

Cameco Australia Pty. Ltd.
Beatrice Project EL 24291 - Sample thin section analysis
Beatrice Project EL 26796

Sample number	Formation	Rock type	Field Description	Report
C010021	Pdo	Dolerite	Granite: clay-altered fine-grained granite: sericite alteration? 4500 cps	Plagioclase-porphyritic dolerite with minor oxidation and alteration to sericite-limonite-leucoxene. (Undeformed and possibly Oenpelli Dolerite).
C010036	Pxn	Granite	Granite? Extremely hematized granite: 4800 cps	Heterogeneous mass of partly porous sericite/illite-limonite of uncertain origin, but apparently quartz-free. Incorporates scattered subhedral goethite-zoned replicas after (oxidised pyrite).
C010040	Pxn	Granite Gneiss	Fine-grained granite, sericitised, extremely weathered? 1200 cps	Massive limonite-stained clay-sericite with residuals of small elongate quartz grains. Interpreted as an altered fine to medium-grained granitoid gneiss. Local quartz-sericite vein.
C010201	Pxn	Quartz Breccia	Quartz breccia and granite: unknown black mineral in veins: 215 cps	Breccia with sub-rounded clasts of low-temperature hydrothermal quartz ± sericite within minor limonitic matrix of microcrystalline quartz ± limonite, including minor limonitic boxwork possibly derived from altered possible arsenopyrite and/or pyrite. Quartz veins and lenses locally containing tourmaline.
C010203	Pxn	Quartz Breccia	Quartz breccia and vein, moderate disseminated hematite, from the Beatrice prospect: 180 cps	Complex breccia with fragments of sericite-quartz-hematite-leucoxene alteration in contact with areas of coarser prismatic quartz ± interstitial sericite. Also veins of columnar quartz partly nucleated on lenses and small patches of sericite and/or fine-grained quartz.
C010209	Pxn	Gneiss	Coarse-grained weakly foliated granite from the Beatrice prospect; large phenocrysts of plagioclase to 20mm: 220 cps	Weakly altered biotite-hornblende tonalite gneiss with albite-sericite-prehnite-epidote-clay alteration.
C010221	Pxn	Granite	Hematized granite from the Beatrice prospect: 180 cps	Sericite-quartz-clay-limonite-altered granitoid gneiss partly with greisen-like alteration.
C010230	Pxn	Granite	Quartz breccia and sericitised granite, silicified: 170 cps	Interpreted as silicified and sericitised leucocratic granitoid. Cut by a quartz vein containing hematite and limonite. Weak radioactivity detected in the off-cut.
C010248	Phe	Sandstone	Sandstone: hematized fine-grained sandstone from the Violet prospect: 120 cps	Coarse-grained and quartz-rich sandstone, with mostly sutured grain boundaries, and sparse interstitial sericite/limonite.
C010259	Phe	Sandstone	Brecciated sandstone with uranium minerals: 30,000 cps	Sandstone with disseminated fine to coarser quartz sand grains, also scattered patches of quartz within heterogeneous quartz-sericite 'matrix', including disseminated minor limonite, leucoxene and anatase. Some limonite and sericite as local stylolites. No uranium minerals identified petrographically, and radioactivity was not detected by scintillometer. (Further sections or sub-samples, plus autoradiographs seem to be required to establish the source of this reported high radioactivity.)