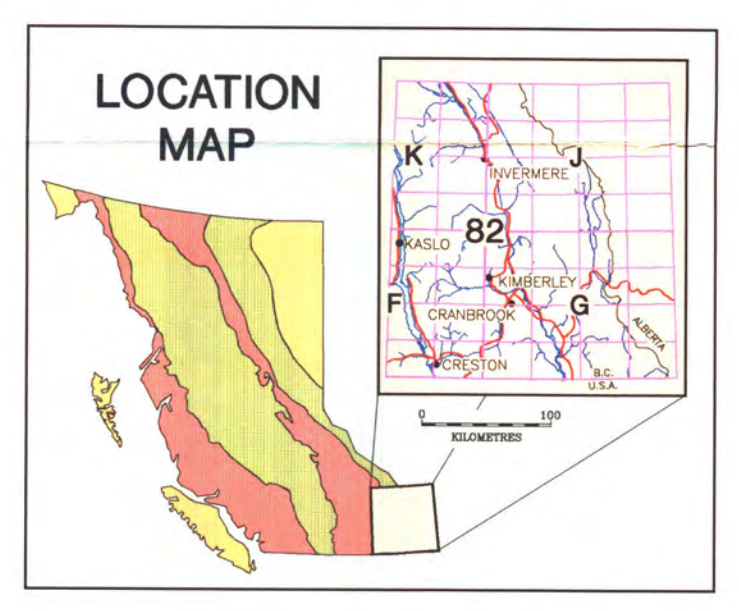
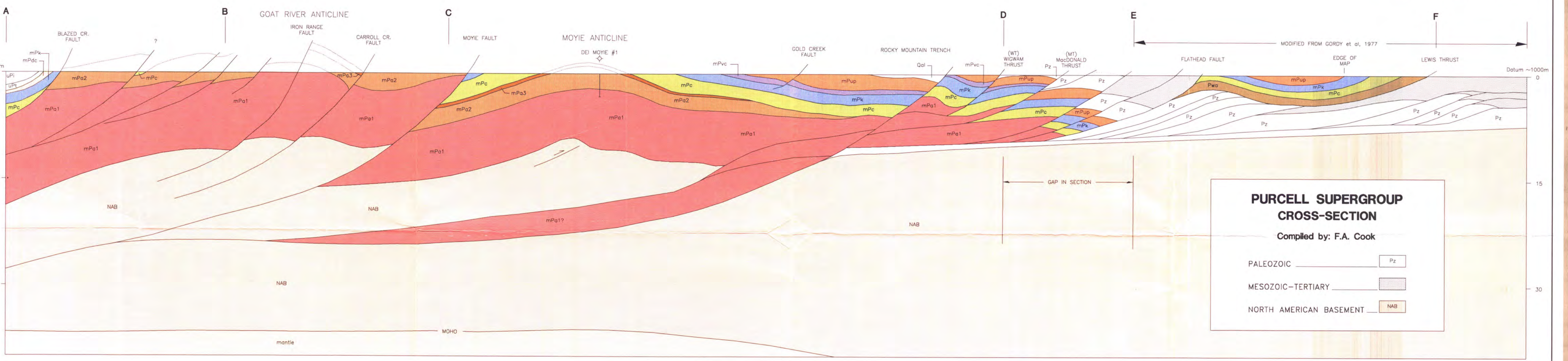


- INTRUSIVE ROCKS**
- Kg** monzonite, commonly porphyritic, quartz monzonite, granodiorite
 - Pmi** Moya intrusions: diorite
- LAYERED ROCKS**
- PURCELL SUPERGROUP**
- Mount Nelson Formation** (mPnn) quartzite, white and green; dolomite, silty dolomite, argillaceous siltstone
 - Dutch Creek Formation** (mPdc) upper: siltstone, argillite, quartzite, dolomite; lower: argillite, argillaceous siltstone, thin layers of dolomite, gnd/or quartzite
 - Nicol Creek, Sheppard, Gateway, Phillips, Rossville Formations** (correlative with Dutch Creek)
 - mPup** Rossville Formation: green siltstone and argillite; stratolite and oolitic dolomite; quartz arenite; Phillips Formation: maroon micaceous siltstone, quartz wacke and argillite; Gateway Formation: dolomite, quartz wacke, siltstone and argillite; stratolite & oolitic near base; Sheppard Formation: sandstone and conglomerate; stratolite and oolitic dolomite; Nicol Creek Formation (mPnc): basaltic to andesitic lava flows; tuffaceous sandstone, siltstone
 - Van Creek Formation (= top of Snye Formation in Rocky Mountains)**
 - mPvc** green, massive laminated siltstone and quartz wacke
 - Kitchener Formation (= Snye Formation in Rocky Mountains)**
 - mPk** dolomitic siltstone, dolomitic argillite, dolomite, commonly buff-weathering argillite, siltstone, quartzite; green tinged dolomitic siltstone near base
 - Creighton Formation** (= Green and Spokan Formations in Rocky Mountains)
 - mPc** upper: green siltstone; black or purple argillite and siltstone; middle: grey siltstone; thick-bedded quartzite, white or or mauve tinged; black to dark purple argillite and siltstone; lower: dark argillite and siltstone; green siltstone
 - Alldridge Formation**
 - mPa** undivided
 - Alldridge Formation (Upper)**
 - mPa3** black argillite, silty argillite, siltstone laminae; typically rusty weathering
 - mPa2** grey quartzite, quartz wacke, commonly medium to thick bedded; interbeds of argillite and siltstone; typically grey to rusty weathering
 - mPa1** siltstone and quartzite, typically rusty weathering; interbeds of silty argillite, quartz wacke
 - Allyn, Waterton, Tomestone Mountain and Hald Brook Formations** (lateral equivalents of Alldridge Formation)
 - Pwa** argillaceous dolomite, dolomite, argillite, argillaceous limestone, limestone
 - Fort Steele Formation**
 - mPfl** white quartzite, grey argillaceous quartzite, argillite; grey to black dolomitic and calcareous argillite



CAUTION: This map is produced with non-waterproof inks. Exposure to moisture will damage the product.



PURCELL SUPERGROUP
CROSS-SECTION
 Compiled by: F.A. Cook

PALEOZOIC
 MESOZOIC-TERTIARY
 NORTH AMERICAN BASEMENT

LEGEND

- INTRUSIVE ROCKS**
- Kg** monzonite, commonly porphyritic, quartz monzonite, granodiorite
 - Pmi** Flathead intrusions: trachyte, syenite, breccia
- MIDDLE JURASSIC**
- mJc** porphyritic gneiss, granodiorite, monzonite, (mJg)
- MIDDLE PROTEROZOIC**
- mpc** Hellspring Creek Shale: coarse grained granodiorite, pegmatite, minor apfite
 - mpu** serpenitized ultramafic - age unknown
 - pmi** Moya intrusions: diorite
- QUATERNARY**
- Q** unconsolidated glacial till, sand and gravel
- TERTIARY**
- Ts** St. Eugene & Kitchener Formations: mudstone, marl, siltstone, sandstone, conglomerate and breccia
- UPPER CRETACEOUS**
- uc** Alberta Group and Belly River Formation: dark grey shale, siltstone, sandstone; light grey sandstone and mudstone
- LOWER CRETACEOUS**
- lc** Blairmore Group, Crownsnest Formation: variegated sandstone, mudstone, siltstone, conglomerate; trachyte agglomerate, tuffs, volcanic sandstone and mudstone in overlying Crownsnest Formation
- JURASSIC AND CRETACEOUS**
- jc** Kootenay Group: dark carbonaceous sandstone, siltstone and mudstone; coal, pebble and cobble conglomerate
- JURASSIC**
- Jc** Fensie Group: dark shale, siltstone and sandstone; limestone, gneissic sandstone and shale
 - Jp** Spry River Group: dolomitic and calcareous siltstone, massive orthoquartzite in upper part (Whitehorn Formation); grey, buff shale interbeds; they laminated buff dolomitic siltstone in lower part (Sulphur Mountain Formation)
- PERMIAN AND TRIASSIC**
- pt** Rocky Mountain Supergroup (Spray Lakes, Isabel Groups): from base to top: dolomitic siltstone; sandy dolomite; orthoquartzite and limestone; dark shale, phosphatic shale and chert
 - ms** Rundle Group (Etherington, Mount Head & Livingstone formations): grey limestone, cherty limestone, dolomite
 - mb** Banff and Exshaw formations: Banff: thin bedded, silty, laminated dolomite and limestone; cherty layers; Exshaw: carbonaceous platy shale, siltite
- UPPER DEVONIAN**
- ud** Upper Devonian shale unit (lateral equivalent to Palliser Formation and Fairbairn Group): dark grey shale, limestone and argillaceous limestone
 - ds** Palliser Formation: buff, yellow and grey, banded and nodular argillaceous limestone and dolomite; dark grey, fine crystalline limestone and dolomitic limestone
 - fa** Fairbairn Group (and Sassenach and Alsea formations): limestone, dolomite, platy and argillaceous; siltstone; orthoquartzite and laminated limestone; buff limestone with possible orthoquartzite
- MIDDLE DEVONIAN**
- cd** Cedarist, Burns and Harragatt formations: dolomite, sandstone, argillaceous dolomite and limestone, gypsum, shale (basal Devonian unit comprises sandstone, dolomite, mudstone, solution breccia, gypsum)
- UPPER ORDOVICIAN TO MIDDLE SILURIAN**
- sw** Beaverfoot, Mount Wilson, Gieniege formations
 - sws** Beaverfoot Formation (sws): dolomite with nodular chert, graphic shale; sandstone and conglomerate in lower part
 - swu** Mount Wilson Formation: quartzite and sandstone
 - swl** Gieniege Formation: graphic shale, siltstone, limestone
- ORDOVICIAN**
- sw** Mount Wilson, Sakai, Tipperary, Gieniege formations
 - swu** Mount Wilson Formation: quartzite, quartz sandstone
 - swl** Sakai Formation: dolomite, sandstone
 - swl** Tipperary Formation: quartzite, sandstone
 - swl** Gieniege Formation: graphic shale, siltstone, limestone, sandstone
- UPPER CAMBRIAN AND LOWER ORDOVICIAN**
- sw** Maddy Group
 - sw** Upper: limestone and shale with intraformational conglomerate
 - sw** Lower: shale, silty limestone, intraformational conglomerate
 - sw** Undivided: shale, limestone, dolomite, siltstone, argillaceous limestone, quartzite, quartz sandstone, sandstone
 - sw** Jubilee and Dittell formations
 - sw** Dittell (Dit): dark grey limestone and argillaceous limestone (Upper Cambrian)
- MIDDLE AND UPPER CAMBRIAN**
- sw** Charlton and Tanglefoot formations: silty limestone & dolomite, calcareous slate, breccia & conglomerate
 - sw** Flathead, Gordon, Edo & Windsor Mountain formations (lateral equivalents of Charlton and Tanglefoot formations)
 - sw** Flathead: quartz sandstone and pebble conglomerate; Gordon: green shale; Edo and Windsor Mountain: grey dolomite and black mottled dolomitic limestone
- LOWER CAMBRIAN**
- sw** Cog Group: sandstone and quartzite, siltstone
 - sw** Layer and Croonian formations
 - sw** Layer Formation (ca): shale, siltstone, limestone, quartzite; minor argillite
 - sw** Croonian Formation (ca): quartzite, limestone, magnesite; minor grit and quartz-pebble conglomerate
- LATE PROTEROZOIC**
- sw** Windermere Supergroup (undivided): mPw-basal
- HOBBSHURST CREEK GROUP, MLETTE GROUP**
- sw** Hobbshurst Creek Group: siltite, quartz pebble conglomerate; sandstone, siltstone, limestone
 - sw** Mlette Group: sandstone, slate, quartz pebble conglomerate
- TOBY FORMATION**
- sw** Conglomerate, siltstone, slate
- MIDDLE PROTEROZOIC**
- sw** Purcell Supergroup
- PURCELL SUPERGROUP**
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 - Fort Steele Formation**
 - mPfl** white quartzite, grey argillaceous quartzite, argillite; grey to black dolomitic and calcareous argillite
- WESTERN PURCELL AND BELKIRK MOUNTAINS**
- TRASSIC**
- sw** Shagan Formation: carbonaceous, argillite, slate
 - sw** Kasia Formation: mafic volcanics; serpenitine (Pkum)
- PERMIAN TO CARBONIFEROUS**
- sw** Mollat Formation: argillite, limestone, quartzite, dolomite
- UPPER MISSISSIPPIAN TO CYPRIAN**
- sw** Mount Foster & Starbird formations: shale, limestone, quartzite, greenstone
- CAMBRIAN TO DEVONIAN (?)**
- sw** Blairmore Group: metasedimentary rocks
 - sw** Blairmore Formation: limestone, phyllite, grit
 - sw** Juvett Formation: green phyllite, greenstone
 - sw** Tullane Formation: dark siliceous phyllite
 - sw** Alsea Formation: massive grey quartzite
 - sw** Sharon Creek Formation: dark siliceous phyllite
 - sw** Snye Formation: micaceous schist, impure marble
 - sw** Basford Formation (locally includes Mohokan): marble, dolomite, limestone
 - sw** Osa: Osa Formation
- UPPER PROTEROZOIC TO LOWER CAMBRIAN**
- sw** Hamel Group (Reno, Quartzite Range): quartzite
 - sw** Mares Adams and Mount Sabin formations: quartzite
- UPPER PROTEROZOIC**
- sw** Windermere Supergroup (undivided)
 - sw** Hellspring Creek Group (undivided): Three Sisters and Monk formations
 - sw** phyllite, quartzite; grt, marble
 - sw** Three Sisters Formation: grt, quartzite
 - sw** Monk Formation: phyllite, quartzite
 - sw** Irene Formation: greenstone
 - sw** Tully Formation: conglomerate
 - sw** Undifferentiated basal Windermere