

Electronic Supplementary Information

Table I Measured isotope intensities (cps) of OPA extracted elements (¹⁶⁵Ho standardised)

Isotope	Blank (MilliQ)	Extract (MilliQ) Mean (n=3)	SD ^a	Blank (PW)	Extrakt (PW) Mean (n=3)	SD
7Li	603	161389	16943	792	405113	24826
9Be	51	242	24	95	140	9
11B	18320	2180895	231468	21631	1264237	45667
23Na	1878198	965008704	14301191	OL ^b	OL	OL
24Mg	437736	25016974	2560647	887613856	1189153263	23646373
27Al	29485	2752647	176571	39371	259148	28368
29Si	144150	1215451	74454	214892	930387	52477
31P	155347	2331508	60797	3938846	5029997	511517
33S	15751744	28107442	508722	26878468	34301627	1262692
39K	136297012	372335519	18858015	545289869	936479594	8737180
44Ca	89984	2199073	257131	110167379	145910721	1297564
45Sc ^c	139822	162265	732	130329	138865	1601
47Ti	752	30099	1657	763181	836505	37848
51V	1947	40282	11284	173912	258658	20315
52Cr	7480	28167	2591	25569	35180	1777
55Mn	83553	205773	4148	121471	1716211	70878
56Fe	1339886	2186565	130141	1928970	2686431	281454
59Co	380	2403	133	14102	102107	2712
60Ni	2766	3540	1396	22727	45952	2601
65Cu	2339	3051	424	6980	8098	503
66Zn	12516	15007	2390	9896	9840	759
69Ga	253	3395	228	857	14821	482
72Ge	450	772	59	2169	2372	50
75As	2793	7072	393	12992	13379	647
81Br	6015	28402	2254	20630	42964	951
82Se	516	1216	104	590	1241	78
85Rb	752	56526	5396	771928	2457916	77682
88Sr	3666	2380347	248225	194254731	226398258	2772773
89Y	48	392	69	6100	8074	302
90Zr	236	735	46	440	332	21
93Nb	39	263	28	117	255	29
95Mo	1367	10164	2150	8966	6933	940
101Ru	33	76	3	735	999	84
103Rh	33	251	19	10174	13469	738
105Pd	168	816	84	51997	62217	1986
107Ag	387	155	11	1238	304	27
111Cd	2825	2254	62	1912	1667	103
115In	289	1668	835	987	386	109
118Sn	555	544	68	645	390	89
121Sb	152	1387	42	190	815	86
125Te	34	40	11	147	160	12
127I	1536	6997	706	1932	7324	750
133Cs	363	908	207	512	3043	95
137Ba	558	6632	443	1416	60458	969
139La	331	839	68	3514	384	18
140Ce	50	446	159	577	146	35
141Pr	43	170	32	192	83	13
146Nd	25	75	15	97	74	3
147Sm	34	48	7	27	65	6
153Eu	27	62	11	70	224	14

157Gd	22	47	8	54	75	10
159Tb	22	42	7	52	72	12
163Dy	26	48	10	55	81	19
165Ho ^d	100000	100000	-	100000	100000	-
166Er	43	47	14	57	74	7
169Tm	27	44	4	57	61	16
172Yb	26	38	6	55	78	9
175Lu	41	34	8	55	65	16
178Hf	33	65	17	69	61	7
181Ta	629	3400	261	738	1125	151
182W	118	23278	2379	117	4721	82
185Re	31	2613	306	75	710	22
189Os	37	29	11	49	65	9
193Ir	22	45	7	35	60	19
195Pt	35	42	9	46	50	13
197Au	51	91	14	72	74	11
202Hg	77	351	26	150	191	52
205Tl	113	192	26	455	616	66
208Pb	1429	1536	140	2647	975	30
209Bi	110	147	10	107	126	33
232Th	34	86	13	42	83	16
238U	69	2978	305	171	6063	147
239Pu	22	30	5	32	64	14

^a SD = Standard deviation (n=3), ^b OL = over detection limit, ^c 45Sc: Sample spike, ^d 165Ho: Int. STD (10 ppb = 100000 cps)
