

APPENDIX 1

The range and average heavy mineral content (vol.%) of the gold-bearing samples in the representative grain sizes

Sampling site/number of samples (n)	Minerals	Grain size range: 63–125 µm			Grain size range: 126–250 µm		
		Minimum	Average	Maximum	Minimum	Average	Maximum
Zimnik Creek (45)	Fe-Ti oxides ¹	8.7	63.5	74.7	12.0	58.6	70.2
	Fe-oxyhydroxides ²	12.9	15.8	25.4	15.9	19.7	27.7
	zircon	2.0	3.1	12.1	1.3	4.7	6.6
	rutile	1.5	3.4	6.1	+	3.1	4.3
	apatite	2.3	7.3	13.8	+	4.3	7.9
	cinnabar	+	1.7	2.6	+	1.2	2.0
	others ³	3.1	5.2	10.2	3.8	12.6	18.5
Golden Creek (10)	Fe-Ti oxides ¹	7.9	59.7	73.9	14.0	59.4	73.8
	Fe-oxyhydroxides ²	10.9	25.1	28.1	14.2	16.9	29.1
	zircon	1.5	2.4	6.5	1.1	2.3	3.2
	rutile	1.2	1.4	6.1	+	2.3	3.6
	apatite	+	2.3	8.2	+	2.9	6.7
	cinnabar	+	1.2	1.8	+	+	+
	others ³	3.4	7.9	11.6	2.1	11.4	16.6

¹ – magnetite, magnetite-hematite, magnetite-ilmenite or magnetite-martite polyphase grains, ilmenite, hematite

² – goethite and limonite (unidentified massive iron hydroxides and oxides with no visible crystals)

³ – garnets, epidote, amphiboles, pyroxenes, monazite, kyanite, tourmaline, andalusite, sillimanite and topaz; + mineral content is <1 vol.%