Natural Resources Canada | Ressources naturelles Canada

GEOLOGICAL SURVEY OF CANADA | COMMISSION GÉOLOGIQUE DU CANADA

TGI3 Components

REFERENCES

Anderson, H. E. and Davis, D.W.
1995: U-Pb geochronology of the Moyie sills, Purcell Supergroup, southeastern British Columbia: implications for the Mesoproterozoic geological history of the Purcell (Belt) basin; *Canadian Journal of Earth Sciences*, volume 32, pages 1160-1193.

Brown, D.A.
1998: Geological compilation of the Yahk (East Half) and Yahk River (West Half) Map Areas, Southeastern British Columbia; *B.C. Ministry of Energy and Mines* , Geoscience Map 1998-2, scale 1:50 000.

Brown, D.A., Bradford, J.A., Stinson, P., Melville, D.M. and Stinson, P.
1995: Geology of the Yahk Map Area, Southeastern British Columbia; B.C. Ministry of Energy, Mines and Petroleum Resources, Open File 1995-14.

Cominco Ltd. Unpublished maps, internal reports, and memos.

Downie, C.C. and Anderson, D.
2005: Geological Report for the Iron Range Property, B.C. Ministry of Energy, Mines, and Petroleum Resources, ARIS Assessment Report 28078A, 43 p.

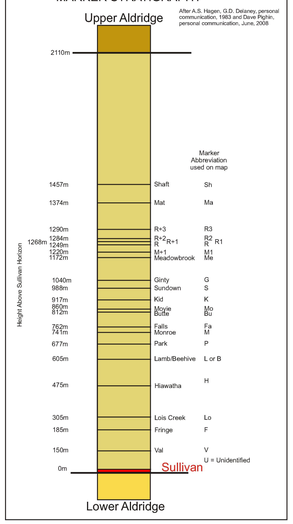
Gal, L. and Weidner, S.
1999a: Geological evaluation of the Kitchener South Property, B.C. Ministry of Energy, Mines, and Petroleum Resources, ARIS Assessment Report 26117, 47 p.

Gal, L. and Weidner, S.
1999b: Geological evaluation of the Kitchener North Property, B.C. Ministry of Energy, Mines, and Petroleum Resources, ARIS Assessment Report 26119, 52 p.

Reesor, J.E.
1996: Geology, Kootenay Lake, British Columbia; Geological Survey of Canada, Map 1864A, scale 1:100 000.

Van Andersen, P. and Nassichuk, B.
1997: Yahk Project Geology; Unpublished company map, Abitibi & Sedex Mining Corp

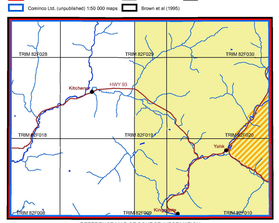
MIDDLE ALDRIDGE MARKER STRATIGRAPHY



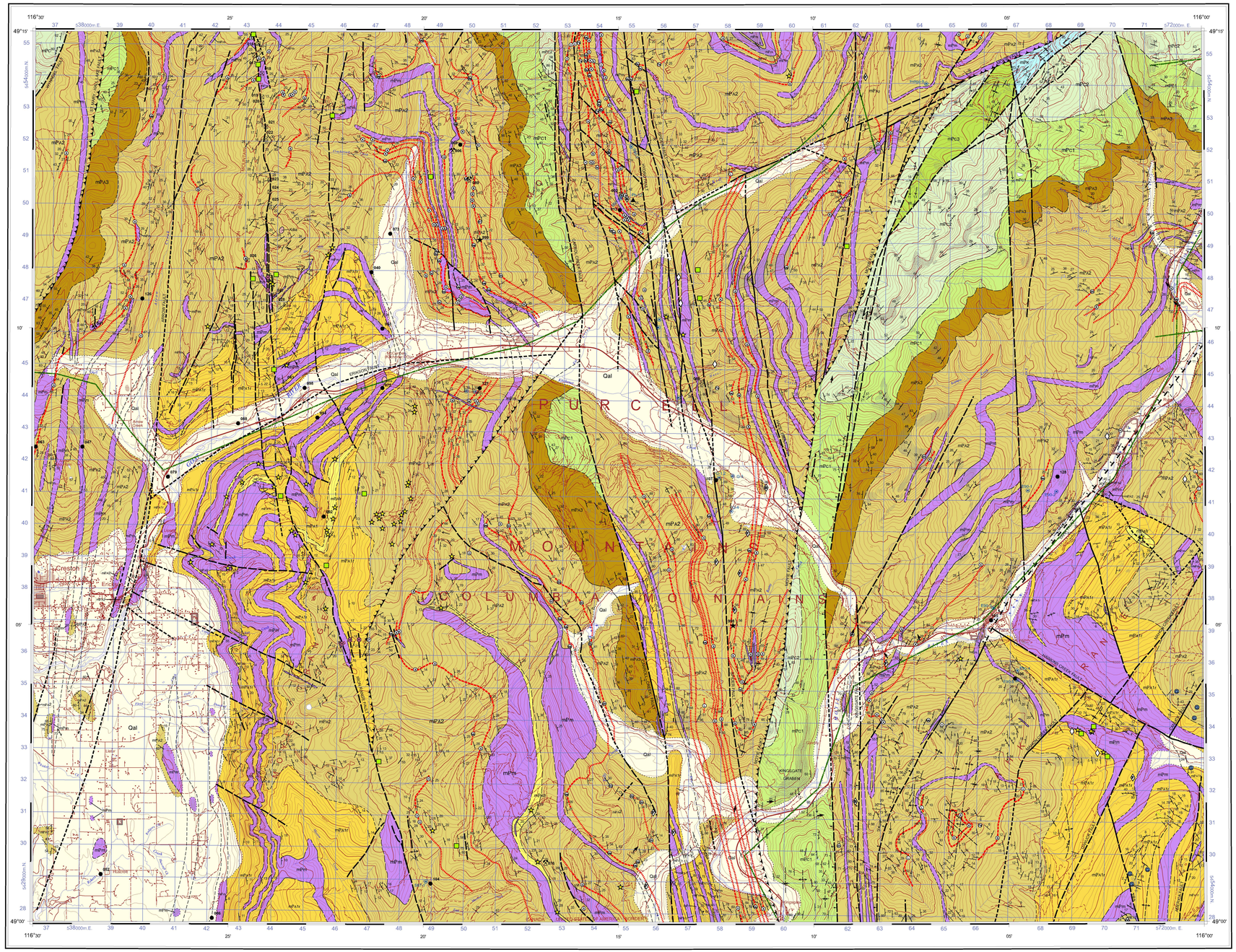
MINFILE TABLE

MINFILNO	NAME	STATUS	COMMODITIES
082FSE060	STAN	Prospect	ZN CU AGPB ZN CU AG
082FSE096	LEADVILLE	Past Producer	PB ZN CU AU AG PB ZN CU AU
082FSE013	KID 3	Showing	PB ZN AG PB ZN
082FSE018	AMERICAN FLAG (L.5767)	Prospect	FE
082FSE017	FLAG (L.5767)	Prospect	FE
082FSE077	MAPLE LEAF (L.5776)	Prospect	FE
082FSE078	KESTRAKE (L.5774)	Prospect	FE
082FSE020	RHODESIAN (L.5775)	Prospect	FE
082FSE021	LA GRANDE (L.5776)	Prospect	FE
082FSE022	CRACKER JACK (L.5778)	Prospect	FE
082FSE023	DAKOTA (L.5783)	Prospect	FE
082FSE024	EXPO (L.5784)	Prospect	FE
082FSE025	PACIFIC (L.5786)	Prospect	FE
082FSE026	ATLANTIC (L.5786)	Prospect	FE
082FSE027	NIAGARA	Prospect	FE
082FSE028	CONSTELLATION (L.5669)	Prospect	FE
082FSE040	EMPIRE STATE	Showing	CU W CU
082FSE041	VIRGINIA (L.7055)	Past Producer	AG ZN AU CU PB AG ZN AU CU
082FSE042	CRESTON HILL	Prospect	CU
082FSE043	MAYBEE	Prospect	AG AU CU AG AU
082FSE047	CITY OF SILVER	Showing	AG PB AG
082FSE062	SAM	Showing	CU
082FSE063	GOAT MOUNTAIN	Prospect	AU AG PBCU AU AG PB
082FSE065	ORTON	Prospect	AU WO AG YB ZN CU AU WO AG YB ZN
082FSE069	BLUE RAIN	Showing	CU AG CU
082FSE073	TIGAR 1	Showing	CU
082FSE075	SENAGAR1	Showing	CU
082FSE076	BLACKMORE	Past Producer	PB AG PB
082FSE079	LUCKY	Showing	TH
082FSE086	HAWK	Showing	AG AU CU AG AU
082FSE088	CRESTON CLAY	Showing	CU
082FSE089	CRESTON CLAY	Past Producer	PB ZN CU AG PB ZN CU
082FSE092	GREAT WAR	Showing	FE
082FSE093	SARAH	Showing	ZN AG PB ZN AG
082FSE094	KITCHENER-SULLIVAN	Showing	AG CU AU
082FSE098	CRESTON	Showing	CH
082FSE104	SHA	Showing	CU ZN CU
082FSE105	YAH	Showing	PB ZN AG PB ZN
082FSE106	ENG 2	Showing	CU AU AG CU AU
082FSE107	GOATFELL	Showing	ZN PB ZN
082FSE126	ENG 1	Showing	ZN PB ZN
082FSE127	SUN	Showing	AG ZN PB AG ZN
082FSE128	ENG 3	Showing	PB ZN PB
082FSE098	SHA SOUTH	Anomaly	ZN PB ZN
082FSE099	SHA NORTH	Anomaly	ZN PB ZN

Cominco Ltd. (unpublished) 1:20 000 maps
Cominco Ltd. (unpublished) 1:50 000 maps
Brown (1998)
Bowen et al (1995)
Van Andersen and Nassichuk (1997)



REFERENCE MAP OF SOURCE INFORMATION



LEGEND

Coloured legend blocks indicate map units that appear on this map.

LAYERED ROCKS
QUATERNARY
PLEISTOCENE TO RECENT

Qal — *Unconsolidated sediments: alluvium; colluvium; diamictite*

PROTEROZOIC
MIDDLE PROTEROZOIC
PURCELL SUPERGROUP
KITCHENER FORMATION

mPK — *Undivided meta-sedimentary rocks: thin-bedded, brown-weathering dolomitic siltstone and green argillite.*

mPK2 — *Dolomitic siltstone; dolomitic argillite; dolomite, commonly buff-weathering; argillite; siltstone; quartzite; green-tinged dolomitic siltstone near the base.*

mPK1 — *Green and beige siltstone; dark grey argillite; dolomitic siltstone.*

CRESTON FORMATION

mPC — *Undivided meta-sedimentary rocks: light grey, mauve, or green siltstone and argillite; thin to medium-bedded quartz arenite, quartz wacke; lenticular bedding, ripples, cross-bedding, and mudcracks occur locally.*

mPC3 — *UPPER: green siltstone; black and purple argillite; siltstone.*

mPC2 — *MIDDLE: light grs., mauve, or purple, thin to medium-bedded quartz arenite; quartz wacke; lesser grey siltstone and argillite; white quartzite interbeds; lenticular bedding, ripples, cross-bedding, and mudcracks occur locally.*

mPC1 — *LOWER: waxy green to olive, tan-weathering, thin to thick-bedded to laminated argillite and siltstone; lesser fine grained quartz wackE; wavy bedding and abundant mudcracks common.*

ALDRIDGE FORMATION

mPA — *Undivided meta-sedimentary rocks: argillite; siltstone; quartz wacke.*

mPAfr — *Sedimentary fragmental: stratiform to discordant; matrix to framework-supported; angular to angular to rounded; fine quartz wacke fragmentals; fragment sizes vary from <2mm to >2m; interpreted to be synsedimentary debris flows, dewatering structures, mud volcanos, and hydrothermal breccia.*

mPA3 — *UPPER: rusty-brown weathering, grey to dark grey, fissile to platy, laminated silty argillite; siltstone.*

mPA2 — *MIDDLE: grey to rusty-weathering, thick to thin-bedded, quartz of eldspathic wacke; intercalated argillite and siltstone.*

mPA1 — *LOWER: light grey weathering, medium to thick-bedded, medium to fine-grained, quartzite, quartz arenite, and quartz wacke; lenticular bedding and cross bedding occur locally.*

mPA1r — *"Remparts Facies" member: light grey weathering, medium to thick-bedded, medium to fine-grained quartzite, quartz arenite and quartz wacke; local lenticular bedding and cross-bedding; rare rusty-brown quartz wacke layers towards base of the exposed section.*

INTRUSIVE ROCKS
AGE UNKNOWN

Kdia — *Diatreme: Lamprophyre sills and dykes in the Middle Aldridge Formation; brown weathering, carbonatized, large megacrysts and xenocrysts of phlogopite, amphibole, and pyroxene in a fine-grained, dark chloritic matrix; 10-80 percent by volume xenocrysts; sedimentary, lower crustal, and mantle xenocysts; possibly Cretaceous in age.*

MIDDLE PROTEROZOIC

mPs — *Mafic sills and/or dikes similar composition to Moyie sills but hosted in younger than middle Aldridge strata.*

MOYIE INTRUSIONS

mPm — *"Moyie sills": dark-green to black, medium to fine-grained gabbro, and hornblende quartz diorite sills and dikes; several to hundreds of metres thick; zircon U-Pb date circa 1467 Ma (Anderson and Davis, 1995).*

SYMBOLS

- *Bedding: inclined, vertical*
- *Bedding: facing direction known, right way up overturned*
- *Foliation, schistosity: inclined, vertical*
- *Fracture cleavage: inclined, vertical*
- *Thrust fault plane*
- *Fold axis: asymmetric Z-fold*
- *Fold axis: asymmetric S-fold*
- *Fragmentals (isolated exposures)*
- *Tourmalinite: outcrop, stratiform, discordant, float*
- *Albite alteration*
- *Hematite and magnetite alteration*
- *Garnetiferous beds (manganese-rich garnet)*
- *Lead isotope* — Pb-12
- *Marker locality (see index at left for abbreviations)*
- *MINFILE mineral occurrence (see table at left) producer, past producer, developed prospect, prospect, showing, anomaly* — 001
- *Paleocurrent direction*
- *Adit, drill hole and reference number*
- *Outcrop*
- *Geological contact: defined, approximate, assumed*
- *Quaternary limit*
- *Fault: defined, approximate, assumed*
- *Fault, thrust: defined, approximate, assumed*
- *Fault, extension (solid circle indicates downthrown side): defined, approximate, assumed*
- *Syncline: upright, overturned, plunging*
- *Anticline: upright, overturned, plunging*
- *Marker horizon projection: approximate, assumed*
- *Approximate location of seismic line*

LOCATION MAP

OPEN FILE 6153

GEOLOGY

YAHK

BRITISH COLUMBIA

Scale 1:50 000/Echelle 1:50 000

kilometres 1 0 1 2 3 4 kilometres

Universal Transverse Mercator Projection
North American Datum 1983
© Her Majesty the Queen in Right of Canada 2010

Projection transverse universelle de Mercator
Système de référence géodésique nord-américain 1983
© Sa Majesté la Reine du chef du Canada 2010

Compilers: P. Glombick, D.A. Brown, and R.F. MacLeod

Geological compilation by P. Glombick, 2006; D.A. Brown, 2008–2009; and R.F. MacLeod, 2008–2009

Co-ordinated through the auspices of the Targeted Geoscience Initiative (TGI3)

Digital cartography by R.F. MacLeod, Geological Survey of Canada (Pacific Division)

Digital base map from data compiled by Geomatics Canada, modified by R.F. MacLeod

Magnetic declination 2010, 15°48' E, decreasing 12' annually

Elevations in feet above mean sea level

Contour interval 100 feet

82 F/10 OF6307	82 F/09 OF6308	82 G/12 OF6302
82 F/07 OF6310	82 F/08 OF6309	82 G/05 OF6303
82 F/02 OF6152	82 F/01 OF6153	82 G/04 OF6304

NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO NI 43-101 GEOLOGICAL SURVEY OF CANADA MAPS

OPEN FILE
DOSSIER PUBLIC
6153
GEOLOGICAL SURVEY OF CANADA
COMMISSION GÉOLOGIQUE DU CANADA
2010

Open files are products that have not gone through the GSC formal publication process.

Les dossiers publics sont des produits qui ne font pas été soumis au processus officiel de publication de la CGC.

Recommended citation:
Glombick, P., Brown, D.A., and MacLeod, R.F. (compilers)
2010: Geology, Yahk, British Columbia; Geological Survey of Canada, Open File 6153, scale 1:50 000.

Canada