Table C.2.ESM.1 Experimental conditions for the runs in the internally heated pressure vessel from (Erdmann et al., 2015)

T (°C)	p (Mpa)	run time (h)	capsule material	log fO_2	ΔQFM	run products	melt fraction (vol%)
910*	100	162	Au	-10.85	+1.4	Cpx, Opx, Pl, Magt, Ilm, glass	7
940	100	120	Au	-10.05	+1.7	Cpx, Opx, Pl, Magt, Ilm, glass	9
970	100	160	Au	-10.03	+1.3	Cpx, Opx, Pl, Magt, Ilm, glass	22
1000	100	146	Au	-10.36	+0.5	Cpx, Opx, Pl, Magt, glass	38
1030	100	72	Au	-8.64	+1.7	Ol, Cpx, Pl, glass	66

***** For the experimental run at 910°C in (Erdmann et al., 2015) show major element results as a combination of powder and microrock experiments. To ensure the comparability between the different experimental temperatures, especially in terms of equilibrium, we only use those major element compositions revealed from powder experiments.

Table C.2.ESM.2 Trace element compositions of natural tonalites from IODP Hole 1256D.

Sample Name	Rb	Ba	Th	U	Nb	Ta	La	Ce	Pr	Sr	Nd	Zr	Hf	Sm	Eu	Gd	Tb	Dy	Y	Ho	Er	Yb	Lu
312-1256D-212R-1, 25–28 cm	0.58	16.30	0.86	0.27	7.46	0.81	8.62	23.47	3.46	93.89	19.73	675.3	17.66	6.37	2.39	8.60	1.49	9.87	63.67	2.16	6.66	7.44	1.22
312-1256D-214R-1, 68–70 cm	0.73	18.18	1.07	0.38	10.72	1.00	12.82	38.05	5.67	89.50	32.13	500.9	11.81	9.83	3.44	12.90	2.15	13.79	85.70	2.90	8.45	8.33	1.25
335-1256D-235R-1, 23–26 cm	1.10	9.06	0.84	0.18	3.76	0.33	6.15	16.14	2.40	78.31	13.75	1424.0	34.59	4.19	1.40	5.85	1.01	6.94	49.01	1.63	5.17	6.42	1.16

Table C.2.ESM.3 We compiled published data from fresh basaltic glasses (MgO: 5 - 12 wt%) from East Pacific Rise. To complete selection for trace elements we used PetDB (Lehnert et al., 2000).

Sample no.	Original sample name	Latitude	Longitude	References
1	ALV2384-009	8.3772	-103.6738	(Arevalo and McDonough, 2008; Hays, 2004)
2	ODP0206-1256D-023R-002/016-020	6.7361	-91.9344	(Brandl et al., 2013; Geldmacher et al., 2013)
3	ALV2384-003	8.3713	-103.6617	(Arevalo and McDonough, 2008; Danyushevsky et al., 2003; Hays, 2004)
4	CYA1978-004-006	20.92	-109.03	(Bézos and Humler, 2005; Gale et al., 2013; Gannoun et al., 2007)
5	WASVNTR-032	15.52	-105.38	(Gale et al., 2013; Gannoun et al., 2007; Lange et al., 2013)
6	ALV4204-004B	9.8838	-104.2948	(Goss et al., 2010)
7	ALV4204-001	9.8826	-104.3023	(Goss et al., 2010)
8	ALV4204-005	9.8843	-104.2931	(Goss et al., 2010)
9	ALV4204-004A	9.8838	-104.2948	(Goss et al., 2010)
10	ALV4204-009	9.8828	-104.2921	(Goss et al., 2010)
11	ALV4204-006	9.8849	-104.2917	(Goss et al., 2010)
12	ALV4204-002	9.8833	-104.2976	(Goss et al., 2010)
13	ALV4204-003	9.8838	-104.2948	(Goss et al., 2010)
14	ALV4202-002A	9.8466	-104.2932	(Goss et al., 2010)
15	ALV4202-001	9.8467	-104.2957	(Goss et al., 2010)
16	ALV4205-007	9.7874	-104.2841	(Goss et al., 2010)
17	ALV4203-001	9.8388	-104.2928	(Goss et al., 2010)
18	ALV4205-001	9.7708	-104.2798	(Goss et al., 2010)
19	KNO0182-13-048/B	9.806	-104.287	(Goss et al., 2010)
20	KNO0182-13-048/A	9.8122	-104.2879	(Goss et al., 2010)
21	ALV4203-003	9.8379	-104.2917	(Goss et al., 2010)
22	ALV4205-003	9.771	-104.2799	(Goss et al., 2010; Moore et al., 2014)
23	ALV4204-008	9.8846	-104.2922	(Goss et al., 2010; Moore et al., 2014)
24	ALV4203-002	9.8388	-104.2928	(Goss et al., 2010; Moore et al., 2014)
25	ALV4206-002	9.8351	-104.2913	(Goss et al., 2010; Moore et al., 2014)
26	ALV2359-004	9.8879	-104.2978	(Goss et al., 2010; Perfit et al., 2013; Sims et al., 2002)
27	ALV2504-001	9.83838	-104.29135	(Goss et al., 2010; Perfit et al., 2013; Sims et al., 2002)
28	JS20268-015	9.84935	-104.2848	(Goss et al., 2010; Soule et al., 2012)
29	JS20268-004	9.845367	-104.295517	(Goss et al., 2010; Soule et al., 2012)
30	JS20268-019	9.852283	-104.281467	(Goss et al., 2010; Soule et al., 2012)
31	JS20268-005	9.84625	-104.293917	(Goss et al., 2010; Soule et al., 2012)
32	JS20268-011	9.848633	-104.290933	(Goss et al., 2010; Soule et al., 2012)
33	JS20268-023	9.853717	-104.273617	(Goss et al., 2010; Soule et al., 2012)
34	JS20268-018	9.852933	-104.28315	(Goss et al., 2010; Soule et al., 2012)
35	JS20268-012	9.849	-104.288467	(Goss et al., 2010; Soule et al., 2012)
36	JS20268-013	9.850183	-104.28805	(Goss et al., 2010; Soule et al., 2012)
37	JS20268-017	9.853017	-104.282783	(Goss et al., 2010; Soule et al., 2012)
38	JS20268-014	9.847867	-104.286783	(Goss et al., 2010; Soule et al., 2012)
39	JS20268-003	9.844033	-104.2969	(Goss et al., 2010; Soule et al., 2012)
40	JS20268-009	9.849583	-104.293717	(Goss et al., 2010; Soule et al., 2012)
41	JS20268-010	9.8495	-104.293083	(Goss et al., 2010; Soule et al., 2012)
42	JS20268-016	9.850683	-104.28305	(Goss et al., 2010; Soule et al., 2012)
43	JS20268-002	9.8431	-104.298217	(Goss et al., 2010; Soule et al., 2012)

44	JS20268-001	9.841517	-104.299617	(Goss et al., 2010; Soule et al., 2012)
45	JS20268-022	9.8536	-104.2755	(Goss et al., 2010; Soule et al., 2012)
46	JS20268-020	9.85305	-104.280133	(Goss et al., 2010; Soule et al., 2012)
47	ALV0918-R001	20.87	-109.07	(Byers et al., 1986; Gale et al., 2013; Hekinian and Walker, 1987)
48	ALV0981-R023	20.833	-109.1	(Gale et al., 2013; Hekinian and Walker, 1987; Jambon et al., 1995)
49	CYA1982-031-002	12.78	-103.933	(Hekinian and Walker, 1987; Jambon et al., 1995)
50	NHOCHEP-116-002	12.2	-103.842	(Castillo et al., 2000; Gale et al., 2013; le Roux et al., 2006)
51	NHOCHEP-031-004	12	-103.808	(Castillo et al., 2000; Gale et al., 2013; le Roux et al., 2006)
52	NHOCHEP-006-001	13.645	-104.171	(Castillo et al., 2000; Gale et al., 2013; le Roux et al., 2006)
53	NHOCHEP-121-002	12.533	-103.913	(Castillo et al., 2000; Gale et al., 2013; le Roux et al., 2006)
54	NHOCHEP-003-003	13.967	-104.195	(Castillo et al., 2000; Gale et al., 2013; le Roux et al., 2006)
55	NHOCHEP-015-006	12.85	-103.888	(Castillo et al., 2000; Gale et al., 2013; le Roux et al., 2006)
56	NHOCHEP-024-007	12.673	-103.913	(Castillo et al., 2000; Gale et al., 2013; le Roux et al., 2006)
57	NHOCHEP-116-003	12.2	-103.842	(Castillo et al., 2000; Gale et al., 2013; le Roux et al., 2006)
58	WASVNTR-006	12.08	-103.8483	(Gale et al., 2013; le Roux et al., 2006)
59	WASVNTR-010	12.1725	-103.847	(Gale et al., 2013; le Roux et al., 2006)
60	WASVNTR-027-C	12.0935	-103.806	(Gale et al., 2013; le Roux et al., 2006)
61	ALV2390-005	8.3058	-104.038	(Hays, 2004; le Roux et al., 2006)
62	ALV2384-006	8.3713	-103.6693	(Hays, 2004; le Roux et al., 2006)
63	ALV2489-009	9.5275	-104.2111	(le Roux et al., 2006; Perfit et al., 2013)
64	ALV2759-005	9.81627	-104.30835	(le Roux et al., 2006; Perfit et al., 2013)
65	ALV2365-003	9.2799	-104.2181	(le Roux et al., 2006; Perfit et al., 2013)
66	ALV2490-010	9.5289	-104.2625	(le Roux et al., 2006; Perfit et al., 2013)
67	ALV2490-003	9.5305	-104.2502	(le Roux et al., 2006; Perfit et al., 2013)
68	ALV2489-005	9.5285	-104.2175	(le Roux et al., 2006; Waters et al., 2011)
69	ALV2697-001	9.88644	-104.32965	(le Roux et al., 2006; Waters et al., 2011)
70	ALV2392-009	9.845	-104.3206	(Goss et al., 2010; Lundstrom et al., 1999; Perfit et al., 2013)
71	ALV2497-001B	9.8877	-104.2975	(Goss et al., 2010; le Roux et al., 2006; Lundstrom et al., 1999; Perfit et al., 2013)
72	MELWEST-062-002A	-54.01	-118.14	(Jenner and O'Neill, 2012; Melson and O'Hearn, 2003)
73	MELWEST-062-001D	-54.01	-118.14	(Jenner and O'Neill, 2012; Melson and O'Hearn, 2003)
74	MELWEST-059-001	-54.31	-120.77	(Jenner and O'Neill, 2012; Melson and O'Hearn, 2003)
75	MELWEST-062-007A	-54.01	-118.14	(Jenner and O'Neill, 2012; Melson and O'Hearn, 2003)
76	MELWEST-062-001A	-54.01	-118.14	(Jenner and O'Neill, 2012; Melson and O'Hearn, 2003)
77	MELWEST-058-002A	-55.15	-121.14	(Jenner and O'Neill, 2012; Melson and O'Hearn, 2003)
78	MELWEST-059-004A	-54.31	-120.77	(Jenner and O'Neill, 2012; Melson and O'Hearn, 2003)
79	MELWEST-058-003	-55.15	-121.14	(Jenner and O'Neill, 2012; Melson and O'Hearn, 2003)
80	MELWEST-059-006	-54.31	-120.77	(Jenner and O'Neill, 2012; Melson and O'Hearn, 2003)
81	MELWEST-064-003B	-53.13	-117.7	(Jenner and O'Neill, 2012; Melson and O'Hearn, 2003)
82	MELWEST-064-004D	-53.13	-117.7	(Jenner and O'Neill, 2012; Melson and O'Hearn, 2003)
83	MELWEST-064-004A	-53.13	-117.7	(Jenner and O'Neill, 2012; Melson and O'Hearn, 2003)
84	MELWEST-064-002	-53.13	-117.7	(Jenner and O'Neill, 2012; Melson and O'Hearn, 2003)
85	ALV2768-006	9.83337	-104.27272	(le Roux et al., 2006; Melson and O'Hearn, 2003; Perfit et al., 2013)
86	ALV2771-001	9.83367	-104.31092	(Melson and O'Hearn, 2003; Sims et al., 2003)
87	ALV2768-004	9.83337	-104.26365	(le Roux et al., 2006; Melson and O'Hearn, 2003; Sims et al., 2003)
88	ALV2772-003	9.86691	-104.2873	(Melson and O'Hearn, 2003; Perfit et al., 2013; Sims et al., 2003)
89	ALV2772-002	9.86702	-104.28202	(Melson and O'Hearn, 2003; Perfit et al., 2013; Sims et al., 2003)
90	ALV2768-003	9.83332	-104.25918	(Melson and O'Hearn, 2003; Perfit et al., 2013; Sims et al., 2003)

91	ALV2772-001	9.86687	-104.2745	(Melson and O'Hearn, 2003; Perfit et al., 2013; Sims et al., 2003)
92	ALV2737-008	9.84685	-104.30111	(Melson and O'Hearn, 2003; Perfit et al., 2013; Sims et al., 2003)
93	ALV2768-008	9.83342	-104.28178	(Melson and O'Hearn, 2003; Perfit et al., 2013; Sims et al., 2003)
94	MELPROT-9-047-001	10.3	-103.583	(Melson and O'Hearn, 2003; Michael, 1995; Michael and Cornell, 1998)
95	MELPROT-9-048-018	10.35	-103.583	(Melson and O'Hearn, 2003; Michael, 1995; Michael and Cornell, 1998)
96	AII0125-24-R030	9.50997	-104.228	(Michael and Cornell, 1998; Perfit et al., 2013, 1994)
97	AII0125-24-R027	9.50015	-104.24175	(Michael and Cornell, 1998; Perfit et al., 2013, 1994)
98	AII0125-24-R022	9.50815	-104.24337	(Michael and Cornell, 1998; Perfit et al., 2013, 1994)
99	AII0125-24-R028	9.50923	-104.23883	(Michael and Cornell, 1998; Perfit et al., 2013, 1994)
100	AII1991-020-001	8.3477	-103.6488	(Perfit et al., 1996; Saal et al., 2002)
101	AII1991-020-005	8.3477	-103.6488	(Perfit et al., 1996; Saal et al., 2002)
102	ALV2384-001	8.3758	-103.6583	(Hays, 2004; Perfit et al., 1996; Saal et al., 2002)
103	CYA1982-027-001	12.717	-103.922	(Hekinian et al., 1989; Jambon et al., 1995; Prinzhofer et al., 1989)
104	CYA1982-009-003	12.715	-103.913	(Hekinian et al., 1996, 1989; Jambon et al., 1995; Prinzhofer et al., 1989)
105	CHRCLIP-007-001	11.433	-103.783	(Hekinian et al., 1989; Michael, 1995; Michael and Cornell, 1998; Prinzhofer et al., 1989; Thompson et al., 1989)
106	WASVNTR-024-A	12.0783	-103.7205	(le Roux et al., 2006; Reynolds, 1995)
107	WASVNTR-026	12.1242	-103.76	(le Roux et al., 2006; Reynolds, 1995)
108	WASVNTR-029-B	12.1045	-103.7687	(le Roux et al., 2006; Reynolds, 1995)
109	WASVNTR-007-A	12.1917	-103.885	(le Roux et al., 2006; Reynolds, 1995)
110	WASVNTR-029-C	12.1045	-103.7687	(le Roux et al., 2006; Reynolds, 1995)
111	CHRSR01-004	6.733	-102.6	(Bézos and Humler, 2005; Gale et al., 2013; Schiano et al., 1997)
112	CYA1978-018-062	20.87	-109.07	(Gale et al., 2013; Schiano et al., 1997)
113	NADNAUD-021-004	-18.75	-113.43	(Gale et al., 2013; Gannoun et al., 2007; Schiano et al., 1997)
114	NADNAUD-051	-17.37	-113.2	(Gale et al., 2013; Gannoun et al., 2007; Schiano et al., 1997)
115	CYA1978-018-065	20.87	-109.08	(Gale et al., 2013; Gannoun et al., 2007; Schiano et al., 1997)
116	CYA1978-006-010	20.92	-109.07	(Gale et al., 2013; Gannoun et al., 2007; Hekinian and Walker, 1987; Schiano et al., 1997)
117	ALV2759-012	9.81863	-104.30983	(Perfit et al., 2013; Sims et al., 2003)
118	ALV2759-014	9.82005	-104.30968	(Perfit et al., 2013; Sims et al., 2003)
119	ALV2746-004	9.81537	-104.28814	(Perfit et al., 2013; Sims et al., 2003)
120	ALV2746-009	9.81618	-104.29465	(Perfit et al., 2013; Sims et al., 2003)
121	ALV2746-007	9.8174	-104.29037	(Perfit et al., 2013; Sims et al., 2003)
122	ALV2372-001	9.84335	-104.29203	(Goss et al., 2010; Sims et al., 2002; Smith et al., 2001)
123	MELPROT-9-051-002	10.6	-103.628	(Melson and O'Hearn, 2003; Michael, 1995; Michael and Cornell, 1998; Thompson et al., 1989)
124	MELPROT-9-215-002	11.71	-103.832	(Melson and O'Hearn, 2003; Michael, 1995; Michael and Cornell, 1998; Thompson et al., 1989)
125	MELPROT-9-209-002	10.977	-103.7	(Melson and O'Hearn, 2003; Michael, 1995; Michael and Cornell, 1998; Thompson et al., 1989)
126	MELPROT-9-055-013	10.987	-103.705	(Melson and O'Hearn, 2003; Michael, 1995; Michael and Cornell, 1998; Thompson et al., 1989)
127	MELPROT-9-057-004	10.927	-103.687	(Melson and O'Hearn, 2003; Michael, 1995; Michael and Cornell, 1998; Thompson et al., 1989)
128	MELPROT-9-059-001	11.247	-103.753	(Melson and O'Hearn, 2003; Michael, 1995; Michael and Cornell, 1998; Thompson et al., 1989)
129	MELPROT-9-067-001	11.582	-103.832	(Melson and O'Hearn, 2003; Michael, 1995; Michael and Cornell, 1998; Thompson et al., 1989)
130	MELPROT-9-064-002	11.717	-103.832	(Melson and O'Hearn, 2003; Michael, 1995; Michael and Cornell, 1998; Thompson et al., 1989)
131	JS20264-008	9.162801	-104.20003	(Wanless et al., 2012)
132	JS20265-088	9.126339	-104.206384	(Wanless et al., 2012)
133	JS20264-004	9.157611	-104.18989	(Wanless et al., 2012)
134	JS20265-043	9.155526	-104.212706	(Wanless et al., 2012)
135	JS20265-018	9.136182	-104.234547	(Wanless et al., 2012)
136	NHOTCS06NH-001/A	9.9087	-104.2947	(Waters et al., 2013)
137	ALV3963-3	9.8435	-104.2743	(Waters et al., 2013)

138	ALV3963-5	9.8417	-104.27692	(Waters et al., 2013)
139	ALV3974-2	9.83607	-104.30863	(Waters et al., 2013)
140	ALV3974-6	9.83915	-104.30697	(Waters et al., 2013)
141	ALV3974-5	9.83832	-104.30842	(Waters et al., 2013)
142	ALV4205-006	9.7862	-104.2835	(Waters et al., 2013)
143	ALV4205-6	9.7862	-104.2835	(Waters et al., 2013)
144	ALV3963-6	9.84168	-104.27648	(Waters et al., 2013)
145	ALV4205-5	9.7754	-104.2805	(Waters et al., 2013)
146	ALV3974-8	9.83753	-104.30538	(Waters et al., 2013)
147	ALV3974-4	9.83757	-104.30843	(Waters et al., 2013)
148	ALV4202-004	9.8466	-104.2931	(Waters et al., 2013)
149	ALV4202-4	9.8466	-104.2931	(Waters et al., 2013)
150	ALV3974-7	9.83752	-104.30543	(Waters et al., 2013)
151	ALV4202-6	9.8456	-104.293	(Waters et al., 2013)
152	ALV3974-9	9.83807	-104.30382	(Waters et al., 2013)
153	ALV3963-10	9.83823	-104.28318	(Waters et al., 2013)
154	ALV3963-9	9.83813	-104.2808	(Waters et al., 2013)
155	ALV4205-005	9.7754	-104.2805	(Moore et al., 2014; Waters et al., 2013)
156	ALV4202-006	9.8456	-104.293	(Moore et al., 2014; Waters et al., 2013)

Table C.2.ESM.4 Major element compositions of EPR MORB in wt%

sample no.	SiO_2	TiO_2	Al_2O_3	FeOtot	MnO	MgO	CaO	Na_2O	K_2O	P_2O_5	total
1	48.79	1.04	16.88	7.92	0.14	9.70	11.67	2.44	0.03	0.11	98.72
2	51.72	1.25	13.69	11.63	0.20	7.09	11.60	2.13	0.08	0.09	99.48
3	48.95	0.95	17.35	8.04	0.17	10.12	12.09	2.33	0.03	0.06	100.09
4	50.66	1.52	15.07	10.44	0.19	7.84	11.80	2.66	0.10	0.17	100.45
5	51.01	1.86	15.64	8.72	0.19	7.73	11.84	2.82	0.68	0.34	100.83
6	50.53	1.49	14.83	10.20	0.19	7.75	11.97	2.65	0.10	0.16	99.87
7	50.57	1.52	14.60	10.29	0.18	7.81	11.94	2.62	0.10	0.15	99.78
8	50.46	1.49	14.74	9.97	0.18	7.82	12.00	2.63	0.11	0.14	99.54
9	50.67	1.47	14.66	10.15	0.18	7.84	11.91	2.64	0.10	0.16	99.78
10	50.75	1.49	14.70	10.10	0.18	7.87	11.90	2.63	0.10	0.13	99.85
11	50.58	1.52	14.80	10.00	0.20	7.87	12.00	2.63	0.11	0.12	99.83
12	50.68	1.47	14.64	10.18	0.17	7.90	11.87	2.64	0.11	0.15	99.81
13	50.72	1.49	14.66	9.98	0.19	7.94	11.87	2.63	0.12	0.16	99.76
14	50.59	1.43	14.91	10.15	0.19	7.95	11.62	2.58	0.10	0.17	99.69
15	50.72	1.38	14.94	9.94	0.19	8.02	11.74	2.52	0.10	0.13	99.68
16	50.40	1.41	15.10	10.01	0.18	8.03	11.93	2.56	0.10	0.15	99.87
17	50.27	1.38	15.06	10.11	0.17	8.08	11.89	2.55	0.10	0.14	99.75
18	50.32	1.37	15.19	9.93	0.18	8.14	11.86	2.62	0.10	0.14	99.85
19	50.50	1.38	15.04	9.39	0.18	8.15	12.02	2.73	0.11	0.13	99.63
20	50.66	1.37	15.26	9.36	0.16	8.16	12.09	2.71	0.12	0.14	100.03
21	50.44	1.34	15.21	9.69	0.17	8.20	12.04	2.48	0.10	0.15	99.82
22	50.41	1.62	14.97	10.26	0.19	7.85	11.70	2.63	0.10	0.14	99.87
23	50.62	1.54	14.67	9.98	0.18	7.88	11.97	2.62	0.11	0.13	99.70
24	50.44	1.41	15.09	9.90	0.17	8.10	11.91	2.52	0.10	0.14	99.78
25	50.31	1.37	15.09	9.69	0.17	8.28	12.01	2.57	0.10	0.13	99.72
26	50.45	1.50	14.85	10.06	0.19	8.02	11.94	2.62	0.10	0.15	99.88
27	50.19	1.30	15.48	9.25	0.18	8.50	12.03	2.48	0.09	0.13	99.63
28	50.26	1.42	14.98	9.87	0.18	8.02	11.96	2.57	0.09	0.13	99.48
29	50.21	1.44	14.89	10.01	0.20	8.02	11.81	2.74	0.09	0.13	99.54
30	50.12	1.42	15.01	9.80	0.19	8.03	12.01	2.60	0.09	0.13	99.40
31	50.10	1.46	14.88	9.96	0.19	8.04	11.82	2.72	0.09	0.13	99.39
32	50.14	1.44	15.06	9.90	0.19	8.06	11.89	2.64	0.10	0.12	99.54
33	50.00	1.43	15.04	10.00	0.20	8.07	12.21	2.64	0.10	0.13	99.82
34	50.12	1.41	14.97	9.80	0.19	8.08	11.98	2.62	0.09	0.13	99.39
35	50.22	1.42	15.05	9.85	0.18	8.09	11.93	2.62	0.09	0.13	99.58
36	50.20	1.42	14.98	9.83	0.18	8.10	11.94	2.59	0.09	0.12	99.45
37	50.00	1.41	15.08	9.78	0.18	8.12	12.09	2.59	0.09	0.13	99.47
38	50.17	1.38	15.05	9.76	0.18	8.16	12.03	2.56	0.09	0.13	99.51
39	50.11	1.41	14.96	9.79	0.20	8.16	12.00	2.64	0.10	0.12	99.49
40	49.95	1.44	15.07	9.83	0.19	8.16	11.94	2.64	0.09	0.13	99.44
41	49.94	1.37	15.16	9.79	0.19	8.17	12.06	2.57	0.10	0.12	99.47
42	50.09	1.40	15.07	9.79	0.18	8.20	12.01	2.63	0.09	0.13	99.59
43	50.11	1.39	14.99	9.74	0.19	8.24	12.09	2.60	0.09	0.13	99.57
44	50.09	1.40	15.01	9.77	0.19	8.25	12.12	2.60	0.09	0.10	99.62

45	50.11	1.43	15.09	9.91	0.19	8.27	12.15	2.63	0.09	0.12	99.99
46	50.17	1.42	15.08	9.92	0.20	8.32	12.10	2.65	0.10	0.13	100.09
47	50.67	1.35	15.59	9.15	0.18	8.33	12.09	2.76	0.09	0.14	100.35
48	48.93	1.22	16.24	8.16	0.16	8.88	12.02	2.77	0.05	0.11	98.53
49	48.90	1.17	16.92	8.00	0.15	9.17	11.73	2.69	0.08	0.11	98.92
50	49.30	2.34	13.95	11.91	0.21	6.28	10.30	3.06	0.28	0.28	97.91
51	49.84	1.97	13.89	11.49	0.20	7.13	11.30	2.63	0.15	0.20	98.80
52	50.00	1.81	15.00	10.42	0.19	7.15	11.00	2.95	0.30	0.21	99.03
53	49.65	1.82	13.96	11.51	0.21	7.17	11.38	2.61	0.10	0.17	98.58
54	49.50	1.56	15.40	10.18	0.18	7.50	11.60	2.84	0.13	0.15	99.04
55	48.85	1.33	16.70	8.88	0.16	8.51	11.65	2.85	0.16	0.15	99.24
56	49.10	1.37	16.60	8.25	0.16	8.68	11.63	2.82	0.23	0.19	99.03
57	49.31	1.15	16.00	8.97	0.17	8.94	12.21	2.35	0.05	0.10	99.25
58	50.70	2.03	13.80	11.82	0.21	7.01	11.23	2.67	0.13	0.20	99.79
59	50.84	1.54	14.32	10.57	0.19	7.65	11.82	2.57	0.08	0.18	99.78
60	50.52	1.42	14.89	9.71	0.19	8.10	12.14	2.52	0.08	0.19	99.76
61	49.87	2.50	15.77	10.59	0.19	6.40	10.50	3.04	0.71	0.50	100.07
62	48.43	0.82	17.35	8.29	0.10	12.41	11.48	2.25	0.03	0.06	101.22
63	49.99	2.17	13.79	12.00	0.20	6.54	10.97	3.28	0.14	0.20	99.28
64	50.70	1.72	14.45	10.41	0.20	7.19	11.63	2.92	0.27	0.19	99.68
65	50.46	1.69	14.32	10.81	0.21	7.54	11.72	2.78	0.13		99.66
66	50.32	1.41	15.27	9.60	0.15	8.01	12.23	2.59	0.13	0.14	99.85
67	50.29	1.40	15.08	9.74	0.16	8.20	12.14	2.62	0.12	0.16	99.91
68	51.00	1.79	14.40	10.76	0.21	6.65	11.00	3.19	0.44	0.31	99.75
69	49.00	1.23	15.40	9.36	0.14	8.30	12.60	2.51	0.16	0.15	98.85
70	49.99	1.29	15.40	9.38	0.18	8.52	12.16	2.60	0.11	0.12	99.75
71	50.41	1.47	14.88	10.12	0.18	7.91	12.06	2.69	0.11	0.16	99.99
72	50.80	2.32	13.39	12.64		5.99	10.24	2.95	0.14	0.22	98.69
73	50.87	2.25	13.61	12.53		6.11	10.35	2.97	0.15	0.20	99.04
74	51.79	1.94	14.48	10.63		6.16	10.32	3.15	0.24	0.22	98.93
75	50.86	2.25	13.55	12.66		6.19	10.45	2.91	0.14	0.22	99.23
76	50.36	2.29	13.47	12.73		6.22	10.30	2.99	0.16	0.18	98.70
77	50.49	2.00	14.15	11.51		6.59	11.22	2.92	0.16	0.16	99.20
78	49.56	2.29	13.96	11.91		6.59	10.90	2.84	0.15	0.21	98.41
79	50.30	1.97	14.02	11.54		6.63	11.17	2.91	0.16	0.19	98.89
80	50.10	2.04	14.53	11.01		6.81	10.76	2.84	0.15	0.18	98.42
81	49.96	1.44	15.24	9.70		8.16	11.96	2.27	0.04	0.12	98.89
82	50.08	1.42	15.25	9.71		8.17	11.98	2.23	0.04	0.14	99.02
83	50.41	1.46	15.47	9.63		8.19	11.98	2.25	0.05	0.14	99.58
84	49.88	1.41	15.37	9.74		8.25	12.04	2.24	0.04	0.12	99.09
85	50.41	1.60	14.38	10.28	0.17	7.38	11.94	2.61	0.11	0.13	99.01
86	50.30	1.68	14.47	10.47	0.19	7.17	11.90	2.70	0.12	0.15	99.15
87	50.36	2.06	13.74	11.82	0.21	6.34	10.99	2.98	0.17	0.19	98.86
88	49.99	1.71	14.31	10.80	0.19	7.21	11.61	2.69	0.12	0.16	98.79
89	50.14	1.52	14.38	10.10	0.17	7.32	12.08	2.60	0.12	0.14	98.57
90	50.51	1.59	14.42	10.20	0.19	7.35	12.01	2.74	0.10	0.14	99.25
91	50.45	1.55	14.40	10.23	0.18	7.36	12.10	2.61	0.12	0.14	99.14

92	49.72	1.21	15.80	8.99	0.16	8.21	12.23	2.47	0.09	0.10	98.98
93	49.76	1.20	15.96	8.92	0.18	8.40	12.27	2.47	0.10	0.09	99.35
94	51.41	2.29	13.70	12.59		5.60	10.14	3.13	0.25	0.20	99.31
95	50.88	1.57	14.25	10.94		7.24	11.95	2.57	0.08	0.14	99.62
96	50.04	1.78	14.17	11.31	0.21	7.38	11.72	2.77	0.14		99.51
97	51.28	1.62	13.99	10.68	0.19	7.39	11.52	2.64	0.12		99.42
98	51.18	1.58	14.11	10.57	0.21	7.45	11.49	2.77	0.13	0.13	99.62
99	50.74	1.46	14.20	10.45	0.18	7.67	12.07	2.60	0.10		99.48
100	48.81	0.96	17.31	7.92	0.10	10.01	12.08	2.39	0.03	0.07	99.68
101	48.05	0.95	17.11	7.90	0.14	10.63	11.71	2.37	0.03	0.07	98.96
102	48.88	0.93	17.50	7.77	0.16	12.78	12.22	2.40	0.04	0.06	102.74
103	50.78	1.70	15.39	9.22	0.18	7.64	11.46	3.06	0.23	0.18	99.84
104	50.32	1.80	16.19	8.61	0.15	7.51	11.02	3.19	0.43	0.24	99.46
105	49.52	2.17	14.99	9.38	0.15	6.38	10.44	3.18	0.60	0.24	97.05
106	50.73	2.04	13.38	13.19	0.23	6.44	10.48	2.93	0.10	0.20	99.72
107	50.72	1.83	14.02	11.50	0.20	7.06	11.39	2.68	0.10	0.21	99.72
108	50.63	1.62	14.76	10.01	0.18	7.29	12.09	2.86	0.15	0.18	99.76
109	50.44	1.64	14.84	9.74	0.18	7.65	12.18	2.85	0.19	0.18	99.89
110	50.52	0.99	14.87	9.22	0.18	8.54	13.13	2.12	0.04	0.14	99.76
111	50.28	1.69	15.33	11.57	0.17	8.21	11.14	2.91	0.14	0.20	101.64
112	50.06	1.30	15.06	9.23	0.11	8.65	11.08	2.77	0.06		98.32
113	50.11	1.45	14.94	9.84	0.26	7.61	12.16	2.72	0.07		99.16
114	50.32	1.70	14.42	8.08	0.03	7.70	11.67	2.65	0.11		96.68
115	49.48	1.45	14.96	9.41	0.17	7.75	11.58	2.74	0.18		97.72
116	50.13	1.34	15.82	9.11	0.17	8.47	12.03	2.79	0.05	0.02	99.93
117	50.70	1.95	13.86	11.74	0.20	6.78	11.23	3.00	0.16	0.19	99.81
118	50.50	1.61	14.54	10.40	0.19	7.55	11.81	2.83	0.14	0.14	99.71
119	50.40	1.36	15.28	9.43	0.18	8.32	12.10	2.64	0.11	0.15	99.97
120	50.20	1.27	15.58	9.16	0.17	8.48	12.19	2.60	0.12	0.11	99.88
121	50.10	1.23	15.50	9.22	0.16	8.65	12.26	2.59	0.12	0.12	99.95
122	49.94	1.29	15.66	9.27	0.17	8.70	12.04	2.54	0.09	0.12	99.82
123	50.59	2.64	13.03	13.72	0.24	5.42	9.87	3.15	0.21	0.24	99.11
124	49.61	2.19	16.24	9.69	0.17	6.57	10.44	3.22	0.73	0.27	99.13
125	51.21	1.83	14.44	10.95	0.20	6.89	11.28	2.96	0.15	0.18	100.09
126	50.77	1.78	14.32	10.94	0.19	6.90	11.47	2.91	0.16	0.19	99.63
127	51.14	1.66	14.57	10.48	0.19	7.07	11.99	2.92	0.12	0.19	100.33
128	50.42	1.76	14.92	10.17	0.20	7.14	11.70	2.87	0.23	0.21	99.62
129	50.15	1.60	15.93	9.40	0.17	7.73	11.68	2.96	0.15	0.18	99.95
130	50.21	1.50	16.06	9.21	0.17	7.91	11.94	2.68	0.12	0.16	99.96
131	50.10	2.68	12.70	14.10	0.26	5.69	9.60	3.27	0.21	0.28	98.89
132	50.90	2.02	13.90	12.00	0.22	6.71	11.10	2.85	0.15	0.21	100.06
133	50.50	1.84	13.70	11.50	0.21	6.97	11.10	2.98	0.15	0.18	99.13
134	50.50	1.92	13.90	11.60	0.21	6.98	11.10	2.86	0.13	0.19	99.39
135	50.80	1.82	14.00	11.30	0.21	7.21	11.30	2.97	0.12	0.18	99.91
136	51.00	1.50	14.59	10.40	0.16	7.36	11.56	2.79	0.11	0.12	99.59
137	50.47	1.54	14.88	10.24	0.18	7.39	11.92	2.70	0.13	0.12	99.57
138	50.55	1.45	14.88	10.19	0.20	7.43	11.99	2.67	0.16	0.13	99.65

139	50.48	1.52	15.02	10.41	0.19	7.48	11.71	2.71	0.10	0.13	99.75
140	50.56	1.55	15.34	10.06	0.18	7.60	11.83	2.72	0.16	0.17	100.17
141	50.35	1.55	15.23	10.19	0.18	7.61	11.79	2.75	0.16	0.18	99.99
142	50.51	1.47	15.26	10.08	0.15	7.68	11.86	2.66	0.10	0.12	99.89
143	50.51	1.47	15.26	10.08	0.15	7.68	11.86	2.66	0.10	0.12	99.89
144	50.45	1.46	15.00	10.21	0.16	7.69	12.02	2.65	0.13	0.12	99.89
145	50.43	1.41	15.17	10.15	0.18	7.85	11.98	2.67	0.10	0.14	100.08
146	50.33	1.38	15.81	9.65	0.18	7.87	11.98	2.63	0.14	0.12	100.09
147	50.54	1.41	15.49	9.86	0.17	7.90	12.05	2.60	0.12	0.12	100.26
148	50.43	1.37	15.40	10.06	0.17	8.00	11.88	2.71	0.11	0.10	100.23
149	50.43	1.37	15.40	10.06	0.17	8.00	11.88	2.71	0.11	0.10	100.23
150	50.38	1.40	15.75	9.74	0.17	8.15	12.02	2.62	0.15	0.13	100.51
151	50.39	1.36	15.28	9.99	0.17	8.23	11.72	2.66	0.10	0.14	100.04
152	50.06	1.38	15.69	9.64	0.16	8.23	11.95	2.63	0.14	0.16	100.04
153	49.76	1.11	16.54	8.98	0.15	8.67	12.12	2.46	0.09	0.09	99.97
154	49.84	1.08	16.08	9.08	0.16	8.74	12.20	2.40	0.08	0.09	99.75
155	50.43	1.41	15.17	10.15	0.18	7.85	11.98	2.67	0.10	0.14	100.08
156	50.39	1.36	15.28	9.99	0.17	8.23	11.72	2.66	0.10	0.14	100.04

Table C.2.ESM.5 Trace element compositions of EPR MORB in ppm

sample no.	Cl	Ba	Rb	Nb	Ta	La	Ce	Sr	Nd	Zr	Sm	Eu	Y
1	30	1.42	0.26	0.52	0.06	1.18	3.96	66.00	5.68	47.00	2.31	0.89	22.74
2	423	0.06	5.39	10.50	0.61	10.60	30.40	86.90	28.10	298.00	9.82	2.86	102.00
3	30	1.38	0.30	0.48	0.04	1.10	3.50	79.40	5.33	55.50	2.28	0.84	24.86
4	66	14.65	1.31	3.04	0.18	3.19	10.06	106.28	9.63	95.47	3.35	1.25	35.60
5	296	54.28	3.19	6.38	0.39	6.25	16.79	169.90	13.69	126.81	4.24	1.54	37.49
6	70	8.60	0.97	2.25	0.17	3.46	10.63	109.00	10.11	96.90	3.30	1.20	33.30
7	80	8.51	0.97	2.24	0.17	3.38	10.39	108.00	9.95	94.60	3.25	1.17	32.80
8	90	8.75	0.94	2.45	0.16	3.25	10.25	112.00	9.52	91.50	3.21	1.18	32.20
9	50	8.44	0.96	2.27	0.18	3.32	10.29	107.00	9.71	95.30	3.19	1.15	33.20
10	50	10.50	0.98	2.21	0.17	3.43	10.59	107.00	10.09	97.40	3.28	1.19	32.80
11	50	9.08	0.99	2.53	0.17	3.31	10.44	115.00	9.70	93.50	3.27	1.19	33.30
12	60	8.65	0.99	2.20	0.18	3.45	10.67	105.00	10.34	97.60	3.33	1.22	33.90
13	60	11.88	1.27	2.82	0.21	3.83	11.49	119.00	10.35	99.30	3.31	1.19	32.50
14	70	7.84	0.95	2.06	0.17	3.26	10.15	106.00	9.86	89.70	3.23	1.15	31.60
15	40	7.88	0.80	2.40	0.16	2.95	9.75	109.00	8.63	86.70	3.10	1.11	31.40
16	60	8.32	0.93	2.21	0.17	3.23	9.91	108.00	9.47	94.40	3.15	1.14	32.90
17	60	8.71	0.92	2.29	0.15	3.13	9.88	114.00	9.20	88.00	3.14	1.16	31.80
18	40	8.31	0.89	2.40	0.16	3.10	10.17	119.00	9.20	88.00	3.21	1.17	32.10
19	330	8.54	1.01	2.46	0.17	3.42	10.64	119.00	9.77	92.90	3.19	1.18	35.50
20	470	8.45	1.01	2.44	0.20	3.39	10.56	118.00	9.71	92.60	3.13	1.16	34.50
21	60	15.02	0.92	2.21	0.15	3.03	9.58	115.00	8.87	86.10	3.04	1.12	30.30
22	40	8.24	0.91	2.20	0.15	3.11	9.72	79.62	8.99	83.50	3.05	1.12	30.30
23	70	8.59	0.92	2.18	0.17	3.46	10.57	105.33	10.42	94.60	3.33	1.21	32.80
24	50	7.98	0.91	2.03	0.16	3.16	9.74	105.61	9.47	85.60	3.08	1.10	30.30
25	40	8.03	0.89	1.95	0.16	3.13	9.52	112.73	9.16	86.30	2.97	1.10	29.60
26	32	9.00	0.90	2.30	0.16	3.18	9.99	112.00	9.13	93.00	3.24	1.16	31.90
27	23		0.70	2.20				118.00		83.00			30.80
28	53	8.36	0.97	2.24	0.16	3.36	10.56	116.00	9.80	89.90	3.36	1.22	32.60
29	50	8.57	0.97	2.24	0.15	3.39	10.78	116.00	10.10	91.90	3.40	1.24	33.60
30	53	8.69	0.99	2.22	0.16	3.35	10.52	116.00	9.69	88.90	3.31	1.20	32.10
31	51	8.76	0.96	2.21	0.15	3.35	10.65	114.00	9.95	90.30	3.36	1.23	32.90
32	51	8.56	0.98	2.22	0.15	3.36	10.60	115.00	9.81	90.10	3.39	1.23	32.80
33	62	8.71	0.97	2.16	0.15	3.26	10.22	114.00	9.50	85.70	3.22	1.17	31.20
34	57	8.44	0.95	2.18	0.16	3.31	10.42	113.00	9.59	86.80	3.26	1.18	31.60
35	48	8.51	0.96	2.21	0.16	3.32	10.48	116.00	9.74	89.00	3.29	1.20	32.40
36	52	8.50	0.93	2.16	0.14	3.32	10.41	114.00	9.69	87.30	3.30	1.21	31.70
37	55	8.55	0.96	2.19	0.15	3.30	10.31	116.00	9.55	87.10	3.25	1.18	31.50
38	52	8.80	1.00	2.20	0.15	3.36	10.51	119.00	9.77	86.90	3.32	1.22	32.00
39	49	8.64	0.93	2.18	0.15	3.31	10.45	116.00	9.70	87.70	3.26	1.19	31.70
40	44	8.80	1.00	2.28	0.15	3.44	10.87	119.00	10.08	92.20	3.46	1.25	33.70
41	46	8.84	0.99	2.20	0.15	3.34	10.57	118.00	9.85	88.20	3.33	1.21	32.40
42	58	8.76	1.01	2.21	0.15	3.36	10.53	118.00	9.76	88.20	3.34	1.22	32.30
43	56	8.96	0.99	2.22	0.15	3.33	10.46	115.00	9.72	87.40	3.27	1.20	32.00
44	52	8.43	0.91	2.11	0.15	3.11	9.88	108.00	9.05	83.30	3.09	1.13	30.00

45	63	8.77	0.99	2.22	0.15	3.34	10.46	116.00	9.71	88.50	3.28	1.21	32.10
46	54	8.89	1.00	2.24	0.16	3.38	10.56	115.00	9.85	88.00	3.36	1.21	32.00
47	10	15.09	1.27	2.70	0.17	2.92	8.93	115.80	8.51	82.27	2.88	1.12	31.36
48	41	7.62	0.61	1.34	0.09	2.29	8.32	140.67	8.44	85.45	2.92	1.13	28.87
49	67		2.00	3.00		2.86	9.10	138.00	8.80	91.00	2.80	1.10	28.00
50	214	24.76	2.55	7.95	0.50	7.98	21.86	152.97	17.96	189.00	5.57	1.85	51.96
51	222	13.98	1.37	4.29	0.29	4.80	14.98	118.95	13.70	142.61	4.54	1.58	44.69
52	163	47.79	3.92	8.78	0.53	7.25	18.40	171.89	13.71	132.48	4.21	1.53	40.35
53	369	9.25	0.87	2.99	0.20	3.95	12.50	104.03	12.29	125.39	4.22	1.50	45.17
54	131	14.17	1.17	3.42	0.23	3.86	11.80	123.53	10.72	110.59	3.62	1.34	35.87
55	42	15.35	1.33	3.89	0.26	4.48	12.44	172.73	10.10	104.28	3.04	1.21	29.37
56	45	26.55	2.29	6.15	0.38	5.92	15.52	201.13	11.55	121.88	3.35	1.29	29.05
57	71	4.32	0.38	1.38	0.10	1.89	6.33	81.78	6.92	65.71	2.54	1.02	28.36
58	99	9.65		3.19		4.20	13.40	101.00	13.20	129.00	4.56	1.45	44.00
59	44	3.65		1.13		1.63	5.50	79.00	6.24	54.00	2.43	0.87	24.00
60	39	6.55		2.03		2.96	9.57	108.00	9.36	88.00	3.23	1.09	30.00
61	241	180.00	12.00	24.00	1.10	18.30	42.00	330.00	26.00	209.00	6.78	2.27	40.00
62	3	1.18	0.50	0.57		1.14	4.42	77.00	6.16	46.00	2.53	0.92	24.00
63	522	14.70	1.40	3.70		5.71	18.20	134.00	16.60	155.00	5.36	1.79	47.00
64	62	27.00	2.50	7.00		6.15	16.70	150.00	13.40	119.00	4.14	1.41	34.70
65	82	10.00	1.10	2.80	0.19	3.80	11.90	116.00	10.74	106.00	3.74	1.33	36.80
66	44	11.80	1.70	3.30		3.63	11.00	123.00	10.20	89.00	3.69	1.20	29.70
67	42	12.10	1.50	4.40		3.69	11.00	123.00	10.20	93.00	3.45	1.18	31.00
68	425	67.60	5.80	9.54	0.58	8.18	21.10	156.00	15.69	150.00	4.71	1.67	39.70
69	30	22.20	1.90	3.55	0.23	3.60	10.40	120.00	8.11	78.00	2.57	1.07	23.00
70	30	7.67	0.94	2.23	0.15	3.10	9.70	117.00	8.90	85.70	2.89	1.09	29.40
71	42	8.45	0.91	2.52	0.20	3.38	11.15	112.00	10.00	98.80	3.28	1.18	31.70
72	540	19.63	1.74	5.60	0.32	6.02	17.65	120.90	15.26	144.50	5.15	1.88	45.53
73	524	19.11	1.64	5.36	0.32	5.84	17.35	121.70	14.90	141.30	5.10	1.82	44.87
74	1282	22.07	2.31	7.43	0.43	9.05	25.61	138.20	20.56	224.70	6.51	2.03	52.13
75	514	19.45	1.78	5.53	0.32	5.95	17.47	122.10	15.10	142.00	5.16	1.82	44.21
76	523	18.61	1.74	5.36	0.32	5.85	17.21	120.30	14.70	142.30	5.12	1.81	44.47
77	444	17.96	1.55	4.63	0.27	5.33	15.66	132.80	13.57	125.10	4.40	1.62	37.83
78	370	15.15	1.44	4.82	0.28	5.70	16.85	128.10	14.59	138.90	4.86	1.72	41.03
79	417	17.96	1.46	4.67	0.28	5.23	15.65	131.00	13.20	124.60	4.53	1.61	37.71
80	186	13.95	1.27	4.63	0.28	5.58	16.43	137.30	13.94	133.50	4.45	1.62	38.71
81	104	9.50	0.87	2.46	0.15	3.04	9.16	89.12	8.57	79.75	2.95	1.12	28.63
82	125	9.18	0.92	2.82	0.19	3.24	9.62	127.20	8.19	80.91	2.98	1.08	28.85
83	117	9.30	0.95	2.52	0.14	3.09	9.31	89.24	8.61	79.02	3.21	1.16	29.28
84	118	9.12	0.79	2.34	0.15	2.91	8.78	87.45	8.00	77.67	3.03	1.19	26.68
85	119	9.00	0.90	2.60	0.17	3.41	10.82	112.00	9.90	97.00	3.44	1.23	34.10
86	76	9.00	0.90	3.20		3.50	11.00	126.00	10.25	110.00	3.50	1.40	36.00
87	702	18.60	1.90	4.40		5.24	16.10	128.00	14.60	137.00	4.81	1.58	43.00
88	43	9.00	1.00	2.60	0.18	3.77	11.89	110.00	10.88	105.00	3.84	1.34	36.30
89	81	10.00	1.10	2.80	0.19	3.80	11.83	131.00	10.63	103.00	3.78	1.36	35.70
90	114	7.00	0.80	1.80	0.14	3.40	11.30	108.00	10.40	101.00	3.60	1.30	34.30
91	69	9.00	1.00	2.60	0.17	3.44	10.74	118.00	9.71	96.00	3.37	1.21	34.00

92	43	7.00	0.70	1.80	0.12	2.56	8.02	115.00	7.52	71.00	2.63	0.99	26.00
93	14	7.00	0.70	1.90	0.13	2.66	8.29	122.00	7.54	73.00	2.64	1.00	25.50
94	435			5.00						146.00			
95	136			2.00						97.00			
96	130	11.00	1.00	2.90	0.20	4.40	14.09	136.00	12.55	129.00	4.29	1.67	39.60
97	91	11.00	1.00	2.80	0.20	4.05	12.99	131.00	11.13	115.00	3.70	1.45	34.30
98	107	11.00	1.00	2.70	0.19	3.74	12.31	129.00	10.71	111.00	3.67	1.41	34.00
99	53	13.00	0.80	2.10	0.15	3.32	11.35	131.00	9.80	96.00	3.41	1.39	30.40
100	3			0.47			3.75						
101	18	1.60		0.48		0.97	3.61	64.80	4.95	39.39	1.88	0.72	19.21
102	21	1.76		1.30		0.81	3.36	63.00	4.14	45.00	1.81	0.64	18.00
103	142	23.30	1.50	7.00		5.07	15.50	167.00	12.10	127.00	4.16	1.47	37.00
104	91	41.20	3.73	11.00		14.30	23.70	233.00	16.00	163.00	4.32	1.70	37.00
105	498	110.00	7.38	16.00		10.20	27.10	287.00	17.30	155.00	4.73	1.67	57.00
106	122	7.04		2.54		3.94	13.10	102.00	13.60	130.00	5.34	1.59	46.00
107	355	8.48		2.86		3.95	12.60	103.00	13.00	118.00	4.18	1.39	40.00
108	229	14.10		3.06		4.02	12.40	146.00	11.50	105.00	3.73	1.29	32.00
109	82	19.20		4.22		4.78	14.30	151.00	12.50	117.00	3.82	1.31	32.00
110	14	3.04		0.95		1.49	5.18	72.00	5.91	48.00	2.27	0.85	25.00
111	90	14.58	1.59	4.35	0.29	4.99	14.87	116.70	13.95	134.80	4.31	1.53	45.25
112	10	20.36	1.79	3.53	0.21	3.21	9.43	142.57	8.42	84.68	2.88	1.13	29.55
113	54			1.52	0.11	2.63	9.23	132.51	9.18	94.61	3.35	1.21	34.72
114	160		1.02	2.87	0.20	3.40	10.27	117.32	10.01	100.46	3.62	1.28	34.45
115	156	41.51	3.21	6.64	0.37	4.87	12.93	149.20	10.39	97.43	3.33	1.22	31.30
116	48	8.07	0.72	1.58	0.11	2.39	8.09	132.11	8.55	81.84	2.99	1.10	29.21
117	85	10.00	1.10	3.00	0.20	4.34	13.77	123.00	12.48	125.00	4.36	1.51	42.10
118	64	9.00	0.90	2.50	0.17	3.51	11.13	120.00	10.17	100.00	3.52	1.26	34.60
119	39	8.00	0.90	2.50	0.12	2.64	8.19	122.00	7.59	92.00	2.67	1.02	30.00
120	30	8.00	0.80	2.00	0.13	2.78	8.61	115.00	7.95	78.00	2.86	1.04	27.10
121	41	8.00	0.80	2.10	0.14	2.72	8.48	115.00	7.81	77.00	2.77	1.02	27.70
122	62	7.88	2.00	1.93	0.19	3.70	9.07	125.00	8.24	82.00	2.87	1.09	29.70
123	436		3.00	6.00				134.00		162.00			55.00
124	263	168.00	12.00	19.00				314.00		166.00			35.00
125	929		3.00	4.00				132.00		136.00			46.00
126	123		4.00	5.00				137.00		123.00			42.00
127	375		3.00	5.00				135.00		129.00			39.00
128	149		5.00	6.00				161.00		120.00			37.00
129	72		4.00	4.00				168.00		115.00			35.00
130	68		4.00	5.00				145.00		107.00			32.00
131	700	17.07	2.10	5.46	0.37	6.81	20.51	126.40	17.30	180.00	5.99	1.94	58.90
132	200	10.31	1.20	3.46	0.23	4.94	14.97	123.60	13.20	133.00	4.48	1.52	44.30
133	100	13.20	1.60	4.01	0.28	4.98	15.49	146.40	13.90	142.00	4.78	1.67	45.40
134	100	8.37	1.10	3.08	0.21	4.54	14.16	119.90	12.60	126.00	4.42	1.48	43.80
135	100	6.87	1.00	2.76	0.19	4.27	13.40	126.20	11.90	122.00	4.15	1.40	41.90
136	500	5.92	0.69	2.54	0.17	3.04	9.56	119.00	9.37	102.00	3.51	1.22	34.70
137	100	10.00	1.14	3.59	0.23	3.95	12.00	135.00	10.70	109.00	3.70	1.33	35.70
138	100	11.40	1.29	3.93	0.27	4.14	11.50	135.00	10.60	112.00	3.67	1.30	37.10

139	100	6.28	0.67	2.32	0.17	3.16	9.39	126.00	9.32	104.00	3.29	1.17	34.90
140	100	15.80	1.53	4.06	0.25	4.11	11.70	141.00	9.75	96.90	3.24	1.15	29.40
141	100	17.70	1.72	4.48	0.27	4.38	13.30	153.00	10.60	103.00	3.53	1.26	31.10
142	100	7.46	0.86	2.66	0.17	3.40	10.80	131.00	9.94	101.00	3.52	1.27	33.70
143	100	7.46	0.86	2.66	0.17	3.40	10.80	131.00	9.94	101.00	3.52	1.27	33.70
144	100	7.36	0.82	2.92	0.19	3.64	11.10	136.00	10.20	103.00	3.56	1.28	34.20
145	100	7.12	0.80	2.52	0.17	3.22	10.20	124.00	9.37	95.30	3.16	1.20	32.30
146	100	12.80	1.40	3.74	0.22	3.69	10.90	135.00	8.84	88.70	2.99	1.09	27.00
147	100	11.30	1.24	3.59	0.23	4.05	12.10	154.00	10.70	109.00	3.61	1.32	35.10
148	100	6.47	0.76	2.35	0.15	2.92	9.64	121.00	8.73	87.20	3.00	1.13	29.60
149	100	6.47	0.76	2.35	0.15	2.92	9.64	121.00	8.73	87.20	3.00	1.13	29.60
150	100	13.60	1.49	3.90	0.26	4.12	11.50	145.00	10.00	107.00	3.37	1.20	33.00
151	100	6.62	0.75	2.39	0.15	3.01	9.69	124.00	8.87	88.80	3.08	1.17	30.20
152	100	12.40	1.36	3.66	0.22	3.72	10.60	134.00	8.85	90.50	3.00	1.07	27.70
153	100	5.72	0.63	2.06	0.13	2.60	8.40	132.00	7.61	73.60	2.57	1.02	24.60
154	100	5.26	0.60	1.79	0.12	2.40	7.74	125.00	7.35	71.90	2.53	0.98	25.50
155	100	7.12	0.80	2.52	0.17	3.22	10.20	109.38	9.37	95.30	3.16	1.20	32.30
156	100	6.62	0.75	2.39	0.15	3.01	9.69	108.11	8.87	88.80	3.08	1.17	30.20

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