1	70	277	0.860
771.0	0.393	14	1.9	45	233	1.2	5.7	3.5	68	267	0.885
771.7	0.393	13	1.5	39	198	0.816	5.7	2.8	60	226	0.595
772.4	0.737	11	1.7	35	230	0.669	11	3.1	54	263	0.488
773.1	0.393	14	2.0	45	251	1.1	5.7	3.6	68	287	0.805
773.8	0.772	11	1.7	41	230	0.935	11	3.1	63	263	0.682
774.5	0.590	10	1.8	40	233	1.9	8.5	3.3	62	266	1.4
775.2	0.393	14	1.7	48	235	1.0	5.7	3.2	74	269	0.741
775.9	0.393	11	2.0	45	230	0.701	5.7	3.7	69	263	0.512
776.6	0.393	13	2.1	44	267	1.5	5.7	3.9	68	305	1.1
777.3	0.398	13	2.1	42	246	1.2	5.7	3.9	65	281	0.909
778.0	0.393	10	1.5	38	253	1.1	5.7	2.8	58	289	0.810
778.7	0.393	11	1.4	43	226	1.2	5.7	2.5	65	259	0.842
779.4	0.393	14	1.8	173	228	0.996	5.7	3.4	265	261	0.727
780.1	0.393	13	1.6	42	247	1.2	5.7	2.9	65	283	0.851
780.8	0.393	12	1.5	38	228	1.1	5.7	2.7	59	260	0.795
781.5	0.393	14	1.8	41	237	0.985	5.7	3.2	63	271	0.718
782.2	0.393	14	2.0	47	236	1.4	5.7	3.6	72	270	1.0
782.9	0.393	12	2.0	46	300	1.9	5.7	3.6	70	343	1.4
783.6	0.393	12	1.6	42	276	0.668	5.7	2.9	65	316	0.488
784.3	0.393	12	1.6	42	237	1.3	5.7	2.9	65	271	0.924
785.0	0.507	14	1.8	38	249	1.5	7.3	3.3	58	284	1.1
785.7	0.878	11	2.2	44	237	1.4	13	4.0	68	271	1.0
786.4	0.393	10	1.5	42	245	1.6	5.7	2.7	65	281	1.1
787.1	0.393	12	1.4	38	272	2.3	5.7	2.6	58	311	1.7
787.8	0.393	11	2.2	37	254	2.4	5.7	4.0	57	291	1.7
788.5	0.615	13	2.1	40	262	1.3	8.9	3.9	61	299	0.982
789.2	0.468	14	1.8	36	227	1.1	6.8	3.3	54	260	0.831
789.8	0.856	11	1.5	38	235	1.3	12	2.8	58	269	0.984
790.5	0.393	10	1.4	38	249	2.0	5.7	2.6	59	285	1.4

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
791.2	0.393	16	1.9	41	249	1.5	5.7	3.5	63	285	1.1
791.9	0.393	13	1.9	40	266	1.4	5.7	3.4	61	304	1.0
792.6	0.586	14	1.6	38	260	0.854	8.5	3.0	58	298	0.623
793.3	0.393	12	1.8	32	250	1.3	5.7	3.4	49	286	0.979
794.0	0.393	12	1.8	37	253	1.8	5.7	3.3	56	290	1.3
794.7	0.393	13	2.0	40	277	1.2	5.7	3.6	62	317	0.879
795.4	0.393	13	1.5	29	285	1.8	5.7	2.8	44	326	1.3
796.1	0.752	10	1.7	37	252	1.4	11	3.0	57	289	0.998
796.8	0.393	12	2.0	33	269	0.802	5.7	3.6	51	307	0.585
797.5	0.393	13	1.9	36	259	2.0	5.7	3.4	55	296	1.5
798.2	0.393	15	2.4	34	257	1.3	5.7	4.4	53	294	0.952
798.9	0.393	13	1.5	35	285	1.8	5.7	2.7	53	326	1.3
799.6	0.393	15	1.8	32	261	2.6	5.7	3.2	49	298	1.9
800.3	0.393	13	1.5	30	249	0.718	5.7	2.8	47	284	0.524
801.0	0.393	11	1.7	32	251	1.6	5.7	3.2	50	287	1.1
801.7	0.393	15	1.2	30	244	1.7	5.7	2.3	46	279	1.2
802.4	0.393	13	1.2	31	257	1.1	5.7	2.2	48	293	0.834
803.1	0.393	13	1.5	28	236	1.3	5.7	2.8	42	270	0.961
803.8	0.393	14	1.9	30	232	1.9	5.7	3.4	47	265	1.4
804.5	0.394	15	1.4	24	249	1.4	5.7	2.5	36	285	1.1
805.2	0.393	14	1.2	27	241	1.3	5.7	2.3	41	275	0.927
805.9	0.393	15	1.1	26	253	1.4	5.7	2.0	40	289	0.992
806.6	0.625	14	0.868	33	243	2.4	9.0	1.6	51	278	1.7
807.3	0.521	15	0.695	25	303	2.0	7.5	1.3	39	346	1.5
808.0	0.393	13	0.905	29	276	1.6	5.7	1.7	44	316	1.2
808.7	0.471	15	1.1	26	274	2.6	6.8	2.0	39	313	1.9
809.4	0.393	15	1.3	22	263	1.2	5.7	2.5	33	301	0.883
810.1	0.544	17	0.816	20	256	0.991	7.9	1.5	30	292	0.723
810.8	0.538	18	1.0	26	266	1.1	7.8	1.9	40	304	0.780
811.5	0.607	18	1.1	30	326	2.4	8.8	1.9	46	372	1.7
812.2	0.393	18	0.864	27	315	1.5	5.7	1.6	42	361	1.1
812.9	0.393	16	1.2	24	295	1.1	5.7	2.1	37	338	0.806
813.6	0.393	18	0.549	27	291	1.5	5.7	1.0	41	333	1.1
814.3	0.766	21	0.882	26	335	1.6	11	1.6	40	383	1.2
815.0	0.393	20	1.0	24	318	1.8	5.7	1.9	37	363	1.3
815.7	0.393	17	0.767	29	292	2.7	5.7	1.4	45	334	2.0
816.3	0.712	20	0.816	33	322	1.5	10	1.5	50	368	1.1
817.0	0.393	22	0.782	33	302	1.5	5.7	1.4	50	345	1.1
817.7	0.610	19	0.922	36	298	1.1	8.8	1.7	55	341	0.810
818.4	0.393	24	0.904	32	310	1.4	5.7	1.6	49	355	1.0
819.1	0.393	20	0.983	35	336	1.4	5.7	1.8	54	384	1.0
819.8	0.393	20	0.910	39	297	1.3	5.7	1.7	59	340	0.933
820.5	0.393	19	1.7	39	314	1.4	5.7	3.1	60	359	1.0
821.2	0.692	20	1.1	40	367	1.5	10.0	2.0	61	420	1.1
821.9	0.547	21	1.2	43	358	1.5	7.9	2.1	66	410	1.1
822.6	0.393	18	1.2	41	315	1.6	5.7	2.1	63	361	1.2
823.3	0.393	23	1.3	47	348	1.8	5.7	2.4	72	398	1.3
824.0	0.393	19	1.2	40	290	1.9	5.7	2.2	61	331	1.4
824.7	0.443	21	0.960	48	346	2.1	6.4	1.8	73	396	1.5
825.4	0.393	18	1.2	49	334	1.4	5.7	2.2	75	382	1.0
826.1	0.547	18	1.2	53	324	2.2	7.9	2.1	81	371	1.6
826.8	0.458	20	1.2	49	295	1.9	6.6	2.1	75	338	1.4
827.5	0.393	21	1.3	49	321	1.8	5.7	2.3	75	367	1.3
828.2	0.672	19	1.3	49	334	1.8	9.7	2.3	76	382	1.3
828.9	0.393	19	1.5	52	314	1.6	5.7	2.8	79	359	1.2
829.6	0.431	21	0.919	49	313	1.1	6.2	1.7	75	358	0.821
830.3	0.393	17	1.6	58	346	2.2	5.7	2.8	89	396	1.6
831.0	0.732	20	1.4	61	356	2.3	11	2.6	93	407	1.7
831.7	0.598	19	1.6	56	366	2.1	8.6	2.8	85	418	1.5
832.4	0.520	17	1.2	63	337	1.1	7.5	2.2	97	385	0.768
833.1	0.393	18	2.0	55	336	1.3	5.7	3.6	84	384	0.961
833.8	0.534	20	1.8	54	420	1.7	7.7	3.3	83	481	1.3
834.5	0.393	18	1.6	58	328	1.2	5.7	2.9	90	375	0.908
835.2	0.393	19	1.3	60	347	1.5	5.7	2.4	91	397	1.1
835.9	0.393	18	1.2	63	339	2.0	5.7	2.3	96	387	1.5
836.6	0.393	17	2.0	55	344	1.7	5.7	3.6	84	394	1.3
837.3	0.393	19	1.4	66	437	1.5	5.7	2.6	102	500	1.1
838.0	0.471	19	1.8	59	339	1.9	6.8	3.4	90	388	1.4
838.7	0.666	18	1.1	64	369	2.2	9.6	2.0	98	422	1.6
839.4	0.393	21	1.7	66	433	2.3	5.7	3.1	101	495	1.7
840.1	0.393	20	1.6	69	375	2.8	5.7	2.9	105	429	2.1
840.8	0.393	19	1.8	67	381	1.9	5.7	3.3	103	436	1.4
841.5	0.393	19	1.7	64	323	1.8	5.7	3.1	99	369	1.3
842.1	0.393	19	1.5	67	392	2.5	5.7	2.8	103	448	1.8
842.8	0.393	18	2.0	68	358	1.1	5.7	3.6	105	410	0.771
843.5	0.393	21	1.9	73	406	3.0	5.7	3.4	112	465	2.2
844.2	0.393	17	1.8	74	394	1.8	5.7	3.2	114	451	1.3
844.9	0.393	21	1.6	72	430	1.1	5.7	2.9	111	491	0.810
845.6	0.393	20	2.0	62	338	2.3	5.7	3.6	94	386	1.7
846.3	0.393	18	2.2	61	363	2.2	5.7	4.0	94	415	1.6
847.0	0.393	18	1.8	66	342	1.0	5.7	3.2	101	391	0.755

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Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
847.7	0.393	20	2.2	70	405	2.0	5.7	4.0	107	463	1.4
848.4	0.509	19	1.6	68	377	2.3	7.3	3.0	104	431	1.7
849.1	0.393	19	2.1	64	371	0.940	5.7	3.8	98	424	0.686
849.8	0.393	18	2.3	63	338	1.2	5.7	4.2	96	386	0.903
850.5	0.471	20	2.1	72	424	3.2	6.8	3.8	111	484	2.4
851.2	0.463	18	1.7	76	355	1.2	6.7	3.2	117	406	0.848
851.9	0.393	17	2.0	72	375	1.8	5.7	3.7	111	429	1.3
852.6	0.585	17	1.7	75	383	2.0	8.4	3.2	115	438	1.5
853.3	0.397	17	2.0	62	354	1.7	5.7	3.6	96	404	1.2
854.0	0.393	18	2.1	84	381	2.1	5.7	3.8	129	435	1.5
854.7	0.393	18	2.1	65	319	1.2	5.7	3.9	100	364	0.850
855.4	0.393	18	2.5	78	374	2.6	5.7	4.6	119	428	1.9
856.1	0.393	19	1.7	75	345	3.3	5.7	3.1	115	394	2.4
856.8	0.393	18	2.7	76	343	1.6	5.7	4.9	116	393	1.2
857.5	0.393	22	2.7	75	377	0.534	5.7	4.9	114	431	0.390
858.2	0.397	17	2.5	76	347	1.3	5.7	4.5	117	397	0.983
858.9	0.393	18	2.5	83	344	2.0	5.7	4.5	128	393	1.4
859.6	0.393	19	2.6	75	310	2.0	5.7	4.8	114	355	1.5
860.3	0.393	19	3.5	81	346	1.4	5.7	6.5	124	396	1.0
861.0	0.393	21	2.4	85	327	2.0	5.7	4.4	130	374	1.5
861.7	0.393	19	2.2	79	326	2.1	5.7	4.1	120	373	1.5
862.4	0.393	16	2.6	79	283	1.3	5.7	4.8	121	324	0.974
863.1	0.393	16	3.0	73	324	2.2	5.7	5.5	112	370	1.6
863.8	0.540	20	3.4	85	303	2.5	7.8	6.1	131	347	1.8
864.5	0.393	19	3.4	96	337	1.9	5.7	6.2	147	386	1.4
865.2	0.504	17	3.3	85	301	1.8	7.3	6.0	130	344	1.3
865.9	0.393	17	3.3	77	288	1.5	5.7	6.1	118	329	1.1
866.6	0.393	21	3.0	89	303	1.8	5.7	5.4	136	346	1.3
867.3	0.393	20	3.0	84	298	2.4	5.7	5.5	128	341	1.7
868.0	0.450	20	3.5	95	306	2.3	6.5	6.3	146	350	1.6
868.6	0.634	19	4.1	95	306	3.3	9.2	7.5	145	350	2.4
869.3	0.393	18	3.1	84	280	1.8	5.7	5.7	129	320	1.3
870.0	0.393	18	3.5	83	288	2.7	5.7	6.4	127	330	2.0
870.7	0.393	17	3.4	88	278	1.9	5.7	6.2	134	318	1.4
871.4	0.393	21	3.2	83	282	2.2	5.7	5.8	127	322	1.6
872.1	0.468	20	4.6	88	282	2.8	6.8	8.4	134	323	2.0
872.8	0.393	19	3.1	81	286	2.9	5.7	5.7	125	326	2.1
873.5	0.549	19	3.6	84	298	2.2	7.9	6.6	129	341	1.6
874.2	0.393	19	3.7	89	310	2.5	5.7	6.8	136	354	1.8
874.9	0.393	20	3.4	91	278	3.2	5.7	6.2	139	318	2.3
875.6	0.393	17	3.6	84	278	1.7	5.7	6.6	128	318	1.3
876.3	0.393	20	3.9	86	306	2.7	5.7	7.0	131	350	2.0
877.0	0.393	19	3.7	77	281	2.7	5.7	6.8	118	322	2.0
877.7	0.393	20	3.5	76	286	2.8	5.7	6.4	116	328	2.0
878.4	0.393	20	4.3	86	307	4.3	5.7	7.8	132	351	3.1
879.1	0.393	20	3.1	84	256	2.8	5.7	5.6	128	293	2.0
879.8	0.393	19	3.3	84	273	2.5	5.7	6.1	128	313	1.8
880.5	0.393	19	3.4	79	282	2.9	5.7	6.2	122	323	2.1
881.2	0.393	21	4.1	84	285	2.0	5.7	7.6	129	326	1.4
881.9	0.398	19	3.5	76	248	2.6	5.7	6.3	117	284	1.9
882.6	0.467	19	3.1	76	265	4.7	6.7	5.6	117	303	3.4
883.3	0.393	22	3.3	86	301	3.9	5.7	6.0	132	344	2.8
884.0	0.548	24	3.5	79	263	4.1	7.9	6.3	122	301	3.0
884.7	0.393	22	3.1	75	247	4.1	5.7	5.7	115	282	3.0
885.4	0.393	19	3.0	69	244	2.6	5.7	5.4	106	279	1.9
886.1	0.393	18	3.1	64	258	2.1	5.7	5.6	98	294	1.5
886.8	0.393	20	2.6	67	244	1.8	5.7	4.8	103	280	1.3
887.5	0.452	24	3.0	72	240	2.4	6.5	5.4	110	275	1.7
888.2	0.394	23	2.4	68	242	2.7	5.7	4.3	105	277	2.0
888.9	0.393	18	2.2	66	224	2.2	5.7	4.0	100	256	1.6
889.6	0.393	21	2.7	65	222	2.8	5.7	5.0	99	254	2.1
890.3	0.393	20	2.8	57	250	1.4	5.7	5.2	88	286	1.0
891.0	0.393	20	2.4	67	218	2.2	5.7	4.4	102	249	1.6
891.7	0.393	23	1.7	57	245	2.3	5.7	3.1	87	280	1.7
892.4	0.393	18	2.3	57	203	2.6	5.7	4.3	88	232	1.9
893.1	0.393	24	2.7	62	243	1.8	5.7	4.9	95	278	1.3
893.8	0.393	25	2.3	60	279	2.3	5.7	4.2	92	319	1.7
894.4	0.393	24	2.2	63	295	1.6	5.7	4.0	97	338	1.2
895.1	0.393	25	2.6	57	233	3.0	5.7	4.7	88	266	2.2
895.8	0.393	21	1.9	53	218	2.4	5.7	3.4	81	250	1.7
896.5	0.410	26	1.8	50	282	1.6	5.9	3.3	76	322	1.2
897.2	0.484	22	1.9	57	270	2.6	7.0	3.4	87	309	1.9
897.9	0.393	20	1.8	45	227	2.1	5.7	3.3	70	260	1.5
898.6	0.393	24	2.0	46	241	1.8	5.7	3.7	70	276	1.3
899.3	0.393	21	2.0	49	251	2.8	5.7	3.6	75	287	2.1
900.0	0.395	23	1.5	50	275	1.9	5.7	2.7	76	314	1.4
900.7	0.509	22	1.8	48	246	2.2	7.3	3.4	73	281	1.6
901.4	0.393	22	1.7	47	249	2.0	5.7	3.2	72	284	1.5
902.1	0.393	23	1.5	45	257	2.6	5.7	2.7	70	294	1.9
902.8	0.393	22	1.4	43	227	2.1	5.7	2.6	66	260	1.5
903.5	0.393	22	1.4	43	258	1.3	5.7	2.5	66	295	0.973

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Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
904.2	0.444	23	1.9	43	277	2.8	6.4	3.5	67	317	2.1
904.9	0.393	23	1.5	48	255	1.2	5.7	2.8	73	291	0.861
905.6	0.393	22	1.2	39	250	2.2	5.7	2.1	60	286	1.6
906.3	0.393	20	1.2	40	246	2.1	5.7	2.1	61	281	1.5
907.0	0.393	20	1.7	40	261	2.4	5.7	3.1	61	298	1.7
907.7	0.601	23	1.3	45	289	2.4	8.7	2.4	69	330	1.7
908.4	0.393	21	1.3	38	254	2.7	5.7	2.3	58	290	2.0
909.1	0.587	18	1.3	40	253	2.0	8.5	2.4	61	290	1.5
909.8	0.429	20	1.1	42	273	1.4	6.2	2.0	65	313	1.000
910.5	0.393	19	1.2	34	233	2.6	5.7	2.2	52	267	1.9
911.2	0.454	19	1.1	37	246	2.0	6.6	2.1	57	282	1.4
911.9	0.393	20	1.1	37	238	2.3	5.7	2.0	57	273	1.7
912.6	0.393	18	0.742	36	252	1.6	5.7	1.4	55	289	1.2
913.3	0.393	18	0.583	42	255	1.5	5.7	1.1	64	291	1.1
914.0	0.393	16	1.1	34	241	1.5	5.7	2.0	52	276	1.1
914.7	0.393	18	0.718	34	258	2.4	5.7	1.3	52	295	1.7
915.4	0.609	18	1.1	37	257	1.9	8.8	1.9	57	294	1.4
916.1	0.393	17	0.682	35	292	1.7	5.7	1.2	53	334	1.2
916.8	0.393	17	1.2	35	270	1.6	5.7	2.1	54	309	1.2
917.5	0.831	19	0.753	34	262	1.8	12	1.4	51	299	1.3
918.2	0.496	22	1.3	33	252	1.7	7.2	2.3	51	288	1.2
918.9	0.393	16	0.928	34	281	1.8	5.7	1.7	53	321	1.3
919.6	0.559	16	0.692	33	261	1.2	8.1	1.3	51	299	0.891
920.3	0.393	17	0.614	32	265	2.3	5.7	1.1	49	303	1.7
920.9	0.393	17	0.975	32	251	1.4	5.7	1.8	50	287	1.0
921.6	0.393	17	0.595	32	239	2.9	5.7	1.1	50	273	2.1
922.3	0.393	18	0.870	27	249	2.1	5.7	1.6	42	284	1.5
923.0	0.393	18	0.819	31	288	1.9	5.7	1.5	47	330	1.4
923.7	0.492	19	0.678	30	257	2.0	7.1	1.2	46	294	1.5
924.4	0.393	18	0.982	29	260	2.7	5.7	1.8	45	298	2.0
925.1	0.393	17	0.684	28	255	2.2	5.7	1.2	43	292	1.6
925.8	0.550	16	0.783	32	288	2.3	7.9	1.4	49	330	1.7
926.5	0.450	17	0.699	32	278	2.2	6.5	1.3	49	318	1.6
927.2	0.393	17	0.702	28	264	1.5	5.7	1.3	43	301	1.1
927.9	0.393	19	1.1	27	235	2.7	5.7	2.1	41	268	1.9
928.6	0.393	15	0.676	28	281	1.5	5.7	1.2	43	321	1.1
929.3	0.479	15	0.644	30	274	1.9	6.9	1.2	46	313	1.4
930.0	0.393	16	0.530	31	268	2.3	5.7	0.966	47	306	1.7
930.7	0.393	16	0.547	26	241	1.7	5.7	0.998	40	276	1.2
931.4	0.393	18	0.711	26	266	2.5	5.7	1.3	40	305	1.8
932.1	0.393	17	0.726	25	266	3.4	5.7	1.3	38	304	2.5
932.8	0.393	17	0.600	24	267	2.0	5.7	1.1	38	305	1.4
933.5	0.393	18	0.856	32	271	1.3	5.7	1.6	49	310	0.978
934.2	0.443	15	0.787	23	261	1.9	6.4	1.4	35	298	1.4
934.9	0.393	15	0.586	22	256	1.8	5.7	1.1	34	293	1.3
935.6	0.468	18	0.703	22	267	2.1	6.8	1.3	34	306	1.6
936.3	0.393	17	0.668	23	237	2.3	5.7	1.2	36	271	1.7
937.0	0.404	19	0.575	25	276	3.0	5.8	1.0	38	316	2.2
937.7	0.393	22	1.0	25	276	3.2	5.7	1.8	38	316	2.4
938.4	0.393	21	0.646	26	259	2.6	5.7	1.2	40	296	1.9
939.1	0.393	18	0.283	22	257	1.8	5.7	0.517	33	294	1.3
939.8	0.393	20	0.502	24	313	2.4	5.7	0.916	37	357	1.8
940.5	0.393	22	0.651	25	300	2.9	5.7	1.2	38	343	2.1
941.2	0.540	26	0.558	24	311	2.5	7.8	1.0	37	356	1.8
941.9	0.393	22	0.923	27	275	3.1	5.7	1.7	41	315	2.3
942.6	0.393	24	0.959	22	276	3.2	5.7	1.7	34	315	2.4
943.3	0.393	26	0.677	23	317	2.4	5.7	1.2	35	362	1.8
944.0	0.393	28	0.698	21	326	3.2	5.7	1.3	33	373	2.3
944.7	0.393	30	0.964	25	315	3.8	5.7	1.8	38	360	2.7
945.4	0.644	31	0.818	27	308	3.2	9.3	1.5	41	352	2.4
946.1	0.393	33	0.923	25	318	4.3	5.7	1.7	38	364	3.1
946.7	0.403	34	0.977	31	297	4.7	5.8	1.8	47	339	3.5
947.4	0.393	34	0.834	27	280	3.2	5.7	1.5	42	320	2.3
948.1	0.661	33	0.772	25	282	4.2	9.5	1.4	39	323	3.1
948.8	0.393	36	0.975	29	280	3.4	5.7	1.8	44	321	2.5
949.5	0.393	36	0.941	31	282	3.6	5.7	1.7	47	322	2.7
950.2	0.393	36	1.0	35	274	4.3	5.7	1.9	54	313	3.1
950.9	0.552	35	1.3	37	277	4.0	8.0	2.3	56	317	2.9
951.6	0.393	32	0.846	38	290	3.5	5.7	1.5	59	332	2.6
952.3	0.393	28	1.1	45	332	5.8	5.7	2.1	69	379	4.2
953.0	0.393	32	1.4	36	274	4.0	5.7	2.5	55	313	2.9
953.7	0.393	33	1.0	46	303	4.4	5.7	1.8	71	347	3.2
954.4	0.439	26	1.2	39	273	4.4	6.3	2.3	60	313	3.2
955.1	0.393	28	1.5	41	292	4.9	5.7	2.7	63	333	3.6
955.8	0.393	26	1.1	39	293	4.6	5.7	1.9	60	335	3.4
956.5	0.705	31	1.4	46	283	4.9	10	2.5	70	324	3.6
957.2	0.393	31	1.4	53	317	6.5	5.7	2.6	81	362	4.8
957.9	0.393	29	1.0	54	308	5.7	5.7	1.8	82	352	4.2
958.6	0.439	28	1.5	49	303	5.3	6.3	2.7	75	346	3.9
959.3	0.393	23	1.4	47	331	5.6	5.7	2.5	72	378	4.1
960.0	0.393	25	1.4	50	296	5.6	5.7	2.5	76	339	4.1

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
960.7	0.393	26	1.4	50	286	5.7	5.7	2.5	77	327	4.1
961.4	0.393	18	1.4	43	245	5.0	5.7	2.5	65	280	3.7
962.1	0.457	24	1.8	49	310	7.2	6.6	3.2	75	355	5.3
962.8	0.393	23	1.8	45	275	7.8	5.7	3.3	70	315	5.7
963.5	0.393	28	2.3	50	255	6.7	5.7	4.2	77	292	4.9
964.2	0.792	26	1.5	55	306	7.3	11	2.7	85	350	5.3
964.9	0.393	20	2.1	50	287	9.7	5.7	3.9	77	328	7.1
965.6	0.588	24	1.9	51	259	6.8	8.5	3.5	78	296	4.9
966.3	0.393	23	1.6	52	283	9.5	5.7	3.0	80	324	6.9
967.0	0.393	27	1.5	61	304	9.7	5.7	2.8	94	348	7.1
967.7	0.399	23	1.8	49	300	8.5	5.8	3.3	75	343	6.2
968.4	0.514	23	1.3	53	303	8.5	7.4	2.4	81	346	6.2
969.1	0.393	25	1.9	56	299	7.6	5.7	3.4	85	342	5.5
969.8	0.393	26	2.1	62	309	10	5.7	3.8	94	354	7.3
970.5	0.393	25	1.6	60	270	10	5.7	2.9	92	308	7.5
971.2	0.393	22	1.8	66	317	9.5	5.7	3.3	101	363	7.0
971.8	0.513	19	1.6	57	353	9.3	7.4	2.9	88	403	6.8
972.5	0.393	23	1.6	61	317	8.9	5.7	2.9	93	363	6.5
973.2	0.673	21	1.5	70	311	11	9.7	2.7	107	356	7.7
973.9	0.393	23	1.5	59	312	8.7	5.7	2.7	90	356	6.4
974.6	0.393	19	1.6	58	275	7.8	5.7	3.0	89	315	5.7
975.3	0.424	20	1.6	54	317	7.0	6.1	2.9	82	362	5.1
976.0	0.393	23	1.9	66	301	8.2	5.7	3.4	102	345	6.0
976.7	0.393	24	1.7	70	292	7.2	5.7	3.1	108	334	5.3
977.4	0.646	20	1.2	56	279	7.7	9.3	2.2	85	319	5.6
978.1	0.393	21	1.6	66	296	7.6	5.7	3.0	100	339	5.6
978.8	0.393	20	0.998	59	288	6.0	5.7	1.8	90	329	4.4
979.5	0.393	23	1.2	78	298	5.7	5.7	2.2	119	340	4.1
980.2	0.393	22	1.5	74	295	4.4	5.7	2.8	114	337	3.2
980.9	0.393	21	1.1	76	328	3.9	5.7	2.0	116	375	2.8
981.6	0.876	22	1.3	74	290	4.6	13	2.4	114	331	3.3
982.3	0.548	24	1.4	73	303	4.3	7.9	2.5	112	346	3.2
983.0	0.711	24	1.6	70	337	5.3	10	2.9	107	385	3.9
983.7	0.597	23	1.4	73	287	4.5	8.6	2.5	113	328	3.3
984.4	0.393	21	1.4	77	280	3.1	5.7	2.6	118	320	2.2
985.1	0.393	23	1.6	68	307	3.5	5.7	3.0	105	352	2.5
985.8	0.442	21	1.3	74	308	2.5	6.4	2.4	113	352	1.9
986.5	0.507	26	1.6	65	302	3.7	7.3	2.9	100	345	2.7
987.2	0.393	24	1.4	78	330	2.6	5.7	2.6	119	377	1.9
987.9	0.718	24	1.3	78	300	3.1	10	2.4	119	344	2.3
988.6	0.393	22	1.4	80	345	3.2	5.7	2.5	122	395	2.4
989.3	0.393	22	1.3	71	332	3.8	5.7	2.3	109	380	2.8
990.0	0.393	25	1.7	89	323	3.1	5.7	3.2	136	369	2.2
990.7	0.457	23	2.0	70	296	2.9	6.6	3.6	108	338	2.1
991.4	0.393	26	2.1	85	336	3.3	5.7	3.8	131	384	2.4
992.1	0.393	23	2.1	79	331	3.7	5.7	3.7	121	379	2.7
992.8	0.568	26	1.7	89	367	3.5	8.2	3.0	136	419	2.6
993.5	0.620	32	1.8	90	374	4.1	9.0	3.3	139	428	3.0
994.2	0.393	29	2.2	92	358	2.8	5.7	4.1	141	409	2.1
994.9	0.393	27	2.5	78	326	2.5	5.7	4.5	120	373	1.8
995.6	0.393	26	1.7	78	354	2.6	5.7	3.0	119	405	1.9
996.3	0.393	30	2.7	88	388	3.5	5.7	5.0	135	444	2.5
997.0	0.393	26	2.0	91	390	2.6	5.7	3.7	139	446	1.9
997.7	0.393	26	2.0	85	357	3.2	5.7	3.6	130	408	2.3
998.4	0.554	25	2.1	87	343	3.6	8.0	3.8	133	392	2.6
999.0	0.714	26	2.1	90	367	3.2	10	3.9	138	420	2.3
999.7	0.393	30	2.8	95	414	3.5	5.7	5.0	145	474	2.5
1000.4	0.624	25	2.1	85	352	3.1	9.0	3.7	130	402	2.3
1001.1	0.393	25	2.5	92	372	4.3	5.7	4.5	141	425	3.1
1001.8	0.393	25	2.6	87	380	2.6	5.7	4.7	133	434	1.9
1002.5	0.393	29	2.3	85	379	3.0	5.7	4.1	130	434	2.2
1003.2	0.393	35	2.7	87	375	4.1	5.7	5.0	133	429	3.0
1003.9	0.393	28	2.8	81	406	3.1	5.7	5.1	124	464	2.3
1004.6	0.554	31	2.4	88	393	3.3	8.0	4.3	135	450	2.4
1005.3	0.450	27	2.4	82	326	2.9	6.5	4.3	126	372	2.1
1006.0	0.393	27	2.6	79	355	2.8	5.7	4.7	120	406	2.0
1006.7	0.393	25	2.4	87	318	2.4	5.7	4.4	134	364	1.8
1007.4	0.393	32	2.6	97	358	2.6	5.7	4.8	149	409	1.9
1008.1	0.646	27	2.0	82	369	3.0	9.3	3.7	125	422	2.2
1008.8	0.393	28	2.3	96	346	3.4	5.7	4.1	147	395	2.5
1009.5	0.393	29	2.2	86	364	3.9	5.7	4.0	131	416	2.9
1010.2	0.393	31	2.2	91	375	3.6	5.7	4.0	140	429	2.7
1010.9	0.393	27	2.5	97	366	3.0	5.7	4.5	149	418	2.2
1011.6	0.477	28	2.7	92	374	2.2	6.9	4.9	142	428	1.6
1012.3	0.393	29	2.6	89	383	2.7	5.7	4.7	136	438	2.0
1013.0	0.393	31	2.3	86	348	3.8	5.7	4.1	131	398	2.8
1013.7	0.521	28	2.3	95	349	2.9	7.5	4.1	145	399	2.2
1014.4	0.426	28	2.9	92	301	3.5	6.1	5.4	141	344	2.6
1015.1	0.393	30	2.5	87	337	3.1	5.7	4.5	133	386	2.3
1015.8	0.393	31	2.1	88	365	1.9	5.7	3.8	134	417	1.4
1016.5	0.535	28	2.1	88	319	2.5	7.7	3.8	135	364	1.9

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1017.2	0.393	34	2.5	91	302	2.7	5.7	4.5	139	345	1.9
1017.9	0.393	27	2.1	83	278	2.6	5.7	3.8	127	318	1.9
1018.6	0.393	30	2.6	84	293	2.8	5.7	4.8	129	335	2.0
1019.3	0.393	29	2.7	95	309	3.0	5.7	4.9	145	353	2.2
1020.0	0.963	32	2.7	92	365	2.5	14	4.9	141	417	1.8
1020.7	0.393	32	2.4	97	366	2.9	5.7	4.4	149	419	2.2
1021.4	0.393	27	3.1	96	306	2.8	5.7	5.6	147	350	2.1
1022.1	0.417	30	2.6	98	316	2.8	6.0	4.8	150	361	2.0
1022.8	0.393	28	2.4	85	289	2.1	5.7	4.4	130	330	1.5
1023.5	0.468	31	2.6	92	331	2.8	6.8	4.8	141	378	2.0
1024.2	0.393	29	2.6	100	316	2.4	5.7	4.7	153	361	1.7
1024.8	0.393	26	2.9	96	301	3.7	5.7	5.3	148	344	2.7
1025.5	0.393	30	3.2	98	321	2.8	5.7	5.8	150	367	2.0
1026.2	0.393	34	3.2	99	335	3.0	5.7	5.9	152	384	2.2
1026.9	0.393	31	2.9	101	309	2.5	5.7	5.3	155	354	1.9
1027.6	0.393	28	2.5	97	304	3.0	5.7	4.5	149	347	2.2
1028.3	0.393	28	3.1	93	285	2.1	5.7	5.6	142	326	1.5
1029.0	0.602	27	3.5	101	280	2.6	8.7	6.3	155	320	1.9
1029.7	0.393	31	2.7	90	297	2.5	5.7	4.9	138	339	1.8
1030.4	0.393	34	3.5	103	306	1.6	5.7	6.4	158	350	1.2
1031.1	0.393	28	3.4	98	345	3.2	5.7	6.2	150	394	2.3
1031.8	0.393	29	3.2	87	295	3.0	5.7	5.8	133	337	2.2
1032.5	0.393	31	3.0	94	328	4.6	5.7	5.4	144	375	3.4
1033.2	0.393	31	3.2	95	268	3.2	5.7	5.8	146	306	2.4
1033.9	0.393	28	3.8	103	270	3.0	5.7	6.9	157	309	2.2
1034.6	0.514	29	3.5	100	273	2.5	7.4	6.4	154	312	1.8
1035.3	0.393	28	3.8	91	243	2.7	5.7	7.0	140	278	2.0
1036.0	0.393	29	3.1	93	274	4.4	5.7	5.6	142	314	3.2
1036.7	0.393	29	3.3	85	261	3.8	5.7	6.0	130	298	2.7
1037.4	0.393	30	3.1	89	256	3.2	5.7	5.7	137	293	2.3
1038.1	0.393	36	3.2	88	262	3.4	5.7	5.8	135	300	2.5
1038.8	0.393	29	3.2	84	241	2.4	5.7	5.9	128	275	1.7
1039.5	0.393	29	2.6	90	251	2.2	5.7	4.8	138	287	1.6
1040.2	0.393	30	3.6	90	248	3.0	5.7	6.6	138	284	2.2
1040.9	0.393	31	2.8	94	246	3.5	5.7	5.1	144	282	2.6
1041.6	0.393	29	3.4	84	271	3.4	5.7	6.1	128	310	2.5
1042.3	0.565	32	3.2	90	265	3.6	8.2	5.8	137	303	2.6
1043.0	0.393	32	3.2	92	248	3.2	5.7	5.8	140	283	2.3
1043.7	0.393	28	3.6	91	246	3.1	5.7	6.6	139	281	2.3
1044.4	0.464	29	3.1	95	266	3.9	6.7	5.7	145	305	2.9
1045.1	0.393	27	3.2	92	252	5.4	5.7	5.9	141	288	3.9
1045.8	0.393	26	2.6	84	253	3.4	5.7	4.8	129	289	2.5
1046.5	0.477	28	3.0	86	264	3.5	6.9	5.4	132	302	2.5
1047.2	0.393	29	2.8	80	275	3.9	5.7	5.1	123	314	2.8
1047.9	0.393	29	3.1	84	278	3.7	5.7	5.7	129	318	2.7
1048.6	0.437	26	2.8	77	256	2.7	6.3	5.2	119	293	1.9
1049.3	0.393	28	2.7	82	287	2.5	5.7	5.0	126	328	1.8
1050.0	0.393	30	2.7	81	274	3.7	5.7	5.0	125	313	2.7
1050.6	0.393	31	3.0	89	267	3.9	5.7	5.5	137	305	2.8
1051.3	0.393	31	2.6	77	219	2.7	5.7	4.7	117	250	2.0
1052.0	0.393	30	2.6	78	257	3.3	5.7	4.7	120	294	2.4
1052.7	0.393	31	2.6	81	242	3.4	5.7	4.7	125	276	2.5
1053.4	0.393	29	2.3	79	229	3.6	5.7	4.2	121	262	2.6
1054.1	0.517	30	2.6	81	226	2.5	7.5	4.8	124	259	1.9
1054.8	0.393	27	1.7	88	246	3.8	5.7	3.1	136	281	2.8
1055.5	0.414	29	2.0	74	244	2.1	6.0	3.7	113	280	1.5
1056.2	0.393	32	2.4	78	252	3.4	5.7	4.4	120	288	2.5
1056.9	0.393	37	2.6	78	262	3.8	5.7	4.8	120	300	2.8
1057.6	0.717	30	3.0	77	235	3.3	10	5.5	118	269	2.4
1058.3	0.393	30	2.3	70	253	4.1	5.7	4.2	107	290	3.0
1059.0	0.489	30	2.4	75	246	3.7	7.1	4.4	115	282	2.7
1059.7	0.393	35	2.1	69	283	3.8	5.7	3.7	105	324	2.7
1060.4	0.393	32	2.3	71	253	2.8	5.7	4.3	109	289	2.0
1061.1	0.393	33	2.4	71	239	4.2	5.7	4.5	108	273	3.1
1061.8	0.393	31	2.0	67	250	2.2	5.7	3.6	102	286	1.6
1062.5	0.393	31	2.0	66	234	3.3	5.7	3.7	102	268	2.4
1063.2	0.508	34	2.0	69	253	3.4	7.3	3.6	106	290	2.5
1063.9	0.393	27	1.9	61	232	3.8	5.7	3.4	93	265	2.7
1064.6	0.393	27	1.7	51	223	1.7	5.7	3.0	79	255	1.2
1065.3	0.774	28	1.3	60	256	2.4	11	2.4	92	293	1.8
1066.0	0.393	31	1.5	64	273	3.3	5.7	2.7	99	312	2.4
1066.7	0.408	31	1.5	59	267	3.8	5.9	2.7	90	305	2.8
1067.4	0.393	32	1.7	63	287	4.2	5.7	3.1	96	328	3.1
1068.1	0.393	27	1.1	58	243	3.1	5.7	2.0	88	278	2.3
1068.8	0.393	30	2.3	53	256	5.2	5.7	4.2	82	293	3.8
1069.5	0.393	29	1.7	58	258	4.4	5.7	3.1	89	295	3.2
1070.2	0.477	26	1.1	57	276	5.2	6.9	1.9	87	316	3.8
1070.9	0.393	25	0.958	56	256	4.9	5.7	1.7	85	292	3.6
1071.6	0.393	21	1.2	47	240	4.4	5.7	2.2	72	274	3.2
1072.3	0.499	25	1.5	56	275	4.6	7.2	2.7	86	315	3.3
1073.0	0.393	26	1.4	53	250	3.1	5.7	2.6	81	286	2.2

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Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1073.7	0.393	25	1.3	55	250	5.1	5.7	2.4	85	286	3.7
1074.4	0.393	22	1.3	51	246	4.0	5.7	2.4	78	281	3.0
1075.1	0.393	21	1.3	47	298	3.7	5.7	2.4	72	341	2.7
1075.8	0.393	23	1.1	52	256	4.7	5.7	2.0	80	293	3.4
1076.5	0.393	24	1.2	51	290	3.8	5.7	2.3	78	331	2.8
1077.1	0.393	18	1.1	53	258	2.8	5.7	2.0	81	295	2.0
1077.8	0.449	19	0.952	44	284	4.6	6.5	1.7	68	325	3.4
1078.5	0.393	22	0.907	44	277	3.6	5.7	1.7	68	316	2.6
1079.2	0.393	18	1.4	44	240	4.9	5.7	2.5	67	275	3.5
1079.9	0.393	21	0.863	50	239	4.2	5.7	1.6	77	273	3.1
1080.6	0.512	21	0.901	44	269	4.6	7.4	1.6	67	308	3.3
1081.3	0.393	23	0.906	48	279	7.0	5.7	1.7	73	319	5.1
1082.0	0.393	21	1.3	45	290	5.0	5.7	2.4	68	332	3.6
1082.7	0.393	19	0.991	41	265	4.8	5.7	1.8	62	303	3.5
1083.4	0.393	17	1.3	48	281	4.7	5.7	2.4	73	322	3.4
1084.1	0.393	16	1.1	44	256	5.9	5.7	2.0	67	292	4.3
1084.8	0.393	18	0.922	46	282	5.8	5.7	1.7	71	323	4.2
1085.5	0.595	16	0.713	42	254	5.4	8.6	1.3	64	290	4.0
1086.2	0.393	18	1.1	38	254	4.7	5.7	2.0	58	290	3.4
1086.9	0.463	15	0.933	39	282	4.7	6.7	1.7	60	322	3.4
1087.6	0.393	16	0.600	36	314	3.6	5.7	1.1	55	360	2.7
1088.3	0.393	15	1.2	40	285	5.4	5.7	2.2	61	326	4.0
1089.0	0.393	17	1.3	35	301	7.0	5.7	2.4	53	344	5.1
1089.7	0.431	18	1.1	33	322	6.4	6.2	2.0	51	369	4.7
1090.4	0.393	17	0.880	38	303	4.8	5.7	1.6	58	347	3.5
1091.1	0.393	16	0.793	31	277	5.5	5.7	1.4	47	317	4.0
1091.8	0.393	19	0.652	36	306	6.6	5.7	1.2	54	350	4.8
1092.5	0.393	15	0.937	33	258	5.9	5.7	1.7	51	295	4.3
1093.2	0.393	16	0.637	31	270	6.2	5.7	1.2	48	309	4.5
1093.9	0.428	14	0.641	33	274	5.2	6.2	1.2	50	313	3.8
1094.6	0.655	16	0.982	30	284	4.9	9.5	1.8	47	325	3.6
1095.3	0.432	18	0.870	33	290	6.0	6.2	1.6	51	331	4.4
1096.0	0.419	17	0.867	34	305	7.0	6.0	1.6	52	349	5.1
1096.7	0.393	20	0.695	30	311	7.0	5.7	1.3	47	356	5.1
1097.4	0.393	18	1.1	31	308	6.4	5.7	2.0	48	352	4.7
1098.1	0.393	20	0.819	29	299	7.2	5.7	1.5	45	342	5.3
1098.8	0.393	17	0.784	28	297	5.4	5.7	1.4	44	339	3.9
1099.5	0.393	19	1.0	30	297	5.8	5.7	1.9	46	339	4.2
1100.2	0.393	18	1.0	34	290	8.4	5.7	1.8	52	331	6.1
1100.9	0.599	17	0.692	36	315	8.0	8.6	1.3	56	360	5.8
1101.6	0.393	19	0.723	35	297	7.2	5.7	1.3	54	340	5.3
1102.3	0.404	19	0.885	34	299	8.9	5.8	1.6	52	342	6.5
1103.0	0.393	18	0.593	36	274	8.0	5.7	1.1	55	313	5.8
1103.6	0.393	19	0.900	32	282	6.8	5.7	1.6	49	323	5.0
1104.3	0.617	18	0.865	40	352	9.3	8.9	1.6	62	403	6.8
1105.0	0.393	23	1.2	43	321	7.8	5.7	2.1	66	367	5.7
1105.7	0.393	22	1.1	40	339	9.6	5.7	2.1	61	388	7.0
1106.4	0.393	24	1.1	39	345	9.1	5.7	2.0	60	394	6.6
1107.1	0.393	20	1.1	37	289	8.7	5.7	2.1	57	331	6.3
1107.8	0.524	20	1.1	39	292	6.9	7.6	2.0	60	334	5.0
1108.5	0.891	20	1.0	42	318	8.9	13	1.8	65	363	6.5
1109.2	0.393	19	1.1	40	304	8.9	5.7	2.0	61	348	6.5
1109.9	0.393	21	0.778	39	290	8.7	5.7	1.4	59	332	6.3
1110.6	0.393	21	1.1	44	314	9.5	5.7	2.0	67	359	7.0
1111.3	0.489	23	1.2	50	310	8.6	7.1	2.2	77	354	6.3
1112.0	0.393	21	1.1	44	314	12	5.7	2.1	68	359	8.6
1112.7	0.735	21	1.2	46	305	11	11	2.2	70	349	8.3
1113.4	0.393	23	1.4	45	303	9.3	5.7	2.6	70	347	6.8
1114.1	0.398	21	1.0	46	304	9.5	5.8	1.8	70	348	6.9
1114.8	0.393	20	1.2	52	297	11	5.7	2.2	79	339	7.7
1115.5	0.575	25	1.3	54	301	12	8.3	2.3	83	344	8.5
1116.2	0.393	24	1.2	58	304	11	5.7	2.2	89	348	8.0
1116.9	0.393	20	1.2	46	278	9.3	5.7	2.2	70	318	6.8
1117.6	0.393	24	1.3	53	303	9.7	5.7	2.4	81	346	7.1
1118.3	0.393	19	1.3	59	300	12	5.7	2.4	90	343	8.8
1119.0	0.393	21	1.4	61	313	11	5.7	2.5	94	358	8.0
1119.7	0.442	22	1.3	59	302	12	6.4	2.4	90	346	8.9
1120.4	0.623	20	1.2	56	318	13	9.0	2.2	87	364	9.1
1121.1	0.393	24	1.7	63	340	14	5.7	3.1	96	388	11
1121.8	0.420	25	1.3	63	361	12	6.1	2.4	97	413	8.9
1122.5	0.393	23	1.4	68	315	13	5.7	2.6	105	360	9.5
1123.2	0.393	23	1.2	65	293	9.8	5.7	2.3	100	335	7.2
1123.9	0.393	24	1.7	65	354	13	5.7	3.2	99	405	9.7
1124.6	0.402	22	1.5	58	312	13	5.8	2.7	88	357	9.8
1125.3	0.393	21	1.6	64	319	15	5.7	3.0	98	365	11
1126.0	0.713	24	1.5	64	304	14	10	2.7	99	348	10
1126.7	0.605	22	1.5	54	297	13	8.7	2.7	82	339	9.4
1127.4	0.393	22	1.5	56	275	14	5.7	2.8	86	315	10
1128.1	0.393	20	1.4	55	293	13	5.7	2.5	84	335	9.5
1128.8	0.393	22	1.6	59	287	15	5.7	3.0	90	329	11
1129.5	0.393	22	2.1	62	304	15	5.7	3.8	94	348	11

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Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1130.1	0.393	24	1.5	59	312	16	5.7	2.7	90	357	12
1130.8	0.393	25	1.6	67	304	15	5.7	3.0	102	348	11
1131.5	0.863	22	1.2	59	302	17	12	2.2	90	346	12
1132.2	0.393	25	1.7	65	313	12	5.7	3.1	99	358	8.9
1132.9	0.393	24	1.7	70	315	16	5.7	3.1	107	360	12
1133.6	0.523	23	1.8	61	294	14	7.5	3.4	93	337	10.0
1134.3	0.393	23	1.7	67	320	15	5.7	3.1	102	366	11
1135.0	0.393	23	1.2	58	291	14	5.7	2.2	90	332	10
1135.7	0.393	24	1.8	69	335	18	5.7	3.3	106	383	13
1136.4	0.393	27	1.4	67	311	17	5.7	2.6	103	356	12
1137.1	0.393	26	1.6	64	331	17	5.7	2.9	99	378	12
1137.8	0.393	21	1.5	62	329	15	5.7	2.8	96	376	11
1138.5	0.393	26	1.6	62	320	14	5.7	3.0	96	366	10
1139.2	0.393	26	1.6	68	331	18	5.7	3.0	105	378	13
1139.9	0.393	27	1.8	64	330	16	5.7	3.2	98	377	12
1140.6	0.393	24	1.8	71	299	15	5.7	3.3	109	342	11
1141.3	0.632	23	1.2	64	311	18	9.1	2.2	98	356	13
1142.0	0.393	22	1.2	74	298	17	5.7	2.2	113	340	13
1142.7	0.393	25	1.3	69	326	22	5.7	2.3	106	373	16
1143.4	0.509	22	1.7	65	305	15	7.3	3.0	100	349	11
1144.1	0.393	24	1.6	62	325	19	5.7	2.8	95	372	14
1144.8	0.393	23	1.4	72	299	19	5.7	2.5	110	342	14
1145.5	0.393	28	1.6	71	345	17	5.7	2.8	109	395	12
1146.2	0.393	26	1.5	67	315	19	5.7	2.8	103	361	14
1146.9	0.393	25	1.7	69	353	20	5.7	3.1	106	403	15
1147.6	0.393	26	1.6	78	386	19	5.7	3.0	120	441	14
1148.3	0.393	26	1.6	71	354	23	5.7	3.0	108	405	17
1149.0	0.393	25	1.6	70	312	22	5.7	2.8	107	357	16
1149.7	0.393	25	2.0	82	372	23	5.7	3.6	125	426	17
1150.4	0.666	25	1.8	71	366	20	9.6	3.4	109	418	14
1151.1	0.393	22	1.9	73	320	20	5.7	3.4	112	366	14
1151.8	0.393	26	1.8	74	389	24	5.7	3.2	114	445	17
1152.5	0.740	25	1.9	80	335	20	11	3.5	123	383	15
1153.2	0.393	27	1.6	72	351	22	5.7	3.0	110	401	16
1153.9	0.393	22	1.8	70	320	20	5.7	3.2	107	366	14
1154.6	0.393	21	1.6	69	355	21	5.7	2.9	106	406	15
1155.3	0.393	23	1.7	74	323	17	5.7	3.0	114	369	12
1156.0	0.393	24	2.4	69	354	20	5.7	4.4	105	405	14
1156.6	0.393	26	1.6	76	333	15	5.7	3.0	117	381	11
1157.3	0.393	23	1.6	82	358	19	5.7	3.0	126	409	14
1158.0	0.447	23	1.7	72	326	17	6.4	3.1	111	372	12
1158.7	0.502	20	1.7	82	370	16	7.3	3.0	125	423	12
1159.4	0.393	23	2.0	80	330	16	5.7	3.6	123	377	12
1160.1	0.393	24	1.4	81	348	18	5.7	2.5	124	398	13
1160.8	0.644	23	2.2	80	360	17	9.3	4.1	122	412	13
1161.5	0.393	24	1.8	70	330	18	5.7	3.2	108	378	13
1162.2	0.996	24	1.9	71	321	17	14	3.4	109	367	13
1162.9	0.393	23	1.7	81	320	15	5.7	3.2	124	366	11
1163.6	0.393	23	1.8	93	365	17	5.7	3.3	143	417	13
1164.3	0.393	21	1.7	73	354	16	5.7	3.0	112	404	12
1165.0	0.393	23	1.7	74	333	16	5.7	3.1	113	381	12
1165.7	0.393	26	2.1	83	351	18	5.7	3.9	128	401	13
1166.4	0.393	25	2.2	93	375	17	5.7	4.0	142	429	12
1167.1	0.393	24	1.7	79	337	13	5.7	3.0	121	386	9.7
1167.8	0.393	22	1.3	79	339	15	5.7	2.4	121	388	11
1168.5	0.549	22	2.2	83	375	18	7.9	4.0	128	429	13
1169.2	0.393	27	2.2	88	347	16	5.7	4.0	135	397	12
1169.9	0.480	21	2.4	76	369	19	6.9	4.3	116	422	14
1170.6	0.393	24	2.2	73	351	16	5.7	4.1	112	401	11
1171.3	0.393	27	2.2	83	356	17	5.7	4.0	128	407	12
1172.0	0.393	25	1.8	82	354	14	5.7	3.2	125	404	10
1172.7	0.726	26	1.8	85	336	16	10	3.2	131	384	11
1173.4	0.393	23	1.7	74	301	13	5.7	3.0	114	345	9.3
1174.1	0.393	23	1.9	75	319	16	5.7	3.4	115	365	12
1174.8	0.531	22	1.9	92	340	17	7.7	3.5	142	389	12
1175.5	0.393	28	1.2	91	364	15	5.7	2.3	139	416	11
1176.2	0.393	22	2.0	86	311	14	5.7	3.7	131	356	11
1176.9	0.393	24	1.6	80	348	10	5.7	2.9	122	398	7.4
1177.6	0.674	26	2.1	83	359	13	9.7	3.8	128	411	9.1
1178.3	0.393	25	2.2	88	352	14	5.7	4.0	135	402	9.9
1179.0	0.393	25	1.9	86	297	13	5.7	3.5	131	339	9.3
1179.7	0.393	22	2.1	81	319	11	5.7	3.8	125	365	7.9
1180.4	0.393	22	1.9	85	317	13	5.7	3.5	130	362	9.3
1181.1	0.393	24	2.4	92	311	12	5.7	4.4	142	356	9.1
1181.8	0.610	27	2.3	100	345	15	8.8	4.2	154	394	11
1182.5	0.677	26	2.0	95	315	13	9.8	3.7	146	361	9.7
1183.1	0.746	27	2.0	81	345	12	11	3.6	124	395	8.9
1183.8	0.393	27	1.6	98	337	15	5.7	2.9	151	385	11
1184.5	0.393	25	1.8	90	363	13	5.7	3.3	138	415	9.4
1185.2	0.393	24	1.9	81	336	10	5.7	3.5	124	385	7.4
1185.9	0.415	26	2.0	87	292	13	6.0	3.7	133	334	9.2

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1186.6	0.393	24	2.0	99	349	14	5.7	3.7	152	399	10
1187.3	0.393	24	2.0	92	294	13	5.7	3.6	142	336	9.8
1188.0	0.393	23	2.4	106	313	14	5.7	4.4	163	358	11
1188.7	0.438	25	2.0	93	320	14	6.3	3.7	142	366	10
1189.4	0.393	26	2.4	96	287	9.7	5.7	4.3	148	328	7.1
1190.1	0.393	24	1.9	91	302	11	5.7	3.4	140	345	8.3
1190.8	0.393	27	2.1	106	393	13	5.7	3.7	163	449	9.6
1191.5	0.393	25	2.5	94	337	12	5.7	4.5	144	386	9.0
1192.2	0.393	25	2.3	95	296	11	5.7	4.1	146	338	7.8
1192.9	0.491	24	2.7	90	298	12	7.1	4.9	139	341	9.0
1193.6	0.393	22	2.1	97	299	11	5.7	3.8	148	342	8.3
1194.3	0.603	24	3.3	97	377	13	8.7	6.0	148	431	9.6
1195.0	0.450	23	2.5	116	330	14	6.5	4.6	178	378	9.9
1195.7	0.578	23	2.6	107	323	14	8.3	4.7	164	370	10
1196.4	0.393	22	2.3	99	279	12	5.7	4.2	152	319	8.7
1197.1	0.393	24	2.8	95	311	15	5.7	5.2	145	356	11
1197.8	0.393	22	2.9	96	311	12	5.7	5.4	147	355	8.5
1198.5	0.393	23	2.3	104	296	12	5.7	4.1	159	338	8.5
1199.2	0.393	24	2.1	94	303	11	5.7	3.8	144	347	7.8
1199.9	0.393	29	2.7	99	322	11	5.7	4.9	152	369	7.8
1200.6	0.393	24	2.3	93	293	6.5	5.7	4.2	142	335	4.8
1201.3	0.393	21	2.3	101	315	8.8	5.7	4.1	155	360	6.4
1202.0	0.490	23	2.3	98	291	8.0	7.1	4.2	151	333	5.9
1202.7	0.393	24	2.5	94	299	9.9	5.7	4.6	145	342	7.2
1203.4	0.393	23	2.5	105	329	10	5.7	4.6	161	377	7.6
1204.1	0.393	26	2.1	107	305	8.7	5.7	3.9	164	349	6.4
1204.8	0.393	22	2.7	103	289	8.8	5.7	4.9	158	330	6.4
1205.5	0.393	24	2.8	118	321	11	5.7	5.2	181	367	8.1
1206.2	0.393	22	3.0	98	296	6.3	5.7	5.5	151	338	4.6
1206.9	0.393	21	2.4	90	270	4.6	5.7	4.3	137	309	3.4
1207.6	0.393	22	3.0	104	292	7.6	5.7	5.4	160	333	5.6
1208.3	0.393	24	2.5	120	280	5.9	5.7	4.6	185	320	4.3
1209.0	0.393	23	2.8	119	266	7.0	5.7	5.1	182	304	5.1
1209.6	0.393	21	2.7	107	303	6.5	5.7	4.8	165	347	4.8
1210.3	0.393	25	2.9	99	267	7.5	5.7	5.3	152	306	5.5
1211.0	0.393	22	2.8	99	297	7.8	5.7	5.1	152	339	5.7
1211.7	0.393	23	2.9	98	279	6.6	5.7	5.4	150	319	4.8
1212.4	0.393	21	2.5	112	267	8.0	5.7	4.6	172	306	5.8
1213.1	0.393	23	2.6	106	267	7.7	5.7	4.7	162	305	5.6
1213.8	0.671	24	2.9	112	270	5.8	9.7	5.2	171	308	4.2
1214.5	0.472	25	2.7	107	270	7.1	6.8	4.9	164	309	5.2
1215.2	0.478	20	2.9	110	295	4.7	6.9	5.2	168	337	3.4
1215.9	0.433	20	2.2	96	263	4.9	6.3	4.1	148	301	3.6
1216.6	0.393	23	2.7	108	296	4.8	5.7	4.9	165	338	3.5
1217.3	0.393	25	3.0	106	268	7.3	5.7	5.5	162	306	5.3
1218.0	0.405	22	3.0	107	275	7.0	5.8	5.4	164	314	5.1
1218.7	0.393	25	2.8	124	265	3.9	5.7	5.1	189	303	2.9
1219.4	0.393	19	3.0	104	259	4.0	5.7	5.5	159	296	2.9
1220.1	0.393	23	2.8	106	261	5.6	5.7	5.2	162	299	4.1
1220.8	0.393	22	2.9	107	259	4.5	5.7	5.4	164	296	3.3
1221.5	0.452	22	2.7	108	309	4.8	6.5	4.9	165	354	3.5
1222.2	0.393	22	3.3	113	297	4.7	5.7	6.0	173	339	3.4
1222.9	0.471	21	3.0	107	251	3.1	6.8	5.4	164	287	2.3
1223.6	0.393	22	2.4	110	274	4.9	5.7	4.3	168	313	3.6
1224.3	0.393	21	3.0	101	267	3.9	5.7	5.4	155	306	2.9
1225.0	0.393	23	2.9	118	285	4.8	5.7	5.2	180	326	3.5
1225.7	0.393	22	3.1	101	244	3.6	5.7	5.6	155	278	2.7
1226.4	0.393	22	2.4	106	233	2.9	5.7	4.4	163	266	2.1
1227.1	0.393	21	2.4	104	228	3.0	5.7	4.5	159	261	2.2
1227.8	0.393	24	3.3	105	251	4.1	5.7	6.1	160	287	3.0
1228.5	0.393	21	3.3	106	254	5.9	5.7	6.1	163	291	4.3
1229.2	0.397	20	2.7	100	246	3.5	5.7	4.9	153	281	2.6
1229.9	0.393	22	2.7	109	265	5.6	5.7	4.9	166	303	4.1
1230.6	0.393	20	2.5	108	258	4.4	5.7	4.6	165	295	3.2
1231.3	0.393	25	2.2	115	254	4.8	5.7	4.1	176	290	3.5
1232.0	0.510	20	2.5	105	227	3.1	7.4	4.6	160	259	2.3
1232.7	0.393	20	2.6	115	235	2.7	5.7	4.7	177	269	1.9
1233.4	0.544	19	2.9	111	250	3.5	7.9	5.2	170	286	2.6
1234.1	0.393	19	2.5	107	236	4.1	5.7	4.5	164	269	3.0
1234.7	0.413	21	2.6	112	238	3.5	6.0	4.8	172	272	2.5
1235.4	0.393	20	3.5	107	237	4.6	5.7	6.5	165	271	3.4
1236.1	0.393	21	2.4	99	224	4.8	5.7	4.3	151	256	3.5
1236.8	0.415	19	2.7	103	236	3.6	6.0	4.9	158	270	2.6
1237.5	0.393	21	2.5	116	234	3.9	5.7	4.5	177	268	2.8
1238.2	0.393	21	2.6	113	233	5.0	5.7	4.8	173	266	3.6
1238.9	0.591	18	2.9	118	233	2.3	8.5	5.2	181	267	1.7
1239.6	0.393	20	2.6	111	229	3.9	5.7	4.7	170	262	2.8
1240.3	0.393	18	2.8	107	223	3.1	5.7	5.1	163	255	2.2
1241.0	0.393	22	3.0	119	244	4.1	5.7	5.4	183	279	3.0
1241.7	0.393	18	2.9	119	225	3.9	5.7	5.4	182	257	2.8
1242.4	0.393	22	2.7	104	220	2.1	5.7	5.0	159	251	1.5

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1243.1	0.393	20	2.7	109	215	3.3	5.7	4.9	167	246	2.4
1243.8	0.393	19	3.0	112	232	2.9	5.7	5.5	172	265	2.2
1244.5	0.393	21	2.9	126	249	3.6	5.7	5.2	193	285	2.7
1245.2	0.393	20	3.2	109	222	4.1	5.7	5.8	168	253	3.0
1245.9	0.393	19	2.6	111	227	3.7	5.7	4.8	170	259	2.7
1246.6	0.550	19	2.3	116	252	3.0	7.9	4.3	177	288	2.2
1247.3	0.710	20	2.9	111	216	3.2	10	5.2	170	246	2.4
1248.0	0.490	19	2.9	109	210	2.7	7.1	5.3	167	241	2.0
1248.7	0.393	20	2.9	118	222	3.0	5.7	5.2	180	254	2.2
1249.4	0.393	19	3.2	125	229	2.9	5.7	5.9	192	262	2.1
1250.1	0.393	19	2.9	114	229	2.9	5.7	5.3	175	262	2.1
1250.8	0.393	18	2.8	105	219	2.8	5.7	5.2	161	251	2.0
1251.5	0.393	19	3.1	115	244	2.3	5.7	5.6	176	279	1.7
1252.2	0.704	18	2.9	103	213	2.4	10	5.3	157	244	1.7
1252.9	0.393	20	2.5	106	237	4.3	5.7	4.6	162	271	3.1
1253.6	0.393	18	3.5	119	233	2.7	5.7	6.3	183	266	2.0
1254.3	0.551	21	3.2	123	299	3.1	8.0	5.9	188	342	2.3
1255.0	0.393	21	2.7	105	227	2.1	5.7	5.0	161	260	1.5
1255.7	0.393	21	2.9	115	240	4.2	5.7	5.4	176	274	3.1
1256.4	0.515	22	3.2	116	230	3.2	7.4	5.8	177	263	2.4
1257.1	0.615	19	2.5	97	217	2.1	8.9	4.5	149	249	1.5
1257.8	0.393	21	3.3	106	232	2.4	5.7	6.0	163	265	1.7
1258.5	0.393	21	3.3	108	217	3.2	5.7	6.1	166	248	2.3
1259.2	0.393	24	3.7	102	223	2.9	5.7	6.8	157	255	2.1
1259.9	0.393	18	3.3	103	227	2.2	5.7	6.1	159	260	1.6
1260.5	0.393	18	2.7	102	267	3.9	5.7	5.0	157	306	2.9
1261.2	0.393	23	2.7	106	227	3.0	5.7	5.0	163	260	2.2
1261.9	0.609	20	2.8	105	215	3.1	8.8	5.2	161	246	2.2
1262.6	0.393	20	2.7	97	214	2.7	5.7	4.9	149	245	2.0
1263.3	0.393	20	2.8	94	212	3.1	5.7	5.0	145	242	2.3
1264.0	0.393	20	3.2	108	228	2.9	5.7	5.9	166	260	2.1
1264.7	0.393	21	2.9	112	253	3.3	5.7	5.3	171	289	2.4
1265.4	0.393	22	3.0	93	225	3.3	5.7	5.6	142	257	2.4
1266.1	0.393	21	3.0	97	264	2.5	5.7	5.5	149	302	1.8
1266.8	0.393	20	3.0	101	235	3.3	5.7	5.5	155	269	2.4
1267.5	0.393	19	2.9	96	222	2.8	5.7	5.2	147	254	2.1
1268.2	0.393	22	3.4	99	267	3.2	5.7	6.1	152	306	2.4
1268.9	0.449	23	2.7	102	229	3.3	6.5	4.9	156	262	2.4
1269.6	0.393	21	1.8	80	201	3.0	5.7	3.2	122	230	2.2
1270.3	0.506	21	2.8	100	291	3.7	7.3	5.0	154	333	2.7
1271.0	0.393	23	2.4	99	246	3.0	5.7	4.3	152	281	2.2
1271.7	0.393	22	2.8	90	285	2.9	5.7	5.1	138	326	2.1
1272.4	0.393	22	2.5	106	282	3.7	5.7	4.6	162	322	2.7
1273.1	0.393	18	2.3	98	210	2.6	5.7	4.1	150	240	1.9
1273.8	0.393	20	2.8	101	227	3.2	5.7	5.0	154	259	2.4
1274.5	0.393	21	3.2	97	264	2.9	5.7	5.8	149	302	2.1
1275.2	0.393	21	2.4	96	236	2.6	5.7	4.3	148	269	1.9
1275.9	0.393	21	2.8	104	260	3.1	5.7	5.1	159	297	2.3
1276.6	0.652	18	2.7	101	232	2.9	9.4	4.9	155	266	2.1
1277.3	0.393	20	2.6	102	261	3.6	5.7	4.7	157	298	2.7
1278.0	0.393	19	2.6	101	238	3.3	5.7	4.8	154	272	2.4
1278.7	0.393	20	3.6	99	279	3.7	5.7	6.6	152	319	2.7
1279.4	0.393	17	3.2	100	233	4.4	5.7	5.9	154	266	3.2
1280.1	0.393	21	2.5	103	250	3.3	5.7	4.5	158	286	2.4
1280.8	0.796	19	2.8	102	259	2.7	11	5.1	157	296	2.0
1281.5	0.393	18	3.2	101	248	4.3	5.7	5.8	154	284	3.2
1282.2	0.393	21	2.3	96	254	3.0	5.7	4.3	147	290	2.2
1282.9	0.479	16	3.1	107	237	3.1	6.9	5.6	163	271	2.3
1283.6	0.393	18	3.3	88	238	3.3	5.7	6.0	135	272	2.4
1284.3	0.393	17	3.1	94	255	2.6	5.7	5.6	145	292	1.9
1285.0	0.393	21	2.8	102	234	4.7	5.7	5.1	156	268	3.4
1285.7	0.393	20	3.3	117	265	3.3	5.7	5.9	179	303	2.4
1286.4	0.635	20	3.0	95	227	3.6	9.2	5.4	145	260	2.6
1287.0	0.393	20	2.2	103	245	3.5	5.7	3.9	157	280	2.6
1287.7	0.393	17	3.0	102	248	4.6	5.7	5.4	156	284	3.4
1288.4	0.502	20	2.8	104	268	3.2	7.3	5.1	160	306	2.3
1289.1	0.393	24	2.8	100	267	3.8	5.7	5.1	154	305	2.8
1289.8	0.551	20	2.2	103	246	3.9	8.0	4.0	157	281	2.9
1290.5	0.393	19	3.0	110	263	3.2	5.7	5.5	169	301	2.3
1291.2	0.393	19	3.0	110	264	4.5	5.7	5.5	168	302	3.3
1291.9	0.393	21	2.6	109	256	4.0	5.7	4.7	167	293	2.9
1292.6	0.651	17	2.6	105	279	3.9	9.4	4.7	161	319	2.8
1293.3	0.393	21	2.6	92	255	3.4	5.7	4.7	141	291	2.5
1294.0	0.393	20	3.1	114	257	3.2	5.7	5.6	174	294	2.3
1294.7	0.411	19	2.4	100	257	3.4	5.9	4.4	154	293	2.5
1295.4	0.393	22	2.7	105	267	3.2	5.7	4.9	161	305	2.3
1296.1	0.393	17	2.8	99	252	3.5	5.7	5.1	152	288	2.5
1296.8	0.393	18	2.7	102	250	3.3	5.7	4.9	157	286	2.4
1297.5	0.393	20	2.5	96	278	4.6	5.7	4.6	148	317	3.4
1298.2	0.393	17	2.7	105	252	4.5	5.7	4.9	161	288	3.3
1298.9	0.393	17	2.8	92	258	4.5	5.7	5.0	140	295	3.3

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1299.6	0.443	21	2.9	113	261	5.0	6.4	5.4	173	298	3.6
1300.3	0.430	17	2.7	97	280	4.3	6.2	4.9	149	320	3.1
1301.0	0.393	19	2.7	115	283	3.9	5.7	5.0	177	324	2.8
1301.7	0.395	17	2.3	93	251	3.2	5.7	4.2	143	287	2.4
1302.4	0.393	20	1.9	96	270	3.6	5.7	3.4	148	309	2.6
1303.1	0.393	17	2.2	91	250	3.7	5.7	4.1	139	285	2.7
1303.8	0.393	18	2.4	98	270	2.7	5.7	4.3	150	309	2.0
1304.5	0.939	19	2.7	101	248	2.3	14	4.9	154	284	1.7
1305.2	0.393	17	2.0	91	257	4.5	5.7	3.7	139	294	3.3
1305.9	0.393	19	2.7	108	257	5.0	5.7	5.0	166	294	3.7
1306.6	0.393	18	2.8	91	258	3.6	5.7	5.0	140	295	2.6
1307.3	0.393	21	2.9	102	298	3.2	5.7	5.3	156	341	2.3
1308.0	0.393	18	2.2	111	293	3.8	5.7	4.1	171	335	2.8
1308.7	0.393	21	2.4	97	255	3.5	5.7	4.3	149	291	2.5
1309.4	0.393	20	2.6	103	261	3.8	5.7	4.8	157	299	2.8
1310.1	0.721	17	3.0	101	263	4.1	10	5.5	155	301	3.0
1310.8	0.393	19	2.8	102	266	3.9	5.7	5.2	157	304	2.8
1311.5	0.548	21	2.9	111	252	4.2	7.9	5.4	170	288	3.1
1312.2	0.393	20	2.8	93	292	2.4	5.7	5.2	143	334	1.8
1312.8	0.393	20	2.9	92	244	2.6	5.7	5.3	141	279	1.9
1313.5	0.393	19	2.4	91	257	4.0	5.7	4.3	140	294	2.9
1314.2	0.590	18	2.7	102	243	2.0	8.5	4.8	156	278	1.4
1314.9	0.393	18	2.7	95	269	4.6	5.7	4.9	146	308	3.4
1315.6	0.537	19	2.7	103	274	4.0	7.7	4.8	157	313	2.9
1316.3	0.393	17	2.6	88	241	3.8	5.7	4.7	135	275	2.8
1317.0	0.393	16	2.5	87	276	3.3	5.7	4.6	134	316	2.4
1317.7	0.393	19	2.2	98	249	4.3	5.7	4.0	151	285	3.1
1318.4	0.875	17	2.8	91	279	4.2	13	5.2	139	319	3.1
1319.1	0.651	18	2.7	89	261	4.3	9.4	4.9	136	299	3.2
1319.8	0.393	17	2.7	99	276	3.3	5.7	5.0	151	316	2.4
1320.5	0.427	17	2.4	101	268	5.0	6.2	4.3	155	307	3.6
1321.2	0.393	18	2.5	91	286	3.9	5.7	4.5	140	327	2.9
1321.9	0.393	18	2.6	92	248	4.5	5.7	4.7	142	284	3.3
1322.6	0.393	19	2.4	107	279	4.6	5.7	4.3	165	319	3.4
1323.3	0.427	19	2.4	84	258	3.8	6.2	4.4	129	295	2.8
1324.0	0.393	18	2.4	85	252	3.6	5.7	4.3	131	288	2.6
1324.7	0.393	20	2.7	92	304	4.0	5.7	4.9	141	347	2.9
1325.4	0.393	19	3.0	91	240	3.5	5.7	5.5	140	274	2.6
1326.1	0.473	17	2.6	104	283	4.0	6.8	4.7	159	323	2.9
1326.8	0.393	20	2.5	95	290	4.2	5.7	4.5	146	332	3.0
1327.5	0.393	18	2.8	96	301	5.0	5.7	5.1	148	344	3.6
1328.2	0.393	17	2.1	90	254	4.2	5.7	3.9	139	291	3.1
1328.9	0.393	18	2.7	93	278	3.4	5.7	5.0	142	317	2.5
1329.6	0.393	18	2.2	89	275	3.4	5.7	4.1	137	315	2.5
1330.3	0.393	18	3.2	88	285	3.6	5.7	5.9	134	326	2.6
1331.0	0.393	17	2.7	104	308	5.1	5.7	4.9	159	353	3.7
1331.7	0.393	19	2.8	91	295	4.2	5.7	5.1	140	337	3.1
1332.4	0.393	19	2.2	97	278	4.3	5.7	4.1	149	318	3.1
1333.1	0.393	21	2.9	95	276	4.1	5.7	5.4	145	315	3.0
1333.8	0.393	18	2.3	91	289	3.8	5.7	4.1	139	330	2.8
1334.5	0.393	20	2.8	93	269	3.5	5.7	5.0	142	308	2.6
1335.2	0.393	19	2.2	90	278	3.1	5.7	4.1	138	318	2.3
1335.9	0.393	19	2.1	94	269	5.5	5.7	3.9	144	307	4.0
1336.6	0.393	20	3.1	91	321	3.5	5.7	5.6	140	367	2.6
1337.3	0.393	20	2.7	94	298	4.6	5.7	4.9	143	340	3.4
1338.0	0.393	20	2.7	100	260	4.4	5.7	5.0	153	298	3.2
1338.7	0.481	19	2.6	94	274	4.3	6.9	4.7	144	314	3.1
1339.3	0.393	17	2.6	91	308	5.4	5.7	4.7	140	353	4.0
1340.0	0.435	19	2.5	76	263	4.9	6.3	4.5	117	301	3.6
1340.7	0.393	18	2.2	85	290	4.6	5.7	4.0	130	332	3.4
1341.4	0.393	17	2.7	88	252	4.0	5.7	4.9	135	288	2.9
1342.1	0.466	21	2.1	96	296	5.3	6.7	3.8	148	338	3.9
1342.8	0.393	19	3.0	81	273	3.3	5.7	5.4	124	312	2.4
1343.5	0.393	17	2.2	81	260	3.0	5.7	4.1	124	298	2.2
1344.2	0.684	18	2.9	100	261	3.7	9.9	5.3	153	298	2.7
1344.9	0.393	20	2.8	99	279	3.6	5.7	5.2	152	320	2.6
1345.6	0.393	18	2.2	86	269	5.2	5.7	4.0	132	307	3.8
1346.3	0.514	19	2.6	88	299	3.9	7.4	4.8	135	342	2.9
1347.0	0.517	22	2.6	82	263	3.7	7.5	4.8	126	300	2.7
1347.7	0.393	20	2.3	92	292	4.6	5.7	4.2	141	334	3.4
1348.4	0.393	20	2.3	92	252	5.1	5.7	4.2	141	288	3.7
1349.1	0.393	15	2.0	80	265	4.6	5.7	3.7	123	303	3.3
1349.8	0.393	16	2.5	79	259	4.8	5.7	4.6	121	296	3.5
1350.5	0.393	20	2.6	94	309	4.0	5.7	4.8	143	353	2.9
1351.2	0.393	19	2.7	86	254	4.1	5.7	4.9	132	290	3.0
1351.9	0.393	18	2.4	95	262	5.1	5.7	4.3	145	300	3.7
1352.6	0.393	19	2.5	82	288	4.6	5.7	4.6	126	329	3.3
1353.3	0.393	19	2.4	86	278	3.8	5.7	4.5	132	318	2.8
1354.0	0.393	23	2.5	90	280	4.6	5.7	4.6	138	321	3.4
1354.7	0.393	22	2.8	92	298	5.8	5.7	5.0	141	341	4.2
1355.4	0.393	19	2.7	92	286	5.3	5.7	4.9	142	327	3.8

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1356.1	0.393	17	2.7	83	270	4.5	5.7	4.8	127	309	3.3
1356.8	0.393	24	2.4	89	269	5.5	5.7	4.5	137	307	4.0
1357.5	0.394	17	2.4	90	295	5.4	5.7	4.4	137	338	3.9
1358.2	0.436	19	2.5	91	312	4.3	6.3	4.5	140	357	3.1
1358.9	0.837	22	2.1	87	292	5.3	12	3.8	134	334	3.9
1359.6	0.393	18	2.5	86	278	7.1	5.7	4.5	132	318	5.2
1360.3	0.393	15	2.7	80	274	4.4	5.7	5.0	123	313	3.2
1361.0	0.393	18	2.9	88	290	5.6	5.7	5.2	134	331	4.1
1361.7	0.393	21	2.1	84	267	3.1	5.7	3.8	129	305	2.2
1362.4	0.393	22	2.4	98	308	4.9	5.7	4.3	150	352	3.6
1363.1	0.393	18	2.5	82	272	4.8	5.7	4.6	126	311	3.5
1363.8	0.512	21	2.3	89	291	5.3	7.4	4.2	137	333	3.9
1364.5	0.393	21	2.9	90	286	5.4	5.7	5.2	137	328	4.0
1365.1	0.626	20	2.2	87	327	6.7	9.0	4.0	134	374	4.9
1365.8	0.393	19	2.7	78	270	4.6	5.7	4.8	119	309	3.4
1366.5	0.452	20	2.9	87	307	5.4	6.5	5.3	133	351	3.9
1367.2	0.554	20	2.6	85	322	4.6	8.0	4.7	130	369	3.4
1367.9	0.393	19	2.2	92	290	5.8	5.7	4.1	142	332	4.2
1368.6	0.393	22	2.5	94	296	6.4	5.7	4.5	144	338	4.7
1369.3	0.393	21	2.4	95	304	5.0	5.7	4.4	146	348	3.6
1370.0	0.598	19	2.4	89	304	5.6	8.6	4.4	136	347	4.1
1370.7	0.393	20	3.0	101	274	5.4	5.7	5.4	155	313	3.9
1371.4	0.393	20	3.0	93	320	6.4	5.7	5.5	143	366	4.7
1372.1	0.393	15	2.1	74	226	3.3	5.7	3.9	114	259	2.4
1372.8	0.508	17	2.5	89	305	5.0	7.3	4.6	136	349	3.7
1373.5	0.393	19	2.4	94	321	7.3	5.7	4.3	144	367	5.3
1374.2	0.393	22	3.2	98	271	4.5	5.7	5.8	151	309	3.3
1374.9	0.408	22	3.1	84	265	6.7	5.9	5.6	129	303	4.9
1375.6	0.393	20	3.1	88	289	6.1	5.7	5.6	135	331	4.5
1376.3	0.393	20	2.3	97	283	5.2	5.7	4.2	148	324	3.8
1377.0	0.450	21	2.6	88	327	5.8	6.5	4.7	135	374	4.2
1377.7	0.393	20	2.6	81	258	5.9	5.7	4.8	124	295	4.3
1378.4	0.393	23	2.1	80	274	5.2	5.7	3.8	122	313	3.8
1379.1	0.393	20	2.2	89	278	5.3	5.7	4.1	136	318	3.9
1379.8	0.393	21	3.0	87	263	4.6	5.7	5.4	134	300	3.4
1380.5	0.393	21	2.4	91	295	6.1	5.7	4.5	140	337	4.5
1381.2	0.393	22	2.6	99	282	5.0	5.7	4.8	151	323	3.6
1381.9	0.393	21	2.3	99	317	3.7	5.7	4.2	152	363	2.7
1382.6	0.405	19	2.4	98	283	4.9	5.8	4.4	150	323	3.5
1383.3	0.393	20	2.6	92	287	6.1	5.7	4.7	140	328	4.4
1384.0	0.393	22	3.0	95	272	6.4	5.7	5.5	146	310	4.6
1384.7	0.746	20	2.5	81	280	5.7	11	4.6	124	321	4.2
1385.4	0.417	21	2.2	91	310	7.2	6.0	4.1	140	355	5.2
1386.1	0.822	18	2.5	91	278	6.3	12	4.5	140	318	4.6
1386.8	0.393	22	2.7	95	299	5.9	5.7	4.9	145	342	4.3
1387.5	0.518	20	2.7	96	280	6.5	7.5	5.0	147	321	4.8
1388.2	0.393	25	3.0	109	313	6.1	5.7	5.6	167	358	4.5
1388.9	0.393	20	2.8	87	258	5.8	5.7	5.1	134	295	4.3
1389.6	0.393	20	2.7	102	293	5.0	5.7	4.9	157	335	3.6
1390.3	0.393	19	2.4	88	301	4.7	5.7	4.3	135	344	3.4
1391.0	0.393	22	2.4	91	274	6.1	5.7	4.3	139	313	4.4
1391.6	0.393	22	2.2	89	297	4.4	5.7	4.0	137	340	3.2
1392.3	0.393	21	2.3	91	289	5.3	5.7	4.1	139	330	3.8
1393.0	0.393	19	3.0	94	275	6.2	5.7	5.4	144	315	4.5
1393.7	0.393	23	2.1	99	261	5.3	5.7	3.8	152	298	3.9
1394.4	0.393	20	2.4	92	276	6.5	5.7	4.4	140	315	4.8
1395.1	0.393	23	2.9	97	308	6.7	5.7	5.3	149	352	4.9
1395.8	0.393	20	1.9	100	302	7.4	5.7	3.6	153	345	5.4
1396.5	0.393	23	2.5	101	307	5.5	5.7	4.6	154	351	4.0
1397.2	0.393	21	2.3	94	297	4.8	5.7	4.2	145	339	3.5
1397.9	0.393	22	2.4	97	265	4.8	5.7	4.5	148	303	3.5
1398.6	0.393	19	2.8	97	289	5.3	5.7	5.2	149	330	3.9
1399.3	0.768	17	2.8	97	280	5.5	11	5.1	149	320	4.0
1400.0	0.393	21	2.5	99	283	5.1	5.7	4.6	151	324	3.7
1400.7	0.393	20	2.9	99	293	6.7	5.7	5.4	151	336	4.9
1401.4	0.393	20	2.7	86	289	4.8	5.7	4.9	132	331	3.5
1402.1	0.393	21	2.9	103	274	5.0	5.7	5.4	158	314	3.7
1402.8	0.393	19	2.2	91	278	6.4	5.7	3.9	140	318	4.7
1403.5	0.393	24	2.8	99	275	6.0	5.7	5.1	151	315	4.4
1404.2	0.393	22	2.2	95	263	5.8	5.7	4.1	145	301	4.2
1404.9	0.393	24	2.7	106	323	5.8	5.7	4.9	162	370	4.2
1405.6	0.393	24	2.4	86	272	6.4	5.7	4.3	132	311	4.7
1406.3	0.393	20	2.4	99	289	5.7	5.7	4.4	152	330	4.2
1407.0	0.393	18	2.3	94	271	5.0	5.7	4.2	144	310	3.6
1407.7	0.393	22	2.7	92	277	5.5	5.7	5.0	141	317	4.0
1408.4	0.393	19	2.6	108	319	4.7	5.7	4.8	165	365	3.4
1409.1	0.393	20	2.6	99	290	6.0	5.7	4.8	152	332	4.4
1409.8	0.515	22	2.8	97	327	6.3	7.4	5.1	149	374	4.6
1410.5	0.393	19	2.2	91	251	5.0	5.7	4.0	139	287	3.6
1411.2	0.393	20	2.6	95	302	7.5	5.7	4.7	145	346	5.5
1411.9	0.393	20	2.7	101	325	5.6	5.7	4.9	155	372	4.1

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1412.6	1.2	21	2.9	93	328	5.8	17	5.4	142	375	4.2
1413.3	0.393	22	2.5	84	269	4.8	5.7	4.5	129	308	3.5
1414.0	0.504	23	3.0	98	306	4.6	7.3	5.4	150	349	3.4
1414.7	0.493	19	2.5	97	292	6.3	7.1	4.6	149	333	4.6
1415.4	0.393	20	3.1	102	317	6.2	5.7	5.6	156	363	4.6
1416.1	0.393	19	2.7	86	265	3.9	5.7	5.0	132	303	2.9
1416.8	0.401	22	3.1	97	294	5.6	5.8	5.6	149	336	4.1
1417.5	0.393	23	3.3	104	305	5.2	5.7	5.9	159	349	3.8
1418.2	0.627	25	2.7	92	298	6.3	9.0	4.9	141	341	4.6
1418.8	0.393	20	2.7	95	268	3.3	5.7	5.0	145	307	2.4
1419.5	0.412	23	2.5	93	247	4.7	6.0	4.6	142	283	3.5
1420.2	0.667	23	2.7	88	294	3.1	9.6	5.0	134	336	2.3
1420.9	0.393	22	2.8	94	250	3.4	5.7	5.2	144	286	2.5
1421.6	0.393	21	2.3	89	238	3.7	5.7	4.2	136	272	2.7
1422.3	0.393	21	2.7	88	246	3.3	5.7	5.0	135	281	2.4
1423.0	0.393	25	3.1	77	263	3.4	5.7	5.6	118	300	2.4
1423.7	0.393	30	2.4	84	242	3.8	5.7	4.4	128	277	2.8
1424.4	0.715	26	2.6	80	249	3.6	10	4.8	123	285	2.6
1425.1	0.562	27	2.9	70	229	2.0	8.1	5.3	108	261	1.4
1425.8	0.393	23	2.3	70	261	2.8	5.7	4.2	108	298	2.0
1426.5	0.757	26	2.6	74	296	3.4	11	4.7	113	338	2.5
1427.2	0.484	27	2.8	77	270	2.9	7.0	5.1	118	309	2.1
1427.9	0.565	27	2.4	73	267	4.0	8.1	4.4	112	305	2.9
1428.6	0.460	25	2.4	64	287	3.8	6.6	4.3	98	329	2.8
1429.3	0.393	28	2.7	62	282	3.9	5.7	5.0	95	323	2.8
1430.0	0.678	27	2.8	74	335	4.8	9.8	5.2	113	383	3.5
1430.7	0.496	26	2.7	63	316	4.4	7.2	4.9	97	361	3.2
1431.4	0.432	25	2.3	70	280	4.9	6.2	4.1	107	321	3.6
1432.1	0.474	24	2.2	70	355	5.3	6.8	4.1	108	406	3.9
1432.8	0.616	23	2.3	65	359	5.8	8.9	4.2	100	410	4.2
1433.5	0.393	25	2.9	65	330	4.7	5.7	5.2	99	378	3.5
1434.2	0.476	24	2.3	61	305	5.6	6.9	4.2	93	349	4.1
1434.9	0.393	24	1.9	66	334	4.6	5.7	3.5	101	382	3.4
1435.6	0.393	26	2.4	63	326	4.3	5.7	4.4	97	373	3.2
1436.3	0.518	21	2.8	69	322	5.5	7.5	5.0	105	368	4.0
1437.0	0.495	23	2.2	68	341	5.2	7.1	4.1	104	390	3.8
1437.7	0.637	26	3.1	67	343	5.4	9.2	5.6	103	392	4.0
1438.4	0.443	22	2.3	70	360	5.4	6.4	4.1	108	412	3.9
1439.1	0.588	22	2.3	73	350	6.1	8.5	4.1	112	401	4.5
1439.8	0.393	22	2.4	70	339	5.5	5.7	4.3	107	387	4.0
1440.5	0.519	21	2.7	81	348	7.8	7.5	4.9	124	398	5.7
1441.2	0.393	18	2.4	69	336	4.2	5.7	4.3	106	384	3.1
1441.9	0.393	22	2.3	71	307	4.1	5.7	4.2	109	351	3.0
1442.6	0.544	23	2.2	86	313	5.3	7.9	4.0	131	358	3.9
1443.3	0.393	25	3.1	104	357	8.2	5.7	5.6	159	408	5.9
1444.0	0.393	25	2.8	83	324	5.6	5.7	5.0	127	371	4.1
1444.7	0.393	23	2.6	82	289	4.4	5.7	4.7	126	330	3.2
1445.3	0.393	22	2.8	80	338	4.5	5.7	5.1	123	386	3.3
1446.0	0.393	20	2.9	83	304	5.6	5.7	5.2	127	348	4.1
1446.7	0.570	20	2.8	86	295	4.7	8.2	5.2	132	337	3.5
1447.4	0.393	19	2.2	80	296	6.3	5.7	4.1	123	339	4.6
1448.1	0.393	20	2.9	87	286	4.9	5.7	5.2	134	327	3.6
1448.8	0.393	23	2.8	94	349	9.4	5.7	5.2	144	399	6.9
1449.5	0.724	23	3.1	87	291	6.4	10	5.7	133	333	4.6
1450.2	0.393	24	2.3	84	280	5.4	5.7	4.2	128	320	3.9
1450.9	0.604	21	2.2	98	286	5.4	8.7	4.1	150	327	3.9
1451.6	0.393	21	2.7	95	277	4.1	5.7	4.9	145	317	3.0
1452.3	0.393	23	2.7	84	296	6.3	5.7	5.0	129	338	4.6
1453.0	0.393	22	2.2	75	287	7.5	5.7	4.0	114	328	5.5
1453.7	0.529	21	2.2	82	298	6.8	7.6	4.0	126	341	4.9
1454.4	0.614	21	2.4	86	300	5.4	8.9	4.3	131	343	3.9
1455.1	0.581	19	3.2	83	295	6.7	8.4	5.9	127	338	4.9
1455.8	0.393	18	2.7	90	331	7.0	5.7	4.8	138	378	5.1
1456.5	0.393	21	2.7	89	325	8.0	5.7	5.0	137	371	5.8
1457.2	0.861	24	2.7	91	281	6.9	12	4.8	140	322	5.1
1457.9	0.393	22	2.3	94	309	5.6	5.7	4.2	144	353	4.1
1458.6	0.393	20	2.6	90	300	7.4	5.7	4.7	139	343	5.4
1459.3	0.473	18	2.4	87	306	6.4	6.8	4.4	133	350	4.7
1460.0	0.393	19	2.7	87	278	6.6	5.7	4.9	133	318	4.8
1460.7	0.393	19	2.1	81	290	6.4	5.7	3.9	123	331	4.7
1461.4	0.919	19	2.8	92	311	7.5	13	5.2	142	356	5.5
1462.1	0.393	17	2.8	91	297	6.0	5.7	5.0	140	339	4.4
1462.8	0.430	17	2.3	88	317	6.4	6.2	4.3	135	363	4.7
1463.5	0.393	19	2.9	98	291	6.7	5.7	5.2	151	332	4.9
1464.2	0.655	21	2.7	91	314	8.1	9.5	5.0	140	359	5.9
1464.9	0.393	20	2.8	95	330	9.7	5.7	5.1	146	378	7.0
1465.6	0.393	17	2.7	89	279	7.5	5.7	5.0	136	319	5.5
1466.3	0.429	20	2.2	99	313	7.4	6.2	4.1	152	358	5.4
1467.0	0.393	19	2.9	91	291	8.6	5.7	5.4	139	333	6.3
1467.7	0.393	18	2.5	96	308	8.5	5.7	4.6	147	352	6.2
1468.4	0.393	20	2.8	88	308	8.5	5.7	5.1	135	352	6.2

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Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1469.1	0.393	19	2.8	93	288	6.3	5.7	5.1	143	329	4.6
1469.8	0.557	21	2.6	97	356	7.8	8.0	4.7	148	407	5.7
1470.5	0.393	18	2.3	92	284	6.5	5.7	4.3	140	324	4.8
1471.1	0.452	20	2.8	85	292	7.8	6.5	5.1	130	334	5.7
1471.8	0.393	19	2.7	90	304	7.6	5.7	5.0	138	348	5.6
1472.5	0.588	19	3.1	83	288	7.3	8.5	5.6	127	329	5.3
1473.2	0.393	23	2.9	88	303	11	5.7	5.2	135	346	8.3
1473.9	0.393	17	2.7	84	310	7.5	5.7	5.0	129	354	5.5
1474.6	0.393	17	2.7	88	278	6.0	5.7	4.9	136	317	4.4
1475.3	0.393	20	2.6	92	306	7.9	5.7	4.8	141	350	5.8
1476.0	0.666	18	2.7	88	310	9.7	9.6	5.0	135	354	7.1
1476.7	0.393	18	2.4	83	293	8.2	5.7	4.4	127	335	6.0
1477.4	0.393	20	2.7	91	341	9.4	5.7	5.0	140	390	6.9
1478.1	0.393	17	2.5	85	328	9.8	5.7	4.5	130	375	7.1
1478.8	0.393	20	2.4	95	327	11	5.7	4.3	146	374	8.2
1479.5	0.393	20	2.9	88	323	8.4	5.7	5.3	135	370	6.1
1480.2	0.393	17	2.4	81	294	8.2	5.7	4.4	124	337	6.0
1480.9	0.393	21	3.1	92	338	9.2	5.7	5.6	141	387	6.7
1481.6	0.393	22	2.6	89	329	11	5.7	4.8	136	376	7.9
1482.3	0.443	19	2.7	93	359	11	6.4	5.0	142	410	7.9
1483.0	0.393	20	2.9	88	338	12	5.7	5.3	136	386	8.7
1483.7	0.393	17	2.1	78	288	11	5.7	3.7	120	329	7.7
1484.4	0.393	16	2.7	81	305	9.5	5.7	4.9	124	349	6.9
1485.1	0.393	17	2.5	95	365	9.7	5.7	4.6	145	417	7.0
1485.8	0.393	20	2.7	85	315	11	5.7	5.0	130	360	8.0
1486.5	0.393	19	2.2	92	336	11	5.7	3.9	141	385	7.7
1487.2	0.393	17	2.5	93	340	11	5.7	4.5	143	388	7.7
1487.9	0.393	17	2.6	85	340	12	5.7	4.8	131	389	8.5
1488.6	0.393	18	2.6	81	318	14	5.7	4.7	124	364	10
1489.3	0.393	23	2.4	83	312	12	5.7	4.4	128	356	8.6
1490.0	0.393	20	1.9	84	331	13	5.7	3.5	129	379	9.4
1490.7	0.393	19	2.4	92	346	11	5.7	4.4	141	395	8.2
1491.4	0.393	21	3.4	94	328	11	5.7	6.1	144	375	7.8
1492.1	0.393	17	1.9	87	311	11	5.7	3.5	133	355	7.9
1492.8	0.393	17	2.2	85	327	9.6	5.7	4.0	130	374	7.0
1493.5	0.393	16	2.4	91	346	13	5.7	4.4	140	396	9.8
1494.2	0.393	18	2.4	78	313	12	5.7	4.3	120	358	8.4
1494.9	0.393	16	2.3	78	284	9.5	5.7	4.2	119	325	6.9
1495.6	0.469	16	2.0	84	356	11	6.8	3.6	129	407	7.8
1496.3	0.396	19	2.3	88	335	12	5.7	4.1	135	383	8.7
1497.0	0.393	20	1.8	85	330	12	5.7	3.4	130	377	9.0
1497.6	0.393	19	1.9	87	321	13	5.7	3.5	133	367	9.3
1498.3	0.393	16	2.6	74	306	12	5.7	4.7	113	350	8.5
1499.0	0.924	20	3.2	86	310	14	13	5.8	131	354	10
1499.7	0.570	21	2.7	85	359	14	8.2	5.0	130	411	10
1500.4	0.393	18	2.2	86	325	15	5.7	4.0	133	371	11
1501.1	0.393	13	1.8	79	327	14	5.7	3.2	121	374	11
1501.8	0.393	19	1.9	84	318	13	5.7	3.6	128	363	9.8
1502.5	0.468	19	2.4	91	361	13	6.7	4.4	139	412	9.8
1503.2	0.393	20	2.0	91	342	13	5.7	3.7	139	391	9.7
1503.9	0.527	18	2.2	82	309	12	7.6	4.1	126	353	8.8
1504.6	0.393	16	2.2	74	320	11	5.7	4.0	113	366	8.2
1505.3	0.393	18	2.1	87	363	11	5.7	3.8	133	416	7.9
1506.0	0.393	18	2.4	84	360	12	5.7	4.4	129	412	8.9
1506.7	0.459	20	1.4	77	334	9.1	6.6	2.6	118	382	6.7
1507.4	0.393	19	2.3	82	312	11	5.7	4.2	126	357	8.2
1508.1	0.393	19	2.8	84	318	12	5.7	5.0	128	364	8.6
1508.8	0.393	19	2.3	83	333	13	5.7	4.1	126	381	9.2
1509.5	0.393	17	2.1	84	328	11	5.7	3.9	129	376	8.4
1510.2	0.393	19	2.0	81	342	11	5.7	3.7	124	391	8.2
1510.9	0.393	19	2.0	83	304	10.0	5.7	3.6	127	347	7.3
1511.6	0.453	17	2.1	87	361	13	6.5	3.9	133	412	9.4
1512.3	0.393	17	2.5	88	337	9.0	5.7	4.5	135	385	6.6
1513.0	0.393	20	2.0	80	327	11	5.7	3.6	123	374	7.7
1513.7	0.393	17	2.4	85	312	12	5.7	4.3	130	357	8.5
1514.4	0.393	17	1.9	83	386	11	5.7	3.4	127	441	7.8
1515.1	0.465	16	2.3	84	321	11	6.7	4.1	128	367	7.9
1515.8	0.393	18	2.7	87	331	11	5.7	4.9	133	379	8.3
1516.5	0.393	17	2.4	82	314	9.4	5.7	4.4	126	359	6.8
1517.2	0.393	18	2.4	91	306	11	5.7	4.4	139	349	7.8
1517.9	0.393	16	2.4	87	336	12	5.7	4.4	134	384	8.7
1518.6	0.393	19	2.5	84	347	12	5.7	4.5	129	396	8.7
1519.3	0.393	21	2.2	84	350	14	5.7	4.1	129	400	9.9
1520.0	0.393	19	2.1	77	303	11	5.7	3.9	117	347	8.3
1520.7	0.393	18	2.1	82	328	9.3	5.7	3.8	125	375	6.8
1521.4	0.393	20	2.3	81	341	9.9	5.7	4.1	125	390	7.2
1522.1	0.393	17	2.5	77	322	11	5.7	4.6	118	368	7.7
1522.8	0.460	17	2.2	90	318	11	6.6	4.0	139	363	7.7
1523.4	0.393	18	2.2	88	331	11	5.7	3.9	134	379	8.0
1524.1	0.393	18	2.2	88	340	13	5.7	4.0	134	389	9.5
1524.8	0.393	18	2.0	84	318	9.7	5.7	3.6	129	364	7.1

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Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1525.5	0.393	18	1.8	78	312	12	5.7	3.3	120	357	8.8
1526.2	0.812	16	2.2	81	325	11	12	4.1	125	371	8.3
1526.9	0.393	17	2.2	75	282	8.9	5.7	4.0	114	322	6.5
1527.6	0.393	17	2.0	74	301	9.1	5.7	3.7	113	345	6.7
1528.3	0.641	15	2.2	75	303	8.6	9.2	4.0	115	346	6.2
1529.0	0.393	20	1.8	85	295	9.7	5.7	3.4	130	338	7.1
1529.7	0.624	17	2.3	81	321	9.0	9.0	4.1	124	367	6.6
1530.4	0.393	18	2.3	86	315	10	5.7	4.2	131	360	7.6
1531.1	0.393	18	2.0	78	289	10.0	5.7	3.7	119	330	7.3
1531.8	0.393	18	1.9	83	315	10	5.7	3.5	128	361	7.6
1532.5	0.393	18	2.7	89	338	10	5.7	5.0	136	387	7.5
1533.2	0.393	21	2.0	86	389	9.7	5.7	3.6	132	445	7.1
1533.9	0.393	18	2.1	83	315	10	5.7	3.8	127	360	7.4
1534.6	0.393	18	1.7	77	333	11	5.7	3.0	118	381	8.3
1535.3	0.393	17	1.8	71	309	9.8	5.7	3.2	108	353	7.2
1536.0	0.393	21	2.5	80	356	9.4	5.7	4.5	123	407	6.9
1536.7	0.968	19	2.7	84	359	11	14	4.9	128	411	7.9
1537.4	0.393	19	2.3	79	318	8.2	5.7	4.1	121	364	6.0
1538.1	0.393	20	2.3	80	289	9.3	5.7	4.2	123	330	6.8
1538.8	0.393	21	2.7	87	347	12	5.7	4.9	134	397	8.5
1539.5	0.393	20	2.2	87	319	9.2	5.7	4.0	133	364	6.7
1540.2	0.393	21	2.2	89	308	9.0	5.7	4.1	137	352	6.5
1540.9	0.393	19	2.4	90	323	8.6	5.7	4.4	138	369	6.3
1541.6	0.393	17	2.4	76	303	11	5.7	4.3	117	347	7.9
1542.3	0.393	21	2.4	96	369	7.3	5.7	4.4	147	422	5.4
1543.0	0.393	19	2.0	91	379	8.5	5.7	3.7	139	433	6.2
1543.7	0.393	19	2.1	86	330	8.5	5.7	3.9	132	377	6.2
1544.4	0.393	20	2.4	84	306	6.6	5.7	4.4	129	350	4.8
1545.1	0.393	17	2.4	81	326	8.1	5.7	4.4	124	373	5.9
1545.8	0.393	21	3.0	89	326	10	5.7	5.5	136	372	7.6
1546.5	0.393	20	2.4	97	349	8.0	5.7	4.5	149	399	5.8
1547.2	0.393	20	2.5	84	313	7.6	5.7	4.5	129	358	5.6
1547.9	0.558	18	2.5	85	331	6.3	8.1	4.5	131	378	4.6
1548.6	0.393	18	2.2	88	310	7.1	5.7	4.0	135	354	5.2
1549.3	0.393	19	2.1	92	313	7.8	5.7	3.7	141	358	5.7
1550.0	0.393	17	2.5	82	311	6.3	5.7	4.5	126	356	4.6
1550.6	0.393	15	2.2	90	288	8.1	5.7	4.0	138	329	5.9
1551.3	0.393	18	2.7	91	302	8.4	5.7	4.9	140	345	6.2
1552.0	0.393	18	2.3	100	330	7.6	5.7	4.2	153	377	5.5
1552.7	0.393	18	2.3	95	328	8.7	5.7	4.1	145	376	6.4
1553.4	0.393	20	2.1	94	296	7.2	5.7	3.8	144	339	5.3
1554.1	0.393	17	2.6	91	311	5.7	5.7	4.7	139	356	4.2
1554.8	0.393	16	2.7	91	331	8.0	5.7	5.0	139	378	5.8
1555.5	0.393	17	3.0	85	278	5.3	5.7	5.4	130	318	3.8
1556.2	0.393	19	2.8	105	305	5.7	5.7	5.1	161	349	4.1
1556.9	0.393	22	2.3	95	307	8.3	5.7	4.2	145	351	6.1
1557.6	0.393	17	2.5	91	302	8.5	5.7	4.5	139	345	6.2
1558.3	0.393	18	2.4	79	276	9.4	5.7	4.5	122	316	6.9
1559.0	0.393	21	2.8	102	289	8.1	5.7	5.1	156	330	5.9
1559.7	0.393	17	2.4	99	289	9.0	5.7	4.3	152	331	6.6
1560.4	0.393	18	2.8	107	303	7.1	5.7	5.2	164	346	5.2
1561.1	0.393	17	2.1	94	287	4.8	5.7	3.8	144	328	3.5
1561.8	0.393	18	2.3	94	266	5.7	5.7	4.2	144	304	4.1
1562.5	0.393	18	2.5	87	306	6.4	5.7	4.6	134	350	4.6
1563.2	0.393	17	2.8	93	289	8.3	5.7	5.1	142	330	6.0
1563.9	0.393	16	2.3	93	311	6.8	5.7	4.2	142	355	5.0
1564.6	0.393	17	2.3	94	328	5.6	5.7	4.3	144	375	4.1
1565.3	0.393	16	2.4	87	318	7.3	5.7	4.4	134	363	5.4
1566.0	0.393	18	2.7	87	278	5.3	5.7	4.9	133	318	3.9
1566.7	0.393	17	2.8	90	282	7.5	5.7	5.1	138	323	5.5
1567.4	0.393	20	2.6	94	287	9.2	5.7	4.7	144	328	6.7
1568.1	0.393	15	2.3	87	290	5.5	5.7	4.1	134	332	4.0
1568.8	0.393	17	2.7	96	358	6.4	5.7	5.0	147	410	4.7
1569.5	0.393	18	2.5	98	290	6.0	5.7	4.6	151	332	4.4
1570.2	0.393	16	2.2	83	281	8.1	5.7	4.0	128	321	5.9
1570.9	0.393	19	2.6	98	308	5.1	5.7	4.8	151	353	3.8
1571.6	0.393	15	2.6	97	289	6.0	5.7	4.8	149	330	4.4
1572.3	0.393	18	2.2	107	330	5.4	5.7	4.0	165	377	4.0
1573.0	0.393	17	2.4	88	273	7.9	5.7	4.3	135	312	5.8
1573.7	0.727	21	2.1	95	292	6.8	10	3.9	146	333	5.0
1574.4	0.393	17	2.8	95	290	8.5	5.7	5.0	145	332	6.2
1575.1	0.393	16	2.6	94	283	7.7	5.7	4.7	144	324	5.6
1575.8	0.546	19	2.4	88	313	6.3	7.9	4.4	135	358	4.6
1576.5	0.393	19	2.5	87	253	5.2	5.7	4.6	134	290	3.8
1577.1	0.586	19	2.5	86	281	7.0	8.5	4.5	131	322	5.1
1577.8	0.393	18	2.5	88	289	6.6	5.7	4.6	135	330	4.8
1578.5	0.393	18	2.7	92	285	6.5	5.7	5.0	141	326	4.7
1579.2	0.584	21	2.5	90	305	8.8	8.4	4.6	137	349	6.4
1579.9	0.393	20	3.0	100	292	5.1	5.7	5.5	153	334	3.8
1580.6	0.393	18	2.3	88	277	7.7	5.7	4.3	134	316	5.6
1581.3	0.393	17	2.9	102	316	8.3	5.7	5.2	157	361	6.1

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1582.0	0.541	18	2.6	75	279	5.5	7.8	4.7	116	319	4.0
1582.7	0.393	21	2.3	91	373	8.1	5.7	4.3	139	427	5.9
1583.4	0.393	19	2.3	85	319	7.4	5.7	4.3	130	365	5.4
1584.1	0.393	18	2.2	99	279	7.2	5.7	3.9	151	319	5.3
1584.8	0.393	19	2.4	83	279	4.4	5.7	4.4	127	319	3.2
1585.5	0.393	18	2.5	88	277	5.7	5.7	4.6	135	317	4.2
1586.2	0.393	19	2.5	91	336	7.0	5.7	4.5	140	384	5.1
1586.9	0.393	17	2.4	86	272	7.9	5.7	4.3	132	311	5.8
1587.6	0.393	20	2.3	89	287	8.2	5.7	4.2	136	328	6.0
1588.3	0.393	22	2.6	90	279	7.2	5.7	4.8	138	319	5.2
1589.0	0.393	20	2.3	90	329	8.8	5.7	4.2	138	376	6.4
1589.7	0.393	23	2.6	78	285	7.7	5.7	4.8	119	326	5.6
1590.4	0.615	22	2.6	89	308	6.6	8.9	4.8	136	352	4.8
1591.1	0.393	21	2.3	82	284	8.4	5.7	4.3	126	325	6.1
1591.8	0.393	22	2.0	78	266	8.2	5.7	3.6	119	305	6.0
1592.5	0.393	24	2.3	88	312	9.3	5.7	4.2	135	357	6.8
1593.2	0.393	22	2.5	89	280	8.4	5.7	4.5	137	320	6.1
1593.9	0.393	21	3.3	87	286	6.5	5.7	5.9	133	327	4.7
1594.6	0.393	21	2.2	75	292	7.8	5.7	4.1	114	333	5.7
1595.3	0.393	20	2.2	73	252	8.8	5.7	4.0	112	288	6.4
1596.0	0.393	19	2.8	90	280	8.5	5.7	5.1	138	320	6.2
1596.7	0.393	18	2.0	79	263	7.5	5.7	3.7	121	301	5.5
1597.4	0.456	19	1.9	78	276	8.8	6.6	3.5	119	315	6.4
1598.1	0.393	20	3.1	82	287	9.9	5.7	5.6	126	328	7.2
1598.8	0.393	20	2.7	71	275	9.5	5.7	5.0	109	315	7.0
1599.5	0.417	22	2.3	89	275	10	6.0	4.2	137	315	7.4
1600.2	0.443	20	1.8	84	305	9.5	6.4	3.2	128	349	6.9
1600.9	0.393	21	2.6	72	259	9.9	5.7	4.8	110	296	7.2
1601.6	0.393	18	1.6	73	257	9.5	5.7	2.9	112	294	6.9
1602.3	0.626	21	2.4	80	282	9.3	9.0	4.3	123	322	6.8
1602.9	0.393	20	2.7	76	328	11	5.7	4.9	117	375	8.1
1603.6	0.393	22	2.3	73	276	11	5.7	4.2	112	315	8.0
1604.3	0.393	20	2.2	68	285	11	5.7	4.0	105	326	8.3
1605.0	0.393	22	2.1	79	284	13	5.7	3.9	121	325	9.4
1605.7	0.576	19	2.4	85	322	12	8.3	4.4	130	368	8.5
1606.4	0.393	20	2.1	76	274	10	5.7	3.9	117	314	7.6
1607.1	0.393	19	2.2	70	252	7.7	5.7	3.9	107	288	5.6
1607.8	0.393	19	1.8	70	301	11	5.7	3.2	108	344	8.0
1608.5	0.393	22	2.1	75	280	12	5.7	3.8	114	320	8.4
1609.2	0.470	21	1.7	69	302	11	6.8	3.2	106	346	8.4
1609.9	0.393	19	1.8	80	294	10	5.7	3.2	123	336	7.7
1610.6	0.393	17	1.7	76	303	9.3	5.7	3.2	117	346	6.8
1611.3	0.393	19	2.2	75	290	10	5.7	4.1	115	331	7.5
1612.0	0.393	19	2.3	76	346	11	5.7	4.1	116	395	7.8
1612.7	0.393	18	1.9	72	319	12	5.7	3.4	111	365	8.5
1613.4	0.393	20	2.2	69	297	11	5.7	4.0	106	340	8.0
1614.1	0.393	16	1.5	62	265	10.0	5.7	2.8	95	303	7.3
1614.8	0.393	19	1.9	67	301	14	5.7	3.5	102	344	10
1615.5	0.393	21	1.8	78	313	12	5.7	3.2	120	358	8.9
1616.2	0.393	21	1.9	70	289	13	5.7	3.5	107	330	9.3
1616.9	0.763	20	1.8	73	301	13	11	3.3	112	344	9.4
1617.6	0.393	17	1.4	69	284	9.7	5.7	2.6	105	325	7.1
1618.3	0.393	21	1.7	71	334	13	5.7	3.1	108	382	9.1
1619.0	0.393	18	2.0	61	314	11	5.7	3.6	94	359	8.2
1619.7	0.426	20	1.5	71	328	12	6.1	2.8	109	375	8.7
1620.4	0.393	16	1.8	64	290	11	5.7	3.2	99	331	8.0
1621.1	0.483	17	1.8	63	338	11	7.0	3.2	97	387	8.4
1621.8	0.393	20	1.6	61	295	12	5.7	3.0	94	338	8.8
1622.5	0.393	18	1.6	63	296	11	5.7	2.9	97	339	8.4
1623.2	0.518	22	1.9	69	320	10	7.5	3.4	106	366	7.5
1623.9	0.393	14	1.9	57	337	11	5.7	3.4	87	385	8.0
1624.6	0.393	15	1.5	61	322	12	5.7	2.7	94	368	8.5
1625.3	0.393	20	2.0	66	332	14	5.7	3.6	102	380	10
1626.0	0.393	16	1.5	62	298	11	5.7	2.8	94	341	8.2
1626.7	0.393	18	1.6	59	324	11	5.7	2.9	91	370	7.8
1627.4	0.393	18	1.8	57	363	12	5.7	3.2	88	416	8.9
1628.1	0.393	14	1.4	58	314	13	5.7	2.6	89	359	9.6
1628.7	0.398	14	1.5	59	310	11	5.8	2.7	90	355	8.1
1629.4	0.393	14	1.5	64	299	14	5.7	2.7	98	341	10
1630.1	0.666	17	1.6	62	324	15	9.6	2.9	95	371	11
1630.8	0.393	16	1.4	56	299	12	5.7	2.6	85	342	8.5
1631.5	0.393	15	1.1	57	303	13	5.7	2.1	87	346	9.4
1632.2	0.525	15	1.2	59	334	14	7.6	2.2	90	381	10
1632.9	0.393	17	1.4	52	289	13	5.7	2.5	80	331	9.4
1633.6	0.393	15	1.2	47	297	13	5.7	2.3	71	340	9.3
1634.3	0.393	14	1.3	54	312	11	5.7	2.4	83	357	8.1
1635.0	0.393	14	1.4	57	309	11	5.7	2.5	88	354	8.1
1635.7	0.603	13	1.5	54	317	12	8.7	2.8	84	363	8.5
1636.4	0.393	16	1.7	58	333	13	5.7	3.1	89	381	9.7
1637.1	0.393	15	1.7	63	317	14	5.7	3.1	96	362	10
1637.8	0.430	16	1.3	52	316	13	6.2	2.5	80	361	9.4

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1638.5	0.393	13	1.3	51	327	16	5.7	2.4	78	374	12
1639.2	0.393	15	1.5	52	313	13	5.7	2.7	79	358	9.5
1639.9	0.393	14	1.4	52	349	12	5.7	2.5	80	400	8.4
1640.6	0.393	15	1.0	58	323	9.4	5.7	1.9	89	369	6.8
1641.3	0.393	14	1.2	50	289	12	5.7	2.3	76	330	8.9
1642.0	0.559	13	1.5	50	303	12	8.1	2.8	77	346	8.5
1642.7	0.393	14	1.0	54	380	12	5.7	1.9	82	434	8.8
1643.4	0.393	13	1.3	51	344	12	5.7	2.4	78	393	8.4
1644.1	0.393	13	1.3	45	320	12	5.7	2.3	70	366	8.8
1644.8	0.393	15	1.1	38	325	9.8	5.7	2.1	59	372	7.1
1645.5	0.393	12	1.2	44	298	12	5.7	2.3	68	341	9.0
1646.2	0.393	16	1.0	53	351	11	5.7	1.9	82	401	7.9
1646.9	0.393	11	0.963	37	274	12	5.7	1.8	56	314	9.0
1647.6	0.393	14	1.3	47	284	11	5.7	2.3	71	325	7.9
1648.3	0.393	12	1.1	38	307	11	5.7	2.0	59	352	8.1
1649.0	0.393	14	1.3	46	316	9.5	5.7	2.3	71	361	6.9
1649.7	0.393	13	0.794	38	284	7.5	5.7	1.4	58	325	5.5
1650.4	0.393	15	0.992	41	314	11	5.7	1.8	62	359	8.0
1651.1	0.393	14	0.978	40	339	11	5.7	1.8	62	388	7.7
1651.8	0.545	13	1.4	42	303	11	7.9	2.6	65	346	7.7
1652.5	0.702	14	1.3	39	297	8.5	10	2.4	60	340	6.2
1653.2	0.393	16	0.976	40	299	10	5.7	1.8	61	342	7.4
1653.9	0.397	13	1.1	32	271	8.7	5.7	1.9	49	310	6.4
1654.5	0.393	15	0.852	38	269	9.5	5.7	1.6	58	308	6.9
1655.2	0.393	15	0.948	41	382	9.5	5.7	1.7	63	437	6.9
1655.9	0.393	12	1.0	35	275	9.1	5.7	1.8	54	314	6.7
1656.6	0.393	14	1.5	33	302	8.6	5.7	2.7	51	345	6.3
1657.3	0.407	13	1.1	36	303	8.2	5.9	2.0	56	347	6.0
1658.0	0.393	13	0.764	34	261	6.9	5.7	1.4	51	299	5.1
1658.7	0.393	13	0.982	37	289	7.9	5.7	1.8	57	330	5.8
1659.4	0.393	12	1.1	39	372	8.6	5.7	2.0	59	425	6.2
1660.1	0.393	16	0.981	38	288	6.2	5.7	1.8	58	330	4.5
1660.8	0.393	13	0.989	42	293	8.2	5.7	1.8	64	335	6.0
1661.5	0.393	16	0.761	40	319	9.5	5.7	1.4	62	364	6.9
1662.2	0.393	15	1.3	40	299	8.8	5.7	2.3	61	342	6.4
1662.9	0.393	16	0.977	42	305	8.5	5.7	1.8	64	349	6.2
1663.6	0.393	14	0.871	34	269	7.2	5.7	1.6	53	307	5.3
1664.3	0.393	15	0.907	38	299	7.1	5.7	1.7	58	341	5.2
1665.0	0.576	15	1.2	37	269	6.1	8.3	2.1	57	307	4.4
1665.7	0.393	14	0.991	38	292	10	5.7	1.8	58	334	7.3
1666.4	0.567	16	1.1	41	292	7.6	8.2	1.9	63	334	5.5
1667.1	0.393	15	0.845	37	278	6.2	5.7	1.5	56	318	4.5
1667.8	0.393	14	1.2	43	283	6.7	5.7	2.1	66	324	4.9
1668.5	0.393	14	1.2	39	290	6.8	5.7	2.1	60	331	5.0
1669.2	0.728	12	0.992	34	254	6.1	11	1.8	53	291	4.5
1669.9	0.393	14	1.0	45	302	6.1	5.7	1.9	69	346	4.5
1670.6	0.393	13	0.964	38	262	5.5	5.7	1.8	58	299	4.0
1671.3	0.393	13	0.854	38	280	5.7	5.7	1.6	58	321	4.2
1672.0	0.401	15	1.6	45	351	7.1	5.8	2.9	69	401	5.2
1672.7	0.520	15	0.773	41	254	7.0	7.5	1.4	63	291	5.1
1673.4	0.393	13	1.3	41	290	5.9	5.7	2.5	63	331	4.3
1674.1	0.393	15	1.4	41	270	7.0	5.7	2.5	63	309	5.1
1674.8	0.920	16	1.3	40	289	6.4	13	2.3	61	330	4.7
1675.5	0.393	15	1.7	45	283	6.0	5.7	3.1	69	323	4.3
1676.2	0.393	15	1.2	44	268	5.8	5.7	2.1	68	306	4.2
1676.9	0.393	17	0.977	43	334	5.1	5.7	1.8	65	382	3.8
1677.6	0.393	17	1.6	45	324	5.0	5.7	2.9	70	370	3.7
1678.3	0.598	18	1.1	45	286	7.2	8.6	2.1	69	326	5.3
1679.0	0.393	15	1.5	48	293	5.3	5.7	2.7	73	335	3.9
1679.6	0.393	19	1.4	41	268	4.6	5.7	2.5	62	306	3.3
1680.3	0.494	17	1.5	54	287	3.9	7.1	2.8	82	329	2.9
1681.0	0.393	17	1.2	46	283	7.1	5.7	2.2	71	323	5.2
1681.7	0.393	17	1.6	46	288	7.1	5.7	2.8	71	330	5.2
1682.4	0.716	16	1.5	53	278	5.6	10	2.8	81	318	4.1
1683.1	0.393	20	1.6	58	275	5.7	5.7	3.0	89	314	4.1
1683.8	0.393	16	1.3	50	281	5.5	5.7	2.4	77	322	4.0
1684.5	0.393	19	1.8	54	265	4.1	5.7	3.3	82	303	3.0
1685.2	0.393	20	1.6	46	275	5.3	5.7	2.9	70	314	3.8
1685.9	0.393	19	2.0	52	305	4.1	5.7	3.7	80	349	3.0
1686.6	0.393	19	1.7	53	257	3.8	5.7	3.0	81	294	2.8
1687.3	0.393	19	1.5	54	274	4.6	5.7	2.8	82	313	3.4
1688.0	0.393	18	1.8	63	297	5.2	5.7	3.2	97	340	3.8
1688.7	0.416	21	2.1	52	326	5.6	6.0	3.9	79	373	4.0
1689.4	0.393	20	1.5	50	271	5.2	5.7	2.8	77	310	3.8
1690.1	0.393	20	1.7	60	298	5.3	5.7	3.2	92	341	3.9
1690.8	0.454	20	1.5	48	269	3.8	6.6	2.8	74	308	2.8
1691.5	0.393	18	1.7	56	305	4.3	5.7	3.0	86	349	3.2
1692.2	0.393	19	1.5	58	280	3.7	5.7	2.7	89	320	2.7
1692.9	0.393	21	1.7	59	298	5.3	5.7	3.1	90	340	3.9
1693.6	0.439	21	1.5	62	293	4.3	6.3	2.8	94	335	3.1
1694.3	0.393	21	2.2	61	285	3.6	5.7	3.9	93	325	2.6

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Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1695.0	0.393	18	2.0	58	298	4.1	5.7	3.7	89	341	3.0
1695.7	0.393	19	1.8	57	272	3.3	5.7	3.2	87	311	2.4
1696.4	0.393	20	1.9	59	281	3.1	5.7	3.4	91	321	2.3
1697.1	0.417	19	1.8	58	292	4.0	6.0	3.3	89	334	2.9
1697.8	0.401	19	1.8	64	316	5.6	5.8	3.2	98	362	4.1
1698.5	0.393	19	1.6	61	263	3.9	5.7	2.9	93	301	2.8
1699.2	0.624	21	2.1	60	272	5.3	9.0	3.9	92	311	3.8
1699.9	0.393	23	2.0	63	299	4.1	5.7	3.6	97	342	3.0
1700.6	0.465	21	1.7	64	304	3.0	6.7	3.0	98	347	2.2
1701.3	0.393	17	2.2	53	277	3.4	5.7	3.9	82	317	2.5
1702.0	0.393	20	1.9	64	295	5.5	5.7	3.5	98	338	4.0
1702.7	0.393	20	1.9	61	309	2.5	5.7	3.4	94	353	1.8
1703.4	0.440	17	2.0	55	283	3.5	6.4	3.6	84	324	2.6
1704.1	0.393	19	1.9	61	291	2.5	5.7	3.5	94	333	1.8
1704.8	0.393	21	2.1	54	284	4.5	5.7	3.8	83	324	3.3
1705.5	0.605	22	2.5	69	288	3.2	8.7	4.5	105	329	2.3
1706.2	0.502	23	1.7	63	290	4.7	7.2	3.2	96	332	3.4
1706.8	0.393	19	2.0	63	305	3.0	5.7	3.6	97	349	2.2
1707.5	0.421	19	1.7	58	287	3.1	6.1	3.2	88	328	2.2
1708.2	0.599	23	1.9	63	331	2.5	8.6	3.5	97	379	1.8
1708.9	0.393	21	1.9	70	308	4.8	5.7	3.5	107	352	3.5
1709.6	0.393	20	1.8	57	295	3.2	5.7	3.4	87	337	2.3
1710.3	0.393	17	2.1	65	290	3.4	5.7	3.9	100	332	2.5
1711.0	0.499	19	1.9	67	310	3.0	7.2	3.5	102	354	2.2
1711.7	0.702	19	2.0	62	308	2.9	10	3.6	94	352	2.1
1712.4	0.393	20	1.4	67	304	4.3	5.7	2.5	102	347	3.1
1713.1	0.393	19	1.7	58	285	3.4	5.7	3.0	89	326	2.5
1713.8	0.393	17	1.5	65	273	2.3	5.7	2.8	99	312	1.7
1714.5	0.393	21	1.8	61	310	4.3	5.7	3.2	94	354	3.2
1715.2	0.393	20	2.0	63	312	4.3	5.7	3.6	97	357	3.1
1715.9	0.559	19	1.8	58	290	3.3	8.1	3.2	89	332	2.4
1716.6	0.393	18	1.7	61	275	4.3	5.7	3.0	94	314	3.1
1717.3	0.529	20	1.5	56	283	3.4	7.6	2.7	86	323	2.5
1718.0	0.393	20	2.2	65	317	4.1	5.7	4.0	99	362	3.0
1718.7	0.754	21	2.1	63	308	6.0	11	3.9	96	353	4.4
1719.4	0.738	21	1.5	59	325	4.3	11	2.7	91	372	3.2
1720.1	0.457	19	1.5	59	313	3.6	6.6	2.8	90	358	2.6
1720.8	0.393	19	2.0	64	300	4.4	5.7	3.7	98	343	3.2
1721.5	0.659	20	1.9	70	307	4.0	9.5	3.5	108	351	2.9
1722.2	0.393	21	2.0	68	319	4.8	5.7	3.7	104	365	3.5
1722.9	0.393	19	1.8	58	306	4.3	5.7	3.3	89	350	3.1
1723.6	0.393	19	1.4	55	261	4.7	5.7	2.6	84	299	3.4
1724.3	0.393	18	1.8	65	312	4.5	5.7	3.2	100	356	3.3
1725.0	0.393	19	2.2	61	282	3.8	5.7	4.1	94	322	2.8
1725.7	0.393	18	1.6	60	277	4.2	5.7	2.9	92	316	3.0
1726.4	0.393	19	1.8	60	324	4.3	5.7	3.3	93	370	3.1
1727.1	0.605	20	1.7	57	285	4.9	8.7	3.1	88	326	3.6
1727.8	0.448	17	2.0	61	277	2.8	6.5	3.6	94	317	2.0
1728.5	0.393	21	2.0	64	288	4.2	5.7	3.7	98	329	3.0
1729.2	0.393	20	1.6	66	281	4.9	5.7	3.0	101	322	3.6
1729.9	0.393	19	1.6	62	335	3.7	5.7	2.9	94	383	2.7
1730.6	0.661	18	1.5	63	336	4.9	9.5	2.6	97	384	3.6
1731.3	0.789	19	2.2	62	323	4.2	11	4.1	95	370	3.1
1732.0	0.393	20	1.8	60	325	3.4	5.7	3.3	92	371	2.5
1732.7	0.393	18	2.1	56	288	4.3	5.7	3.9	86	329	3.2
1733.3	0.393	18	1.4	56	300	4.5	5.7	2.6	86	343	3.3
1734.0	0.393	21	2.0	60	285	4.4	5.7	3.6	91	326	3.2
1734.7	0.393	21	1.5	61	279	4.0	5.7	2.7	94	319	2.9
1735.4	0.393	19	1.9	57	273	4.4	5.7	3.4	88	312	3.2
1736.1	0.589	18	2.2	61	282	3.7	8.5	3.9	94	323	2.7
1736.8	0.420	18	2.0	56	265	4.7	6.1	3.6	87	303	3.4
1737.5	0.393	19	1.7	59	269	3.0	5.7	3.1	90	308	2.2
1738.2	0.393	18	2.5	58	321	4.2	5.7	4.6	89	367	3.1
1738.9	0.393	21	1.7	66	312	3.3	5.7	3.2	102	357	2.4
1739.6	0.393	21	1.4	59	290	5.2	5.7	2.5	90	331	3.8
1740.3	0.393	16	2.0	60	307	4.6	5.7	3.6	92	351	3.3
1741.0	0.393	18	1.2	60	304	3.6	5.7	2.3	91	347	2.6
1741.7	0.475	18	1.7	57	319	5.2	6.9	3.2	88	365	3.8
1742.4	0.557	18	1.6	59	279	4.4	8.0	2.9	91	319	3.2
1743.1	0.747	19	2.0	64	313	3.6	11	3.6	99	358	2.6
1743.8	0.393	19	1.8	53	305	3.6	5.7	3.3	81	349	2.6
1744.5	0.605	20	1.7	55	294	4.2	8.7	3.0	85	337	3.1
1745.2	0.393	19	1.9	64	295	3.7	5.7	3.4	98	338	2.7
1745.9	0.404	18	1.6	50	291	3.9	5.8	2.9	77	333	2.9
1746.6	0.393	17	1.8	56	296	4.6	5.7	3.3	87	339	3.4
1747.3	0.393	21	1.2	53	337	5.2	5.7	2.2	81	385	3.8
1748.0	0.393	17	1.8	52	299	5.3	5.7	3.3	79	342	3.9
1748.7	0.393	19	1.3	53	283	4.8	5.7	2.5	82	323	3.5
1749.4	0.393	19	1.8	55	290	5.4	5.7	3.3	84	331	3.9
1750.1	0.393	17	1.7	48	279	5.2	5.7	3.1	74	320	3.8
1750.8	0.393	19	1.6	51	299	6.8	5.7	2.8	78	342	5.0

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Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1751.5	0.393	16	1.4	46	316	4.2	5.7	2.6	70	362	3.1
1752.2	0.393	17	1.3	48	284	3.0	5.7	2.3	73	325	2.2
1752.9	0.393	18	1.3	52	286	4.9	5.7	2.4	80	327	3.5
1753.6	0.393	16	1.7	47	286	4.0	5.7	3.1	72	327	2.9
1754.3	0.434	18	1.6	47	306	4.1	6.3	2.9	71	349	3.0
1755.0	0.393	18	1.6	56	295	4.1	5.7	2.8	86	337	3.0
1755.7	0.583	19	1.3	50	295	4.1	8.4	2.3	77	337	3.0
1756.4	0.393	18	1.3	52	280	5.1	5.7	2.3	80	320	3.7
1757.1	0.393	17	1.2	54	316	3.9	5.7	2.3	83	362	2.9
1757.8	0.393	18	1.6	46	319	4.7	5.7	2.9	71	365	3.4
1758.5	0.393	15	1.4	50	285	3.7	5.7	2.6	76	326	2.7
1759.2	0.393	15	1.5	51	282	3.4	5.7	2.7	78	322	2.5
1759.8	0.393	18	1.4	52	297	4.1	5.7	2.6	79	340	3.0
1760.5	0.393	16	1.1	46	272	3.9	5.7	2.0	70	311	2.9
1761.2	0.741	17	1.5	49	315	3.9	11	2.8	76	360	2.9
1761.9	0.393	17	1.4	46	333	3.7	5.7	2.5	70	381	2.7
1762.6	0.402	16	1.3	53	305	3.9	5.8	2.4	81	349	2.8
1763.3	0.393	15	1.1	37	267	4.0	5.7	2.0	57	305	2.9
1764.0	0.393	16	1.2	45	277	4.2	5.7	2.1	69	316	3.0
1764.7	0.393	12	1.5	44	311	4.8	5.7	2.7	67	356	3.5
1765.4	0.393	17	1.1	35	295	3.1	5.7	2.1	53	337	2.2
1766.1	0.393	14	1.3	38	304	3.1	5.7	2.3	58	347	2.2
1766.8	0.702	15	1.3	42	293	4.2	10	2.4	64	336	3.0
1767.5	0.437	15	1.4	35	273	2.6	6.3	2.6	54	312	1.9
1768.2	0.393	15	0.805	38	321	3.6	5.7	1.5	58	367	2.6
1768.9	0.476	14	0.788	40	289	3.6	6.9	1.4	61	331	2.6
1769.6	0.393	12	1.0	37	257	2.4	5.7	1.9	57	294	1.8
1770.3	0.424	14	1.1	42	313	3.7	6.1	2.1	64	357	2.7
1771.0	0.393	14	1.1	38	270	2.4	5.7	2.0	58	309	1.8
1771.7	0.393	13	0.917	34	276	3.5	5.7	1.7	53	315	2.6
1772.4	0.393	12	1.0	30	291	2.2	5.7	1.8	47	332	1.6
1773.1	0.393	13	0.974	31	268	3.3	5.7	1.8	48	307	2.4
1773.8	0.393	13	0.845	38	288	3.7	5.7	1.5	58	330	2.7
1774.5	0.457	13	0.803	35	257	3.1	6.6	1.5	54	293	2.3
1775.2	0.393	15	1.3	40	331	4.6	5.7	2.3	62	378	3.4
1775.9	0.393	12	1.0	38	307	2.9	5.7	1.9	58	351	2.1
1776.6	0.393	13	1.0	35	255	4.1	5.7	1.9	54	292	3.0
1777.3	0.393	13	0.741	30	261	3.2	5.7	1.4	46	299	2.3
1778.0	0.468	14	1.2	32	276	3.7	6.8	2.2	49	315	2.7
1778.7	0.393	13	1.1	34	324	3.5	5.7	2.0	51	371	2.6
1779.4	0.553	12	1.1	34	287	2.8	8.0	2.0	52	328	2.1
1780.1	0.393	13	1.000	30	258	2.8	5.7	1.8	45	295	2.1
1780.8	0.393	15	0.757	32	261	2.4	5.7	1.4	48	299	1.8
1781.5	0.393	15	0.891	32	259	3.0	5.7	1.6	50	296	2.2
1782.2	0.393	12	0.795	31	233	2.9	5.7	1.4	47	267	2.1
1782.9	0.393	14	1.1	35	280	2.6	5.7	2.1	54	320	1.9
1783.6	0.393	9.9	0.943	30	254	2.4	5.7	1.7	46	290	1.7
1784.3	0.393	15	1.1	33	262	2.9	5.7	2.0	51	300	2.1
1785.0	0.393	15	1.2	36	307	2.8	5.7	2.2	55	351	2.0
1785.7	0.393	13	0.677	29	254	2.0	5.7	1.2	44	291	1.4
1786.3	0.393	14	0.888	32	291	4.1	5.7	1.6	48	333	3.0
1787.0	0.393	13	0.985	32	251	2.8	5.7	1.8	49	287	2.0
1787.7	0.393	14	1.5	28	253	2.7	5.7	2.7	43	289	2.0
1788.4	0.393	16	1.3	39	279	1.8	5.7	2.5	59	319	1.3
1789.1	0.416	15	1.2	34	259	3.4	6.0	2.2	52	296	2.5
1789.8	0.393	15	0.706	33	282	2.6	5.7	1.3	51	322	1.9
1790.5	0.393	14	1.3	34	276	3.7	5.7	2.4	52	315	2.7
1791.2	0.393	15	0.709	33	262	2.8	5.7	1.3	50	300	2.1
1791.9	0.393	15	1.3	39	289	2.5	5.7	2.4	60	330	1.8
1792.6	0.393	17	1.2	40	274	2.5	5.7	2.1	61	314	1.8
1793.3	0.393	15	0.818	35	269	3.2	5.7	1.5	53	308	2.3
1794.0	0.393	14	1.1	29	257	2.0	5.7	1.9	45	294	1.5
1794.7	0.393	12	1.2	32	272	3.9	5.7	2.2	50	312	2.8
1795.4	0.393	11	0.680	28	276	3.5	5.7	1.2	43	316	2.6
1796.1	0.393	13	1.2	33	269	2.6	5.7	2.2	50	307	1.9
1796.8	0.453	14	1.2	35	279	1.9	6.5	2.2	53	319	1.4
1797.5	0.393	18	1.1	35	278	2.7	5.7	2.1	54	318	2.0
1798.2	0.393	14	1.3	38	260	2.8	5.7	2.3	58	297	2.0
1798.9	0.456	13	1.5	31	259	2.8	6.6	2.8	47	296	2.1
1799.6	0.393	11	1.0	31	294	2.1	5.7	1.9	47	336	1.5
1800.3	0.393	15	1.2	35	274	3.0	5.7	2.2	53	314	2.2
1801.0	0.463	14	1.1	37	273	4.7	6.7	2.0	56	312	3.4
1801.7	0.393	14	1.4	33	303	3.8	5.7	2.6	51	347	2.8
1802.4	0.393	16	1.4	34	319	2.5	5.7	2.6	52	364	1.9
1803.1	0.393	14	1.0	40	257	2.0	5.7	1.9	62	293	1.4
1803.8	0.393	14	1.2	29	257	2.1	5.7	2.1	44	294	1.5
1804.5	0.393	16	1.2	32	270	2.5	5.7	2.3	49	309	1.9
1805.2	0.393	14	0.974	32	301	2.3	5.7	1.8	50	344	1.6
1805.9	0.393	12	1.2	31	293	2.5	5.7	2.2	48	335	1.8
1806.6	0.393	15	1.2	32	270	2.2	5.7	2.2	49	309	1.6
1807.3	0.398	16	1.1	34	314	2.3	5.7	1.9	52	359	1.7

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1808.0	0.393	15	1.0	29	326	2.2	5.7	1.8	45	372	1.6
1808.7	0.393	19	1.3	31	281	2.3	5.7	2.3	48	321	1.7
1809.4	0.393	13	1.1	27	294	2.9	5.7	2.0	42	336	2.1
1810.1	0.393	16	0.866	32	289	3.3	5.7	1.6	49	331	2.4
1810.8	0.634	14	1.3	32	284	2.4	9.2	2.4	50	325	1.8
1811.5	0.536	12	1.1	31	275	1.8	7.7	1.9	47	315	1.3
1812.2	0.393	14	1.3	36	261	2.0	5.7	2.3	55	298	1.4
1812.8	0.393	16	1.1	31	273	2.1	5.7	2.0	48	312	1.6
1813.5	0.393	13	1.1	37	259	1.9	5.7	2.0	57	296	1.4
1814.2	0.393	14	1.1	30	258	0.934	5.7	2.0	46	296	0.682
1814.9	0.393	13	1.1	35	266	2.0	5.7	2.0	54	304	1.5
1815.6	0.393	15	1.0	31	267	1.6	5.7	1.9	48	305	1.2
1816.3	0.393	13	1.3	32	238	2.3	5.7	2.4	50	272	1.6
1817.0	0.878	17	1.1	41	283	2.0	13	2.1	63	324	1.5
1817.7	0.393	15	1.4	34	290	1.6	5.7	2.6	53	331	1.2
1818.4	0.393	16	1.3	32	299	2.5	5.7	2.4	49	342	1.8
1819.1	0.393	15	1.3	39	290	2.8	5.7	2.4	60	332	2.0
1819.8	0.393	15	1.4	34	264	2.5	5.7	2.6	52	302	1.8
1820.5	0.393	15	1.5	35	298	1.7	5.7	2.7	53	341	1.3
1821.2	0.424	17	1.5	38	307	1.9	6.1	2.7	59	351	1.4
1821.9	0.512	18	1.1	34	290	2.9	7.4	2.0	53	332	2.1
1822.6	0.393	16	1.4	38	271	1.6	5.7	2.5	58	310	1.2
1823.3	0.393	16	1.5	38	267	2.6	5.7	2.6	58	305	1.9
1824.0	0.556	14	1.4	36	255	2.5	8.0	2.6	55	291	1.8
1824.7	0.479	15	1.2	44	318	2.7	6.9	2.1	67	364	2.0
1825.4	0.393	15	1.6	34	263	2.5	5.7	2.9	52	301	1.9
1826.1	0.393	16	1.4	37	322	1.6	5.7	2.5	57	368	1.2
1826.8	0.393	16	1.5	34	307	2.9	5.7	2.8	52	351	2.1
1827.5	0.393	20	1.5	43	323	2.3	5.7	2.8	65	370	1.7
1828.2	0.393	17	1.4	39	298	1.4	5.7	2.5	60	340	1.1
1828.9	0.393	17	1.5	38	282	1.2	5.7	2.7	59	323	0.880
1829.6	0.393	17	1.4	31	248	1.5	5.7	2.5	48	283	1.1
1830.3	0.516	17	1.8	36	300	2.2	7.4	3.2	56	343	1.6
1831.0	0.393	18	1.6	40	282	2.1	5.7	3.0	62	323	1.5
1831.7	0.810	18	1.3	47	313	2.1	12	2.3	72	358	1.5
1832.4	0.393	17	1.3	41	276	1.7	5.7	2.4	62	316	1.2
1833.1	0.631	15	1.6	41	263	1.4	9.1	3.0	63	301	1.0
1833.8	0.393	16	1.5	37	307	1.3	5.7	2.7	57	351	0.951
1834.5	0.393	17	1.5	38	280	2.0	5.7	2.7	59	320	1.4
1835.2	0.393	17	1.1	44	267	1.2	5.7	2.0	68	305	0.863
1835.9	0.393	17	1.7	42	277	1.9	5.7	3.0	64	316	1.4
1836.6	0.474	15	0.957	40	282	1.8	6.8	1.7	61	323	1.3
1837.3	0.393	15	1.5	33	274	1.7	5.7	2.7	51	314	1.2
1838.0	0.539	18	1.3	45	290	1.6	7.8	2.3	70	332	1.2
1838.6	0.395	16	1.4	42	284	1.9	5.7	2.6	65	325	1.4
1839.3	0.393	16	1.3	39	301	1.7	5.7	2.3	60	345	1.2
1840.0	0.393	17	1.4	41	282	1.1	5.7	2.6	63	323	0.784
1840.7	0.411	17	1.7	41	314	1.3	5.9	3.2	63	359	0.940
1841.4	0.393	18	1.5	41	310	2.7	5.7	2.6	62	354	1.9
1842.1	0.393	15	1.3	35	258	1.6	5.7	2.4	54	295	1.2
1842.8	0.393	16	1.6	38	266	1.6	5.7	2.9	59	304	1.1
1843.5	0.393	15	2.2	37	274	2.1	5.7	3.9	57	313	1.5
1844.2	0.393	17	1.4	38	280	2.0	5.7	2.6	58	320	1.4
1844.9	0.393	19	1.7	41	296	2.7	5.7	3.2	63	339	1.9
1845.6	0.393	18	1.4	46	278	1.2	5.7	2.5	71	317	0.889
1846.3	0.393	17	1.1	39	301	1.4	5.7	2.1	59	344	1.0
1847.0	0.393	17	1.5	41	330	2.3	5.7	2.8	63	378	1.7
1847.7	0.393	16	1.4	35	313	1.4	5.7	2.6	53	357	1.0
1848.4	0.393	15	1.9	41	313	1.3	5.7	3.4	63	358	0.971
1849.1	0.393	16	1.8	41	290	1.2	5.7	3.2	63	331	0.855
1849.8	0.480	16	1.7	37	259	1.3	6.9	3.0	56	296	0.923
1850.5	0.393	16	1.4	39	331	1.8	5.7	2.6	60	378	1.3
1851.2	0.393	17	1.4	38	277	2.4	5.7	2.6	59	317	1.8
1851.9	0.393	15	1.9	41	306	2.2	5.7	3.4	63	350	1.6
1852.6	0.393	14	1.3	37	268	1.5	5.7	2.4	57	306	1.1
1853.3	0.651	17	1.9	42	308	2.0	9.4	3.4	64	352	1.5
1854.0	0.393	16	1.9	36	386	1.6	5.7	3.5	55	442	1.2
1854.7	0.393	17	1.5	34	248	1.6	5.7	2.8	52	283	1.1
1855.4	0.442	17	1.3	34	267	1.2	6.4	2.4	52	306	0.883
1856.1	0.453	13	1.5	36	302	1.3	6.5	2.8	55	345	0.981
1856.8	0.436	15	1.5	46	292	1.1	6.3	2.7	70	334	0.797
1857.5	0.393	14	1.6	39	289	2.6	5.7	2.9	60	331	1.9
1858.2	0.393	14	1.4	47	297	1.6	5.7	2.5	72	340	1.1
1858.9	0.393	17	1.2	37	322	1.2	5.7	2.2	57	368	0.906
1859.6	0.393	16	1.5	34	286	1.5	5.7	2.7	52	327	1.1
1860.3	0.393	18	1.3	35	299	1.5	5.7	2.4	54	342	1.1
1861.0	0.393	15	1.6	37	288	1.7	5.7	3.0	56	329	1.2
1861.7	0.393	13	1.1	40	257	1.6	5.7	2.0	61	294	1.2
1862.4	0.393	14	1.2	36	275	1.4	5.7	2.2	56	314	1.0
1863.1	0.393	17	1.3	38	282	1.4	5.7	2.3	58	323	0.987
1863.8	0.393	13	1.4	34	273	1.4	5.7	2.6	52	312	1.0

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1864.5	0.393	14	1.3	37	285	1.4	5.7	2.4	57	326	0.988
1865.2	0.393	14	1.4	35	270	1.5	5.7	2.5	53	309	1.1
1865.8	0.393	11	1.0	35	279	1.3	5.7	1.8	54	320	0.970
1866.5	0.488	13	2.0	38	294	1.1	7.0	3.7	59	336	0.794
1867.2	0.592	13	1.5	37	296	1.7	8.5	2.8	57	338	1.3
1867.9	0.393	13	1.2	38	265	0.891	5.7	2.2	58	303	0.650
1868.6	0.393	15	1.2	37	279	0.997	5.7	2.2	56	319	0.728
1869.3	0.393	16	1.2	35	310	1.8	5.7	2.1	53	355	1.3
1870.0	0.393	16	1.4	37	279	1.1	5.7	2.6	57	320	0.810
1870.7	0.393	18	1.6	33	314	0.974	5.7	2.9	51	359	0.711
1871.4	0.393	14	1.1	37	267	0.888	5.7	2.1	56	305	0.648
1872.1	0.393	14	0.801	34	285	1.3	5.7	1.5	53	326	0.958
1872.8	0.393	14	1.2	34	279	1.4	5.7	2.2	52	320	1.0
1873.5	0.393	15	1.4	31	283	1.9	5.7	2.6	48	324	1.4
1874.2	0.393	13	0.978	31	289	0.803	5.7	1.8	48	331	0.586
1874.9	0.393	13	0.838	31	294	1.4	5.7	1.5	48	336	1.0
1875.6	0.393	15	1.5	40	284	1.2	5.7	2.7	62	325	0.888
1876.3	0.393	16	1.1	31	273	1.4	5.7	2.0	47	312	0.994
1877.0	0.393	13	1.2	35	294	2.0	5.7	2.2	54	337	1.4
1877.7	0.393	15	0.870	33	276	1.1	5.7	1.6	50	316	0.823
1878.4	0.532	12	0.768	29	258	1.3	7.7	1.4	45	295	0.919
1879.1	0.393	12	0.886	29	333	1.6	5.7	1.6	44	380	1.1
1879.8	0.393	12	0.868	25	254	1.6	5.7	1.6	39	291	1.1
1880.5	0.393	16	1.0	26	251	1.0	5.7	1.9	40	287	0.756
1881.2	0.393	13	0.708	24	234	0.852	5.7	1.3	37	268	0.622
1881.9	0.393	14	0.740	27	269	1.5	5.7	1.4	41	307	1.1
1882.6	0.486	13	0.803	24	271	1.4	7.0	1.5	36	309	1.0
1883.3	0.393	12	0.848	24	262	1.3	5.7	1.5	38	300	0.937
1884.0	0.393	16	0.887	26	276	1.5	5.7	1.6	40	316	1.1
1884.7	0.393	14	0.836	25	296	1.7	5.7	1.5	39	339	1.2
1885.4	0.393	15	1.1	25	276	0.878	5.7	2.0	38	316	0.641
1886.1	0.393	13	0.742	25	284	2.0	5.7	1.4	38	325	1.4
1886.8	0.475	13	0.836	23	260	0.867	6.9	1.5	35	297	0.633
1887.5	0.393	13	1.1	23	244	0.966	5.7	2.0	36	279	0.705
1888.2	0.393	14	0.933	26	257	1.1	5.7	1.7	40	294	0.770
1888.9	0.393	12	0.875	25	263	1.3	5.7	1.6	38	300	0.966
1889.6	0.564	14	0.751	26	267	2.4	8.1	1.4	39	305	1.8
1890.3	0.695	12	0.812	26	267	1.1	10	1.5	39	305	0.768
1891.0	0.393	12	1.2	26	273	1.6	5.7	2.3	40	313	1.2
1891.7	0.393	14	1.0	28	255	1.1	5.7	1.9	43	292	0.825
1892.3	0.569	12	1.0	31	301	1.1	8.2	1.8	48	344	0.832
1893.0	0.393	12	1.2	32	257	1.1	5.7	2.1	49	294	0.835
1893.7	0.423	12	1.3	25	291	1.7	6.1	2.4	38	333	1.2
1894.4	0.393	13	1.2	26	256	1.4	5.7	2.2	40	292	0.989
1895.1	0.393	13	1.1	29	263	0.995	5.7	2.0	44	301	0.726
1895.8	0.393	11	1.1	26	237	1.1	5.7	1.9	40	271	0.805
1896.5	0.393	12	1.2	26	264	1.5	5.7	2.1	39	302	1.1
1897.2	0.789	14	1.2	30	281	0.957	11	2.2	46	322	0.698
1897.9	0.393	15	1.0	26	287	0.913	5.7	1.8	39	328	0.666
1898.6	0.998	14	1.2	28	270	1.2	14	2.2	43	309	0.910
1899.3	0.407	13	0.963	27	274	0.744	5.9	1.8	41	314	0.542
1900.0	0.393	12	1.2	25	265	0.882	5.7	2.2	38	303	0.643
1900.7	0.393	14	0.752	26	295	0.904	5.7	1.4	39	338	0.660
1901.4	0.393	12	1.5	25	246	0.931	5.7	2.6	38	282	0.679
1902.1	0.393	12	0.994	26	299	1.1	5.7	1.8	40	342	0.783
1902.8	0.393	14	1.2	23	241	0.868	5.7	2.1	36	275	0.633
1903.5	0.420	15	1.0	29	255	1.6	6.1	1.9	44	292	1.2
1904.2	0.405	12	1.1	24	263	1.5	5.8	2.1	36	301	1.1
1904.9	0.393	12	1.0	26	251	0.979	5.7	1.9	39	287	0.715
1905.6	0.592	12	1.2	24	217	0.718	8.5	2.1	37	248	0.524
1906.3	0.393	12	1.3	30	261	1.1	5.7	2.4	46	299	0.784
1907.0	0.393	11	1.3	31	244	0.803	5.7	2.3	48	279	0.586
1907.7	0.393	13	1.6	26	246	1.2	5.7	2.9	41	281	0.906
1908.4	0.393	15	1.4	26	284	1.5	5.7	2.6	39	324	1.1
1909.1	0.393	12	1.6	29	259	0.805	5.7	2.9	44	296	0.588
1909.8	0.393	15	0.825	30	255	1.5	5.7	1.5	47	291	1.1
1910.5	0.981	13	1.3	29	258	0.749	14	2.3	44	295	0.547
1911.2	0.393	15	1.5	29	253	1.8	5.7	2.8	45	289	1.3
1911.9	0.393	14	1.2	27	282	1.1	5.7	2.3	42	323	0.785
1912.6	0.393	14	1.1	28	242	1.4	5.7	2.0	43	277	1.0
1913.3	0.393	15	1.8	29	270	0.820	5.7	3.3	44	309	0.598
1914.0	0.393	14	0.943	27	253	1.5	5.7	1.7	42	290	1.1
1914.7	0.687	12	1.3	29	248	1.3	9.9	2.4	44	284	0.912
1915.4	0.393	15	1.2	32	254	1.5	5.7	2.2	49	290	1.1
1916.1	0.482	13	1.1	35	251	0.976	7.0	2.1	54	287	0.712
1916.8	0.393	13	1.2	28	286	1.7	5.7	2.2	43	327	1.2
1917.5	0.393	16	1.3	33	268	1.5	5.7	2.4	51	307	1.1
1918.2	0.393	17	1.1	31	287	0.636	5.7	1.9	47	328	0.464
1918.9	0.393	14	1.1	31	271	1.0	5.7	1.9	48	310	0.741
1919.5	0.393	12	1.4	28	266	1.0	5.7	2.5	42	305	0.743
1920.2	0.393	13	1.6	27	276	2.0	5.7	3.0	42	316	1.5

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1920.9	0.500	16	1.4	28	283	0.607	7.2	2.5	44	324	0.443
1921.6	0.393	14	1.0	24	238	1.2	5.7	1.8	37	272	0.843
1922.3	0.410	12	1.0	23	230	0.498	5.9	1.9	35	263	0.364
1923.0	0.393	13	0.963	29	255	0.814	5.7	1.8	45	291	0.594
1923.7	0.393	12	1.2	31	253	1.3	5.7	2.1	47	289	0.932
1924.4	0.393	14	0.998	27	260	1.2	5.7	1.8	42	297	0.857
1925.1	0.393	15	1.2	30	287	0.993	5.7	2.1	46	328	0.724
1925.8	0.393	14	0.680	25	251	1.8	5.7	1.2	38	287	1.3
1926.5	0.440	16	1.1	27	240	1.3	6.4	2.0	41	274	0.977
1927.2	0.580	15	1.2	23	244	1.2	8.4	2.2	35	279	0.911
1927.9	0.393	13	1.4	24	246	1.4	5.7	2.5	37	281	1.0
1928.6	0.750	15	0.998	26	274	0.733	11	1.8	40	314	0.535
1929.3	0.393	11	1.3	24	224	0.960	5.7	2.4	37	256	0.700
1930.0	0.393	14	0.995	26	251	0.859	5.7	1.8	40	287	0.627
1930.7	0.393	13	1.4	27	293	1.7	5.7	2.6	41	335	1.2
1931.4	0.503	16	1.3	24	292	1.2	7.3	2.4	37	334	0.892
1932.1	0.393	16	1.3	26	293	1.3	5.7	2.4	39	335	0.953
1932.8	0.393	13	1.1	25	268	1.5	5.7	1.9	38	306	1.1
1933.5	0.393	13	1.6	26	246	1.3	5.7	2.9	40	281	0.950
1934.2	0.393	17	0.965	27	254	0.710	5.7	1.8	41	291	0.518
1934.9	0.455	14	1.2	26	260	0.934	6.6	2.1	39	297	0.681
1935.6	0.393	13	1.1	29	277	1.2	5.7	2.0	44	317	0.867
1936.3	0.393	13	1.2	22	263	1.1	5.7	2.2	34	300	0.803
1937.0	0.393	14	1.4	25	266	1.4	5.7	2.5	38	304	1.0
1937.7	0.393	14	1.2	27	233	1.8	5.7	2.2	41	267	1.3
1938.4	0.393	14	1.2	30	259	0.843	5.7	2.1	45	296	0.615
1939.1	0.422	15	1.1	30	253	0.440	6.1	2.0	46	289	0.321
1939.8	0.393	13	1.2	25	239	1.8	5.7	2.2	38	273	1.3
1940.5	0.393	12	1.4	28	237	0.404	5.7	2.5	43	271	0.295
1941.2	0.393	14	1.2	28	233	1.7	5.7	2.2	43	266	1.2
1941.9	0.393	13	1.3	29	237	1.1	5.7	2.3	44	271	0.784
1942.6	0.393	12	1.3	30	237	1.8	5.7	2.3	47	271	1.3
1943.3	0.393	15	1.4	29	273	1.6	5.7	2.5	45	312	1.1
1944.0	0.393	12	1.1	29	283	1.3	5.7	2.1	45	323	0.962
1944.7	0.393	13	1.3	28	232	0.802	5.7	2.4	43	265	0.585
1945.4	0.393	14	1.2	29	287	0.831	5.7	2.2	45	328	0.607
1946.0	0.393	12	0.886	23	244	1.4	5.7	1.6	35	279	1.0
1946.7	0.393	13	1.0	27	250	1.3	5.7	1.9	42	286	0.972
1947.4	0.449	16	0.859	30	277	1.4	6.5	1.6	45	317	1.0
1948.1	0.393	13	1.1	29	245	1.9	5.7	2.0	44	280	1.4
1948.8	0.700	16	1.3	24	312	1.2	10	2.4	36	357	0.852
1949.5	0.527	16	1.5	25	258	1.4	7.6	2.6	38	295	1.0
1950.2	0.393	16	0.999	26	248	1.4	5.7	1.8	40	284	1.0
1950.9	0.393	13	1.1	25	266	0.809	5.7	2.0	38	304	0.590
1951.6	0.551	15	1.2	26	279	1.2	7.9	2.2	40	319	0.878
1952.3	0.393	14	0.964	27	288	1.6	5.7	1.8	42	329	1.2
1953.0	0.393	15	1.1	27	264	1.6	5.7	2.0	42	301	1.1
1953.7	0.425	16	0.804	25	271	1.6	6.1	1.5	38	310	1.1
1954.4	0.393	14	0.822	26	303	1.4	5.7	1.5	41	346	1.0
1955.1	0.393	14	0.990	27	248	1.3	5.7	1.8	41	284	0.934
1955.8	0.491	12	0.913	29	271	1.2	7.1	1.7	44	310	0.899
1956.5	0.393	13	1.2	31	286	0.693	5.7	2.2	47	327	0.506
1957.2	0.393	15	1.2	29	260	1.0	5.7	2.1	44	297	0.741
1957.9	0.393	15	1.2	35	284	1.5	5.7	2.2	53	325	1.1
1958.6	0.393	13	1.5	30	296	1.2	5.7	2.7	46	339	0.910
1959.3	0.393	14	1.5	31	282	1.7	5.7	2.7	48	322	1.3
1960.0	0.393	14	1.5	31	270	1.3	5.7	2.7	48	309	0.937
1960.7	0.393	13	1.4	36	242	0.324	5.7	2.5	56	277	0.236
1961.4	0.393	15	0.812	30	293	1.5	5.7	1.5	46	335	1.1
1962.1	0.393	14	1.4	25	281	0.768	5.7	2.5	38	322	0.561
1962.8	0.393	15	1.3	29	273	1.0	5.7	2.4	44	312	0.737
1963.5	0.393	16	1.4	33	291	1.1	5.7	2.6	50	333	0.805
1964.2	0.393	14	1.0	31	288	0.900	5.7	1.9	47	330	0.657
1964.9	0.454	14	0.868	30	326	1.7	6.6	1.6	46	373	1.2
1965.6	0.393	15	0.960	36	318	1.6	5.7	1.8	55	363	1.2
1966.3	0.456	15	1.5	32	281	1.0	6.6	2.7	50	321	0.759
1967.0	0.539	17	0.767	29	311	1.6	7.8	1.4	44	356	1.2
1967.7	0.408	15	1.2	29	322	1.3	5.9	2.2	45	368	0.933
1968.4	0.393	17	1.1	35	296	2.3	5.7	2.0	53	338	1.7
1969.1	0.446	17	0.922	33	282	0.915	6.4	1.7	50	322	0.668
1969.8	0.393	16	1.4	32	340	0.850	5.7	2.5	49	388	0.620
1970.5	0.393	17	1.2	31	302	1.7	5.7	2.3	47	345	1.3
1971.2	0.393	16	1.4	34	294	1.2	5.7	2.5	52	337	0.868
1971.9	0.802	13	0.837	28	282	1.8	12	1.5	42	322	1.3
1972.5	0.393	13	1.2	34	298	1.7	5.7	2.2	52	341	1.2
1973.2	0.702	16	1.3	34	277	1.4	10	2.3	53	317	1.0
1973.9	0.711	16	1.3	36	291	1.4	10	2.3	55	333	1.0
1974.6	0.393	15	1.3	34	304	1.6	5.7	2.4	51	347	1.2
1975.3	0.393	14	1.1	31	271	1.8	5.7	1.9	47	310	1.3
1976.0	0.393	12	0.888	34	283	1.5	5.7	1.6	52	323	1.1
1976.7	0.393	16	1.0	36	314	1.3	5.7	1.9	55	359	0.954

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1977.4	0.393	17	1.0	35	259	1.6	5.7	1.9	54	296	1.2
1978.1	0.393	15	1.2	40	337	1.4	5.7	2.1	61	386	0.994
1978.8	0.393	14	1.6	36	310	1.6	5.7	2.9	55	355	1.2
1979.5	0.393	17	1.5	38	357	2.0	5.7	2.7	59	409	1.5
1980.2	0.393	16	1.3	34	298	1.3	5.7	2.4	52	341	0.952
1980.9	0.393	14	1.2	39	291	1.6	5.7	2.2	60	333	1.2
1981.6	0.393	14	0.786	34	282	1.2	5.7	1.4	53	322	0.894
1982.3	0.393	17	0.972	36	295	1.7	5.7	1.8	56	337	1.2
1983.0	0.684	15	0.987	40	277	1.1	9.9	1.8	62	317	0.833
1983.7	0.393	14	1.4	41	288	1.2	5.7	2.5	63	329	0.908
1984.4	0.393	15	1.0	32	295	1.3	5.7	1.9	50	337	0.918
1985.1	0.393	13	1.2	39	328	1.2	5.7	2.1	60	375	0.862
1985.8	0.393	14	0.730	38	309	1.7	5.7	1.3	59	354	1.3
1986.5	0.574	19	1.1	38	382	1.5	8.3	2.1	58	437	1.1
1987.2	0.393	14	1.2	42	324	1.8	5.7	2.1	65	371	1.3
1987.9	0.393	16	1.1	36	308	1.1	5.7	2.0	55	352	0.807
1988.6	0.705	12	1.2	37	316	1.9	10	2.1	57	361	1.4
1989.3	0.410	13	1.1	33	279	1.5	5.9	2.0	51	319	1.1
1990.0	0.698	12	1.3	39	336	1.4	10	2.4	60	385	1.0
1990.7	0.863	16	1.2	39	307	1.1	12	2.2	60	351	0.818
1991.4	0.393	14	1.0	31	334	2.3	5.7	1.8	47	382	1.7
1992.1	0.393	12	1.1	39	313	1.9	5.7	2.1	60	358	1.4
1992.8	0.393	15	1.1	39	317	1.9	5.7	2.0	59	362	1.4
1993.5	1.0	15	0.813	39	334	1.4	15	1.5	59	382	1.0
1994.2	0.393	14	1.1	42	339	2.1	5.7	2.1	65	388	1.5
1994.9	0.393	12	0.778	44	310	1.3	5.7	1.4	68	355	0.918
1995.6	0.393	12	1.1	42	325	1.8	5.7	2.0	65	372	1.3
1996.3	0.556	13	1.3	39	337	1.4	8.0	2.3	60	385	0.986
1997.0	0.393	13	1.1	37	293	1.1	5.7	2.0	57	335	0.774
1997.7	0.393	13	0.810	35	332	0.735	5.7	1.5	54	379	0.536
1998.3	0.393	14	1.1	40	333	1.6	5.7	2.1	62	380	1.2
1999.0	0.529	14	1.4	37	314	0.965	7.6	2.5	57	359	0.704
1999.7	0.393	12	1.0	36	384	1.5	5.7	1.9	55	439	1.1
2000.4	0.393	13	0.763	37	314	2.2	5.7	1.4	57	359	1.6
2001.1	0.426	12	0.857	37	310	1.6	6.2	1.6	57	355	1.1
2001.8	0.393	11	1.1	31	294	0.616	5.7	2.0	48	336	0.450
2002.5	0.393	11	0.578	32	307	1.7	5.7	1.1	49	351	1.2
2003.2	0.393	9.5	0.994	39	298	2.1	5.7	1.8	59	341	1.6
2003.9	0.564	11	1.2	32	310	2.1	8.1	2.2	50	355	1.5
2004.6	0.393	9.7	1.2	35	318	1.7	5.7	2.1	54	364	1.2
2005.3	0.393	13	1.0	38	304	1.0	5.7	1.8	58	348	0.734
2006.0	0.393	12	1.0	36	301	0.862	5.7	1.8	54	344	0.629
2006.7	0.393	12	1.0	30	348	0.964	5.7	1.9	46	397	0.703
2007.4	0.393	12	1.1	40	384	1.8	5.7	2.0	61	439	1.3
2008.1	0.393	12	0.943	34	327	0.775	5.7	1.7	52	374	0.565
2008.8	0.393	12	1.1	35	307	1.6	5.7	2.0	53	351	1.2
2009.5	0.393	12	1.5	39	302	1.8	5.7	2.8	59	345	1.3
2010.2	0.393	13	1.2	37	321	1.6	5.7	2.2	56	367	1.2
2010.9	0.393	11	1.0	35	299	0.867	5.7	1.9	53	342	0.633
2011.6	0.393	12	0.878	50	330	1.3	5.7	1.6	76	377	0.921
2012.3	0.393	8.5	0.779	35	298	1.1	5.7	1.4	53	341	0.781
2013.0	0.393	12	1.2	38	347	1.0	5.7	2.2	58	397	0.754
2013.7	0.393	13	0.902	35	373	1.6	5.7	1.6	53	426	1.1
2014.4	0.393	9.9	1.4	32	351	1.4	5.7	2.5	49	401	1.0
2015.1	0.444	10	0.659	33	327	1.6	6.4	1.2	50	374	1.2
2015.8	0.393	12	0.966	33	318	1.4	5.7	1.8	50	363	1.1
2016.5	0.393	11	1.3	36	386	2.0	5.7	2.5	55	441	1.5
2017.2	0.452	10	0.895	30	346	0.988	6.5	1.6	46	396	0.721
2017.9	0.393	13	0.882	32	338	2.1	5.7	1.6	48	387	1.5
2018.6	0.489	11	0.847	29	368	0.890	7.1	1.5	45	421	0.649
2019.3	0.393	12	0.788	32	374	1.4	5.7	1.4	50	428	1.1
2020.0	0.393	11	1.2	33	388	1.5	5.7	2.2	51	444	1.1
2020.7	0.393	9.1	0.797	30	276	1.9	5.7	1.5	46	315	1.4
2021.4	0.393	9.4	0.751	29	287	1.8	5.7	1.4	45	328	1.3
2022.1	0.393	11	0.965	28	342	1.3	5.7	1.8	43	391	0.915
2022.8	0.393	12	0.822	26	337	0.864	5.7	1.5	39	386	0.630
2023.5	0.393	11	0.783	28	313	1.4	5.7	1.4	43	358	0.998
2024.2	0.757	9.9	0.565	26	330	1.7	11	1.0	40	378	1.3
2024.8	0.574	11	0.904	30	349	1.2	8.3	1.6	46	399	0.901
2025.5	0.393	11	0.721	33	384	1.5	5.7	1.3	50	439	1.1
2026.2	0.393	9.0	0.789	28	313	1.5	5.7	1.4	43	358	1.1
2026.9	0.393	12	1.1	27	350	1.4	5.7	2.0	42	400	1.0
2027.6	0.393	11	0.752	28	334	1.4	5.7	1.4	43	382	1.0
2028.3	0.393	9.9	0.841	27	298	1.0	5.7	1.5	41	341	0.764
2029.0	0.393	10	0.687	27	330	1.8	5.7	1.3	41	378	1.3
2029.7	0.393	11	0.608	22	372	1.4	5.7	1.1	33	425	1.0
2030.4	0.393	9.6	0.862	26	361	1.3	5.7	1.6	40	413	0.926
2031.1	0.393	11	0.724	30	345	1.1	5.7	1.3	46	395	0.801
2031.8	0.393	9.8	0.603	25	361	1.7	5.7	1.1	38	413	1.2
2032.5	0.393	8.6	0.785	23	340	1.8	5.7	1.4	36	389	1.3
2033.2	0.393	9.7	0.494	24	341	1.0	5.7	0.902	36	390	0.756

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2033.9	0.393	8.8	0.615	25	339	0.903	5.7	1.1	38	388	0.659
2034.6	0.393	8.2	0.695	20	339	1.2	5.7	1.3	31	387	0.882
2035.3	0.393	9.2	0.634	21	355	1.8	5.7	1.2	33	406	1.3
2036.0	0.393	11	0.787	22	354	1.3	5.7	1.4	33	404	0.921
2036.7	0.393	9.0	0.707	17	300	1.5	5.7	1.3	26	343	1.1
2037.4	0.393	7.4	0.533	20	277	1.7	5.7	0.972	31	316	1.2
2038.1	1.1	6.8	0.576	20	314	1.5	16	1.1	31	359	1.1
2038.8	0.393	7.9	0.512	21	337	0.846	5.7	0.934	32	386	0.617
2039.5	0.393	9.4	0.649	18	375	1.5	5.7	1.2	28	429	1.1
2040.2	0.393	10.0	0.559	22	318	1.4	5.7	1.0	34	364	1.0
2040.9	0.393	9.0	0.705	19	295	0.829	5.7	1.3	30	338	0.605
2041.6	0.393	7.9	0.422	16	299	0.743	5.7	0.770	24	342	0.542
2042.3	0.393	11	0.530	18	353	1.5	5.7	0.966	27	403	1.1
2043.0	0.393	9.5	0.562	18	312	0.969	5.7	1.0	27	357	0.707
2043.7	0.393	8.1	0.500	16	287	0.801	5.7	0.913	24	328	0.585
2044.4	0.393	9.8	0.425	16	332	1.5	5.7	0.776	25	380	1.1
2045.1	0.393	7.2	0.353	16	275	0.970	5.7	0.643	25	314	0.707
2045.8	0.393	9.5	0.669	16	369	1.2	5.7	1.2	24	422	0.845
2046.5	0.393	8.1	0.282	15	261	0.720	5.7	0.514	23	299	0.526
2047.2	0.393	9.8	0.704	14	309	1.4	5.7	1.3	22	354	1.0
2047.9	0.393	10	0.404	12	325	1.4	5.7	0.736	18	372	0.991
2048.6	0.393	6.8	0.393	13	265	0.914	5.7	0.716	20	303	0.667
2049.3	0.393	9.6	0.527	12	297	1.1	5.7	0.960	19	339	0.806
2050.0	0.393	9.3	0.506	16	281	1.7	5.7	0.922	25	322	1.3
2050.7	0.393	9.0	0.600	15	258	0.916	5.7	1.1	23	295	0.668
2051.3	0.393	8.7	0.630	14	261	0.863	5.7	1.1	21	298	0.629
2052.0	0.393	8.9	0.374	16	293	1.4	5.7	0.682	24	335	1.0
2052.7	0.393	9.1	0.534	19	266	2.0	5.7	0.973	29	304	1.5
2053.4	0.393	8.2	0.584	14	262	1.4	5.7	1.1	21	300	1.0
2054.1	0.393	8.4	0.789	16	284	0.632	5.7	1.4	24	325	0.461
2054.8	0.393	9.0	0.655	12	284	0.776	5.7	1.2	19	324	0.566
2055.5	0.393	8.5	0.561	14	312	1.1	5.7	1.0	22	357	0.784
2056.2	0.393	9.5	0.761	14	301	1.4	5.7	1.4	21	344	1.0
2056.9	0.393	7.3	0.596	16	274	0.984	5.7	1.1	24	314	0.718
2057.6	0.586	9.3	0.943	16	304	1.2	8.5	1.7	24	348	0.856
2058.3	0.890	7.4	0.712	15	243	1.3	13	1.3	23	278	0.972
2059.0	0.468	8.7	0.702	13	290	1.2	6.8	1.3	21	332	0.857
2059.7	0.607	10	0.677	16	270	1.2	8.8	1.2	24	309	0.888
2060.4	0.393	8.0	0.612	14	240	0.799	5.7	1.1	21	274	0.583
2061.1	0.558	9.0	0.897	15	334	0.678	8.1	1.6	23	382	0.495
2061.8	0.463	10	0.718	19	271	0.739	6.7	1.3	30	310	0.539
2062.5	0.393	7.8	0.870	14	279	0.960	5.7	1.6	22	319	0.700
2063.2	0.393	8.6	1.2	16	272	0.673	5.7	2.2	24	311	0.491
2063.9	0.393	9.9	0.979	19	240	0.823	5.7	1.8	29	274	0.600
2064.6	0.393	7.8	1.3	18	264	1.3	5.7	2.4	27	302	0.930
2065.3	0.393	9.7	0.868	16	269	1.3	5.7	1.6	25	308	0.931
2066.0	0.561	9.9	1.2	21	327	1.7	8.1	2.1	33	374	1.2
2066.7	0.393	8.3	0.834	20	251	1.1	5.7	1.5	31	288	0.820
2067.4	0.482	10	1.1	20	262	0.880	7.0	2.0	31	299	0.642
2068.1	0.393	9.5	0.968	18	232	1.1	5.7	1.8	28	266	0.779
2068.8	0.393	9.6	1.2	16	294	1.1	5.7	2.1	25	337	0.776
2069.5	0.393	9.3	0.965	21	249	1.1	5.7	1.8	32	285	0.834
2070.2	0.393	11	1.3	20	301	0.852	5.7	2.3	31	344	0.622
2070.9	0.393	11	0.987	25	213	1.1	5.7	1.8	38	244	0.830
2071.6	0.393	7.5	1.0	22	268	1.3	5.7	1.9	34	306	0.961
2072.3	0.393	10	1.3	23	260	1.5	5.7	2.3	35	298	1.1
2073.0	0.393	9.4	1.4	23	248	0.815	5.7	2.5	36	284	0.595
2073.7	0.393	13	1.3	23	248	1.1	5.7	2.4	35	283	0.773
2074.4	0.393	11	1.2	25	265	0.880	5.7	2.2	38	303	0.642
2075.1	0.393	10	1.3	25	285	1.4	5.7	2.3	39	326	0.994
2075.8	0.393	9.4	1.5	20	226	0.722	5.7	2.7	31	259	0.527
2076.5	0.393	9.6	1.5	22	277	0.942	5.7	2.7	33	317	0.687
2077.1	0.393	9.7	1.2	23	249	0.476	5.7	2.1	35	285	0.347
2077.8	0.393	9.4	1.1	24	237	1.2	5.7	2.0	37	271	0.858
2078.5	0.393	9.0	1.7	23	208	0.689	5.7	3.1	35	237	0.502
2079.2	0.393	9.7	1.3	25	255	1.2	5.7	2.4	39	291	0.906
2079.9	0.393	11	1.4	25	232	0.677	5.7	2.6	39	266	0.494
2080.6	0.393	10	1.4	28	240	0.931	5.7	2.6	44	275	0.679
2081.3	0.561	12	1.3	23	219	0.371	8.1	2.3	36	250	0.270
2082.0	0.393	13	1.3	25	247	0.960	5.7	2.3	39	282	0.700
2082.7	0.729	10	1.6	31	241	1.1	11	2.9	47	276	0.819
2083.4	0.393	11	1.5	28	225	1.2	5.7	2.8	43	257	0.871
2084.1	0.393	8.8	1.2	26	254	1.4	5.7	2.1	39	290	1.0
2084.8	0.393	9.1	1.3	27	219	0.845	5.7	2.4	42	251	0.616
2085.5	0.393	10	1.3	31	273	0.572	5.7	2.4	48	312	0.418
2086.2	0.393	12	1.3	26	224	1.0	5.7	2.3	41	257	0.753
2086.9	0.393	8.9	1.4	24	221	1.3	5.7	2.5	37	253	0.916
2087.6	0.393	11	1.2	27	283	0.803	5.7	2.2	41	324	0.586
2088.3	0.393	9.4	1.4	28	225	0.767	5.7	2.5	43	257	0.560
2089.0	0.393	8.8	1.4	26	229	0.579	5.7	2.6	40	262	0.422
2089.7	0.393	10	1.5	29	231	0.508	5.7	2.8	44	265	0.370

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2090.4	0.393	8.7	1.5	26	214	0.675	5.7	2.7	41	245	0.493
2091.1	0.393	10	1.6	26	235	0.707	5.7	2.8	41	269	0.516
2091.8	0.393	9.9	1.2	28	234	1.4	5.7	2.2	43	268	1.0
2092.5	0.393	10	1.3	25	234	1.0	5.7	2.3	38	268	0.765
2093.2	0.393	9.3	1.2	25	268	1.2	5.7	2.2	38	306	0.861
2093.9	0.393	9.6	1.3	29	257	1.4	5.7	2.3	45	294	1.0
2094.6	0.393	11	1.3	24	289	1.2	5.7	2.4	36	330	0.880
2095.3	0.393	10	1.3	25	333	1.7	5.7	2.4	39	381	1.2
2096.0	0.516	11	1.1	25	250	1.6	7.5	2.1	38	286	1.2
2096.7	0.393	9.2	1.2	27	258	1.5	5.7	2.2	42	295	1.1
2097.4	0.393	12	0.906	27	267	1.7	5.7	1.7	42	305	1.2
2098.1	0.393	9.9	1.0	23	240	1.2	5.7	1.9	36	274	0.911
2098.8	0.393	11	1.3	25	248	0.608	5.7	2.3	38	284	0.444
2099.5	0.393	11	1.1	26	243	0.532	5.7	2.0	40	278	0.388
2100.2	0.393	11	0.877	26	250	0.774	5.7	1.6	40	286	0.565
2100.9	0.461	9.1	1.2	22	262	1.8	6.7	2.3	34	300	1.3
2101.6	0.393	10	1.1	26	263	1.1	5.7	2.0	39	301	0.774
2102.3	0.393	8.9	0.899	20	239	1.4	5.7	1.6	31	274	0.987
2103.0	0.393	10	1.3	25	308	1.3	5.7	2.4	39	352	0.960
2103.6	0.393	9.8	0.848	17	240	0.891	5.7	1.5	26	275	0.650
2104.3	0.590	9.8	1.1	28	252	1.1	8.5	2.0	43	288	0.784
2105.0	0.393	11	0.930	18	256	1.8	5.7	1.7	28	292	1.3
2105.7	0.393	8.9	0.997	18	229	0.961	5.7	1.8	27	262	0.701
2106.4	0.518	10	0.770	22	302	1.1	7.5	1.4	33	345	0.827
2107.1	0.393	12	1.1	17	257	1.2	5.7	2.0	25	294	0.858
2107.8	0.393	9.2	0.703	20	243	0.797	5.7	1.3	31	277	0.582
2108.5	0.393	9.6	0.608	17	266	0.778	5.7	1.1	26	305	0.568
2109.2	0.393	8.6	0.906	21	271	0.977	5.7	1.7	32	310	0.713
2109.9	0.393	9.4	0.757	17	277	0.615	5.7	1.4	25	317	0.449
2110.6	0.393	9.2	0.730	17	243	0.984	5.7	1.3	25	278	0.718
2111.3	0.393	9.3	0.574	16	279	1.2	5.7	1.0	25	319	0.892
2112.0	0.393	9.1	0.650	17	292	0.832	5.7	1.2	26	334	0.607
2112.7	0.393	8.4	0.799	16	315	0.952	5.7	1.5	25	360	0.695
2113.4	0.393	9.1	0.687	16	271	1.1	5.7	1.3	24	310	0.784
2114.1	0.473	11	0.630	19	282	1.1	6.8	1.1	29	322	0.769
2114.8	0.754	7.8	0.356	15	296	1.3	11	0.650	23	338	0.929
2115.5	0.393	7.5	0.643	13	249	1.3	5.7	1.2	20	285	0.934
2116.2	0.470	10	0.475	13	268	1.2	6.8	0.867	20	306	0.903
2116.9	0.393	10	0.541	15	299	1.0	5.7	0.987	23	342	0.756
2117.6	0.393	11	0.404	15	274	0.888	5.7	0.736	23	313	0.648
2118.3	0.393	10	0.416	12	284	1.1	5.7	0.759	19	324	0.803
2119.0	0.393	8.8	0.299	14	261	1.7	5.7	0.545	22	298	1.2
2119.7	0.478	9.1	0.474	14	244	1.7	6.9	0.864	21	279	1.2
2120.4	0.393	9.1	0.205	13	267	0.699	5.7	0.374	19	305	0.510
2121.1	0.393	8.3	0.604	12	257	1.2	5.7	1.1	18	294	0.864
2121.8	0.393	8.8	0.828	14	269	1.1	5.7	1.5	21	308	0.838
2122.5	0.583	8.4	0.651	11	293	0.850	8.4	1.2	17	335	0.620
2123.2	0.444	9.6	0.689	12	239	1.2	6.4	1.3	18	274	0.887
2123.9	0.393	8.7	0.581	13	254	0.532	5.7	1.1	20	291	0.388
2124.6	0.404	8.8	0.455	12	272	0.526	5.8	0.830	18	312	0.384
2125.3	0.393	11	0.861	11	304	0.718	5.7	1.6	17	347	0.524
2126.0	0.393	8.1	0.294	13	268	1.7	5.7	0.536	20	306	1.3
2126.7	0.393	8.7	0.560	11	249	0.965	5.7	1.0	17	285	0.704
2127.4	0.393	8.5	0.715	11	227	0.928	5.7	1.3	17	260	0.677
2128.1	0.393	9.0	0.665	10	290	1.3	5.7	1.2	16	331	0.951
2128.8	0.393	8.0	0.692	14	298	1.2	5.7	1.3	22	341	0.907
2129.5	0.393	8.9	0.528	15	281	1.6	5.7	0.963	23	321	1.2
2130.1	0.393	8.3	0.446	11	242	1.0	5.7	0.814	16	276	0.751
2130.8	0.393	8.9	0.388	15	293	0.959	5.7	0.707	22	335	0.700
2131.5	0.393	7.7	0.996	13	258	1.000	5.7	1.8	20	295	0.729
2132.2	0.393	9.3	0.860	12	230	1.0	5.7	1.6	19	263	0.762
2132.9	0.507	8.0	1.1	12	268	1.3	7.3	2.1	18	306	0.974
2133.6	0.393	8.3	0.866	13	286	1.3	5.7	1.6	21	327	0.956
2134.3	0.393	9.9	1.1	14	261	1.4	5.7	2.0	21	299	0.988
2135.0	0.393	9.0	1.0	13	260	1.3	5.7	1.9	20	297	0.955
2135.7	0.393	8.2	0.941	14	270	1.2	5.7	1.7	22	308	0.895
2136.4	0.393	11	1.1	13	261	1.3	5.7	1.9	20	299	0.942
2137.1	0.393	8.4	0.787	14	252	0.736	5.7	1.4	21	289	0.537
2137.8	0.657	9.2	1.2	16	238	1.1	9.5	2.1	25	272	0.799
2138.5	0.393	10	0.760	13	268	0.609	5.7	1.4	19	306	0.445
2139.2	0.393	8.2	1.2	14	211	1.1	5.7	2.1	22	241	0.821
2139.9	0.393	11	1.5	18	259	1.1	5.7	2.7	27	296	0.807
2140.6	0.743	7.8	1.4	19	267	0.935	11	2.5	29	306	0.682
2141.3	0.393	7.7	1.5	19	240	0.965	5.7	2.7	29	275	0.704
2142.0	0.393	9.0	1.3	18	261	0.762	5.7	2.3	27	298	0.556
2142.7	0.393	6.7	0.987	16	235	0.933	5.7	1.8	25	269	0.681
2143.4	0.393	8.5	1.6	19	232	0.654	5.7	2.9	29	265	0.477
2144.1	0.393	7.0	1.3	18	261	0.957	5.7	2.3	27	299	0.698
2144.8	0.393	9.0	1.2	19	244	1.1	5.7	2.1	28	279	0.825
2145.5	0.393	10	1.1	21	243	0.950	5.7	2.0	32	278	0.693
2146.2	0.393	10	1.4	19	242	1.3	5.7	2.6	29	276	0.940

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2146.9	0.884	9.6	1.2	24	233	0.401	13	2.2	36	266	0.292
2147.6	0.393	9.4	1.5	18	222	0.877	5.7	2.8	28	254	0.640
2148.3	0.393	8.0	0.981	22	216	0.492	5.7	1.8	33	247	0.359
2149.0	0.393	11	1.1	19	238	1.3	5.7	2.1	29	272	0.925
2149.7	0.393	8.9	1.0	21	234	0.744	5.7	1.8	32	268	0.543
2150.4	0.393	8.9	1.1	22	215	0.824	5.7	1.9	34	245	0.601
2151.1	0.393	9.6	1.5	22	233	1.4	5.7	2.7	33	266	1.1
2151.8	0.678	10	1.3	23	246	0.616	9.8	2.4	35	281	0.450
2152.5	0.393	11	1.6	27	253	1.5	5.7	3.0	41	290	1.1
2153.2	0.749	11	1.6	26	240	0.838	11	2.9	40	275	0.611
2153.9	0.393	9.3	1.6	25	232	0.854	5.7	2.9	39	265	0.623
2154.6	0.393	9.8	1.5	29	244	0.687	5.7	2.7	45	279	0.501
2155.3	0.393	10	1.7	26	255	0.811	5.7	3.0	40	291	0.592
2155.9	0.393	10	1.7	26	235	0.402	5.7	3.1	40	268	0.293
2156.6	0.393	8.0	2.4	26	231	1.3	5.7	4.3	40	264	0.971
2157.3	0.393	9.8	1.2	22	254	0.567	5.7	2.2	34	290	0.414
2158.0	0.393	8.2	1.2	26	265	0.993	5.7	2.2	40	303	0.724
2158.7	0.393	10	1.3	20	310	0.839	5.7	2.4	31	355	0.612
2159.4	0.393	9.6	1.6	26	267	1.0	5.7	3.0	39	305	0.734
2160.1	0.393	9.0	0.999	25	246	0.686	5.7	1.8	38	282	0.500
2160.8	0.393	11	1.6	25	232	1.1	5.7	2.8	39	265	0.792
2161.5	0.393	8.9	0.825	25	253	0.954	5.7	1.5	39	290	0.696
2162.2	0.393	10	1.8	27	275	0.907	5.7	3.3	41	314	0.662
2162.9	0.393	8.6	1.3	27	228	1.2	5.7	2.4	41	261	0.875
2163.6	0.393	11	1.2	28	250	0.658	5.7	2.2	42	286	0.480
2164.3	0.393	7.9	1.2	25	268	0.559	5.7	2.1	38	306	0.408
2165.0	0.393	10	0.961	25	247	1.1	5.7	1.8	38	283	0.774
2165.7	0.393	9.3	1.2	21	216	0.454	5.7	2.1	32	247	0.331
2166.4	0.472	11	1.4	25	253	0.765	6.8	2.6	39	289	0.558
2167.1	0.567	10	1.000	23	233	0.657	8.2	1.8	36	267	0.479
2167.8	0.484	9.5	0.977	24	224	0.528	7.0	1.8	37	256	0.385
2168.5	0.393	9.3	0.878	22	251	0.704	5.7	1.6	33	287	0.514
2169.2	0.393	11	1.1	24	257	0.798	5.7	2.1	36	294	0.582
2169.9	0.662	11	1.6	26	254	1.1	9.6	2.9	39	291	0.805
2170.6	0.462	10	0.907	31	260	1.5	6.7	1.7	47	297	1.1
2171.3	0.393	9.7	0.747	24	244	0.753	5.7	1.4	37	279	0.549
2172.0	0.393	11	1.1	28	295	1.4	5.7	2.0	43	338	0.998
2172.7	0.393	9.0	0.932	27	253	0.822	5.7	1.7	42	290	0.600
2173.4	0.983	12	0.832	24	246	0.893	14	1.5	37	281	0.651
2174.1	0.562	12	1.2	22	228	0.744	8.1	2.2	34	260	0.543
2174.8	0.393	11	1.1	21	259	1.2	5.7	1.9	32	297	0.849
2175.5	0.393	11	0.780	20	233	0.651	5.7	1.4	31	267	0.475
2176.2	0.393	11	0.606	19	270	0.924	5.7	1.1	29	309	0.674
2176.9	0.393	9.4	0.854	17	235	1.0	5.7	1.6	26	268	0.757
2177.6	0.393	11	0.552	22	238	1.4	5.7	1.0	34	272	1.0
2178.3	0.393	10.0	0.855	17	237	1.3	5.7	1.6	26	271	0.918
2179.0	0.543	9.1	0.695	18	281	0.395	7.8	1.3	28	321	0.288
2179.7	0.393	8.9	0.816	18	233	0.681	5.7	1.5	28	266	0.497
2180.4	0.393	9.9	0.773	18	258	1.2	5.7	1.4	28	295	0.855
2181.1	0.393	8.1	0.547	16	248	0.803	5.7	0.997	25	283	0.586
2181.7	0.407	11	0.650	20	256	0.530	5.9	1.2	30	293	0.387
2182.4	0.393	9.9	0.377	14	307	1.7	5.7	0.688	22	351	1.2
2183.1	0.675	8.1	0.627	20	263	1.4	9.7	1.1	31	300	1.0
2183.8	0.393	10	0.536	17	249	1.2	5.7	0.978	26	285	0.897
2184.5	0.393	9.9	0.644	14	308	1.5	5.7	1.2	21	352	1.1
2185.2	0.393	10	0.653	16	251	0.496	5.7	1.2	25	287	0.362
2185.9	0.393	11	0.800	14	291	1.6	5.7	1.5	22	332	1.1
2186.6	0.393	8.2	0.628	17	240	1.2	5.7	1.1	27	275	0.905
2187.3	0.393	9.7	1.2	15	245	0.781	5.7	2.1	23	280	0.570
2188.0	0.585	7.9	0.571	12	253	1.1	8.4	1.0	19	289	0.777
2188.7	0.393	11	0.945	15	264	1.9	5.7	1.7	23	301	1.4
2189.4	0.393	9.8	0.614	17	287	2.2	5.7	1.1	26	328	1.6
2190.1	0.410	8.6	0.657	13	237	0.841	5.9	1.2	20	271	0.614
2190.8	0.393	9.7	0.881	13	273	1.4	5.7	1.6	20	312	1.0
2191.5	0.393	7.8	0.934	17	252	0.843	5.7	1.7	25	289	0.615
2192.2	0.393	9.2	0.998	13	297	1.4	5.7	1.8	20	340	1.0
2192.9	0.559	8.5	0.985	14	249	1.2	8.1	1.8	21	285	0.878
2193.6	0.393	7.9	1.0	13	246	1.1	5.7	1.8	19	281	0.812
2194.3	0.393	8.2	1.1	15	233	0.991	5.7	2.0	23	266	0.723
2195.0	0.393	9.0	1.1	13	226	1.4	5.7	2.1	20	258	1.0
2195.7	0.393	8.8	0.980	19	268	0.756	5.7	1.8	29	307	0.552
2196.4	0.393	8.0	1.2	15	264	1.7	5.7	2.2	23	302	1.3
2197.1	0.393	7.6	0.986	16	229	0.742	5.7	1.8	25	262	0.542
2197.8	0.479	8.0	1.1	12	240	0.873	6.9	1.9	18	274	0.637
2198.5	0.393	9.1	1.4	17	244	0.703	5.7	2.5	26	278	0.513
2199.2	0.551	9.3	1.4	15	260	1.2	8.0	2.5	23	297	0.879
2199.9	0.393	9.9	1.3	17	253	1.4	5.7	2.4	25	289	1.0
2200.6	0.393	8.1	1.4	16	214	0.887	5.7	2.6	25	244	0.647
2201.3	0.393	8.2	1.7	18	233	1.4	5.7	3.0	27	266	1.0
2202.0	0.393	10	1.7	20	292	1.9	5.7	3.1	30	334	1.4
2202.7	0.396	9.9	1.4	18	237	1.1	5.7	2.5	28	271	0.830

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2203.4	0.691	8.1	1.6	22	248	1.2	10.0	2.9	33	284	0.841
2204.1	0.393	8.0	1.5	17	256	1.4	5.7	2.7	27	292	1.0
2204.8	0.393	8.3	1.4	21	258	1.3	5.7	2.5	31	295	0.931
2205.5	0.393	7.9	1.2	20	254	1.5	5.7	2.1	31	290	1.1
2206.2	0.393	7.8	1.6	20	267	1.3	5.7	2.9	31	306	0.929
2206.9	0.393	9.3	1.4	26	222	1.6	5.7	2.6	40	254	1.2
2207.5	0.408	7.9	1.2	22	236	0.930	5.9	2.2	33	270	0.679
2208.2	0.393	7.8	1.4	23	250	0.966	5.7	2.5	35	286	0.705
2208.9	0.393	11	1.3	20	227	1.3	5.7	2.5	31	259	0.956
2209.6	0.393	7.3	1.1	20	211	0.774	5.7	2.0	31	241	0.564
2210.3	0.393	7.7	1.0	22	225	0.850	5.7	1.9	34	257	0.620
2211.0	0.393	8.7	1.5	24	231	1.5	5.7	2.8	37	264	1.1
2211.7	0.393	11	1.7	25	261	1.4	5.7	3.1	38	298	1.0
2212.4	0.393	9.0	1.5	27	228	1.2	5.7	2.7	41	261	0.883
2213.1	0.393	9.6	1.4	31	233	0.925	5.7	2.5	47	267	0.675
2213.8	0.393	8.8	1.2	24	254	0.746	5.7	2.2	36	291	0.545
2214.5	0.393	8.2	1.4	29	215	1.3	5.7	2.6	44	246	0.957
2215.2	0.393	10	1.6	27	238	1.7	5.7	2.8	42	273	1.3
2215.9	0.466	9.1	1.3	29	215	0.744	6.7	2.3	44	246	0.543
2216.6	0.393	9.3	1.2	29	242	1.0	5.7	2.1	44	277	0.740
2217.3	0.393	9.4	1.4	26	252	1.2	5.7	2.5	41	289	0.860
2218.0	0.393	7.8	1.3	26	264	1.6	5.7	2.4	40	302	1.1
2218.7	0.393	10	0.864	26	272	1.5	5.7	1.6	40	312	1.1
2219.4	0.532	12	1.1	21	217	1.4	7.7	2.1	33	249	0.991
2220.1	0.653	7.5	1.3	30	253	0.791	9.4	2.3	46	290	0.577
2220.8	0.393	8.9	1.0	28	240	0.413	5.7	1.8	43	275	0.301
2221.5	0.393	10	1.3	29	228	1.2	5.7	2.4	44	261	0.871
2222.2	0.482	8.6	1.1	29	244	0.880	7.0	2.0	44	280	0.642
2222.9	0.393	8.8	1.3	31	238	0.976	5.7	2.3	47	273	0.712
2223.6	0.393	9.6	1.1	29	221	1.1	5.7	2.1	44	253	0.773
2224.3	0.830	8.2	1.4	24	257	0.565	12	2.5	37	294	0.412
2225.0	0.393	12	0.934	30	229	0.846	5.7	1.7	45	262	0.617
2225.7	0.393	11	1.2	31	244	1.2	5.7	2.1	48	279	0.885
2226.4	0.393	11	1.7	30	227	1.4	5.7	3.1	45	259	1.0
2227.1	0.393	11	1.3	31	233	1.2	5.7	2.4	48	267	0.847
2227.8	0.393	11	0.983	23	222	1.1	5.7	1.8	35	253	0.829
2228.5	0.393	7.5	1.5	21	242	0.871	5.7	2.7	32	277	0.636
2229.2	0.393	11	0.941	22	256	0.579	5.7	1.7	34	293	0.422
2229.9	0.393	11	1.1	26	231	0.804	5.7	2.1	39	264	0.587
2230.6	0.446	6.7	1.0	21	241	0.089	6.4	1.9	32	276	0.065
2231.3	0.643	11	1.0	22	240	0.682	9.3	1.9	34	274	0.497
2232.0	0.543	14	1.4	28	258	0.990	7.8	2.6	42	296	0.722
2232.7	0.393	11	0.877	24	243	1.2	5.7	1.6	36	278	0.839
2233.3	0.393	12	0.937	21	246	0.492	5.7	1.7	32	281	0.359
2234.0	0.490	12	0.765	21	237	0.993	7.1	1.4	33	270	0.725
2234.7	0.393	9.0	1.2	19	238	0.919	5.7	2.2	30	272	0.670
2235.4	0.393	11	1.1	21	237	0.789	5.7	2.0	32	271	0.576
2236.1	0.393	11	0.626	19	247	1.0	5.7	1.1	29	282	0.746
2236.8	0.393	9.8	0.794	19	237	0.424	5.7	1.4	29	271	0.309
2237.5	0.393	9.3	0.918	20	251	0.935	5.7	1.7	30	287	0.682
2238.2	0.393	10	0.462	21	250	0.748	5.7	0.842	32	286	0.546
2238.9	0.393	8.1	0.924	20	218	0.995	5.7	1.7	30	249	0.726
2239.6	0.393	9.3	0.783	17	213	0.493	5.7	1.4	26	243	0.360
2240.3	0.408	11	0.652	21	247	0.425	5.9	1.2	32	282	0.310
2241.0	0.393	9.0	0.680	19	223	0.967	5.7	1.2	28	255	0.706
2241.7	0.393	9.7	0.842	17	238	1.0	5.7	1.5	26	272	0.753
2242.4	0.393	9.1	0.454	21	260	1.1	5.7	0.827	32	297	0.767
2243.1	0.393	9.9	0.834	17	236	1.0	5.7	1.5	26	270	0.746
2243.8	0.393	9.2	0.701	17	229	0.498	5.7	1.3	26	261	0.363
2244.5	0.393	11	0.767	17	258	0.995	5.7	1.4	27	295	0.726
2245.2	0.393	7.4	0.769	14	215	0.471	5.7	1.4	22	246	0.343
2245.9	0.393	9.4	0.682	14	231	0.802	5.7	1.2	21	264	0.585
2246.6	0.552	8.5	0.684	14	263	0.603	8.0	1.2	21	300	0.440
2247.3	0.393	11	0.344	14	273	0.807	5.7	0.628	22	312	0.589
2248.0	0.393	9.6	0.644	16	233	0.567	5.7	1.2	24	267	0.414
2248.7	0.393	9.8	0.680	13	240	1.3	5.7	1.2	20	274	0.917
2249.4	0.562	8.6	0.604	14	242	1.4	8.1	1.1	22	277	1.0
2250.1	0.393	7.7	0.560	12	209	0.949	5.7	1.0	18	239	0.693
2250.8	0.393	8.1	1.0	15	237	1.2	5.7	1.9	23	271	0.863
2251.5	0.445	11	0.874	12	252	1.1	6.4	1.6	18	288	0.815
2252.2	0.976	8.2	1.3	13	252	1.2	14	2.4	19	288	0.862
2252.9	0.393	7.1	0.949	14	264	1.6	5.7	1.7	21	302	1.2
2253.6	0.393	6.7	0.924	14	236	1.0	5.7	1.7	22	269	0.761
2254.3	0.393	8.6	1.3	14	273	1.3	5.7	2.4	21	313	0.983
2255.0	0.393	7.3	0.979	14	226	1.2	5.7	1.8	21	259	0.854
2255.7	0.393	7.2	1.2	14	233	0.740	5.7	2.2	22	267	0.540
2256.4	0.393	8.2	1.4	13	247	0.872	5.7	2.6	20	283	0.636
2257.1	0.393	7.8	1.5	14	240	1.3	5.7	2.8	22	274	0.953
2257.8	0.393	7.4	1.5	14	245	0.597	5.7	2.7	22	281	0.435
2258.5	0.393	6.6	1.4	14	269	1.0	5.7	2.5	21	308	0.745
2259.2	0.393	7.9	1.5	15	264	0.926	5.7	2.7	23	302	0.676

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2259.8	0.393	8.2	1.7	14	271	1.3	5.7	3.0	22	310	0.981
2260.5	0.393	7.6	1.5	13	255	1.2	5.7	2.7	20	292	0.875
2261.2	0.393	8.3	1.7	17	262	1.4	5.7	3.2	25	299	1.0
2261.9	0.393	8.3	1.3	15	228	1.6	5.7	2.3	23	261	1.2
2262.6	0.393	6.0	2.2	15	254	1.7	5.7	4.1	22	291	1.2
2263.3	0.393	8.5	1.7	14	247	1.1	5.7	3.1	22	283	0.820
2264.0	0.410	6.4	1.8	18	227	1.3	5.9	3.2	28	260	0.955
2264.7	0.393	6.8	1.4	17	235	0.874	5.7	2.5	25	269	0.638
2265.4	0.393	6.9	1.5	18	282	0.868	5.7	2.7	28	322	0.633
2266.1	0.616	9.3	1.8	21	279	1.7	8.9	3.3	33	319	1.3
2266.8	0.393	6.6	1.6	20	221	1.4	5.7	2.9	31	253	1.1
2267.5	0.393	7.5	1.6	20	235	0.863	5.7	3.0	31	268	0.630
2268.2	0.393	7.6	1.7	24	229	1.4	5.7	3.2	37	262	0.992
2268.9	0.393	6.9	1.9	18	240	1.5	5.7	3.5	27	275	1.1
2269.6	0.393	9.8	2.1	25	229	1.7	5.7	3.8	38	262	1.3
2270.3	0.405	6.8	1.8	23	224	1.5	5.9	3.2	35	256	1.1
2271.0	0.393	8.4	1.6	23	225	1.2	5.7	2.9	35	258	0.848
2271.7	0.500	8.1	2.0	22	264	1.5	7.2	3.7	33	302	1.1
2272.4	0.393	8.6	1.6	22	230	1.4	5.7	2.9	33	263	1.0
2273.1	0.393	7.8	2.0	25	233	1.4	5.7	3.6	38	267	1.0
2273.8	0.393	7.4	2.0	27	225	0.673	5.7	3.6	42	257	0.491
2274.5	0.393	6.7	2.1	24	232	1.2	5.7	3.8	37	265	0.892
2275.2	0.479	8.2	1.3	26	223	1.2	6.9	2.3	40	255	0.849
2275.9	0.393	7.4	2.1	23	197	1.6	5.7	3.8	35	225	1.1
2276.6	0.453	6.4	2.2	33	248	1.3	6.5	3.9	50	283	0.981
2277.3	0.393	9.5	2.3	30	224	1.3	5.7	4.1	47	256	0.931
2278.0	0.393	6.6	2.2	26	258	1.6	5.7	4.0	40	296	1.2
2278.7	0.393	7.8	1.9	29	261	1.2	5.7	3.5	45	299	0.885
2279.4	0.393	7.8	2.0	29	257	1.4	5.7	3.7	45	294	1.0
2280.1	0.393	8.5	2.0	27	262	1.1	5.7	3.6	42	299	0.800
2280.8	0.396	6.8	1.9	25	246	0.826	5.7	3.4	39	281	0.603
2281.5	0.393	8.9	2.2	28	243	0.712	5.7	4.0	43	278	0.519
2282.2	0.393	6.2	1.7	31	235	1.2	5.7	3.1	47	269	0.882
2282.9	0.393	7.8	2.0	28	267	1.4	5.7	3.6	43	305	1.0
2283.6	0.393	8.0	1.5	34	227	1.1	5.7	2.7	51	259	0.770
2284.3	0.393	8.4	1.6	23	221	0.823	5.7	2.9	36	253	0.600
2285.0	0.393	9.6	2.4	29	288	0.992	5.7	4.5	44	329	0.724
2285.6	0.759	9.9	2.0	28	248	0.636	11	3.7	43	284	0.464
2286.3	0.393	8.9	1.8	33	226	0.305	5.7	3.3	51	258	0.223
2287.0	0.393	9.6	1.6	25	237	1.3	5.7	3.0	39	270	0.959
2287.7	0.393	8.9	1.6	31	242	1.4	5.7	2.9	47	276	1.0
2288.4	0.393	9.0	1.1	32	260	0.886	5.7	2.1	48	297	0.647
2289.1	0.581	8.0	1.7	33	233	0.740	8.4	3.0	50	267	0.540
2289.8	0.393	8.7	1.6	25	193	0.620	5.7	2.9	39	221	0.452
2290.5	0.393	9.1	1.9	29	249	0.578	5.7	3.4	44	285	0.421
2291.2	0.393	8.6	1.4	29	281	0.588	5.7	2.6	44	321	0.429
2291.9	0.393	8.6	1.5	27	217	0.772	5.7	2.7	42	248	0.563
2292.6	0.393	8.8	1.3	32	235	1.1	5.7	2.4	49	269	0.806
2293.3	0.393	8.1	1.4	28	264	1.1	5.7	2.5	43	302	0.817
2294.0	0.393	11	1.5	32	262	0.396	5.7	2.8	49	299	0.289
2294.7	0.393	8.7	1.4	24	211	0.465	5.7	2.5	37	241	0.339
2295.4	0.444	9.3	1.7	25	220	0.810	6.4	3.0	39	252	0.591
2296.1	0.529	9.8	1.7	27	226	0.674	7.6	3.1	41	259	0.492
2296.8	0.393	9.5	1.3	25	255	0.498	5.7	2.4	38	291	0.364
2297.5	0.393	11	1.2	29	261	0.525	5.7	2.2	44	299	0.383
2298.2	0.393	12	1.1	23	215	0.392	5.7	2.0	35	246	0.286
2298.9	0.393	11	1.1	22	212	0.285	5.7	1.9	33	243	0.208
2299.6	0.393	11	1.2	25	242	1.0	5.7	2.1	39	277	0.733
2300.3	0.414	11	0.621	24	214	1.3	6.0	1.1	36	244	0.964
2301.0	0.393	11	1.1	27	251	0.510	5.7	2.0	41	287	0.372
2301.7	0.393	11	0.967	28	219	0.728	5.7	1.8	43	251	0.531
2302.4	0.393	11	1.2	29	271	0.946	5.7	2.2	44	310	0.690
2303.1	0.393	11	0.779	21	245	0.785	5.7	1.4	32	280	0.573
2303.8	0.703	11	1.1	25	257	0.639	10	2.0	38	293	0.466
2304.5	0.393	11	1.0	24	273	0.523	5.7	1.9	37	312	0.381
2305.2	0.393	10	0.766	20	249	1.2	5.7	1.4	31	284	0.875
2305.9	1.1	10	0.922	22	244	0.711	15	1.7	34	279	0.519
2306.6	0.415	8.6	0.944	21	233	0.757	6.0	1.7	33	267	0.552
2307.3	0.393	7.8	0.705	19	249	0.621	5.7	1.3	28	285	0.453
2308.0	0.393	11	0.895	24	260	1.2	5.7	1.6	37	297	0.911
2308.7	0.393	7.3	0.655	17	214	0.559	5.7	1.2	25	245	0.408
2309.4	0.393	9.3	0.883	16	255	0.615	5.7	1.6	25	292	0.448
2310.1	0.393	9.8	0.710	14	260	0.293	5.7	1.3	22	297	0.214
2310.8	0.393	10	0.701	15	277	1.1	5.7	1.3	23	316	0.800
2311.5	0.393	8.9	0.621	16	250	0.766	5.7	1.1	24	285	0.559
2312.1	0.393	8.6	0.612	16	268	0.539	5.7	1.1	24	307	0.393
2312.8	0.393	11	0.868	14	248	1.0	5.7	1.6	22	283	0.755
2313.5	0.393	8.6	0.973	16	282	0.920	5.7	1.8	24	323	0.671
2314.2	0.393	8.8	0.624	15	255	1.4	5.7	1.1	23	291	1.0
2314.9	0.433	9.2	0.404	15	236	0.790	6.2	0.737	23	270	0.576
2315.6	0.451	9.3	0.653	13	253	0.719	6.5	1.2	20	290	0.524

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2316.3	0.733	7.2	0.497	11	214	0.761	11	0.906	16	244	0.555
2317.0	0.393	8.9	0.521	12	223	0.499	5.7	0.951	19	255	0.364
2317.7	0.393	9.1	0.498	9.9	244	0.797	5.7	0.908	15	279	0.582
2318.4	0.393	9.9	0.461	15	277	0.812	5.7	0.841	23	317	0.592
2319.1	0.393	8.3	0.870	15	294	0.933	5.7	1.6	23	337	0.681
2319.8	0.393	9.9	0.853	15	279	0.395	5.7	1.6	23	319	0.288
2320.5	0.536	8.8	0.906	13	279	0.585	7.7	1.7	19	319	0.427
2321.2	0.393	8.9	0.591	14	241	1.4	5.7	1.1	22	276	1.0
2321.9	0.393	9.6	0.844	13	230	0.784	5.7	1.5	20	263	0.572
2322.6	0.393	8.6	0.867	13	273	0.850	5.7	1.6	20	312	0.620
2323.3	0.393	6.5	0.995	14	289	1.1	5.7	1.8	21	330	0.766
2324.0	0.393	7.4	0.767	11	248	1.3	5.7	1.4	17	283	0.934
2324.7	0.492	7.4	1.0	14	303	0.498	7.1	1.9	21	346	0.363
2325.4	0.479	8.4	1.1	13	295	0.970	6.9	2.0	20	337	0.708
2326.1	0.393	7.9	1.0	9.9	253	1.3	5.7	1.9	15	290	0.918
2326.8	0.393	8.4	0.964	11	286	0.494	5.7	1.8	17	327	0.361
2327.5	0.393	7.3	1.1	15	271	1.1	5.7	2.1	23	310	0.781
2328.2	0.393	6.2	1.1	12	272	2.3	5.7	2.1	18	311	1.7
2328.9	0.393	8.6	1.2	11	292	1.0	5.7	2.2	17	334	0.764
2329.6	0.393	8.1	1.3	15	281	1.9	5.7	2.4	22	321	1.4
2330.3	0.393	7.4	1.2	12	291	0.711	5.7	2.2	18	332	0.518
2331.0	0.481	7.6	1.3	13	260	1.1	6.9	2.5	20	298	0.783
2331.7	0.393	9.0	0.993	11	255	1.1	5.7	1.8	16	291	0.780
2332.4	0.393	6.5	1.0	12	253	0.783	5.7	1.9	18	289	0.571
2333.1	0.639	7.8	1.1	13	294	1.1	9.2	2.0	19	336	0.771
2333.8	0.393	7.9	1.4	14	289	0.796	5.7	2.6	22	331	0.581
2334.5	0.739	7.9	1.4	15	248	1.0	11	2.5	22	284	0.754
2335.2	0.393	8.4	1.3	17	266	1.1	5.7	2.4	26	304	0.793
2335.9	0.393	8.3	1.2	15	313	0.872	5.7	2.3	23	358	0.637
2336.6	0.717	8.4	1.0	14	238	1.1	10	1.9	22	272	0.805
2337.3	0.393	6.3	1.4	11	278	1.6	5.7	2.6	17	318	1.2
2338.0	0.393	9.7	1.1	15	270	1.6	5.7	2.0	24	308	1.2
2338.6	0.393	8.3	1.3	12	224	0.804	5.7	2.4	19	256	0.586
2339.3	0.393	7.3	1.1	12	295	0.654	5.7	2.0	19	337	0.477
2340.0	0.393	7.6	1.2	13	264	1.2	5.7	2.1	20	302	0.853
2340.7	0.543	9.3	1.2	16	297	0.770	7.8	2.1	25	339	0.562
2341.4	0.393	8.7	1.4	15	279	1.6	5.7	2.5	23	319	1.2
2342.1	0.393	8.8	1.5	14	245	1.3	5.7	2.8	21	280	0.946
2342.8	0.393	8.6	1.1	14	298	1.5	5.7	2.0	21	340	1.1
2343.5	0.393	6.6	1.4	16	309	0.928	5.7	2.5	24	353	0.677
2344.2	0.393	9.6	1.3	17	323	1.2	5.7	2.4	26	369	0.875
2344.9	0.393	8.2	0.816	12	241	1.4	5.7	1.5	18	276	1.1
2345.6	0.393	10	1.2	14	238	0.638	5.7	2.1	22	273	0.466
2346.3	0.393	7.1	1.2	17	252	1.1	5.7	2.2	26	289	0.834
2347.0	0.393	8.8	1.1	16	265	1.2	5.7	2.0	25	303	0.872
2347.7	0.393	7.9	1.1	16	294	1.4	5.7	1.9	24	336	1.0
2348.4	0.393	7.9	1.1	14	227	1.2	5.7	2.1	22	259	0.909
2349.1	0.393	9.3	1.3	12	219	1.3	5.7	2.3	19	250	0.958
2349.8	0.393	11	1.4	14	242	0.798	5.7	2.5	21	277	0.582
2350.5	0.536	7.7	0.960	13	293	1.5	7.7	1.8	21	335	1.1
2351.2	0.403	13	1.2	16	253	0.525	5.8	2.2	24	290	0.383
2351.9	0.659	9.8	1.2	13	263	1.3	9.5	2.2	20	301	0.955
2352.6	0.393	9.2	1.1	14	238	0.695	5.7	2.0	22	272	0.507
2353.3	0.406	8.1	0.923	9.8	209	0.926	5.9	1.7	15	239	0.675
2354.0	0.393	9.7	0.598	13	290	1.1	5.7	1.1	19	331	0.813
2354.7	0.393	10	1.3	14	238	0.980	5.7	2.4	22	272	0.715
2355.4	0.699	7.3	0.841	15	242	1.2	10	1.5	23	276	0.856
2356.1	0.393	9.4	1.3	15	296	0.746	5.7	2.4	22	339	0.544
2356.8	0.442	7.7	1.0	14	267	1.3	6.4	1.9	22	306	0.957
2357.5	0.701	8.0	0.932	10	228	0.686	10	1.7	16	261	0.500
2358.2	0.393	8.0	0.872	12	241	1.4	5.7	1.6	19	275	1.0
2358.9	0.393	7.9	1.4	11	199	0.853	5.7	2.5	17	228	0.622
2359.6	0.393	8.8	0.892	14	266	1.0	5.7	1.6	21	304	0.737
2360.3	0.393	8.0	0.949	12	240	1.2	5.7	1.7	19	274	0.874
2361.0	0.393	8.5	0.529	14	304	1.6	5.7	0.964	22	347	1.1
2361.7	0.393	9.4	0.646	15	259	0.911	5.7	1.2	23	296	0.665
2362.4	0.393	7.9	0.779	10	232	1.0	5.7	1.4	16	265	0.738
2363.1	0.393	8.1	0.804	11	272	0.303	5.7	1.5	17	311	0.221
2363.8	0.393	8.4	1.1	12	266	0.857	5.7	2.0	18	304	0.625
2364.5	0.505	8.0	0.626	12	245	0.552	7.3	1.1	18	280	0.403
2365.1	0.393	7.8	0.610	11	271	1.0	5.7	1.1	16	310	0.755
2365.8	0.428	9.4	0.951	13	244	0.878	6.2	1.7	20	280	0.641
2366.5	0.393	7.8	0.799	12	256	0.858	5.7	1.5	18	293	0.626
2367.2	0.393	8.2	0.877	13	249	1.2	5.7	1.6	20	285	0.869
2367.9	0.393	8.7	0.775	10	241	1.3	5.7	1.4	16	275	0.944
2368.6	0.514	8.3	0.806	12	260	0.936	7.4	1.5	19	298	0.683
2369.3	0.608	7.4	0.689	12	232	0.552	8.8	1.3	18	265	0.403
2370.0	0.393	7.9	0.832	9.5	265	0.753	5.7	1.5	15	303	0.549
2370.7	0.393	8.9	0.789	12	246	1.1	5.7	1.4	18	281	0.799
2371.4	0.629	7.8	0.779	9.9	271	1.5	9.1	1.4	15	310	1.1
2372.1	0.704	7.4	1.1	14	284	0.747	10	2.0	21	325	0.545

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Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2372.8	0.393	10	0.764	13	284	1.1	5.7	1.4	20	325	0.773
2373.5	0.393	6.7	0.784	12	221	1.0	5.7	1.4	18	252	0.751
2374.2	0.393	8.7	1.2	12	252	0.795	5.7	2.1	18	288	0.580
2374.9	0.393	8.3	0.992	12	257	2.5	5.7	1.8	18	294	1.8
2375.6	0.575	9.2	0.690	11	241	4.6	8.3	1.3	17	276	3.3
2376.3	0.502	8.7	0.967	11	273	0.304	7.2	1.8	17	312	0.222
2377.0	0.393	8.3	0.745	12	265	1.3	5.7	1.4	18	303	0.975
2377.7	0.393	8.4	0.667	13	254	1.3	5.7	1.2	20	291	0.963
2378.4	0.393	9.1	1.1	10	273	1.0	5.7	2.0	16	312	0.733
2379.1	0.491	8.4	0.564	10	292	1.5	7.1	1.0	16	333	1.1
2379.8	0.393	7.6	0.787	9.5	248	1.6	5.7	1.4	15	284	1.2
2380.5	0.393	8.2	0.913	9.6	267	1.1	5.7	1.7	15	305	0.809
2381.2	0.393	9.0	0.669	10	308	0.655	5.7	1.2	16	352	0.478
2381.9	0.393	8.8	0.634	11	275	0.859	5.7	1.2	16	315	0.627
2382.6	0.393	8.6	0.738	9.4	263	1.3	5.7	1.3	14	300	0.936
2383.3	0.393	6.8	0.814	8.9	295	0.923	5.7	1.5	14	338	0.674
2384.0	0.457	9.9	0.781	12	348	0.834	6.6	1.4	18	398	0.609
2384.7	0.393	9.0	0.972	8.7	300	1.3	5.7	1.8	13	343	0.947
2385.4	0.393	9.8	1.0	8.3	244	0.957	5.7	1.9	13	279	0.698
2386.1	0.534	7.9	0.816	11	235	0.876	7.7	1.5	17	269	0.639
2386.8	0.393	8.6	0.817	9.0	243	0.317	5.7	1.5	14	278	0.231
2387.5	0.393	8.9	0.699	7.2	233	0.964	5.7	1.3	11	267	0.703
2388.2	0.393	11	0.860	13	318	1.2	5.7	1.6	20	364	0.870
2388.9	0.406	7.4	0.546	8.2	218	0.740	5.9	0.996	13	249	0.540
2389.6	0.393	8.2	0.556	9.6	216	0.876	5.7	1.0	15	247	0.639
2390.3	0.752	9.0	0.621	11	256	0.526	11	1.1	16	293	0.383
2391.0	0.393	10	0.564	11	303	1.5	5.7	1.0	16	347	1.1
2391.7	0.393	10.0	0.802	9.0	288	1.5	5.7	1.5	14	329	1.1
2392.3	0.393	7.8	0.886	8.9	256	0.802	5.7	1.6	14	293	0.585
2393.0	0.393	9.6	0.759	7.7	289	0.887	5.7	1.4	12	330	0.647
2393.7	0.796	8.5	0.809	11	280	0.868	11	1.5	17	320	0.633
2394.4	0.393	11	0.756	8.7	257	1.6	5.7	1.4	13	294	1.1
2395.1	0.767	7.7	0.767	8.5	280	0.896	11	1.4	13	320	0.653
2395.8	0.393	8.2	0.919	8.6	221	0.849	5.7	1.7	13	253	0.620
2396.5	0.393	7.6	0.908	10	264	0.779	5.7	1.7	16	302	0.568
2397.2	0.393	7.9	0.902	12	290	1.4	5.7	1.6	18	331	0.996
2397.9	1.0	7.0	0.884	10	298	1.7	15	1.6	15	341	1.3
2398.6	0.616	8.1	0.947	12	306	0.815	8.9	1.7	19	350	0.595
2399.3	0.987	9.2	0.947	10	298	0.597	14	1.7	16	340	0.435
2400.0	0.480	8.1	0.991	11	314	0.777	6.9	1.8	16	359	0.567
2400.7	0.926	9.9	0.712	10	350	0.672	13	1.3	16	400	0.491
2401.4	0.467	9.8	0.629	11	322	1.9	6.7	1.1	17	369	1.4
2402.1	0.917	9.6	1.0	11	377	1.3	13	1.8	16	431	0.973
2402.8	0.559	7.7	0.946	16	452	1.8	8.1	1.7	24	517	1.3
2403.5	0.819	8.6	1.4	16	487	1.2	12	2.5	25	557	0.883
2404.2	1.2	9.2	1.3	19	511	1.7	18	2.4	28	585	1.2
2404.9	0.712	8.9	1.4	12	470	1.3	10	2.5	19	537	0.945
2405.6	1.7	8.1	1.3	17	567	0.516	24	2.4	26	648	0.377
2406.3	1.4	9.8	1.5	16	497	0.411	20	2.8	24	569	0.300
2407.0	1.8	11	1.7	21	685	1.9	26	3.0	32	783	1.4
2407.7	1.0	9.5	1.4	16	601	1.1	15	2.6	25	687	0.775
2408.4	1.5	11	1.8	23	711	1.3	21	3.4	36	813	0.933
2409.1	2.4	11	2.1	22	761	2.7	35	3.7	34	870	2.0
2409.8	2.1	9.0	2.3	29	739	1.3	30	4.2	45	845	0.912
2410.5	2.1	11	2.1	24	756	2.2	30	3.8	36	864	1.6
2411.2	1.8	11	2.0	24	784	1.7	26	3.6	37	896	1.2
2411.9	1.5	8.5	2.1	25	912	1.3	21	3.9	39	1043	0.942
2412.6	2.4	11	2.9	28	1013	1.7	35	5.2	44	1158	1.2
2413.3	2.2	11	2.8	32	919	2.8	32	5.2	50	1051	2.1
2414.0	1.5	11	2.2	27	982	1.6	22	3.9	42	1123	1.1
2414.7	2.2	9.4	3.3	33	1129	1.7	31	6.0	51	1291	1.2
2415.4	2.6	11	2.7	31	1034	2.1	38	5.0	47	1182	1.5
2416.1	3.3	11	2.8	30	1155	2.0	47	5.2	47	1321	1.5
2416.8	2.8	10	2.3	33	1108	1.6	41	4.1	50	1267	1.2
2417.5	2.6	10	3.9	35	1251	2.1	38	7.1	53	1430	1.6
2418.2	2.1	13	2.7	34	1168	1.3	30	5.0	53	1336	0.975
2418.8	3.2	11	3.4	35	1187	1.8	46	6.2	54	1357	1.3
2419.5	2.3	10	3.3	29	1134	1.4	34	6.0	44	1296	1.0
2420.2	2.4	12	3.9	36	1339	2.0	35	7.1	55	1531	1.5
2420.9	2.3	9.9	3.7	36	1237	3.0	33	6.8	55	1414	2.2
2421.6	3.2	10	3.2	37	1306	1.3	46	5.8	56	1494	0.922
2422.3	2.1	11	3.5	36	1439	2.0	31	6.4	55	1645	1.5
2423.0	2.5	13	3.7	34	1252	2.3	36	6.7	52	1432	1.7
2423.7	2.7	12	4.4	35	1460	2.7	39	8.1	54	1670	2.0
2424.4	2.6	14	3.9	44	1499	1.3	37	7.2	68	1715	0.970
2425.1	1.9	11	4.0	42	1395	1.9	27	7.3	64	1596	1.4
2425.8	2.5	12	3.4	39	1549	2.1	36	6.2	61	1771	1.5
2426.5	2.8	11	4.1	37	1543	2.3	40	7.5	57	1765	1.7
2427.2	2.5	12	3.9	40	1570	3.5	36	7.1	62	1795	2.5
2427.9	1.9	14	4.0	41	1757	1.9	27	7.3	62	2009	1.4
2428.6	3.2	13	3.3	45	1683	2.3	46	6.0	69	1925	1.6

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Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2429.3	2.6	14	4.3	40	1606	2.1	37	7.8	62	1836	1.5
2430.0	2.5	14	4.8	38	1639	2.2	36	8.8	59	1874	1.6
2430.7	2.0	14	3.6	39	1573	1.2	29	6.7	60	1799	0.851
2431.4	3.3	15	4.3	42	1570	2.3	47	7.9	64	1796	1.7
2432.1	2.8	13	3.8	42	1561	2.9	41	7.0	64	1785	2.1
2432.8	1.6	14	3.2	37	1435	2.1	23	5.9	57	1641	1.5
2433.5	1.9	16	3.7	41	1641	2.6	27	6.8	62	1877	1.9
2434.2	2.3	14	3.9	46	1616	3.2	34	7.1	70	1848	2.3
2434.9	1.0	14	3.0	40	1582	2.9	15	5.5	62	1809	2.1
2435.6	1.9	17	3.9	43	1614	2.5	27	7.1	65	1845	1.8
2436.3	2.3	17	4.0	41	1826	1.8	33	7.2	63	2089	1.3
2437.0	1.5	12	4.0	39	1490	2.5	22	7.3	60	1704	1.8
2437.7	2.0	18	3.8	42	1654	1.1	29	6.9	65	1892	0.825
2438.4	2.1	16	3.2	35	1581	2.2	30	5.8	54	1808	1.6
2439.1	1.7	14	3.8	43	1658	1.9	24	7.0	67	1896	1.4
2439.8	1.2	14	3.7	33	1324	1.9	18	6.7	50	1514	1.4
2440.5	1.9	17	3.2	35	1631	2.6	28	5.9	54	1865	1.9
2441.2	2.5	15	3.7	40	1615	2.5	36	6.7	61	1847	1.8
2441.9	1.9	15	3.5	38	1609	1.9	28	6.3	58	1840	1.4
2442.6	2.3	16	3.6	32	1429	1.8	33	6.6	49	1634	1.3
2443.3	2.2	17	3.5	35	1572	2.1	32	6.4	53	1798	1.5
2444.0	1.2	15	3.1	33	1461	1.9	17	5.7	51	1670	1.4
2444.7	1.7	17	3.1	31	1292	3.0	25	5.6	47	1477	2.2
2445.3	1.5	12	2.6	40	1384	1.6	21	4.7	61	1582	1.2
2446.0	1.6	16	2.8	33	1477	2.4	23	5.1	50	1689	1.8
2446.7	1.9	17	3.2	28	1449	1.7	28	5.8	43	1657	1.2
2447.4	1.9	18	2.5	30	1558	2.6	27	4.6	47	1782	1.9
2448.1	1.5	14	2.1	27	1251	2.1	21	3.8	41	1430	1.5
2448.8	1.1	16	3.0	28	1396	2.4	15	5.5	43	1597	1.8
2449.5	2.2	15	2.4	29	1316	3.0	32	4.4	45	1505	2.2
2450.2	1.6	15	2.7	27	1366	2.7	23	4.9	42	1562	2.0
2450.9	1.6	15	2.2	28	1254	1.6	24	4.0	42	1434	1.2
2451.6	2.3	14	2.3	30	1275	3.0	33	4.3	46	1458	2.2
2452.3	2.3	14	1.8	24	1204	2.6	33	3.3	36	1377	1.9
2453.0	1.8	13	2.1	21	1098	1.6	26	3.8	33	1255	1.2
2453.7	3.3	12	2.0	21	1204	2.4	48	3.7	32	1377	1.8
2454.4	2.7	13	1.9	25	1307	2.3	39	3.6	38	1495	1.6
2455.1	3.2	14	2.3	22	1247	2.8	46	4.2	34	1426	2.0
2455.8	2.7	13	2.4	21	1288	2.3	40	4.3	33	1473	1.7
2456.5	3.7	14	2.2	23	1240	3.5	53	4.0	35	1418	2.5
2457.2	3.9	12	2.5	24	1064	2.5	56	4.5	37	1216	1.8
2457.9	3.8	14	2.2	25	1192	2.6	54	4.0	38	1363	1.9
2458.6	3.3	14	2.3	23	1369	2.9	47	4.1	35	1566	2.1
2459.3	3.4	14	2.5	20	1329	3.1	49	4.6	30	1519	2.3
2460.0	3.5	13	2.2	18	1285	2.9	51	4.1	28	1470	2.1
2460.7	4.0	12	2.9	26	1471	3.2	57	5.3	40	1682	2.3
2461.4	5.5	16	3.0	20	1223	2.5	79	5.5	31	1398	1.8
2462.1	4.1	13	2.8	18	1152	2.2	59	5.1	28	1317	1.6
2462.8	4.4	13	2.8	22	1274	2.9	63	5.1	34	1457	2.1
2463.5	4.8	14	2.8	23	1448	3.9	69	5.2	35	1656	2.8
2464.2	4.5	14	2.6	26	1339	2.6	65	4.7	40	1532	1.9
2464.9	5.5	13	3.4	27	1415	3.3	79	6.1	41	1618	2.4
2465.6	5.0	13	2.6	22	1220	3.2	72	4.7	34	1395	2.4
2466.3	4.4	12	3.1	24	1275	2.8	64	5.7	37	1458	2.1
2467.0	4.8	13	3.1	25	1462	3.2	70	5.6	38	1672	2.3
2467.7	4.3	14	2.6	21	1328	4.6	62	4.7	33	1519	3.3
2468.4	4.1	13	3.1	23	1445	2.5	60	5.6	35	1652	1.8
2469.1	5.1	12	2.7	18	1302	2.7	74	4.9	27	1489	1.9
2469.8	4.5	15	3.4	24	1554	4.9	64	6.2	36	1778	3.6
2470.5	4.2	15	2.7	26	1225	3.5	61	4.8	40	1400	2.5
2471.1	3.6	13	2.8	22	1335	2.7	52	5.1	34	1526	2.0
2471.8	5.0	13	2.7	21	1307	3.0	72	5.0	33	1494	2.2
2472.5	5.1	14	3.1	25	1474	3.3	73	5.6	38	1685	2.4
2473.2	5.5	15	3.1	24	1380	3.3	80	5.6	37	1578	2.4
2473.9	4.4	13	2.5	21	1317	2.2	64	4.6	32	1506	1.6
2474.6	5.4	16	2.4	24	1399	1.7	77	4.4	38	1600	1.2
2475.3	4.4	14	3.0	24	1402	2.7	63	5.5	36	1603	2.0
2476.0	3.7	13	2.6	19	1502	3.4	53	4.8	29	1717	2.5
2476.7	5.0	14	3.0	21	1315	3.1	73	5.5	32	1504	2.3
2477.4	3.8	16	2.4	22	1422	3.3	54	4.4	34	1626	2.4
2478.1	3.9	13	2.2	18	1230	2.8	56	4.1	28	1407	2.0
2478.8	4.1	13	2.6	20	1453	3.6	59	4.8	31	1661	2.6
2479.5	3.8	12	2.7	22	1350	2.5	54	5.0	34	1544	1.8
2480.2	3.1	15	3.4	23	1427	2.2	44	6.2	36	1632	1.6
2480.9	3.9	14	3.1	20	1529	3.2	56	5.7	31	1749	2.3
2481.6	4.2	12	3.1	20	1494	2.6	61	5.6	31	1709	1.9
2482.3	4.4	12	2.3	18	1370	3.8	64	4.3	28	1566	2.8
2483.0	3.6	15	3.1	19	1359	4.3	51	5.6	29	1554	3.2
2483.7	3.2	13	2.3	22	1244	2.4	46	4.3	33	1423	1.8
2484.4	4.2	11	2.4	18	1328	2.2	60	4.4	28	1518	1.6
2485.1	3.5	10	2.3	16	1307	2.5	50	4.2	24	1495	1.8

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2485.8	4.5	11	2.2	14	1398	2.4	64	4.1	22	1599	1.7
2486.5	2.7	13	2.5	25	1478	4.3	38	4.6	39	1690	3.2
2487.2	3.1	11	2.2	16	1004	1.8	45	3.9	24	1148	1.3
2487.9	3.0	11	2.4	19	1270	4.0	43	4.3	29	1452	2.9
2488.6	2.2	12	2.0	17	1392	3.7	32	3.7	26	1592	2.7
2489.3	3.4	10	1.9	18	1289	2.9	49	3.5	27	1474	2.1
2490.0	3.3	14	2.2	16	1290	3.8	48	4.0	25	1475	2.8
2490.7	2.8	12	2.7	18	1222	3.7	41	4.9	28	1398	2.7
2491.4	3.0	12	1.8	15	1193	3.1	43	3.2	24	1364	2.3
2492.1	1.7	11	2.1	17	1183	2.3	25	3.9	26	1353	1.7
2492.8	2.0	12	1.8	21	1428	2.8	29	3.3	32	1633	2.1
2493.5	2.6	15	2.2	19	1625	2.9	38	4.0	29	1859	2.1
2494.2	2.0	12	1.9	15	1277	2.8	29	3.5	23	1461	2.0
2494.9	1.6	11	2.4	14	1190	2.5	24	4.5	21	1361	1.9
2495.6	3.3	8.9	1.6	20	1263	2.4	48	2.9	30	1444	1.8
2496.3	1.0	11	2.2	15	1342	2.2	15	4.0	23	1535	1.6
2496.9	1.7	14	2.0	17	1373	3.2	24	3.6	26	1570	2.3
2497.6	2.0	11	2.1	18	1359	4.5	29	3.8	27	1554	3.2
2498.3	1.8	11	1.3	17	1255	2.9	26	2.4	26	1435	2.1
2499.0	1.6	11	1.6	14	1306	3.4	24	3.0	22	1493	2.5
2499.7	1.4	12	1.6	13	1470	2.2	21	2.9	20	1681	1.6
2500.4	1.4	15	1.6	15	1479	2.8	20	2.9	23	1691	2.0
2501.1	0.960	12	1.3	14	1358	2.4	14	2.3	22	1553	1.8
2501.8	1.2	12	1.2	15	1262	3.5	17	2.2	23	1443	2.6
2502.5	0.808	14	2.0	13	1387	2.9	12	3.6	20	1586	2.1
2503.2	0.798	17	1.1	12	1303	2.5	12	1.9	18	1490	1.8
2503.9	0.682	13	1.1	13	1382	2.3	9.8	2.1	20	1581	1.6
2504.6	0.393	11	1.1	11	1309	3.5	5.7	2.0	17	1497	2.6
2505.3	0.735	11	0.908	15	1165	3.0	11	1.7	23	1333	2.2
2506.0	0.486	14	0.979	11	1157	1.9	7.0	1.8	18	1323	1.4
2506.7	0.846	13	0.778	14	1248	2.1	12	1.4	22	1427	1.6
2507.4	0.393	11	1.0	11	1268	3.0	5.7	1.8	17	1450	2.2
2508.1	1.0	9.3	0.711	9.5	974	2.3	15	1.3	15	1113	1.6
2508.8	1.7	9.7	0.767	8.8	1141	3.1	25	1.4	14	1304	2.2
2509.5	1.1	10	0.651	8.2	1011	2.4	15	1.2	13	1156	1.7
2510.2	2.4	13	1.1	9.1	1131	1.7	35	1.9	14	1293	1.2
2510.9	1.7	10	0.798	7.3	1082	1.9	25	1.5	11	1237	1.4
2511.6	0.880	9.7	0.751	7.7	1243	2.5	13	1.4	12	1422	1.8
2512.3	2.1	12	0.650	10	1247	2.6	31	1.2	16	1426	1.9
2513.0	2.0	9.6	1.0	7.7	1017	1.9	28	1.8	12	1163	1.4
2513.7	1.9	11	0.770	11	1149	3.4	27	1.4	16	1313	2.5
2514.4	2.9	10	0.615	8.2	1039	1.8	42	1.1	13	1188	1.3
2515.1	1.1	12	1.1	7.6	1090	3.8	16	2.0	12	1246	2.8
2515.8	2.4	10	0.658	7.9	1069	2.3	34	1.2	12	1223	1.7
2516.5	1.9	9.4	0.887	8.5	1164	2.2	28	1.6	13	1331	1.6
2517.2	2.8	11	0.840	9.7	1171	2.8	41	1.5	15	1339	2.1
2517.9	2.5	10	0.898	11	1138	3.0	37	1.6	17	1302	2.2
2518.6	2.4	13	0.981	9.8	1139	2.2	35	1.8	15	1303	1.6
2519.3	2.9	14	1.4	13	1249	1.5	42	2.6	20	1428	1.1
2520.0	3.2	11	0.995	7.9	1268	3.9	46	1.8	12	1450	2.9
2520.7	1.7	11	1.3	15	1172	3.3	24	2.4	23	1340	2.4
2521.4	2.7	11	1.1	13	1184	3.6	39	2.0	20	1354	2.6
2522.1	2.4	10	1.2	8.5	1200	3.4	34	2.2	13	1373	2.5
2522.8	3.2	13	1.3	11	1372	2.5	46	2.3	17	1569	1.8
2523.4	1.8	13	1.2	9.8	1402	2.7	26	2.2	15	1603	2.0
2524.1	1.3	12	0.875	9.9	1109	1.8	19	1.6	15	1269	1.3
2524.8	2.5	13	1.1	13	1442	2.8	36	2.1	19	1649	2.0
2525.5	2.7	11	1.2	8.8	1311	2.3	39	2.2	14	1499	1.7
2526.2	2.3	12	1.2	12	1398	2.8	33	2.2	18	1598	2.1
2526.9	2.8	12	1.5	11	1228	2.4	41	2.8	17	1404	1.8
2527.6	2.2	12	1.2	11	1322	3.1	31	2.2	16	1511	2.2
2528.3	2.2	12	1.1	14	1446	2.6	32	1.9	22	1654	1.9
2529.0	2.5	15	1.5	9.6	1326	2.0	37	2.7	15	1517	1.5
2529.7	2.3	15	1.6	14	1399	3.3	34	2.9	21	1600	2.4
2530.4	2.4	13	1.4	14	1278	2.5	34	2.6	21	1461	1.8
2531.1	2.6	12	1.1	12	1343	2.3	37	2.0	18	1536	1.6
2531.8	1.7	11	1.5	12	1225	2.5	24	2.7	18	1401	1.8
2532.5	3.3	14	1.3	12	1327	2.8	48	2.3	19	1517	2.0
2533.2	1.6	15	1.1	10	1331	2.7	23	2.0	16	1522	2.0
2533.9	2.2	15	0.755	11	1267	1.9	32	1.4	17	1449	1.4
2534.6	3.0	13	1.1	13	1257	3.1	43	1.9	19	1437	2.2
2535.3	2.3	13	1.2	12	1324	2.6	33	2.2	19	1514	1.9
2536.0	1.5	14	1.4	12	1365	1.9	22	2.5	19	1561	1.4
2536.7	2.4	12	1.1	8.3	1218	3.0	35	2.0	13	1393	2.2
2537.4	2.0	14	1.1	8.4	1063	2.5	29	1.9	13	1216	1.8
2538.1	1.9	11	1.3	11	1261	2.5	28	2.3	17	1442	1.8
2538.8	1.9	15	1.1	12	1281	2.8	27	2.1	18	1465	2.1
2539.5	1.2	13	0.765	11	1256	2.1	17	1.4	16	1436	1.5
2540.2	1.6	12	1.3	11	1391	3.1	23	2.3	16	1590	2.2
2540.9	1.8	11	0.787	8.7	1056	2.5	26	1.4	13	1208	1.8
2541.6	1.6	13	1.2	9.1	1229	2.5	23	2.2	14	1406	1.8

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Parameter	7Li	24Mg	55Mn	66Zn	88Sr	137Ba	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
DL (ppm)	0.393	0.403	0.079	0.702	0.005	0.003					
Length (µm)											
2542.3	1.5	13	1.4	8.0	1348	2.1	21	2.6	12	1541	1.5
2543.0	1.6	11	1.1	9.4	1125	2.0	23	1.9	14	1287	1.5
2543.7	2.3	12	0.887	7.3	1117	2.7	34	1.6	11	1277	2.0
2544.4	2.5	11	0.757	12	1125	2.9	36	1.4	18	1287	2.1
2545.1	2.2	11	1.0	10	1217	1.9	32	1.9	15	1392	1.4
2545.8	1.7	11	0.732	7.9	1021	2.0	24	1.3	12	1167	1.5
2546.5	2.6	12	1.2	8.1	1165	2.6	38	2.2	12	1332	1.9
2547.2	1.5	14	1.2	9.0	1256	2.1	22	2.2	14	1436	1.6
2547.9	2.2	12	1.5	13	1217	2.7	32	2.7	19	1392	2.0
2548.6	1.9	9.7	0.821	9.1	1145	2.5	27	1.5	14	1309	1.8
2549.2	2.1	13	1.1	7.9	1344	2.7	30	1.9	12	1537	2.0
2549.9	2.8	9.5	1.1	9.1	1229	2.7	41	2.1	14	1405	1.9
2550.6	2.7	11	1.0	9.1	1174	2.4	38	1.8	14	1343	1.8
2551.3	0.737	11	0.981	7.0	1070	2.7	11	1.8	11	1224	2.0
2552.0	2.2	13	0.914	9.0	1222	2.3	32	1.7	14	1397	1.7
2552.7	1.4	14	0.984	11	1236	2.3	21	1.8	17	1413	1.7
2553.4	1.3	12	0.949	7.5	1221	2.8	18	1.7	11	1397	2.0
2554.1	1.9	18	0.949	9.9	1178	2.7	28	1.7	15	1348	2.0
2554.8	1.3	12	0.820	6.8	1304	1.7	19	1.5	10	1491	1.3
2555.5	2.1	14	1.1	7.8	1213	2.6	30	2.0	12	1387	1.9
2556.2	0.822	12	0.860	7.3	1308	1.5	12	1.6	11	1496	1.1
2556.9	1.6	15	0.966	9.1	1140	1.1	23	1.8	14	1304	0.797
2557.6	0.939	15	1.3	8.9	1361	2.8	14	2.4	14	1557	2.1
2558.3	1.2	13	0.535	11	1296	1.9	18	0.975	17	1482	1.4
2559.0	0.860	15	0.845	9.6	1230	2.0	12	1.5	15	1407	1.5
2559.7	0.996	13	0.848	7.7	1239	1.9	14	1.5	12	1417	1.4
2560.4	1.6	16	0.596	7.9	1356	2.6	23	1.1	12	1551	1.9
2561.1	0.680	14	0.842	8.1	1288	2.3	9.8	1.5	12	1473	1.6
2561.8	1.1	16	0.783	7.2	1078	2.1	15	1.4	11	1233	1.5
2562.5	0.746	13	0.781	6.4	1021	1.9	11	1.4	9.8	1168	1.4
2563.2	0.781	14	0.644	7.6	1207	1.7	11	1.2	12	1380	1.3
2563.9	0.393	15	0.668	8.1	1340	3.2	5.7	1.2	12	1532	2.3
2564.6	0.435	16	0.540	6.5	982	3.1	6.3	0.985	9.9	1123	2.2
2565.3	0.470	14	3.6	6.6	1088	1.8	6.8	6.5	10	1244	1.3
2566.0	0.393	16	0.502	4.3	1077	2.1	5.7	0.915	6.6	1231	1.5
2566.7	0.547	17	0.653	5.3	1069	2.4	7.9	1.2	8.1	1223	1.8
2567.4	0.420	14	0.473	5.1	1091	1.5	6.1	0.863	7.8	1247	1.1
2568.1	0.393	27	0.325	6.1	990	1.2	5.7	0.592	9.4	1132	0.892
2568.8	0.452	18	0.352	4.1	1045	2.0	6.5	0.641	6.3	1195	1.4
2569.5	0.478	21	0.680	4.8	983	1.5	6.9	1.2	7.3	1124	1.1
2570.2	0.393	23	0.329	5.4	984	2.0	5.7	0.600	8.3	1125	1.5
2570.9	0.420	20	0.608	4.0	978	2.1	6.1	1.1	6.1	1119	1.5
2571.6	0.475	22	0.350	4.2	911	1.5	6.9	0.638	6.5	1042	1.1
2572.3	0.393	21	0.386	3.1	906	1.5	5.7	0.703	4.7	1036	1.1
2573.0	0.643	23	0.377	4.0	861	2.2	9.3	0.687	6.2	985	1.6
2573.7	0.393	22	0.422	2.9	904	0.825	5.7	0.769	4.5	1034	0.602
2574.4	0.393	24	0.340	3.7	854	1.7	5.7	0.619	5.7	976	1.2
2575.1	0.539	20	0.402	2.4	900	2.1	7.8	0.733	3.6	1030	1.5
2575.7	0.393	21	0.623	3.8	920	2.0	5.7	1.1	5.8	1052	1.5
2576.4	0.647	22	0.467	2.1	926	2.6	9.3	0.852	3.2	1059	1.9
2577.1	0.393	22	0.407	3.0	923	1.7	5.7	0.741	4.6	1055	1.2
2577.8	0.535	26	0.200	2.9	958	1.4	7.7	0.365	4.4	1095	0.996
2578.5	1.1	24	0.547	2.3	956	1.3	15	0.998	3.6	1093	0.916
2579.2	0.393	28	0.396	3.3	987	0.922	5.7	0.722	5.1	1128	0.673
2579.9	0.465	26	0.343	1.8	930	1.8	6.7	0.626	2.7	1064	1.3
2580.6	0.393	22	0.360	2.2	914	1.3	5.7	0.656	3.4	1046	0.963
2581.3	0.562	23	0.359	2.6	937	1.5	8.1	0.655	4.0	1072	1.1
2582.0	0.508	24	0.421	1.6	1093	1.5	7.3	0.767	2.5	1250	1.1
2582.7	0.393	25	0.216	1.8	913	2.4	5.7	0.393	2.7	1044	1.7
2583.4	0.393	26	0.268	2.8	964	1.8	5.7	0.488	4.2	1103	1.3
2584.1	0.393	23	0.215	2.0	905	2.2	5.7	0.393	3.1	1035	1.6
2584.8	0.393	23	0.302	0.744	898	2.0	5.7	0.551	1.1	1026	1.5
2585.5	0.698	27	0.466	2.5	994	1.5	10	0.850	3.8	1137	1.1
2586.2	0.393	31	0.426	2.4	927	1.1	5.7	0.777	3.7	1060	0.836
2586.9	0.393	27	0.451	1.8	983	1.8	5.7	0.823	2.8	1124	1.3
2587.6	0.505	26	0.280	2.1	949	1.8	7.3	0.511	3.2	1085	1.3
2588.3	0.393	27	0.550	3.5	849	1.9	5.7	1.0	5.4	971	1.4
2589.0	0.457	25	0.308	3.1	944	0.833	6.6	0.563	4.7	1080	0.608
2589.7	0.393	26	0.558	3.4	1117	2.9	5.7	1.0	5.3	1277	2.1
2590.4	0.525	27	0.555	2.3	954	1.8	7.6	1.0	3.5	1091	1.3
2591.1	0.635	26	0.501	2.7	979	1.6	9.2	0.913	4.1	1119	1.1
2591.8	0.393	28	0.428	2.3	914	1.6	5.7	0.780	3.5	1045	1.1
2592.5	0.393	28	0.325	2.7	988	1.6	5.7	0.593	4.1	1130	1.2
2593.2	0.393	25	0.454	1.6	903	1.1	5.7	0.827	2.4	1033	0.767
2593.9	0.424	27	0.402	2.8	949	1.1	6.1	0.734	4.3	1086	0.807
2594.6	0.393	27	0.577	3.8	915	1.7	5.7	1.1	5.9	1046	1.2
2595.3	0.738	28	0.281	1.7	983	1.6	11	0.512	2.6	1124	1.1
2596.0	0.393	27	0.325	2.1	808	1.1	5.7	0.593	3.2	925	0.834
2596.7	0.464	31	0.385	1.6	901	1.6	6.7	0.702	2.4	1030	1.2
2597.4	0.393	31	0.249	2.9	954	2.0	5.7	0.454	4.5	1090	1.4
2598.1	1.0	30	0.342	3.0	1035	1.8	15	0.624	4.5	1184	1.3

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Parameter	7Li	24Mg	55Mn	66Zn	88Sr	137Ba	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
DL (ppm)	0.393	0.403	0.079	0.702	0.005	0.003					
Length (µm)											
2598.8	0.393	33	0.344	1.9	1007	2.6	5.7	0.628	2.9	1152	1.9
2599.5	0.569	35	0.498	1.9	963	1.8	8.2	0.907	2.9	1102	1.3
2600.2	0.532	31	0.441	2.8	1032	2.1	7.7	0.805	4.3	1180	1.5
2600.9	0.393	28	0.495	2.9	920	1.8	5.7	0.903	4.5	1052	1.3
2601.5	0.396	31	0.412	1.0	904	1.2	5.7	0.751	1.6	1034	0.880
2602.2	0.393	32	0.527	1.5	963	1.5	5.7	0.962	2.3	1101	1.1
2602.9	0.393	33	0.396	1.3	1087	1.7	5.7	0.722	2.0	1243	1.3
2603.6	0.393	36	0.382	0.702	999	1.3	5.7	0.696	1.1	1143	0.941
2604.3	0.393	29	0.221	2.9	973	1.2	5.7	0.403	4.5	1113	0.881
2605.0	0.540	31	0.365	2.3	893	1.8	7.8	0.665	3.6	1021	1.3
2605.7	0.393	32	0.350	1.1	924	0.945	5.7	0.638	1.8	1057	0.690
2606.4	0.393	33	0.353	1.9	957	1.1	5.7	0.644	3.0	1094	0.783
2607.1	0.423	34	0.323	1.1	978	1.2	6.1	0.590	1.7	1118	0.847
2607.8	0.393	27	0.607	2.2	888	1.1	5.7	1.1	3.3	1015	0.780
2608.5	0.627	32	0.404	2.1	875	1.4	9.0	0.737	3.2	1001	1.0
2609.2	0.393	30	0.248	1.3	903	1.8	5.7	0.453	2.0	1032	1.3
2609.9	0.393	26	0.187	0.959	884	1.2	5.7	0.340	1.5	1011	0.888
2610.6	0.393	28	0.425	0.702	875	2.0	5.7	0.776	1.1	1001	1.5
2611.3	0.393	34	0.273	3.6	879	1.9	5.7	0.499	5.5	1005	1.4
2612.0	0.393	29	0.443	1.9	825	1.2	5.7	0.809	2.8	943	0.874
2612.7	0.502	32	0.522	1.1	1008	2.9	7.2	0.953	1.7	1153	2.1
2613.4	0.393	35	0.374	1.3	809	1.8	5.7	0.682	1.9	925	1.3
2614.1	0.393	31	0.187	1.7	835	1.8	5.7	0.341	2.6	955	1.3
2614.8	0.393	26	0.290	1.4	841	1.7	5.7	0.529	2.1	961	1.2
2615.5	0.623	32	0.408	4.2	926	1.8	9.0	0.744	6.4	1059	1.3
2616.2	0.393	28	0.465	1.6	733	0.728	5.7	0.848	2.5	838	0.531
2616.9	0.393	25	0.301	1.0	722	0.732	5.7	0.550	1.6	826	0.534
2617.6	0.393	27	0.265	1.6	632	0.722	5.7	0.483	2.4	723	0.527
2618.3	0.393	25	0.225	1.4	765	0.978	5.7	0.410	2.1	875	0.713
2619.0	0.393	30	0.308	2.7	748	0.840	5.7	0.561	4.2	856	0.613
2619.7	0.393	30	0.086	2.7	991	1.4	5.7	0.157	4.2	1133	1.1
2620.4	0.393	27	0.346	2.3	725	1.8	5.7	0.630	3.5	829	1.3
2621.1	0.393	24	0.131	0.702	591	1.7	5.7	0.239	1.1	675	1.2
2621.8	0.393	25	0.083	0.782	759	0.526	5.7	0.152	1.2	868	0.384
2622.5	0.393	28	0.119	3.5	768	1.2	5.7	0.218	5.3	878	0.869
2623.2	0.393	30	0.351	1.4	736	1.5	5.7	0.640	2.1	841	1.1
2623.9	0.393	25	0.079	1.2	689	0.678	5.7	0.144	1.8	788	0.495
2624.6	0.393	26	0.210	3.2	647	1.3	5.7	0.384	4.9	740	0.932
2625.3	0.393	29	0.082	1.2	679	1.0	5.7	0.150	1.9	777	0.757
2626.0	0.393	27	0.141	3.6	726	1.0	5.7	0.257	5.4	830	0.734
2626.7	0.393	32	0.079	2.1	724	0.003	5.7	0.144	3.2	828	0.002
2627.3	0.599	33	0.128	2.5	597	0.546	8.6	0.233	3.8	683	0.399
2628.0	0.393	31	0.230	0.702	468	0.332	5.7	0.420	1.1	535	0.242
2628.7	0.393	28	0.079	1.2	695	1.0	5.7	0.144	1.8	795	0.751
2629.4	0.393	25	0.288	4.2	630	0.625	5.7	0.525	6.5	720	0.456
2630.1	0.762	24	0.409	1.7	562	0.595	11	0.746	2.6	643	0.434
2630.8	0.393	25	0.217	0.702	655	1.3	5.7	0.396	1.1	749	0.962
2631.5	0.393	27	0.383	2.5	543	0.743	5.7	0.698	3.9	621	0.542
2632.2	0.407	37	0.176	2.1	927	1.3	5.9	0.321	3.2	1060	0.916
2632.9	0.393	27	0.247	2.9	732	1.1	5.7	0.451	4.5	837	0.781
2633.6	0.393	21	0.397	0.702	845	1.4	5.7	0.724	1.1	966	0.986
2634.3	0.393	38	0.236	4.8	697	2.8	5.7	0.430	7.4	797	2.0
2635.0	0.393	27	0.556	3.3	630	0.728	5.7	1.0	5.1	720	0.531
2635.7	0.393	34	0.406	0.791	729	0.250	5.7	0.741	1.2	834	0.182
2636.4	0.393	33	0.147	0.702	580	2.5	5.7	0.268	1.1	664	1.8
2637.1	0.393	23	0.251	2.2	529	1.1	5.7	0.457	3.4	605	0.796
2637.8	0.393	28	0.114	2.3	612	1.2	5.7	0.208	3.6	700	0.876
2638.5	0.393	29	0.254	2.1	607	0.660	5.7	0.464	3.3	694	0.481
2639.2	0.393	34	0.392	1.7	608	1.2	5.7	0.715	2.7	695	0.890
2639.9	0.393	33	0.169	1.7	696	0.720	5.7	0.308	2.6	796	0.526
2640.6	0.393	26	0.079	3.9	717	1.8	5.7	0.144	6.0	820	1.3
2641.3	0.485	27	0.308	2.2	756	0.891	7.0	0.561	3.3	864	0.650
2642.0	0.393	27	0.304	0.982	588	1.3	5.7	0.555	1.5	672	0.965
2642.7	0.877	32	0.079	0.702	558	0.455	13	0.144	1.1	639	0.332
2643.4	0.393	25	0.462	1.1	496	0.501	5.7	0.842	1.7	568	0.366
2644.1	0.393	21	0.240	1.8	753	1.5	5.7	0.438	2.7	861	1.1
2644.8	0.393	24	0.172	1.1	481	1.1	5.7	0.313	1.6	550	0.810
2645.5	0.393	33	0.343	2.7	593	0.744	5.7	0.625	4.2	679	0.543
2646.2	0.393	25	0.562	1.1	554	1.2	5.7	1.0	1.7	633	0.897
2646.9	0.393	39	0.336	4.4	739	0.871	5.7	0.612	6.7	845	0.635
2647.6	0.393	29	0.368	0.702	597	0.531	5.7	0.671	1.1	683	0.387
2648.3	0.393	32	0.277	3.3	672	0.894	5.7	0.505	5.1	769	0.652
2649.0	0.393	25	0.079	3.3	676	0.260	5.7	0.144	5.0	773	0.190
2649.7	0.661	37	0.213	0.951	502	0.300	9.5	0.389	1.5	574	0.219
2650.4	0.393	25	0.190	1.6	465	1.9	5.7	0.347	2.4	531	1.4
2651.1	0.879	21	0.153	2.7	654	1.9	13	0.279	4.2	748	1.4
2651.8	0.393	35	0.340	2.5	613	1.5	5.7	0.620	3.8	701	1.1
2652.5	0.393	31	0.079	2.7	581	0.946	5.7	0.144	4.1	665	0.691
2653.2	0.596	31	0.813	1.9	521	1.6	8.6	1.5	3.0	596	1.2
2653.9	0.993	30	0.079	1.7	573	0.299	14	0.144	2.7	656	0.218
2654.5	0.393	28	0.375	1.9	511	1.4	5.7	0.685	3.0	585	0.992

Minnow Environmental
Sample ID: 019

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
2655.2	0.393	29	0.432	1.2	592	1.6	5.7	0.789	1.8	677	1.2
2655.9	0.956	28	0.344	0.780	460	0.746	14	0.627	1.2	526	0.544
2656.6	0.965	37	0.605	1.7	524	0.585	14	1.1	2.6	599	0.427
2657.3	0.393	33	0.228	3.7	384	0.243	5.7	0.416	5.7	439	0.177
2658.0	2.2	30	0.091	1.6	581	0.726	32	0.165	2.5	664	0.529
2658.7	0.956	43	0.706	0.702	574	0.003	14	1.3	1.1	657	0.002
2659.4	0.393	31	0.166	2.0	560	0.697	5.7	0.303	3.1	641	0.508
2660.1	0.393	32	0.176	2.6	721	0.738	5.7	0.321	4.0	825	0.538
2660.8	0.756	33	0.559	1.1	429	1.0	11	1.0	1.7	491	0.759
2661.5	0.393	35	0.079	0.702	541	0.895	5.7	0.144	1.1	618	0.653
2662.2	0.393	37	0.618	4.4	738	0.003	5.7	1.1	6.7	844	0.002
2662.9	1.4	27	0.079	3.6	443	0.423	20	0.144	5.5	506	0.309
2663.6	0.393	32	0.100	11	441	0.003	5.7	0.182	17	504	0.002
2664.3	0.710	27	2.4	7.5	644	2.9	10	4.5	11	736	2.1
2665.0	2.6	30	0.083	1.9	316	0.666	37	0.152	3.0	361	0.486
2665.7	0.677	41	0.387	5.7	665	1.2	9.8	0.706	8.8	760	0.912
2666.4	1.1	81	2.7	3.8	607	0.649	15	4.9	5.8	694	0.473
2667.1	9.0	47	1.3	7.2	589	0.575	130	2.4	11	673	0.420
2667.8	1.4	30	0.583	0.702	494	0.500	20	1.1	1.1	565	0.364
2668.5	0.393	32	0.469	0.702	670	0.402	5.7	0.856	1.1	766	0.293
2669.2	0.393	35	0.460	305	468	0.003	5.7	0.839	467	536	0.002
2669.9	0.393	39	0.079	1.8	413	0.003	5.7	0.144	2.8	472	0.002
2670.6	0.393	39	0.079	0.702	569	0.820	5.7	0.144	1.1	651	0.598
2671.3	1.3	37	0.370	0.702	878	0.769	18	0.674	1.1	1004	0.561
2672.0	2.2	42	0.079	6.7	543	1.6	31	0.144	10	621	1.1
2672.7	0.393	51	0.241	0.702	505	3.9	5.7	0.440	1.1	577	2.8
2673.4	0.393	37	0.198	17	585	1.6	5.7	0.362	26	669	1.2
2674.1	0.393	52	0.757	9.0	425	1.6	5.7	1.4	14	486	1.2
2674.8	0.393	62	1.4	13	490	1.0	5.7	2.6	20	560	0.742
2675.5	0.521	42	0.710	14	481	1.0	7.5	1.3	21	549	0.730
2676.2	0.393	56	1.0	0.702	426	0.003	5.7	1.9	1.1	488	0.002
2676.9	0.393	45	0.922	0.702	438	3.9	5.7	1.7	1.1	501	2.9
2677.6	0.393	23	0.803	15	346	0.003	5.7	1.5	23	396	0.002
2678.3	0.557	28	0.079	6.2	306	0.003	8.0	0.144	9.6	350	0.002
2679.0	0.841	49	0.777	0.798	388	0.003	12	1.4	1.2	443	0.002
2679.7	0.393	83	4.1	0.969	464	2.0	5.7	7.5	1.5	531	1.4

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
0.3	1.7	53	2.6	26	421	1.6	24	4.7	40	481	1.2
1.0	2.0	56	2.9	27	410	1.7	29	5.3	42	468	1.3
1.7	1.3	53	3.8	37	407	1.7	18	7.0	57	465	1.2
2.4	1.3	77	5.8	32	372	1.9	19	11	49	425	1.4
3.1	1.6	65	8.1	35	424	1.7	23	15	53	485	1.2
3.8	1.2	64	5.5	31	395	2.0	18	10	47	451	1.5
4.5	0.944	53	4.4	29	387	1.7	14	8.0	44	443	1.3
5.2	0.958	47	3.9	29	394	2.4	14	7.2	45	451	1.8
5.9	1.2	49	3.9	25	397	2.0	17	7.0	39	454	1.5
6.6	1.4	52	6.3	26	355	1.6	21	11	40	406	1.2
7.3	1.5	56	7.0	28	371	1.9	22	13	43	425	1.4
8.0	1.5	64	4.5	30	454	2.3	21	8.2	47	519	1.7
8.7	1.3	56	4.2	26	452	2.3	18	7.7	40	517	1.7
9.4	1.4	45	3.4	27	379	1.5	20	6.2	42	433	1.1
10.1	1.3	55	3.8	29	406	1.7	19	6.9	44	465	1.2
10.8	1.6	57	3.2	27	374	1.8	23	5.8	41	428	1.3
11.5	1.1	58	3.0	25	361	1.4	15	5.4	38	412	1.0
12.2	1.5	52	2.7	27	415	3.0	22	4.9	41	475	2.2
12.9	2.1	47	2.5	24	310	2.1	30	4.5	36	355	1.5
13.6	2.0	48	1.8	27	418	2.4	29	3.3	41	477	1.8
14.3	1.6	62	1.9	28	375	1.5	24	3.5	43	429	1.1
15.0	1.8	53	2.6	31	411	1.9	26	4.8	48	471	1.4
15.7	1.4	56	2.1	27	403	1.6	21	3.9	41	461	1.1
16.4	1.5	46	2.5	31	389	3.1	21	4.5	47	445	2.2
17.1	1.7	56	4.0	34	390	2.4	25	7.3	53	446	1.8
17.8	1.2	56	1.9	32	383	2.2	17	3.5	49	438	1.6
18.5	1.4	56	2.6	33	403	2.3	20	4.8	50	461	1.6
19.2	1.6	47	2.0	25	380	2.0	22	3.7	38	434	1.4
19.9	1.1	51	1.5	29	429	1.7	16	2.7	44	490	1.3
20.6	0.807	46	1.8	28	365	1.3	12	3.4	43	417	0.977
21.3	1.2	57	1.8	29	397	2.5	18	3.3	44	454	1.8
22.0	1.3	46	7.6	31	352	2.0	18	14	47	402	1.5
22.6	1.1	51	1.5	29	368	2.4	16	2.8	44	420	1.7
23.3	1.6	44	1.4	28	365	2.0	22	2.5	42	417	1.4
24.0	1.5	54	1.1	32	370	2.0	22	2.0	48	423	1.5
24.7	1.4	52	1.1	31	354	2.6	20	2.0	48	405	1.9
25.4	2.2	48	0.822	34	425	2.3	32	1.5	52	486	1.7
26.1	1.7	39	1.2	27	387	2.7	25	2.3	42	442	2.0
26.8	1.4	53	1.3	30	376	2.7	20	2.4	47	430	2.0
27.5	1.8	55	1.2	33	396	2.1	26	2.1	51	452	1.5
28.2	1.4	41	0.967	40	374	3.0	20	1.8	62	428	2.2
28.9	1.2	38	0.955	28	347	2.2	18	1.7	43	397	1.6
29.6	1.9	48	1.2	31	408	3.2	28	2.2	47	467	2.4
30.3	2.0	55	1.5	35	407	3.3	29	2.7	54	466	2.4
31.0	1.8	50	0.639	39	347	3.1	26	1.2	60	397	2.3
31.7	1.0	42	1.0	38	392	1.9	15	1.9	58	449	1.4
32.4	1.6	39	1.1	27	404	2.9	23	2.0	42	462	2.1
33.1	1.8	56	1.2	39	439	3.0	26	2.2	59	502	2.2
33.8	1.7	48	0.974	35	364	2.1	25	1.8	54	416	1.5
34.5	1.3	50	1.1	44	386	2.6	19	2.0	68	442	1.9
35.2	1.0	35	1.0	29	347	3.7	15	1.9	45	397	2.7
35.9	1.8	47	0.835	27	377	2.4	26	1.5	41	431	1.8
36.6	1.9	50	0.741	29	342	2.6	27	1.4	44	391	1.9
37.3	1.5	52	0.886	40	448	3.1	22	1.6	61	512	2.2
38.0	1.1	47	1.0	36	399	2.5	15	1.9	55	456	1.8
38.7	1.2	37	0.923	30	300	2.3	18	1.7	47	343	1.7
39.4	1.5	38	0.693	32	346	2.2	21	1.3	49	396	1.6
40.1	2.2	42	0.948	32	343	2.0	32	1.7	50	392	1.5
40.8	1.3	46	1.2	36	323	1.8	18	2.2	56	370	1.3
41.5	1.2	36	0.705	32	339	2.6	17	1.3	50	387	1.9
42.2	0.917	37	1.0	37	336	2.1	13	1.9	57	385	1.6
42.9	1.9	40	1.1	38	345	2.5	27	1.9	58	395	1.8
43.6	1.4	38	0.823	34	349	2.3	20	1.5	52	399	1.7
44.3	1.3	39	1.3	48	395	3.2	18	2.4	73	452	2.3
45.0	1.2	40	0.896	37	308	2.5	17	1.6	57	352	1.9
45.7	1.4	32	0.772	34	303	2.1	20	1.4	52	346	1.5
46.4	1.7	34	0.867	35	333	2.5	25	1.6	54	381	1.8
47.1	1.5	36	1.0	36	416	3.0	21	1.8	55	475	2.2
47.8	2.0	44	0.805	39	338	2.3	28	1.5	60	386	1.7
48.5	1.3	38	1.2	43	378	2.2	18	2.1	65	433	1.6
49.1	1.1	34	0.850	35	315	1.7	15	1.5	54	361	1.2
49.8	1.7	40	0.713	35	313	2.3	24	1.3	54	357	1.7
50.5	0.891	38	0.796	36	324	2.0	13	1.5	55	370	1.4
51.2	1.6	34	1.0	35	369	2.2	23	1.8	53	422	1.6
51.9	1.5	38	0.683	36	293	1.4	21	1.2	56	335	0.995
52.6	2.0	38	0.674	29	353	2.4	29	1.2	44	403	1.7
53.3	1.6	35	0.967	45	385	2.6	23	1.8	68	441	1.9
54.0	2.0	38	0.946	38	342	2.7	29	1.7	58	391	2.0
54.7	1.7	39	0.767	45	328	4.2	25	1.4	68	375	3.1
55.4	1.2	31	0.489	42	293	2.2	18	0.892	64	335	1.6
56.1	1.9	35	0.699	38	268	2.6	27	1.3	58	306	1.9

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
56.8	2.0	30	0.922	46	314	3.8	29	1.7	70	359	2.7
57.5	1.1	35	0.858	62	412	2.8	15	1.6	94	471	2.1
58.2	1.4	33	0.979	39	333	2.7	20	1.8	60	381	2.0
58.9	1.1	37	1.2	54	449	2.9	16	2.2	83	514	2.1
59.6	1.4	32	1.0	43	370	2.8	20	1.9	67	423	2.1
60.3	1.6	41	0.782	48	342	2.2	23	1.4	74	391	1.6
61.0	1.7	31	0.817	48	357	3.0	25	1.5	74	408	2.2
61.7	0.778	39	0.848	50	333	3.7	11	1.5	76	380	2.7
62.4	0.883	28	0.833	50	375	2.1	13	1.5	77	428	1.5
63.1	2.1	30	0.949	48	345	2.8	31	1.7	73	394	2.1
63.8	1.8	33	1.2	54	359	3.1	25	2.2	83	410	2.3
64.5	2.9	40	1.0	49	369	2.6	42	1.8	75	422	1.9
65.2	1.2	32	0.719	50	345	2.6	17	1.3	77	394	1.9
65.9	1.1	27	0.773	47	317	2.0	15	1.4	72	362	1.4
66.6	1.2	25	1.2	40	308	2.1	17	2.3	62	352	1.6
67.3	1.5	29	0.963	46	317	1.8	22	1.8	70	363	1.3
68.0	1.2	31	0.772	56	370	2.8	17	1.4	86	424	2.0
68.7	1.3	25	0.719	44	268	2.4	19	1.3	68	307	1.8
69.4	1.5	26	0.765	41	412	3.1	22	1.4	63	471	2.3
70.1	0.578	26	0.804	47	338	2.5	8.3	1.5	72	386	1.8
70.8	1.3	36	0.952	47	338	3.5	18	1.7	71	386	2.5
71.5	1.4	29	0.855	59	355	2.9	20	1.6	91	406	2.1
72.2	1.8	32	0.755	62	355	2.3	26	1.4	95	406	1.7
72.9	1.7	29	1.1	52	438	2.9	25	1.9	79	501	2.1
73.6	2.1	29	1.0	57	396	4.6	31	1.9	87	453	3.4
74.3	1.2	35	0.676	43	245	1.9	17	1.2	66	280	1.4
74.9	1.5	26	0.877	49	313	2.0	22	1.6	75	358	1.5
75.6	1.7	25	0.881	52	323	3.0	24	1.6	80	369	2.2
76.3	1.0	22	0.735	50	342	3.3	15	1.3	76	391	2.4
77.0	1.9	32	0.981	55	422	1.7	28	1.8	84	483	1.2
77.7	1.5	25	0.985	57	381	3.8	21	1.8	87	435	2.8
78.4	1.1	27	0.927	57	371	3.4	16	1.7	87	424	2.4
79.1	1.4	19	0.921	46	304	2.9	20	1.7	71	347	2.1
79.8	1.2	22	0.733	59	364	2.6	17	1.3	91	416	1.9
80.5	1.7	27	0.926	59	340	2.6	25	1.7	90	389	1.9
81.2	0.950	26	0.943	50	333	3.2	14	1.7	77	381	2.4
81.9	0.803	25	1.000	52	244	2.3	12	1.8	79	279	1.6
82.6	1.0	20	0.976	58	356	2.7	15	1.8	89	407	2.0
83.3	1.2	24	1.1	62	358	3.3	18	2.0	96	409	2.4
84.0	1.7	26	0.980	61	334	3.7	25	1.8	93	382	2.7
84.7	1.3	23	1.1	75	357	2.8	19	2.0	114	408	2.0
85.4	1.3	20	0.854	58	312	2.9	18	1.6	89	357	2.1
86.1	1.6	26	1.2	56	333	2.6	23	2.2	85	381	1.9
86.8	1.6	24	0.721	53	279	3.5	23	1.3	81	320	2.5
87.5	1.4	17	1.1	50	311	2.6	20	2.0	77	355	1.9
88.2	1.4	19	1.0	60	291	1.8	21	1.9	91	333	1.3
88.9	1.4	19	0.957	62	328	3.2	20	1.7	95	375	2.3
89.6	1.1	20	1.3	55	320	3.5	16	2.3	85	366	2.6
90.3	1.3	23	1.0	59	271	2.7	18	1.9	90	310	2.0
91.0	0.764	21	0.954	62	345	2.5	11	1.7	95	394	1.8
91.7	0.905	20	1.4	53	329	3.1	13	2.5	81	376	2.3
92.4	1.2	19	0.809	54	332	3.6	17	1.5	83	379	2.6
93.1	0.705	18	0.970	56	281	1.9	10	1.8	86	321	1.4
93.8	1.0	17	1.2	60	314	2.5	15	2.3	92	359	1.8
94.5	0.975	18	1.0	49	290	2.1	14	1.9	75	331	1.5
95.2	0.869	17	0.848	70	348	3.9	13	1.5	107	398	2.8
95.9	0.874	19	1.1	64	331	3.7	13	2.0	97	379	2.7
96.6	1.3	23	0.886	56	353	2.9	18	1.6	85	403	2.1
97.3	1.0	18	1.2	67	325	2.8	15	2.1	103	372	2.0
98.0	1.7	17	1.2	55	300	2.2	24	2.2	84	343	1.6
98.7	1.9	19	1.1	60	350	3.4	27	2.0	92	401	2.5
99.4	1.3	20	0.902	68	424	2.8	19	1.6	105	485	2.1
100.1	1.4	17	1.0	67	338	3.6	21	1.9	102	387	2.6
100.8	1.2	19	1.2	66	380	3.4	17	2.2	101	435	2.5
101.4	1.1	21	0.839	68	382	3.3	16	1.5	103	436	2.4
102.1	1.7	22	0.797	52	236	2.7	25	1.5	80	270	2.0
102.8	1.7	21	0.983	68	309	2.8	25	1.8	104	354	2.0
103.5	0.586	18	0.918	65	321	3.2	8.5	1.7	99	367	2.3
104.2	1.4	15	0.680	54	278	1.6	20	1.2	83	318	1.1
104.9	1.3	16	0.707	70	309	3.1	19	1.3	108	353	2.3
105.6	1.4	21	0.937	57	306	3.0	21	1.7	88	350	2.2
106.3	1.1	16	1.0	67	342	2.3	16	1.9	103	391	1.7
107.0	1.3	15	1.1	59	274	2.5	18	2.0	91	313	1.9
107.7	1.2	14	1.4	68	369	4.0	18	2.5	104	421	2.9
108.4	0.843	20	0.656	62	342	3.2	12	1.2	96	391	2.3
109.1	1.0	16	0.756	56	234	1.9	15	1.4	86	268	1.4
109.8	1.5	23	0.891	66	262	2.6	22	1.6	101	300	1.9
110.5	1.5	19	1.0	74	362	3.2	21	1.8	113	414	2.3
111.2	0.747	18	0.911	64	379	3.5	11	1.7	99	433	2.5
111.9	1.5	18	0.670	77	402	2.7	22	1.2	118	459	1.9
112.6	0.988	17	0.698	63	302	3.4	14	1.3	96	345	2.5

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
113.3	1.2	18	1.0	75	345	2.6	17	1.9	114	395	1.9
114.0	1.3	16	1.0	58	263	2.1	19	1.8	89	301	1.6
114.7	1.0	17	0.855	63	327	2.4	15	1.6	97	374	1.8
115.4	1.1	17	0.935	66	298	2.6	15	1.7	101	341	1.9
116.1	0.987	17	0.964	59	270	2.3	14	1.8	90	309	1.7
116.8	1.1	20	1.1	77	378	3.2	17	2.0	118	432	2.3
117.5	0.865	16	0.895	65	292	3.0	12	1.6	100	334	2.2
118.2	0.957	14	0.930	64	329	3.2	14	1.7	99	376	2.4
118.9	1.3	19	0.991	52	247	2.1	19	1.8	80	282	1.5
119.6	1.7	16	0.747	63	268	1.9	24	1.4	96	306	1.4
120.3	0.944	17	0.990	63	269	2.8	14	1.8	96	308	2.0
121.0	0.776	16	0.925	61	332	3.3	11	1.7	93	380	2.4
121.7	1.7	17	0.762	55	287	2.7	25	1.4	85	328	2.0
122.4	1.6	17	0.937	71	368	2.7	23	1.7	109	421	1.9
123.1	1.4	18	0.858	64	284	2.6	20	1.6	99	325	1.9
123.8	1.7	19	1.3	62	272	3.1	24	2.4	95	311	2.3
124.5	1.3	17	0.905	62	318	2.2	19	1.7	94	363	1.6
125.2	1.0	16	0.995	67	266	2.5	15	1.8	102	304	1.8
125.9	0.950	17	1.0	69	281	2.6	14	1.9	105	321	1.9
126.6	1.2	14	0.776	76	287	3.7	17	1.4	117	328	2.7
127.2	1.3	14	0.828	50	223	2.1	18	1.5	77	255	1.5
127.9	1.4	20	0.905	71	270	2.3	20	1.7	109	308	1.7
128.6	1.8	19	0.926	59	274	3.1	26	1.7	90	313	2.2
129.3	1.1	18	1.2	70	355	3.8	16	2.3	107	406	2.7
130.0	0.939	17	0.916	64	349	3.8	14	1.7	98	399	2.7
130.7	2.0	15	0.810	63	303	2.2	28	1.5	96	346	1.6
131.4	1.6	19	0.850	71	304	2.4	23	1.6	109	348	1.8
132.1	0.807	19	0.959	73	323	4.6	12	1.7	112	370	3.3
132.8	1.6	15	0.848	62	269	2.9	23	1.5	96	307	2.1
133.5	1.4	16	1.0	68	301	3.1	20	1.9	104	344	2.2
134.2	1.1	16	0.875	63	254	4.1	16	1.6	96	291	3.0
134.9	0.842	15	0.836	66	268	2.2	12	1.5	101	306	1.6
135.6	0.651	18	0.997	49	235	1.4	9.4	1.8	75	269	1.0
136.3	0.973	18	1.2	69	323	3.9	14	2.1	106	369	2.8
137.0	0.885	16	0.798	64	249	2.7	13	1.5	99	285	2.0
137.7	0.484	15	1.2	58	310	3.2	7.0	2.2	90	355	2.3
138.4	0.956	18	1.1	65	317	3.7	14	1.9	99	363	2.7
139.1	1.2	18	0.796	59	330	3.0	18	1.5	90	377	2.2
139.8	1.8	15	0.739	61	302	3.4	26	1.3	94	345	2.5
140.5	1.6	19	1.0	71	300	3.5	23	1.9	109	343	2.6
141.2	1.5	18	0.737	54	228	1.5	21	1.3	83	261	1.1
141.9	1.6	18	1.1	76	348	2.7	23	2.0	117	398	2.0
142.6	1.0	16	0.821	63	263	1.8	15	1.5	96	301	1.3
143.3	1.1	18	0.973	76	371	3.1	16	1.8	116	424	2.3
144.0	0.890	13	1.0	62	298	1.6	13	1.9	94	340	1.2
144.7	1.1	19	1.1	64	308	2.4	16	2.1	99	352	1.7
145.4	2.1	15	0.976	61	314	3.2	30	1.8	94	359	2.4
146.1	1.0	20	0.810	68	304	2.7	14	1.5	104	347	2.0
146.8	1.1	13	1.0	59	237	2.6	15	1.9	91	271	1.9
147.5	0.813	15	0.652	69	379	2.9	12	1.2	106	433	2.1
148.2	1.5	18	1.0	56	233	1.8	22	1.9	87	267	1.3
148.9	1.2	14	0.892	70	280	2.7	17	1.6	107	320	1.9
149.6	0.964	17	0.924	56	296	3.1	14	1.7	87	338	2.3
150.3	0.815	18	0.971	64	292	4.8	12	1.8	98	334	3.5
151.0	2.1	21	0.803	69	297	2.8	30	1.5	106	340	2.0
151.7	0.714	14	0.912	52	241	2.1	10	1.7	80	276	1.5
152.4	1.5	15	0.848	67	350	4.2	21	1.5	103	400	3.1
153.0	1.3	15	0.975	66	280	3.2	18	1.8	102	321	2.3
153.7	2.0	20	0.829	55	286	2.7	29	1.5	85	327	2.0
154.4	1.2	13	0.973	70	333	4.0	18	1.8	107	381	2.9
155.1	1.8	16	1.0	62	244	3.5	26	1.9	95	279	2.5
155.8	1.1	14	0.995	75	403	4.2	16	1.8	115	460	3.1
156.5	1.9	18	0.955	48	250	2.6	27	1.7	73	286	1.9
157.2	1.2	18	0.974	62	330	3.0	17	1.8	95	377	2.2
157.9	1.7	15	1.0	52	266	2.4	25	1.9	80	304	1.7
158.6	1.1	15	0.903	46	264	3.5	16	1.6	71	301	2.5
159.3	1.3	17	1.2	69	329	2.0	18	2.2	106	376	1.5
160.0	1.1	15	1.3	64	273	2.4	15	2.4	98	312	1.8
160.7	1.1	17	0.806	56	239	2.7	16	1.5	86	274	2.0
161.4	1.2	12	1.1	64	325	2.7	17	2.0	98	372	2.0
162.1	1.3	16	1.2	52	278	2.1	19	2.1	80	318	1.6
162.8	1.6	13	0.923	72	258	3.2	22	1.7	111	295	2.3
163.5	1.3	15	0.863	70	315	3.4	19	1.6	107	360	2.5
164.2	1.4	16	0.945	58	259	2.1	21	1.7	88	296	1.5
164.9	1.5	16	0.708	60	242	2.4	22	1.3	92	276	1.8
165.6	0.969	17	1.2	67	281	3.1	14	2.2	102	321	2.3
166.3	0.930	16	0.986	58	292	2.5	13	1.8	90	333	1.8
167.0	1.1	15	0.795	52	239	2.4	15	1.5	80	273	1.7
167.7	1.1	19	0.813	68	201	1.7	16	1.5	104	230	1.2
168.4	1.1	12	0.994	70	319	1.8	16	1.8	107	365	1.3
169.1	1.6	19	0.510	63	240	2.9	22	0.931	96	275	2.1

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
169.8	1.3	14	0.854	69	331	4.4	19	1.6	105	378	3.2
170.5	1.5	17	0.790	59	270	2.3	21	1.4	90	309	1.7
171.2	1.8	16	0.888	53	240	2.7	25	1.6	82	275	1.9
171.9	1.5	17	1.1	66	285	2.6	22	2.0	101	326	1.9
172.6	1.6	16	1.0	58	308	2.9	24	1.9	89	352	2.1
173.3	1.1	18	0.721	57	265	1.7	16	1.3	87	304	1.2
174.0	1.5	17	0.656	52	192	1.8	21	1.2	79	219	1.3
174.7	1.6	15	0.664	59	295	2.5	23	1.2	90	337	1.8
175.4	1.0	18	0.969	59	275	3.6	15	1.8	91	314	2.6
176.1	1.1	16	0.448	67	306	2.9	16	0.817	103	350	2.1
176.8	2.1	15	0.918	61	307	2.5	30	1.7	94	351	1.9
177.5	0.870	17	0.703	55	285	1.9	13	1.3	84	326	1.4
178.2	1.2	14	0.531	59	231	2.2	18	0.968	90	264	1.6
178.8	0.982	18	0.838	57	269	2.7	14	1.5	88	308	1.9
179.5	1.1	17	1.0	60	263	3.3	16	1.9	92	301	2.4
180.2	1.2	21	1.2	67	328	2.7	17	2.2	102	375	2.0
180.9	2.1	18	0.704	52	239	1.5	30	1.3	79	273	1.1
181.6	1.6	16	0.672	56	257	1.6	24	1.2	85	294	1.1
182.3	1.2	20	0.790	52	280	2.0	18	1.4	80	320	1.5
183.0	1.4	16	0.535	50	251	1.9	20	0.975	76	287	1.4
183.7	0.873	17	0.701	62	251	2.3	13	1.3	94	288	1.6
184.4	1.0	17	1.0	59	354	3.3	15	1.9	90	405	2.4
185.1	1.0	20	0.726	54	259	2.7	15	1.3	82	296	2.0
185.8	1.1	20	0.926	64	271	2.0	16	1.7	98	310	1.4
186.5	1.5	20	0.756	63	331	2.8	21	1.4	97	379	2.0
187.2	1.1	16	0.898	56	276	1.9	16	1.6	86	315	1.4
187.9	1.2	22	0.766	56	280	2.7	18	1.4	85	320	2.0
188.6	0.978	18	0.809	60	275	2.8	14	1.5	91	315	2.0
189.3	1.4	18	1.1	57	251	2.1	21	2.0	87	287	1.5
190.0	1.4	19	0.753	57	250	2.7	21	1.4	88	285	2.0
190.7	1.2	17	0.569	54	255	2.0	17	1.0	83	292	1.5
191.4	1.1	20	0.986	61	240	1.7	16	1.8	93	275	1.3
192.1	1.2	16	0.575	52	232	2.0	17	1.0	80	266	1.4
192.8	1.5	20	0.898	64	241	2.0	21	1.6	98	275	1.5
193.5	0.626	13	0.894	51	192	1.7	9.0	1.6	79	219	1.2
194.2	0.886	14	0.907	61	310	3.4	13	1.7	93	355	2.5
194.9	0.599	17	0.938	49	221	3.1	8.6	1.7	75	253	2.2
195.6	0.944	16	0.747	56	281	2.2	14	1.4	86	321	1.6
196.3	1.0	16	1.0	42	243	1.8	15	1.9	65	278	1.3
197.0	0.976	17	1.0	47	209	1.9	14	1.8	72	238	1.4
197.7	0.921	16	0.572	50	301	1.9	13	1.0	77	345	1.4
198.4	1.7	19	0.619	49	242	1.4	24	1.1	75	277	1.0
199.1	1.3	19	0.796	50	274	1.9	19	1.5	76	314	1.4
199.8	1.2	18	0.826	47	256	1.4	18	1.5	71	293	1.0
200.5	1.3	13	0.792	53	239	2.6	19	1.4	82	273	1.9
201.2	0.987	15	0.913	54	274	1.8	14	1.7	83	313	1.3
201.9	0.744	15	0.714	54	260	1.9	11	1.3	83	297	1.4
202.6	0.926	14	0.938	65	288	1.4	13	1.7	100	330	0.992
203.3	1.0	15	0.771	53	234	2.0	15	1.4	81	268	1.4
204.0	1.0	15	0.586	56	297	2.6	15	1.1	86	339	1.9
204.7	1.3	17	0.637	57	303	2.0	18	1.2	88	347	1.5
205.3	1.1	16	0.770	56	284	1.5	16	1.4	86	325	1.1
206.0	0.958	17	0.772	50	261	2.4	14	1.4	77	298	1.8
206.7	0.923	13	0.709	53	255	1.5	13	1.3	81	292	1.1
207.4	1.5	14	0.920	54	277	2.6	22	1.7	83	317	1.9
208.1	1.4	19	0.655	53	284	1.8	21	1.2	82	325	1.3
208.8	1.2	14	0.984	61	263	2.1	18	1.8	94	301	1.6
209.5	0.999	20	0.597	57	244	1.6	14	1.1	87	279	1.2
210.2	1.1	16	0.996	57	270	1.9	15	1.8	87	308	1.4
210.9	1.3	17	1.1	62	271	2.5	19	2.0	95	310	1.8
211.6	1.0	15	0.916	51	290	2.5	15	1.7	78	331	1.8
212.3	1.3	16	0.849	42	181	1.9	18	1.5	65	207	1.4
213.0	1.2	16	1.0	60	258	3.1	17	1.8	91	296	2.2
213.7	0.892	17	0.835	50	224	2.1	13	1.5	76	256	1.5
214.4	1.0	16	0.656	51	205	2.1	15	1.2	79	234	1.5
215.1	1.5	16	0.698	52	265	2.4	21	1.3	80	303	1.8
215.8	0.900	18	0.686	45	226	1.8	13	1.3	69	259	1.3
216.5	0.920	14	0.656	58	297	2.1	13	1.2	89	340	1.5
217.2	0.748	13	0.638	47	228	2.0	11	1.2	72	260	1.5
217.9	1.0	16	0.590	58	275	1.7	15	1.1	89	314	1.2
218.6	1.4	15	0.773	50	221	1.1	20	1.4	76	253	0.834
219.3	0.997	14	0.899	51	263	2.2	14	1.6	78	301	1.6
220.0	1.8	18	0.586	58	288	2.6	27	1.1	89	329	1.9
220.7	0.669	16	0.815	59	335	2.6	9.7	1.5	91	383	1.9
221.4	1.3	17	0.806	52	222	1.5	18	1.5	80	254	1.1
222.1	1.1	14	0.609	59	260	1.5	15	1.1	91	297	1.1
222.8	0.863	13	0.589	47	307	2.4	12	1.1	72	351	1.8
223.5	1.1	13	0.622	52	232	2.3	15	1.1	80	265	1.7
224.2	1.7	16	0.703	57	349	2.2	24	1.3	88	399	1.6
224.9	1.1	18	0.758	59	239	1.8	16	1.4	90	273	1.3
225.6	1.6	15	0.635	46	258	1.5	23	1.2	71	295	1.1

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
226.3	0.618	17	0.908	56	302	2.2	8.9	1.7	86	346	1.6
227.0	2.1	19	0.849	54	287	1.9	31	1.5	83	329	1.4
227.7	0.722	15	0.803	52	237	2.3	10	1.5	80	271	1.7
228.4	0.567	13	0.841	58	262	2.1	8.2	1.5	88	299	1.5
229.1	0.522	20	0.985	57	232	1.6	7.5	1.8	88	265	1.1
229.8	1.6	16	0.785	58	232	1.8	24	1.4	88	265	1.3
230.5	0.707	16	0.941	61	295	1.6	10	1.7	94	337	1.1
231.2	1.2	15	0.639	50	255	1.7	17	1.2	77	291	1.2
231.8	1.5	19	0.718	52	261	2.0	21	1.3	79	298	1.5
232.5	0.761	16	1.0	71	337	2.3	11	1.9	108	385	1.7
233.2	1.1	13	0.668	47	239	2.4	16	1.2	72	274	1.7
233.9	1.6	15	0.728	61	311	2.2	23	1.3	93	355	1.6
234.6	1.6	14	0.798	51	231	1.1	23	1.5	78	264	0.819
235.3	0.869	15	0.789	66	298	2.2	13	1.4	101	340	1.6
236.0	0.901	16	0.891	62	310	1.7	13	1.6	94	355	1.3
236.7	0.826	15	1.3	56	312	2.3	12	2.3	85	356	1.7
237.4	0.962	21	0.880	56	257	1.6	14	1.6	85	294	1.2
238.1	1.1	12	0.980	58	291	2.1	16	1.8	89	332	1.5
238.8	0.722	15	0.831	44	203	0.959	10	1.5	67	232	0.699
239.5	0.993	14	0.629	55	332	2.6	14	1.1	84	380	1.9
240.2	1.1	13	0.528	44	202	1.3	15	0.964	68	230	0.944
240.9	1.2	20	1.0	62	310	3.0	18	1.8	95	354	2.2
241.6	1.6	15	0.788	57	232	1.9	23	1.4	87	265	1.4
242.3	0.561	14	0.722	46	194	1.6	8.1	1.3	71	221	1.2
243.0	0.393	14	1.0	52	254	1.1	5.7	1.8	80	290	0.830
243.7	1.6	14	0.750	44	300	1.7	24	1.4	68	343	1.2
244.4	1.2	13	0.535	39	231	1.1	17	0.976	60	264	0.777
245.1	1.1	14	0.611	53	229	1.8	17	1.1	82	262	1.3
245.8	0.623	11	0.715	57	269	1.3	9.0	1.3	87	308	0.982
246.5	1.3	15	0.620	41	264	3.3	19	1.1	63	301	2.4
247.2	1.2	14	0.774	48	255	1.5	17	1.4	74	292	1.1
247.9	0.981	15	0.423	44	268	1.6	14	0.772	67	307	1.2
248.6	1.3	14	1.1	58	290	2.0	19	1.9	89	331	1.5
249.3	1.8	14	0.860	37	227	2.1	26	1.6	57	259	1.5
250.0	2.1	13	0.541	48	272	1.5	30	0.987	74	311	1.1
250.7	0.592	15	1.1	53	297	1.9	8.6	2.1	81	340	1.4
251.4	0.393	16	0.819	62	286	2.0	5.7	1.5	96	327	1.5
252.1	1.0	15	0.767	50	261	2.4	15	1.4	77	298	1.8
252.8	1.5	13	0.734	46	218	1.6	22	1.3	71	250	1.2
253.5	1.4	20	1.2	49	303	2.6	21	2.1	75	346	1.9
254.2	0.965	15	0.862	52	336	2.4	14	1.6	80	385	1.8
254.9	1.2	13	0.585	43	194	1.8	17	1.1	66	221	1.3
255.6	0.663	13	0.761	58	290	1.7	9.6	1.4	90	332	1.3
256.3	1.0	14	0.900	47	246	2.0	15	1.6	72	281	1.4
256.9	0.774	15	0.922	46	233	1.7	11	1.7	70	267	1.3
257.6	1.0	15	0.597	43	249	1.6	15	1.1	66	285	1.2
258.3	1.5	14	0.773	43	285	2.3	21	1.4	66	326	1.7
259.0	0.407	14	0.580	57	282	2.2	5.9	1.1	88	323	1.6
259.7	0.962	12	0.835	37	202	1.9	14	1.5	57	231	1.4
260.4	0.830	13	0.667	48	327	1.8	12	1.2	74	374	1.3
261.1	0.954	13	0.873	41	216	1.8	14	1.6	63	247	1.3
261.8	1.2	13	0.485	56	266	2.1	17	0.884	86	304	1.5
262.5	1.6	14	0.807	39	205	1.2	22	1.5	60	235	0.871
263.2	1.3	15	0.693	48	242	1.6	18	1.3	73	277	1.2
263.9	1.2	11	0.872	49	313	1.7	17	1.6	75	358	1.2
264.6	1.2	15	0.974	47	287	2.6	17	1.8	73	329	1.9
265.3	0.668	16	0.788	58	316	1.8	9.6	1.4	88	361	1.3
266.0	1.4	14	0.864	49	232	1.5	20	1.6	76	266	1.1
266.7	1.0	15	0.564	43	260	2.6	15	1.0	66	298	1.9
267.4	1.5	12	0.815	45	277	2.0	22	1.5	68	317	1.5
268.1	1.8	14	0.608	45	254	1.4	26	1.1	70	291	1.0
268.8	1.3	13	0.855	47	195	2.0	18	1.6	72	223	1.4
269.5	0.793	15	0.612	51	246	1.5	11	1.1	78	281	1.1
270.2	0.773	15	0.663	47	296	1.9	11	1.2	72	339	1.4
270.9	1.6	13	0.921	52	246	1.6	22	1.7	79	281	1.2
271.6	1.0	14	0.891	60	299	2.9	15	1.6	92	342	2.1
272.3	0.565	15	1.0	64	352	2.3	8.2	1.9	99	402	1.7
273.0	1.2	16	0.683	41	212	2.3	17	1.2	63	242	1.7
273.7	0.564	9.9	0.805	38	219	1.7	8.1	1.5	59	250	1.2
274.4	1.2	18	0.727	49	241	1.2	18	1.3	75	275	0.863
275.1	1.4	13	0.522	50	266	2.3	20	0.953	76	304	1.7
275.8	1.7	14	0.990	45	244	2.0	24	1.8	70	279	1.5
276.5	0.893	16	0.866	49	297	2.0	13	1.6	75	339	1.4
277.2	1.0	13	0.598	54	341	2.0	15	1.1	83	390	1.5
277.9	0.961	14	0.884	41	268	1.0	14	1.6	63	307	0.759
278.6	1.2	13	0.889	49	233	1.2	18	1.6	75	266	0.850
279.3	0.840	13	0.655	48	230	1.5	12	1.2	74	263	1.1
280.0	0.998	12	0.609	46	221	1.2	14	1.1	70	253	0.890
280.7	0.979	14	0.829	41	190	2.1	14	1.5	62	217	1.5
281.4	1.0	15	0.588	47	233	1.3	15	1.1	72	267	0.920
282.1	0.892	13	0.427	48	181	1.7	13	0.779	74	207	1.3

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
282.8	0.786	13	0.575	55	288	2.9	11	1.0	85	330	2.1
283.5	1.0	13	0.666	41	230	1.8	15	1.2	63	263	1.3
284.1	1.5	16	0.563	47	262	1.6	22	1.0	73	299	1.1
284.8	1.3	17	1.0	50	241	1.9	18	1.8	77	276	1.4
285.5	0.720	14	0.470	46	220	1.9	10	0.857	71	252	1.4
286.2	1.1	11	0.962	43	275	2.3	15	1.8	66	315	1.7
286.9	0.607	12	0.544	48	266	1.7	8.8	0.993	73	305	1.3
287.6	0.803	12	0.791	40	190	0.832	12	1.4	61	217	0.607
288.3	1.7	13	0.616	53	298	2.7	24	1.1	81	341	2.0
289.0	1.0	13	0.927	55	303	2.2	15	1.7	84	346	1.6
289.7	0.776	16	0.765	49	229	1.8	11	1.4	75	262	1.3
290.4	1.2	15	1.1	47	269	2.4	18	2.0	72	307	1.7
291.1	1.3	17	0.656	48	321	2.1	19	1.2	74	367	1.5
291.8	1.2	14	0.910	43	219	1.8	17	1.7	66	251	1.3
292.5	0.666	16	0.726	46	235	1.0	9.6	1.3	70	268	0.761
293.2	1.1	13	0.648	42	242	1.1	16	1.2	65	277	0.769
293.9	1.3	13	0.532	46	255	2.1	19	0.971	70	291	1.5
294.6	0.775	16	0.926	48	232	1.7	11	1.7	73	265	1.2
295.3	1.7	15	0.768	45	256	2.4	25	1.4	70	292	1.8
296.0	1.2	16	0.911	57	318	1.9	17	1.7	88	364	1.4
296.7	0.515	14	0.587	45	301	1.5	7.4	1.1	68	344	1.1
297.4	0.971	14	0.715	43	225	0.991	14	1.3	65	257	0.723
298.1	1.6	14	0.728	54	297	1.9	23	1.3	83	340	1.4
298.8	1.4	17	0.906	61	284	1.8	20	1.7	93	325	1.3
299.5	1.2	13	0.769	43	257	0.875	18	1.4	67	294	0.638
300.2	1.1	15	0.695	47	242	1.6	16	1.3	72	277	1.2
300.9	1.2	16	0.695	51	306	1.5	17	1.3	77	350	1.1
301.6	0.743	18	1.0	57	324	1.2	11	1.9	87	370	0.858
302.3	1.2	15	0.936	46	214	1.4	17	1.7	70	245	1.1
303.0	1.3	16	0.767	46	287	0.470	18	1.4	71	329	0.343
303.7	0.728	11	1.0	53	285	1.5	11	1.9	80	326	1.1
304.4	1.6	15	1.1	50	265	1.1	23	1.9	77	303	0.774
305.1	1.8	15	0.680	40	215	1.1	26	1.2	61	246	0.808
305.8	1.4	15	0.789	55	251	2.1	20	1.4	84	288	1.6
306.5	0.829	14	0.647	53	279	1.1	12	1.2	81	319	0.786
307.2	1.2	13	0.993	44	247	0.816	17	1.8	68	283	0.595
307.9	1.3	16	0.821	42	285	1.4	19	1.5	65	326	1.0
308.6	0.613	14	0.707	44	212	0.784	8.8	1.3	67	242	0.572
309.3	1.2	16	0.884	56	244	1.5	17	1.6	85	279	1.1
309.9	0.420	14	0.688	50	303	1.3	6.1	1.3	77	346	0.954
310.6	0.708	15	0.624	44	242	0.896	10	1.1	68	276	0.654
311.3	1.4	12	0.521	52	255	0.868	21	0.950	79	291	0.633
312.0	1.4	12	0.825	54	276	1.5	20	1.5	82	316	1.1
312.7	1.2	17	0.945	44	245	0.912	17	1.7	68	280	0.665
313.4	1.4	12	0.797	46	234	0.619	20	1.5	71	267	0.451
314.1	0.932	13	0.625	42	235	0.925	13	1.1	64	268	0.675
314.8	0.768	14	0.937	46	258	0.796	11	1.7	71	295	0.581
315.5	1.6	16	0.796	55	263	2.0	23	1.5	84	301	1.5
316.2	0.924	13	0.637	49	262	1.3	13	1.2	75	300	0.964
316.9	0.707	11	0.863	44	266	0.794	10	1.6	67	305	0.579
317.6	1.3	16	0.844	46	281	1.2	19	1.5	71	321	0.888
318.3	1.3	17	0.634	43	249	1.2	18	1.2	66	284	0.906
319.0	1.1	19	0.886	48	248	1.4	15	1.6	73	284	1.0
319.7	1.6	17	0.882	55	258	0.612	23	1.6	85	295	0.446
320.4	0.986	13	0.962	53	273	1.2	14	1.8	81	312	0.857
321.1	1.2	13	0.833	50	317	1.2	17	1.5	77	363	0.873
321.8	1.4	17	0.552	55	290	1.3	21	1.0	84	331	0.930
322.5	1.1	15	0.811	43	228	1.2	16	1.5	65	261	0.853
323.2	0.748	11	0.711	42	228	0.971	11	1.3	64	261	0.709
323.9	1.0	11	0.593	46	224	1.0	15	1.1	71	257	0.744
324.6	0.769	16	0.978	49	236	0.974	11	1.8	76	270	0.711
325.3	1.3	16	0.871	53	244	1.3	18	1.6	81	279	0.915
326.0	1.3	15	0.734	49	325	1.1	18	1.3	76	372	0.767
326.7	0.534	13	0.725	46	295	1.6	7.7	1.3	71	337	1.2
327.4	1.1	15	0.711	47	244	1.6	15	1.3	72	279	1.2
328.1	1.4	18	0.728	56	247	1.7	21	1.3	87	283	1.2
328.8	0.951	15	1.2	59	317	1.8	14	2.1	90	363	1.3
329.5	0.393	15	0.661	36	276	0.652	5.7	1.2	56	316	0.476
330.2	1.1	14	0.849	43	292	0.942	16	1.5	66	334	0.687
330.9	0.966	15	0.689	43	288	0.966	14	1.3	66	330	0.705
331.6	0.913	16	0.840	44	263	0.653	13	1.5	68	301	0.476
332.3	0.565	17	0.606	53	317	0.937	8.2	1.1	81	362	0.684
333.0	0.965	14	0.965	50	329	1.8	14	1.8	76	376	1.3
333.7	0.540	13	0.843	47	255	0.547	7.8	1.5	72	291	0.399
334.4	0.827	13	0.665	45	254	1.2	12	1.2	70	291	0.903
335.1	1.5	14	0.716	50	272	1.2	21	1.3	76	311	0.843
335.8	1.2	13	0.835	53	308	0.976	18	1.5	81	352	0.712
336.4	0.748	13	0.757	40	214	0.840	11	1.4	61	245	0.613
337.1	0.393	14	0.449	42	222	1.2	5.7	0.819	65	254	0.902
337.8	0.590	15	0.840	44	292	0.988	8.5	1.5	67	334	0.720
338.5	0.670	15	0.902	55	296	1.7	9.7	1.6	84	339	1.3

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
339.2	0.714	13	0.704	41	251	0.740	10	1.3	63	287	0.540
339.9	1.8	14	0.783	38	255	1.2	26	1.4	58	292	0.868
340.6	1.3	14	0.785	40	251	0.871	18	1.4	62	287	0.636
341.3	0.786	15	0.632	41	207	1.4	11	1.2	62	237	1.1
342.0	1.1	15	0.868	47	260	1.8	16	1.6	72	297	1.3
342.7	0.420	14	0.799	41	262	1.2	6.1	1.5	63	300	0.862
343.4	0.782	14	0.669	37	250	1.8	11	1.2	57	286	1.3
344.1	0.884	15	0.797	38	227	0.670	13	1.5	59	259	0.488
344.8	1.5	14	0.530	51	313	1.0	21	0.966	78	358	0.747
345.5	0.981	17	0.898	41	207	0.664	14	1.6	63	237	0.485
346.2	0.876	16	0.962	42	238	1.7	13	1.8	64	273	1.2
346.9	0.868	12	0.984	39	262	0.924	13	1.8	60	299	0.674
347.6	0.710	13	0.710	35	213	0.538	10	1.3	53	243	0.392
348.3	0.907	14	0.793	46	231	0.741	13	1.4	71	265	0.541
349.0	1.2	15	0.625	42	241	0.411	18	1.1	65	276	0.300
349.7	0.810	11	0.608	38	209	1.3	12	1.1	58	239	0.936
350.4	0.949	13	0.523	43	234	1.3	14	0.954	66	268	0.968
351.1	1.1	15	0.574	40	226	1.3	15	1.0	62	258	0.968
351.8	0.666	13	0.903	36	238	1.1	9.6	1.6	55	272	0.825
352.5	0.418	14	1.1	34	245	1.5	6.0	2.0	52	280	1.1
353.2	0.469	14	0.613	41	240	0.972	6.8	1.1	63	274	0.709
353.9	0.478	13	0.871	46	292	0.991	6.9	1.6	70	334	0.723
354.6	0.728	15	0.888	43	218	1.1	11	1.6	66	250	0.795
355.3	0.743	16	1.0	41	252	1.1	11	1.9	63	288	0.787
356.0	0.393	13	1.0	41	294	0.981	5.7	1.9	64	337	0.716
356.7	0.689	13	1.0	39	242	1.4	9.9	1.9	60	277	1.0
357.4	1.3	15	0.687	39	282	0.814	19	1.3	60	323	0.594
358.1	0.981	15	0.609	39	261	1.3	14	1.1	60	298	0.950
358.8	1.4	15	0.669	44	225	1.2	20	1.2	67	258	0.888
359.5	0.656	12	0.909	34	195	0.887	9.5	1.7	51	223	0.647
360.2	0.605	14	0.713	45	269	1.5	8.7	1.3	68	308	1.1
360.9	1.2	17	0.910	51	310	0.606	17	1.7	78	355	0.442
361.6	1.1	15	0.940	43	265	1.1	16	1.7	66	303	0.797
362.2	0.880	18	0.959	42	256	4.5	13	1.7	64	292	3.3
362.9	14	13	1077	37	252	1.1	203	1963	57	288	0.797
363.6	2.2	14	0.842	30	194	0.700	32	1.5	46	221	0.511
364.3	3.1	15	0.759	39	203	1.2	44	1.4	59	233	0.843
365.0	0.811	13	0.863	40	242	1.3	12	1.6	61	277	0.954
365.7	0.736	15	0.673	43	278	1.1	11	1.2	66	318	0.792
366.4	1.4	14	0.818	40	263	0.864	20	1.5	61	301	0.630
367.1	0.490	13	0.637	50	266	0.821	7.1	1.2	76	304	0.599
367.8	0.648	16	0.731	42	282	1.0	9.3	1.3	65	323	0.748
368.5	1.5	16	0.969	47	277	1.1	21	1.8	72	316	0.832
369.2	0.646	14	0.989	52	266	0.897	9.3	1.8	80	304	0.654
369.9	0.546	16	1.5	57	308	1.4	7.9	2.7	88	353	1.0
370.6	0.592	13	0.893	39	234	0.758	8.5	1.6	59	267	0.553
371.3	0.994	15	1.1	41	327	1.5	14	2.0	62	374	1.1
372.0	0.732	14	0.915	44	255	1.2	11	1.7	68	292	0.912
372.7	0.478	12	1.1	59	254	0.793	6.9	1.9	90	290	0.578
373.4	0.942	16	0.564	50	262	0.691	14	1.0	77	299	0.504
374.1	0.393	12	0.953	38	215	0.450	5.7	1.7	59	246	0.328
374.8	0.796	14	0.794	49	250	1.2	11	1.4	75	286	0.857
375.5	0.957	17	0.682	41	260	0.684	14	1.2	62	297	0.499
376.2	0.686	13	0.693	51	235	0.905	9.9	1.3	79	269	0.661
376.9	0.858	17	0.823	59	265	0.988	12	1.5	90	303	0.721
377.6	1.4	15	0.616	49	236	1.3	21	1.1	75	270	0.927
378.3	1.1	15	0.960	45	248	0.741	16	1.8	69	283	0.541
379.0	0.944	16	1.2	46	256	0.913	14	2.1	71	293	0.666
379.7	0.881	14	0.960	51	260	0.811	13	1.8	79	297	0.592
380.4	0.625	14	0.979	50	318	1.3	9.0	1.8	77	363	0.916
381.1	0.701	15	0.938	47	278	0.924	10	1.7	72	318	0.674
381.8	1.3	18	0.789	52	221	0.757	19	1.4	80	253	0.552
382.5	0.693	16	1.1	52	306	1.1	10.0	2.0	80	350	0.800
383.2	1.3	16	0.746	49	281	0.876	18	1.4	75	321	0.639
383.9	0.646	15	0.999	51	280	1.4	9.3	1.8	78	321	0.995
384.6	0.393	14	1.2	51	237	0.654	5.7	2.2	78	271	0.477
385.3	1.4	15	1.2	44	249	0.743	20	2.2	68	285	0.542
386.0	1.0	14	0.812	44	229	0.858	15	1.5	67	262	0.626
386.7	0.817	15	0.865	38	233	1.1	12	1.6	58	266	0.791
387.4	1.0	15	0.741	39	226	1.4	14	1.4	60	259	0.989
388.0	0.912	17	1.2	47	291	0.987	13	2.3	72	333	0.720
388.7	1.4	18	1.1	40	228	1.1	20	2.0	62	260	0.776
389.4	0.839	15	0.813	58	276	1.4	12	1.5	89	316	1.1
390.1	1.3	15	0.951	60	249	0.866	19	1.7	92	285	0.632
390.8	0.717	12	1.2	39	266	0.529	10	2.1	60	304	0.386
391.5	0.512	16	1.2	46	239	0.668	7.4	2.2	70	273	0.487
392.2	0.950	15	1.4	47	238	1.5	14	2.5	73	272	1.1
392.9	0.796	12	1.1	50	306	0.825	11	1.9	76	350	0.602
393.6	40	1587	266	374	164	19	574	485	572	188	14
394.3	7.4	13	4.8	51	283	1.0	106	8.7	77	324	0.738
395.0	0.826	16	41	49	251	2.1	12	75	76	287	1.5

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Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
395.7	0.974	13	1.1	41	265	1.4	14	2.1	63	303	1.0
396.4	0.717	17	1.1	43	244	0.881	10	2.0	65	279	0.643
397.1	0.393	12	0.802	34	264	1.1	5.7	1.5	52	302	0.779
397.8	1.1	14	1.2	51	302	1.6	16	2.2	78	346	1.1
398.5	1.0	14	0.831	47	270	0.776	14	1.5	72	309	0.566
399.2	0.727	17	1.3	54	258	0.767	10	2.3	83	295	0.560
399.9	1.5	17	1.2	53	301	1.6	21	2.2	81	344	1.2
400.6	0.393	15	1.3	53	368	1.2	5.7	2.3	81	421	0.878
401.3	0.393	12	0.680	37	301	1.6	5.7	1.2	57	344	1.1
402.0	0.611	14	1.1	46	237	0.569	8.8	2.1	71	272	0.415
402.7	0.782	12	0.585	39	258	0.962	11	1.1	59	296	0.702
403.4	0.923	13	1.3	47	314	1.6	13	2.4	72	359	1.2
404.1	0.831	12	0.889	50	268	0.658	12	1.6	77	306	0.480
404.8	0.634	15	0.706	47	233	0.881	9.2	1.3	72	266	0.643
405.5	0.393	15	1.4	51	251	1.3	5.7	2.6	78	287	0.933
406.2	0.680	13	0.872	45	304	1.4	9.8	1.6	70	348	0.988
406.9	0.545	10	1.3	45	280	1.1	7.9	2.4	69	320	0.814
407.6	1.3	16	1.2	38	262	1.1	19	2.1	59	300	0.837
408.3	0.933	13	1.1	44	263	1.0	13	2.0	68	300	0.750
409.0	0.494	15	1.3	46	254	1.6	7.1	2.4	70	290	1.1
409.7	0.615	14	1.2	52	251	1.4	8.9	2.2	79	287	1.0
410.4	0.698	15	1.1	51	263	1.2	10	2.1	78	301	0.876
411.1	1.3	15	1.6	51	208	0.803	19	3.0	79	237	0.586
411.8	0.917	13	1.3	52	322	1.3	13	2.3	80	368	0.956
412.5	0.539	16	1.4	60	341	1.3	7.8	2.6	92	390	0.952
413.2	0.799	12	1.3	59	275	1.3	12	2.5	91	315	0.953
413.9	0.973	15	1.5	54	269	1.6	14	2.8	82	307	1.2
414.5	0.393	18	1.3	53	361	0.465	5.7	2.4	81	413	0.339
415.2	0.905	12	0.861	52	265	1.7	13	1.6	80	303	1.2
415.9	0.959	16	1.2	50	296	0.980	14	2.1	76	339	0.715
416.6	1.4	14	1.2	54	273	1.1	19	2.2	83	312	0.832
417.3	0.828	14	1.2	45	221	1.8	12	2.2	70	252	1.3
418.0	0.917	14	1.1	49	278	0.842	13	2.0	75	317	0.614
418.7	0.834	14	1.1	50	231	1.1	12	2.1	77	264	0.824
419.4	0.990	12	1.6	54	277	1.1	14	3.0	83	317	0.795
420.1	1.2	15	1.4	59	334	1.3	17	2.5	90	382	0.975
420.8	0.763	18	1.3	49	288	1.8	11	2.4	75	329	1.3
421.5	0.704	16	1.2	54	303	1.8	10	2.2	82	346	1.3
422.2	1.1	17	1.3	70	380	2.6	16	2.4	108	434	1.9
422.9	0.479	16	1.2	48	308	0.981	6.9	2.1	74	352	0.716
423.6	1.0	17	1.6	56	361	1.7	15	2.9	86	413	1.2
424.3	0.556	15	1.2	56	257	1.2	8.0	2.3	85	294	0.876
425.0	1.1	15	0.906	58	270	0.770	16	1.7	89	309	0.562
425.7	0.765	14	1.4	50	236	0.625	11	2.5	77	269	0.456
426.4	0.884	15	1.3	56	224	1.6	13	2.4	86	256	1.2
427.1	0.393	15	1.1	51	249	1.6	5.7	1.9	78	285	1.2
427.8	0.653	14	1.2	55	213	1.0	9.4	2.1	84	244	0.754
428.5	0.447	16	1.3	53	236	0.832	6.5	2.3	81	270	0.607
429.2	1.0	17	1.2	65	266	0.970	15	2.2	99	304	0.708
429.9	0.826	14	1.5	55	261	0.958	12	2.7	85	299	0.699
430.6	1.5	16	1.2	53	284	1.4	22	2.2	82	325	1.0
431.3	1.1	17	1.5	62	281	1.6	15	2.7	96	321	1.2
432.0	0.905	15	1.2	48	236	1.1	13	2.2	74	270	0.766
432.7	0.654	12	1.3	50	203	0.804	9.4	2.3	76	232	0.586
433.4	1.3	17	1.1	52	264	0.763	19	2.0	79	302	0.557
434.1	1.0	14	1.5	70	291	1.6	15	2.8	107	333	1.2
434.8	0.849	15	0.879	58	221	0.623	12	1.6	89	253	0.455
435.5	0.615	13	1.1	52	263	1.4	8.9	2.0	80	301	1.0
436.2	0.921	15	1.4	57	287	0.930	13	2.5	88	328	0.678
436.9	1.2	17	1.3	52	208	2.0	17	2.4	79	237	1.5
437.6	0.626	13	1.2	51	218	0.483	9.0	2.1	79	249	0.352
438.3	1.2	15	1.0	59	252	1.0	18	1.8	90	289	0.759
439.0	0.618	12	1.5	72	331	1.2	8.9	2.7	111	378	0.905
439.7	0.657	14	1.3	63	260	1.4	9.5	2.3	97	298	1.0
440.3	0.798	14	1.5	55	277	1.0	12	2.7	85	317	0.756
441.0	1.2	17	1.1	53	229	0.950	17	2.0	82	262	0.693
441.7	1.9	18	1.3	66	346	1.3	28	2.4	101	395	0.918
442.4	0.393	15	1.2	70	276	0.628	5.7	2.2	108	316	0.458
443.1	0.648	15	1.2	61	264	0.922	9.4	2.2	93	301	0.672
443.8	1.5	15	1.4	63	277	0.828	21	2.6	96	317	0.604
444.5	0.872	11	1.1	68	294	2.2	13	2.1	104	336	1.6
445.2	0.787	11	1.2	64	226	1.4	11	2.2	98	258	0.997
445.9	0.800	12	1.3	59	297	0.921	12	2.4	91	340	0.672
446.6	0.562	16	1.6	73	345	1.4	8.1	3.0	112	394	0.992
447.3	1.4	14	1.2	64	223	1.3	20	2.2	99	255	0.945
448.0	1.1	18	1.3	73	262	1.0	16	2.3	112	300	0.766
448.7	0.485	16	1.4	73	304	1.5	7.0	2.6	112	348	1.1
449.4	0.704	14	0.926	67	288	0.701	10	1.7	103	329	0.512
450.1	0.577	17	1.2	60	284	0.973	8.3	2.1	92	325	0.710
450.8	1.3	14	0.993	61	311	5.5	18	1.8	93	356	4.0
451.5	3.4	18	6.6	60	247	1.3	49	12	91	282	0.968

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
452.2	1.0	15	3.2	57	315	1.3	15	5.8	87	360	0.945
452.9	1.6	16	1.1	63	243	1.0	22	2.1	96	277	0.735
453.6	0.876	14	1.6	73	300	1.6	13	2.9	112	343	1.2
454.3	0.922	15	1.1	60	279	0.898	13	2.1	92	319	0.655
455.0	0.929	14	1.1	70	327	1.0	13	1.9	107	374	0.733
455.7	1.1	15	1.6	64	307	0.991	16	3.0	98	351	0.723
456.4	1.2	13	1.2	55	225	0.480	17	2.1	85	258	0.351
457.1	1.1	15	1.1	65	276	2.0	15	2.1	99	315	1.4
457.8	0.951	15	0.899	55	219	1.7	14	1.6	85	251	1.2
458.5	0.613	17	1.1	77	391	1.6	8.9	2.1	119	447	1.1
459.2	0.874	13	1.3	64	258	1.5	13	2.3	99	295	1.1
459.9	0.901	13	1.1	63	260	0.871	13	2.0	97	298	0.635
460.6	1.1	15	0.929	70	311	1.6	16	1.7	107	356	1.1
461.3	0.967	17	1.2	86	352	2.6	14	2.2	132	403	1.9
462.0	1.4	17	1.2	66	256	1.2	20	2.2	101	293	0.904
462.7	0.756	12	1.1	58	233	1.1	11	1.9	89	266	0.825
463.4	0.532	14	1.5	59	299	1.3	7.7	2.8	91	342	0.983
464.1	1.3	17	1.5	52	259	1.8	19	2.7	79	296	1.3
464.8	1.1	16	0.980	61	261	1.2	16	1.8	94	299	0.896
465.5	0.755	14	1.2	68	345	1.3	11	2.2	104	394	0.948
466.2	0.421	13	1.4	67	282	0.986	6.1	2.6	103	322	0.719
466.8	1.1	14	1.3	64	396	2.0	16	2.3	99	453	1.5
467.5	1.5	16	1.4	61	305	1.7	22	2.5	93	349	1.3
468.2	0.660	17	1.1	58	240	0.812	9.5	2.0	89	274	0.592
468.9	0.857	17	1.2	57	269	1.5	12	2.1	87	308	1.1
469.6	0.710	15	1.2	51	260	0.877	10	2.1	79	297	0.640
470.3	1.0	19	1.0	65	300	1.8	15	1.9	99	343	1.3
471.0	0.600	16	1.6	81	330	1.0	8.7	2.8	125	377	0.733
471.7	1.6	15	0.976	72	309	1.7	23	1.8	110	353	1.3
472.4	1.2	16	1.1	59	284	1.1	17	1.9	90	325	0.771
473.1	0.561	16	1.3	50	252	0.866	8.1	2.5	77	288	0.632
473.8	1.2	18	1.1	63	257	0.726	18	2.0	97	294	0.530
474.5	0.543	14	1.2	71	337	1.5	7.8	2.1	109	385	1.1
475.2	0.960	16	0.972	53	296	1.7	14	1.8	81	338	1.2
475.9	1.2	15	1.3	56	322	1.2	17	2.3	85	368	0.865
476.6	1.1	13	1.2	66	221	1.5	15	2.1	102	253	1.1
477.3	0.943	17	1.2	70	334	1.1	14	2.1	108	382	0.792
478.0	0.951	17	1.4	69	304	1.2	14	2.6	106	347	0.868
478.7	1.3	16	1.5	64	261	1.3	18	2.7	99	298	0.917
479.4	0.905	15	1.3	55	263	1.3	13	2.3	84	301	0.981
480.1	0.891	19	1.2	56	321	1.6	13	2.2	85	367	1.2
480.8	0.750	17	1.3	59	226	1.1	11	2.4	91	258	0.819
481.5	0.762	14	0.948	55	189	0.825	11	1.7	84	216	0.602
482.2	0.861	14	1.3	55	302	1.3	12	2.4	85	346	0.952
482.9	0.988	12	1.3	51	282	0.980	14	2.4	78	322	0.715
483.6	1.1	16	1.5	59	322	1.2	16	2.7	91	368	0.871
484.3	1.0	21	1.7	68	336	1.4	15	3.0	104	384	1.0
485.0	0.634	15	1.4	67	288	2.0	9.2	2.6	102	330	1.5
485.7	0.803	13	1.5	61	309	1.6	12	2.7	93	354	1.2
486.4	1.1	18	1.3	63	319	1.5	16	2.3	97	365	1.1
487.1	0.781	13	1.1	69	323	1.3	11	2.1	106	369	0.980
487.8	0.745	16	1.4	65	324	1.1	11	2.5	100	371	0.814
488.5	1.2	17	0.802	62	351	1.2	17	1.5	95	401	0.841
489.2	0.432	11	1.4	61	334	1.5	6.2	2.5	94	382	1.1
489.9	0.700	14	1.2	61	347	1.5	10	2.1	93	397	1.1
490.6	0.910	15	1.1	72	268	1.5	13	1.9	110	306	1.1
491.3	0.635	17	1.5	84	277	1.5	9.2	2.8	129	317	1.1
492.0	0.662	13	1.2	58	304	1.4	9.6	2.3	89	347	1.0
492.7	0.575	14	0.941	61	291	1.4	8.3	1.7	93	332	0.992
493.3	1.3	14	1.4	54	256	1.5	19	2.6	83	293	1.1
494.0	1.1	15	1.1	71	354	1.8	16	2.0	109	404	1.3
494.7	0.869	14	0.809	62	285	0.877	13	1.5	96	326	0.640
495.4	1.3	14	1.4	67	271	0.889	19	2.5	102	310	0.648
496.1	0.963	11	0.965	58	258	0.931	14	1.8	88	295	0.679
496.8	0.765	14	1.1	52	291	0.908	11	2.0	80	333	0.662
497.5	1.0	17	1.3	72	353	1.1	15	2.3	110	404	0.828
498.2	1.4	17	1.7	72	323	1.6	21	3.1	110	369	1.2
498.9	0.582	15	0.757	58	301	1.8	8.4	1.4	88	344	1.3
499.6	0.989	11	0.966	51	287	1.1	14	1.8	79	329	0.782
500.3	0.736	14	1.3	61	283	0.680	11	2.4	94	323	0.496
501.0	1.2	15	1.2	74	375	1.6	18	2.3	113	429	1.2
501.7	1.5	13	0.627	62	357	0.857	21	1.1	94	408	0.625
502.4	0.464	14	0.777	42	215	0.783	6.7	1.4	65	245	0.572
503.1	0.798	14	1.0	68	289	1.4	12	1.9	104	330	0.994
503.8	1.4	16	0.952	46	283	1.0	20	1.7	70	324	0.755
504.5	1.1	18	1.1	71	326	1.0	16	2.0	109	373	0.754
505.2	0.860	14	1.4	51	264	0.631	12	2.5	78	302	0.461
505.9	0.804	15	1.1	51	297	0.890	12	2.0	79	340	0.649
506.6	0.718	15	1.3	62	332	1.7	10	2.5	95	380	1.2
507.3	1.0	17	1.2	78	360	0.944	15	2.2	120	411	0.689
508.0	0.414	13	0.721	55	219	0.582	6.0	1.3	84	251	0.425

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
508.7	0.639	12	1.1	69	379	0.789	9.2	2.1	106	433	0.576
509.4	1.8	17	0.870	53	240	1.0	26	1.6	81	274	0.734
510.1	0.393	15	0.837	54	250	0.684	5.7	1.5	83	285	0.499
510.8	1.0	14	0.635	56	246	1.5	15	1.2	86	281	1.1
511.5	0.960	12	0.845	53	261	0.995	14	1.5	81	298	0.726
512.2	0.991	13	0.763	51	232	0.743	14	1.4	79	265	0.542
512.9	0.661	14	1.2	51	332	1.5	9.5	2.2	78	380	1.1
513.6	1.3	12	0.762	60	287	1.1	19	1.4	92	328	0.822
514.3	0.582	14	0.746	51	247	0.745	8.4	1.4	78	282	0.544
515.0	0.475	15	0.843	65	267	0.492	6.9	1.5	99	305	0.359
515.7	0.636	14	0.897	47	281	0.814	9.2	1.6	72	321	0.594
516.4	0.832	16	0.958	52	279	0.850	12	1.7	80	320	0.620
517.1	1.5	17	0.939	50	238	0.500	22	1.7	76	273	0.364
517.8	1.2	13	0.859	46	210	1.5	18	1.6	71	240	1.1
518.5	1.1	14	0.879	55	255	0.513	15	1.6	84	291	0.374
519.2	1.3	17	1.4	54	308	0.818	19	2.6	82	352	0.597
519.8	0.881	13	1.1	58	347	1.1	13	2.0	89	396	0.835
520.5	1.2	17	1.0	72	295	1.4	18	1.9	110	337	0.996
521.2	1.4	15	0.804	53	292	0.625	20	1.5	82	334	0.456
521.9	1.2	15	0.862	58	303	1.2	18	1.6	88	346	0.858
522.6	1.2	16	0.875	60	300	0.970	18	1.6	93	343	0.708
523.3	1.2	17	1.1	67	374	1.5	18	1.9	103	428	1.1
524.0	0.966	14	0.659	60	272	1.2	14	1.2	92	311	0.906
524.7	1.1	15	1.0	51	271	1.2	16	1.8	78	310	0.885
525.4	0.957	15	0.866	55	296	1.0	14	1.6	85	339	0.732
526.1	0.983	16	0.754	50	294	1.2	14	1.4	76	336	0.877
526.8	0.898	17	0.930	57	263	1.0	13	1.7	88	300	0.736
527.5	0.406	19	0.686	56	244	1.1	5.9	1.3	86	279	0.833
528.2	0.995	15	0.641	58	333	0.813	14	1.2	89	381	0.593
528.9	1.3	17	0.955	53	360	1.5	19	1.7	81	412	1.1
529.6	0.749	21	0.667	52	286	1.4	11	1.2	80	327	1.0
530.3	0.672	20	0.817	54	286	0.907	9.7	1.5	83	327	0.662
531.0	0.834	16	1.0	72	325	1.1	12	1.9	110	372	0.771
531.7	1.2	18	0.811	46	265	1.5	17	1.5	71	303	1.1
532.4	0.536	16	0.932	46	269	1.1	7.7	1.7	71	308	0.784
533.1	1.0	18	0.637	46	247	1.5	15	1.2	70	282	1.1
533.8	0.393	20	0.639	52	288	1.4	5.7	1.2	80	329	0.994
534.5	0.659	18	0.827	69	325	1.0	9.5	1.5	105	372	0.730
535.2	0.781	18	0.729	50	262	0.629	11	1.3	76	299	0.459
535.9	1.5	15	0.766	44	292	1.6	21	1.4	67	334	1.2
536.6	1.1	15	1.0	49	331	0.579	15	1.9	75	379	0.423
537.3	1.4	18	0.700	39	232	0.319	20	1.3	60	266	0.233
538.0	1.1	16	0.898	51	319	1.1	17	1.6	79	365	0.769
538.7	1.1	16	1.2	45	266	1.4	15	2.1	70	304	1.0
539.4	0.954	19	0.769	39	253	1.0	14	1.4	60	289	0.741
540.1	1.0	17	0.993	57	310	1.3	14	1.8	88	354	0.972
540.8	1.4	15	0.610	47	284	1.7	20	1.1	72	324	1.2
541.5	0.933	16	0.849	49	249	0.771	13	1.5	75	285	0.562
542.2	0.794	19	0.484	37	262	0.258	11	0.882	56	300	0.188
542.9	0.640	18	0.885	51	312	0.953	9.2	1.6	78	356	0.695
543.6	1.2	18	0.685	39	268	1.3	18	1.2	60	307	0.971
544.3	0.666	18	0.509	45	288	1.2	9.6	0.929	69	329	0.901
545.0	0.664	18	0.580	54	269	1.1	9.6	1.1	82	308	0.817
545.7	0.806	15	0.786	41	263	0.872	12	1.4	62	301	0.636
546.3	0.684	17	0.833	41	297	1.6	9.9	1.5	63	340	1.2
547.0	0.786	16	0.897	56	414	1.9	11	1.6	85	474	1.4
547.7	0.754	17	0.942	46	346	0.995	11	1.7	71	395	0.726
548.4	1.0	13	0.613	34	229	1.3	14	1.1	52	262	0.934
549.1	1.7	16	0.697	38	331	1.1	24	1.3	57	379	0.821
549.8	1.2	16	0.794	45	360	0.726	18	1.4	68	411	0.530
550.5	0.804	17	0.712	38	268	0.790	12	1.3	58	307	0.577
551.2	1.1	19	0.747	49	319	0.982	16	1.4	75	365	0.717
551.9	1.7	17	0.835	44	358	0.953	24	1.5	67	409	0.695
552.6	0.638	13	0.759	32	310	0.926	9.2	1.4	49	355	0.675
553.3	1.4	17	0.877	37	323	1.8	20	1.6	57	369	1.3
554.0	0.636	17	0.798	36	290	1.7	9.2	1.5	55	332	1.3
554.7	1.4	13	0.755	39	270	1.2	20	1.4	60	309	0.908
555.4	1.5	15	0.627	42	367	1.1	21	1.1	65	420	0.812
556.1	0.700	14	0.562	29	257	1.0	10	1.0	44	293	0.753
556.8	1.0	18	0.957	30	297	0.447	15	1.7	46	339	0.326
557.5	1.4	18	0.729	42	295	0.809	20	1.3	65	337	0.590
558.2	0.756	13	0.830	35	323	0.491	11	1.5	53	370	0.358
558.9	0.836	16	0.596	34	331	0.598	12	1.1	53	378	0.436
559.6	0.826	13	0.862	33	297	0.866	12	1.6	50	340	0.632
560.3	1.4	18	0.821	29	261	1.2	20	1.5	44	299	0.907
561.0	0.898	18	0.955	35	281	1.1	13	1.7	54	321	0.830
561.7	0.674	13	0.914	42	331	0.728	9.7	1.7	65	378	0.531
562.4	0.954	13	0.852	36	245	0.369	14	1.6	55	281	0.269
563.1	0.820	15	0.872	33	380	1.4	12	1.6	51	434	1.0
563.8	0.486	18	0.636	43	355	1.2	7.0	1.2	66	406	0.883
564.5	0.911	17	0.811	38	305	1.1	13	1.5	58	348	0.793

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
565.2	0.756	12	0.522	35	244	1.5	11	0.951	54	278	1.1
565.9	0.690	13	0.779	33	294	1.1	10.0	1.4	50	336	0.797
566.6	1.0	15	0.763	35	358	1.1	14	1.4	54	409	0.777
567.3	1.6	18	0.915	44	333	1.7	23	1.7	67	381	1.2
568.0	0.616	14	0.888	35	254	0.963	8.9	1.6	54	290	0.703
568.7	0.992	13	0.726	43	309	1.5	14	1.3	66	354	1.1
569.4	0.704	15	0.834	35	307	0.901	10	1.5	54	351	0.657
570.1	0.682	15	0.853	41	299	1.4	9.8	1.6	63	342	0.998
570.8	1.4	16	0.971	39	289	0.680	20	1.8	60	331	0.496
571.5	0.581	14	0.728	34	301	1.3	8.4	1.3	52	344	0.917
572.2	0.798	11	0.486	33	267	0.771	12	0.887	51	305	0.563
572.9	0.393	13	0.842	39	328	0.467	5.7	1.5	59	375	0.341
573.5	0.807	15	0.795	35	258	1.3	12	1.5	54	295	0.949
574.2	0.786	16	0.805	43	338	1.7	11	1.5	66	386	1.3
574.9	0.705	15	0.946	44	300	1.1	10	1.7	68	343	0.835
575.6	0.870	15	0.994	32	244	0.760	13	1.8	49	279	0.555
576.3	0.845	13	0.856	34	287	0.863	12	1.6	52	328	0.630
577.0	1.2	14	0.826	41	265	1.3	17	1.5	64	304	0.981
577.7	0.393	14	0.931	36	265	1.2	5.7	1.7	56	303	0.882
578.4	0.714	12	0.785	45	294	0.847	10	1.4	69	336	0.618
579.1	0.870	12	0.972	36	281	1.2	13	1.8	56	321	0.874
579.8	0.540	13	0.732	36	286	1.2	7.8	1.3	54	327	0.851
580.5	0.998	14	0.864	36	248	0.872	14	1.6	55	284	0.636
581.2	0.746	13	0.910	37	246	0.886	11	1.7	56	282	0.646
581.9	0.402	15	0.935	36	244	1.1	5.8	1.7	55	279	0.825
582.6	0.947	12	0.600	36	321	1.7	14	1.1	56	367	1.3
583.3	0.595	14	1.2	35	318	1.5	8.6	2.1	54	364	1.1
584.0	0.884	17	0.867	32	229	0.513	13	1.6	50	262	0.374
584.7	0.971	13	0.924	40	270	1.4	14	1.7	61	308	0.997
585.4	0.719	10	0.895	31	247	1.6	10	1.6	48	282	1.2
586.1	0.488	13	0.712	34	283	0.677	7.0	1.3	52	323	0.494
586.8	1.3	15	0.829	41	295	0.644	19	1.5	63	337	0.470
587.5	0.770	15	0.854	43	289	1.3	11	1.6	66	330	0.967
588.2	1.6	15	0.737	36	233	1.2	23	1.3	56	267	0.862
588.9	0.393	11	0.467	38	287	1.1	5.7	0.853	58	328	0.821
589.6	1.2	10.0	0.684	40	267	0.982	18	1.2	61	305	0.717
590.3	0.926	17	1.2	48	313	1.3	13	2.2	74	358	0.914
591.0	0.500	15	0.982	54	397	1.7	7.2	1.8	82	454	1.2
591.7	1.2	14	0.762	32	258	0.639	17	1.4	48	295	0.466
592.4	1.4	12	1.1	41	277	0.735	21	1.9	63	317	0.536
593.1	0.850	13	0.730	40	289	0.941	12	1.3	61	330	0.686
593.8	0.995	12	0.889	34	243	0.962	14	1.6	53	278	0.702
594.5	1.1	12	1.2	64	347	1.1	15	2.1	98	397	0.788
595.2	1.1	15	0.703	40	282	1.5	16	1.3	61	322	1.1
595.9	1.1	14	0.968	37	222	0.840	15	1.8	56	254	0.613
596.6	0.756	16	1.1	58	414	0.700	11	1.9	89	474	0.511
597.3	1.3	15	0.596	44	299	1.4	18	1.1	68	342	1.0
598.0	0.865	13	0.797	39	243	0.619	12	1.5	59	278	0.451
598.7	0.399	11	1.4	40	253	1.4	5.8	2.5	62	289	1.0
599.4	0.654	13	0.888	50	294	1.2	9.4	1.6	76	336	0.884
600.0	1.1	16	0.971	51	285	1.0	16	1.8	78	326	0.749
600.7	0.908	14	0.733	41	228	0.834	13	1.3	63	261	0.608
601.4	0.679	13	0.747	46	306	1.2	9.8	1.4	71	350	0.850
602.1	0.884	12	0.969	39	251	0.568	13	1.8	60	287	0.414
602.8	1.2	16	0.828	46	300	1.1	17	1.5	70	343	0.819
603.5	0.393	13	1.2	48	281	1.1	5.7	2.1	74	321	0.777
604.2	0.870	17	1.0	38	285	0.848	13	1.9	58	325	0.618
604.9	0.975	16	0.965	47	284	0.597	14	1.8	72	324	0.436
605.6	0.836	13	1.5	41	329	0.453	12	2.8	63	376	0.330
606.3	0.853	12	0.894	40	285	0.646	12	1.6	62	326	0.471
607.0	0.393	15	0.517	51	240	0.353	5.7	0.942	79	275	0.258
607.7	0.816	12	0.995	48	262	1.1	12	1.8	74	300	0.822
608.4	0.749	12	1.1	47	281	0.644	11	2.1	72	321	0.470
609.1	0.929	14	0.748	43	266	1.2	13	1.4	67	305	0.880
609.8	1.1	14	1.1	56	292	1.2	16	1.9	86	334	0.854
610.5	0.774	14	1.2	47	245	0.791	11	2.1	72	280	0.577
611.2	1.4	13	0.829	45	259	1.3	20	1.5	69	296	0.947
611.9	1.2	14	1.0	48	300	1.4	17	1.8	73	343	1.0
612.6	0.659	14	0.887	44	271	1.5	9.5	1.6	68	309	1.1
613.3	0.710	14	1.1	49	281	1.1	10	2.0	75	321	0.775
614.0	0.736	16	0.918	46	225	0.453	11	1.7	70	257	0.330
614.7	0.393	11	0.649	42	237	1.2	5.7	1.2	65	271	0.909
615.4	1.2	14	0.636	43	265	1.1	18	1.2	65	303	0.782
616.1	1.1	13	1.0	53	360	0.893	16	1.9	81	412	0.652
616.8	1.6	13	0.977	39	257	0.747	24	1.8	60	294	0.545
617.5	1.2	14	0.938	60	308	0.767	17	1.7	92	353	0.560
618.2	0.986	13	0.834	47	260	0.986	14	1.5	72	297	0.720
618.9	0.625	14	0.781	50	292	1.1	9.0	1.4	76	334	0.778
619.6	0.754	16	0.784	50	240	0.398	11	1.4	76	275	0.290
620.3	0.393	15	0.690	48	214	0.721	5.7	1.3	74	244	0.526
621.0	1.1	12	0.825	53	317	0.539	15	1.5	82	363	0.393

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
621.7	0.786	11	1.0	48	271	0.995	11	1.9	73	310	0.726
622.4	0.538	15	0.955	56	284	0.831	7.8	1.7	86	325	0.606
623.1	0.712	16	0.973	53	281	1.4	10	1.8	81	321	1.0
623.8	0.847	14	1.1	50	285	0.878	12	1.9	77	326	0.641
624.5	0.721	13	0.859	60	304	1.3	10	1.6	92	348	0.970
625.2	1.4	15	1.4	50	282	1.2	20	2.5	77	323	0.911
625.9	0.935	14	0.856	51	325	1.1	13	1.6	78	372	0.792
626.5	1.5	15	1.2	62	303	1.0	22	2.2	95	346	0.738
627.2	1.1	15	0.958	56	296	1.1	16	1.7	85	339	0.775
627.9	0.966	12	0.894	51	279	1.2	14	1.6	78	319	0.862
628.6	1.0	13	1.0	47	214	0.658	15	1.8	71	245	0.480
629.3	0.690	17	1.1	51	308	0.815	10.0	2.1	79	352	0.595
630.0	0.588	15	0.690	58	273	1.2	8.5	1.3	89	313	0.878
630.7	1.3	17	1.0	56	261	0.960	19	1.9	86	299	0.701
631.4	1.1	16	1.2	66	312	0.777	16	2.2	101	357	0.567
632.1	2.1	16	0.883	44	254	1.3	30	1.6	68	291	0.931
632.8	1.1	16	1.2	52	346	1.3	17	2.2	80	396	0.933
633.5	0.922	21	0.824	56	298	0.802	13	1.5	86	340	0.586
634.2	0.916	16	0.858	46	209	0.708	13	1.6	71	239	0.517
634.9	1.5	16	0.548	46	313	0.304	22	1.0	71	358	0.222
635.6	0.781	17	0.800	46	320	0.592	11	1.5	70	366	0.432
636.3	2.4	20	0.874	43	303	1.1	34	1.6	66	347	0.772
637.0	1.4	20	0.838	52	257	1.2	20	1.5	80	294	0.904
637.7	1.4	21	0.984	41	255	0.699	20	1.8	63	292	0.510
638.4	1.2	16	0.856	43	233	0.411	18	1.6	66	266	0.300
639.1	0.854	21	0.931	41	286	1.1	12	1.7	63	327	0.798
639.8	1.3	24	0.834	41	259	0.952	19	1.5	64	297	0.694
640.5	2.0	24	1.1	49	288	1.0	28	1.9	75	330	0.743
641.2	1.2	30	1.1	39	238	0.655	17	2.1	60	272	0.478
641.9	0.464	19	1.4	48	368	1.3	6.7	2.5	73	420	0.912
642.6	1.1	30	1.2	50	304	0.903	16	2.3	77	348	0.659
643.3	1.1	31	1.0	47	301	0.588	17	1.9	72	345	0.429
644.0	0.731	33	0.796	45	272	0.757	11	1.5	69	311	0.552
644.7	1.4	32	1.1	40	252	0.174	20	2.0	62	289	0.127
645.4	1.0	38	0.755	46	329	0.493	15	1.4	70	376	0.359
646.1	0.607	40	1.1	49	336	1.1	8.8	2.0	75	384	0.824
646.8	0.836	42	1.1	48	325	1.9	12	1.9	74	372	1.4
647.5	1.1	39	0.655	46	312	0.934	15	1.2	71	357	0.682
648.2	1.0	35	0.821	47	329	0.593	15	1.5	72	377	0.433
648.9	0.701	42	0.764	36	312	1.2	10	1.4	56	357	0.883
649.6	0.772	49	0.688	43	319	1.2	11	1.3	66	365	0.892
650.3	0.473	44	0.953	40	258	0.880	6.8	1.7	62	294	0.642
651.0	1.4	50	1.1	45	290	0.726	21	2.1	69	332	0.529
651.7	1.7	41	1.0	38	301	0.845	25	1.8	58	345	0.617
652.3	0.985	44	0.740	37	235	0.739	14	1.3	57	269	0.539
653.0	1.8	47	0.976	46	317	1.7	26	1.8	71	362	1.3
653.7	1.3	33	0.700	47	301	0.643	19	1.3	71	344	0.469
654.4	0.820	34	0.979	39	335	0.755	12	1.8	59	383	0.551
655.1	1.3	32	0.904	46	286	0.501	19	1.6	70	327	0.366
655.8	1.1	35	0.441	41	251	1.2	16	0.804	63	287	0.844
656.5	1.2	32	0.916	47	266	0.717	18	1.7	72	305	0.523
657.2	1.2	28	0.882	50	380	1.2	18	1.6	77	435	0.884
657.9	0.529	31	0.799	41	255	1.6	7.6	1.5	63	292	1.1
658.6	1.2	26	0.997	42	344	1.7	17	1.8	64	393	1.2
659.3	1.3	33	1.0	44	250	1.1	19	1.9	67	286	0.833
660.0	0.679	29	1.0	56	372	0.869	9.8	1.8	85	425	0.634
660.7	1.2	28	1.1	40	277	0.178	17	2.1	61	317	0.130
661.4	0.971	30	1.2	46	320	1.6	14	2.2	70	366	1.2
662.1	0.625	28	1.0	42	360	1.9	9.0	1.9	65	412	1.4
662.8	1.7	33	0.898	50	297	0.732	25	1.6	76	340	0.534
663.5	1.0	32	0.641	47	315	1.0	14	1.2	72	361	0.737
664.2	1.3	30	0.905	46	271	1.6	18	1.7	71	310	1.2
664.9	1.3	32	0.874	45	248	1.2	18	1.6	69	284	0.889
665.6	1.1	29	0.923	53	385	1.3	17	1.7	81	440	0.965
666.3	0.647	24	0.811	43	258	0.899	9.3	1.5	66	295	0.656
667.0	0.861	23	1.1	54	329	1.2	12	2.1	83	376	0.850
667.7	1.7	24	0.953	44	225	0.961	25	1.7	68	258	0.701
668.4	0.787	24	1.4	54	266	1.2	11	2.6	82	305	0.909
669.1	1.8	22	1.2	50	259	0.917	25	2.2	76	296	0.669
669.8	0.662	17	1.2	57	268	0.753	9.6	2.1	87	306	0.549
670.5	1.0	21	0.802	54	319	1.4	15	1.5	83	364	1.1
671.2	1.0	18	0.990	55	325	1.7	15	1.8	84	372	1.2
671.9	0.784	20	1.0	43	269	0.721	11	1.9	66	308	0.526
672.6	1.3	18	1.1	40	266	1.5	18	2.1	62	304	1.1
673.3	1.1	22	0.998	64	303	1.5	16	1.8	97	346	1.1
674.0	1.3	16	1.5	62	299	1.2	19	2.8	95	341	0.840
674.7	0.865	15	1.1	45	286	0.972	12	2.0	69	326	0.709
675.4	0.933	19	1.2	48	302	1.3	13	2.1	74	345	0.958
676.1	0.393	20	1.2	61	351	0.888	5.7	2.1	94	401	0.648
676.8	1.5	19	1.1	48	343	0.556	22	2.0	73	393	0.405
677.5	0.795	19	1.2	45	297	0.734	11	2.2	69	339	0.536

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
678.1	0.653	15	0.991	50	296	1.3	9.4	1.8	76	339	0.943
678.8	2.1	19	1.4	47	270	0.602	31	2.6	72	309	0.439
679.5	1.1	16	0.777	49	263	0.668	16	1.4	75	301	0.487
680.2	1.3	17	1.4	55	332	1.4	18	2.5	84	380	1.0
680.9	1.2	17	1.4	52	321	1.1	17	2.5	79	367	0.770
681.6	0.698	17	0.940	49	278	0.695	10	1.7	75	318	0.507
682.3	2.0	17	1.1	48	278	1.5	28	2.0	73	318	1.1
683.0	1.3	18	0.983	61	340	1.7	19	1.8	94	389	1.2
683.7	1.3	16	1.1	45	256	1.1	19	2.0	69	292	0.837
684.4	1.2	14	1.0	60	293	1.0	18	1.9	92	335	0.756
685.1	0.945	14	0.991	52	290	0.409	14	1.8	80	331	0.298
685.8	1.3	14	0.957	59	273	0.579	18	1.7	91	313	0.423
686.5	0.708	15	0.885	53	283	1.6	10	1.6	81	324	1.2
687.2	0.987	15	1.0	58	375	1.4	14	1.9	88	428	1.0
687.9	1.3	16	0.757	52	249	1.3	19	1.4	79	284	0.928
688.6	1.7	18	1.1	63	335	1.3	25	2.0	96	383	0.923
689.3	1.3	13	0.779	50	246	0.672	18	1.4	77	282	0.490
690.0	1.1	16	1.1	54	305	0.905	16	2.0	83	349	0.660
690.7	1.6	17	1.3	48	235	0.458	24	2.4	74	268	0.334
691.4	0.884	12	1.0	62	353	0.978	13	1.8	95	403	0.714
692.1	0.689	12	0.952	47	255	0.703	9.9	1.7	73	292	0.513
692.8	0.967	16	0.799	57	291	0.422	14	1.5	87	333	0.308
693.5	1.5	15	1.3	50	223	0.962	21	2.3	77	255	0.702
694.2	1.5	15	1.1	53	267	1.4	22	2.0	80	305	1.0
694.9	0.705	13	0.686	61	351	0.870	10	1.3	93	402	0.635
695.6	0.956	16	0.748	61	302	0.586	14	1.4	93	345	0.427
696.3	1.2	16	0.854	55	276	0.389	18	1.6	84	316	0.284
697.0	1.7	16	0.899	57	271	0.584	24	1.6	88	310	0.426
697.7	1.1	14	0.639	49	281	0.945	16	1.2	75	321	0.690
698.4	0.866	15	0.604	44	262	0.838	13	1.1	67	300	0.611
699.1	1.3	15	0.819	54	299	0.623	19	1.5	82	342	0.454
699.8	1.2	17	0.717	52	259	0.821	18	1.3	80	296	0.599
700.5	0.721	13	0.479	50	286	0.797	10	0.873	76	327	0.582
701.2	1.5	17	0.878	56	294	0.682	22	1.6	86	336	0.498
701.9	1.8	15	1.0	53	315	1.3	26	1.9	81	360	0.960
702.6	1.4	15	1.1	51	279	1.4	21	2.0	79	319	1.0
703.3	1.1	14	0.940	53	277	0.798	15	1.7	82	316	0.582
704.0	1.5	15	0.649	46	278	0.872	21	1.2	71	318	0.636
704.6	1.6	14	0.972	45	284	1.4	24	1.8	69	325	1.0
705.3	0.658	15	0.612	36	251	0.375	9.5	1.1	56	287	0.273
706.0	1.4	19	0.795	58	327	1.7	20	1.4	89	373	1.2
706.7	0.950	13	0.940	43	298	1.3	14	1.7	66	341	0.920
707.4	1.2	13	0.687	42	249	0.462	17	1.3	64	284	0.337
708.1	1.5	15	0.731	40	278	0.901	21	1.3	62	318	0.658
708.8	1.2	20	0.988	45	335	1.1	18	1.8	70	383	0.768
709.5	0.973	18	1.0	41	295	0.804	14	1.8	63	338	0.586
710.2	0.969	15	1.1	45	241	0.979	14	2.1	68	276	0.714
710.9	1.2	14	0.604	52	283	0.925	17	1.1	80	324	0.675
711.6	1.4	14	0.837	45	284	1.3	20	1.5	69	324	0.979
712.3	1.5	15	0.906	43	294	1.4	21	1.7	66	337	1.0
713.0	1.0	16	0.926	45	285	1.7	15	1.7	69	326	1.2
713.7	1.3	17	0.744	39	230	0.971	18	1.4	60	263	0.708
714.4	1.3	16	0.801	42	295	1.0	19	1.5	65	337	0.763
715.1	1.4	18	0.666	36	300	0.869	21	1.2	55	343	0.634
715.8	1.3	18	0.795	37	233	0.617	19	1.4	57	267	0.450
716.5	1.7	16	0.787	44	310	1.6	25	1.4	67	355	1.2
717.2	0.393	18	0.855	44	347	1.6	5.7	1.6	67	396	1.2
717.9	1.2	16	0.825	40	325	0.666	17	1.5	61	371	0.486
718.6	1.2	16	0.686	38	269	1.7	17	1.3	59	308	1.2
719.3	1.1	14	1.0	34	261	1.0	16	1.9	52	299	0.743
720.0	0.495	16	0.768	36	267	1.4	7.1	1.4	55	305	1.0
720.7	1.6	15	1.1	37	292	0.980	23	1.9	56	334	0.715
721.4	1.0	16	1.0	40	307	1.1	15	1.8	61	351	0.787
722.1	0.544	17	0.994	35	351	1.2	7.9	1.8	53	401	0.871
722.8	1.1	18	0.913	40	310	1.1	16	1.7	61	354	0.800
723.5	0.958	17	1.2	38	254	1.1	14	2.2	58	290	0.811
724.2	0.799	15	0.809	41	288	1.4	12	1.5	63	329	1.0
724.9	1.4	16	1.1	44	370	0.721	20	1.9	67	423	0.526
725.6	0.882	15	0.945	41	310	0.882	13	1.7	63	354	0.643
726.3	1.7	15	0.748	35	300	1.9	24	1.4	54	343	1.4
727.0	0.691	17	1.4	40	301	1.0	10.0	2.5	61	344	0.731
727.7	1.2	16	371	171	228	3.0	17	676	262	260	2.2
728.4	2.0	19	3.8	51	348	1.4	29	6.9	78	398	1.0
729.1	0.676	15	2.0	48	340	1.1	9.8	3.7	73	389	0.838
729.8	0.934	16	1.3	44	311	1.2	13	2.4	67	356	0.893
730.5	1.4	17	1.2	43	281	1.3	20	2.1	66	321	0.951
731.2	0.810	14	1.7	43	284	1.1	12	3.1	67	325	0.821
731.8	0.602	14	0.843	46	362	0.624	8.7	1.5	71	414	0.455
732.5	1.1	17	1.5	42	281	1.2	15	2.8	65	321	0.864
733.2	0.789	16	1.4	38	279	0.582	11	2.6	58	319	0.425
733.9	0.660	13	1.1	39	301	0.563	9.5	2.1	60	344	0.411

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Parameter	7Li	24Mg	55Mn	66Zn	88Sr	137Ba	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
DL (ppm)	0.393	0.403	0.079	0.702	0.005	0.003					
Length (µm)											
734.6	1.1	18	0.755	34	230	0.670	15	1.4	52	263	0.489
735.3	0.393	15	1.3	45	332	2.1	5.7	2.4	70	379	1.5
736.0	0.941	18	1.1	43	247	1.2	14	2.1	65	283	0.911
736.7	0.926	16	1.6	53	277	1.1	13	2.8	81	316	0.804
737.4	0.979	17	1.4	43	391	1.2	14	2.6	66	447	0.875
738.1	0.781	16	1.4	47	290	1.3	11	2.6	72	332	0.977
738.8	0.646	15	1.2	40	267	1.3	9.3	2.2	61	305	0.945
739.5	0.760	15	1.4	47	266	1.8	11	2.5	72	304	1.3
740.2	0.481	16	1.2	45	301	1.6	6.9	2.2	68	344	1.2
740.9	0.590	15	1.5	42	247	1.1	8.5	2.8	64	283	0.796
741.6	1.0	17	1.7	50	301	1.3	15	3.2	77	345	0.921
742.3	0.771	20	1.2	48	240	1.3	11	2.1	74	275	0.968
743.0	0.611	14	1.2	45	252	2.0	8.8	2.2	69	288	1.4
743.7	0.866	15	1.5	38	265	0.937	12	2.7	58	303	0.684
744.4	0.708	12	1.5	46	336	1.5	10	2.7	71	384	1.1
745.1	0.893	14	1.9	51	358	1.6	13	3.6	78	409	1.2
745.8	0.393	15	1.6	48	246	1.4	5.7	3.0	74	282	0.996
746.5	1.0	17	1.3	58	324	1.0	15	2.4	89	370	0.757
747.2	0.678	14	1.6	41	278	1.5	9.8	3.0	64	318	1.1
747.9	0.708	16	1.3	48	212	1.1	10	2.4	74	242	0.773
748.6	0.542	15	1.9	53	294	2.3	7.8	3.4	82	336	1.7
749.3	0.865	18	1.8	46	287	2.2	12	3.3	70	328	1.6
750.0	0.834	15	1.2	49	299	1.4	12	2.2	75	342	0.988
750.7	0.710	18	1.6	52	317	1.9	10	2.9	79	363	1.4
751.4	0.815	16	2.1	52	310	2.6	12	3.9	79	354	1.9
752.1	0.574	15	1.7	51	317	1.2	8.3	3.2	78	362	0.857
752.8	0.588	15	1.7	60	363	1.9	8.5	3.1	92	415	1.4
753.5	0.393	15	1.7	47	225	0.964	5.7	3.1	72	258	0.703
754.2	0.865	16	1.4	42	229	1.1	12	2.6	65	262	0.773
754.9	1.5	16	1.1	46	328	2.0	22	2.0	71	375	1.4
755.6	0.439	16	1.2	42	267	1.9	6.3	2.2	64	305	1.4
756.3	0.463	13	1.5	51	263	1.2	6.7	2.7	78	301	0.855
757.0	0.756	15	1.4	42	219	1.0	11	2.5	64	251	0.762
757.7	0.452	13	1.6	54	272	1.3	6.5	3.0	83	311	0.957
758.3	0.840	16	1.6	56	265	1.0	12	2.8	86	303	0.730
759.0	1.1	17	1.5	46	212	1.2	16	2.7	71	242	0.878
759.7	0.412	13	2.0	56	292	1.4	5.9	3.7	86	333	0.986
760.4	1.2	16	1.2	59	367	2.0	17	2.2	90	419	1.4
761.1	0.672	16	1.3	46	256	1.2	9.7	2.3	70	293	0.906
761.8	0.822	15	1.5	60	308	1.8	12	2.7	92	352	1.3
762.5	0.955	16	1.4	46	261	1.6	14	2.6	71	299	1.2
763.2	0.692	16	1.4	56	253	0.912	10.0	2.6	86	290	0.665
763.9	0.725	16	1.4	106	238	2.0	10	2.6	163	272	1.5
764.6	0.495	16	1.8	51	302	1.0	7.1	3.3	79	346	0.749
765.3	0.863	17	1.3	60	333	2.2	12	2.4	92	381	1.6
766.0	1.2	16	0.981	55	242	1.2	18	1.8	84	277	0.886
766.7	0.704	14	1.3	59	330	1.4	10	2.4	91	377	1.0
767.4	1.3	13	1.3	50	240	0.756	19	2.4	77	274	0.552
768.1	0.957	14	1.3	41	262	1.8	14	2.4	63	299	1.3
768.8	0.844	13	1.2	49	229	1.3	12	2.2	74	262	0.944
769.5	0.750	16	1.4	58	263	1.9	11	2.5	89	301	1.4
770.2	0.945	16	0.968	52	237	1.6	14	1.8	79	271	1.1
770.9	0.938	14	1.3	44	245	1.0	14	2.3	67	280	0.741
771.6	0.753	17	1.3	49	326	1.8	11	2.4	75	373	1.3
772.3	0.534	14	1.1	51	268	1.2	7.7	2.0	77	306	0.843
773.0	1.5	16	1.3	61	266	0.697	22	2.3	93	304	0.508
773.7	0.832	13	1.2	44	252	1.1	12	2.2	68	288	0.836
774.4	0.722	16	1.3	46	242	1.6	10	2.3	71	277	1.1
775.1	0.576	12	0.921	44	294	1.2	8.3	1.7	67	336	0.843
775.8	1.2	14	0.972	50	225	1.8	17	1.8	77	257	1.3
776.5	1.3	16	1.6	52	238	0.985	18	2.9	80	273	0.719
777.2	0.393	13	1.3	43	249	1.5	5.7	2.4	66	285	1.1
777.9	0.813	14	1.0	40	279	0.865	12	1.9	61	319	0.631
778.6	1.1	15	1.1	45	272	1.1	15	2.1	69	311	0.767
779.3	1.2	18	1.5	45	245	1.2	17	2.8	68	280	0.878
780.0	1.1	18	1.1	52	249	0.814	16	2.0	79	285	0.594
780.7	42	310	1.2	44	237	1.5	604	2.2	68	271	1.1
781.4	7.5	16	1.4	42	262	1.2	108	2.6	65	299	0.858
782.1	0.426	14	1.1	41	275	1.7	6.2	1.9	62	314	1.3
782.8	1.2	16	1.6	46	325	1.6	18	2.9	70	372	1.1
783.5	0.704	14	1.1	37	239	0.650	10	2.0	57	273	0.474
784.2	0.670	14	1.1	34	242	0.849	9.7	2.1	52	277	0.619
784.8	1.3	18	0.999	36	244	1.2	18	1.8	55	279	0.850
785.5	0.608	18	0.995	41	257	1.0	8.8	1.8	63	293	0.754
786.2	0.966	15	1.1	43	280	1.3	14	1.9	66	320	0.936
786.9	0.681	35	1.1	45	311	0.969	9.8	2.1	69	355	0.707
787.6	0.462	14	0.879	37	311	1.1	6.7	1.6	57	355	0.797
788.3	0.491	13	1.1	36	284	1.6	7.1	2.0	56	325	1.1
789.0	1.6	21	1.0	34	265	1.1	22	1.9	52	303	0.828
789.7	0.933	20	1.2	38	277	0.902	13	2.2	58	317	0.658
790.4	1.1	17	1.1	40	276	1.9	15	2.1	61	315	1.4

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
791.1	0.860	17	1.2	32	299	1.0	12	2.2	49	341	0.747
791.8	0.795	19	1.2	39	423	1.6	11	2.1	60	484	1.1
792.5	0.948	22	1.1	38	282	1.3	14	2.0	58	322	0.937
793.2	0.829	15	0.878	36	230	1.4	12	1.6	55	263	1.1
793.9	1.6	17	0.937	38	288	0.416	23	1.7	58	329	0.303
794.6	0.686	15	1.000	30	313	1.4	9.9	1.8	46	358	1.1
795.3	0.850	16	1.2	33	305	0.941	12	2.2	51	349	0.686
796.0	1.1	16	1.3	53	331	2.1	16	2.4	81	379	1.5
796.7	0.631	17	1.2	44	361	1.5	9.1	2.1	68	412	1.1
797.4	0.874	12	0.895	35	296	0.992	13	1.6	54	338	0.724
798.1	1.5	14	1.2	36	318	1.3	22	2.3	55	363	0.917
798.8	0.582	21	1.7	41	326	1.4	8.4	3.0	63	373	1.0
799.5	2.1	19	1.1	45	311	1.0	30	2.0	69	355	0.762
800.2	0.896	15	0.996	36	271	0.866	13	1.8	56	310	0.632
800.9	0.880	20	1.2	31	290	1.8	13	2.2	48	332	1.3
801.6	1.1	16	1.6	39	319	1.5	16	3.0	60	364	1.1
802.3	1.5	20	1.3	41	283	1.3	22	2.4	63	323	0.948
803.0	0.665	19	0.989	31	233	0.877	9.6	1.8	48	266	0.640
803.7	0.499	15	1.0	37	303	1.0	7.2	1.9	57	346	0.746
804.4	0.393	15	1.1	30	289	1.4	5.7	2.1	46	330	1.1
805.1	1.3	19	1.2	39	338	1.9	19	2.2	60	387	1.4
805.8	0.781	20	1.6	49	295	0.927	11	2.9	75	338	0.676
806.5	1.6	21	1.2	40	289	2.0	23	2.2	61	330	1.5
807.2	0.789	17	1.3	34	333	1.2	11	2.4	52	381	0.911
807.9	1.3	22	1.3	39	361	1.3	18	2.4	60	413	0.949
808.6	0.729	23	1.2	49	316	0.788	11	2.2	75	361	0.575
809.3	0.956	18	1.4	68	340	2.9	14	2.5	105	389	2.1
810.0	1.1	22	1.4	54	363	2.0	16	2.6	83	415	1.4
810.7	0.646	22	1.2	45	294	0.341	9.3	2.2	69	336	0.249
811.3	1.3	20	1.3	40	343	1.2	19	2.4	61	392	0.873
812.0	1.2	24	1.3	47	309	1.4	17	2.4	71	353	1.0
812.7	0.535	24	1.3	38	227	0.813	7.7	2.4	58	259	0.593
813.4	0.543	21	0.735	44	273	1.1	7.8	1.3	68	312	0.821
814.1	0.661	21	1.2	46	297	2.0	9.5	2.1	70	340	1.5
814.8	0.878	26	1.4	44	303	1.3	13	2.5	68	346	0.929
815.5	1.0	26	1.4	52	256	1.3	14	2.6	80	293	0.970
816.2	0.734	27	1.4	52	332	1.6	11	2.6	79	380	1.1
816.9	1.3	25	1.5	43	303	1.6	19	2.7	66	346	1.2
817.6	1.0	27	1.3	46	259	1.7	15	2.5	71	296	1.2
818.3	1.1	25	1.2	44	287	0.943	16	2.2	68	328	0.688
819.0	0.858	28	1.3	50	347	1.9	12	2.4	77	397	1.4
819.7	0.900	26	1.5	42	259	0.609	13	2.7	65	296	0.445
820.4	0.622	24	1.4	49	273	1.2	9.0	2.6	75	312	0.897
821.1	0.842	32	1.3	47	342	1.2	12	2.4	71	391	0.864
821.8	0.467	28	1.3	50	394	1.6	6.7	2.3	77	451	1.1
822.5	1.0	27	1.4	47	313	1.4	15	2.6	73	358	0.996
823.2	0.875	27	1.3	44	233	0.894	13	2.3	67	267	0.652
823.9	1.1	24	0.741	52	336	1.4	16	1.4	79	384	1.0
824.6	1.1	25	1.4	56	347	0.809	16	2.5	86	397	0.590
825.3	0.965	30	1.4	58	317	1.8	14	2.5	88	363	1.3
826.0	1.4	24	1.0	45	249	1.2	21	1.9	69	284	0.910
826.7	1.0	25	1.4	46	308	1.2	15	2.5	70	352	0.873
827.4	0.789	20	1.4	54	298	1.6	11	2.6	83	341	1.2
828.1	1.3	29	1.5	51	287	1.2	18	2.7	78	329	0.902
828.8	0.943	20	1.1	41	229	0.866	14	2.0	63	262	0.632
829.5	1.3	19	0.987	47	264	1.1	18	1.8	71	302	0.813
830.2	1.3	23	0.769	51	292	1.3	18	1.4	78	334	0.952
830.9	0.814	21	1.2	58	301	1.5	12	2.2	88	344	1.1
831.6	0.697	28	1.0	51	257	1.3	10	1.8	78	294	0.938
832.3	0.815	25	1.2	50	290	0.801	12	2.1	77	332	0.585
833.0	1.3	23	1.2	49	283	0.965	19	2.2	76	324	0.704
833.7	0.930	20	1.3	44	282	0.768	13	2.4	68	322	0.560
834.4	0.519	23	1.4	51	306	0.701	7.5	2.6	78	350	0.512
835.1	1.5	21	1.3	44	271	1.5	22	2.3	68	310	1.1
835.8	0.965	23	1.4	50	311	0.788	14	2.6	77	355	0.575
836.5	0.905	19	1.2	54	333	0.686	13	2.1	83	380	0.500
837.2	1.4	20	1.2	47	309	1.6	21	2.2	72	353	1.2
837.8	1.0	20	1.2	41	256	0.902	15	2.1	62	292	0.658
838.5	1.3	22	1.4	55	282	0.995	18	2.6	84	323	0.726
839.2	0.573	20	1.0	42	254	0.708	8.3	1.9	64	290	0.516
839.9	0.980	21	1.2	65	451	1.2	14	2.1	100	516	0.851
840.6	1.8	19	1.4	47	306	0.816	27	2.5	71	350	0.595
841.3	1.4	22	1.2	41	282	1.4	20	2.2	62	322	1.0
842.0	0.726	22	1.4	51	377	1.8	10	2.6	78	431	1.3
842.7	1.3	17	1.5	48	418	1.0	19	2.7	74	477	0.747
843.4	1.5	12	1.7	48	434	1.7	21	3.1	73	496	1.2
844.1	1.6	21	1.4	45	423	1.6	24	2.6	69	484	1.1
844.8	1.3	19	1.6	54	488	2.1	19	2.9	82	558	1.5
845.5	1.7	24	1.8	56	542	2.0	25	3.3	86	620	1.4
846.2	1.1	12	1.4	44	346	0.869	16	2.6	67	395	0.634
846.9	1.2	16	1.5	45	479	1.9	18	2.7	69	548	1.4

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Parameter	7Li	24Mg	55Mn	66Zn	88Sr	137Ba	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
DL (ppm)	0.393	0.403	0.079	0.702	0.005	0.003					
Length (µm)											
847.6	0.759	17	1.6	57	519	1.7	11	3.0	87	594	1.2
848.3	1.4	24	1.8	44	422	0.733	20	3.2	67	483	0.535
849.0	2.1	20	2.0	51	604	3.2	30	3.6	79	690	2.3
849.7	1.1	18	1.9	59	612	1.6	16	3.5	91	700	1.2
850.4	1.8	20	1.2	42	701	1.6	25	2.3	64	802	1.2
851.1	2.5	17	2.0	45	623	2.2	36	3.7	69	712	1.6
851.8	2.0	25	2.0	45	559	2.4	28	3.6	69	640	1.7
852.5	1.7	18	2.1	48	692	1.2	24	3.8	73	791	0.897
853.2	1.6	15	2.0	68	1106	3.7	23	3.7	104	1265	2.7
853.9	2.4	18	1.9	51	537	1.6	34	3.5	78	614	1.2
854.6	2.7	26	2.4	51	822	2.6	39	4.3	79	940	1.9
855.3	0.940	19	383	47	658	1.7	14	698	71	752	1.3
856.0	1.9	19	1.9	47	627	2.3	27	3.5	72	717	1.7
856.7	1.1	15	2.3	48	739	1.7	15	4.1	73	845	1.3
857.4	2.1	20	1.8	40	802	1.4	31	3.3	62	917	1.0
858.1	1.5	16	2.2	53	749	1.6	21	4.1	81	857	1.2
858.8	2.0	20	1.5	43	643	1.1	29	2.8	66	735	0.797
859.5	1.3	16	2.5	58	791	2.6	19	4.6	89	905	1.9
860.2	2.0	17	2.1	51	805	1.8	29	3.9	78	920	1.3
860.9	2.3	20	1.6	50	991	2.1	34	2.9	76	1133	1.5
861.6	1.7	20	1.7	45	735	1.2	25	3.1	69	841	0.863
862.3	2.7	18	2.2	78	1488	4.4	39	4.0	119	1701	3.2
863.0	1.9	17	1.7	52	891	2.7	27	3.0	79	1019	2.0
863.7	2.6	20	1.9	40	841	2.3	38	3.4	61	962	1.6
864.3	2.3	21	1.7	58	933	2.1	34	3.2	88	1066	1.5
865.0	1.7	23	2.4	58	1031	2.5	24	4.4	89	1179	1.8
865.7	2.0	19	1.9	62	1104	1.7	29	3.5	95	1262	1.2
866.4	2.4	22	1.6	49	1050	1.8	35	2.9	75	1201	1.3
867.1	2.0	21	2.2	59	1384	2.9	29	4.0	90	1583	2.1
867.8	1.4	17	1.9	50	917	2.4	20	3.4	76	1048	1.8
868.5	1.9	22	1.8	67	1268	1.9	28	3.3	103	1450	1.4
869.2	0.933	20	2.0	60	1182	1.9	13	3.6	92	1352	1.4
869.9	1.7	15	1.8	53	1006	1.9	25	3.3	81	1150	1.4
870.6	2.1	21	1.5	53	1002	2.7	31	2.8	81	1146	2.0
871.3	2.3	24	2.0	52	1133	2.4	33	3.6	80	1296	1.8
872.0	1.6	20	1.7	51	944	2.1	23	3.1	78	1080	1.6
872.7	1.6	19	1.7	51	945	2.6	23	3.1	78	1081	1.9
873.4	2.0	20	2.0	54	1218	2.1	29	3.6	82	1393	1.6
874.1	1.8	22	1.9	55	1204	1.7	27	3.5	84	1376	1.3
874.8	1.6	20	1.7	57	1166	4.2	23	3.2	88	1333	3.1
875.5	2.5	22	2.2	60	1086	2.6	36	4.0	92	1242	1.9
876.2	1.9	21	1.8	56	966	1.6	27	3.3	86	1105	1.2
876.9	2.0	17	2.1	64	1319	2.1	29	3.9	98	1509	1.5
877.6	1.9	19	1.6	54	1067	1.1	27	2.9	83	1220	0.781
878.3	2.0	19	2.8	81	1419	3.1	29	5.2	123	1623	2.2
879.0	1.6	20	1.9	62	1242	2.9	23	3.4	96	1420	2.1
879.7	3.0	21	2.1	53	1074	1.8	43	3.8	81	1229	1.3
880.4	2.0	16	2.4	58	1261	2.3	29	4.3	88	1442	1.7
881.1	2.8	20	1.9	71	1340	1.9	41	3.4	109	1533	1.4
881.8	2.2	18	2.7	69	1118	2.6	32	4.9	106	1279	1.9
882.5	1.5	21	1.8	63	1209	2.4	21	3.3	96	1382	1.8
883.2	1.4	18	1.9	59	1355	1.8	20	3.4	91	1550	1.3
883.9	1.7	23	2.5	72	1524	4.2	25	4.5	110	1742	3.0
884.6	2.9	19	2.0	89	1477	2.8	42	3.7	136	1689	2.0
885.3	2.8	18	1.9	65	1142	2.5	40	3.5	99	1306	1.8
886.0	1.8	19	2.2	70	1404	2.1	26	3.9	108	1606	1.5
886.7	1.9	20	2.7	70	1249	2.5	27	4.8	107	1428	1.8
887.4	1.5	18	2.0	70	1389	2.3	22	3.7	107	1589	1.7
888.1	2.3	19	1.8	78	1380	2.1	33	3.3	119	1578	1.5
888.8	1.9	19	2.2	75	1431	1.9	27	4.0	115	1636	1.4
889.5	2.5	20	2.3	75	1321	3.1	36	4.2	115	1511	2.2
890.1	2.1	20	1.6	69	1268	2.1	30	2.9	105	1449	1.5
890.8	2.9	28	1.8	63	1261	2.1	42	3.3	96	1442	1.5
891.5	2.2	20	2.1	72	1340	2.3	32	3.8	111	1533	1.7
892.2	2.0	21	1.9	74	1281	2.8	29	3.5	113	1465	2.0
892.9	2.7	17	2.1	72	1576	2.3	39	3.9	111	1803	1.7
893.6	2.2	23	2.2	70	1321	2.3	32	4.1	107	1510	1.7
894.3	2.6	19	2.6	75	1460	2.4	38	4.7	115	1670	1.8
895.0	2.4	25	2.3	84	1510	3.0	35	4.1	129	1726	2.2
895.7	1.6	16	2.1	54	1093	1.9	23	3.8	84	1250	1.4
896.4	1.1	16	1.9	65	1250	2.6	16	3.5	100	1430	1.9
897.1	2.4	19	1.7	63	1193	1.4	34	3.2	97	1364	1.0
897.8	2.6	18	1.9	69	1456	3.5	37	3.4	105	1664	2.6
898.5	1.7	17	1.6	72	1126	1.6	24	3.0	110	1287	1.1
899.2	1.6	17	1.4	80	1422	3.6	23	2.6	123	1626	2.7
899.9	2.5	21	2.6	83	1707	3.3	35	4.8	128	1952	2.4
900.6	1.8	19	1.5	77	1781	3.5	26	2.8	118	2036	2.5
901.3	1.9	22	1.9	77	1179	2.1	27	3.4	119	1348	1.5
902.0	2.7	22	1.8	70	1362	2.5	40	3.2	107	1557	1.8
902.7	2.5	19	1.6	76	1759	2.8	35	2.9	116	2012	2.0
903.4	3.7	20	1.4	68	1446	2.6	53	2.6	105	1653	1.9

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Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
904.1	2.3	18	2.0	74	1230	3.6	33	3.7	113	1407	2.6
904.8	2.5	19	1.8	76	1383	3.3	36	3.3	116	1581	2.4
905.5	2.6	18	1.9	72	1359	1.6	38	3.5	110	1554	1.2
906.2	1.5	19	1.9	78	1412	3.1	21	3.6	119	1615	2.3
906.9	2.6	19	1.7	85	1536	2.9	38	3.1	130	1756	2.1
907.6	1.7	17	1.7	93	1490	3.7	24	3.1	142	1704	2.7
908.3	3.0	19	2.1	83	1678	4.1	43	3.8	127	1919	3.0
909.0	2.4	20	1.9	80	1533	2.3	35	3.5	123	1753	1.7
909.7	2.3	22	2.1	71	1444	3.1	33	3.9	110	1651	2.2
910.4	2.8	21	2.3	85	1589	3.3	40	4.1	130	1817	2.4
911.1	4.6	20	2.1	76	1685	2.4	67	3.7	116	1927	1.8
911.8	3.2	16	1.9	82	1364	3.1	47	3.5	125	1560	2.3
912.5	2.6	19	2.0	75	1555	3.3	37	3.6	115	1778	2.4
913.2	3.2	19	1.8	65	1307	2.0	46	3.3	99	1495	1.4
913.9	3.4	20	1.8	62	1365	3.0	49	3.2	96	1561	2.2
914.6	2.7	20	2.6	81	1572	4.8	39	4.8	124	1797	3.5
915.3	3.6	19	2.1	75	1436	4.2	52	3.8	115	1642	3.1
916.0	3.1	19	1.5	58	1284	1.8	44	2.8	89	1468	1.3
916.6	3.0	17	1.8	68	1342	3.4	43	3.2	104	1534	2.5
917.3	5.0	21	2.1	66	1402	4.4	73	3.9	101	1603	3.2
918.0	3.4	18	2.0	84	1295	4.9	49	3.6	129	1481	3.6
918.7	3.6	19	1.7	73	1354	3.3	52	3.1	112	1548	2.4
919.4	3.3	19	1.5	56	1147	4.7	48	2.8	86	1312	3.5
920.1	5.0	19	1.9	62	1502	5.4	73	3.5	95	1718	3.9
920.8	4.9	20	2.2	57	1079	4.2	70	4.0	87	1233	3.0
921.5	4.5	18	1.2	59	1146	6.2	65	2.2	91	1310	4.5
922.2	3.7	16	1.5	56	1320	4.6	53	2.8	85	1510	3.4
922.9	4.1	18	1.7	40	1106	4.6	59	3.1	62	1265	3.3
923.6	5.8	19	1.5	41	1028	4.3	83	2.7	62	1175	3.1
924.3	4.9	17	2.0	61	1187	5.3	71	3.6	93	1357	3.8
925.0	4.4	18	1.4	40	952	4.2	64	2.6	62	1088	3.1
925.7	5.7	19	1.8	51	1115	6.1	83	3.2	79	1275	4.5
926.4	6.5	20	2.0	38	972	3.1	94	3.6	58	1111	2.3
927.1	6.6	21	2.5	52	1162	6.6	96	4.6	80	1329	4.8
927.8	7.3	19	2.8	52	1296	6.4	105	5.2	80	1482	4.7
928.5	7.6	22	2.9	59	1141	3.5	110	5.2	90	1304	2.6
929.2	6.2	20	2.4	47	1362	5.4	90	4.4	72	1557	4.0
929.9	3.6	11	3.0	49	1204	4.3	52	5.4	75	1377	3.2
930.6	6.6	15	2.7	50	1182	3.7	96	5.0	77	1351	2.7
931.3	9.6	18	3.4	65	1352	6.2	138	6.1	99	1546	4.5
932.0	9.5	18	3.2	59	1583	7.4	137	5.9	90	1810	5.4
932.7	8.6	16	3.1	48	1028	3.9	124	5.6	73	1175	2.8
933.4	8.6	19	3.3	60	1523	5.4	124	5.9	93	1741	3.9
934.1	8.2	18	3.1	67	1719	7.4	119	5.7	103	1965	5.4
934.8	9.2	19	3.5	60	1212	3.1	133	6.4	93	1386	2.3
935.5	8.9	19	3.9	62	1387	5.6	128	7.2	96	1586	4.1
936.2	9.5	18	3.8	59	1421	4.3	136	6.9	91	1624	3.1
936.9	8.7	15	4.2	68	1513	4.6	125	7.7	104	1730	3.4
937.6	9.5	16	3.9	71	1755	4.6	137	7.1	108	2007	3.3
938.3	7.5	19	4.4	63	2012	4.9	109	8.0	96	2301	3.6
939.0	9.3	15	3.8	64	1394	3.4	134	7.0	98	1594	2.5
939.7	6.5	13	4.3	56	1504	3.0	94	7.8	86	1720	2.2
940.4	7.9	15	4.4	61	1448	2.4	115	8.0	93	1656	1.7
941.1	7.5	18	4.5	73	2085	4.2	108	8.3	112	2384	3.1
941.8	6.8	20	4.9	70	2164	4.5	99	8.9	107	2474	3.3
942.4	10.0	22	4.5	63	1442	3.0	144	8.2	97	1650	2.2
943.1	6.4	16	3.9	84	2124	4.6	93	7.1	128	2429	3.4
943.8	8.2	18	5.1	91	1896	4.1	118	9.3	140	2169	3.0
944.5	6.9	17	3.6	62	1654	2.8	99	6.6	95	1891	2.0
945.2	6.2	16	5.3	82	1925	2.6	89	9.6	125	2201	1.9
945.9	8.3	16	5.1	73	1872	4.2	120	9.3	111	2140	3.0
946.6	6.7	12	6.0	78	2021	3.8	97	11	119	2311	2.8
947.3	8.8	18	6.1	76	2207	3.2	127	11	116	2524	2.4
948.0	7.6	17	5.6	80	2048	3.5	110	10	123	2341	2.5
948.7	7.3	16	5.7	75	1980	3.5	106	10	116	2264	2.5
949.4	9.5	15	4.9	71	2495	4.9	138	9.0	108	2853	3.6
950.1	8.6	17	6.0	66	1916	2.6	124	11	101	2191	1.9
950.8	8.2	19	7.0	77	2276	3.6	119	13	117	2603	2.6
951.5	7.3	15	7.3	91	2835	7.2	105	13	140	3242	5.3
952.2	7.9	16	7.9	85	2488	3.6	115	14	131	2845	2.6
952.9	7.3	16	5.7	78	2367	3.7	106	10	120	2707	2.7
953.6	8.9	15	5.8	88	2404	2.9	129	11	134	2749	2.1
954.3	7.5	16	5.9	77	2625	4.1	108	11	117	3002	3.0
955.0	6.6	15	6.5	86	2180	4.5	95	12	132	2493	3.3
955.7	6.2	14	5.6	67	1870	3.5	90	10	102	2139	2.5
956.4	6.9	15	6.3	78	2427	5.2	100	11	119	2776	3.8
957.1	6.3	17	6.1	79	2151	4.4	90	11	121	2459	3.2
957.8	6.5	21	5.5	81	2535	3.9	94	9.9	124	2898	2.9
958.5	4.4	14	6.6	78	2339	4.0	63	12	119	2675	2.9
959.2	6.5	17	5.9	69	2263	3.2	94	11	106	2588	2.4
959.9	5.2	13	6.8	87	2457	5.6	76	12	133	2810	4.1

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
960.6	7.0	19	6.1	90	2334	4.0	100	11	138	2669	2.9
961.3	4.6	13	5.5	82	2288	3.7	66	10.0	125	2616	2.7
962.0	6.9	18	5.1	69	1784	4.2	99	9.2	105	2040	3.1
962.7	5.2	14	6.6	78	2579	4.6	75	12	119	2949	3.4
963.4	5.6	15	6.5	73	2444	2.9	81	12	111	2794	2.1
964.1	4.6	14	5.4	77	2161	3.4	67	9.8	117	2471	2.5
964.8	5.1	17	6.5	88	2221	3.8	74	12	135	2540	2.8
965.5	4.9	18	4.8	71	2269	3.6	70	8.8	109	2595	2.6
966.2	6.4	19	5.8	87	2737	3.6	93	11	133	3129	2.6
966.9	5.3	15	5.3	63	2217	4.0	77	9.6	96	2535	2.9
967.6	6.2	18	5.5	76	2110	3.3	89	10.0	117	2413	2.4
968.3	5.1	19	5.1	85	2244	3.6	73	9.2	130	2566	2.7
968.9	5.0	13	5.1	64	2200	2.3	72	9.3	98	2516	1.7
969.6	5.0	16	5.2	76	2090	2.3	72	9.6	116	2389	1.7
970.3	4.3	16	4.6	65	2278	2.8	63	8.5	100	2605	2.0
971.0	6.2	18	4.5	83	2392	3.2	90	8.2	128	2735	2.3
971.7	6.3	18	4.4	66	2315	3.2	90	8.1	101	2648	2.3
972.4	5.1	14	4.3	60	1785	3.2	74	7.8	91	2041	2.3
973.1	4.9	14	4.0	79	2168	2.5	71	7.3	121	2480	1.8
973.8	5.2	19	4.3	65	1956	3.3	75	7.8	99	2236	2.4
974.5	5.1	18	4.5	77	2173	2.7	74	8.2	118	2485	2.0
975.2	6.6	16	4.6	78	2192	3.3	95	8.3	120	2507	2.4
975.9	4.7	16	4.0	62	1958	2.4	67	7.4	95	2239	1.7
976.6	6.3	22	4.5	70	2644	4.1	91	8.2	107	3024	3.0
977.3	5.3	18	3.9	59	1866	2.7	77	7.2	91	2133	2.0
978.0	5.9	22	3.5	67	1896	2.6	85	6.5	103	2169	1.9
978.7	3.1	13	3.7	69	2039	3.1	45	6.7	105	2332	2.2
979.4	4.4	19	3.6	67	2518	3.7	64	6.6	103	2879	2.7
980.1	3.9	15	3.9	65	2230	4.3	56	7.2	99	2550	3.1
980.8	4.4	18	4.1	74	2013	3.2	63	7.5	113	2302	2.3
981.5	4.9	20	3.7	82	2219	2.9	71	6.8	126	2538	2.1
982.2	4.2	15	3.5	66	2210	2.6	60	6.5	102	2527	1.9
982.9	4.1	15	3.6	62	2298	3.0	60	6.6	94	2628	2.2
983.6	4.8	15	3.2	54	2049	3.3	69	5.9	83	2343	2.4
984.3	3.7	15	3.4	64	2060	3.4	53	6.2	97	2355	2.5
985.0	3.7	19	4.4	79	2400	4.5	54	8.1	121	2745	3.3
985.7	3.4	16	2.4	58	1624	1.9	50	4.5	89	1857	1.4
986.4	3.3	12	3.4	55	2070	2.9	48	6.3	84	2367	2.1
987.1	3.7	14	2.7	54	1870	3.1	54	4.9	83	2138	2.3
987.8	3.5	20	3.7	72	2316	4.1	50	6.7	111	2648	3.0
988.5	2.9	17	2.6	61	2065	3.0	42	4.8	93	2361	2.2
989.2	2.5	19	2.8	56	2050	3.2	36	5.1	86	2344	2.3
989.9	2.2	18	3.1	59	2359	3.1	32	5.6	91	2697	2.3
990.6	2.6	17	2.9	70	2445	4.2	38	5.2	107	2796	3.0
991.3	2.2	16	2.5	58	1677	1.7	31	4.6	89	1917	1.3
992.0	2.9	16	2.6	51	1502	2.2	43	4.7	78	1718	1.6
992.7	2.5	14	2.9	60	2150	3.7	36	5.2	93	2459	2.7
993.4	2.7	16	2.2	59	1772	2.0	39	4.1	91	2027	1.4
994.1	2.8	18	2.3	53	2245	3.0	40	4.2	81	2567	2.2
994.8	2.0	17	2.1	51	1762	2.5	28	3.8	78	2014	1.8
995.4	2.3	16	2.1	50	1910	2.3	33	3.7	77	2184	1.7
996.1	2.3	14	1.9	39	1764	2.3	34	3.5	59	2017	1.7
996.8	2.4	18	2.4	49	1827	3.0	35	4.4	76	2089	2.2
997.5	2.3	16	1.9	59	1882	2.3	33	3.5	90	2152	1.7
998.2	1.4	15	2.0	50	1931	2.5	20	3.7	76	2208	1.8
998.9	2.4	16	1.8	44	1877	2.5	34	3.4	67	2146	1.8
999.6	1.2	16	1.8	47	2031	2.2	17	3.3	72	2323	1.6
1000.3	1.4	19	2.2	45	2051	2.7	20	4.0	69	2345	2.0
1001.0	1.9	18	1.3	42	1814	1.7	28	2.4	64	2074	1.3
1001.7	1.4	20	1.6	49	1842	2.4	20	2.9	75	2106	1.7
1002.4	1.2	18	1.5	49	2477	2.7	17	2.7	75	2832	1.9
1003.1	0.848	16	1.2	40	1453	1.9	12	2.2	62	1662	1.4
1003.8	1.5	19	1.3	37	1875	2.0	21	2.4	57	2144	1.4
1004.5	1.0	17	1.0	61	2262	2.9	15	1.9	94	2586	2.1
1005.2	1.1	20	1.9	52	2050	1.4	16	3.5	80	2345	1.1
1005.9	1.3	14	1.4	39	2012	2.2	19	2.6	59	2301	1.6
1006.6	0.951	17	1.1	37	1546	2.4	14	2.1	57	1768	1.7
1007.3	0.567	17	1.3	42	2205	2.6	8.2	2.4	65	2521	1.9
1008.0	1.1	21	1.3	37	1652	2.1	15	2.4	57	1889	1.6
1008.7	1.5	15	1.0	32	1281	1.3	22	1.9	49	1465	0.972
1009.4	0.779	19	1.6	37	1823	1.7	11	2.9	57	2084	1.2
1010.1	0.864	19	1.6	50	1954	2.9	12	2.9	76	2234	2.2
1010.8	0.793	21	1.8	37	1317	1.8	11	3.3	57	1506	1.3
1011.5	0.801	22	1.6	44	1434	2.0	12	2.9	68	1640	1.5
1012.2	0.743	18	1.2	42	1484	2.2	11	2.3	64	1696	1.6
1012.9	0.881	16	1.2	34	1304	1.8	13	2.1	52	1491	1.3
1013.6	1.1	19	1.3	35	1314	2.4	16	2.3	53	1503	1.7
1014.3	0.472	18	1.5	33	1156	2.0	6.8	2.7	51	1322	1.4
1015.0	0.462	14	1.3	34	1225	2.3	6.7	2.3	53	1401	1.7
1015.7	0.629	18	1.7	40	1217	1.9	9.1	3.1	61	1392	1.4
1016.4	0.810	22	1.4	37	1285	2.0	12	2.6	57	1469	1.5

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1017.1	0.531	22	1.2	36	1355	3.4	7.7	2.2	56	1549	2.4
1017.8	0.628	22	1.3	37	1176	1.5	9.1	2.3	57	1345	1.1
1018.5	0.397	22	1.2	31	1104	1.5	5.7	2.1	48	1262	1.1
1019.2	0.752	17	1.0	35	1252	3.5	11	1.8	53	1432	2.6
1019.9	0.896	24	1.3	25	1176	2.6	13	2.3	39	1345	1.9
1020.5	0.746	18	1.2	37	930	2.0	11	2.2	56	1063	1.5
1021.2	1.2	21	1.2	45	1427	3.2	17	2.2	69	1632	2.3
1021.9	0.532	16	0.931	42	1130	1.8	7.7	1.7	64	1292	1.3
1022.6	1.3	17	1.1	38	980	1.9	18	2.1	59	1121	1.4
1023.3	0.393	16	1.0	31	944	2.9	5.7	1.9	47	1080	2.1
1024.0	1.2	18	1.3	50	1394	2.8	18	2.4	76	1595	2.0
1024.7	0.923	19	0.786	36	1012	2.0	13	1.4	56	1157	1.4
1025.4	0.954	16	0.735	28	794	2.1	14	1.3	44	908	1.5
1026.1	0.840	16	1.3	32	1024	1.9	12	2.3	49	1171	1.4
1026.8	0.663	18	0.974	35	927	1.5	9.6	1.8	54	1060	1.1
1027.5	0.467	18	0.873	34	927	2.2	6.7	1.6	52	1060	1.6
1028.2	0.652	18	0.438	30	675	1.1	9.4	0.800	47	772	0.812
1028.9	0.852	16	0.973	31	987	2.8	12	1.8	47	1129	2.1
1029.6	0.984	18	0.795	30	858	1.6	14	1.4	46	982	1.1
1030.3	0.904	16	0.853	29	901	2.1	13	1.6	44	1031	1.5
1031.0	0.862	20	0.788	35	1004	3.4	12	1.4	53	1148	2.5
1031.7	0.393	17	0.745	36	974	2.5	5.7	1.4	55	1113	1.8
1032.4	0.587	16	0.531	29	1006	2.8	8.5	0.968	45	1150	2.0
1033.1	0.748	12	0.785	19	814	1.3	11	1.4	29	931	0.945
1033.8	0.693	15	0.577	29	1143	3.3	10	1.1	44	1307	2.4
1034.5	0.968	18	0.457	30	726	1.5	14	0.833	46	831	1.1
1035.2	0.393	14	0.613	26	804	2.0	5.7	1.1	39	919	1.5
1035.9	0.524	11	0.529	26	902	2.0	7.6	0.965	40	1031	1.5
1036.6	0.712	13	0.769	27	977	2.1	10	1.4	41	1118	1.5
1037.3	1.1	21	0.895	33	852	2.7	16	1.6	51	974	2.0
1038.0	0.985	19	0.730	26	644	1.4	14	1.3	40	736	1.0
1038.7	1.5	16	0.503	35	920	1.2	22	0.917	53	1052	0.870
1039.4	0.448	14	0.662	30	1011	1.7	6.5	1.2	46	1156	1.2
1040.1	0.425	15	0.763	31	984	2.2	6.1	1.4	47	1125	1.6
1040.8	0.957	17	0.594	32	934	2.8	14	1.1	49	1068	2.1
1041.5	0.870	17	0.576	29	817	2.6	13	1.0	44	934	1.9
1042.2	0.393	16	0.469	27	780	1.7	5.7	0.855	41	892	1.2
1042.9	0.601	17	0.663	27	868	2.2	8.7	1.2	41	993	1.6
1043.6	0.393	16	0.547	28	915	2.9	5.7	0.998	43	1046	2.1
1044.3	1.2	16	0.441	28	894	2.4	17	0.805	43	1022	1.8
1045.0	0.625	20	0.665	22	883	2.5	9.0	1.2	34	1010	1.8
1045.7	1.3	17	0.493	24	971	3.5	18	0.899	37	1111	2.6
1046.3	0.607	17	0.400	24	830	2.2	8.8	0.730	36	949	1.6
1047.0	0.623	17	0.606	27	844	1.9	9.0	1.1	42	965	1.4
1047.7	0.759	17	0.399	23	719	2.4	11	0.727	35	823	1.8
1048.4	1.1	18	0.534	19	700	1.5	15	0.975	29	801	1.1
1049.1	0.753	18	0.549	27	1101	2.3	11	1.0	41	1259	1.7
1049.8	0.844	18	0.411	20	788	2.0	12	0.749	31	902	1.5
1050.5	1.6	18	0.605	23	1122	1.4	24	1.1	35	1283	1.0
1051.2	1.4	16	0.306	24	934	1.8	20	0.559	36	1069	1.3
1051.9	1.3	16	0.593	17	717	1.8	19	1.1	26	820	1.3
1052.6	0.818	16	0.520	22	823	1.9	12	0.949	34	941	1.4
1053.3	1.0	19	0.453	23	867	1.8	15	0.827	35	991	1.3
1054.0	1.3	17	0.469	16	867	1.9	18	0.855	24	992	1.4
1054.7	1.0	14	0.448	23	728	0.839	15	0.817	35	833	0.612
1055.4	1.5	12	0.484	18	935	2.1	22	0.882	28	1069	1.5
1056.1	1.9	16	0.368	18	814	1.9	27	0.671	28	931	1.4
1056.8	0.785	15	0.223	19	693	2.1	11	0.407	29	793	1.5
1057.5	0.793	14	0.502	15	688	1.0	11	0.916	23	787	0.751
1058.2	1.3	15	0.380	19	659	1.4	19	0.693	29	753	1.0
1058.9	0.801	16	0.199	19	833	1.9	12	0.362	28	952	1.4
1059.6	1.7	14	0.549	19	912	1.6	25	1.0	29	1042	1.2
1060.3	1.4	14	0.328	24	1205	2.3	21	0.598	36	1378	1.7
1061.0	1.5	15	0.349	15	794	1.1	22	0.637	23	908	0.775
1061.7	1.2	15	0.545	17	931	1.7	17	0.994	26	1065	1.2
1062.4	1.9	11	0.563	13	915	2.0	27	1.0	20	1047	1.4
1063.1	1.4	14	0.577	19	881	2.3	20	1.1	29	1007	1.7
1063.8	0.742	14	0.307	19	859	1.7	11	0.559	29	982	1.3
1064.5	1.7	18	0.586	21	848	2.2	24	1.1	32	969	1.6
1065.2	1.6	13	0.702	17	841	1.0	23	1.3	26	962	0.731
1065.9	1.2	14	0.598	16	912	1.6	17	1.1	25	1043	1.2
1066.6	1.3	15	0.326	21	836	1.4	19	0.595	32	956	0.993
1067.3	1.4	17	0.663	23	930	2.9	21	1.2	36	1064	2.1
1068.0	0.958	14	0.347	20	1004	2.2	14	0.633	30	1148	1.6
1068.7	1.4	14	0.580	15	750	1.1	21	1.1	23	858	0.812
1069.4	1.9	13	0.444	19	963	2.1	27	0.810	29	1101	1.5
1070.1	1.1	17	0.272	20	1047	2.4	16	0.496	30	1198	1.8
1070.8	1.9	13	0.697	27	1243	2.9	28	1.3	42	1421	2.1
1071.5	1.7	12	0.469	16	883	1.4	25	0.855	24	1010	1.0
1072.2	2.0	11	0.296	15	895	1.8	30	0.541	23	1023	1.3
1072.8	2.1	12	0.299	13	1073	1.5	30	0.544	20	1227	1.1

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1073.5	1.7	17	0.479	17	1070	2.2	25	0.874	26	1224	1.6
1074.2	1.6	17	0.433	16	857	2.0	23	0.790	24	980	1.5
1074.9	2.2	14	0.422	13	980	1.6	32	0.769	20	1120	1.2
1075.6	0.810	15	0.732	16	949	1.5	12	1.3	25	1086	1.1
1076.3	1.4	10	0.333	15	843	2.3	21	0.607	23	964	1.7
1077.0	1.6	16	0.434	15	832	2.3	22	0.791	23	952	1.7
1077.7	1.7	11	0.479	15	1016	2.1	25	0.873	24	1162	1.6
1078.4	0.962	13	0.333	14	815	1.3	14	0.607	21	932	0.925
1079.1	1.4	10	0.355	11	908	1.6	21	0.647	17	924	1.2
1079.8	1.6	15	0.668	16	938	1.7	23	1.2	24	1072	1.2
1080.5	1.4	15	0.248	16	1014	2.8	20	0.452	24	1159	2.0
1081.2	2.0	13	0.381	11	1007	1.6	29	0.696	18	1152	1.2
1081.9	1.1	9.9	0.309	14	1022	1.6	17	0.563	21	1168	1.2
1082.6	2.3	12	0.266	8.9	934	1.5	33	0.486	14	1068	1.1
1083.3	2.4	15	0.266	11	1082	2.4	35	0.484	17	1237	1.7
1084.0	1.8	16	0.296	16	1038	1.6	26	0.539	25	1187	1.2
1084.7	2.5	16	0.305	14	1091	1.4	36	0.556	21	1247	0.990
1085.4	1.3	10	0.261	11	854	1.3	18	0.476	17	977	0.969
1086.1	1.7	11	0.337	10	937	1.6	25	0.615	16	1071	1.2
1086.8	1.1	13	0.428	15	1005	2.6	16	0.781	24	1149	1.9
1087.5	1.8	12	0.105	17	1039	2.6	25	0.192	25	1188	1.9
1088.2	2.0	11	0.205	9.7	846	1.2	29	0.374	15	967	0.908
1088.9	1.9	9.3	0.314	12	743	3.0	27	0.573	18	850	2.2
1089.6	2.4	10	0.414	13	1154	1.3	35	0.755	19	1320	0.970
1090.3	2.8	15	0.320	15	962	2.1	41	0.583	23	1100	1.5
1091.0	3.4	14	0.305	14	924	2.0	48	0.556	22	1057	1.5
1091.7	2.7	13	0.291	16	840	2.6	39	0.531	24	961	1.9
1092.4	3.7	14	0.325	10	980	2.6	53	0.592	16	1121	1.9
1093.1	3.2	13	0.456	15	978	3.1	47	0.832	23	1118	2.3
1093.8	3.3	15	0.484	17	1027	3.2	48	0.883	25	1175	2.3
1094.5	3.6	13	0.464	22	1053	3.2	51	0.847	34	1204	2.4
1095.2	5.3	13	0.642	18	781	2.0	77	1.2	27	893	1.5
1095.9	4.0	13	0.871	19	1258	2.6	58	1.6	30	1439	1.9
1096.6	6.6	13	1.000	23	1124	3.7	95	1.8	35	1285	2.7
1097.3	6.8	16	0.867	21	981	1.8	99	1.6	32	1122	1.3
1098.0	5.2	11	1.0	22	1077	2.6	75	1.9	34	1231	1.9
1098.7	7.1	11	0.792	19	915	3.3	102	1.4	30	1046	2.4
1099.4	6.0	14	1.5	15	998	5.1	87	2.7	23	1141	3.7
1100.0	6.4	14	1.3	25	1070	4.0	93	2.4	38	1224	2.9
1100.7	5.9	16	1.6	25	1138	2.9	85	2.9	38	1302	2.1
1101.4	5.9	17	1.7	33	1454	4.7	85	3.1	51	1663	3.5
1102.1	7.3	17	2.0	25	1245	2.7	105	3.6	39	1424	2.0
1102.8	8.1	14	1.9	23	1269	4.2	117	3.4	36	1451	3.1
1103.5	10	15	2.4	32	1238	3.3	148	4.3	49	1416	2.4
1104.2	10	19	3.1	34	1248	4.5	150	5.7	53	1427	3.3
1104.9	11	17	3.3	35	1539	4.2	152	6.1	53	1760	3.1
1105.6	9.5	17	4.0	35	1291	3.2	137	7.3	54	1476	2.3
1106.3	12	19	4.6	36	1506	3.8	168	8.3	55	1722	2.8
1107.0	12	20	4.7	32	1255	3.0	167	8.7	49	1435	2.2
1107.7	8.8	22	4.0	57	1649	3.6	127	7.3	87	1886	2.6
1108.4	9.4	19	4.2	48	1836	5.3	136	7.7	74	2100	3.8
1109.1	9.7	16	4.9	39	1773	4.9	139	8.9	60	2028	3.6
1109.8	10	22	6.0	41	1685	2.8	147	11	62	1926	2.0
1110.5	8.7	21	5.8	36	1376	3.1	125	11	55	1573	2.3
1111.2	8.7	18	5.9	55	2016	4.7	125	11	84	2306	3.4
1111.9	7.1	15	6.2	38	1500	3.2	103	11	58	1716	2.3
1112.6	8.4	20	5.8	42	1875	4.4	121	11	65	2144	3.2
1113.3	6.7	18	4.5	35	1385	2.6	97	8.2	54	1584	1.9
1114.0	7.3	21	5.4	51	2075	4.0	105	9.8	79	2373	2.9
1114.7	7.1	18	5.3	46	1901	4.3	103	9.6	70	2174	3.1
1115.4	6.4	19	4.7	44	1999	3.2	92	8.5	67	2286	2.3
1116.1	6.1	18	5.8	45	1508	2.7	88	10	69	1724	1.9
1116.8	7.3	19	5.1	51	2150	4.2	105	9.3	79	2459	3.0
1117.5	7.8	21	5.9	45	1770	2.4	112	11	69	2024	1.7
1118.2	6.5	18	4.8	46	1955	2.7	94	8.7	70	2236	2.0
1118.9	6.1	16	5.9	50	2010	2.9	88	11	76	2298	2.1
1119.6	5.1	19	4.4	48	1810	2.9	74	7.9	74	2070	2.1
1120.3	4.8	16	5.0	53	2153	2.5	69	9.2	82	2462	1.9
1121.0	4.9	16	5.0	45	2139	3.1	70	9.1	69	2446	2.3
1121.7	4.4	21	5.2	53	1957	1.8	64	9.5	82	2238	1.3
1122.4	5.2	19	5.8	48	2180	2.7	74	10	73	2493	2.0
1123.1	5.0	15	5.0	54	2072	3.3	72	9.0	82	2370	2.4
1123.8	4.0	17	4.7	53	1826	3.7	57	8.5	81	2089	2.7
1124.5	4.7	19	4.1	47	2116	2.4	67	7.6	72	2419	1.8
1125.2	4.9	19	4.4	41	1904	2.7	71	8.0	63	2177	1.9
1125.8	3.4	16	4.5	48	2092	4.0	50	8.2	73	2392	2.9
1126.5	2.7	18	3.5	38	1694	1.7	39	6.4	59	1937	1.2
1127.2	3.4	21	3.8	44	2086	3.1	49	6.9	68	2386	2.3
1127.9	3.5	16	3.3	37	1532	2.2	51	6.0	57	1752	1.6
1128.6	3.2	19	3.6	48	2212	2.3	47	6.5	74	2529	1.7
1129.3	3.0	16	3.5	39	2055	2.7	44	6.5	60	2350	2.0

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Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1130.0	3.7	19	3.6	47	2031	3.2	54	6.5	72	2323	2.4
1130.7	2.8	17	3.3	40	1764	2.3	41	5.9	61	2017	1.7
1131.4	3.9	13	3.2	43	1990	3.0	56	5.9	66	2276	2.2
1132.1	3.2	17	3.2	46	2298	2.0	46	5.8	70	2627	1.5
1132.8	2.7	20	3.2	45	2002	3.8	39	5.8	69	2289	2.7
1133.5	3.2	22	2.9	43	1855	2.4	46	5.2	65	2122	1.7
1134.2	2.2	17	2.5	33	1670	2.7	31	4.5	51	1910	2.0
1134.9	1.3	14	2.2	35	1632	2.0	19	4.1	53	1866	1.5
1135.6	2.0	16	2.5	36	2068	2.5	28	4.6	55	2365	1.8
1136.3	1.6	15	2.1	44	1924	2.6	23	3.9	68	2200	1.9
1137.0	1.8	22	2.2	35	1833	3.3	25	4.1	53	2096	2.4
1137.7	2.2	18	1.9	39	2192	2.4	32	3.5	59	2507	1.7
1138.4	1.4	15	2.1	28	1342	1.4	20	3.7	43	1534	1.0
1139.1	2.2	20	2.5	26	1567	2.8	32	4.6	40	1791	2.0
1139.8	1.6	18	2.0	38	1650	2.7	23	3.7	59	1887	2.0
1140.5	1.0	18	1.9	34	1631	2.0	15	3.5	52	1865	1.5
1141.2	2.0	20	2.0	30	1504	2.3	29	3.7	45	1720	1.7
1141.9	1.6	14	1.8	33	1557	1.4	23	3.4	50	1780	1.1
1142.6	2.1	19	1.9	32	1641	2.2	31	3.5	50	1877	1.6
1143.3	2.1	21	1.8	29	1249	1.5	30	3.3	44	1429	1.1
1144.0	1.4	17	1.9	37	1527	2.6	20	3.5	57	1747	1.9
1144.7	1.5	18	1.5	29	1402	1.5	22	2.8	44	1603	1.1
1145.4	2.3	13	2.0	33	1736	2.1	33	3.6	51	1985	1.5
1146.1	0.921	17	1.8	31	1380	1.9	13	3.3	47	1578	1.4
1146.8	1.5	16	2.0	38	1526	1.8	22	3.6	58	1745	1.3
1147.5	1.4	15	1.2	29	1401	1.9	20	2.2	45	1602	1.4
1148.2	0.684	14	1.5	28	1417	1.1	9.9	2.8	42	1620	0.781
1148.9	1.6	16	1.3	29	1478	2.3	23	2.5	44	1690	1.7
1149.6	0.805	14	1.1	29	1448	1.4	12	2.1	44	1656	1.0
1150.3	0.967	18	1.0	29	1251	1.3	14	1.9	45	1431	0.972
1151.0	1.3	16	1.0	23	1177	0.908	18	1.8	36	1346	0.663
1151.6	0.804	13	1.1	22	1383	1.0	12	2.1	33	1582	0.743
1152.3	1.1	17	1.5	21	1640	2.0	16	2.7	32	1876	1.5
1153.0	1.3	17	1.2	28	1508	1.7	19	2.2	42	1724	1.3
1153.7	0.889	14	0.780	24	1281	2.0	13	1.4	37	1464	1.5
1154.4	0.892	15	1.1	28	1284	1.6	13	2.0	42	1468	1.2
1155.1	0.791	12	1.5	20	1280	1.1	11	2.7	31	1463	0.812
1155.8	1.0	13	1.7	23	1546	1.4	15	3.1	35	1768	0.990
1156.5	0.886	15	1.1	29	1405	2.1	13	2.1	44	1607	1.5
1157.2	1.2	16	0.988	19	1046	1.3	18	1.8	29	1196	0.914
1157.9	0.646	16	1.1	21	1030	2.3	9.3	1.9	32	1178	1.7
1158.6	0.530	12	0.966	22	1365	1.5	7.6	1.8	34	1561	1.1
1159.3	0.424	16	1.3	24	1506	1.5	6.1	2.4	36	1722	1.1
1160.0	0.886	17	1.3	27	1204	1.5	13	2.3	42	1377	1.1
1160.7	1.3	15	0.913	23	1181	2.1	18	1.7	35	1350	1.6
1161.4	0.769	12	0.852	24	1227	1.8	11	1.6	37	1403	1.3
1162.1	0.947	15	1.1	17	942	1.3	14	2.1	27	1077	0.951
1162.8	1.1	16	0.775	23	1083	1.8	15	1.4	36	1238	1.3
1163.5	1.2	15	0.553	22	987	0.851	17	1.0	33	1128	0.621
1164.2	0.868	14	0.793	23	1232	1.1	13	1.4	35	1409	0.779
1164.9	0.393	14	0.705	17	1116	2.3	5.7	1.3	26	1277	1.7
1165.6	1.6	14	0.827	17	1252	1.4	23	1.5	27	1432	1.0
1166.3	1.2	16	0.913	16	1077	1.1	17	1.7	25	1231	0.806
1167.0	1.4	11	0.686	19	912	2.0	20	1.3	29	1042	1.5
1167.7	0.694	10	0.711	20	979	1.3	10	1.3	30	1119	0.936
1168.4	0.732	11	0.648	16	1165	1.7	11	1.2	24	1332	1.2
1169.1	1.7	15	0.583	15	997	1.7	24	1.1	23	1140	1.2
1169.8	0.750	14	0.769	20	1029	1.5	11	1.4	31	1176	1.1
1170.5	0.693	15	0.421	16	1195	2.5	10.0	0.768	25	1366	1.8
1171.2	0.733	13	0.655	15	968	1.4	11	1.2	23	1107	1.0
1171.9	1.5	15	0.395	17	898	1.3	21	0.721	27	1027	0.976
1172.6	0.659	11	0.801	16	1045	1.1	9.5	1.5	25	1195	0.805
1173.3	1.7	14	0.357	20	1159	2.8	24	0.651	30	1325	2.1
1174.0	1.3	14	0.795	12	962	1.9	18	1.4	19	1100	1.4
1174.7	0.963	11	0.701	15	925	1.8	14	1.3	23	1058	1.3
1175.4	0.848	14	0.822	17	1069	3.1	12	1.5	27	1223	2.3
1176.1	1.7	15	0.578	16	1167	2.1	25	1.1	25	1335	1.5
1176.8	1.0	13	0.618	17	938	1.4	15	1.1	26	1072	1.1
1177.4	1.0	17	0.658	12	930	1.4	14	1.2	19	1063	1.0
1178.1	1.3	8.6	0.344	14	1165	1.5	18	0.628	22	1333	1.1
1178.8	1.3	12	0.455	12	981	1.0	18	0.829	18	1122	0.737
1179.5	1.1	13	0.421	11	1086	1.6	16	0.768	16	1242	1.1
1180.2	0.793	14	0.725	13	926	1.8	11	1.3	20	1059	1.3
1180.9	1.1	13	0.448	15	982	1.3	16	0.818	22	1123	0.930
1181.6	0.937	12	0.535	12	961	1.7	14	0.975	19	1098	1.3
1182.3	0.923	14	0.723	12	942	1.2	13	1.3	18	1077	0.846
1183.0	1.1	12	0.513	15	1096	1.4	16	0.936	23	1253	0.999
1183.7	0.414	13	0.401	14	888	1.8	6.0	0.732	21	1015	1.3
1184.4	0.997	11	0.491	13	1079	1.6	14	0.895	20	1234	1.2
1185.1	0.955	11	0.505	12	1084	2.0	14	0.921	19	1240	1.4
1185.8	1.7	11	0.409	9.2	1138	2.5	25	0.746	14	1301	1.8

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Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1186.5	1.2	15	0.521	15	1258	3.3	17	0.951	23	1438	2.4
1187.2	0.881	14	0.659	12	986	1.5	13	1.2	18	1128	1.1
1187.9	0.829	12	0.606	11	957	1.6	12	1.1	17	1094	1.2
1188.6	0.603	11	0.404	13	1073	1.9	8.7	0.737	20	1227	1.4
1189.3	1.1	14	0.516	11	838	1.4	16	0.941	17	958	0.989
1190.0	1.4	14	0.587	12	1429	2.8	20	1.1	18	1635	2.1
1190.7	1.0	11	0.245	12	869	1.2	15	0.447	18	994	0.910
1191.4	1.2	11	0.339	11	1035	2.2	17	0.619	17	1183	1.6
1192.1	0.427	13	0.079	11	912	1.6	6.2	0.144	17	1043	1.2
1192.8	1.2	13	0.504	14	1154	2.0	18	0.920	21	1320	1.5
1193.5	1.3	14	0.581	15	1157	1.6	18	1.1	23	1323	1.2
1194.2	0.417	11	0.109	13	1052	2.1	6.0	0.199	21	1203	1.6
1194.9	1.0	15	0.240	7.3	926	1.1	15	0.438	11	1059	0.781
1195.6	0.827	13	0.245	10	1047	2.5	12	0.446	16	1198	1.8
1196.3	1.2	13	0.304	8.5	980	2.6	17	0.555	13	1121	1.9
1197.0	1.3	11	0.333	13	1025	1.9	19	0.608	21	1173	1.4
1197.7	1.1	11	0.384	11	1120	2.0	15	0.701	17	1281	1.4
1198.4	0.954	11	0.281	8.2	899	2.0	14	0.512	13	1028	1.5
1199.1	1.3	12	0.294	9.6	882	2.0	19	0.536	15	1008	1.4
1199.8	0.824	14	0.458	15	1235	2.0	12	0.835	24	1412	1.5
1200.5	1.2	11	0.418	13	1164	2.8	17	0.763	19	1331	2.0
1201.2	0.994	12	0.324	11	1033	2.1	14	0.591	16	1181	1.5
1201.9	0.688	10	0.522	10	791	1.7	9.9	0.953	16	904	1.2
1202.6	0.642	13	0.390	13	932	1.6	9.3	0.712	20	1066	1.2
1203.2	1.4	14	0.317	14	966	1.8	20	0.579	22	1104	1.3
1203.9	0.918	13	0.380	11	964	1.8	13	0.693	17	1103	1.3
1204.6	1.4	11	0.342	13	1084	2.1	20	0.623	20	1239	1.6
1205.3	1.3	10	0.354	13	1046	2.3	18	0.646	19	1196	1.7
1206.0	0.916	13	0.518	11	1028	2.1	13	0.945	16	1175	1.6
1206.7	0.408	13	0.301	11	1015	1.7	5.9	0.549	16	1160	1.3
1207.4	1.2	14	0.375	13	1227	2.9	17	0.684	20	1403	2.1
1208.1	1.3	11	0.299	10	830	1.8	19	0.546	15	949	1.3
1208.8	2.0	14	0.497	10	1161	1.5	29	0.907	16	1327	1.1
1209.5	1.2	14	0.325	14	1026	3.3	17	0.593	21	1173	2.4
1210.2	0.653	11	0.502	13	928	1.8	9.4	0.915	20	1061	1.3
1210.9	1.0	11	0.454	12	1015	2.0	15	0.827	19	1160	1.5
1211.6	0.751	15	0.155	12	909	1.4	11	0.283	19	1040	1.0
1212.3	1.6	15	0.458	19	1313	2.6	23	0.835	29	1502	1.9
1213.0	1.3	15	0.441	17	1218	3.8	19	0.804	27	1393	2.8
1213.7	1.2	16	0.384	14	888	2.6	17	0.700	21	1016	1.9
1214.4	1.3	12	0.556	21	1142	2.7	19	1.0	32	1306	2.0
1215.1	1.4	12	0.650	18	1323	2.7	20	1.2	27	1512	2.0
1215.8	2.5	18	0.570	18	1291	3.4	37	1.0	28	1477	2.5
1216.5	1.7	14	0.642	21	1129	3.1	24	1.2	32	1291	2.2
1217.2	1.4	13	0.467	24	1340	3.9	20	0.852	36	1532	2.8
1217.9	1.6	11	0.765	20	1324	3.1	23	1.4	31	1514	2.2
1218.6	1.8	16	0.409	23	1432	3.3	26	0.746	36	1637	2.4
1219.3	1.8	17	0.596	26	1501	4.4	26	1.1	40	1716	3.2
1220.0	1.8	14	0.996	19	1133	4.5	25	1.8	29	1295	3.3
1220.7	2.7	12	0.938	22	1145	2.8	39	1.7	34	1310	2.0
1221.4	2.2	13	0.777	23	1419	4.2	32	1.4	35	1622	3.1
1222.1	2.3	15	0.849	21	1262	3.1	33	1.5	32	1443	2.3
1222.8	2.1	15	1.0	30	1701	6.0	31	1.9	46	1945	4.4
1223.5	2.2	17	0.745	26	1602	5.1	32	1.4	40	1832	3.8
1224.2	1.7	15	1.1	30	1628	3.6	25	2.0	45	1862	2.6
1224.9	1.8	15	0.737	23	1641	4.7	26	1.3	35	1877	3.4
1225.6	0.821	17	0.894	23	1773	6.5	12	1.6	35	2028	4.8
1226.3	1.5	20	0.953	22	1328	5.1	22	1.7	33	1519	3.7
1227.0	1.2	16	1.0	27	1598	4.0	17	1.8	42	1828	2.9
1227.7	0.994	12	0.740	22	1410	3.7	14	1.3	34	1613	2.7
1228.4	1.7	16	1.0	20	1914	3.4	25	1.8	31	2188	2.5
1229.1	1.1	17	0.810	26	1588	4.8	16	1.5	40	1816	3.5
1229.7	1.3	17	1.3	27	1360	2.7	19	2.4	42	1555	2.0
1230.4	0.853	14	0.725	25	1236	2.6	12	1.3	39	1414	1.9
1231.1	1.2	15	1.2	25	1622	3.6	18	2.2	39	1854	2.6
1231.8	1.0	17	0.628	22	1525	2.8	15	1.1	34	1744	2.0
1232.5	0.853	19	1.1	36	1821	3.6	12	2.0	56	2083	2.6
1233.2	0.763	17	0.952	27	1740	3.4	11	1.7	42	1990	2.5
1233.9	0.787	19	0.943	20	1406	2.4	11	1.7	31	1608	1.8
1234.6	1.4	14	0.658	20	1526	2.7	20	1.2	30	1745	1.9
1235.3	1.3	16	0.820	20	1317	1.9	18	1.5	30	1507	1.4
1236.0	1.8	21	0.805	27	1840	5.0	26	1.5	42	2104	3.7
1236.7	0.617	18	0.973	28	1356	3.3	8.9	1.8	42	1551	2.4
1237.4	1.0	16	0.626	20	1201	1.9	15	1.1	30	1373	1.4
1238.1	1.1	16	0.703	23	1310	2.4	16	1.3	36	1499	1.7
1238.8	0.701	17	1.5	29	1617	4.2	10	2.8	45	1849	3.0
1239.5	1.0	17	1.1	29	1380	3.0	15	2.0	44	1578	2.2
1240.2	1.1	19	0.892	30	1142	2.6	17	1.6	47	1305	1.9
1240.9	0.736	18	0.959	24	1107	3.3	11	1.7	36	1266	2.4
1241.6	0.981	14	0.812	20	1273	2.8	14	1.5	31	1456	2.1
1242.3	1.4	21	0.712	24	1141	2.8	20	1.3	36	1305	2.1

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1243.0	0.669	17	0.636	27	961	2.4	9.7	1.2	41	1099	1.7
1243.7	0.672	20	0.538	24	1074	1.6	9.7	0.982	36	1228	1.2
1244.4	1.5	17	0.454	22	1182	2.0	22	0.828	34	1352	1.5
1245.1	1.1	12	0.470	21	1009	2.0	16	0.857	33	1154	1.5
1245.8	1.0	20	0.902	23	1078	2.8	14	1.6	35	1232	2.0
1246.5	1.4	16	0.247	21	984	2.3	21	0.450	32	1125	1.7
1247.2	1.0	16	0.357	15	660	1.3	14	0.651	22	755	0.914
1247.9	2.0	18	0.626	21	1089	1.5	29	1.1	33	1246	1.1
1248.6	1.9	15	0.469	14	904	2.0	28	0.855	22	1034	1.4
1249.3	2.3	17	0.395	18	779	1.5	34	0.720	28	891	1.1
1250.0	1.6	16	0.446	23	965	2.9	23	0.814	35	1104	2.1
1250.7	2.0	13	0.514	17	934	2.6	28	0.937	26	1068	1.9
1251.4	3.1	18	0.223	16	956	2.3	45	0.406	24	1093	1.7
1252.1	4.0	16	0.473	17	783	1.6	58	0.863	27	895	1.1
1252.8	4.1	16	0.445	19	805	1.8	59	0.811	30	921	1.3
1253.5	2.9	14	0.245	18	755	1.5	42	0.448	28	863	1.1
1254.2	3.3	8.7	0.433	19	781	1.8	48	0.790	30	893	1.3
1254.9	4.6	11	0.495	11	843	1.5	67	0.902	17	964	1.1
1255.6	6.2	15	0.706	22	966	3.4	89	1.3	33	1104	2.5
1256.2	6.7	15	0.508	22	843	1.9	97	0.926	34	964	1.4
1256.9	6.7	15	0.558	25	1014	3.8	97	1.0	39	1159	2.8
1257.6	5.9	13	1.1	24	1242	3.0	85	1.9	37	1420	2.2
1258.3	7.1	13	0.665	21	918	1.6	102	1.2	33	1049	1.2
1259.0	9.0	15	0.761	20	937	1.8	130	1.4	31	1072	1.3
1259.7	8.0	15	1.1	28	1038	2.8	116	2.1	43	1187	2.0
1260.4	7.1	12	1.2	27	967	1.8	103	2.1	42	1105	1.3
1261.1	7.3	11	1.3	21	720	1.7	105	2.3	32	824	1.3
1261.8	8.7	15	2.1	29	1273	2.2	126	3.8	44	1455	1.6
1262.5	8.5	17	2.0	29	1282	2.8	122	3.6	45	1466	2.0
1263.2	7.6	17	1.9	36	1044	2.5	110	3.4	55	1194	1.8
1263.9	7.4	13	2.1	35	1185	1.9	107	3.9	54	1355	1.4
1264.6	7.1	14	2.7	27	1322	2.3	103	4.9	42	1512	1.7
1265.3	9.3	14	3.8	44	1470	2.7	134	6.9	68	1681	2.0
1266.0	8.9	18	2.8	42	1542	3.6	128	5.2	65	1764	2.7
1266.7	6.8	16	3.3	43	1347	2.2	97	6.0	67	1540	1.6
1267.4	6.0	13	3.5	36	1368	1.9	87	6.3	55	1564	1.4
1268.1	8.0	17	3.7	33	1481	1.5	115	6.7	51	1693	1.1
1268.8	7.3	17	4.1	53	1538	2.5	105	7.5	81	1759	1.8
1269.5	6.8	20	4.3	59	1795	2.1	98	7.9	90	2052	1.5
1270.2	4.3	16	3.6	41	1169	1.5	62	6.5	62	1337	1.1
1270.9	5.0	14	4.4	33	1178	1.7	73	8.0	51	1347	1.2
1271.6	4.5	14	3.9	44	1807	1.8	65	7.1	67	2066	1.3
1272.3	5.1	16	5.2	48	1658	2.6	73	9.6	74	1896	1.9
1273.0	3.5	17	3.6	50	1464	2.6	51	6.5	76	1674	1.9
1273.7	4.5	14	3.9	39	1361	2.8	66	7.1	60	1557	2.0
1274.4	5.3	18	4.3	41	1736	2.8	76	7.8	63	1985	2.0
1275.1	3.8	15	3.6	45	2052	3.4	54	6.5	69	2347	2.5
1275.8	5.2	17	4.1	47	1718	3.5	74	7.5	72	1964	2.5
1276.5	3.0	16	3.0	40	1484	2.8	44	5.4	62	1697	2.0
1277.2	3.6	19	2.8	38	1477	2.5	52	5.0	58	1689	1.8
1277.9	2.3	16	3.4	44	2198	4.5	34	6.1	67	2513	3.3
1278.6	3.7	22	4.0	47	2260	3.6	54	7.3	72	2584	2.6
1279.3	4.1	24	2.4	35	1467	3.3	59	4.4	54	1678	2.4
1280.0	2.8	17	2.4	44	1874	2.6	40	4.3	68	2143	1.9
1280.7	2.4	12	2.0	35	1740	2.4	34	3.6	54	1990	1.7
1281.4	3.5	16	2.7	38	1613	2.6	50	5.0	58	1844	1.9
1282.0	4.1	22	2.7	52	1910	3.9	59	4.9	79	2184	2.8
1282.7	3.3	26	2.5	53	1971	3.6	47	4.6	81	2254	2.6
1283.4	3.2	19	2.2	49	1802	2.8	46	3.9	75	2061	2.0
1284.1	2.3	15	2.7	43	1978	2.2	33	4.9	66	2262	1.6
1284.8	2.6	15	2.6	43	1847	2.4	37	4.7	67	2112	1.8
1285.5	2.9	23	2.8	50	2111	3.9	41	5.0	77	2413	2.8
1286.2	2.1	20	1.7	44	1460	2.6	30	3.2	67	1669	1.9
1286.9	1.7	16	2.2	35	1368	2.0	25	3.9	54	1564	1.5
1287.6	1.5	16	2.4	43	2070	3.3	21	4.3	65	2367	2.4
1288.3	1.6	20	2.4	39	1759	3.3	23	4.4	60	2011	2.4
1289.0	1.8	26	2.6	49	1909	2.7	26	4.7	76	2183	2.0
1289.7	1.5	20	1.8	50	1572	2.8	21	3.2	76	1798	2.0
1290.4	1.8	19	1.8	40	1578	2.3	26	3.4	61	1805	1.7
1291.1	1.7	17	1.9	38	1582	2.3	24	3.5	58	1809	1.7
1291.8	0.795	21	2.3	49	2103	2.6	11	4.2	75	2404	1.9
1292.5	1.0	22	2.0	39	1444	2.3	15	3.6	60	1651	1.7
1293.2	0.393	24	2.1	44	1371	2.2	5.7	3.9	67	1568	1.6
1293.9	1.2	16	1.7	37	1497	3.8	17	3.1	56	1712	2.8
1294.6	0.393	17	1.4	31	1740	3.0	5.7	2.6	47	1990	2.2
1295.3	1.7	21	1.9	41	1670	3.3	25	3.5	63	1910	2.4
1296.0	1.2	19	1.3	34	1120	2.8	17	2.4	53	1280	2.1
1296.7	0.766	15	1.1	39	1421	1.9	11	2.1	60	1624	1.4
1297.4	1.0	17	1.4	27	1118	1.5	15	2.5	42	1278	1.1
1298.1	1.1	16	1.0	34	1457	2.5	15	1.9	52	1666	1.8
1298.8	0.659	19	1.3	38	1293	3.3	9.5	2.4	59	1479	2.4

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1299.5	0.709	21	1.3	39	1203	2.6	10	2.4	60	1376	1.9
1300.2	0.627	16	0.763	41	1061	3.2	9.0	1.4	62	1213	2.3
1300.9	0.991	17	1.1	27	1178	1.8	14	2.1	41	1347	1.3
1301.6	0.886	17	1.4	29	1173	1.9	13	2.5	45	1341	1.4
1302.3	1.1	20	0.945	35	1186	2.7	16	1.7	53	1356	2.0
1303.0	0.393	20	1.1	32	1038	1.2	5.7	1.9	48	1187	0.895
1303.7	0.925	14	0.995	23	1046	1.7	13	1.8	35	1196	1.2
1304.4	0.785	15	0.919	23	922	1.2	11	1.7	35	1054	0.868
1305.1	2.0	21	0.951	30	1108	2.5	29	1.7	46	1267	1.8
1305.8	1.3	21	0.810	29	892	1.5	19	1.5	45	1020	1.1
1306.5	0.546	18	0.893	22	936	0.922	7.9	1.6	34	1070	0.672
1307.2	0.968	13	0.590	16	812	0.761	14	1.1	25	928	0.555
1307.9	1.1	16	0.736	19	901	2.2	15	1.3	29	1031	1.6
1308.5	0.539	15	0.630	21	1070	1.7	7.8	1.1	32	1224	1.2
1309.2	1.0	20	0.713	19	751	1.9	15	1.3	29	859	1.4
1309.9	0.679	17	0.564	21	805	1.2	9.8	1.0	33	920	0.853
1310.6	0.500	16	0.678	19	922	1.7	7.2	1.2	29	1054	1.2
1311.3	0.669	14	0.407	14	753	1.1	9.7	0.742	21	861	0.834
1312.0	0.676	15	0.616	17	981	2.4	9.8	1.1	27	1121	1.7
1312.7	0.393	17	0.592	19	860	1.2	5.7	1.1	29	983	0.895
1313.4	0.726	15	0.451	18	727	1.5	10	0.823	28	831	1.1
1314.1	1.0	13	0.478	13	785	0.898	15	0.872	19	898	0.656
1314.8	0.977	16	0.405	21	1171	2.4	14	0.738	32	1339	1.7
1315.5	0.867	20	0.613	21	774	1.3	13	1.1	32	885	0.959
1316.2	0.776	20	0.402	20	984	0.626	11	0.734	30	1126	0.456
1316.9	0.686	14	0.398	13	630	1.0	9.9	0.727	20	721	0.738
1317.6	0.622	17	0.541	17	981	1.2	9.0	0.986	26	1121	0.911
1318.3	1.1	16	0.372	18	1014	1.4	16	0.678	28	1160	1.1
1319.0	1.0	18	0.205	20	803	1.5	15	0.374	30	919	1.1
1319.7	0.771	15	0.205	17	907	1.1	11	0.374	27	1037	0.816
1320.4	0.393	14	0.465	12	782	1.4	5.7	0.849	19	894	1.0
1321.1	0.522	17	0.377	15	811	1.1	7.5	0.687	23	927	0.836
1321.8	0.832	17	0.816	20	917	1.8	12	1.5	30	1049	1.3
1322.5	1.3	20	0.201	16	931	1.2	19	0.367	24	1064	0.902
1323.2	0.502	13	0.210	16	758	0.624	7.2	0.383	25	867	0.456
1323.9	0.782	12	0.507	16	940	0.990	11	0.924	25	1075	0.722
1324.6	0.811	16	0.373	11	715	0.993	12	0.679	17	818	0.725
1325.3	1.2	20	0.162	15	901	1.1	18	0.295	23	1030	0.829
1326.0	0.865	17	0.079	12	782	1.3	12	0.144	19	894	0.957
1326.7	0.649	13	0.173	12	818	1.8	9.4	0.315	19	936	1.3
1327.4	0.811	12	0.201	11	1082	0.997	12	0.367	17	1237	0.727
1328.1	0.393	16	0.142	11	988	1.7	5.7	0.259	16	1130	1.3
1328.8	1.1	16	0.136	11	811	1.5	16	0.249	16	927	1.1
1329.5	1.1	15	0.206	14	1058	0.790	17	0.376	21	1210	0.577
1330.2	0.630	14	0.104	7.1	930	1.3	9.1	0.190	11	1064	0.941
1330.9	1.0	13	0.105	11	905	2.1	15	0.192	17	1035	1.5
1331.6	0.745	13	0.079	9.3	850	1.3	11	0.144	14	972	0.933
1332.3	0.991	11	0.250	14	875	1.8	14	0.456	22	1001	1.3
1333.0	0.459	10	0.128	8.7	830	1.5	6.6	0.233	13	949	1.1
1333.7	1.0	9.8	0.079	8.3	907	1.0	15	0.144	13	1037	0.751
1334.3	0.795	10	0.079	8.6	916	0.978	11	0.144	13	1047	0.713
1335.0	0.393	14	0.093	11	958	0.833	5.7	0.169	17	1095	0.608
1335.7	0.982	13	0.079	9.3	640	1.3	14	0.144	14	731	0.952
1336.4	0.393	11	0.100	7.9	742	1.5	5.7	0.183	12	849	1.1
1337.1	0.393	12	0.079	11	943	1.3	5.7	0.144	16	1078	0.976
1337.8	1.6	12	0.133	11	863	2.1	23	0.242	18	987	1.5
1338.5	1.4	12	0.248	14	927	1.7	21	0.451	22	1060	1.2
1339.2	1.2	10	0.079	17	873	0.932	18	0.144	27	998	0.680
1339.9	1.4	13	0.174	12	725	1.4	21	0.318	19	830	0.994
1340.6	1.2	8.0	0.162	12	852	2.0	18	0.295	19	974	1.4
1341.3	1.5	13	0.333	15	936	1.7	22	0.607	23	1070	1.2
1342.0	1.3	15	0.092	18	842	1.9	19	0.169	28	963	1.4
1342.7	1.6	12	0.109	17	894	2.2	23	0.199	25	1022	1.6
1343.4	1.1	9.4	0.339	15	869	1.3	16	0.619	23	994	0.926
1344.1	1.5	10	0.291	16	935	2.2	22	0.530	25	1069	1.6
1344.8	1.5	12	0.525	18	1043	2.7	21	0.958	28	1192	2.0
1345.5	1.9	12	0.327	16	940	2.2	27	0.596	25	1075	1.6
1346.2	1.9	11	0.632	15	1005	2.5	28	1.2	24	1149	1.8
1346.9	1.6	11	0.518	15	1035	2.4	23	0.945	23	1184	1.7
1347.6	2.8	14	0.673	18	1245	3.0	40	1.2	28	1424	2.2
1348.3	2.7	15	0.832	23	1356	3.0	39	1.5	35	1551	2.2
1349.0	2.9	16	0.817	24	1278	2.6	42	1.5	37	1461	1.9
1349.7	2.4	15	0.894	24	1202	3.4	35	1.6	36	1375	2.5
1350.4	2.6	12	0.956	20	1219	2.4	37	1.7	31	1394	1.7
1351.1	1.9	13	0.875	23	1497	4.1	28	1.6	35	1712	3.0
1351.8	2.5	15	0.771	26	1590	5.7	37	1.4	40	1818	4.2
1352.5	2.6	17	0.553	25	1348	4.1	38	1.0	39	1542	3.0
1353.2	1.7	13	0.736	19	1293	2.5	25	1.3	28	1478	1.8
1353.9	2.1	23	1.1	22	1675	4.2	30	2.0	34	1915	3.1
1354.6	1.7	14	1.5	21	1799	5.0	25	2.7	32	2058	3.6
1355.3	2.7	16	0.932	31	2032	5.5	40	1.7	48	2323	4.0

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1356.0	1.7	15	0.887	23	1343	3.5	25	1.6	35	1536	2.5
1356.7	1.8	14	1.1	24	1712	3.2	27	2.1	36	1958	2.3
1357.4	1.6	13	1.4	24	1764	4.0	23	2.5	36	2017	2.9
1358.1	2.5	18	1.1	29	2009	4.6	36	2.1	44	2297	3.4
1358.8	0.904	17	1.3	34	1982	5.5	13	2.3	53	2266	4.0
1359.5	0.897	15	1.1	30	1543	4.7	13	2.0	46	1764	3.4
1360.1	0.809	21	0.899	21	1618	2.9	12	1.6	32	1850	2.1
1360.8	1.2	11	1.2	23	1759	3.9	17	2.1	36	2011	2.8
1361.5	0.856	15	1.3	32	1874	4.1	12	2.4	49	2143	3.0
1362.2	0.393	17	1.4	30	1532	4.1	5.7	2.6	45	1752	3.0
1362.9	0.518	12	1.4	29	1873	3.8	7.5	2.5	45	2142	2.7
1363.6	0.554	13	0.906	26	1721	2.4	8.0	1.7	39	1968	1.8
1364.3	0.394	16	1.4	24	1686	2.9	5.7	2.5	38	1928	2.1
1365.0	0.910	17	0.731	30	1598	3.1	13	1.3	46	1828	2.3
1365.7	1.0	18	1.3	28	1602	3.2	15	2.3	43	1832	2.3
1366.4	0.623	15	0.918	28	1550	3.6	9.0	1.7	43	1773	2.6
1367.1	0.566	13	1.1	21	1176	2.7	8.2	2.0	31	1345	1.9
1367.8	0.810	15	1.4	27	1767	2.1	12	2.5	41	2021	1.6
1368.5	0.393	17	0.766	26	1488	2.9	5.7	1.4	40	1701	2.1
1369.2	0.486	14	0.841	26	1382	1.5	7.0	1.5	41	1580	1.1
1369.9	0.423	11	0.889	25	1454	2.6	6.1	1.6	38	1663	1.9
1370.6	0.393	13	0.921	20	1107	1.4	5.7	1.7	31	1266	1.0
1371.3	0.618	16	1.3	28	1712	2.8	8.9	2.4	42	1957	2.1
1372.0	0.766	19	1.2	29	1351	2.8	11	2.1	45	1544	2.1
1372.7	0.875	16	0.703	22	1179	1.9	13	1.3	34	1348	1.4
1373.4	0.783	13	0.651	27	1573	2.2	11	1.2	42	1799	1.6
1374.1	1.1	18	0.625	20	1403	2.3	16	1.1	31	1605	1.6
1374.8	0.638	21	0.821	19	1278	2.3	9.2	1.5	28	1461	1.7
1375.5	0.949	16	0.541	29	1121	3.4	14	0.986	44	1281	2.5
1376.2	0.929	12	0.555	24	1123	2.1	13	1.0	37	1284	1.5
1376.9	0.393	11	0.504	13	1039	2.2	5.7	0.919	20	1188	1.6
1377.6	0.786	13	0.514	18	1170	3.2	11	0.937	28	1338	2.3
1378.3	0.856	15	0.777	20	1038	2.0	12	1.4	30	1187	1.4
1379.0	0.798	14	0.393	17	986	1.4	12	0.716	26	1128	1.0
1379.7	0.561	12	0.624	13	909	1.4	8.1	1.1	20	1039	1.0
1380.4	0.664	17	0.346	13	956	1.3	9.6	0.631	19	1094	0.973
1381.1	1.1	15	0.496	13	1087	2.3	16	0.905	19	1243	1.7
1381.8	0.896	15	0.239	14	818	2.4	13	0.437	22	935	1.8
1382.5	0.694	17	0.288	11	796	1.7	10	0.525	17	911	1.3
1383.2	0.782	16	0.302	11	671	1.2	11	0.551	16	767	0.912
1383.9	0.636	13	0.420	10	891	1.1	9.2	0.766	15	1019	0.789
1384.6	0.750	16	0.336	9.9	1117	3.3	11	0.612	15	1277	2.4
1385.3	0.687	22	0.219	11	722	1.2	9.9	0.400	17	825	0.856
1386.0	0.652	18	0.089	12	960	1.3	9.4	0.163	19	1097	0.955
1386.6	0.951	22	0.306	9.7	961	1.4	14	0.557	15	1099	0.992
1387.3	0.439	20	0.254	10	835	0.823	6.3	0.463	16	955	0.601
1388.0	0.485	21	0.383	8.3	777	1.6	7.0	0.699	13	889	1.2
1388.7	0.531	18	0.282	8.6	686	1.4	7.7	0.514	13	784	1.0
1389.4	0.704	21	0.079	9.3	814	1.2	10	0.144	14	930	0.880
1390.1	0.393	17	0.123	7.0	768	1.5	5.7	0.225	11	878	1.1
1390.8	0.582	21	0.222	8.5	861	1.3	8.4	0.404	13	984	0.983
1391.5	0.533	22	0.129	9.3	690	1.2	7.7	0.235	14	789	0.841
1392.2	0.417	25	0.116	6.2	642	1.2	6.0	0.212	9.5	734	0.884
1392.9	0.779	28	0.149	7.3	795	1.6	11	0.271	11	909	1.1
1393.6	0.642	33	0.110	6.4	769	0.892	9.3	0.201	9.8	879	0.651
1394.3	0.680	40	0.212	6.5	669	1.5	9.8	0.386	10.0	765	1.1
1395.0	0.541	47	0.227	5.7	725	1.1	7.8	0.414	8.7	829	0.832
1395.7	0.663	44	0.352	5.9	609	0.896	9.6	0.642	9.1	697	0.654
1396.4	0.393	42	0.079	5.6	655	0.845	5.7	0.144	8.5	749	0.617
1397.1	0.569	54	0.171	9.9	699	2.4	8.2	0.311	15	799	1.8
1397.8	0.393	54	0.079	4.4	635	1.5	5.7	0.144	6.7	726	1.1
1398.5	0.393	48	0.171	4.5	559	1.4	5.7	0.312	6.8	639	1.0
1399.2	0.393	61	0.513	5.5	580	1.9	5.7	0.936	8.5	663	1.4
1399.9	0.393	52	0.079	2.5	678	1.3	5.7	0.144	3.8	775	0.968
1400.6	1.3	59	0.237	9.8	642	1.8	19	0.433	15	735	1.3
1401.3	0.619	61	0.527	10	705	1.6	8.9	0.962	16	807	1.1
1402.0	0.393	58	0.079	7.4	508	1.8	5.7	0.144	11	581	1.3
1402.7	0.718	65	0.339	8.0	560	1.0	10	0.619	12	641	0.736
1403.4	0.393	65	0.290	4.3	565	0.972	5.7	0.529	6.6	646	0.709
1404.1	0.838	61	0.314	6.2	510	0.468	12	0.574	9.5	583	0.341
1404.8	0.999	77	0.378	4.9	508	0.169	14	0.690	7.5	580	0.123
1405.5	1.1	69	0.340	13	524	0.569	16	0.620	20	599	0.415
1406.2	0.937	79	0.492	9.6	474	1.1	14	0.898	15	542	0.801
1406.9	1.5	106	0.914	11	816	1.9	22	1.7	17	933	1.4
1407.6	0.983	84	0.487	14	541	1.6	14	0.887	21	619	1.1
1408.3	0.393	91	0.303	10	530	0.543	5.7	0.552	16	606	0.396
1409.0	0.393	91	0.749	14	615	0.836	5.7	1.4	21	703	0.610
1409.7	0.901	88	0.389	14	488	0.437	13	0.709	22	558	0.319
1410.4	0.393	77	0.494	25	994	2.2	5.7	0.900	38	1136	1.6
1411.1	1.5	64	1.3	3.2	487	0.003	22	2.4	5.0	557	0.002
1411.8	1.2	144	0.640	18	556	1.9	18	1.2	28	635	1.4

Minnow Environmental
Sample ID: 020

Parameter DL (ppm) Length (µm)	7Li 0.393	24Mg 0.403	55Mn 0.079	66Zn 0.702	88Sr 0.005	137Ba 0.003	7Li/Ca	55Mn/Ca	66Zn/Ca	88Sr/Ca	137Ba/Ca
1412.4	0.393	70	0.835	22	505	4.7	5.7	1.5	34	578	3.5
1413.1	0.914	105	0.695	26	444	0.887	13	1.3	39	508	0.647
1413.8	0.777	108	2.9	25	509	0.516	11	5.3	39	582	0.376
1414.5	0.830	107	0.738	57	720	3.3	12	1.3	87	823	2.4
1415.2	0.393	108	2.7	26	687	0.003	5.7	5.0	40	785	0.002
1415.9	2.0	123	4.5	28	557	1.3	29	8.1	43	637	0.933
1416.6	1.1	100	1.1	20	540	1.5	16	2.1	31	617	1.1
1417.3	1.6	86	0.079	18	631	2.4	23	0.144	28	722	1.8
1418.0	2.9	146	3.0	23	427	1.2	43	5.5	36	489	0.893
1418.7	0.393	106	1.4	32	567	1.6	5.7	2.6	49	648	1.2
1419.4	0.702	110	0.819	49	532	0.735	10	1.5	76	609	0.536
1420.1	1.1	112	1.9	31	626	0.003	16	3.5	48	716	0.002
1420.8	1.2	769	1.1	30	605	3.2	17	1.9	47	691	2.3
1421.5	0.393	133	0.402	24	676	0.919	5.7	0.734	37	773	0.670
1422.2	0.393	76	1.9	50	606	0.003	5.7	3.5	76	693	0.002
1422.9	2.3	115	1.8	36	735	2.3	34	3.2	55	840	1.7
1423.6	0.393	77	0.079	6.5	627	2.0	5.7	0.144	10	717	1.4
1424.3	1.5	79	0.434	22	974	0.003	22	0.792	34	1113	0.002
1425.0	0.393	76	1.4	6.7	601	2.0	5.7	2.5	10	688	1.5
1425.7	0.393	81	2.0	19	701	1.0	5.7	3.7	29	802	0.733
1426.4	0.393	52	0.079	7.0	598	0.881	5.7	0.144	11	684	0.643
1427.1	0.393	69	1.2	0.702	638	1.1	5.7	2.3	1.1	730	0.815
1427.8	0.393	28	0.079	5.6	301	1.2	5.7	0.144	8.5	344	0.874
1428.5	1.3	91	1.2	33	830	0.003	19	2.2	50	949	0.002
1429.2	0.393	80	0.079	17	615	1.2	5.7	0.144	25	703	0.909
1429.9	0.529	57	0.079	10	958	0.003	7.6	0.144	16	1096	0.002
1430.6	3.1	42	0.079	7.7	476	0.825	44	0.144	12	545	0.602
1431.3	1.8	59	1.9	32	770	0.003	26	3.5	49	880	0.002
1432.0	2.4	51	0.079	11	516	1.1	34	0.144	16	590	0.837
1432.7	0.393	98	0.079	18	664	3.1	5.7	0.144	28	759	2.2
1433.4	0.393	35	0.191	2.4	428	0.902	5.7	0.349	3.7	490	0.658
1434.1	0.393	43	1.0	25	602	0.003	5.7	1.9	38	689	0.002
1434.8	0.393	77	0.079	22	613	1.5	5.7	0.144	34	701	1.1

Minnow Environmental
Sample Notes

Sample ID	Client ID	Notes
001	BA-QURL-AC-OT-01-Aug-28	Ablation line from core to edge.
002	BA-QURL-AC-OT-02-Aug-28	
003	BA-QURL-AC-OT-03-Aug-28	
004	BA-QURL-AC-OT-04-Aug-28	Ablation line from core to edge.
005	BA-QURL-AC-OT-05-Aug-28	
006	BA-QURL-AC-OT-06-Aug-28	Ablation line from core to edge.
007	BA-QURL-AC-OT-07-Aug-28	
008	BA-QURL-AC-OT-08-Aug-28	Ablation line from core to edge.
009	BA-QURL-AC-OT-09-Aug-28	Ablation line from core to edge.
010	BA-QURL-AC-OT-10-Aug-28	Abnormal concentrations after 1640µm - otolith likely too thin. Use left side, core at ~1215µm.
011	BA-QURL-AC-OT-11-Aug-28	
012	BA-QURL-AC-OT-12-Aug-28	Ablation line from core to edge.
013	BA-QURL-AC-OT-13-Aug-28	Ablation line from core to edge.
014	BA-QURL-AC-OT-14-Aug-28	
015	BA-QURL-AC-OT-15-Aug-28	Ablation line from core to edge.
016	BA-QURL-AC-OT-16-Aug-28	
017	BA-QURL-AC-OT-17-Aug-28	
018	BA-QURL-AC-OT-18-Aug-28	
019	BA-QURL-AC-OT-19-Aug-28	
020	BA-QURL-AC-OT-20-Aug-28	Ablation line from core to edge.

Minnow Environmental
Sample Aging

Sample ID	Client ID	Estimated Age (based on chemistry)	Migrated to Ocean (Y or N)	Estimated Duration in Ocean
001	BA-QURL-AC-OT-01-Aug-28	14	Y	5
002	BA-QURL-AC-OT-02-Aug-28	12	Y	5
003	BA-QURL-AC-OT-03-Aug-28	13	Y	6
004	BA-QURL-AC-OT-04-Aug-28	18	Y	5
005	BA-QURL-AC-OT-05-Aug-28	14	Y	5
006	BA-QURL-AC-OT-06-Aug-28	14	Y	5
007	BA-QURL-AC-OT-07-Aug-28	14	Y	6
008	BA-QURL-AC-OT-08-Aug-28	25	Y	11
009	BA-QURL-AC-OT-09-Aug-28	18	N	-
010	BA-QURL-AC-OT-10-Aug-28	15	Y	5
011	BA-QURL-AC-OT-11-Aug-28	16	Y	3
012	BA-QURL-AC-OT-12-Aug-28	14	Y	3*
013	BA-QURL-AC-OT-13-Aug-28	15	Y	5
014	BA-QURL-AC-OT-14-Aug-28	13	Y	3
015	BA-QURL-AC-OT-15-Aug-28	14	Y	11
016	BA-QURL-AC-OT-16-Aug-28	14	Y	5
017	BA-QURL-AC-OT-17-Aug-28	12	Y	5
018	BA-QURL-AC-OT-18-Aug-28	14	Y	5
019	BA-QURL-AC-OT-19-Aug-28	14	Y	6
020	BA-QURL-AC-OT-20-Aug-28	12	Y	6

* Note: Regarding Sample ID #012, the estimated duration in ocean was difficult to evaluate using elemental chemistry.

Minnow Environmental
Sample Set Information

Set	Detection Limit (DL)					
	7Li	24Mg	55Mn	66Zn	88Sr	137Ba
01	0.097	0.295	0.139	1.5	0.001	0.005
02	0.269	0.196	0.051	0.509	0.002	0.006
03	0.337	0.298	0.059	0.458	0.003	0.003
04	0.490	0.362	0.079	0.534	0.003	0.007
05	0.513	0.149	0.058	0.611	0.004	0.009
06	0.393	0.403	0.079	0.702	0.005	0.003
07	0.228	0.272	0.183	1.5	0.494	0.021

Set	Sample ID	Client ID	Date of Analysis
01	001	BA-QURL-AC-OT-01-Aug-28	10 Feb 2025
	002	BA-QURL-AC-OT-02-Aug-28	
02	003	BA-QURL-AC-OT-03-Aug-28	10 Feb 2025
	004	BA-QURL-AC-OT-04-Aug-28	
03	005	BA-QURL-AC-OT-05-Aug-28	10 Feb 2025
	006	BA-QURL-AC-OT-06-Aug-28	
04	007	BA-QURL-AC-OT-07-Aug-28	10 Feb 2025
	010	BA-QURL-AC-OT-10-Aug-28	
05	011	BA-QURL-AC-OT-11-Aug-28	10 Feb 2025
	012	BA-QURL-AC-OT-12-Aug-28	
06	013	BA-QURL-AC-OT-13-Aug-28	10 Feb 2025
	014	BA-QURL-AC-OT-14-Aug-28	
07	015	BA-QURL-AC-OT-15-Aug-28	10 Feb 2025
	016	BA-QURL-AC-OT-16-Aug-28	
	017	BA-QURL-AC-OT-17-Aug-28	10 Feb 2025
	018	BA-QURL-AC-OT-18-Aug-28	
	019	BA-QURL-AC-OT-19-Aug-28	06 Mar 2025
	020	BA-QURL-AC-OT-20-Aug-28	
	008	BA-QURL-AC-OT-08-Aug-28	06 Mar 2025
	009	BA-QURL-AC-OT-09-Aug-28	

Results Summary BF2400295

Project	Pit 2 and 3 Baseline
Report To	Matthew Wilson, Baffinland Iron Mines Corporation
Date Received	27-Aug-2024 20:49
Issue Date	06-Sep-2024 16:32
Amendment	0

Client Sample ID			SYS_QURL-WS_2024-08-26	SYS_IKL-2408_2024-08-26
Date Sampled			26-Aug-2024	26-Aug-2024
Time Sampled			10:30	15:25
ALS Sample ID			BF2400295-001	BF2400295-002
Analyte	Lowest Detection Limit	Units	Sub-Matrix: Water	Sub-Matrix: Water

Physical Tests (Matrix: Water)

Conductivity	1.0	µS/cm	167	21.5
Alkalinity, total (as CaCO3)	2.0	mg/L	78.1	7.3
Hardness (as CaCO3), dissolved	0.50	mg/L	80.9	7.92
Solids, total dissolved [TDS]	10	mg/L	100	21
Solids, total suspended [TSS]	1.0	mg/L	<1.0	<1.0
Turbidity	0.10	NTU	0.41	0.31
pH	0.10	pH units	8.05	7.65

Anions and Nutrients (Matrix: Water)

Ammonia, total (as N)	0.0050	mg/L	0.0057	<0.0050
Bromide	0.10	mg/L	<0.10	<0.10
Chloride	0.50	mg/L	1.27	1.07
Kjeldahl nitrogen, total [TKN]	0.050	mg/L	0.115	0.126
Nitrate (as N)	0.020	mg/L	<0.020	0.050
Nitrite (as N)	0.010	mg/L	<0.010	<0.010
Phosphorus, total	0.0020	mg/L	0.0024	0.0025
Sulfate (as SO4)	0.30	mg/L	6.19	0.86

Organic / Inorganic Carbon (Matrix: Water)

Carbon, dissolved organic [DOC]	0.50	mg/L	1.51	1.65
Carbon, total organic [TOC]	0.50	mg/L	1.28	1.27

Total Metals (Matrix: Water)

Aluminum, total	0.0030	mg/L	0.0068	0.0144
Antimony, total	0.00010	mg/L	<0.00010	<0.00010
Arsenic, total	0.00010	mg/L	<0.00010	<0.00010
Barium, total	0.00010	mg/L	0.00217	0.0190
Beryllium, total	0.000020	mg/L	<0.000020	<0.000020
Bismuth, total	0.000050	mg/L	<0.000050	<0.000050
Boron, total	0.010	mg/L	<0.010	<0.010
Cadmium, total	0.0000050	mg/L	<0.0000050	0.0000084
Calcium, total	0.050	mg/L	24.1	2.05
Cesium, total	0.000010	mg/L	<0.000010	<0.000010
Chromium, total	0.00050	mg/L	<0.00050	<0.00050
Cobalt, total	0.00010	mg/L	<0.00010	<0.00010
Copper, total	0.00050	mg/L	<0.00050	0.00084
Iron, total	0.010	mg/L	<0.010	0.010
Lead, total	0.000050	mg/L	<0.000050	<0.000050
Lithium, total	0.0010	mg/L	0.0012	<0.0010
Magnesium, total	0.0050	mg/L	5.21	0.728
Manganese, total	0.00010	mg/L	0.00068	0.00050
Mercury, total	0.0000050	mg/L	<0.0000050	<0.0000050
Molybdenum, total	0.000050	mg/L	0.000100	0.000225
Nickel, total	0.00050	mg/L	<0.00050	<0.00050
Phosphorus, total	0.050	mg/L	<0.050	<0.050
Potassium, total	0.050	mg/L	0.317	0.376
Rubidium, total	0.00020	mg/L	0.00023	0.00104
Selenium, total	0.000050	mg/L	<0.000050	<0.000050
Silicon, total	0.10	mg/L	0.36	0.38
Silver, total	0.000010	mg/L	<0.000010	<0.000010
Sodium, total	0.050	mg/L	0.617	0.632
Strontium, total	0.00020	mg/L	0.0580	0.00575
Sulfur, total	0.50	mg/L	2.15	<0.50
Tellurium, total	0.00020	mg/L	<0.00020	<0.00020
Thallium, total	0.000010	mg/L	<0.000010	<0.000010
Thorium, total	0.00010	mg/L	<0.00010	<0.00010
Tin, total	0.00010	mg/L	<0.00010	<0.00010
Titanium, total	0.00030	mg/L	<0.00030	0.00038
Tungsten, total	0.00010	mg/L	<0.00010	<0.00010
Uranium, total	0.000010	mg/L	0.000456	0.000379
Vanadium, total	0.00050	mg/L	<0.00050	<0.00050
Zinc, total	0.0030	mg/L	<0.0030	<0.0030
Zirconium, total	0.00020	mg/L	<0.00020	<0.00020

Results Summary BF2400295

Project	Pit 2 and 3 Baseline
Report To	Matthew Wilson, Baffinland Iron Mines Corporation
Date Received	27-Aug-2024 20:49
Issue Date	06-Sep-2024 16:32
Amendment	0

Client Sample ID			SYS_QURL-WS_2024-08-26	SYS_IKL-2408_2024-08-26
Date Sampled			26-Aug-2024	26-Aug-2024
Time Sampled			10:30	15:25
ALS Sample ID			BF2400295-001	BF2400295-002
Analyte	Lowest Detection Limit	Units	Sub-Matrix: Water	Sub-Matrix: Water

Dissolved Metals (Matrix: Water)

Aluminum, dissolved	0.0010	mg/L	0.0022	0.0074
Antimony, dissolved	0.00010	mg/L	<0.00010	<0.00010
Arsenic, dissolved	0.00010	mg/L	<0.00010	<0.00010
Barium, dissolved	0.00010	mg/L	0.00198	0.0179
Beryllium, dissolved	0.000020	mg/L	<0.000020	<0.000020
Bismuth, dissolved	0.000050	mg/L	<0.000050	<0.000050
Boron, dissolved	0.010	mg/L	<0.010	<0.010
Cadmium, dissolved	0.0000050	mg/L	0.0000058	<0.0000050
Calcium, dissolved	0.050	mg/L	23.5	2.00
Cesium, dissolved	0.000010	mg/L	<0.000010	<0.000010
Chromium, dissolved	0.00050	mg/L	<0.00050	<0.00050
Cobalt, dissolved	0.00010	mg/L	<0.00010	<0.00010
Copper, dissolved	0.00020	mg/L	0.00034	0.00073
Iron, dissolved	0.010	mg/L	<0.010	<0.010
Lead, dissolved	0.000050	mg/L	<0.000050	<0.000050
Lithium, dissolved	0.0010	mg/L	0.0016	<0.0010
Magnesium, dissolved	0.0050	mg/L	5.39	0.711
Manganese, dissolved	0.00010	mg/L	0.00027	0.00019
Mercury, dissolved	0.0000050	mg/L	<0.0000050	<0.0000050
Molybdenum, dissolved	0.000050	mg/L	0.000100	0.000192
Nickel, dissolved	0.00050	mg/L	<0.00050	<0.00050
Phosphorus, dissolved	0.050	mg/L	<0.050	<0.050
Potassium, dissolved	0.050	mg/L	0.311	0.317
Rubidium, dissolved	0.00020	mg/L	0.00022	0.00097
Selenium, dissolved	0.000050	mg/L	<0.000050	<0.000050
Silicon, dissolved	0.050	mg/L	0.312	0.342
Silver, dissolved	0.000010	mg/L	<0.000010	<0.000010
Sodium, dissolved	0.050	mg/L	0.696	0.576
Strontium, dissolved	0.00020	mg/L	0.0564	0.00544
Sulfur, dissolved	0.50	mg/L	2.11	<0.50
Tellurium, dissolved	0.00020	mg/L	<0.00020	<0.00020
Thallium, dissolved	0.000010	mg/L	<0.000010	<0.000010
Thorium, dissolved	0.00010	mg/L	<0.00010	<0.00010
Tin, dissolved	0.00010	mg/L	<0.00010	<0.00010
Titanium, dissolved	0.00030	mg/L	<0.00030	<0.00030
Tungsten, dissolved	0.00010	mg/L	<0.00010	<0.00010
Uranium, dissolved	0.000010	mg/L	0.000431	0.000361
Vanadium, dissolved	0.00050	mg/L	<0.00050	<0.00050
Zinc, dissolved	0.0010	mg/L	0.0022	<0.0010
Zirconium, dissolved	0.00030	mg/L	<0.00030	<0.00030
Dissolved mercury filtration location			Field	Field
Dissolved metals filtration location			Field	Field

Aggregate Organics (Matrix: Water)

Phenols, total (4AAP)	0.0010	mg/L	<0.0010	<0.0010
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Plant Pigments (Matrix: Water)

Chlorophyll a	0.010	µg/L	0.623	1.45
Pheophytin a	0.100	µg/L	0.130	0.373

CERTIFICATE OF ANALYSIS

Work Order	: WT2437881	Laboratory	: ALS Environmental - Waterloo
Client	: Baffinland Iron Mines Corporation	Account Manager	: Rick Hawthorne
Contact	: Environmental Lab Results	Address	: 60 Northland Road, Unit 1
Address	: 360 Oakville Place Dr Suite 300		: Waterloo ON Canada N2V 2B8
	: Oakville Ontario Canada L6H 6K8	Telephone	: +1 519 886 6910
Telephone	: ----	Date Samples Received	: 19-Dec-2024 10:30
Project	: 247202.00XX (MILNE 2024)	Date Analysis Commenced	: 16-Jan-2025
PO	: 4500140399	Issue Date	: 14-Feb-2025 15:53
C-O-C number	: 19-DEC-2024 MINNOW FISH TISSUE		
Sampler	: MINNOW		
Site	: ----		
Quote number	: 2024-2025 Scope of Work		
No. of samples received	: 92		
No. of samples analysed	: 92		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	Position	Laboratory Department
Milithza Silva	Manager - Inorganics	Metals, Burlington, Ontario
Philip Elder	Technical Manager	Organics, Burlington, Ontario



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	Description
%	percent
mg/kg	milligrams per kilogram

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-IKLL-AC-LIV-01-AUG-27	BA-IKLL-AC-LIV-02-AUG-27	BA-IKLL-AC-LIV-28-AUG-28	BA-IKLL-AC-LIV-29-AUG-28	BA-IKLL-AC-LIV-30-AUG-28
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-001	WT2437881-002	WT2437881-003	WT2437881-004	WT2437881-005
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		74.3	78.0	66.8	62.8	68.2
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		3.1	68.5	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	0.011	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		1.66	1.37	3.28	3.11	2.34
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	0.63	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		3.04	4.15	0.680	1.34	2.94
Calcium	7440-70-2	E464/BU	25	mg/kg		154	503	113	79	101
Chromium	7440-47-3	E464/BU	0.050	mg/kg		0.101	0.246	<0.050	<0.050	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.953	0.820	0.256	0.146	0.380
Copper	7440-50-8	E464/BU	0.10	mg/kg		41.9	58.6	33.6	25.9	50.4
Iron	7439-89-6	E464/BU	2.5	mg/kg		1130	2380	455	676	943
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.167	0.321	0.073	0.057	0.069
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		716	792	577	481	652
Manganese	7439-96-5	E464/BU	0.50	mg/kg		4.49	7.57	4.12	3.36	3.48
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.402	0.462	0.128	0.150	0.300
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		0.728	0.709	0.732	0.717	0.653



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-IKLL-AC-LIV-01-AUG-27	BA-IKLL-AC-LIV-02-AUG-27	BA-IKLL-AC-LIV-28-AUG-28	BA-IKLL-AC-LIV-29-AUG-28	BA-IKLL-AC-LIV-30-AUG-28
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-001	WT2437881-002	WT2437881-003	WT2437881-004	WT2437881-005
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		0.26	0.51	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		14000	13000	11700	10200	10700
Potassium	7440-09-7	E464/BU	20	mg/kg		12300	12000	8310	7450	9580
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		5.12	4.82	3.42	3.17	4.07
Selenium	7782-49-2	E464/BU	0.050	mg/kg		4.52	6.09	9.77	10.7	8.51
Silver	7440-22-4	E464/BU	0.0050	mg/kg		1.82	1.36	0.760	0.546	1.21
Sodium	7440-23-5	E464/BU	25	mg/kg		5280	7210	3650	2670	2840
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.36	1.07	0.33	0.26	0.29
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0596	0.0374	0.0307	0.0363	0.0331
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	0.028	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		2.22	0.62	0.10	0.15	0.26
Zinc	7440-66-6	E464/BU	0.50	mg/kg		121	137	105	83.8	116
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-IKLL-AC-LIV-34-AUG-28	BA-IKLL-AC-LIV-37-AUG-28	BA-IKLL-AC-LIV-12-AUG-27	BA-IKLL-AC-LIV-22-AUG-27	BA-IKLL-AC-LIV-35-AUG-27
					Client sampling date / time	28-Aug-2024 00:00	28-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-006	WT2437881-007	WT2437881-008	WT2437881-009	WT2437881-010
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		78.2	79.6	63.6	67.6	50.2
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		1.66	1.83	3.46	1.94	3.06
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	0.14	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		3.94	4.78	1.36	1.50	0.515
Calcium	7440-70-2	E464/BU	25	mg/kg		206	293	117	106	42
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	0.069	<0.050	<0.050	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.553	2.20	0.134	0.202	0.181
Copper	7440-50-8	E464/BU	0.10	mg/kg		28.9	19.1	19.4	72.6	29.3
Iron	7439-89-6	E464/BU	2.5	mg/kg		1040	1540	379	472	205
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.122	0.104	0.033	0.091	0.032
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		689	776	487	491	249
Manganese	7439-96-5	E464/BU	0.50	mg/kg		4.42	4.65	3.12	2.37	1.67
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.374	0.485	0.150	0.344	0.106
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		0.758	0.435	0.559	0.676	0.282



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-IKLL-AC-LIV-34-AUG-28	BA-IKLL-AC-LIV-37-AUG-28	BA-IKLL-AC-LIV-12-AUG-27	BA-IKLL-AC-LIV-22-AUG-27	BA-IKLL-AC-LIV-35-AUG-27
					Client sampling date / time	28-Aug-2024 00:00	28-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-006	WT2437881-007	WT2437881-008	WT2437881-009	WT2437881-010
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		0.23	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		13500	14300	9580	9620	5000
Potassium	7440-09-7	E464/BU	20	mg/kg		12600	14000	7800	8230	3920
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		4.67	6.53	3.35	3.73	1.72
Selenium	7782-49-2	E464/BU	0.050	mg/kg		4.81	3.99	7.46	6.08	6.71
Silver	7440-22-4	E464/BU	0.0050	mg/kg		1.24	1.18	0.503	1.76	0.344
Sodium	7440-23-5	E464/BU	25	mg/kg		7680	7520	3090	2990	1470
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.33	0.38	0.52	0.21	0.12
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0278	0.0810	0.0217	0.0182	0.0312
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		0.50	0.32	<0.10	0.29	<0.10
Zinc	7440-66-6	E464/BU	0.50	mg/kg		108	110	89.9	98.8	55.9
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-IKLL-AC-LIV-31-AUG-27	BA-IKLL-AC-LIV-08-AUG-27	BA-IKLL-AC-LIV-09-AUG-27	BA-IKLL-AC-LIV-10-AUG-27	BA-IKLL-AC-LIV-13-AUG-27
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-011	WT2437881-012	WT2437881-013	WT2437881-014	WT2437881-015
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		60.1	76.8	76.7	75.9	78.2
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		2.65	1.20	0.702	1.03	2.18
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	0.14
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		1.32	1.28	1.64	1.06	6.08
Calcium	7440-70-2	E464/BU	25	mg/kg		68	257	345	288	232
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	<0.050	<0.050	0.051	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.291	0.133	0.128	0.121	0.634
Copper	7440-50-8	E464/BU	0.10	mg/kg		55.7	6.38	6.52	5.81	16.8
Iron	7439-89-6	E464/BU	2.5	mg/kg		400	469	488	257	2160
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.038	0.067	0.061	0.081	0.153
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		422	1180	1280	1210	1110
Manganese	7439-96-5	E464/BU	0.50	mg/kg		3.00	6.28	7.78	8.09	4.71
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.131	0.206	0.213	0.127	0.552
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		0.671	0.358	0.409	0.428	0.357



Analytical Results

Sub-Matrix: Biota
(Matrix: Biota)

					Client sample ID	BA-IKLL-AC-LIV-31-AUG-27	BA-IKLL-AC-LIV-08-AUG-27	BA-IKLL-AC-LIV-09-AUG-27	BA-IKLL-AC-LIV-10-AUG-27	BA-IKLL-AC-LIV-13-AUG-27
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-011	WT2437881-012	WT2437881-013	WT2437881-014	WT2437881-015
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		<0.20	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		8400	18800	21100	18800	18600
Potassium	7440-09-7	E464/BU	20	mg/kg		6780	19000	20000	19900	17900
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		2.57	11.3	11.3	10.4	10.9
Selenium	7782-49-2	E464/BU	0.050	mg/kg		9.78	3.24	3.18	2.72	3.41
Silver	7440-22-4	E464/BU	0.0050	mg/kg		1.58	0.120	0.125	0.0824	0.282
Sodium	7440-23-5	E464/BU	25	mg/kg		2180	4540	4700	4420	6290
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.25	0.42	0.63	0.46	0.26
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0264	0.0601	0.0573	0.0510	0.204
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		0.14	0.33	0.21	0.15	0.58
Zinc	7440-66-6	E464/BU	0.50	mg/kg		82.9	93.7	116	90.7	157
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-IKLL-AC-LIV-14-AUG-27	BA-IKLL-AC-LIV-15-AUG-27	BA-IKLL-AC-LIV-16-AUG-27	BA-IKLL-AC-LIV-19-AUG-27	BA-IKLL-AC-LIV-21-AUG-27
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-016	WT2437881-017	WT2437881-018	WT2437881-019	WT2437881-020
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		69.8	62.2	78.4	59.8	77.3
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		1.72	2.31	1.90	2.73	1.38
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	0.12
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		2.24	0.881	4.92	1.38	1.97
Calcium	7440-70-2	E464/BU	25	mg/kg		241	100	242	83	326
Chromium	7440-47-3	E464/BU	0.050	mg/kg		0.106	<0.050	<0.050	<0.050	0.066
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.381	0.159	0.297	0.172	0.388
Copper	7440-50-8	E464/BU	0.10	mg/kg		17.1	20.3	6.96	73.1	4.05
Iron	7439-89-6	E464/BU	2.5	mg/kg		788	380	402	488	768
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.072	0.037	0.145	0.028	0.035
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		605	420	1020	403	1330
Manganese	7439-96-5	E464/BU	0.50	mg/kg		4.03	3.39	3.27	2.86	5.03
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.219	0.099	0.460	0.142	0.253
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		0.866	0.558	0.312	0.609	0.286



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-IKLL-AC-LIV-14-AUG-27	BA-IKLL-AC-LIV-15-AUG-27	BA-IKLL-AC-LIV-16-AUG-27	BA-IKLL-AC-LIV-19-AUG-27	BA-IKLL-AC-LIV-21-AUG-27
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-016	WT2437881-017	WT2437881-018	WT2437881-019	WT2437881-020
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		0.24	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		11800	8700	15800	8570	21000
Potassium	7440-09-7	E464/BU	20	mg/kg		9720	7290	16600	6330	20500
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		3.96	2.80	7.86	3.34	13.3
Selenium	7782-49-2	E464/BU	0.050	mg/kg		10.2	7.99	2.79	8.83	2.19
Silver	7440-22-4	E464/BU	0.0050	mg/kg		0.275	0.529	0.0782	2.05	0.0095
Sodium	7440-23-5	E464/BU	25	mg/kg		4250	2660	6780	2690	5690
Strontium	7440-24-6	E464/BU	0.10	mg/kg		1.96	0.47	0.36	0.29	0.34
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0269	0.0259	0.0940	0.0338	0.0917
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		0.76	<0.10	0.30	0.12	0.32
Zinc	7440-66-6	E464/BU	0.50	mg/kg		102	71.4	158	80.5	81.1
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-IKLL-AC-LIV-24-AUG-27	BA-DUP-AC-LIV-01-2024-08	BA-DUP-AC-LIV-02-2024-08	BA-DUP-AC-LIV-03-2024-08	BA-QURL-AC-LI-03-AUG-28
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	29-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-021	WT2437881-022	WT2437881-023	WT2437881-024	WT2437881-025
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		68.5	62.9	67.5	60.3	80.2
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		0.657	3.30	1.96	2.52	1.51
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		1.24	1.35	1.38	1.36	5.53
Calcium	7440-70-2	E464/BU	25	mg/kg		126	103	120	76	569
Chromium	7440-47-3	E464/BU	0.050	mg/kg		0.137	<0.050	<0.050	<0.050	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.130	0.119	0.168	0.263	0.193
Copper	7440-50-8	E464/BU	0.10	mg/kg		25.3	22.3	62.2	48.4	9.69
Iron	7439-89-6	E464/BU	2.5	mg/kg		459	352	467	415	858
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.053	<0.020	0.044	0.025	0.036
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		501	443	490	405	1020
Manganese	7439-96-5	E464/BU	0.50	mg/kg		2.69	3.14	2.72	3.07	4.25
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.196	0.150	0.356	0.126	0.469
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		0.681	0.574	0.563	0.685	0.396



Analytical Results

Sub-Matrix: Biota
(Matrix: Biota)

					Client sample ID	BA-IKLL-AC-LIV-24-AUG-27	BA-DUP-AC-LIV-01-2024-08	BA-DUP-AC-LIV-02-2024-08	BA-DUP-AC-LIV-03-2024-08	BA-QURL-AC-LI-03-AUG-28
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	29-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-021	WT2437881-022	WT2437881-023	WT2437881-024	WT2437881-025
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		0.24	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		9450	8890	9000	7930	18900
Potassium	7440-09-7	E464/BU	20	mg/kg		8000	7080	7940	6490	14900
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		3.67	3.10	3.73	2.54	7.75
Selenium	7782-49-2	E464/BU	0.050	mg/kg		4.68	7.34	5.91	9.87	3.58
Silver	7440-22-4	E464/BU	0.0050	mg/kg		0.618	0.580	1.60	1.46	0.149
Sodium	7440-23-5	E464/BU	25	mg/kg		3400	3110	2990	2330	6860
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.36	0.38	0.22	0.26	0.47
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0381	0.0186	0.0165	0.0233	0.113
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		0.43	<0.10	0.25	0.13	0.21
Zinc	7440-66-6	E464/BU	0.50	mg/kg		92.0	90.3	106	82.9	159
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-QURL-AC-LI-04-AUG-29	BA-QURL-AC-LI-05-AUG-29	BA-QURL-AC-LI-06-AUG-29	BA-QURL-AC-LI-07-AUG-29	BA-QURL-AC-LI-08-AUG-29
					Client sampling date / time	29-Aug-2024 00:00	29-Aug-2024 00:00	29-Aug-2024 00:00	29-Aug-2024 00:00	29-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-026	WT2437881-027	WT2437881-028	WT2437881-029	WT2437881-030
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		79.3	81.0	75.1	79.1	81.4
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		3.0	<2.0	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	0.012
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		1.99	2.08	2.01	1.22	3.07
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	1.7	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		6.72	4.22	8.40	6.23	8.76
Calcium	7440-70-2	E464/BU	25	mg/kg		462	584	226	411	379
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.276	0.173	0.272	0.288	0.316
Copper	7440-50-8	E464/BU	0.10	mg/kg		8.01	6.45	100	15.3	6.48
Iron	7439-89-6	E464/BU	2.5	mg/kg		1650	974	1820	1370	5180
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.053	0.074	0.059	0.038	0.080
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		1020	1080	669	881	984
Manganese	7439-96-5	E464/BU	0.50	mg/kg		4.78	5.17	2.76	3.19	4.67
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.491	0.346	0.378	0.468	0.999
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		0.386	0.348	0.386	0.410	0.396



Analytical Results

Sub-Matrix: Biota
(Matrix: Biota)

					Client sample ID	BA-QURL-AC-LI-04-AUG-29	BA-QURL-AC-LI-05-AUG-29	BA-QURL-AC-LI-06-AUG-29	BA-QURL-AC-LI-07-AUG-29	BA-QURL-AC-LI-08-AUG-29
					Client sampling date / time	29-Aug-2024 00:00	29-Aug-2024 00:00	29-Aug-2024 00:00	29-Aug-2024 00:00	29-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-026	WT2437881-027	WT2437881-028	WT2437881-029	WT2437881-030
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		<0.20	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		18800	18400	13200	15900	18200
Potassium	7440-09-7	E464/BU	20	mg/kg		15900	16200	12500	14000	16800
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		9.03	9.41	6.11	7.21	6.82
Selenium	7782-49-2	E464/BU	0.050	mg/kg		3.27	3.21	2.81	3.49	4.61
Silver	7440-22-4	E464/BU	0.0050	mg/kg		0.0878	0.0486	3.45	0.464	0.0257
Sodium	7440-23-5	E464/BU	25	mg/kg		5820	7400	5760	7220	8630
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.35	0.47	0.25	0.36	0.30
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.158	0.114	0.0728	0.0959	0.103
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		0.53	0.21	0.17	0.24	0.72
Zinc	7440-66-6	E464/BU	0.50	mg/kg		119	127	155	145	132
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-QURL-AC-LI-09-AUG-29	BA-QURL-AC-LI-10-AUG-29	BA-QURL-AC-LI-11-AUG-30	BA-QURL-AC-LI-12-AUG-30	BA-QURL-AC-LI-13-AUG-30
					Client sampling date / time	29-Aug-2024 00:00	29-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-031	WT2437881-032	WT2437881-033	WT2437881-034	WT2437881-035
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		79.7	78.4	78.2	78.8	78.7
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	2.1	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		0.0540	2.37	2.42	3.70	2.40
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		0.772	7.71	5.48	3.97	3.44
Calcium	7440-70-2	E464/BU	25	mg/kg		999	320	313	523	411
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	<0.050	0.184	<0.050	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.186	0.550	0.435	0.193	0.218
Copper	7440-50-8	E464/BU	0.10	mg/kg		36.9	40.1	36.5	7.53	35.7
Iron	7439-89-6	E464/BU	2.5	mg/kg		2640	2340	1540	835	987
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.042	0.054	0.078	0.047	0.042
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		1110	958	804	1140	1000
Manganese	7439-96-5	E464/BU	0.50	mg/kg		7.69	4.38	5.40	4.96	4.84
Mercury	7439-97-6	E524/BU	0.031	mg/kg		3.38	0.655	0.364	0.302	0.315
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		0.664	0.467	0.686	0.250	0.356



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-QURL-AC-LI-09-AUG-29	BA-QURL-AC-LI-10-AUG-29	BA-QURL-AC-LI-11-AUG-30	BA-QURL-AC-LI-12-AUG-30	BA-QURL-AC-LI-13-AUG-30
					Client sampling date / time	29-Aug-2024 00:00	29-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-031	WT2437881-032	WT2437881-033	WT2437881-034	WT2437881-035
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		<0.20	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		17500	18500	15500	18900	18100
Potassium	7440-09-7	E464/BU	20	mg/kg		13800	16200	12500	15200	16100
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		7.40	7.48	5.22	6.79	7.47
Selenium	7782-49-2	E464/BU	0.050	mg/kg		11.6	3.71	4.53	2.80	2.59
Silver	7440-22-4	E464/BU	0.0050	mg/kg		0.568	1.88	1.92	0.0599	1.28
Sodium	7440-23-5	E464/BU	25	mg/kg		5120	6660	7530	5690	6580
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.36	0.30	0.30	0.42	0.28
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.219	0.119	0.0315	0.0791	0.0812
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		<0.10	0.74	0.30	0.15	0.15
Zinc	7440-66-6	E464/BU	0.50	mg/kg		161	164	138	130	144
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-QURL-AC-LI-14-AUG-30	BA-QURL-AC-LI-15-AUG-30	BA-QURL-AC-LI-16-AUG-30	BA-QURL-AC-LI-17-AUG-30	BA-QURL-AC-LI-18-AUG-30
					Client sampling date / time	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-036	WT2437881-037	WT2437881-038	WT2437881-039	WT2437881-040
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		81.2	77.5	77.6	79.6	78.2
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		1.41	2.16	1.83	2.21	1.53
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		2.81	8.07	3.97	6.04	5.26
Calcium	7440-70-2	E464/BU	25	mg/kg		438	331	394	370	518
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	<0.050	0.149	<0.050	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.266	0.190	0.217	0.164	0.302
Copper	7440-50-8	E464/BU	0.10	mg/kg		93.2	9.06	22.4	14.7	6.46
Iron	7439-89-6	E464/BU	2.5	mg/kg		1140	1330	1140	1680	971
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.062	0.047	0.041	0.044	0.059
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		1090	1100	1060	1010	1350
Manganese	7439-96-5	E464/BU	0.50	mg/kg		5.48	4.78	4.47	5.49	6.14
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.365	0.579	0.345	0.396	0.301
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		0.451	0.486	0.367	0.329	0.414



Analytical Results

Sub-Matrix: Biota
(Matrix: Biota)

					Client sample ID	BA-QURL-AC-LI-14-AUG-30	BA-QURL-AC-LI-15-AUG-30	BA-QURL-AC-LI-16-AUG-30	BA-QURL-AC-LI-17-AUG-30	BA-QURL-AC-LI-18-AUG-30
					Client sampling date / time	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-036	WT2437881-037	WT2437881-038	WT2437881-039	WT2437881-040
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		<0.20	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		20300	19000	17500	18600	19600
Potassium	7440-09-7	E464/BU	20	mg/kg		16200	15100	14600	14900	14900
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		9.95	7.37	7.52	7.94	7.84
Selenium	7782-49-2	E464/BU	0.050	mg/kg		3.16	4.15	3.22	3.59	3.13
Silver	7440-22-4	E464/BU	0.0050	mg/kg		3.29	0.135	1.05	0.416	0.0369
Sodium	7440-23-5	E464/BU	25	mg/kg		7710	5030	5630	6170	6450
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.35	0.24	0.36	0.32	0.46
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.105	0.152	0.0849	0.0743	0.0817
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		0.26	0.39	0.13	0.18	0.28
Zinc	7440-66-6	E464/BU	0.50	mg/kg		142	167	136	142	125
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-QURL-AC-LI-19-AUG-30	BA-QURL-AC-LI-20-AUG-30	BA-DUP-AC-LIV-05-2024-08	BA-DUP-AC-LIV-15-2024-08	BA-IKLL-AC-MUS-01-AUG-27
					Client sampling date / time	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-041	WT2437881-042	WT2437881-043	WT2437881-044	WT2437881-045
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		78.3	80.6	79.9	77.5	76.1
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		2.25	1.10	1.94	2.30	2.02
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	1.3	1.2	<1.0	1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		3.59	7.75	4.90	9.23	0.0095
Calcium	7440-70-2	E464/BU	25	mg/kg		288	473	502	714	173
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	0.054
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.167	0.227	0.195	0.242	0.153
Copper	7440-50-8	E464/BU	0.10	mg/kg		5.83	13.8	6.61	10.6	2.56
Iron	7439-89-6	E464/BU	2.5	mg/kg		1030	1490	1080	1500	19.8
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.049	0.045	0.042	0.119	<0.020
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		1130	826	1090	1260	1600
Manganese	7439-96-5	E464/BU	0.50	mg/kg		6.71	3.73	5.86	5.73	<0.50
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.371	0.404	0.346	0.503	0.171
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		0.281	0.398	0.351	0.510	<0.020



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-QURL-AC-LI-19-AUG-30	BA-QURL-AC-LI-20-AUG-30	BA-DUP-AC-LIV-05-2024-08	BA-DUP-AC-LIV-15-2024-08	BA-IKLL-AC-MUS-01-AUG-27
					Client sampling date / time	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-041	WT2437881-042	WT2437881-043	WT2437881-044	WT2437881-045
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		<0.20	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		20100	15200	20500	21100	12400
Potassium	7440-09-7	E464/BU	20	mg/kg		14100	12200	15900	16800	20800
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		7.17	6.70	9.58	8.27	6.15
Selenium	7782-49-2	E464/BU	0.050	mg/kg		2.73	3.14	3.23	4.61	1.22
Silver	7440-22-4	E464/BU	0.0050	mg/kg		0.0336	0.517	0.0484	0.161	<0.0050
Sodium	7440-23-5	E464/BU	25	mg/kg		5330	7960	6780	5160	1560
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.23	0.39	0.39	0.67	0.21
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.124	0.0661	0.113	0.160	0.0085
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		0.20	0.25	0.24	0.46	<0.10
Zinc	7440-66-6	E464/BU	0.50	mg/kg		109	172	140	208	16.2
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-IKLL-AC-MUS-02-AUG-27	BA-IKLL-AC-MUS-28-AUG-28	BA-IKLL-AC-MUS-29-AUG-28	BA-QURL-AC-MUS-01-AUG-28	BA-QURL-AC-MUS-02-AUG-28
					Client sampling date / time	27-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-046	WT2437881-047	WT2437881-048	WT2437881-049	WT2437881-050
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		74.8	76.7	74.1	77.3	76.1
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		23.6	<2.0	<2.0	<2.0	4.6
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	0.018
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		1.34	2.72	2.95	1.48	1.56
Barium	7440-39-3	E464/BU	0.10	mg/kg		0.18	<0.10	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		1.0	1.0	<1.0	1.0	2.7
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		0.0111	0.0131	0.0151	0.0114	0.0185
Calcium	7440-70-2	E464/BU	25	mg/kg		1590	159	121	136	240
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.852	0.080	<0.020	0.053	0.044
Copper	7440-50-8	E464/BU	0.10	mg/kg		2.41	2.51	2.14	2.96	3.00
Iron	7439-89-6	E464/BU	2.5	mg/kg		243	15.5	14.3	24.9	34.0
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.046	0.021	<0.020	<0.020	<0.020
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		1380	1560	1220	1120	1110
Manganese	7439-96-5	E464/BU	0.50	mg/kg		2.59	<0.50	<0.50	<0.50	<0.50
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.207	0.128	0.172	0.240	0.275
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-IKLL-AC-MUS-02-AUG-27	BA-IKLL-AC-MUS-28-AUG-28	BA-IKLL-AC-MUS-29-AUG-28	BA-QURL-AC-MUS-01-AUG-28	BA-QURL-AC-MUS-02-AUG-28
					Client sampling date / time	27-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-046	WT2437881-047	WT2437881-048	WT2437881-049	WT2437881-050
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		0.37	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		10300	12000	10000	9530	9780
Potassium	7440-09-7	E464/BU	20	mg/kg		16600	19600	15600	15700	15300
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		4.96	5.11	4.34	6.47	6.61
Selenium	7782-49-2	E464/BU	0.050	mg/kg		1.28	1.31	1.26	0.981	1.26
Silver	7440-22-4	E464/BU	0.0050	mg/kg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Sodium	7440-23-5	E464/BU	25	mg/kg		1140	1370	958	2030	2730
Strontium	7440-24-6	E464/BU	0.10	mg/kg		1.47	0.17	0.14	<0.10	0.16
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0063	0.0042	0.0048	0.0086	0.0094
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Zinc	7440-66-6	E464/BU	0.50	mg/kg		14.3	18.5	15.1	14.5	17.3
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-QURL-AC-MUS-03-AUG-28	BA-QURL-AC-MUS-04-AUG-29	BA-QURL-AC-MUS-05-AUG-29	BA-QURL-AC-MUS-06-AUG-29	BA-QURL-AC-MUS-07-AUG-29
					Client sampling date / time	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-051	WT2437881-052	WT2437881-053	WT2437881-054	WT2437881-055
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		74.4	74.6	78.4	75.6	76.8
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	0.015
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		1.66	1.94	2.23	2.40	1.42
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	0.013	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		1.0	1.9	1.0	1.1	1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		0.0119	0.0141	0.0090	0.0116	0.0096
Calcium	7440-70-2	E464/BU	25	mg/kg		145	118	248	153	162
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.035	0.027	0.025	<0.020	<0.020
Copper	7440-50-8	E464/BU	0.10	mg/kg		2.76	3.39	3.16	2.51	2.76
Iron	7439-89-6	E464/BU	2.5	mg/kg		31.7	38.0	27.9	24.6	20.3
Lead	7439-92-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	0.022	<0.020
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		988	1020	1210	1080	1210
Manganese	7439-96-5	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.230	0.226	0.212	0.230	0.277
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-QURL-AC-MUS-03-AUG-28	BA-QURL-AC-MUS-04-AUG-29	BA-QURL-AC-MUS-05-AUG-29	BA-QURL-AC-MUS-06-AUG-29	BA-QURL-AC-MUS-07-AUG-29
					Client sampling date / time	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-051	WT2437881-052	WT2437881-053	WT2437881-054	WT2437881-055
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		<0.20	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		8490	8720	10100	8980	9870
Potassium	7440-09-7	E464/BU	20	mg/kg		13500	13200	16600	14800	15500
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		6.07	5.42	7.68	6.14	6.52
Selenium	7782-49-2	E464/BU	0.050	mg/kg		1.00	1.05	1.20	1.02	1.10
Silver	7440-22-4	E464/BU	0.0050	mg/kg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Sodium	7440-23-5	E464/BU	25	mg/kg		1960	1830	1720	2030	2050
Strontium	7440-24-6	E464/BU	0.10	mg/kg		<0.10	<0.10	0.21	0.10	<0.10
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0098	0.0102	0.0114	0.0113	0.0129
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Zinc	7440-66-6	E464/BU	0.50	mg/kg		13.9	15.1	15.4	13.7	14.4
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-QURL-AC-MUS-08-AUG-29	BA-QURL-AC-MUS-09-AUG-29	BA-QURL-AC-MUS-10-AUG-29	BA-QURL-AC-MUS-11-AUG-30	BA-QURL-AC-MUS-12-AUG-30
					Client sampling date / time	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-056	WT2437881-057	WT2437881-058	WT2437881-059	WT2437881-060
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		79.3	82.0	74.7	76.5	77.9
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		4.07	0.0310	1.92	2.75	4.57
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		1.2	1.4	<1.0	1.1	1.2
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		0.0184	<0.0050	0.0084	0.0099	0.0085
Calcium	7440-70-2	E464/BU	25	mg/kg		209	231	134	167	176
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.022	0.064	<0.020	0.022	<0.020
Copper	7440-50-8	E464/BU	0.10	mg/kg		1.83	2.81	2.02	3.37	2.67
Iron	7439-89-6	E464/BU	2.5	mg/kg		25.2	31.2	22.1	29.7	21.4
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.027	0.029	0.028	0.029	<0.020
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		1200	1330	1070	1080	1210
Manganese	7439-96-5	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.600	2.22	0.232	0.198	0.230
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-QURL-AC-MUS-08-AUG-29	BA-QURL-AC-MUS-09-AUG-29	BA-QURL-AC-MUS-10-AUG-29	BA-QURL-AC-MUS-11-AUG-30	BA-QURL-AC-MUS-12-AUG-30
					Client sampling date / time	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-056	WT2437881-057	WT2437881-058	WT2437881-059	WT2437881-060
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		<0.20	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		10200	12300	8850	8950	9990
Potassium	7440-09-7	E464/BU	20	mg/kg		18400	20900	14500	14600	16600
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		6.16	6.43	5.90	4.97	5.80
Selenium	7782-49-2	E464/BU	0.050	mg/kg		1.10	2.05	0.944	1.14	1.04
Silver	7440-22-4	E464/BU	0.0050	mg/kg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Sodium	7440-23-5	E464/BU	25	mg/kg		2660	1950	1840	2460	2140
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.11	<0.10	<0.10	0.10	<0.10
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0102	0.0661	0.0103	0.0092	0.0109
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	0.12
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Zinc	7440-66-6	E464/BU	0.50	mg/kg		16.4	19.9	12.6	15.6	14.8
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-QURL-AC-MUS-13-AUG-30	BA-QURL-AC-MUS-14-AUG-30	BA-QURL-AC-MUS-15-AUG-30	BA-QURL-AC-MUS-16-AUG-30	BA-QURL-AC-MUS-17-AUG-30
					Client sampling date / time	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-061	WT2437881-062	WT2437881-063	WT2437881-064	WT2437881-065
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		76.6	75.6	77.9	76.5	78.1
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		2.20	1.55	2.00	2.16	2.01
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		0.0073	0.0060	0.0138	0.0058	0.0125
Calcium	7440-70-2	E464/BU	25	mg/kg		209	242	177	203	224
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.023	0.021	0.133	<0.020	0.022
Copper	7440-50-8	E464/BU	0.10	mg/kg		2.14	2.50	1.95	2.25	3.68
Iron	7439-89-6	E464/BU	2.5	mg/kg		24.1	19.8	21.4	18.4	37.8
Lead	7439-92-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		957	986	1110	1130	1180
Manganese	7439-96-5	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.199	0.247	0.381	0.244	0.221
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-QURL-AC-MUS-13-AUG-30	BA-QURL-AC-MUS-14-AUG-30	BA-QURL-AC-MUS-15-AUG-30	BA-QURL-AC-MUS-16-AUG-30	BA-QURL-AC-MUS-17-AUG-30
					Client sampling date / time	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-061	WT2437881-062	WT2437881-063	WT2437881-064	WT2437881-065
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		<0.20	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		8590	8730	9220	9610	10200
Potassium	7440-09-7	E464/BU	20	mg/kg		13600	14200	14700	15100	16300
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		5.94	6.68	6.70	6.55	7.50
Selenium	7782-49-2	E464/BU	0.050	mg/kg		1.06	1.16	1.13	1.22	1.21
Silver	7440-22-4	E464/BU	0.0050	mg/kg		<0.0050	<0.0050	0.0122	<0.0050	<0.0050
Sodium	7440-23-5	E464/BU	25	mg/kg		2760	2660	3190	2090	2910
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.12	0.18	0.10	0.12	0.14
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0108	0.0113	0.0102	0.0109	0.0132
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Zinc	7440-66-6	E464/BU	0.50	mg/kg		14.7	14.2	15.4	13.8	16.8
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-QURL-AC-MUS-18-AUG-30	BA-QURL-AC-MUS-19-AUG-30	BA-QURL-AC-MUS-20-AUG-30	BA-DUP-AC-MUS-05-2024-08	BA-DUP-AC-MUS-15-2024-08
					Client sampling date / time	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-066	WT2437881-067	WT2437881-068	WT2437881-069	WT2437881-070
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		78.2	75.8	76.9	78.9	78.5
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	<2.0	3.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		1.14	2.73	2.11	1.96	2.51
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		0.0118	0.0080	0.0170	0.0087	0.0134
Calcium	7440-70-2	E464/BU	25	mg/kg		198	178	176	138	180
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	<0.050	0.065	<0.050	0.088
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		<0.020	<0.020	0.021	<0.020	<0.020
Copper	7440-50-8	E464/BU	0.10	mg/kg		2.44	2.12	5.90	2.17	2.12
Iron	7439-89-6	E464/BU	2.5	mg/kg		21.6	19.5	52.6	19.8	17.3
Lead	7439-92-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	0.030	0.027
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		1220	1100	1050	1210	1350
Manganese	7439-96-5	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.225	0.231	0.186	0.239	0.413
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-QURL-AC-MUS-18-AUG-30	BA-QURL-AC-MUS-19-AUG-30	BA-QURL-AC-MUS-20-AUG-30	BA-DUP-AC-MUS-05-2024-08	BA-DUP-AC-MUS-15-2024-08
					Client sampling date / time	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00	30-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-066	WT2437881-067	WT2437881-068	WT2437881-069	WT2437881-070
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		<0.20	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		10200	9030	9480	10300	10500
Potassium	7440-09-7	E464/BU	20	mg/kg		16400	14800	13200	17300	16900
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		6.81	5.90	5.67	8.31	7.65
Selenium	7782-49-2	E464/BU	0.050	mg/kg		1.20	1.16	1.16	1.24	1.34
Silver	7440-22-4	E464/BU	0.0050	mg/kg		<0.0050	<0.0050	<0.0050	<0.0050	0.0294
Sodium	7440-23-5	E464/BU	25	mg/kg		2570	2560	2930	1640	2730
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.12	<0.10	0.12	<0.10	0.10
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0118	0.0108	0.0151	0.0153	0.0103
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Zinc	7440-66-6	E464/BU	0.50	mg/kg		15.8	14.3	18.4	14.2	15.6
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-QURL-AC-LI-01-AUG-28	BA-QURL-AC-LI-02-AUG-28	BA-IKLL-AC-MUS-30-AUG-28	BA-IKLL-AC-MUS-34-AUG-28	BA-IKLL-AC-MUS-37-AUG-28
					Client sampling date / time	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-071	WT2437881-072	WT2437881-073	WT2437881-074	WT2437881-075
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		79.4	80.1	72.4	76.5	77.7
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		1.56	1.51	2.17	5.05	1.50
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		7.49	4.74	0.0724	0.0134	0.0202
Calcium	7440-70-2	E464/BU	25	mg/kg		458	561	157	161	164
Chromium	7440-47-3	E464/BU	0.050	mg/kg		0.097	<0.050	<0.050	<0.050	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		0.305	0.187	0.025	<0.020	0.034
Copper	7440-50-8	E464/BU	0.10	mg/kg		38.4	5.31	2.74	2.51	2.95
Iron	7439-89-6	E464/BU	2.5	mg/kg		2150	964	23.0	15.8	32.6
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.060	0.027	<0.020	<0.020	<0.020
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	0.59	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		1140	1190	1320	1270	1160
Manganese	7439-96-5	E464/BU	0.50	mg/kg		5.04	6.81	<0.50	<0.50	<0.50
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.393	0.312	0.161	0.219	0.275
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		0.448	0.304	<0.020	<0.020	<0.020



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-QURL-AC-LI-01-AUG-28	BA-QURL-AC-LI-02-AUG-28	BA-IKLL-AC-MUS-30-AUG-28	BA-IKLL-AC-MUS-34-AUG-28	BA-IKLL-AC-MUS-37-AUG-28
					Client sampling date / time	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00	28-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-071	WT2437881-072	WT2437881-073	WT2437881-074	WT2437881-075
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		<0.20	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		18600	19500	10600	10500	9930
Potassium	7440-09-7	E464/BU	20	mg/kg		15400	16600	16300	18100	16800
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		8.38	9.50	5.32	5.28	6.27
Selenium	7782-49-2	E464/BU	0.050	mg/kg		3.42	2.80	1.42	1.34	1.20
Silver	7440-22-4	E464/BU	0.0050	mg/kg		1.62	0.0364	<0.0050	<0.0050	<0.0050
Sodium	7440-23-5	E464/BU	25	mg/kg		7680	7780	1150	1760	2610
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.38	0.45	0.24	0.17	0.14
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0932	0.101	0.0066	0.0059	0.0087
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		0.34	0.13	<0.10	<0.10	<0.10
Zinc	7440-66-6	E464/BU	0.50	mg/kg		162	101	17.5	14.4	19.5
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-IKLL-AC-MUS-12-AUG-27	BA-IKLL-AC-MUS-22-AUG-27	BA-IKLL-AC-MUS-35-AUG-27	BA-IKLL-AC-MUS-31-AUG-27	BA-IKLL-AC-MUS-08-AUG-27
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-076	WT2437881-077	WT2437881-078	WT2437881-079	WT2437881-080
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		74.0	71.9	72.1	73.6	73.6
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		1.98	2.61	2.82	2.99	1.40
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	0.17	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		0.0220	0.0417	0.0100	0.0546	0.0137
Calcium	7440-70-2	E464/BU	25	mg/kg		144	151	123	138	150
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	<0.050	<0.050	<0.050	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		<0.020	0.021	0.085	0.043	0.036
Copper	7440-50-8	E464/BU	0.10	mg/kg		1.69	3.14	1.70	1.76	1.64
Iron	7439-89-6	E464/BU	2.5	mg/kg		16.2	37.4	14.5	17.5	14.3
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.108	<0.020	<0.020	<0.020	<0.020
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		1430	1140	1190	1430	1350
Manganese	7439-96-5	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.141	0.201	0.177	0.162	0.250
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-IKLL-AC-MUS-12-AUG-27	BA-IKLL-AC-MUS-22-AUG-27	BA-IKLL-AC-MUS-35-AUG-27	BA-IKLL-AC-MUS-31-AUG-27	BA-IKLL-AC-MUS-08-AUG-27
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-076	WT2437881-077	WT2437881-078	WT2437881-079	WT2437881-080
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		<0.20	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		11500	9540	9870	11000	9920
Potassium	7440-09-7	E464/BU	20	mg/kg		17600	14100	15000	16700	16000
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		5.29	4.70	4.64	5.13	5.43
Selenium	7782-49-2	E464/BU	0.050	mg/kg		1.48	1.39	1.36	1.34	1.15
Silver	7440-22-4	E464/BU	0.0050	mg/kg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Sodium	7440-23-5	E464/BU	25	mg/kg		886	1550	1220	1040	1240
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.20	0.23	0.17	0.20	0.21
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0046	0.0066	0.0085	0.0075	0.0096
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Zinc	7440-66-6	E464/BU	0.50	mg/kg		16.0	17.1	16.6	15.9	14.5
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota
(Matrix: Biota)

					Client sample ID	BA-IKLL-AC-MUS-09-AUG-27	BA-IKLL-AC-MUS-10-AUG-27	BA-IKLL-AC-MUS-13-AUG-27	BA-IKLL-AC-MUS-14-AUG-27	BA-IKLL-AC-MUS-15-AUG-27
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-081	WT2437881-082	WT2437881-083	WT2437881-084	WT2437881-085
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		75.9	75.7	77.8	74.7	73.0
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	6.4	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		0.602	1.01	2.47	2.35	1.54
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		0.0126	0.0116	0.0196	0.0465	0.0435
Calcium	7440-70-2	E464/BU	25	mg/kg		158	161	160	152	138
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	0.278	<0.050	<0.050	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		<0.020	6.24	0.022	<0.020	<0.020
Copper	7440-50-8	E464/BU	0.10	mg/kg		2.53	3.12	3.60	2.79	2.13
Iron	7439-89-6	E464/BU	2.5	mg/kg		30.2	34.2	52.5	29.8	18.9
Lead	7439-92-1	E464/BU	0.020	mg/kg		0.027	0.023	0.029	<0.020	<0.020
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		1260	1320	1070	1380	1420
Manganese	7439-96-5	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.199	0.129	0.228	0.183	0.109
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-IKLL-AC-MUS-09-AUG-27	BA-IKLL-AC-MUS-10-AUG-27	BA-IKLL-AC-MUS-13-AUG-27	BA-IKLL-AC-MUS-14-AUG-27	BA-IKLL-AC-MUS-15-AUG-27
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-081	WT2437881-082	WT2437881-083	WT2437881-084	WT2437881-085
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		<0.20	0.22	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		10500	10900	10200	11400	11400
Potassium	7440-09-7	E464/BU	20	mg/kg		17200	18100	16300	18100	16800
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		5.64	4.77	7.94	4.84	4.82
Selenium	7782-49-2	E464/BU	0.050	mg/kg		1.12	1.09	1.08	1.40	1.30
Silver	7440-22-4	E464/BU	0.0050	mg/kg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Sodium	7440-23-5	E464/BU	25	mg/kg		1410	1410	1800	1240	997
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.20	0.19	0.15	0.28	0.21
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0071	0.0065	0.0123	0.0051	0.0049
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Zinc	7440-66-6	E464/BU	0.50	mg/kg		14.6	16.1	16.1	17.0	17.4
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-IKLL-AC-MUS-16-AUG-27	BA-IKLL-AC-MUS-19-AUG-27	BA-IKLL-AC-MUS-21-AUG-27	BA-IKLL-AC-MUS-24-AUG-27	BA-DUP-AC-MUS-01-2024-08
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-086	WT2437881-087	WT2437881-088	WT2437881-089	WT2437881-090
						Result	Result	Result	Result	Result
Physical Tests										
Moisture	----	E144/BU	0.50	%		77.3	74.5	77.2	73.5	74.2
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg		<2.0	<2.0	<2.0	<2.0	<2.0
Antimony	7440-36-0	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg		2.53	2.16	1.58	1.23	2.20
Barium	7440-39-3	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Beryllium	7440-41-7	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Bismuth	7440-69-9	E464/BU	0.010	mg/kg		<0.010	<0.010	<0.010	<0.010	<0.010
Boron	7440-42-8	E464/BU	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg		0.0172	0.0127	0.0278	0.0232	0.0147
Calcium	7440-70-2	E464/BU	25	mg/kg		136	136	192	150	140
Chromium	7440-47-3	E464/BU	0.050	mg/kg		<0.050	<0.050	<0.050	0.184	<0.050
Cobalt	7440-48-4	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Copper	7440-50-8	E464/BU	0.10	mg/kg		2.54	1.93	2.49	2.53	2.20
Iron	7439-89-6	E464/BU	2.5	mg/kg		22.9	14.8	36.2	28.5	16.3
Lead	7439-92-1	E464/BU	0.020	mg/kg		<0.020	<0.020	0.022	<0.020	0.020
Lithium	7439-93-2	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Magnesium	7439-95-4	E464/BU	5.0	mg/kg		1100	1310	1360	1280	1310
Manganese	7439-96-5	E464/BU	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Mercury	7439-97-6	E524/BU	0.031	mg/kg		0.225	0.185	0.228	0.158	0.146
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-IKLL-AC-MUS-16-AUG-27	BA-IKLL-AC-MUS-19-AUG-27	BA-IKLL-AC-MUS-21-AUG-27	BA-IKLL-AC-MUS-24-AUG-27	BA-DUP-AC-MUS-01-2024-08
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00	27-Aug-2024 00:00
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2437881-086	WT2437881-087	WT2437881-088	WT2437881-089	WT2437881-090
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg		<0.20	<0.20	<0.20	<0.20	<0.20
Phosphorus	7723-14-0	E464/BU	10	mg/kg		9580	10900	11400	11000	11600
Potassium	7440-09-7	E464/BU	20	mg/kg		15900	16300	18800	17300	17800
Rubidium	7440-17-7	E464/BU	0.10	mg/kg		6.02	5.09	7.72	5.35	5.04
Selenium	7782-49-2	E464/BU	0.050	mg/kg		1.02	1.35	1.14	1.21	1.46
Silver	7440-22-4	E464/BU	0.0050	mg/kg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Sodium	7440-23-5	E464/BU	25	mg/kg		1670	1080	1580	1200	1020
Strontium	7440-24-6	E464/BU	0.10	mg/kg		0.13	0.19	0.15	0.22	0.21
Tellurium	13494-80-9	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	7440-28-0	E464/BU	0.0020	mg/kg		0.0064	0.0059	0.0068	0.0088	0.0045
Tin	7440-31-5	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Tungsten	7440-33-7	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Uranium	7440-61-1	E464/BU	0.020	mg/kg		<0.020	<0.020	<0.020	<0.020	<0.020
Vanadium	7440-62-2	E464/BU	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
Zinc	7440-66-6	E464/BU	0.50	mg/kg		13.5	14.8	15.8	16.7	16.1
Zirconium	7440-67-7	E464/BU	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30

Please refer to the General Comments section for an explanation of any result qualifiers detected.



Analytical Results

Sub-Matrix: Biota

(Matrix: Biota)

					Client sample ID	BA-DUP-AC-MUS-02-2024-08	BA-DUP-AC-MUS-03-2024-08	----	----	----
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2437881-091	WT2437881-092	----	----	----	----
					Result	Result	----	----	----	----
Physical Tests										
Moisture	----	E144/BU	0.50	%	72.2	73.9	----	----	----	----
Metals										
Aluminum	7429-90-5	E464/BU	2.0	mg/kg	<2.0	<2.0	----	----	----	----
Antimony	7440-36-0	E464/BU	0.010	mg/kg	<0.010	<0.010	----	----	----	----
Arsenic	7440-38-2	E464/BU	0.0200	mg/kg	2.24	3.36	----	----	----	----
Barium	7440-39-3	E464/BU	0.10	mg/kg	<0.10	0.11	----	----	----	----
Beryllium	7440-41-7	E464/BU	0.010	mg/kg	<0.010	<0.010	----	----	----	----
Bismuth	7440-69-9	E464/BU	0.010	mg/kg	<0.010	<0.010	----	----	----	----
Boron	7440-42-8	E464/BU	1.0	mg/kg	<1.0	<1.0	----	----	----	----
Cadmium	7440-43-9	E464/BU	0.0050	mg/kg	0.0178	0.0301	----	----	----	----
Calcium	7440-70-2	E464/BU	25	mg/kg	144	131	----	----	----	----
Chromium	7440-47-3	E464/BU	0.050	mg/kg	<0.050	0.233	----	----	----	----
Cobalt	7440-48-4	E464/BU	0.020	mg/kg	0.119	<0.020	----	----	----	----
Copper	7440-50-8	E464/BU	0.10	mg/kg	2.32	2.86	----	----	----	----
Iron	7439-89-6	E464/BU	2.5	mg/kg	24.9	25.0	----	----	----	----
Lead	7439-92-1	E464/BU	0.020	mg/kg	<0.020	<0.020	----	----	----	----
Lithium	7439-93-2	E464/BU	0.50	mg/kg	<0.50	<0.50	----	----	----	----
Magnesium	7439-95-4	E464/BU	5.0	mg/kg	1230	1240	----	----	----	----
Manganese	7439-96-5	E464/BU	0.50	mg/kg	<0.50	<0.50	----	----	----	----
Mercury	7439-97-6	E524/BU	0.031	mg/kg	0.172	0.148	----	----	----	----
Molybdenum	7439-98-7	E464/BU	0.020	mg/kg	<0.020	<0.020	----	----	----	----



Analytical Results

Sub-Matrix: Biota
 (Matrix: Biota)

					Client sample ID	BA-DUP-AC-MUS-02-2024-08	BA-DUP-AC-MUS-03-2024-08	----	----	----
					Client sampling date / time	27-Aug-2024 00:00	27-Aug-2024 00:00	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	WT2437881-091	WT2437881-092	----	----	----	----
					Result	Result	----	----	----	----
Metals										
Nickel	7440-02-0	E464/BU	0.20	mg/kg	<0.20	<0.20	----	----	----	----
Phosphorus	7723-14-0	E464/BU	10	mg/kg	10400	10800	----	----	----	----
Potassium	7440-09-7	E464/BU	20	mg/kg	15800	15900	----	----	----	----
Rubidium	7440-17-7	E464/BU	0.10	mg/kg	5.08	4.54	----	----	----	----
Selenium	7782-49-2	E464/BU	0.050	mg/kg	1.37	1.26	----	----	----	----
Silver	7440-22-4	E464/BU	0.0050	mg/kg	<0.0050	<0.0050	----	----	----	----
Sodium	7440-23-5	E464/BU	25	mg/kg	952	1100	----	----	----	----
Strontium	7440-24-6	E464/BU	0.10	mg/kg	0.16	0.21	----	----	----	----
Tellurium	13494-80-9	E464/BU	0.10	mg/kg	<0.10	<0.10	----	----	----	----
Thallium	7440-28-0	E464/BU	0.0020	mg/kg	0.0062	0.0047	----	----	----	----
Tin	7440-31-5	E464/BU	0.10	mg/kg	<0.10	<0.10	----	----	----	----
Tungsten	7440-33-7	E464/BU	0.10	mg/kg	<0.10	<0.10	----	----	----	----
Uranium	7440-61-1	E464/BU	0.020	mg/kg	<0.020	<0.020	----	----	----	----
Vanadium	7440-62-2	E464/BU	0.10	mg/kg	<0.10	<0.10	----	----	----	----
Zinc	7440-66-6	E464/BU	0.50	mg/kg	14.8	16.9	----	----	----	----
Zirconium	7440-67-7	E464/BU	0.30	mg/kg	<0.30	<0.30	----	----	----	----

Please refer to the General Comments section for an explanation of any result qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: WT2437881	Page	: 1 of 37
Client	: Baffinland Iron Mines Corporation	Laboratory	: ALS Environmental - Waterloo
Contact	: Environmental Lab Results	Account Manager	: Rick Hawthorne
Address	: 360 Oakville Place Dr Suite 300 Oakville ON Canada L6H 6K8	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: ----	Telephone	: +1 519 886 6910
Project	: 247202.00XX (MILNE 2024)	Date Samples Received	: 19-Dec-2024 10:30
PO	: 4500140399	Issue Date	: 14-Feb-2025 15:53
C-O-C number	: 19-DEC-2024 MINNOW FISH TISSUE		
Sampler	: MINNOW		
Site	: ----		
Quote number	: 2024-2025 Scope of Work		
No. of samples received	: 92		
No. of samples analysed	: 92		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.

CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.

DQO: Data Quality Objective.

LOR: Limit of Reporting (detection limit).

RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "----" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- Method Blank value outliers occur - please see following pages for full details.
- Duplicate outliers occur - please see following pages for full details.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- Matrix Spike outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- Analysis Holding Time Outliers exist - please see following pages for full details.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.



Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: Biota

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Method Blank (MB) Values								
Metals	QC-MRG2-1853948 001	----	Arsenic	7440-38-2	E464	<0.0200 ^B mg/kg	0.0048 mg/kg	Blank result exceeds permitted value

Result Qualifiers

Qualifier	Description
B	Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.

Duplicate (DUP) RPDs

Metals	WT2437881-002	BA-IKLL-AC-LIV-02-AUG-27	Calcium	7440-70-2	E464	21.5 % ^{DUP-H}	20%	Duplicate RPD does not meet the DQO for this test.
Metals	WT2437881-021	BA-IKLL-AC-LIV-24-AUG-27	Chromium	7440-47-3	E464	0.122 % ^{DUP-H, J}	Diff <2x LOR	Low Level DUP DQO exceeded (difference > 2 LOR).

Result Qualifiers

Qualifier	Description
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
J	Duplicate results and limits are expressed in terms of absolute difference.

Laboratory Control Sample (LCS) Recoveries

Metals	QC-MRG2-1841075 002	----	Lithium	7439-93-2	E464	62.6 % ^{LCS-L}	70.0-130%	Recovery less than lower control limit
Metals	QC-MRG2-1847480 002	----	Lithium	7439-93-2	E464	66.7 % ^{LCS-L}	70.0-130%	Recovery less than lower control limit
Metals	QC-MRG2-1848876 002	----	Lithium	7439-93-2	E464	65.9 % ^{LCS-L}	70.0-130%	Recovery less than lower control limit
Metals	QC-MRG2-1853948 002	----	Lithium	7439-93-2	E464	65.0 % ^{LCS-L}	70.0-130%	Recovery less than lower control limit
Metals	QC-MRG2-1847480 002	----	Silver	7440-22-4	E464	69.8 % ^{LCS-L}	70.0-130%	Recovery less than lower control limit
Metals	QC-MRG2-1848876 002	----	Zirconium	7440-67-7	E464	68.8 % ^{LCS-L}	70.0-130%	Recovery less than lower control limit

Result Qualifiers

Qualifier	Description
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Matrix: Biota

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
---------------	----------------------	----------------------	---------	------------	--------	--------	--------	---------

LCS-L

Lab Control Sample recovery was below ALS DQO. Reference Material and/or Matrix Spike results were acceptable. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.

Matrix Spike (MS) Recoveries								
Metals	WT2437881-002	BA-IKLL-AC-LIV-02-AUG-27	Calcium	7440-70-2	E464	167 % ^E	70.0-130%	Recovery greater than upper data quality objective
Metals	WT2437881-002	BA-IKLL-AC-LIV-02-AUG-27	Lithium	7439-93-2	E464	69.3 % ^K	70.0-130%	Recovery less than lower data quality objective
Metals	WT2437881-061	BA-QURL-AC-MUS-13-AUG-30	Lithium	7439-93-2	E464	67.3 % ^K	70.0-130%	Recovery less than lower data quality objective
Metals	WT2437881-048	BA-IKLL-AC-MUS-29-AUG-28	Silver	7440-22-4	E464	67.3 % ^K	70.0-130%	Recovery less than lower data quality objective
Metals	WT2437881-061	BA-QURL-AC-MUS-13-AUG-30	Silver	7440-22-4	E464	69.7 % ^K	70.0-130%	Recovery less than lower data quality objective

Result Qualifiers

Qualifier	Description
E	Matrix Spike recovery outside ALS DQO due to heterogeneous analyte background in sample.
K	Matrix Spike recovery outside ALS DQO due to sample matrix effects.



Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Biota**

Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-28-AUG-28	E524	28-Aug-2024	16-Jan-2025	28 days	141 days	✖ EHTR	16-Jan-2025	28 days	142 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-29-AUG-28	E524	28-Aug-2024	16-Jan-2025	28 days	141 days	✖ EHTR	16-Jan-2025	28 days	142 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-30-AUG-28	E524	28-Aug-2024	16-Jan-2025	28 days	141 days	✖ EHTR	16-Jan-2025	28 days	142 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-34-AUG-28	E524	28-Aug-2024	16-Jan-2025	28 days	141 days	✖ EHTR	16-Jan-2025	28 days	142 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-37-AUG-28	E524	28-Aug-2024	16-Jan-2025	28 days	141 days	✖ EHTR	16-Jan-2025	28 days	142 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-01-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	✖ EHTR	16-Jan-2025	28 days	143 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-02-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	✖ EHTR	16-Jan-2025	28 days	143 days	✖ EHTR



Matrix: **Biota** Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-08-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	* EHTR	16-Jan-2025	28 days	143 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-09-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	* EHTR	16-Jan-2025	28 days	143 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-10-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	* EHTR	16-Jan-2025	28 days	143 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-12-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	* EHTR	16-Jan-2025	28 days	143 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-13-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	* EHTR	16-Jan-2025	28 days	143 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-14-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	* EHTR	16-Jan-2025	28 days	143 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-15-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	* EHTR	16-Jan-2025	28 days	143 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-16-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	* EHTR	16-Jan-2025	28 days	143 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-19-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	* EHTR	16-Jan-2025	28 days	143 days	* EHTR



Matrix: Biota Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-21-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	* EHTR	16-Jan-2025	28 days	143 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-22-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	* EHTR	16-Jan-2025	28 days	143 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-31-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	* EHTR	16-Jan-2025	28 days	143 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-35-AUG-27	E524	27-Aug-2024	16-Jan-2025	28 days	142 days	* EHTR	16-Jan-2025	28 days	143 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-11-AUG-30	E524	30-Aug-2024	20-Jan-2025	28 days	144 days	* EHTR	21-Jan-2025	28 days	145 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-12-AUG-30	E524	30-Aug-2024	20-Jan-2025	28 days	144 days	* EHTR	21-Jan-2025	28 days	145 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-13-AUG-30	E524	30-Aug-2024	20-Jan-2025	28 days	144 days	* EHTR	21-Jan-2025	28 days	145 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-14-AUG-30	E524	30-Aug-2024	20-Jan-2025	28 days	144 days	* EHTR	21-Jan-2025	28 days	145 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-15-AUG-30	E524	30-Aug-2024	20-Jan-2025	28 days	144 days	* EHTR	21-Jan-2025	28 days	145 days	* EHTR



Matrix: Biota Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-16-AUG-30	E524	30-Aug-2024	20-Jan-2025	28 days	144 days	✖ EHTR	21-Jan-2025	28 days	145 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-17-AUG-30	E524	30-Aug-2024	20-Jan-2025	28 days	144 days	✖ EHTR	21-Jan-2025	28 days	145 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-18-AUG-30	E524	30-Aug-2024	20-Jan-2025	28 days	144 days	✖ EHTR	21-Jan-2025	28 days	145 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-03-AUG-28	E524	29-Aug-2024	20-Jan-2025	28 days	145 days	✖ EHTR	21-Jan-2025	28 days	146 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-04-AUG-29	E524	29-Aug-2024	20-Jan-2025	28 days	145 days	✖ EHTR	21-Jan-2025	28 days	146 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-05-AUG-29	E524	29-Aug-2024	20-Jan-2025	28 days	145 days	✖ EHTR	21-Jan-2025	28 days	146 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-06-AUG-29	E524	29-Aug-2024	20-Jan-2025	28 days	145 days	✖ EHTR	21-Jan-2025	28 days	146 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-07-AUG-29	E524	29-Aug-2024	20-Jan-2025	28 days	145 days	✖ EHTR	21-Jan-2025	28 days	146 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-08-AUG-29	E524	29-Aug-2024	20-Jan-2025	28 days	145 days	✖ EHTR	21-Jan-2025	28 days	146 days	✖ EHTR



Matrix: **Biota** Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-09-AUG-29	E524	29-Aug-2024	20-Jan-2025	28 days	145 days	* EHTR	21-Jan-2025	28 days	146 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-10-AUG-29	E524	29-Aug-2024	20-Jan-2025	28 days	145 days	* EHTR	21-Jan-2025	28 days	146 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-LIV-05-2024-08	E524	30-Aug-2024	22-Jan-2025	28 days	145 days	* EHTR	23-Jan-2025	28 days	147 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-LIV-15-2024-08	E524	30-Aug-2024	22-Jan-2025	28 days	145 days	* EHTR	23-Jan-2025	28 days	147 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-19-AUG-30	E524	30-Aug-2024	22-Jan-2025	28 days	145 days	* EHTR	23-Jan-2025	28 days	147 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-20-AUG-30	E524	30-Aug-2024	22-Jan-2025	28 days	145 days	* EHTR	23-Jan-2025	28 days	147 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-MUS-05-2024-08	E524	30-Aug-2024	23-Jan-2025	28 days	146 days	* EHTR	24-Jan-2025	28 days	148 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-MUS-15-2024-08	E524	30-Aug-2024	23-Jan-2025	28 days	146 days	* EHTR	24-Jan-2025	28 days	148 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-13-AUG-30	E524	30-Aug-2024	23-Jan-2025	28 days	146 days	* EHTR	24-Jan-2025	28 days	148 days	* EHTR



Matrix: Biota Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-14-AUG-30	E524	30-Aug-2024	23-Jan-2025	28 days	146 days	* EHTR	24-Jan-2025	28 days	148 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-15-AUG-30	E524	30-Aug-2024	23-Jan-2025	28 days	146 days	* EHTR	24-Jan-2025	28 days	148 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-16-AUG-30	E524	30-Aug-2024	23-Jan-2025	28 days	146 days	* EHTR	24-Jan-2025	28 days	148 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-17-AUG-30	E524	30-Aug-2024	23-Jan-2025	28 days	146 days	* EHTR	24-Jan-2025	28 days	148 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-18-AUG-30	E524	30-Aug-2024	23-Jan-2025	28 days	146 days	* EHTR	24-Jan-2025	28 days	148 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-19-AUG-30	E524	30-Aug-2024	23-Jan-2025	28 days	146 days	* EHTR	24-Jan-2025	28 days	148 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-20-AUG-30	E524	30-Aug-2024	23-Jan-2025	28 days	146 days	* EHTR	24-Jan-2025	28 days	148 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-LIV-01-2024-08	E524	27-Aug-2024	20-Jan-2025	28 days	147 days	* EHTR	21-Jan-2025	28 days	148 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-LIV-02-2024-08	E524	27-Aug-2024	20-Jan-2025	28 days	147 days	* EHTR	21-Jan-2025	28 days	148 days	* EHTR



Matrix: **Biota** Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-LIV-03-2024-08	E524	27-Aug-2024	20-Jan-2025	28 days	147 days	* EHTR	21-Jan-2025	28 days	148 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-24-AUG-27	E524	27-Aug-2024	20-Jan-2025	28 days	147 days	* EHTR	21-Jan-2025	28 days	148 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-28-AUG-28	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-29-AUG-28	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-01-AUG-28	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-02-AUG-28	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-03-AUG-28	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-04-AUG-29	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-05-AUG-29	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR



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Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-06-AUG-29	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-07-AUG-29	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-08-AUG-29	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-09-AUG-29	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-10-AUG-29	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-11-AUG-30	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-12-AUG-30	E524	28-Aug-2024	22-Jan-2025	28 days	147 days	* EHTR	23-Jan-2025	28 days	149 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-01-AUG-27	E524	27-Aug-2024	22-Jan-2025	28 days	148 days	* EHTR	23-Jan-2025	28 days	150 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-02-AUG-27	E524	27-Aug-2024	22-Jan-2025	28 days	148 days	* EHTR	23-Jan-2025	28 days	150 days	* EHTR



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Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-30-AUG-28	E524	28-Aug-2024	23-Jan-2025	28 days	148 days	* EHTR	24-Jan-2025	28 days	150 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-34-AUG-28	E524	28-Aug-2024	23-Jan-2025	28 days	148 days	* EHTR	24-Jan-2025	28 days	150 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-37-AUG-28	E524	28-Aug-2024	23-Jan-2025	28 days	148 days	* EHTR	24-Jan-2025	28 days	150 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-01-AUG-28	E524	28-Aug-2024	23-Jan-2025	28 days	148 days	* EHTR	24-Jan-2025	28 days	150 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-02-AUG-28	E524	28-Aug-2024	23-Jan-2025	28 days	148 days	* EHTR	24-Jan-2025	28 days	150 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-08-AUG-27	E524	27-Aug-2024	23-Jan-2025	28 days	149 days	* EHTR	24-Jan-2025	28 days	151 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-12-AUG-27	E524	27-Aug-2024	23-Jan-2025	28 days	149 days	* EHTR	24-Jan-2025	28 days	151 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-22-AUG-27	E524	27-Aug-2024	23-Jan-2025	28 days	149 days	* EHTR	24-Jan-2025	28 days	151 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-31-AUG-27	E524	27-Aug-2024	23-Jan-2025	28 days	149 days	* EHTR	24-Jan-2025	28 days	151 days	* EHTR



Matrix: **Biota** Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-35-AUG-27	E524	27-Aug-2024	23-Jan-2025	28 days	149 days	* EHTR	24-Jan-2025	28 days	151 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-MUS-01-2024-08	E524	27-Aug-2024	28-Jan-2025	28 days	154 days	* EHTR	28-Jan-2025	28 days	155 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-MUS-02-2024-08	E524	27-Aug-2024	28-Jan-2025	28 days	154 days	* EHTR	28-Jan-2025	28 days	155 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-MUS-03-2024-08	E524	27-Aug-2024	28-Jan-2025	28 days	154 days	* EHTR	28-Jan-2025	28 days	155 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-09-AUG-27	E524	27-Aug-2024	28-Jan-2025	28 days	154 days	* EHTR	28-Jan-2025	28 days	155 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-10-AUG-27	E524	27-Aug-2024	28-Jan-2025	28 days	154 days	* EHTR	28-Jan-2025	28 days	155 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-13-AUG-27	E524	27-Aug-2024	28-Jan-2025	28 days	154 days	* EHTR	28-Jan-2025	28 days	155 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-14-AUG-27	E524	27-Aug-2024	28-Jan-2025	28 days	154 days	* EHTR	28-Jan-2025	28 days	155 days	* EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-15-AUG-27	E524	27-Aug-2024	28-Jan-2025	28 days	154 days	* EHTR	28-Jan-2025	28 days	155 days	* EHTR



Matrix: **Biota** Evaluation: * = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-16-AUG-27	E524	27-Aug-2024	28-Jan-2025	28 days	154 days	✖ EHTR	28-Jan-2025	28 days	155 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-19-AUG-27	E524	27-Aug-2024	28-Jan-2025	28 days	154 days	✖ EHTR	28-Jan-2025	28 days	155 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-21-AUG-27	E524	27-Aug-2024	28-Jan-2025	28 days	154 days	✖ EHTR	28-Jan-2025	28 days	155 days	✖ EHTR
Metals : Mercury in Tissues by CVAAS (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-24-AUG-27	E524	27-Aug-2024	28-Jan-2025	28 days	154 days	✖ EHTR	28-Jan-2025	28 days	155 days	✖ EHTR
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-28-AUG-28	E464	28-Aug-2024	16-Jan-2025	180 days	141 days	✔	17-Jan-2025	180 days	142 days	✔
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-29-AUG-28	E464	28-Aug-2024	16-Jan-2025	180 days	141 days	✔	17-Jan-2025	180 days	142 days	✔
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-30-AUG-28	E464	28-Aug-2024	16-Jan-2025	180 days	141 days	✔	17-Jan-2025	180 days	142 days	✔
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-34-AUG-28	E464	28-Aug-2024	16-Jan-2025	180 days	141 days	✔	17-Jan-2025	180 days	142 days	✔
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-37-AUG-28	E464	28-Aug-2024	16-Jan-2025	180 days	141 days	✔	17-Jan-2025	180 days	142 days	✔



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-01-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-02-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-08-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-09-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-10-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-12-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-13-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-14-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-15-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-16-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-19-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-21-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-22-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-31-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-35-AUG-27	E464	27-Aug-2024	16-Jan-2025	180 days	142 days	✓	17-Jan-2025	180 days	143 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-11-AUG-30	E464	30-Aug-2024	20-Jan-2025	180 days	144 days	✓	21-Jan-2025	180 days	145 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-12-AUG-30	E464	30-Aug-2024	20-Jan-2025	180 days	144 days	✓	21-Jan-2025	180 days	145 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-13-AUG-30	E464	30-Aug-2024	20-Jan-2025	180 days	144 days	✓	21-Jan-2025	180 days	145 days	✓



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method	Method	Sampling Date	Extraction / Preparation				Analysis			
Container / Client Sample ID(s)			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-14-AUG-30	E464	30-Aug-2024	20-Jan-2025	180 days	144 days	✓	21-Jan-2025	180 days	145 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-15-AUG-30	E464	30-Aug-2024	20-Jan-2025	180 days	144 days	✓	21-Jan-2025	180 days	145 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-16-AUG-30	E464	30-Aug-2024	20-Jan-2025	180 days	144 days	✓	21-Jan-2025	180 days	145 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-17-AUG-30	E464	30-Aug-2024	20-Jan-2025	180 days	144 days	✓	21-Jan-2025	180 days	145 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-18-AUG-30	E464	30-Aug-2024	20-Jan-2025	180 days	144 days	✓	21-Jan-2025	180 days	145 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-LIV-05-2024-08	E464	30-Aug-2024	22-Jan-2025	180 days	145 days	✓	23-Jan-2025	180 days	146 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-LIV-15-2024-08	E464	30-Aug-2024	22-Jan-2025	180 days	145 days	✓	23-Jan-2025	180 days	146 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-03-AUG-28	E464	29-Aug-2024	20-Jan-2025	180 days	145 days	✓	21-Jan-2025	180 days	146 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-04-AUG-29	E464	29-Aug-2024	20-Jan-2025	180 days	145 days	✓	21-Jan-2025	180 days	146 days	✓



Matrix: Biota Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-05-AUG-29	E464	29-Aug-2024	20-Jan-2025	180 days	145 days	✓	21-Jan-2025	180 days	146 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-06-AUG-29	E464	29-Aug-2024	20-Jan-2025	180 days	145 days	✓	21-Jan-2025	180 days	146 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-07-AUG-29	E464	29-Aug-2024	20-Jan-2025	180 days	145 days	✓	21-Jan-2025	180 days	146 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-08-AUG-29	E464	29-Aug-2024	20-Jan-2025	180 days	145 days	✓	21-Jan-2025	180 days	146 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-09-AUG-29	E464	29-Aug-2024	20-Jan-2025	180 days	145 days	✓	21-Jan-2025	180 days	146 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-10-AUG-29	E464	29-Aug-2024	20-Jan-2025	180 days	145 days	✓	21-Jan-2025	180 days	146 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-19-AUG-30	E464	30-Aug-2024	22-Jan-2025	180 days	145 days	✓	23-Jan-2025	180 days	146 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-20-AUG-30	E464	30-Aug-2024	22-Jan-2025	180 days	145 days	✓	23-Jan-2025	180 days	146 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-MUS-05-2024-08	E464	30-Aug-2024	23-Jan-2025	180 days	146 days	✓	27-Jan-2025	180 days	150 days	✓



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method	Method	Sampling Date	Extraction / Preparation				Analysis			
Container / Client Sample ID(s)			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-MUS-15-2024-08	E464	30-Aug-2024	23-Jan-2025	180 days	146 days	✓	27-Jan-2025	180 days	150 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-13-AUG-30	E464	30-Aug-2024	23-Jan-2025	180 days	146 days	✓	27-Jan-2025	180 days	150 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-14-AUG-30	E464	30-Aug-2024	23-Jan-2025	180 days	146 days	✓	27-Jan-2025	180 days	150 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-15-AUG-30	E464	30-Aug-2024	23-Jan-2025	180 days	146 days	✓	27-Jan-2025	180 days	150 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-16-AUG-30	E464	30-Aug-2024	23-Jan-2025	180 days	146 days	✓	27-Jan-2025	180 days	150 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-17-AUG-30	E464	30-Aug-2024	23-Jan-2025	180 days	146 days	✓	27-Jan-2025	180 days	150 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-18-AUG-30	E464	30-Aug-2024	23-Jan-2025	180 days	146 days	✓	27-Jan-2025	180 days	150 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-19-AUG-30	E464	30-Aug-2024	23-Jan-2025	180 days	146 days	✓	27-Jan-2025	180 days	150 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-20-AUG-30	E464	30-Aug-2024	23-Jan-2025	180 days	146 days	✓	27-Jan-2025	180 days	150 days	✓

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 Work Order : WT2437881
 Client : Baffinland Iron Mines Corporation
 Project : 247202.00XX (MILNE 2024)



Matrix: Biota Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method	Method	Sampling Date	Extraction / Preparation				Analysis			
Container / Client Sample ID(s)			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-LIV-01-2024-08	E464	27-Aug-2024	20-Jan-2025	180 days	147 days	✓	21-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-LIV-02-2024-08	E464	27-Aug-2024	20-Jan-2025	180 days	147 days	✓	21-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-LIV-03-2024-08	E464	27-Aug-2024	20-Jan-2025	180 days	147 days	✓	21-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-LIV-24-AUG-27	E464	27-Aug-2024	20-Jan-2025	180 days	147 days	✓	21-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-28-AUG-28	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-29-AUG-28	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-01-AUG-28	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-02-AUG-28	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-03-AUG-28	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓

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 Work Order : WT2437881
 Client : Baffinland Iron Mines Corporation
 Project : 247202.00XX (MILNE 2024)



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method	Method	Sampling Date	Extraction / Preparation				Analysis			
Container / Client Sample ID(s)			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-04-AUG-29	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-05-AUG-29	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-06-AUG-29	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-07-AUG-29	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-08-AUG-29	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-09-AUG-29	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-10-AUG-29	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-11-AUG-30	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-MUS-12-AUG-30	E464	28-Aug-2024	22-Jan-2025	180 days	147 days	✓	23-Jan-2025	180 days	148 days	✓



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-01-AUG-27	E464	27-Aug-2024	22-Jan-2025	180 days	148 days	✓	23-Jan-2025	180 days	149 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-02-AUG-27	E464	27-Aug-2024	22-Jan-2025	180 days	148 days	✓	23-Jan-2025	180 days	149 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-30-AUG-28	E464	28-Aug-2024	23-Jan-2025	180 days	148 days	✓	27-Jan-2025	180 days	152 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-34-AUG-28	E464	28-Aug-2024	23-Jan-2025	180 days	148 days	✓	27-Jan-2025	180 days	152 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-37-AUG-28	E464	28-Aug-2024	23-Jan-2025	180 days	148 days	✓	27-Jan-2025	180 days	152 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-01-AUG-28	E464	28-Aug-2024	23-Jan-2025	180 days	148 days	✓	27-Jan-2025	180 days	152 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-QURL-AC-LI-02-AUG-28	E464	28-Aug-2024	23-Jan-2025	180 days	148 days	✓	27-Jan-2025	180 days	152 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-08-AUG-27	E464	27-Aug-2024	23-Jan-2025	180 days	149 days	✓	27-Jan-2025	180 days	153 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-12-AUG-27	E464	27-Aug-2024	23-Jan-2025	180 days	149 days	✓	27-Jan-2025	180 days	153 days	✓



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-22-AUG-27	E464	27-Aug-2024	23-Jan-2025	180 days	149 days	✓	27-Jan-2025	180 days	153 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-31-AUG-27	E464	27-Aug-2024	23-Jan-2025	180 days	149 days	✓	27-Jan-2025	180 days	153 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-35-AUG-27	E464	27-Aug-2024	23-Jan-2025	180 days	149 days	✓	27-Jan-2025	180 days	153 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-MUS-01-2024-08	E464	27-Aug-2024	28-Jan-2025	180 days	154 days	✓	29-Jan-2025	180 days	155 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-MUS-02-2024-08	E464	27-Aug-2024	28-Jan-2025	180 days	154 days	✓	29-Jan-2025	180 days	155 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-DUP-AC-MUS-03-2024-08	E464	27-Aug-2024	28-Jan-2025	180 days	154 days	✓	29-Jan-2025	180 days	155 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-09-AUG-27	E464	27-Aug-2024	28-Jan-2025	180 days	154 days	✓	29-Jan-2025	180 days	155 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-10-AUG-27	E464	27-Aug-2024	28-Jan-2025	180 days	154 days	✓	29-Jan-2025	180 days	155 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-13-AUG-27	E464	27-Aug-2024	28-Jan-2025	180 days	154 days	✓	29-Jan-2025	180 days	155 days	✓



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method	Method	Sampling Date	Extraction / Preparation				Analysis			
Container / Client Sample ID(s)			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-14-AUG-27	E464	27-Aug-2024	28-Jan-2025	180 days	154 days	✓	29-Jan-2025	180 days	155 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-15-AUG-27	E464	27-Aug-2024	28-Jan-2025	180 days	154 days	✓	29-Jan-2025	180 days	155 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-16-AUG-27	E464	27-Aug-2024	28-Jan-2025	180 days	154 days	✓	29-Jan-2025	180 days	155 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-19-AUG-27	E464	27-Aug-2024	28-Jan-2025	180 days	154 days	✓	29-Jan-2025	180 days	155 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-21-AUG-27	E464	27-Aug-2024	28-Jan-2025	180 days	154 days	✓	29-Jan-2025	180 days	155 days	✓
Metals : Metals in Tissue by ICPMS Analysis (DRY units, Routine)										
Glass soil jar/Teflon lined cap BA-IKLL-AC-MUS-24-AUG-27	E464	27-Aug-2024	28-Jan-2025	180 days	154 days	✓	29-Jan-2025	180 days	155 days	✓
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-DUP-AC-LIV-05-2024-08	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-DUP-AC-LIV-15-2024-08	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-DUP-AC-MUS-05-2024-08	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-DUP-AC-MUS-15-2024-08	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-11-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-12-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-13-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-14-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-15-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-16-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-17-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-18-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-19-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-20-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-13-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-14-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-15-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-16-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-17-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-18-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-19-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-20-AUG-30	E144	30-Aug-2024	----	----	----		11-Feb-2025	----	166 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-03-AUG-28	E144	29-Aug-2024	----	----	----		11-Feb-2025	----	167 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-04-AUG-29	E144	29-Aug-2024	----	----	----		11-Feb-2025	----	167 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-05-AUG-29	E144	29-Aug-2024	----	----	----		11-Feb-2025	----	167 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-06-AUG-29	E144	29-Aug-2024	----	----	----		11-Feb-2025	----	167 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-07-AUG-29	E144	29-Aug-2024	----	----	----		11-Feb-2025	----	167 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-08-AUG-29	E144	29-Aug-2024	----	----	----		11-Feb-2025	----	167 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-09-AUG-29	E144	29-Aug-2024	----	----	----		11-Feb-2025	----	167 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-10-AUG-29	E144	29-Aug-2024	----	----	----		11-Feb-2025	----	167 days	



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-28-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-29-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-30-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-34-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-37-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-28-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-29-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-30-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-34-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-37-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-01-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-LI-02-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-01-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-02-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-03-AUG-28	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-04-AUG-29	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-05-AUG-29	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-06-AUG-29	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-07-AUG-29	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-08-AUG-29	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-09-AUG-29	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-10-AUG-29	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-11-AUG-30	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-QURL-AC-MUS-12-AUG-30	E144	28-Aug-2024	----	----	----		11-Feb-2025	----	168 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-DUP-AC-LIV-01-2024-08	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-DUP-AC-LIV-02-2024-08	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-DUP-AC-LIV-03-2024-08	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-DUP-AC-MUS-01-2024-08	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-DUP-AC-MUS-02-2024-08	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-DUP-AC-MUS-03-2024-08	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-01-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-02-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-08-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-09-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-10-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-12-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-13-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-14-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-15-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-16-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-19-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-21-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-22-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-24-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-31-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-LIV-35-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-01-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-02-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-08-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-09-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-10-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-12-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-13-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-14-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	



Matrix: **Biota** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-15-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-16-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-19-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-21-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-22-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-24-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-31-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	
Physical Tests : Moisture Content by Gravimetry										
LDPE bag BA-IKLL-AC-MUS-35-AUG-27	E144	27-Aug-2024	----	----	----		11-Feb-2025	----	169 days	

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).



Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: Biota

Evaluation: ✖ = QC frequency outside specification; ✔ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	Method	QC Lot #	QC	Regular	Actual	Expected	Evaluation
Laboratory Duplicates (DUP)							
Moisture Content by Gravimetry	E144	1870554	5	92	5.4	5.0	✔
Metals in Tissue by ICPMS Analysis (DRY units, Routine)	E464	1841075	5	92	5.4	5.0	✔
Mercury in Tissues by CVAAS (DRY units, Routine)	E524	1841076	5	92	5.4	5.0	✔
Laboratory Control Samples (LCS)							
Moisture Content by Gravimetry	E144	1870554	5	92	5.4	5.0	✔
Metals in Tissue by ICPMS Analysis (DRY units, Routine)	E464	1841075	5	92	5.4	5.0	✔
Mercury in Tissues by CVAAS (DRY units, Routine)	E524	1841076	5	92	5.4	5.0	✔
Method Blanks (MB)							
Moisture Content by Gravimetry	E144	1870554	5	92	5.4	5.0	✔
Metals in Tissue by ICPMS Analysis (DRY units, Routine)	E464	1841075	5	92	5.4	5.0	✔
Mercury in Tissues by CVAAS (DRY units, Routine)	E524	1841076	5	92	5.4	5.0	✔
Matrix Spikes (MS)							
Metals in Tissue by ICPMS Analysis (DRY units, Routine)	E464	1841075	5	92	5.4	5.0	✔
Mercury in Tissues by CVAAS (DRY units, Routine)	E524	1841076	5	92	5.4	5.0	✔



Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

<i>Analytical Methods</i>	<i>Method / Lab</i>	<i>Matrix</i>	<i>Method Reference</i>	<i>Method Descriptions</i>
Moisture Content by Gravimetry	E144 ALS Environmental - Burlington	Biota	Puget Sound Water Quality Authority/CCME PHC in Soil - Tier 1	Moisture is measured gravimetrically by drying the sample at 105°C. Moisture content is calculated as the weight loss (due to water) divided by the wet weight of the sample, expressed as a percentage.
Metals in Tissue by ICPMS Analysis (DRY units, Routine)	E464 ALS Environmental - Burlington	Biota	EPA Method 3052 (preparation) and EPA Method 6020B (analysis)	Tissue samples are homogenized and sub-sampled, then digested using a closed-vessel microwave process. Instrumental analysis is performed via collision-reaction cell ICPMS. Data is reported on a dry weight basis.
Mercury in Tissues by CVAAS (DRY units, Routine)	E524 ALS Environmental - Burlington	Biota	EPA Method 3052 (preparation) and EPA Method 7470A (analytical)	After microwave digestion, a sub-sample is re-digested in oxidizing reagents, using an open-vessel hotblock method. Samples are treated with a reductant to facilitate analysis by CVAA. Data is reported on a dry weight basis.
<i>Preparation Methods</i>	<i>Method / Lab</i>	<i>Matrix</i>	<i>Method Reference</i>	<i>Method Descriptions</i>
Metals and Mercury in Tissues - Digestion	EP464 ALS Environmental - Burlington	Biota	EPA Method 3052 (preparation)	Tissue samples are homogenized and sub-sampled, then digested using a closed-vessel microwave process.

QUALITY CONTROL REPORT

Work Order	: WT2437881	Page	: 1 of 26
Client	: Baffinland Iron Mines Corporation	Laboratory	: ALS Environmental - Waterloo
Contact	: Environmental Lab Results	Account Manager	: Rick Hawthorne
Address	: 360 Oakville Place Dr Suite 300 Oakville ON Canada L6H 6K8	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: ----	Telephone	: +1 519 886 6910
Project	: 247202.00XX (MILNE 2024)	Date Samples Received	: 19-Dec-2024 10:30
PO	: 4500140399	Date Analysis Commenced	: 16-Jan-2025
C-O-C number	: 19-DEC-2024 MINNOW FISH TISSUE	Issue Date	: 14-Feb-2025 15:52
Sampler	: MINNOW		
Site	: ----		
Quote number	: 2024-2025 Scope of Work		
No. of samples received	: 92		
No. of samples analysed	: 92		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	Position	Laboratory Department
Milithza Silva	Manager - Inorganics	Burlington Metals, Burlington, Ontario
Philip Elder	Technical Manager	Burlington Organics, Burlington, Ontario



General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.

CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.

DQO = Data Quality Objective.

LOR = Limit of Reporting (detection limit).

RPD = Relative Percent Difference

= Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.



Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Physical Tests (QC Lot: 1870554)											
WT2437881-001	BA-IKLL-AC-LIV-01-AUG-27	Moisture	----	E144	0.50	%	74.3	62.7	16.9%	20%	----
Physical Tests (QC Lot: 1870587)											
WT2437881-021	BA-IKLL-AC-LIV-24-AUG-27	Moisture	----	E144	0.50	%	68.5	81.4	17.2%	20%	----
Physical Tests (QC Lot: 1870610)											
WT2437881-041	BA-QURL-AC-LI-19-AUG-30	Moisture	----	E144	0.50	%	78.3	78.2	0.136%	20%	----
Physical Tests (QC Lot: 1870626)											
WT2437881-061	BA-QURL-AC-MUS-13-AUG-30	Moisture	----	E144	0.50	%	76.6	76.8	0.187%	20%	----
Physical Tests (QC Lot: 1870635)											
WT2437881-081	BA-IKLL-AC-MUS-09-AUG-27	Moisture	----	E144	0.50	%	75.9	76.3	0.527%	20%	----
Metals (QC Lot: 1841075)											
WT2437881-002	BA-IKLL-AC-LIV-02-AUG-27	Aluminum	7429-90-5	E464	2.0	mg/kg	68.5	77.7	12.6%	20%	----
		Antimony	7440-36-0	E464	0.010	mg/kg	0.011	<0.010	0.0007	Diff <2x LOR	J
		Arsenic	7440-38-2	E464	0.0200	mg/kg	1.37	1.57	13.8%	20%	----
		Barium	7440-39-3	E464	0.10	mg/kg	0.63	0.51	0.12	Diff <2x LOR	J
		Beryllium	7440-41-7	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J
		Bismuth	7440-69-9	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J
		Boron	7440-42-8	E464	1.0	mg/kg	<1.0	<1.0	0	Diff <2x LOR	J
		Cadmium	7440-43-9	E464	0.0050	mg/kg	4.15	4.02	3.28%	20%	----
		Calcium	7440-70-2	E464	25	mg/kg	503	625	21.5%	20%	DUP-H
		Chromium	7440-47-3	E464	0.050	mg/kg	0.246	0.192	0.054	Diff <2x LOR	J
		Cobalt	7440-48-4	E464	0.020	mg/kg	0.820	0.816	0.598%	20%	----
		Copper	7440-50-8	E464	0.10	mg/kg	58.6	58.2	0.681%	20%	----
		Iron	7439-89-6	E464	2.5	mg/kg	2380	1990	17.8%	20%	----
		Lead	7439-92-1	E464	0.020	mg/kg	0.321	0.311	3.28%	20%	----
		Lithium	7439-93-2	E464	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	J
		Magnesium	7439-95-4	E464	5.0	mg/kg	792	777	1.92%	20%	----
		Manganese	7439-96-5	E464	0.50	mg/kg	7.57	8.53	12.0%	20%	----
		Molybdenum	7439-98-7	E464	0.020	mg/kg	0.709	0.840	16.8%	20%	----



Sub-Matrix: Biota					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Metals (QC Lot: 1841075) - continued											
WT2437881-002	BA-IKLL-AC-LIV-02-AUG-27	Nickel	7440-02-0	E464	0.20	mg/kg	0.51	0.44	0.07	Diff <2x LOR	J
		Phosphorus	7723-14-0	E464	10	mg/kg	13000	14500	10.4%	20%	----
		Potassium	7440-09-7	E464	20	mg/kg	12000	12300	2.94%	20%	----
		Rubidium	7440-17-7	E464	0.10	mg/kg	4.82	4.91	1.98%	20%	----
		Selenium	7782-49-2	E464	0.050	mg/kg	6.09	6.40	4.94%	20%	----
		Silver	7440-22-4	E464	0.0050	mg/kg	1.36	1.45	6.09%	20%	----
		Sodium	7440-23-5	E464	25	mg/kg	7210	7480	3.64%	20%	----
		Strontium	7440-24-6	E464	0.10	mg/kg	1.07	1.07	0.0314%	20%	----
		Tellurium	13494-80-9	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Thallium	7440-28-0	E464	0.0020	mg/kg	0.0374	0.0370	0.958%	20%	----
		Tin	7440-31-5	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Tungsten	7440-33-7	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Uranium	7440-61-1	E464	0.020	mg/kg	0.028	0.025	0.003	Diff <2x LOR	J
		Vanadium	7440-62-2	E464	0.10	mg/kg	0.62	0.62	0.004	Diff <2x LOR	J
		Zinc	7440-66-6	E464	0.50	mg/kg	137	142	3.74%	20%	----
		Zirconium	7440-67-7	E464	0.30	mg/kg	<0.30	<0.30	0	Diff <2x LOR	J
Metals (QC Lot: 1841076)											
WT2437881-002	BA-IKLL-AC-LIV-02-AUG-27	Mercury	7439-97-6	E524	0.031	mg/kg	0.462	0.470	1.77%	25%	----
Metals (QC Lot: 1844973)											
WT2437881-021	BA-IKLL-AC-LIV-24-AUG-27	Aluminum	7429-90-5	E464	2.0	mg/kg	<2.0	<2.0	0	Diff <2x LOR	J
		Antimony	7440-36-0	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J
		Arsenic	7440-38-2	E464	0.0200	mg/kg	0.657	0.679	3.27%	20%	----
		Barium	7440-39-3	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Beryllium	7440-41-7	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J
		Bismuth	7440-69-9	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J
		Boron	7440-42-8	E464	1.0	mg/kg	<1.0	<1.0	0	Diff <2x LOR	J
		Cadmium	7440-43-9	E464	0.0050	mg/kg	1.24	1.28	2.55%	20%	----
		Calcium	7440-70-2	E464	25	mg/kg	126	120	6	Diff <2x LOR	J
		Chromium	7440-47-3	E464	0.050	mg/kg	0.137	# 0.259	0.122	Diff <2x LOR	DUP-H,J
		Cobalt	7440-48-4	E464	0.020	mg/kg	0.130	0.127	0.003	Diff <2x LOR	J
		Copper	7440-50-8	E464	0.10	mg/kg	25.3	26.8	5.84%	20%	----
		Iron	7439-89-6	E464	2.5	mg/kg	459	480	4.36%	20%	----
		Lead	7439-92-1	E464	0.020	mg/kg	0.053	0.063	0.010	Diff <2x LOR	J



Sub-Matrix: Biota					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Metals (QC Lot: 1844973) - continued											
WT2437881-021	BA-IKLL-AC-LIV-24-AUG-27	Lithium	7439-93-2	E464	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	J
		Magnesium	7439-95-4	E464	5.0	mg/kg	501	499	0.327%	20%	----
		Manganese	7439-96-5	E464	0.50	mg/kg	2.69	2.60	0.08	Diff <2x LOR	J
		Molybdenum	7439-98-7	E464	0.020	mg/kg	0.681	0.682	0.0877%	20%	----
		Nickel	7440-02-0	E464	0.20	mg/kg	0.24	0.23	0.01	Diff <2x LOR	J
		Phosphorus	7723-14-0	E464	10	mg/kg	9450	9690	2.46%	20%	----
		Potassium	7440-09-7	E464	20	mg/kg	8000	8250	3.05%	20%	----
		Rubidium	7440-17-7	E464	0.10	mg/kg	3.67	3.69	0.527%	20%	----
		Selenium	7782-49-2	E464	0.050	mg/kg	4.68	4.83	3.10%	20%	----
		Silver	7440-22-4	E464	0.0050	mg/kg	0.618	0.635	2.71%	20%	----
		Sodium	7440-23-5	E464	25	mg/kg	3400	3400	0.110%	20%	----
		Strontium	7440-24-6	E464	0.10	mg/kg	0.36	0.34	0.02	Diff <2x LOR	J
		Tellurium	13494-80-9	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Thallium	7440-28-0	E464	0.0020	mg/kg	0.0381	0.0329	14.5%	20%	----
		Tin	7440-31-5	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Tungsten	7440-33-7	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Uranium	7440-61-1	E464	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	J
		Vanadium	7440-62-2	E464	0.10	mg/kg	0.43	0.45	0.02	Diff <2x LOR	J
		Zinc	7440-66-6	E464	0.50	mg/kg	92.0	90.9	1.12%	20%	----
		Zirconium	7440-67-7	E464	0.30	mg/kg	<0.30	<0.30	0	Diff <2x LOR	J
Metals (QC Lot: 1844974)											
WT2437881-021	BA-IKLL-AC-LIV-24-AUG-27	Mercury	7439-97-6	E524	0.031	mg/kg	0.196	0.200	0.004	Diff <2x LOR	J
Metals (QC Lot: 1847480)											
WT2437881-048	BA-IKLL-AC-MUS-29-AUG-28	Aluminum	7429-90-5	E464	2.0	mg/kg	<2.0	<2.0	0	Diff <2x LOR	J
		Antimony	7440-36-0	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J
		Arsenic	7440-38-2	E464	0.0200	mg/kg	2.95	2.98	0.957%	20%	----
		Barium	7440-39-3	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Beryllium	7440-41-7	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J
		Bismuth	7440-69-9	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J
		Boron	7440-42-8	E464	1.0	mg/kg	<1.0	<1.0	0	Diff <2x LOR	J
		Cadmium	7440-43-9	E464	0.0050	mg/kg	0.0151	0.0131	0.0020	Diff <2x LOR	J
		Calcium	7440-70-2	E464	25	mg/kg	121	116	5	Diff <2x LOR	J
		Chromium	7440-47-3	E464	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	J



Sub-Matrix: Biota					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Metals (QC Lot: 1847480) - continued											
WT2437881-048	BA-IKLL-AC-MUS-29-AUG-28	Cobalt	7440-48-4	E464	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	J
		Copper	7440-50-8	E464	0.10	mg/kg	2.14	2.07	3.14%	20%	----
		Iron	7439-89-6	E464	2.5	mg/kg	14.3	13.2	1.1	Diff <2x LOR	J
		Lead	7439-92-1	E464	0.020	mg/kg	<0.020	0.025	0.005	Diff <2x LOR	J
		Lithium	7439-93-2	E464	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	J
		Magnesium	7439-95-4	E464	5.0	mg/kg	1220	1200	2.00%	20%	----
		Manganese	7439-96-5	E464	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	J
		Molybdenum	7439-98-7	E464	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	J
		Nickel	7440-02-0	E464	0.20	mg/kg	<0.20	<0.20	0	Diff <2x LOR	J
		Phosphorus	7723-14-0	E464	10	mg/kg	10000	9860	1.79%	20%	----
		Potassium	7440-09-7	E464	20	mg/kg	15600	15400	1.53%	20%	----
		Rubidium	7440-17-7	E464	0.10	mg/kg	4.34	4.22	2.78%	20%	----
		Selenium	7782-49-2	E464	0.050	mg/kg	1.26	1.23	2.67%	20%	----
		Silver	7440-22-4	E464	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	J
		Sodium	7440-23-5	E464	25	mg/kg	958	938	2.11%	20%	----
		Strontium	7440-24-6	E464	0.10	mg/kg	0.14	0.13	0.010	Diff <2x LOR	J
		Tellurium	13494-80-9	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Thallium	7440-28-0	E464	0.0020	mg/kg	0.0048	0.0059	0.0010	Diff <2x LOR	J
		Tin	7440-31-5	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Tungsten	7440-33-7	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Uranium	7440-61-1	E464	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	J
		Vanadium	7440-62-2	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Zinc	7440-66-6	E464	0.50	mg/kg	15.1	14.8	1.64%	20%	----
		Zirconium	7440-67-7	E464	0.30	mg/kg	<0.30	<0.30	0	Diff <2x LOR	J
Metals (QC Lot: 1847481)											
WT2437881-048	BA-IKLL-AC-MUS-29-AUG-28	Mercury	7439-97-6	E524	0.031	mg/kg	0.172	0.174	0.002	Diff <2x LOR	J
Metals (QC Lot: 1848876)											
WT2437881-061	BA-QURL-AC-MUS-13-AUG-30	Aluminum	7429-90-5	E464	2.0	mg/kg	<2.0	<2.0	0	Diff <2x LOR	J
		Antimony	7440-36-0	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J
		Arsenic	7440-38-2	E464	0.0200	mg/kg	2.20	2.24	1.62%	20%	----
		Barium	7440-39-3	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Beryllium	7440-41-7	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J
		Bismuth	7440-69-9	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J



Sub-Matrix: Biota					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Metals (QC Lot: 1848876) - continued											
WT2437881-061	BA-QURL-AC-MUS-13-AU G-30	Boron	7440-42-8	E464	1.0	mg/kg	<1.0	<1.0	0	Diff <2x LOR	J
		Cadmium	7440-43-9	E464	0.0050	mg/kg	0.0073	0.0067	0.0006	Diff <2x LOR	J
		Calcium	7440-70-2	E464	25	mg/kg	209	202	7	Diff <2x LOR	J
		Chromium	7440-47-3	E464	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	J
		Cobalt	7440-48-4	E464	0.020	mg/kg	0.023	<0.020	0.003	Diff <2x LOR	J
		Copper	7440-50-8	E464	0.10	mg/kg	2.14	2.57	18.1%	20%	----
		Iron	7439-89-6	E464	2.5	mg/kg	24.1	27.0	11.3%	20%	----
		Lead	7439-92-1	E464	0.020	mg/kg	<0.020	0.024	0.004	Diff <2x LOR	J
		Lithium	7439-93-2	E464	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	J
		Magnesium	7439-95-4	E464	5.0	mg/kg	957	938	1.94%	20%	----
		Manganese	7439-96-5	E464	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	J
		Molybdenum	7439-98-7	E464	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	J
		Nickel	7440-02-0	E464	0.20	mg/kg	<0.20	<0.20	0	Diff <2x LOR	J
		Phosphorus	7723-14-0	E464	10	mg/kg	8590	8760	2.01%	20%	----
		Potassium	7440-09-7	E464	20	mg/kg	13600	14200	3.68%	20%	----
		Rubidium	7440-17-7	E464	0.10	mg/kg	5.94	5.95	0.289%	20%	----
		Selenium	7782-49-2	E464	0.050	mg/kg	1.06	0.987	7.39%	20%	----
		Silver	7440-22-4	E464	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	J
		Sodium	7440-23-5	E464	25	mg/kg	2760	2750	0.208%	20%	----
		Strontium	7440-24-6	E464	0.10	mg/kg	0.12	0.11	0.007	Diff <2x LOR	J
		Tellurium	13494-80-9	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Thallium	7440-28-0	E464	0.0020	mg/kg	0.0108	0.0103	0.0004	Diff <2x LOR	J
		Tin	7440-31-5	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Tungsten	7440-33-7	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Uranium	7440-61-1	E464	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	J
		Vanadium	7440-62-2	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Zinc	7440-66-6	E464	0.50	mg/kg	14.7	14.7	0.111%	20%	----
		Zirconium	7440-67-7	E464	0.30	mg/kg	<0.30	<0.30	0	Diff <2x LOR	J
Metals (QC Lot: 1848877)											
WT2437881-061	BA-QURL-AC-MUS-13-AU G-30	Mercury	7439-97-6	E524	0.031	mg/kg	0.199	0.187	0.012	Diff <2x LOR	J
Metals (QC Lot: 1853948)											
WT2437881-081	BA-IKLL-AC-MUS-09-AUG-27	Aluminum	7429-90-5	E464	2.0	mg/kg	<2.0	<2.0	0	Diff <2x LOR	J
		Antimony	7440-36-0	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J



Sub-Matrix: Biota					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Metals (QC Lot: 1853948) - continued											
WT2437881-081	BA-IKLL-AC-MUS-09-AUG-27	Arsenic	7440-38-2	E464	0.0200	mg/kg	0.602	0.606	0.711%	20%	----
		Barium	7440-39-3	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Beryllium	7440-41-7	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J
		Bismuth	7440-69-9	E464	0.010	mg/kg	<0.010	<0.010	0	Diff <2x LOR	J
		Boron	7440-42-8	E464	1.0	mg/kg	<1.0	<1.0	0	Diff <2x LOR	J
		Cadmium	7440-43-9	E464	0.0050	mg/kg	0.0126	0.0100	0.0026	Diff <2x LOR	J
		Calcium	7440-70-2	E464	25	mg/kg	158	154	4	Diff <2x LOR	J
		Chromium	7440-47-3	E464	0.050	mg/kg	<0.050	<0.050	0	Diff <2x LOR	J
		Cobalt	7440-48-4	E464	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	J
		Copper	7440-50-8	E464	0.10	mg/kg	2.53	2.43	3.81%	20%	----
		Iron	7439-89-6	E464	2.5	mg/kg	30.2	29.3	2.87%	20%	----
		Lead	7439-92-1	E464	0.020	mg/kg	0.027	0.024	0.003	Diff <2x LOR	J
		Lithium	7439-93-2	E464	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	J
		Magnesium	7439-95-4	E464	5.0	mg/kg	1260	1230	2.32%	20%	----
		Manganese	7439-96-5	E464	0.50	mg/kg	<0.50	<0.50	0	Diff <2x LOR	J
		Molybdenum	7439-98-7	E464	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	J
		Nickel	7440-02-0	E464	0.20	mg/kg	<0.20	<0.20	0	Diff <2x LOR	J
		Phosphorus	7723-14-0	E464	10	mg/kg	10500	10300	1.56%	20%	----
		Potassium	7440-09-7	E464	20	mg/kg	17200	17300	0.499%	20%	----
		Rubidium	7440-17-7	E464	0.10	mg/kg	5.64	5.68	0.650%	20%	----
		Selenium	7782-49-2	E464	0.050	mg/kg	1.12	1.12	0.156%	20%	----
		Silver	7440-22-4	E464	0.0050	mg/kg	<0.0050	<0.0050	0	Diff <2x LOR	J
		Sodium	7440-23-5	E464	25	mg/kg	1410	1390	1.28%	20%	----
		Strontium	7440-24-6	E464	0.10	mg/kg	0.20	0.20	0.007	Diff <2x LOR	J
		Tellurium	13494-80-9	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Thallium	7440-28-0	E464	0.0020	mg/kg	0.0071	0.0066	0.0006	Diff <2x LOR	J
		Tin	7440-31-5	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Tungsten	7440-33-7	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Uranium	7440-61-1	E464	0.020	mg/kg	<0.020	<0.020	0	Diff <2x LOR	J
		Vanadium	7440-62-2	E464	0.10	mg/kg	<0.10	<0.10	0	Diff <2x LOR	J
		Zinc	7440-66-6	E464	0.50	mg/kg	14.6	14.6	0.0487%	20%	----
		Zirconium	7440-67-7	E464	0.30	mg/kg	<0.30	<0.30	0	Diff <2x LOR	J
Metals (QC Lot: 1853949)											



Sub-Matrix: Biota					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Metals (QC Lot: 1853949) - continued											
WT2437881-081	BA-IKLL-AC-MUS-09-AUG-27	Mercury	7439-97-6	E524	0.031	mg/kg	0.199	0.192	0.006	Diff <2x LOR	J

Qualifiers

Qualifier	Description
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
J	Duplicate results and limits are expressed in terms of absolute difference.



Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: Biota

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 1870554)						
Moisture	----	E144	0.5	%	<0.50	----
Physical Tests (QCLot: 1870587)						
Moisture	----	E144	0.5	%	<0.50	----
Physical Tests (QCLot: 1870610)						
Moisture	----	E144	0.5	%	<0.50	----
Physical Tests (QCLot: 1870626)						
Moisture	----	E144	0.5	%	<0.50	----
Physical Tests (QCLot: 1870635)						
Moisture	----	E144	0.5	%	<0.50	----
Metals (QCLot: 1841075)						
Aluminum	7429-90-5	E464	2	mg/kg	<2.0	----
Antimony	7440-36-0	E464	0.01	mg/kg	<0.010	----
Arsenic	7440-38-2	E464	0.02	mg/kg	<0.0200	----
Barium	7440-39-3	E464	0.1	mg/kg	<0.10	----
Beryllium	7440-41-7	E464	0.01	mg/kg	<0.010	----
Bismuth	7440-69-9	E464	0.01	mg/kg	<0.010	----
Boron	7440-42-8	E464	1	mg/kg	<1.0	----
Cadmium	7440-43-9	E464	0.005	mg/kg	<0.0050	----
Calcium	7440-70-2	E464	25	mg/kg	<25	----
Chromium	7440-47-3	E464	0.05	mg/kg	<0.050	----
Cobalt	7440-48-4	E464	0.02	mg/kg	<0.020	----
Copper	7440-50-8	E464	0.1	mg/kg	<0.10	----
Iron	7439-89-6	E464	2.5	mg/kg	<2.5	----
Lead	7439-92-1	E464	0.02	mg/kg	<0.020	----
Lithium	7439-93-2	E464	0.5	mg/kg	<0.50	----
Magnesium	7439-95-4	E464	5	mg/kg	<5.0	----
Manganese	7439-96-5	E464	0.5	mg/kg	<0.50	----
Molybdenum	7439-98-7	E464	0.02	mg/kg	<0.020	----
Nickel	7440-02-0	E464	0.2	mg/kg	<0.20	----
Phosphorus	7723-14-0	E464	10	mg/kg	<10	----
Potassium	7440-09-7	E464	20	mg/kg	<20	----
Rubidium	7440-17-7	E464	0.1	mg/kg	<0.10	----



Sub-Matrix: Biota

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Metals (QCLot: 1841075) - continued						
Selenium	7782-49-2	E464	0.05	mg/kg	<0.050	----
Silver	7440-22-4	E464	0.005	mg/kg	<0.0050	----
Sodium	7440-23-5	E464	25	mg/kg	<25	----
Strontium	7440-24-6	E464	0.1	mg/kg	<0.10	----
Tellurium	13494-80-9	E464	0.1	mg/kg	<0.10	----
Thallium	7440-28-0	E464	0.002	mg/kg	<0.0020	----
Tin	7440-31-5	E464	0.1	mg/kg	<0.10	----
Tungsten	7440-33-7	E464	0.1	mg/kg	<0.10	----
Uranium	7440-61-1	E464	0.02	mg/kg	<0.020	----
Vanadium	7440-62-2	E464	0.1	mg/kg	<0.10	----
Zinc	7440-66-6	E464	0.5	mg/kg	<0.50	----
Zirconium	7440-67-7	E464	0.3	mg/kg	<0.30	----
Metals (QCLot: 1841076)						
Mercury	7439-97-6	E524	0.0313	mg/kg	<0.031	----
Metals (QCLot: 1844973)						
Aluminum	7429-90-5	E464	2	mg/kg	<2.0	----
Antimony	7440-36-0	E464	0.01	mg/kg	<0.010	----
Arsenic	7440-38-2	E464	0.02	mg/kg	<0.0200	----
Barium	7440-39-3	E464	0.1	mg/kg	<0.10	----
Beryllium	7440-41-7	E464	0.01	mg/kg	<0.010	----
Bismuth	7440-69-9	E464	0.01	mg/kg	<0.010	----
Boron	7440-42-8	E464	1	mg/kg	<1.0	----
Cadmium	7440-43-9	E464	0.005	mg/kg	<0.0050	----
Calcium	7440-70-2	E464	25	mg/kg	<25	----
Chromium	7440-47-3	E464	0.05	mg/kg	<0.050	----
Cobalt	7440-48-4	E464	0.02	mg/kg	<0.020	----
Copper	7440-50-8	E464	0.1	mg/kg	<0.10	----
Iron	7439-89-6	E464	2.5	mg/kg	<2.5	----
Lead	7439-92-1	E464	0.02	mg/kg	<0.020	----
Lithium	7439-93-2	E464	0.5	mg/kg	<0.50	----
Magnesium	7439-95-4	E464	5	mg/kg	<5.0	----
Manganese	7439-96-5	E464	0.5	mg/kg	<0.50	----
Molybdenum	7439-98-7	E464	0.02	mg/kg	<0.020	----
Nickel	7440-02-0	E464	0.2	mg/kg	<0.20	----
Phosphorus	7723-14-0	E464	10	mg/kg	<10	----



Sub-Matrix: Biota

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Metals (QCLot: 1844973) - continued						
Potassium	7440-09-7	E464	20	mg/kg	<20	----
Rubidium	7440-17-7	E464	0.1	mg/kg	<0.10	----
Selenium	7782-49-2	E464	0.05	mg/kg	<0.050	----
Silver	7440-22-4	E464	0.005	mg/kg	<0.0050	----
Sodium	7440-23-5	E464	25	mg/kg	<25	----
Strontium	7440-24-6	E464	0.1	mg/kg	<0.10	----
Tellurium	13494-80-9	E464	0.1	mg/kg	<0.10	----
Thallium	7440-28-0	E464	0.002	mg/kg	<0.0020	----
Tin	7440-31-5	E464	0.1	mg/kg	<0.10	----
Tungsten	7440-33-7	E464	0.1	mg/kg	<0.10	----
Uranium	7440-61-1	E464	0.02	mg/kg	<0.020	----
Vanadium	7440-62-2	E464	0.1	mg/kg	<0.10	----
Zinc	7440-66-6	E464	0.5	mg/kg	<0.50	----
Zirconium	7440-67-7	E464	0.3	mg/kg	<0.30	----
Metals (QCLot: 1844974)						
Mercury	7439-97-6	E524	0.0313	mg/kg	<0.031	----
Metals (QCLot: 1847480)						
Aluminum	7429-90-5	E464	2	mg/kg	<2.0	----
Antimony	7440-36-0	E464	0.01	mg/kg	<0.010	----
Arsenic	7440-38-2	E464	0.02	mg/kg	<0.0200	----
Barium	7440-39-3	E464	0.1	mg/kg	<0.10	----
Beryllium	7440-41-7	E464	0.01	mg/kg	<0.010	----
Bismuth	7440-69-9	E464	0.01	mg/kg	<0.010	----
Boron	7440-42-8	E464	1	mg/kg	<1.0	----
Cadmium	7440-43-9	E464	0.005	mg/kg	<0.0050	----
Calcium	7440-70-2	E464	25	mg/kg	<25	----
Chromium	7440-47-3	E464	0.05	mg/kg	<0.050	----
Cobalt	7440-48-4	E464	0.02	mg/kg	<0.020	----
Copper	7440-50-8	E464	0.1	mg/kg	<0.10	----
Iron	7439-89-6	E464	2.5	mg/kg	<2.5	----
Lead	7439-92-1	E464	0.02	mg/kg	<0.020	----
Lithium	7439-93-2	E464	0.5	mg/kg	<0.50	----
Magnesium	7439-95-4	E464	5	mg/kg	<5.0	----
Manganese	7439-96-5	E464	0.5	mg/kg	<0.50	----
Molybdenum	7439-98-7	E464	0.02	mg/kg	<0.020	----



Sub-Matrix: Biota

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Metals (QCLot: 1847480) - continued						
Nickel	7440-02-0	E464	0.2	mg/kg	<0.20	----
Phosphorus	7723-14-0	E464	10	mg/kg	<10	----
Potassium	7440-09-7	E464	20	mg/kg	<20	----
Rubidium	7440-17-7	E464	0.1	mg/kg	<0.10	----
Selenium	7782-49-2	E464	0.05	mg/kg	<0.050	----
Silver	7440-22-4	E464	0.005	mg/kg	<0.0050	----
Sodium	7440-23-5	E464	25	mg/kg	<25	----
Strontium	7440-24-6	E464	0.1	mg/kg	<0.10	----
Tellurium	13494-80-9	E464	0.1	mg/kg	<0.10	----
Thallium	7440-28-0	E464	0.002	mg/kg	<0.0020	----
Tin	7440-31-5	E464	0.1	mg/kg	<0.10	----
Tungsten	7440-33-7	E464	0.1	mg/kg	<0.10	----
Uranium	7440-61-1	E464	0.02	mg/kg	<0.020	----
Vanadium	7440-62-2	E464	0.1	mg/kg	<0.10	----
Zinc	7440-66-6	E464	0.5	mg/kg	<0.50	----
Zirconium	7440-67-7	E464	0.3	mg/kg	<0.30	----
Metals (QCLot: 1847481)						
Mercury	7439-97-6	E524	0.0313	mg/kg	<0.031	----
Metals (QCLot: 1848876)						
Aluminum	7429-90-5	E464	2	mg/kg	<2.0	----
Antimony	7440-36-0	E464	0.01	mg/kg	<0.010	----
Arsenic	7440-38-2	E464	0.02	mg/kg	<0.0200	----
Barium	7440-39-3	E464	0.1	mg/kg	<0.10	----
Beryllium	7440-41-7	E464	0.01	mg/kg	<0.010	----
Bismuth	7440-69-9	E464	0.01	mg/kg	<0.010	----
Boron	7440-42-8	E464	1	mg/kg	<1.0	----
Cadmium	7440-43-9	E464	0.005	mg/kg	<0.0050	----
Calcium	7440-70-2	E464	25	mg/kg	<25	----
Chromium	7440-47-3	E464	0.05	mg/kg	<0.050	----
Cobalt	7440-48-4	E464	0.02	mg/kg	<0.020	----
Copper	7440-50-8	E464	0.1	mg/kg	<0.10	----
Iron	7439-89-6	E464	2.5	mg/kg	<2.5	----
Lead	7439-92-1	E464	0.02	mg/kg	<0.020	----
Lithium	7439-93-2	E464	0.5	mg/kg	<0.50	----
Magnesium	7439-95-4	E464	5	mg/kg	<5.0	----



Sub-Matrix: Biota

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Metals (QCLot: 1848876) - continued						
Manganese	7439-96-5	E464	0.5	mg/kg	<0.50	----
Molybdenum	7439-98-7	E464	0.02	mg/kg	<0.020	----
Nickel	7440-02-0	E464	0.2	mg/kg	<0.20	----
Phosphorus	7723-14-0	E464	10	mg/kg	<10	----
Potassium	7440-09-7	E464	20	mg/kg	<20	----
Rubidium	7440-17-7	E464	0.1	mg/kg	<0.10	----
Selenium	7782-49-2	E464	0.05	mg/kg	<0.050	----
Silver	7440-22-4	E464	0.005	mg/kg	<0.0050	----
Sodium	7440-23-5	E464	25	mg/kg	<25	----
Strontium	7440-24-6	E464	0.1	mg/kg	<0.10	----
Tellurium	13494-80-9	E464	0.1	mg/kg	<0.10	----
Thallium	7440-28-0	E464	0.002	mg/kg	<0.0020	----
Tin	7440-31-5	E464	0.1	mg/kg	<0.10	----
Tungsten	7440-33-7	E464	0.1	mg/kg	<0.10	----
Uranium	7440-61-1	E464	0.02	mg/kg	<0.020	----
Vanadium	7440-62-2	E464	0.1	mg/kg	<0.10	----
Zinc	7440-66-6	E464	0.5	mg/kg	<0.50	----
Zirconium	7440-67-7	E464	0.3	mg/kg	<0.30	----
Metals (QCLot: 1848877)						
Mercury	7439-97-6	E524	0.0313	mg/kg	<0.031	----
Metals (QCLot: 1853948)						
Aluminum	7429-90-5	E464	2	mg/kg	<2.0	----
Antimony	7440-36-0	E464	0.01	mg/kg	<0.010	----
Arsenic	7440-38-2	E464	0.02	mg/kg	# <0.0200	B
Barium	7440-39-3	E464	0.1	mg/kg	<0.10	----
Beryllium	7440-41-7	E464	0.01	mg/kg	<0.010	----
Bismuth	7440-69-9	E464	0.01	mg/kg	<0.010	----
Boron	7440-42-8	E464	1	mg/kg	<1.0	----
Cadmium	7440-43-9	E464	0.005	mg/kg	<0.0050	----
Calcium	7440-70-2	E464	25	mg/kg	<25	----
Chromium	7440-47-3	E464	0.05	mg/kg	<0.050	----
Cobalt	7440-48-4	E464	0.02	mg/kg	<0.020	----
Copper	7440-50-8	E464	0.1	mg/kg	0.11	----
Iron	7439-89-6	E464	2.5	mg/kg	<2.5	----
Lead	7439-92-1	E464	0.02	mg/kg	<0.020	----



Sub-Matrix: Biota

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Metals (QCLot: 1853948) - continued						
Lithium	7439-93-2	E464	0.5	mg/kg	<0.50	----
Magnesium	7439-95-4	E464	5	mg/kg	<5.0	----
Manganese	7439-96-5	E464	0.5	mg/kg	<0.50	----
Molybdenum	7439-98-7	E464	0.02	mg/kg	<0.020	----
Nickel	7440-02-0	E464	0.2	mg/kg	<0.20	----
Phosphorus	7723-14-0	E464	10	mg/kg	<10	----
Potassium	7440-09-7	E464	20	mg/kg	<20	----
Rubidium	7440-17-7	E464	0.1	mg/kg	<0.10	----
Selenium	7782-49-2	E464	0.05	mg/kg	<0.050	----
Silver	7440-22-4	E464	0.005	mg/kg	<0.0050	----
Sodium	7440-23-5	E464	25	mg/kg	<25	----
Strontium	7440-24-6	E464	0.1	mg/kg	<0.10	----
Tellurium	13494-80-9	E464	0.1	mg/kg	<0.10	----
Thallium	7440-28-0	E464	0.002	mg/kg	<0.0020	----
Tin	7440-31-5	E464	0.1	mg/kg	<0.10	----
Tungsten	7440-33-7	E464	0.1	mg/kg	<0.10	----
Uranium	7440-61-1	E464	0.02	mg/kg	<0.020	----
Vanadium	7440-62-2	E464	0.1	mg/kg	<0.10	----
Zinc	7440-66-6	E464	0.5	mg/kg	<0.50	----
Zirconium	7440-67-7	E464	0.3	mg/kg	<0.30	----
Metals (QCLot: 1853949)						
Mercury	7439-97-6	E524	0.0313	mg/kg	<0.031	----

Qualifiers

Qualifier	Description
B	Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.



Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: Biota

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 1870554)									
Moisture	----	E144	0.5	%	50 %	98.2	90.0	110	----
Physical Tests (QCLot: 1870587)									
Moisture	----	E144	0.5	%	50 %	101	90.0	110	----
Physical Tests (QCLot: 1870610)									
Moisture	----	E144	0.5	%	50 %	93.9	90.0	110	----
Physical Tests (QCLot: 1870626)									
Moisture	----	E144	0.5	%	50 %	99.4	90.0	110	----
Physical Tests (QCLot: 1870635)									
Moisture	----	E144	0.5	%	50 %	95.3	90.0	110	----
Metals (QCLot: 1841075)									
Aluminum	7429-90-5	E464	2	mg/kg	10 mg/kg	83.1	70.0	130	----
Antimony	7440-36-0	E464	0.01	mg/kg	5 mg/kg	83.3	70.0	130	----
Arsenic	7440-38-2	E464	0.02	mg/kg	5 mg/kg	84.7	70.0	130	----
Barium	7440-39-3	E464	0.1	mg/kg	1.25 mg/kg	80.6	70.0	130	----
Beryllium	7440-41-7	E464	0.01	mg/kg	0.5 mg/kg	79.3	70.0	130	----
Bismuth	7440-69-9	E464	0.01	mg/kg	5 mg/kg	82.0	70.0	130	----
Boron	7440-42-8	E464	1	mg/kg	5 mg/kg	82.4	70.0	130	----
Cadmium	7440-43-9	E464	0.005	mg/kg	0.5 mg/kg	84.9	70.0	130	----
Calcium	7440-70-2	E464	25	mg/kg	250 mg/kg	81.0	70.0	130	----
Chromium	7440-47-3	E464	0.05	mg/kg	1.25 mg/kg	84.4	70.0	130	----
Cobalt	7440-48-4	E464	0.02	mg/kg	1.25 mg/kg	83.7	70.0	130	----
Copper	7440-50-8	E464	0.1	mg/kg	1.25 mg/kg	83.9	70.0	130	----
Iron	7439-89-6	E464	2.5	mg/kg	5 mg/kg	86.4	70.0	130	----
Lead	7439-92-1	E464	0.02	mg/kg	2.5 mg/kg	81.3	70.0	130	----
Lithium	7439-93-2	E464	0.5	mg/kg	1.25 mg/kg	# 62.6	70.0	130	LCS-L
Magnesium	7439-95-4	E464	5	mg/kg	250 mg/kg	83.2	70.0	130	----
Manganese	7439-96-5	E464	0.5	mg/kg	1.25 mg/kg	82.8	70.0	130	----
Molybdenum	7439-98-7	E464	0.02	mg/kg	1.25 mg/kg	81.6	70.0	130	----
Nickel	7440-02-0	E464	0.2	mg/kg	2.5 mg/kg	83.7	70.0	130	----
Phosphorus	7723-14-0	E464	10	mg/kg	50 mg/kg	79.1	70.0	130	----
Potassium	7440-09-7	E464	20	mg/kg	250 mg/kg	79.1	70.0	130	----



Sub-Matrix: Biota

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Metals (QCLot: 1841075) - continued									
Rubidium	7440-17-7	E464	0.1	mg/kg	0.5 mg/kg	85.2	70.0	130	----
Selenium	7782-49-2	E464	0.05	mg/kg	5 mg/kg	83.5	70.0	130	----
Silver	7440-22-4	E464	0.005	mg/kg	0.5 mg/kg	72.9	70.0	130	----
Sodium	7440-23-5	E464	25	mg/kg	250 mg/kg	86.6	70.0	130	----
Strontium	7440-24-6	E464	0.1	mg/kg	1.25 mg/kg	75.0	70.0	130	----
Tellurium	13494-80-9	E464	0.1	mg/kg	0.5 mg/kg	70.7	70.0	130	----
Thallium	7440-28-0	E464	0.002	mg/kg	5 mg/kg	80.5	70.0	130	----
Tin	7440-31-5	E464	0.1	mg/kg	2.5 mg/kg	81.6	70.0	130	----
Tungsten	7440-33-7	E464	0.1	mg/kg	0.5 mg/kg	82.8	70.0	130	----
Uranium	7440-61-1	E464	0.02	mg/kg	0.025 mg/kg	80.3	70.0	130	----
Vanadium	7440-62-2	E464	0.1	mg/kg	2.5 mg/kg	83.9	70.0	130	----
Zinc	7440-66-6	E464	0.5	mg/kg	2.5 mg/kg	80.3	70.0	130	----
Zirconium	7440-67-7	E464	0.3	mg/kg	0.5 mg/kg	73.4	70.0	130	----
Metals (QCLot: 1841076)									
Mercury	7439-97-6	E524	0.0313	mg/kg	0.083 mg/kg	88.4	70.0	130	----
Metals (QCLot: 1844973)									
Aluminum	7429-90-5	E464	2	mg/kg	10 mg/kg	85.6	70.0	130	----
Antimony	7440-36-0	E464	0.01	mg/kg	5 mg/kg	87.0	70.0	130	----
Arsenic	7440-38-2	E464	0.02	mg/kg	5 mg/kg	85.5	70.0	130	----
Barium	7440-39-3	E464	0.1	mg/kg	1.25 mg/kg	85.6	70.0	130	----
Beryllium	7440-41-7	E464	0.01	mg/kg	0.5 mg/kg	83.6	70.0	130	----
Bismuth	7440-69-9	E464	0.01	mg/kg	5 mg/kg	82.0	70.0	130	----
Boron	7440-42-8	E464	1	mg/kg	5 mg/kg	85.4	70.0	130	----
Cadmium	7440-43-9	E464	0.005	mg/kg	0.5 mg/kg	82.5	70.0	130	----
Calcium	7440-70-2	E464	25	mg/kg	250 mg/kg	85.6	70.0	130	----
Chromium	7440-47-3	E464	0.05	mg/kg	1.25 mg/kg	85.9	70.0	130	----
Cobalt	7440-48-4	E464	0.02	mg/kg	1.25 mg/kg	83.5	70.0	130	----
Copper	7440-50-8	E464	0.1	mg/kg	1.25 mg/kg	84.7	70.0	130	----
Iron	7439-89-6	E464	2.5	mg/kg	5 mg/kg	89.5	70.0	130	----
Lead	7439-92-1	E464	0.02	mg/kg	2.5 mg/kg	81.4	70.0	130	----
Lithium	7439-93-2	E464	0.5	mg/kg	1.25 mg/kg	72.1	70.0	130	----
Magnesium	7439-95-4	E464	5	mg/kg	250 mg/kg	85.6	70.0	130	----
Manganese	7439-96-5	E464	0.5	mg/kg	1.25 mg/kg	87.8	70.0	130	----
Molybdenum	7439-98-7	E464	0.02	mg/kg	1.25 mg/kg	87.0	70.0	130	----
Nickel	7440-02-0	E464	0.2	mg/kg	2.5 mg/kg	83.7	70.0	130	----
Phosphorus	7723-14-0	E464	10	mg/kg	50 mg/kg	86.1	70.0	130	----



Sub-Matrix: Biota

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Metals (QCLot: 1844973) - continued									
Potassium	7440-09-7	E464	20	mg/kg	250 mg/kg	82.3	70.0	130	----
Rubidium	7440-17-7	E464	0.1	mg/kg	0.5 mg/kg	88.5	70.0	130	----
Selenium	7782-49-2	E464	0.05	mg/kg	5 mg/kg	83.9	70.0	130	----
Silver	7440-22-4	E464	0.005	mg/kg	0.5 mg/kg	78.6	70.0	130	----
Sodium	7440-23-5	E464	25	mg/kg	250 mg/kg	83.6	70.0	130	----
Strontium	7440-24-6	E464	0.1	mg/kg	1.25 mg/kg	79.9	70.0	130	----
Tellurium	13494-80-9	E464	0.1	mg/kg	0.5 mg/kg	79.8	70.0	130	----
Thallium	7440-28-0	E464	0.002	mg/kg	5 mg/kg	81.5	70.0	130	----
Tin	7440-31-5	E464	0.1	mg/kg	2.5 mg/kg	86.4	70.0	130	----
Tungsten	7440-33-7	E464	0.1	mg/kg	0.5 mg/kg	86.3	70.0	130	----
Uranium	7440-61-1	E464	0.02	mg/kg	0.025 mg/kg	83.7	70.0	130	----
Vanadium	7440-62-2	E464	0.1	mg/kg	2.5 mg/kg	85.1	70.0	130	----
Zinc	7440-66-6	E464	0.5	mg/kg	2.5 mg/kg	81.4	70.0	130	----
Zirconium	7440-67-7	E464	0.3	mg/kg	0.5 mg/kg	80.4	70.0	130	----
Metals (QCLot: 1844974)									
Mercury	7439-97-6	E524	0.0313	mg/kg	0.083 mg/kg	93.7	70.0	130	----
Metals (QCLot: 1847480)									
Aluminum	7429-90-5	E464	2	mg/kg	10 mg/kg	81.4	70.0	130	----
Antimony	7440-36-0	E464	0.01	mg/kg	5 mg/kg	74.6	70.0	130	----
Arsenic	7440-38-2	E464	0.02	mg/kg	5 mg/kg	84.5	70.0	130	----
Barium	7440-39-3	E464	0.1	mg/kg	1.25 mg/kg	83.4	70.0	130	----
Beryllium	7440-41-7	E464	0.01	mg/kg	0.5 mg/kg	78.4	70.0	130	----
Bismuth	7440-69-9	E464	0.01	mg/kg	5 mg/kg	86.4	70.0	130	----
Boron	7440-42-8	E464	1	mg/kg	5 mg/kg	80.0	70.0	130	----
Cadmium	7440-43-9	E464	0.005	mg/kg	0.5 mg/kg	80.1	70.0	130	----
Calcium	7440-70-2	E464	25	mg/kg	250 mg/kg	81.1	70.0	130	----
Chromium	7440-47-3	E464	0.05	mg/kg	1.25 mg/kg	83.3	70.0	130	----
Cobalt	7440-48-4	E464	0.02	mg/kg	1.25 mg/kg	83.6	70.0	130	----
Copper	7440-50-8	E464	0.1	mg/kg	1.25 mg/kg	84.0	70.0	130	----
Iron	7439-89-6	E464	2.5	mg/kg	5 mg/kg	85.2	70.0	130	----
Lead	7439-92-1	E464	0.02	mg/kg	2.5 mg/kg	82.8	70.0	130	----
Lithium	7439-93-2	E464	0.5	mg/kg	1.25 mg/kg	# 66.7	70.0	130	LCS-L
Magnesium	7439-95-4	E464	5	mg/kg	250 mg/kg	84.2	70.0	130	----
Manganese	7439-96-5	E464	0.5	mg/kg	1.25 mg/kg	82.6	70.0	130	----
Molybdenum	7439-98-7	E464	0.02	mg/kg	1.25 mg/kg	76.5	70.0	130	----
Nickel	7440-02-0	E464	0.2	mg/kg	2.5 mg/kg	82.3	70.0	130	----



Sub-Matrix: Biota

Sub-Matrix: Biota					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Metals (QCLot: 1847480) - continued									
Phosphorus	7723-14-0	E464	10	mg/kg	50 mg/kg	78.8	70.0	130	----
Potassium	7440-09-7	E464	20	mg/kg	250 mg/kg	80.0	70.0	130	----
Rubidium	7440-17-7	E464	0.1	mg/kg	0.5 mg/kg	82.7	70.0	130	----
Selenium	7782-49-2	E464	0.05	mg/kg	5 mg/kg	77.3	70.0	130	----
Silver	7440-22-4	E464	0.005	mg/kg	0.5 mg/kg	# 69.8	70.0	130	LCS-L
Sodium	7440-23-5	E464	25	mg/kg	250 mg/kg	88.8	70.0	130	----
Strontium	7440-24-6	E464	0.1	mg/kg	1.25 mg/kg	74.4	70.0	130	----
Tellurium	13494-80-9	E464	0.1	mg/kg	0.5 mg/kg	71.8	70.0	130	----
Thallium	7440-28-0	E464	0.002	mg/kg	5 mg/kg	82.4	70.0	130	----
Tin	7440-31-5	E464	0.1	mg/kg	2.5 mg/kg	79.2	70.0	130	----
Tungsten	7440-33-7	E464	0.1	mg/kg	0.5 mg/kg	80.6	70.0	130	----
Uranium	7440-61-1	E464	0.02	mg/kg	0.025 mg/kg	83.0	70.0	130	----
Vanadium	7440-62-2	E464	0.1	mg/kg	2.5 mg/kg	84.3	70.0	130	----
Zinc	7440-66-6	E464	0.5	mg/kg	2.5 mg/kg	82.4	70.0	130	----
Zirconium	7440-67-7	E464	0.3	mg/kg	0.5 mg/kg	71.7	70.0	130	----
Metals (QCLot: 1847481)									
Mercury	7439-97-6	E524	0.0313	mg/kg	0.083 mg/kg	90.7	70.0	130	----
Metals (QCLot: 1848876)									
Aluminum	7429-90-5	E464	2	mg/kg	10 mg/kg	82.6	70.0	130	----
Antimony	7440-36-0	E464	0.01	mg/kg	5 mg/kg	76.6	70.0	130	----
Arsenic	7440-38-2	E464	0.02	mg/kg	5 mg/kg	81.5	70.0	130	----
Barium	7440-39-3	E464	0.1	mg/kg	1.25 mg/kg	77.1	70.0	130	----
Beryllium	7440-41-7	E464	0.01	mg/kg	0.5 mg/kg	77.5	70.0	130	----
Bismuth	7440-69-9	E464	0.01	mg/kg	5 mg/kg	85.8	70.0	130	----
Boron	7440-42-8	E464	1	mg/kg	5 mg/kg	75.0	70.0	130	----
Cadmium	7440-43-9	E464	0.005	mg/kg	0.5 mg/kg	83.4	70.0	130	----
Calcium	7440-70-2	E464	25	mg/kg	250 mg/kg	78.2	70.0	130	----
Chromium	7440-47-3	E464	0.05	mg/kg	1.25 mg/kg	84.3	70.0	130	----
Cobalt	7440-48-4	E464	0.02	mg/kg	1.25 mg/kg	84.7	70.0	130	----
Copper	7440-50-8	E464	0.1	mg/kg	1.25 mg/kg	84.1	70.0	130	----
Iron	7439-89-6	E464	2.5	mg/kg	5 mg/kg	86.2	70.0	130	----
Lead	7439-92-1	E464	0.02	mg/kg	2.5 mg/kg	84.8	70.0	130	----
Lithium	7439-93-2	E464	0.5	mg/kg	1.25 mg/kg	# 65.9	70.0	130	LCS-L
Magnesium	7439-95-4	E464	5	mg/kg	250 mg/kg	83.8	70.0	130	----
Manganese	7439-96-5	E464	0.5	mg/kg	1.25 mg/kg	82.3	70.0	130	----
Molybdenum	7439-98-7	E464	0.02	mg/kg	1.25 mg/kg	74.4	70.0	130	----



Sub-Matrix: Biota

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Metals (QCLot: 1848876) - continued									
Nickel	7440-02-0	E464	0.2	mg/kg	2.5 mg/kg	84.4	70.0	130	----
Phosphorus	7723-14-0	E464	10	mg/kg	50 mg/kg	77.0	70.0	130	----
Potassium	7440-09-7	E464	20	mg/kg	250 mg/kg	78.2	70.0	130	----
Rubidium	7440-17-7	E464	0.1	mg/kg	0.5 mg/kg	85.8	70.0	130	----
Selenium	7782-49-2	E464	0.05	mg/kg	5 mg/kg	80.0	70.0	130	----
Silver	7440-22-4	E464	0.005	mg/kg	0.5 mg/kg	72.8	70.0	130	----
Sodium	7440-23-5	E464	25	mg/kg	250 mg/kg	87.8	70.0	130	----
Strontium	7440-24-6	E464	0.1	mg/kg	1.25 mg/kg	72.3	70.0	130	----
Tellurium	13494-80-9	E464	0.1	mg/kg	0.5 mg/kg	75.1	70.0	130	----
Thallium	7440-28-0	E464	0.002	mg/kg	5 mg/kg	84.1	70.0	130	----
Tin	7440-31-5	E464	0.1	mg/kg	2.5 mg/kg	77.6	70.0	130	----
Tungsten	7440-33-7	E464	0.1	mg/kg	0.5 mg/kg	81.6	70.0	130	----
Uranium	7440-61-1	E464	0.02	mg/kg	0.025 mg/kg	88.0	70.0	130	----
Vanadium	7440-62-2	E464	0.1	mg/kg	2.5 mg/kg	83.6	70.0	130	----
Zinc	7440-66-6	E464	0.5	mg/kg	2.5 mg/kg	80.0	70.0	130	----
Zirconium	7440-67-7	E464	0.3	mg/kg	0.5 mg/kg	# 68.8	70.0	130	LCS-L
Metals (QCLot: 1848877)									
Mercury	7439-97-6	E524	0.0313	mg/kg	0.083 mg/kg	90.1	70.0	130	----
Metals (QCLot: 1853948)									
Aluminum	7429-90-5	E464	2	mg/kg	10 mg/kg	84.0	70.0	130	----
Antimony	7440-36-0	E464	0.01	mg/kg	5 mg/kg	83.4	70.0	130	----
Arsenic	7440-38-2	E464	0.02	mg/kg	5 mg/kg	81.5	70.0	130	----
Barium	7440-39-3	E464	0.1	mg/kg	1.25 mg/kg	82.3	70.0	130	----
Beryllium	7440-41-7	E464	0.01	mg/kg	0.5 mg/kg	78.2	70.0	130	----
Bismuth	7440-69-9	E464	0.01	mg/kg	5 mg/kg	79.4	70.0	130	----
Boron	7440-42-8	E464	1	mg/kg	5 mg/kg	82.7	70.0	130	----
Cadmium	7440-43-9	E464	0.005	mg/kg	0.5 mg/kg	79.0	70.0	130	----
Calcium	7440-70-2	E464	25	mg/kg	250 mg/kg	81.6	70.0	130	----
Chromium	7440-47-3	E464	0.05	mg/kg	1.25 mg/kg	81.8	70.0	130	----
Cobalt	7440-48-4	E464	0.02	mg/kg	1.25 mg/kg	80.9	70.0	130	----
Copper	7440-50-8	E464	0.1	mg/kg	1.25 mg/kg	87.4	70.0	130	----
Iron	7439-89-6	E464	2.5	mg/kg	5 mg/kg	83.0	70.0	130	----
Lead	7439-92-1	E464	0.02	mg/kg	2.5 mg/kg	81.1	70.0	130	----
Lithium	7439-93-2	E464	0.5	mg/kg	1.25 mg/kg	# 65.0	70.0	130	LCS-L
Magnesium	7439-95-4	E464	5	mg/kg	250 mg/kg	86.0	70.0	130	----
Manganese	7439-96-5	E464	0.5	mg/kg	1.25 mg/kg	82.3	70.0	130	----



Sub-Matrix: Biota					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Target Concentration	LCS	Low	High	Qualifier
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Metals (QCLot: 1853948) - continued									
Molybdenum	7439-98-7	E464	0.02	mg/kg	1.25 mg/kg	82.4	70.0	130	----
Nickel	7440-02-0	E464	0.2	mg/kg	2.5 mg/kg	79.4	70.0	130	----
Phosphorus	7723-14-0	E464	10	mg/kg	50 mg/kg	79.6	70.0	130	----
Potassium	7440-09-7	E464	20	mg/kg	250 mg/kg	79.8	70.0	130	----
Rubidium	7440-17-7	E464	0.1	mg/kg	0.5 mg/kg	80.8	70.0	130	----
Selenium	7782-49-2	E464	0.05	mg/kg	5 mg/kg	77.8	70.0	130	----
Silver	7440-22-4	E464	0.005	mg/kg	0.5 mg/kg	75.2	70.0	130	----
Sodium	7440-23-5	E464	25	mg/kg	250 mg/kg	84.3	70.0	130	----
Strontium	7440-24-6	E464	0.1	mg/kg	1.25 mg/kg	80.2	70.0	130	----
Tellurium	13494-80-9	E464	0.1	mg/kg	0.5 mg/kg	74.0	70.0	130	----
Thallium	7440-28-0	E464	0.002	mg/kg	5 mg/kg	79.2	70.0	130	----
Tin	7440-31-5	E464	0.1	mg/kg	2.5 mg/kg	81.8	70.0	130	----
Tungsten	7440-33-7	E464	0.1	mg/kg	0.5 mg/kg	81.4	70.0	130	----
Uranium	7440-61-1	E464	0.02	mg/kg	0.025 mg/kg	79.3	70.0	130	----
Vanadium	7440-62-2	E464	0.1	mg/kg	2.5 mg/kg	80.9	70.0	130	----
Zinc	7440-66-6	E464	0.5	mg/kg	2.5 mg/kg	76.9	70.0	130	----
Zirconium	7440-67-7	E464	0.3	mg/kg	0.5 mg/kg	75.9	70.0	130	----
Metals (QCLot: 1853949)									
Mercury	7439-97-6	E524	0.0313	mg/kg	0.083 mg/kg	89.0	70.0	130	----

Qualifiers

Qualifier	Description
LCS-L	Lab Control Sample recovery was below ALS DQO. Reference Material and/or Matrix Spike results were acceptable. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.



Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: Biota

Sub-Matrix: Biota					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Metals (QCLot: 1841075)										
WT2437881-002	BA-IKLL-AC-LIV-02-AUG-27	Aluminum	7429-90-5	E464	ND mg/kg	----	ND	70.0	130	----
		Antimony	7440-36-0	E464	4.12 mg/kg	4.87 mg/kg	84.6	70.0	130	----
		Arsenic	7440-38-2	E464	4.55 mg/kg	4.87 mg/kg	93.4	70.0	130	----
		Barium	7440-39-3	E464	1.19 mg/kg	1.22 mg/kg	97.6	70.0	130	----
		Beryllium	7440-41-7	E464	0.413 mg/kg	0.487 mg/kg	84.8	70.0	130	----
		Bismuth	7440-69-9	E464	4.22 mg/kg	4.87 mg/kg	86.6	70.0	130	----
		Boron	7440-42-8	E464	4.2 mg/kg	4.87 mg/kg	86.2	70.0	130	----
		Cadmium	7440-43-9	E464	ND mg/kg	----	ND	70.0	130	----
		Calcium	7440-70-2	E464	407 mg/kg	244 mg/kg	167	70.0	130	E
		Chromium	7440-47-3	E464	1.06 mg/kg	1.22 mg/kg	86.7	70.0	130	----
		Cobalt	7440-48-4	E464	1.05 mg/kg	1.22 mg/kg	86.2	70.0	130	----
		Copper	7440-50-8	E464	ND mg/kg	----	ND	70.0	130	----
		Iron	7439-89-6	E464	ND mg/kg	----	ND	70.0	130	----
		Lead	7439-92-1	E464	2.03 mg/kg	2.44 mg/kg	83.3	70.0	130	----
		Lithium	7439-93-2	E464	0.84 mg/kg	1.22 mg/kg	69.3	70.0	130	K
		Magnesium	7439-95-4	E464	255 mg/kg	244 mg/kg	105	70.0	130	----
		Manganese	7439-96-5	E464	ND mg/kg	----	ND	70.0	130	----
		Molybdenum	7439-98-7	E464	1.04 mg/kg	1.22 mg/kg	85.0	70.0	130	----
		Nickel	7440-02-0	E464	2.02 mg/kg	2.44 mg/kg	82.8	70.0	130	----
		Phosphorus	7723-14-0	E464	ND mg/kg	----	ND	70.0	130	----
		Potassium	7440-09-7	E464	ND mg/kg	----	ND	70.0	130	----
		Rubidium	7440-17-7	E464	ND mg/kg	----	ND	70.0	130	----
		Selenium	7782-49-2	E464	4.51 mg/kg	4.87 mg/kg	92.6	70.0	130	----
		Silver	7440-22-4	E464	0.357 mg/kg	0.487 mg/kg	73.3	70.0	130	----
		Sodium	7440-23-5	E464	ND mg/kg	----	ND	70.0	130	----
		Strontium	7440-24-6	E464	1.28 mg/kg	1.22 mg/kg	105	70.0	130	----
		Tellurium	13494-80-9	E464	0.36 mg/kg	0.487 mg/kg	74.5	70.0	130	----
		Thallium	7440-28-0	E464	4.01 mg/kg	4.87 mg/kg	82.2	70.0	130	----
		Tin	7440-31-5	E464	2.05 mg/kg	2.44 mg/kg	84.2	70.0	130	----
		Tungsten	7440-33-7	E464	0.42 mg/kg	0.487 mg/kg	85.7	70.0	130	----
		Uranium	7440-61-1	E464	0.020 mg/kg	0.024 mg/kg	80.2	70.0	130	----
		Vanadium	7440-62-2	E464	2.14 mg/kg	2.44 mg/kg	87.8	70.0	130	----
		Zinc	7440-66-6	E464	ND mg/kg	----	ND	70.0	130	----
		Zirconium	7440-67-7	E464	0.37 mg/kg	0.487 mg/kg	76.5	70.0	130	----
Metals (QCLot: 1841076)										
WT2437881-002	BA-IKLL-AC-LIV-02-AUG-27	Mercury	7439-97-6	E524	ND mg/kg	----	ND	70.0	130	----
Metals (QCLot: 1844973)										
WT2437881-021	BA-IKLL-AC-LIV-24-AUG-27	Aluminum	7429-90-5	E464	8.3 mg/kg	9.63 mg/kg	86.4	70.0	130	----
		Antimony	7440-36-0	E464	4.06 mg/kg	4.82 mg/kg	84.4	70.0	130	----



Sub-Matrix: Biota					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Metals (QCLot: 1844973) - continued										
WT2437881-021	BA-IKLL-AC-LIV-24-AUG-27	Arsenic	7440-38-2	E464	4.41 mg/kg	4.82 mg/kg	91.6	70.0	130	----
		Barium	7440-39-3	E464	1.02 mg/kg	1.2 mg/kg	84.6	70.0	130	----
		Beryllium	7440-41-7	E464	0.399 mg/kg	0.482 mg/kg	82.9	70.0	130	----
		Bismuth	7440-69-9	E464	3.86 mg/kg	4.82 mg/kg	80.2	70.0	130	----
		Boron	7440-42-8	E464	4.0 mg/kg	4.82 mg/kg	83.2	70.0	130	----
		Cadmium	7440-43-9	E464	0.404 mg/kg	0.482 mg/kg	83.8	70.0	130	----
		Calcium	7440-70-2	E464	194 mg/kg	241 mg/kg	80.7	70.0	130	----
		Chromium	7440-47-3	E464	0.979 mg/kg	1.2 mg/kg	81.3	70.0	130	----
		Cobalt	7440-48-4	E464	0.985 mg/kg	1.2 mg/kg	81.8	70.0	130	----
		Copper	7440-50-8	E464	ND mg/kg	----	ND	70.0	130	----
		Iron	7439-89-6	E464	ND mg/kg	----	ND	70.0	130	----
		Lead	7439-92-1	E464	1.90 mg/kg	2.41 mg/kg	79.1	70.0	130	----
		Lithium	7439-93-2	E464	0.88 mg/kg	1.2 mg/kg	73.0	70.0	130	----
		Magnesium	7439-95-4	E464	226 mg/kg	241 mg/kg	94.0	70.0	130	----
		Manganese	7439-96-5	E464	1.00 mg/kg	1.2 mg/kg	82.8	70.0	130	----
		Molybdenum	7439-98-7	E464	0.998 mg/kg	1.2 mg/kg	82.8	70.0	130	----
		Nickel	7440-02-0	E464	1.95 mg/kg	2.41 mg/kg	81.0	70.0	130	----
		Phosphorus	7723-14-0	E464	ND mg/kg	----	ND	70.0	130	----
		Potassium	7440-09-7	E464	ND mg/kg	----	ND	70.0	130	----
		Rubidium	7440-17-7	E464	ND mg/kg	----	ND	70.0	130	----
		Selenium	7782-49-2	E464	4.65 mg/kg	4.82 mg/kg	96.6	70.0	130	----
		Silver	7440-22-4	E464	0.362 mg/kg	0.482 mg/kg	75.1	70.0	130	----
		Sodium	7440-23-5	E464	ND mg/kg	----	ND	70.0	130	----
		Strontium	7440-24-6	E464	0.92 mg/kg	1.2 mg/kg	76.8	70.0	130	----
		Tellurium	13494-80-9	E464	0.41 mg/kg	0.482 mg/kg	84.6	70.0	130	----
		Thallium	7440-28-0	E464	3.86 mg/kg	4.82 mg/kg	80.2	70.0	130	----
		Tin	7440-31-5	E464	2.04 mg/kg	2.41 mg/kg	84.5	70.0	130	----
		Tungsten	7440-33-7	E464	0.40 mg/kg	0.482 mg/kg	83.6	70.0	130	----
		Uranium	7440-61-1	E464	0.019 mg/kg	0.024 mg/kg	79.5	70.0	130	----
		Vanadium	7440-62-2	E464	2.01 mg/kg	2.41 mg/kg	83.6	70.0	130	----
		Zinc	7440-66-6	E464	ND mg/kg	----	ND	70.0	130	----
		Zirconium	7440-67-7	E464	0.37 mg/kg	0.482 mg/kg	76.9	70.0	130	----
Metals (QCLot: 1844974)										
WT2437881-021	BA-IKLL-AC-LIV-24-AUG-27	Mercury	7439-97-6	E524	0.074 mg/kg	0.08 mg/kg	92.6	70.0	130	----
Metals (QCLot: 1847480)										
WT2437881-048	BA-IKLL-AC-MUS-29-AUG-28	Aluminum	7429-90-5	E464	7.5 mg/kg	8.4 mg/kg	89.5	70.0	130	----
		Antimony	7440-36-0	E464	3.30 mg/kg	4.2 mg/kg	78.6	70.0	130	----
		Arsenic	7440-38-2	E464	3.75 mg/kg	4.2 mg/kg	89.3	70.0	130	----
		Barium	7440-39-3	E464	0.85 mg/kg	1.05 mg/kg	80.8	70.0	130	----
		Beryllium	7440-41-7	E464	0.338 mg/kg	0.42 mg/kg	80.4	70.0	130	----
		Bismuth	7440-69-9	E464	3.32 mg/kg	4.2 mg/kg	79.1	70.0	130	----
		Boron	7440-42-8	E464	3.2 mg/kg	4.2 mg/kg	77.5	70.0	130	----
		Cadmium	7440-43-9	E464	0.341 mg/kg	0.42 mg/kg	81.1	70.0	130	----



Sub-Matrix: Biota					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Metals (QCLot: 1847480) - continued										
WT2437881-048	BA-IKLL-AC-MUS-29-AUG-28	Calcium	7440-70-2	E464	166 mg/kg	210 mg/kg	78.9	70.0	130	----
		Chromium	7440-47-3	E464	0.861 mg/kg	1.05 mg/kg	82.0	70.0	130	----
		Cobalt	7440-48-4	E464	0.861 mg/kg	1.05 mg/kg	82.0	70.0	130	----
		Copper	7440-50-8	E464	0.90 mg/kg	1.05 mg/kg	85.7	70.0	130	----
		Iron	7439-89-6	E464	3.7 mg/kg	4.2 mg/kg	88.4	70.0	130	----
		Lead	7439-92-1	E464	1.64 mg/kg	2.1 mg/kg	78.1	70.0	130	----
		Lithium	7439-93-2	E464	0.74 mg/kg	1.05 mg/kg	70.3	70.0	130	----
		Magnesium	7439-95-4	E464	ND mg/kg	----	ND	70.0	130	----
		Manganese	7439-96-5	E464	0.88 mg/kg	1.05 mg/kg	83.8	70.0	130	----
		Molybdenum	7439-98-7	E464	0.834 mg/kg	1.05 mg/kg	79.4	70.0	130	----
		Nickel	7440-02-0	E464	1.71 mg/kg	2.1 mg/kg	81.2	70.0	130	----
		Phosphorus	7723-14-0	E464	ND mg/kg	----	ND	70.0	130	----
		Potassium	7440-09-7	E464	ND mg/kg	----	ND	70.0	130	----
		Rubidium	7440-17-7	E464	ND mg/kg	----	ND	70.0	130	----
		Selenium	7782-49-2	E464	3.68 mg/kg	4.2 mg/kg	87.5	70.0	130	----
		Silver	7440-22-4	E464	0.283 mg/kg	0.42 mg/kg	67.3	70.0	130	K
		Sodium	7440-23-5	E464	ND mg/kg	----	ND	70.0	130	----
		Strontium	7440-24-6	E464	0.81 mg/kg	1.05 mg/kg	77.2	70.0	130	----
		Tellurium	13494-80-9	E464	0.32 mg/kg	0.42 mg/kg	75.3	70.0	130	----
		Thallium	7440-28-0	E464	3.26 mg/kg	4.2 mg/kg	77.5	70.0	130	----
		Tin	7440-31-5	E464	1.69 mg/kg	2.1 mg/kg	80.5	70.0	130	----
		Tungsten	7440-33-7	E464	0.33 mg/kg	0.42 mg/kg	79.0	70.0	130	----
		Uranium	7440-61-1	E464	0.017 mg/kg	0.021 mg/kg	79.7	70.0	130	----
		Vanadium	7440-62-2	E464	1.78 mg/kg	2.1 mg/kg	84.7	70.0	130	----
		Zinc	7440-66-6	E464	ND mg/kg	----	ND	70.0	130	----
		Zirconium	7440-67-7	E464	0.32 mg/kg	0.42 mg/kg	75.4	70.0	130	----
Metals (QCLot: 1847481)										
WT2437881-048	BA-IKLL-AC-MUS-29-AUG-28	Mercury	7439-97-6	E524	0.068 mg/kg	0.07 mg/kg	96.9	70.0	130	----
Metals (QCLot: 1848876)										
WT2437881-061	BA-QURL-AC-MUS-13-AUG-30	Aluminum	7429-90-5	E464	7.3 mg/kg	8.8 mg/kg	83.0	70.0	130	----
		Antimony	7440-36-0	E464	3.54 mg/kg	4.4 mg/kg	80.5	70.0	130	----
		Arsenic	7440-38-2	E464	3.78 mg/kg	4.4 mg/kg	85.9	70.0	130	----
		Barium	7440-39-3	E464	0.88 mg/kg	1.1 mg/kg	79.9	70.0	130	----
		Beryllium	7440-41-7	E464	0.354 mg/kg	0.44 mg/kg	80.5	70.0	130	----
		Bismuth	7440-69-9	E464	3.74 mg/kg	4.4 mg/kg	85.1	70.0	130	----
		Boron	7440-42-8	E464	3.7 mg/kg	4.4 mg/kg	83.8	70.0	130	----
		Cadmium	7440-43-9	E464	0.372 mg/kg	0.44 mg/kg	84.6	70.0	130	----
		Calcium	7440-70-2	E464	172 mg/kg	220 mg/kg	78.4	70.0	130	----
		Chromium	7440-47-3	E464	0.931 mg/kg	1.1 mg/kg	84.6	70.0	130	----
		Cobalt	7440-48-4	E464	0.919 mg/kg	1.1 mg/kg	83.6	70.0	130	----
		Copper	7440-50-8	E464	1.19 mg/kg	1.1 mg/kg	108	70.0	130	----
		Iron	7439-89-6	E464	ND mg/kg	----	ND	70.0	130	----
		Lead	7439-92-1	E464	1.84 mg/kg	2.2 mg/kg	83.5	70.0	130	----



Sub-Matrix: Biota					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Metals (QCLot: 1848876) - continued										
WT2437881-061	BA-QURL-AC-MUS-13-AUG-30	Lithium	7439-93-2	E464	0.74 mg/kg	1.1 mg/kg	67.3	70.0	130	K
		Magnesium	7439-95-4	E464	ND mg/kg	----	ND	70.0	130	----
		Manganese	7439-96-5	E464	0.94 mg/kg	1.1 mg/kg	85.1	70.0	130	----
		Molybdenum	7439-98-7	E464	0.871 mg/kg	1.1 mg/kg	79.2	70.0	130	----
		Nickel	7440-02-0	E464	1.86 mg/kg	2.2 mg/kg	84.5	70.0	130	----
		Phosphorus	7723-14-0	E464	ND mg/kg	----	ND	70.0	130	----
		Potassium	7440-09-7	E464	ND mg/kg	----	ND	70.0	130	----
		Rubidium	7440-17-7	E464	ND mg/kg	----	ND	70.0	130	----
		Selenium	7782-49-2	E464	3.83 mg/kg	4.4 mg/kg	87.2	70.0	130	----
		Silver	7440-22-4	E464	0.306 mg/kg	0.44 mg/kg	69.7	70.0	130	K
		Sodium	7440-23-5	E464	ND mg/kg	----	ND	70.0	130	----
		Strontium	7440-24-6	E464	0.82 mg/kg	1.1 mg/kg	74.5	70.0	130	----
		Tellurium	13494-80-9	E464	0.35 mg/kg	0.44 mg/kg	80.0	70.0	130	----
		Thallium	7440-28-0	E464	3.64 mg/kg	4.4 mg/kg	82.8	70.0	130	----
		Tin	7440-31-5	E464	1.76 mg/kg	2.2 mg/kg	80.2	70.0	130	----
		Tungsten	7440-33-7	E464	0.36 mg/kg	0.44 mg/kg	81.8	70.0	130	----
		Uranium	7440-61-1	E464	0.018 mg/kg	0.022 mg/kg	83.7	70.0	130	----
		Vanadium	7440-62-2	E464	1.84 mg/kg	2.2 mg/kg	83.8	70.0	130	----
		Zinc	7440-66-6	E464	ND mg/kg	----	ND	70.0	130	----
		Zirconium	7440-67-7	E464	0.32 mg/kg	0.44 mg/kg	72.7	70.0	130	----
Metals (QCLot: 1848877)										
WT2437881-061	BA-QURL-AC-MUS-13-AUG-30	Mercury	7439-97-6	E524	0.068 mg/kg	0.073 mg/kg	92.3	70.0	130	----
Metals (QCLot: 1853948)										
WT2437881-081	BA-IKLL-AC-MUS-09-AUG-27	Aluminum	7429-90-5	E464	8.5 mg/kg	9.82 mg/kg	86.9	70.0	130	----
		Antimony	7440-36-0	E464	4.27 mg/kg	4.91 mg/kg	87.0	70.0	130	----
		Arsenic	7440-38-2	E464	4.36 mg/kg	4.91 mg/kg	88.9	70.0	130	----
		Barium	7440-39-3	E464	1.02 mg/kg	1.23 mg/kg	82.9	70.0	130	----
		Beryllium	7440-41-7	E464	0.421 mg/kg	0.491 mg/kg	85.7	70.0	130	----
		Bismuth	7440-69-9	E464	3.94 mg/kg	4.91 mg/kg	80.2	70.0	130	----
		Boron	7440-42-8	E464	4.5 mg/kg	4.91 mg/kg	91.8	70.0	130	----
		Cadmium	7440-43-9	E464	0.385 mg/kg	0.491 mg/kg	78.4	70.0	130	----
		Calcium	7440-70-2	E464	214 mg/kg	245 mg/kg	87.4	70.0	130	----
		Chromium	7440-47-3	E464	1.03 mg/kg	1.23 mg/kg	83.7	70.0	130	----
		Cobalt	7440-48-4	E464	1.02 mg/kg	1.23 mg/kg	83.2	70.0	130	----
		Copper	7440-50-8	E464	0.96 mg/kg	1.23 mg/kg	78.2	70.0	130	----
		Iron	7439-89-6	E464	ND mg/kg	----	ND	70.0	130	----
		Lead	7439-92-1	E464	2.02 mg/kg	2.45 mg/kg	82.3	70.0	130	----
		Lithium	7439-93-2	E464	0.89 mg/kg	1.23 mg/kg	72.7	70.0	130	----
		Magnesium	7439-95-4	E464	ND mg/kg	----	ND	70.0	130	----
		Manganese	7439-96-5	E464	1.11 mg/kg	1.23 mg/kg	90.6	70.0	130	----
		Molybdenum	7439-98-7	E464	1.12 mg/kg	1.23 mg/kg	91.0	70.0	130	----
		Nickel	7440-02-0	E464	2.02 mg/kg	2.45 mg/kg	82.1	70.0	130	----
		Phosphorus	7723-14-0	E464	ND mg/kg	----	ND	70.0	130	----



Sub-Matrix: Biota					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Metals (QCLot: 1853948) - continued										
WT2437881-081	BA-IKLL-AC-MUS-09-AUG-27	Potassium	7440-09-7	E464	ND mg/kg	----	ND	70.0	130	----
		Rubidium	7440-17-7	E464	ND mg/kg	----	ND	70.0	130	----
		Selenium	7782-49-2	E464	4.28 mg/kg	4.91 mg/kg	87.3	70.0	130	----
		Silver	7440-22-4	E464	0.378 mg/kg	0.491 mg/kg	77.0	70.0	130	----
		Sodium	7440-23-5	E464	ND mg/kg	----	ND	70.0	130	----
		Strontium	7440-24-6	E464	1.05 mg/kg	1.23 mg/kg	85.4	70.0	130	----
		Tellurium	13494-80-9	E464	0.42 mg/kg	0.491 mg/kg	85.4	70.0	130	----
		Thallium	7440-28-0	E464	3.91 mg/kg	4.91 mg/kg	79.6	70.0	130	----
		Tin	7440-31-5	E464	2.03 mg/kg	2.45 mg/kg	82.5	70.0	130	----
		Tungsten	7440-33-7	E464	0.41 mg/kg	0.491 mg/kg	83.3	70.0	130	----
		Uranium	7440-61-1	E464	0.020 mg/kg	0.025 mg/kg	83.0	70.0	130	----
		Vanadium	7440-62-2	E464	2.11 mg/kg	2.45 mg/kg	85.8	70.0	130	----
		Zinc	7440-66-6	E464	ND mg/kg	----	ND	70.0	130	----
		Zirconium	7440-67-7	E464	0.40 mg/kg	0.491 mg/kg	82.1	70.0	130	----
Metals (QCLot: 1853949)										
WT2437881-081	BA-IKLL-AC-MUS-09-AUG-27	Mercury	7439-97-6	E524	0.073 mg/kg	0.082 mg/kg	89.4	70.0	130	----

Qualifiers

Qualifier	Description
E	Matrix Spike recovery outside ALS DQO due to heterogeneous analyte background in sample.
K	Matrix Spike recovery outside ALS DQO due to sample matrix effects.



Chain of Custody (COC) / Analytical Request Form

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here
(lab use only)

Environmental Division
Waterloo
Work Order Reference
WT2437881

Report To	Contact and company name below will appear on the final report	Report Format / Distribution	Select Report Format: <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL) Quality Control (QC) Report with Report <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX
Company:	Minnow Environmental Inc.	Regular [R] <input checked="" type="checkbox"/> Standard	
Contact:	Samantha Burke	4 day [P4-20%] <input type="checkbox"/>	
Phone:	(705) 991-2722	3 day [P3-25%] <input type="checkbox"/>	
	Company address below will appear on the final report	2 day [P2-50%] <input type="checkbox"/>	
Street:	2 Lamb Street	Date and Time Required for all	
City/Province:	Georgetown, Ontario	For tests that can not be performed accor	
Postal Code:	L7G3M9		

Invoice To	Same as Report To <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Invoice Distribution	Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX
Company:	Copy of Invoice with Report <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Email 1 or Fax apminnow@minnow.ca	
Contact:		Email 2 samantha.burke@minnow.ca	
		Email 3 <i>Kathy Kudachuk</i>	
		Email 4 <i>Brian Goss</i>	
Project Information			
ALS Account # / Quote #:	PO#		
Job #:	Routing Code:		
PO / AFE:	Requisitioner:		
LSD:	Location:		

ALS Lab Work Order # (lab use only):	WT2437881		
ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mm-yy)	Time (h:mm)
1	BA-IKLL-AC-LIV-01-Aug-27	27-Aug-24	Tissue
	BA-IKLL-AC-LIV-02-Aug-27	27-Aug-24	Tissue
	BA-IKLL-AC-LIV-28-Aug-28	28-Aug-24	Tissue
	BA-IKLL-AC-LIV-29-Aug-28	28-Aug-24	Tissue
	BA-IKLL-AC-LIV-30-Aug-28	28-Aug-24	Tissue
	BA-IKLL-AC-LIV-34-Aug-28	28-Aug-24	Tissue
	BA-IKLL-AC-LIV-37-Aug-28	28-Aug-24	Tissue
	BA-IKLL-AC-LIV-12-Aug-27	27-Aug-24	Tissue
	BA-IKLL-AC-LIV-22-Aug-27	27-Aug-24	Tissue
	BA-IKLL-AC-LIV-35-Aug-27	27-Aug-24	Tissue
	BA-IKLL-AC-LIV-31-Aug-27	27-Aug-24	Tissue
	BA-IKLL-AC-LIV-08-Aug-27	27-Aug-24	Tissue

Drinking Water (DW) Samples (client use)	Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)		
Are samples taken from a Regulated DW System?	Log under BIM - see email		
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
Are samples for human consumption use?			
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
SHIPMENT RELEASE (client use)	INITIAL SHIPMENT RECEPTION (lab use only)	WHITE - LABORATORY COPY YELLOW - CLIENT COPY	
Released by: Samantha Burke	Received by: <i>RAH</i>	Date: 10 Dec 2024	Time: 10:30

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION
Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.
1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

Report To	Contact and company name below will appear on the final report	Report Format / Distribution	Select Report Format: <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL) Quality Control (QC) Report with Report <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX
Company:	Minnow Environmental Inc.	Regular [R] <input checked="" type="checkbox"/> Standard	
Contact:	Samantha Burke	4 day [P4-20%] <input type="checkbox"/>	
Phone:	(705) 991-2722	3 day [P3-25%] <input type="checkbox"/>	
	Company address below will appear on the final report	2 day [P2-50%] <input type="checkbox"/>	
Street:	2 Lamb Street	Date and Time Required for all	
City/Province:	Georgetown, Ontario	For tests that can not be performed accor	
Postal Code:	L7G3M9		

Invoice To	Same as Report To <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Invoice Distribution	Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX
Company:	Copy of Invoice with Report <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Email 1 or Fax apminnow@minnow.ca	
Contact:		Email 2 samantha.burke@minnow.ca	
		Email 3 <i>Kathy Kudachuk</i>	
		Email 4 <i>Brian Goss</i>	
Project Information			
ALS Account # / Quote #:	PO#		
Job #:	Routing Code:		
PO / AFE:	Requisitioner:		
LSD:	Location:		

ALS Lab Work Order # (lab use only):	WT2437881		
ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mm-yy)	Time (h:mm)
1	BA-IKLL-AC-LIV-01-Aug-27	27-Aug-24	Tissue
	BA-IKLL-AC-LIV-02-Aug-27	27-Aug-24	Tissue
	BA-IKLL-AC-LIV-28-Aug-28	28-Aug-24	Tissue
	BA-IKLL-AC-LIV-29-Aug-28	28-Aug-24	Tissue
	BA-IKLL-AC-LIV-30-Aug-28	28-Aug-24	Tissue
	BA-IKLL-AC-LIV-34-Aug-28	28-Aug-24	Tissue
	BA-IKLL-AC-LIV-37-Aug-28	28-Aug-24	Tissue
	BA-IKLL-AC-LIV-12-Aug-27	27-Aug-24	Tissue
	BA-IKLL-AC-LIV-22-Aug-27	27-Aug-24	Tissue
	BA-IKLL-AC-LIV-35-Aug-27	27-Aug-24	Tissue
	BA-IKLL-AC-LIV-31-Aug-27	27-Aug-24	Tissue
	BA-IKLL-AC-LIV-08-Aug-27	27-Aug-24	Tissue

Drinking Water (DW) Samples (client use)	Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)		
Are samples taken from a Regulated DW System?	Log under BIM - see email		
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
Are samples for human consumption use?			
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
SHIPMENT RELEASE (client use)	INITIAL SHIPMENT RECEPTION (lab use only)	WHITE - LABORATORY COPY YELLOW - CLIENT COPY	
Released by: Samantha Burke	Received by: <i>RAH</i>	Date: 10 Dec 2024	Time: 10:30

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1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

NUMBER OF CONTAINERS	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (FIP) below	
Total Metals	R	R
Total Mercury	R	R

SAMPLES ON HOLD	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (FIP) below	
Total Metals	R	R
Total Mercury	R	R

SAMPLE CONDITION AS RECEIVED (lab use only)	Frozen <input type="checkbox"/> SIF Observations Yes <input type="checkbox"/> No <input type="checkbox"/> Ice Packs <input type="checkbox"/> Ice Cubes <input type="checkbox"/> Custody seal intact Yes <input type="checkbox"/> No <input type="checkbox"/> Cooling Initiated <input type="checkbox"/>	
INITIAL COOLER TEMPERATURES °C	1.8	
FINAL COOLER TEMPERATURES °C	1.8	

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Report To		Contact and company name below will appear on the final report		Report Format / Distribution		Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)	
Company:	Minnow Environmental Inc.	Select Report Format:	<input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL)	Regular [R]	<input checked="" type="checkbox"/> Standard TAT if received by 3 pm - business days - no surcharges apply	4 day [P4-20%]	<input type="checkbox"/> 1 Business day [E - 100%]
Contact:	Samantha Burke	Quality Control (QC) Report with Report	<input type="checkbox"/> YES <input type="checkbox"/> NO			3 day [P3-25%]	<input type="checkbox"/> Same Day, Weekend or Statutory holiday [E2 - 200%]
Phone:	(705) 991-2722	<input checked="" type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked				2 day [P2-50%]	<input type="checkbox"/> (Laboratory opening fees may apply)]
	Company address below will appear on the final report	Select Distribution:	<input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX				
Street:	2 Lamb Street	Email 1 or Fax	samantha.burke@minnow.ca				
City/Province:	Georgetown, Ontario	Email 2					
Postal Code:	L7G3M9	Email 3					
Invoice To	Same as Report To <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Invoice Distribution		Analysis Request			
	Copy of Invoice with Report <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Select Invoice Distribution:	<input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below			
Company:		Email 1 or Fax	apminnow@minnow.ca				
Contact:		Email 2	samantha.burke@minnow.ca				
Project Information		Oil and Gas Required Fields (client use)					
ALS Account # / Quote #:		AFE/Cost Center:		PO#			
Job #:		Major/Minor Code:		Routing Code:			
PO / AFE:		Requisitioner:					
LSD:		Location:					
ALS Lab Work Order # (lab use only):		ALS Contact:		Emily Hansen		Sampler:	
ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)		Date (dd-mm-yy)	Time (hh:mm)	Sample Type		
	BA-QURL-AC-LI-03-Aug-28		29-Aug-24			Tissue	
	BA-QURL-AC-LI-04-Aug-29		29-Aug-24			Tissue	
	BA-QURL-AC-LI-05-Aug-29		29-Aug-24			Tissue	
	BA-QURL-AC-LI-06-Aug-29		29-Aug-24			Tissue	
	BA-QURL-AC-LI-07-Aug-29		29-Aug-24			Tissue	
	BA-QURL-AC-LI-08-Aug-29		29-Aug-24			Tissue	
	BA-QURL-AC-LI-09-Aug-29		29-Aug-24			Tissue	
	BA-QURL-AC-LI-10-Aug-29		29-Aug-24			Tissue	
	BA-QURL-AC-LI-11-Aug-30		30-Aug-24			Tissue	
	BA-QURL-AC-LI-12-Aug-30		30-Aug-24			Tissue	
	BA-QURL-AC-LI-13-Aug-30		30-Aug-24			Tissue	
	BA-QURL-AC-LI-14-Aug-30		30-Aug-24			Tissue	
Drinking Water (DW) Samples ¹ (client use)		Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)					
Are samples taken from a Regulated DW System? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO							
Are samples for human consumption/ use? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO							
Released by: Samantha Burke		SHIPMENT RELEASE (client use) Date: 5-Oct-2021		INITIAL SHIPMENT RECEPTION (lab use only) Received by: _____ Date: _____		Time: _____	

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION	WHITE - LABORATORY COPY	YELLOW - CLIENT COPY
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1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

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Attix ALS barcode label here
(lab use only)

Report To Contact and company name below will appear on the final report		Report Format / Distribution Select Report Format: <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL) Quality Control (QC) Report with Report <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax samanthalburke@minnow.ca Email 2 Email 3		Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply) Regular [R] <input checked="" type="checkbox"/> Standard TAT if received by 3 pm - business days - no surcharges apply 4 day [P4-20%] <input type="checkbox"/> 1 Business day [E - 100%] 3 day [P3-25%] <input type="checkbox"/> Same Day, Weekend or Statutory holiday [E2 - 200%] 2 day [P2-50%] <input type="checkbox"/> (Laboratory opening fees may apply) Date and Time Required for all E&P TATs: dd-mm-yy hh:mm For tests that can not be performed according to the service level selected, you will be contacted.	
Project Information ALS Account # / Quote #: 247202.00XX (Mline 2024) Job #: 247202.00XX (Mline 2024) PO / AFE: LSD:		Invoice Distribution Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax apminnow@minnow.ca Email 2 samanthalburke@minnow.ca Oil and Gas Required Fields (client use) AFE/Cost Center: PO# Major/Minor Code: Routing Code: Requisitioner: Location:			
ALS Lab Work Order # (lab use only):		ALS Contact: Emily Hansen Sampler:			
Sample Identification and/or Coordinates (This description will appear on the report)		Date (dd-mm-yy)		Time (hh:mm)	
Sample Type					
BA-QURL-AC-LI-15-Aug-30		30-Aug-24		Tissue	
BA-QURL-AC-LI-16-Aug-30		30-Aug-24		Tissue	
BA-QURL-AC-LI-17-Aug-30		30-Aug-24		Tissue	
BA-QURL-AC-LI-18-Aug-30		30-Aug-24		Tissue	
BA-QURL-AC-LI-19-Aug-30		30-Aug-24		Tissue	
BA-QURL-AC-LI-20-Aug-30		30-Aug-24		Tissue	
BA-DUP-AC-LIV-05-2024-08		30-Aug-24		Tissue	
BA-DUP-AC-LIV-15-2024-08		30-Aug-24		Tissue	
BA-IKLL-AC-MUS-01-Aug-27		27-Aug-24		Tissue	
BA-IKLL-AC-MUS-02-Aug-27		27-Aug-24		Tissue	
BA-IKLL-AC-MUS-28-Aug-28		28-Aug-24		Tissue	
BA-IKLL-AC-MUS-29-Aug-28		28-Aug-24		Tissue	
Drinking Water (DW) Samples¹ (client use) Are samples taken from a Regulated DW System? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO Are samples for human consumption/ use? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)			
SHIPMENT RELEASE (client use) Released by: Samantha Burke Date: 5-Oct-2021		INITIAL SHIPMENT RECEPTION (lab use only) Received by: Date: Time:			

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REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

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Failure to complete all portions of this form may delay analysis. Please fill in this form. **EGIB, Y.** By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified in the back page of the white - report cover.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.



Report To Contact and company name below will appear on the final report		Report Format / Distribution Select Report Format: <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL) Quality Control (QC) Report with Report <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax: samantha.burke@minnow.ca Email 2 Email 3	
Company: Minnow Environmental Inc. Contact: Samantha Burke Phone: (705) 991-2722 Company address below will appear on the final report Street: 2 Lamb Street City/Province: Georgetown, Ontario Postal Code: L7G3M9		Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax: apminnow@minnow.ca Email 2: samantha.burke@minnow.ca Oil and Gas Required Fields (client use) AFE/Cost Center: PO# Major/Minor Code: Routing Code: Requisitioner: Location:	
Project Information ALS Account # / Quote #: 247202.00XX (Mline 2024) Job #: PO / AFE: LSD:		Invoice Distribution	
ALS Lab Work Order # (lab use only):		ALS Contact: Emily Hansen	
Sample Identification and/or Coordinates (This description will appear on the report)		Date (dd-mm-yy)	Time (hh:mm)
BA-QURL-AC-MUS-01-Aug-28		28-Aug-24	Tissue
BA-QURL-AC-MUS-02-Aug-28		28-Aug-24	Tissue
BA-QURL-AC-MUS-03-Aug-28		28-Aug-24	Tissue
BA-QURL-AC-MUS-04-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-05-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-06-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-07-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-08-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-09-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-10-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-11-Aug-30		28-Aug-24	Tissue
BA-QURL-AC-MUS-12-Aug-30		28-Aug-24	Tissue
Drinking Water (DW) Samples¹ (client use) Are samples taken from a Regulated DW System? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO Are samples for human consumption/ use? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic CDC only)	
SHIPMENT RELEASE (client use) Released by: Samantha Burke Date: 5-Oct-2021		INITIAL SHIPMENT RECEPTION (lab use only) Received by: Date: Time:	

Report Format / Distribution Select Report Format: <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL) Quality Control (QC) Report with Report <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax: samantha.burke@minnow.ca Email 2 Email 3		Invoice Distribution Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax: apminnow@minnow.ca Email 2: samantha.burke@minnow.ca Oil and Gas Required Fields (client use) AFE/Cost Center: PO# Major/Minor Code: Routing Code: Requisitioner: Location:	
Project Information ALS Account # / Quote #: 247202.00XX (Mline 2024) Job #: PO / AFE: LSD:		ALS Contact: Emily Hansen	
Sample Identification and/or Coordinates (This description will appear on the report)		Date (dd-mm-yy)	Time (hh:mm)
BA-QURL-AC-MUS-01-Aug-28		28-Aug-24	Tissue
BA-QURL-AC-MUS-02-Aug-28		28-Aug-24	Tissue
BA-QURL-AC-MUS-03-Aug-28		28-Aug-24	Tissue
BA-QURL-AC-MUS-04-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-05-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-06-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-07-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-08-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-09-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-10-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-11-Aug-30		28-Aug-24	Tissue
BA-QURL-AC-MUS-12-Aug-30		28-Aug-24	Tissue
Drinking Water (DW) Samples¹ (client use) Are samples taken from a Regulated DW System? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO Are samples for human consumption/ use? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic CDC only)	
SHIPMENT RELEASE (client use) Released by: Samantha Burke Date: 5-Oct-2021		INITIAL SHIPMENT RECEPTION (lab use only) Received by: Date: Time:	

Report To Contact and company name below will appear on the final report		Report Format / Distribution Select Report Format: <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL) Quality Control (QC) Report with Report <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax: samantha.burke@minnow.ca Email 2 Email 3	
Company: Minnow Environmental Inc. Contact: Samantha Burke Phone: (705) 991-2722 Company address below will appear on the final report Street: 2 Lamb Street City/Province: Georgetown, Ontario Postal Code: L7G3M9		Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax: apminnow@minnow.ca Email 2: samantha.burke@minnow.ca Oil and Gas Required Fields (client use) AFE/Cost Center: PO# Major/Minor Code: Routing Code: Requisitioner: Location:	
Project Information ALS Account # / Quote #: 247202.00XX (Mline 2024) Job #: PO / AFE: LSD:		ALS Contact: Emily Hansen	
Sample Identification and/or Coordinates (This description will appear on the report)		Date (dd-mm-yy)	Time (hh:mm)
BA-QURL-AC-MUS-01-Aug-28		28-Aug-24	Tissue
BA-QURL-AC-MUS-02-Aug-28		28-Aug-24	Tissue
BA-QURL-AC-MUS-03-Aug-28		28-Aug-24	Tissue
BA-QURL-AC-MUS-04-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-05-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-06-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-07-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-08-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-09-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-10-Aug-29		28-Aug-24	Tissue
BA-QURL-AC-MUS-11-Aug-30		28-Aug-24	Tissue
BA-QURL-AC-MUS-12-Aug-30		28-Aug-24	Tissue
Drinking Water (DW) Samples¹ (client use) Are samples taken from a Regulated DW System? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO Are samples for human consumption/ use? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic CDC only)	
SHIPMENT RELEASE (client use) Released by: Samantha Burke Date: 5-Oct-2021		INITIAL SHIPMENT RECEPTION (lab use only) Received by: Date: Time:	

Report To Contact and company name below will appear on the final report		Report Format / Distribution Select Report Format: <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL) Quality Control (QC) Report with Report <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax: samantha.burke@minnow.ca Email 2 Email 3	
Company: Minnow Environmental Inc. Contact: Samantha Burke Phone: (705) 991-2722 Company address below will appear on the final report Street: 2 Lamb Street City/Province: Georgetown, Ontario Postal Code: L7G3M9		Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX Email 1 or Fax: apminnow@minnow.ca Email 2: samantha.burke@minnow.ca Oil and Gas Required Fields (client use) AFE/Cost Center: PO# Major/Minor Code: Routing Code: Requisitioner: Location:	
Project Information ALS Account # / Quote #: 24720			

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION	WHITE - LABORATORY COPY	YELLOW - CLIENT COPY
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1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW CQC form**.

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Chain of Custody (COC) / Analytical Request Form

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Canada Toll Free: 1 800 668 9878

Affix ALS barcode label here
(lab use only)

COC Number: 17 -

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Report To		Report Format / Distribution		Select Service Level Below - Contact your AM to confirm all E&P TATs (surcharges may apply)	
Company: Minnow Environmental Inc.		Select Report Format: <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL)		Regular [R] <input checked="" type="checkbox"/> Standard TAT if received by 3 pm - business days - no surcharges apply	
Contact: Samantha Burke		Quality Control (QC) Report with Report <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		4 day [P4-20%] <input type="checkbox"/> 1 Business day [E - 100%]	
Phone: (705) 991-2722		<input checked="" type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked		3 day [P3-25%] <input type="checkbox"/> Same Day, Weekend or Statutory holiday [E2 -200%]	
Company address below will appear on the final report		Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX		2 day [P2-50%] <input type="checkbox"/> (Laboratory opening fees may apply)	
Street: 2 Lamb Street		Email 1 or Fax: samantha.burke@minnow.ca		Date and Time Required for all E&P TATs: dd-mm-yy hh:mm	
City/Province: Georgetown, Ontario		Email 2		For tests that can not be performed according to the service level selected, you will be contacted.	
Postal Code: L7G3M9		Email 3		Analysis Request	
Invoice To		Invoice Distribution		Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below	
Same as Report To <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX		NUMBER OF CONTAINERS	
Copy of Invoice with Report <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Email 1 or Fax: apminnow@minnow.ca			
Company:		Email 2: samantha.burke@minnow.ca			
Contact:		Email 3: samantha.burke@minnow.ca		Total Metals	
Project Information		Oil and Gas Required Fields (client use)			
ALS Account # / Quote #: 247202.00XX (Mline 2024)		AFE/Cost Center: PO#			
Job #: 247202.00XX (Mline 2024)		Major/Minor Code: Routing Code:		Total Mercury	
PO / AFE:		Requisitioner:			
LSD:		Location:			
ALS Lab Work Order # (lab use only):		ALS Contact: Emily Hansen		SAMPLER:	
Sample Identification and/or Coordinates (This description will appear on the report)		Date (dd-mm-yy)		Time (hh:mm)	
BA-QURL-AC-MUS-13-Aug-30		30-Aug-24		Tissue	
BA-QURL-AC-MUS-14-Aug-30		30-Aug-24		Tissue	
BA-QURL-AC-MUS-15-Aug-30		30-Aug-24		Tissue	
BA-QURL-AC-MUS-16-Aug-30		30-Aug-24		Tissue	
BA-QURL-AC-MUS-17-Aug-30		30-Aug-24		Tissue	
BA-QURL-AC-MUS-18-Aug-30		30-Aug-24		Tissue	
BA-QURL-AC-MUS-19-Aug-30		30-Aug-24		Tissue	
BA-QURL-AC-MUS-20-Aug-30		30-Aug-24		Tissue	
BA-DUP-AC-MUS-05-2024-08		30-Aug-24		Tissue	
BA-DUP-AC-MUS-15-2024-08		30-Aug-24		Tissue	
BA-QURL-AC-LI-01-Aug-28		28-Aug-24		Tissue	
BA-QURL-AC-LI-02-Aug-28		28-Aug-24		Tissue	
Drinking Water (DW) Samples¹ (client use)		Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)		SAMPLE CONDITION AS RECEIVED (lab use only)	
Are samples taken from a Regulated DW System? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				Frozen <input type="checkbox"/> SIF Observations Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are samples for human consumption/ use? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				Ice Packs <input type="checkbox"/> Ice Cubes <input checked="" type="checkbox"/> Custody seal intact Yes <input type="checkbox"/> No <input type="checkbox"/>	
Released by: Samantha Burke		Date: 5-Oct-2021		Cooling: Initiated <input type="checkbox"/>	
SHIPMENT RELEASE (client use)		INITIAL SHIPMENT RECEPTION (lab use only)		INITIAL COOLER TEMPERATURES °C	
Received by: Samantha Burke		Received by: 19 Dec 24		FINAL COOLER TEMPERATURES °C	
Date: 5-Oct-2021		Date: 19 Dec 24		Time: 1:30	
Time: 5-Oct-2021		Time: 19 Dec 24		Time: 1:30	
REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION		WHITE - LABORATORY COPY YELLOW - CLIENT COPY		NOV 2018 FORM	

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Report To Contact and company name below will appear on the final report		Report Format / Distribution Select Report Format: <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL) Quality Control (QC) Report with Report <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX		Select Service Level Below - Contact your AM to confirm all E&P TAT's (surcharges may apply) Regular [R] <input checked="" type="checkbox"/> Standard TAT if received by 3 pm - business days - no surcharges apply 1 Business day [E - 100%] 3 day [P3-25%] 2 day [P2-50%] Same Day, Weekend or Statutory holiday [E2 -200%] (Laboratory opening fees may apply)] Date and Time Required for all E&P TAT's: dd-mm-yy hh:mm For tests that can not be performed according to the service level selected, you will be contacted.	
Company: Minnow Environmental Inc. Contact: Samantha Burke Phone: (705) 991-2722 Company address below will appear on the final report Street: 2 Lamb Street City/Province: Georgetown, Ontario Postal Code: L7G3M9		Invoice To Same as Report To <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Copy of invoice with Report <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Company: Contact: Project information ALS Account # / Quote #: Job #: 247202.00XX (Milne 2024) PO / AFE: LSD: ALS Lab Work Order # (lab use only):		Analysis Request Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below Total Metals Total Mercury SUSPECTED HAZARD (see Special Instructions)	
Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)		ALS Contact: Emily Hansen Date (dd-mm-yy) Time (hh:mm) Sample Type		NUMBER OF CONTAINERS	
Drinking Water (DW) Samples ¹ (client use) Are samples taken from a Regulated DW System? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO Are samples for human consumption/ use? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		SHIPPING RELEASE (client use) Released by: Samantha Burke Date: 5-Oct-2021 Time:		SAMPLE CONDITION AS RECEIVED (lab use only) Frozen <input type="checkbox"/> Ice Packs <input type="checkbox"/> Ice Cubes <input checked="" type="checkbox"/> Custody seal intact Yes <input type="checkbox"/> No <input type="checkbox"/> Cooling initiated <input type="checkbox"/> Initial Cooler Temperatures °C: Final Cooler Temperatures °C: SUF Observations Yes <input type="checkbox"/> No <input type="checkbox"/>	
SHIPMENT RELEASE (client use) Released by: Samantha Burke Date: 5-Oct-2021 Time:		INITIAL SHIPMENT RECEPTION (lab use only) Received by: Date: Time:		FINAL SHIPMENT RECEPTION (lab use only) Received by: Date: Time:	

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION
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