

**Rim-to-rim EMPA (top values) and LA-ICP-MS (bottom values)
measurements (µg/g) of representative corundum samples**

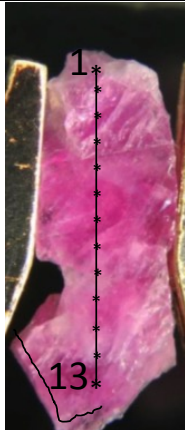
Occur- rence	Picture of samples with location of spots	Habit	Spacing of spots	Nº of spot	Ti	V	Ga	Fe	Cr	Mg
Luc Yen, Vietnam	 Plate c axis, magnified 6x	Elongate-prismatic with <i>z</i> , <i>n</i> , <i>c</i> and <i>r</i> faces	930 µm	1	bdl ¹	bdl	bdl	72	1182	bdl
				22	34	75		1240	13	
				2	bdl	bdl	bdl	bdl	1048	bdl
					bdl	30	92		880	19
				3	bdl	bdl	bdl	bdl	1128	bdl
					427	91	109		983	bdl
				4	bdl	bdl	bdl	bdl	1143	bdl
					281	58	77		836	18
				5	bdl	bdl	bdl	bdl	1777	bdl
					bdl	40	74		1519	bdl
				6	bdl	bdl	bdl	bdl	1841	bdl
					bdl	44	83		1532	20
				7	bdl	dbl	bdl	bdl	1651	bdl
			71	45	78		1492	bdl		
	8		bdl	bdl	bdl	85	1913	bdl		
			27	48	66		1949	257		
	9		bdl	bdl	bdl	bdl	1904	bdl		
			bdl	42	67		1367	bdl		
	10		84	bdl	bdl	bdl	1253	bdl		
			654	98	93		1455	35		
	11		bdl	bdl	bdl	bdl	1069	bdl		
			553	86	88		1367	40		
	12		bdl	bdl	bdl	bdl	1856	bdl		
			136	79	85		1639	bdl		
	13		bdl	bdl	bdl	bdl	1149	bdl		
										</

Table 1 contd

¹ bdl -measurement below the detection limit

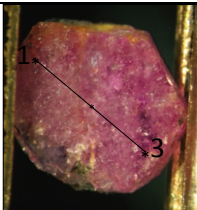
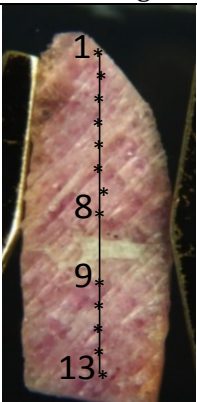
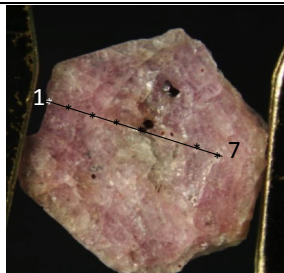
Occur- rence	Picture of samples with location of spots	Habit	Spacing of spots	Nº of spot	Ti	V	Ga	Fe	Cr	Mg				
Luc Yen (secondary), Vietnam			1080 µm	6	bdl	bdl	bdl	230	4055	bdl				
					40	48	69		1803	18				
				7	bdl	bdl	bdl	131	1235	bdl				
					54	45	68		1974	22				
				8	bdl	bdl	bdl	227	2454	bdl				
					bdl	44	69		1352	32				
				9	bdl	bdl	bdl	186	3369	bdl				
					-	-	-	-	-	-				
				1	bdl	bdl	bdl	bdl	774	bdl				
					36	26	76		559	16				
Morogoro, Tanzania		Elongate dipyramidal with c and ω faces	870 µm	2	bdl	bdl	bdl	125	1052	bdl				
					-	-	-	-	-	-				
				3	bdl	bdl	174	148	4451	bdl				
					-	-	-	-	-	-				
				1	bdl	bdl	bdl	431	788	bdl				
					40	47	91		787	38				
				2	bdl	bdl	bdl	468	749	bdl				
					59	45	96		850	46				
				3	bdl	bdl	bdl	473	1040	bdl				
					188	45	109		756	31				
				4	bdl	bdl	bdl	486	778	bdl				
					77	48	99		744	28				
				5	bdl	bdl	bdl	476	1017	bdl				
					1908	55	102		693	19				
				6	bdl	bdl	bdl	620	883	bdl				
					61	46	108		645	46				
				7	bdl	bdl	bdl	665	896	bdl				
					59	50	105		775	39				
				8	bdl	bdl	bdl	729	940	bdl				
					90	47	106		755	40				
				9	bdl	bdl	bdl	691	1084	bdl				
					78	40	89		806	61				
				10	bdl	bdl	bdl	690	944	bdl				
					62	41	100		718	64				
				11	bdl	bdl	bdl	511	924	bdl				
					76	49	112		1179	88				
				12	bdl	bdl	bdl	393	855	bdl				
					64	46	96		697	56				
				13	bdl	bdl	bdl	531	910	bdl				
					106	52	91		834	36				
							860 µm	1	bdl	bdl	bdl	669	649	bdl
									44	44	102		628	23
								2	bdl	bdl	bdl	623	809	bdl
									32	39	94		769	30
								3	bdl	bdl	bdl	592	926	bdl
									33	42	106		709	51
								4	bdl	bdl	bdl	484	687	bdl
									62	37	92		609	29

Table 1 contd

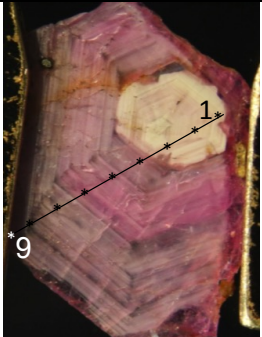
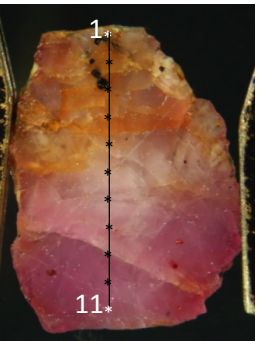
Occur- rence	Picture of samples with location of spots	Habit	Spacing of spots	Nº of spot	Ti	V	Ga	Fe	Cr	Mg	
Gitonga pit, Kenya	 Plate ⊥ c axis, magnified 10x	Rim is elongate-prismatic with <i>z</i> , <i>ω</i> , <i>n</i> , <i>c</i> and <i>r</i> faces, core and intermediate area are dipyrarnidal	820 μm	5	bdl	bdl	bdl	639	753	bdl	
					40	39	101		646	29	
				 Plate c axis, magnified 8x	6	bdl	bdl	bdl	653	872	bdl
						bdl	38	93		585	25
					7	bdl	bdl	bdl	557	706	bdl
						40	36	97		586	32
					1	540	bdl	266	bdl	793	bdl
						611	14	226		1002	63
					2	251	bdl	319	bdl	803	bdl
						4160	26	273		629	402
	3		bdl		bdl	333	bdl	539	bdl		
			990		21	219		397	88		
	4		bdl	bdl	379	bdl	1333	bdl			
			887	14	230		830	170			
	5		bdl	bdl	282	bdl	3080	bdl			
			349	17	228		1713	170			
	6		bdl	bdl	321	bdl	3767	bdl			
			383	20	242		2117	130			
	7		212	bdl	256	bdl	1166	bdl			
			461	13	215		1068	136			
8	bdl	bdl	277	bdl	1446	bdl					
	338	13	224		1298	124					
9	bdl	bdl	204	bdl	2786	bdl					
		129	14	134		1946	155				
		870μm	1	bdl	bdl	289	bdl	558	bdl		
				811	17	279		476	136		
			2	bdl	bdl	175	122	346	bdl		
				743	15	251		331	86		
			3	487	bdl	484	135	570	bdl		
				784	19	290		422	143		
			4	bdl	bdl	318	bdl	495	bdl		
				1334	18	271		426	173		
			5	bdl	bdl	259	bdl	441	bdl		
				1039	16	240		282	212		
			6	bdl	bdl	257	bdl	385	bdl		
				886	14	243		336	145		
			7	bdl	bdl	344	bdl	664	bdl		
				610	17	276		348	99		
			8	bdl	bdl	284	bdl	523	bdl		
				762	14	231		378	576		
			9	bdl	bdl	183	bdl	913	bdl		
				201	14	231		475	89		
			10	bdl	bdl	270	bdl	827	bdl		
					928	16	247		742	171	

Table 1 contd

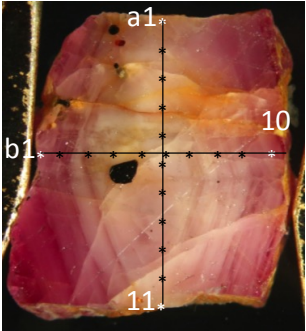
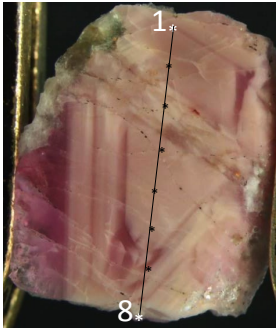
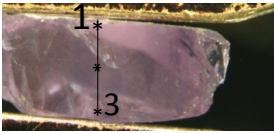
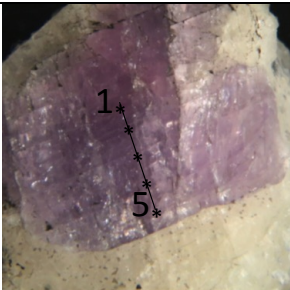
Occurrence	Picture of samples with location of spots	Habit	Spacing of spots	No of spot	Ti	V	Ga	Fe	Cr	Mg
Gitonga pit, Kenya	 <p>Plate c axis, magnified 8x</p>	Rim is elongate-prismatic with <i>z</i> , ω , <i>n</i> , <i>c</i> and <i>r</i> faces, core and intermediate area are dipyramidal	870 μm	11	bdl	bdl	236	bdl	931	bdl
					293	14	213		569	118
			830 μm – “a” profile by EMPA	1	bdl	bdl	319	bdl	533	bdl
				2	bdl	bdl	391	bdl	452	bdl
				3	bdl	bdl	316	bdl	572	bdl
				4	bdl	bdl	341	bdl	543	bdl
				5	bdl	bdl	263	bdl	454	bdl
				6	bdl	bdl	283	bdl	694	bdl
				7	bdl	bdl	373	bdl	bdl	bdl
				8	bdl	bdl	317	bdl	246	bdl
				9	bdl	bdl	294	bdl	429	bdl
				10	bdl	bdl	300	bdl	422	bdl
				11	bdl	bdl	162	109	405	bdl
			830 μm – “b” profile by LA-ICP-MS	1	137	9	187	-	1383	79
				2	494	16	240	-	870	307
				3	1210	14	251	-	344	188
				4	899	18	266	-	348	155
				5	862	15	257	-	215	283
				6	1323	17	275	-	322	267
				7	1693	16	254	-	249	122
				8	1441	18	282	-	478	338
				9	639	17	239	-	637	180
				10	248	11	205	-	1482	119
Aqua mine, Kenya	 <p>Plate c axis, magnified 12x</p>		800 μm	1	834	bdl	bdl	bdl	1378	bdl
					712	18	152		1206	160
				2	bdl	bdl	bdl	bdl	1439	bdl
					4965	35	210		1508	374
				3	160	bdl	236	bdl	1106	bdl
					3128	36	185		1041	141
				4	bdl	bdl	333	105	1253	bdl
					2128	27	203		823	114
				5	bdl	bdl	251	bdl	918	bdl
					6876	30	212		912	698
				6	1995	bdl	275	bdl	1654	bdl
					1593	29	195		1125	41
				7	bdl	bdl	203	bdl	1286	bdl
					5266	31	215		976	815
				8	bdl	bdl	362	bdl	1003	bdl
					3228	27	187		1032	239
Andranondambo	 <p>Plate c axis, magnified 12x</p>	Rhombohedral for blue-violet crystals with <i>r</i> and <i>a</i> faces	1000 μm	1	bdl	bdl	bdl	2473	bdl	bdl
					148	9	29		243	75
				2	bdl	bdl	bdl	2621	bdl	bdl
					150	12	42		301	81
				3	bdl	bdl	bdl	2422	bdl	bdl
					290	10	24		607	71

Table 1 contd

Occur- rence	Picture of samples with location of spots	Habit	Spacing of spots	Nº of spot	Ti	V	Ga	Fe	Cr	Mg
Andranondambo, Madagascar	 <p>Plate \perp <i>r</i> face, magnified 2x</p>	intergrown with calcite	1100 μm	1	bdl	bdl	bdl	2738	332	bdl
					152	11	42		343	98
				2	bdl	bdl	bdl	2648	455	bdl
					165	10	38		315	111
				3	bdl	bdl	bdl	3014	330	bdl
					537	11	34		230	82
				4	bdl	bdl	bdl	2901	591	bdl
					88	7	32		149	60
				5	bdl	bdl	bdl	2532	223	bdl
					81	7	33		bdl	46