

Sample	Zircon grain	<sup>238</sup> U mol	<sup>238</sup> U 1s %	<sup>232</sup> Th mol	<sup>232</sup> Th 1s %	Th/U	<sup>4</sup> He mol	<sup>4</sup> He 1s %	Rs μm	L μm	W1 μm	W2 μm	H μm	Mass μg
fct	gf134fctz1	6.13E-12	0.32	3.45E-12	0.31	0.56	1.82E-13	0.31	39.99	188	66	58	27	2.70
	gf134fctz2	1.41E-11	0.10	7.72E-12	0.22	0.55	4.67E-13	0.25	59.07	260	102	85	40	8.30
	gf135fctz1	1.53E-11	0.39	9.19E-12	0.20	0.60	4.96E-13	0.24	58.23	354	101	75	43	10.49
	gf135fctz2	5.22E-12	0.28	3.22E-12	0.29	0.62	1.54E-13	0.25	52.69	202	86	86	38	5.20
	gf140fctz1	1.28E-11	0.44	7.01E-12	0.37	0.55	4.09E-13	0.24	56.39	242	96	83	39	7.01
	gf140fctz2	7.82E-12	0.26	4.38E-12	0.09	0.56	2.28E-13	0.23	60.35	228	102	96	53	7.17
aft02	<b>aft02z1</b>	<b>4.18E-12</b>	<b>0.54</b>	<b>4.15E-13</b>	<b>1.56</b>	<b>0.10</b>	<b>5.40E-13</b>	<b>0.23</b>	<b>38.42</b>	<b>150</b>	<b>66</b>	<b>59</b>	<b>23</b>	<b>2.15</b>
	<b>aft02z2</b>	<b>4.35E-12</b>	<b>0.33</b>	<b>5.78E-13</b>	<b>1.04</b>	<b>0.13</b>	<b>6.87E-13</b>	<b>0.24</b>	<b>42.12</b>	<b>153</b>	<b>71</b>	<b>70</b>	<b>36</b>	<b>2.40</b>
	<b>aft02z4</b>	<b>4.37E-12</b>	<b>0.33</b>	<b>8.13E-13</b>	<b>0.75</b>	<b>0.19</b>	<b>6.94E-13</b>	<b>0.24</b>	<b>47.22</b>	<b>203</b>	<b>85</b>	<b>66</b>	<b>49</b>	<b>3.61</b>
	<b>aft02z5</b>	<b>2.59E-12</b>	<b>0.58</b>	<b>4.30E-13</b>	<b>1.52</b>	<b>0.17</b>	<b>4.61E-13</b>	<b>0.24</b>	<b>33.96</b>	<b>140</b>	<b>59</b>	<b>50</b>	<b>30</b>	<b>1.38</b>
aft03	aft03z1	2.96E-11	0.22	1.69E-10	0.40	5.71	1.89E-11	0.83	34.90	119	64	56	32	1.27
	aft03z2	1.74E-11	0.08	8.78E-11	0.26	5.03	1.08E-11	0.86	56.68	247	108	76	52	6.85
	aft03z3	4.13E-11	0.27	1.25E-10	0.19	3.03	1.81E-11	1.11	35.61	129	62	57	14	1.80
	aft03z6	1.39E-13	13.97	7.38E-14	2.73	0.53	5.88E-14	0.25	83.49	562	144	106	48	35.39
aft05	<b>aft05z1</b>	<b>4.73E-12</b>	<b>0.55</b>	<b>8.21E-13</b>	<b>1.27</b>	<b>0.17</b>	<b>1.40E-12</b>	<b>1.32</b>	<b>40.01</b>	<b>173</b>	<b>64</b>	<b>62</b>	<b>43</b>	<b>2.14</b>
	<b>aft05z2</b>	<b>3.20E-12</b>	<b>0.46</b>	<b>9.33E-13</b>	<b>0.78</b>	<b>0.29</b>	<b>8.65E-13</b>	<b>1.10</b>	<b>39.15</b>	<b>173</b>	<b>72</b>	<b>54</b>	<b>37</b>	<b>2.23</b>
	<b>aft05z5</b>	<b>3.15E-12</b>	<b>0.53</b>	<b>5.71E-13</b>	<b>1.08</b>	<b>0.18</b>	<b>7.59E-13</b>	<b>0.24</b>	<b>39.52</b>	<b>196</b>	<b>63</b>	<b>58</b>	<b>21</b>	<b>2.85</b>
	<b>aft05dkzr1</b>	<b>3.82E-12</b>	<b>0.54</b>	<b>1.96E-12</b>	<b>0.40</b>	<b>0.51</b>	<b>1.03E-12</b>	<b>0.25</b>	<b>41.47</b>	<b>180</b>	<b>70</b>	<b>61</b>	<b>50</b>	<b>2.25</b>
	<b>aft05dkzr2</b>	<b>4.32E-12</b>	<b>0.64</b>	<b>1.35E-12</b>	<b>0.74</b>	<b>0.31</b>	<b>1.12E-12</b>	<b>0.24</b>	<b>39.97</b>	<b>175</b>	<b>65</b>	<b>60</b>	<b>44</b>	<b>2.14</b>
	<b>aft05dkzr3</b>	<b>3.58E-12</b>	<b>0.54</b>	<b>4.92E-13</b>	<b>0.55</b>	<b>0.14</b>	<b>9.92E-13</b>	<b>0.24</b>	<b>37.97</b>	<b>144</b>	<b>66</b>	<b>59</b>	<b>37</b>	<b>1.71</b>
aft06	<b>aft05dkzr4</b>	<b>5.79E-12</b>	<b>0.39</b>	<b>1.09E-12</b>	<b>0.20</b>	<b>0.19</b>	<b>1.53E-12</b>	<b>1.40</b>	<b>42.94</b>	<b>187</b>	<b>69</b>	<b>66</b>	<b>45</b>	<b>2.69</b>
	aft06z1	1.66E-11	0.23	1.82E-12	0.37	0.11	4.76E-12	1.18	64.36	262	111	96	67	8.55
	aft06z2	9.74E-12	0.15	3.26E-12	0.40	0.33	3.23E-12	1.41	65.29	246	108	106	55	9.20
	aft06z3	4.84E-12	0.33	1.44E-12	0.43	0.30	1.61E-12	1.43	53.28	195	89	88	62	4.08
	aft06z4	1.63E-12	0.85	2.25E-13	2.76	0.14	5.03E-13	0.23	37.57	150	62	59	35	1.74
	aft06z5	2.31E-12	0.66	4.58E-13	1.44	0.20	5.42E-13	0.23	39.96	159	73	58	35	2.21
aft07	<b>aft07z1</b>	<b>3.60E-12</b>	<b>0.51</b>	<b>7.54E-13</b>	<b>0.96</b>	<b>0.21</b>	<b>7.35E-13</b>	<b>0.24</b>	<b>40.98</b>	<b>148</b>	<b>70</b>	<b>67</b>	<b>30</b>	<b>2.33</b>
	<b>aft07z2</b>	<b>3.99E-12</b>	<b>0.39</b>	<b>6.97E-13</b>	<b>0.87</b>	<b>0.17</b>	<b>8.40E-13</b>	<b>1.38</b>	<b>41.59</b>	<b>148</b>	<b>73</b>	<b>67</b>	<b>37</b>	<b>2.24</b>

aft08	aft07z3	2.71E-12	0.61	6.67E-13	0.90	0.25	6.34E-13	0.24	39.83	147	69	63	39	1.92
	aft07z4	2.14E-12	0.71	3.69E-13	1.73	0.17	5.20E-13	0.24	36.84	123	64	63	33	1.48
	aft07z5	4.01E-12	0.42	7.48E-13	0.88	0.19	1.08E-12	1.22	43.52	157	77	69	29	2.91
	aft07dkzr1	5.68E-12	0.38	1.47E-12	0.19	0.26	1.51E-12	1.45	40.85	246	62	59	40	3.27
	aft07dkzr2	5.23E-12	0.41	1.91E-12	0.23	0.37	1.42E-12	1.76	46.02	158	103	66	37	3.44
	aft07dkzr3	7.22E-12	0.42	2.08E-12	0.21	0.29	1.53E-12	2.03	39.70	142	69	64	31	2.07
	aft07dkzr4	1.40E-11	0.32	2.80E-12	0.18	0.20	2.31E-12	1.48	41.83	191	66	64	29	2.98
	aft07dkzr5	1.38E-11	0.24	3.01E-12	0.17	0.22	2.65E-12	1.68	43.04	184	69	66	34	2.96
	aft07dkzr6	5.37E-12	0.43	1.11E-12	0.56	0.21	1.18E-12	0.23	39.11	169	63	60	26	2.37
	aft08z1	1.53E-12	0.89	8.02E-13	0.81	0.53	4.41E-13	0.23	39.06	163	64	61	24	2.35
	aft08z2	3.46E-12	0.51	3.02E-12	0.26	0.87	1.10E-12	0.22	40.71	138	72	68	29	2.26
	aft08z3	3.29E-12	0.46	2.30E-12	0.39	0.70	9.64E-13	0.24	39.02	148	64	64	30	2.05
	aft08z4	2.00E-12	0.78	1.86E-12	0.40	0.93	6.53E-13	0.24	36.32	138	61	58	29	1.63

eU	Ft	Ft Age	Ft Age	Average	Average
ppm		Ma	1s Ma	Age Ma	Age 1s Ma / %
614	0.71	28.6	0.09	27.21	1.54
457	0.80	28.5	0.07		5.66
398	0.80	27.7	0.07		
274	0.78	25.8	0.06		
491	0.79	27.9	0.07		
295	0.80	24.8	0.06		
<b>476</b>	<b>0.71</b>	<b>135.8</b>	<b>0.32</b>	<b>158.78</b>	<b>21.23</b>
<b>448</b>	<b>0.73</b>	<b>159.3</b>	<b>0.39</b>		13.37
<b>303</b>	<b>0.76</b>	<b>187.0</b>	<b>3.46</b>		
<b>469</b>	<b>0.67</b>	<b>153.0</b>	<b>0.37</b>		
12843	0.65	193.5	0.46	274.50	56.82
1310	0.77	324.5	2.75		20.70
9293	0.66	281.3	2.46		
1.06	0.86	298.6	3.38		
<b>552</b>	<b>0.72</b>	<b>297.6</b>	<b>4.03</b>	<b>266.97</b>	<b>19.01</b>
<b>366</b>	<b>0.71</b>	<b>269.8</b>	<b>3.04</b>		7.12
<b>276</b>	<b>0.72</b>	<b>244.9</b>	<b>0.61</b>		
<b>454</b>	<b>0.72</b>	<b>253.5</b>	<b>0.64</b>		
<b>519</b>	<b>0.72</b>	<b>256.7</b>	<b>0.64</b>		
<b>518</b>	<b>0.71</b>	<b>286.8</b>	<b>0.71</b>		
<b>538</b>	<b>0.74</b>	<b>259.3</b>	<b>3.71</b>		
477	0.82	257.4	3.11	279.24	33.20
273	0.82	282.9	4.08		11.89
304	0.78	299.2	4.39		
231	0.70	320.3	0.77		
262	0.72	236.4	0.57		
<b>389</b>	<b>0.72</b>	<b>204.3</b>	<b>0.50</b>	<b>224.45</b>	<b>32.03</b>
<b>444</b>	<b>0.73</b>	<b>210.8</b>	<b>2.96</b>		14.27

358	0.72	234.0	0.57		
361	0.70	253.3	0.62		
344	0.74	263.0	3.28		
441	0.72	262.2	3.89		
395	0.75	253.7	4.57		
890	0.71	210.8	4.36		
1179	0.73	164.9	2.47		
1170	0.74	189.3	3.24		
569	0.71	222.7	0.52		
175	0.70	276.6	0.66	282.71	12.29
441	0.71	281.5	0.63		4.35
447	0.70	272.4	0.67		
355	0.68	300.3	0.73		