

RESULTS

TABLE 1. PETROLOGICAL SUMMARY

Sample	Comments	Lithology and Replacement	Deposition
26014.01 0462/30-33	A penetrative strain fabric has overprinted the peak metamorphic replacement assemblage (predominantly thermal in nature), including micro-porphyroblasts and quartz veining.	(1) Silty (lithic/feldspathic ?) quartz arenite (2) dolerite -quartz, muscovite, biotite, ?Al-silicates -sericite/muscovite -hematite, hydrated Fe-oxides, kaolin/smectite clays	-(veinlet) quartz, pyrite; quartz -(veinlet/cement) hematite, hydrated Fe-oxides
26014.02 0464/30-31	A peak metamorphic replacement assemblage is not resolvable beneath a pervasive supergene hematite and hydrated Fe-oxide replacement assemblage.	Silty (feldspathic/lithic) quartz arenite -quartz, mica minerals -hematite, hydrated Fe-oxides, kaolin/smectite clays; native gold	-(vein/veinlet/cement) quartz, sulphides, muscovite, biotite (→ chlorite → hematite); quartz -(veinlet/cement) hematite; native gold
26014.03 0464/31-32	A significant metasomatic/pneumatolytic component to peak metamorphism is evidenced by an abundance of genetically related secondary tourmaline (CF Old Pirate).	Silty mudstone -quartz, muscovite, biotite, tourmaline, rutile -muscovite/sericite, chlorite -smectite/kaolin clays, hematite, hydrated Fe-oxides	-(vein/cement) quartz; quartz -(veinlet/vein) hematite, hydrated Fe-oxides
26014.04 0464/32-34	Locally abundant biotite and tourmaline within the peak metamorphic replacement of the primary mudstone is perhaps a function of both primary compositional variation and metasomatism.	Silty mudstone -muscovite, quartz, biotite, tourmaline, rutile -chlorite, sericite/muscovite -hematite, kaolin/smectite clays, hydrated Fe-oxides	-(vein) quartz; quartz
26014.05 0465/4704 8	Early quartz + arsenopyrite veining is strongly deformed, plastically initially but in a brittle form later. Early brittle fracturing is cemented with carbonate and later still brittle fracturing with (type B) quartz.	Silty mudstone and siltstone -quartz, muscovite, biotite, Al-silicates, arsenopyrite -chlorite, sericite/muscovite, ?carbonate -smectite/kaolin clays, hematite, hydrated Fe-oxides	-(vein/cement) quartz, sphene/rutile, apatite, pyrite, arsenopyrite; quartz -(vein/cement) quartz, carbonate, sulphides (→ hematite); quartz -(veinlet) quartz, sericite
26014.06 0465/48-51	A supergene gold association occurs in close spatial association with early (type A) quartz veining, some post-dating early supergene hematite and quartz formation.	Silty (lithic/feldspathic) quartz arenite and silty mudstone -quartz, muscovite, tourmaline, biotite -muscovite/sericite, chlorite -hematite, hydrated Fe-oxides	-(vein/veinlet) quartz; quartz -(vein/veinlet/cement) hematite, hydrated Fe-oxides, quartz, native gold -(veinlet/cavity) native gold
26014.07 0465/51-54	Relatively fine-grained sericite/muscovite is associated with the strain overprint, and having formed after detrital feldspar apparently in equilibrium with the peak metamorphic replacement.	Feldspathic lithic quartz arenite -quartz, muscovite, biotite, tourmaline, rutile, pyrrhotite -sericite/muscovite -hematite, hydrated Fe-oxides, quartz; native gold	-(vein/veinlet) quartz; quartz -(vein/cement) quartz, carbonate (→ hematite, quartz) -(veinlet/cement) hematite, quartz, native gold -(veinlet/cavity) native gold