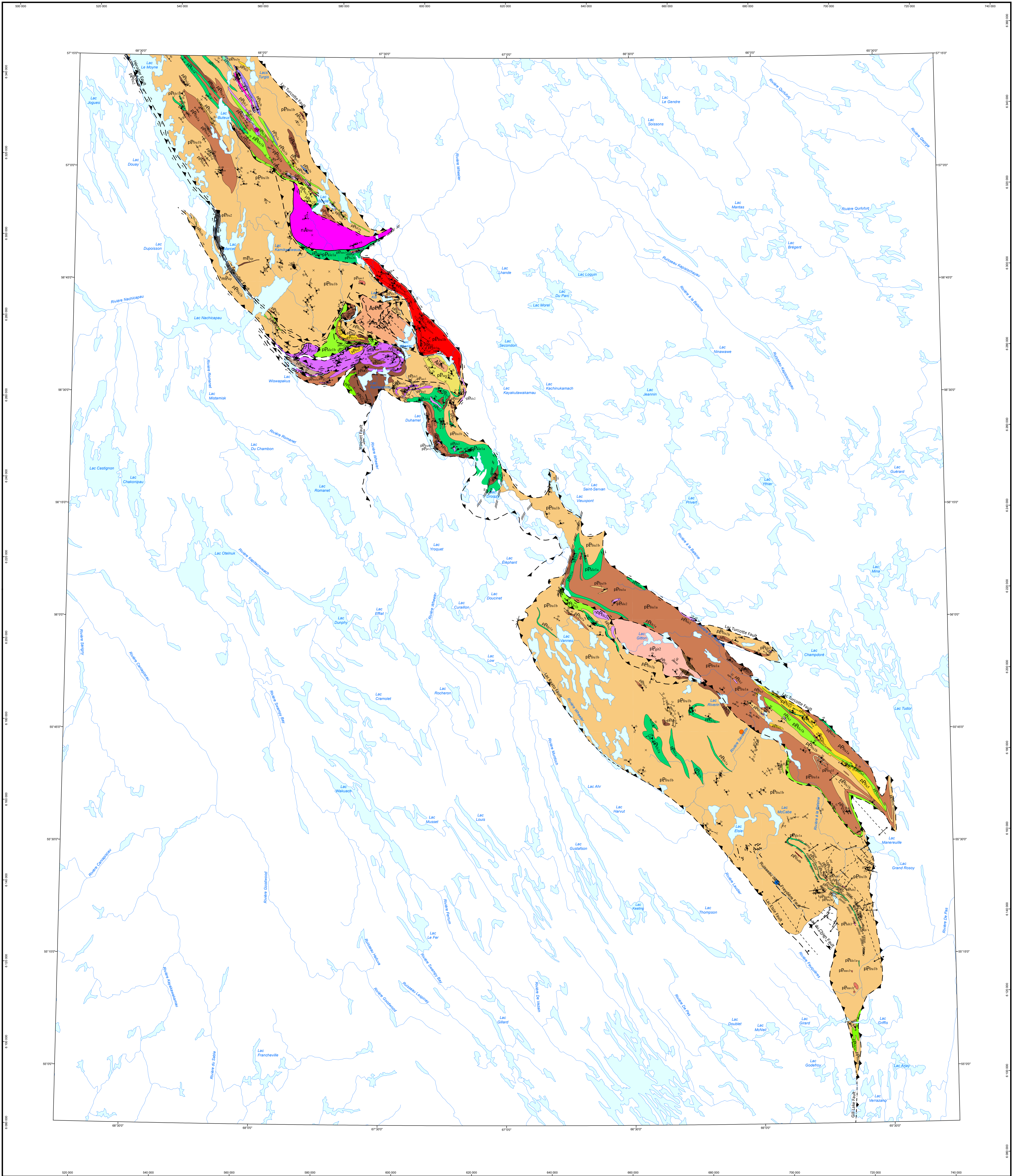


Rachel-Laporte Lithotectonic Domain, Southeastern Churchill Province, Nunavik, Quebec, Canada: Geological Synthesis



STRATIGRAPHIC LEGEND

CHURCHILL PROVINCE MESOPROTEROZOIC

Blipany Dykes (1268 ± 5.5 Ma, Corrigan et al., 2015)
Blipany Dykes (1268 ± 5.5 Ma, Corrigan et al., 2015)

Scapolite, massive and medium-grained olivine gabbro

RACHEL-LAPORTE LITHOTECTONIC DOMAIN PALEOPROTEROZOIC

Mercier Suite
pE1m1 Massive, faceted, porphyritic muscovite-biotite-chlorite ± tourmaline ± garnet ± epidote ± hornblende granites

Hibou Suite
pE1m2 Fine-grained, even-grained grey biotite-muscovite ± epidote granites
pE1m3 Foliated to mylonitic, porphyritic biotite ± muscovite tonalites
pE1m4 Foliated, medium to coarse-grained augen biotite-hornblende-epidote quartz monzonites
Oton Complex (1829 ± 2 Ma, Rayner et al., 2019)
pE1o1 Foliated to mylonitic, heterogeneous, hornblende-biotite ± quartz monzonites
pE1o2 Biotite-muscovite ± garnet ± staurolite paragneiss and migmatized paragneiss
Laporte Suite
pE1l1 Amphibole ± garnet ± scapolite porphyroblastic mafic calcosilicate rock; orthite-actinolite-epidote schist
pE1l2 Banded biotite-amphibole-garnet ± staurolite ± kyanite ± scapolite carbonized gneiss, of possible sedimentary origin

Keyin Suite (1822 ± 0.8 Ma, Houk et al., 2016)

pE1k1 Metapelites and gneissophytic metabasites
pE1k2 Metapelites and metapsyenites
pE1k3 Fine to medium-grained amphibolite of unknown origin
pE1k4 Highly altered carbonate-quartz amphibolite
pE1k5 Massive, pillow or vesicular metabasalt; mafic or intermediate metabasaltic rocks
pE1k6 Banded, massive or schistose, fine to very fine-grained amphibolite, possibly of volcanic origin
Fransuwa Suite (1834-1824 Ma, Henrique-Frutos et al., 2017; Godet et al., 2020)
pE1f1 Neoclastic or chlorite granodioritic quartzite
pE1f2 Very fine-grained bedded graphite metabasite; lesser amount of pyrite metabasite
pE1f3 Bifurcated pyrite-graphite schistose mafic iron formation; massive and semi-massive sulphides
pE1f4 Banded feldspar-dioctahedron-carbonate-amphibole-quartz ± phlogopite calcosilicate rocks
pE1f5 Marble, impure tremolite ± diopside ± wollastonite marble; dolomitic marbles
pE1f6 Aphantic metamorphic; graphite-biotite ± sulphide parashist
pE1f7 Locally slightly migmatized, banded granodioritic muscovite-biotite ± garnet ± amphibole gneisses
pE1f8 Fine to very fine-grained biotite-muscovite-garnet parashist and paragneiss
pE1f9 Fine to very fine-grained biotite-muscovite-sillimanite ± garnet parashist and paragneiss
pE1f10 Homogeneous, fine to very fine-grained biotite-muscovite ± garnet metakalke and meta-arenite; lesser amount of biotite-muscovite parashist
pE1f11 Banded, fine to very fine-grained biotite-muscovite ± garnet ± sillimanite ± staurolite parashist
Secondar Suite
pE1s1 Muscovite-hornblende-epidote meta-arkose, poorly meta-arenite and metagranite; lesser amount of muscovite-hornblende-epidote schist

ARCHEAN AND PALEOPROTEROZOIC

Horshoe Complex
pE1h1 Well-sorted, granoblastic mafic-biotite-epidote ± hornblende monzonite, quartz monzonite and monzonites; lesser amounts of amphibolite gneisses and gabbro

ARCHEAN

Boulin Complex (2699 ± 4 Ma, Rayner et al., 2017)
pE1b1 Foliated to mylonitic, porphyroblastic biotite-hornblende monzonite, monzonites and quartz monzonites; lesser amount of banded biotite granite

PROSPECTIVE ZONE FOR MINERAL EXPLORATION

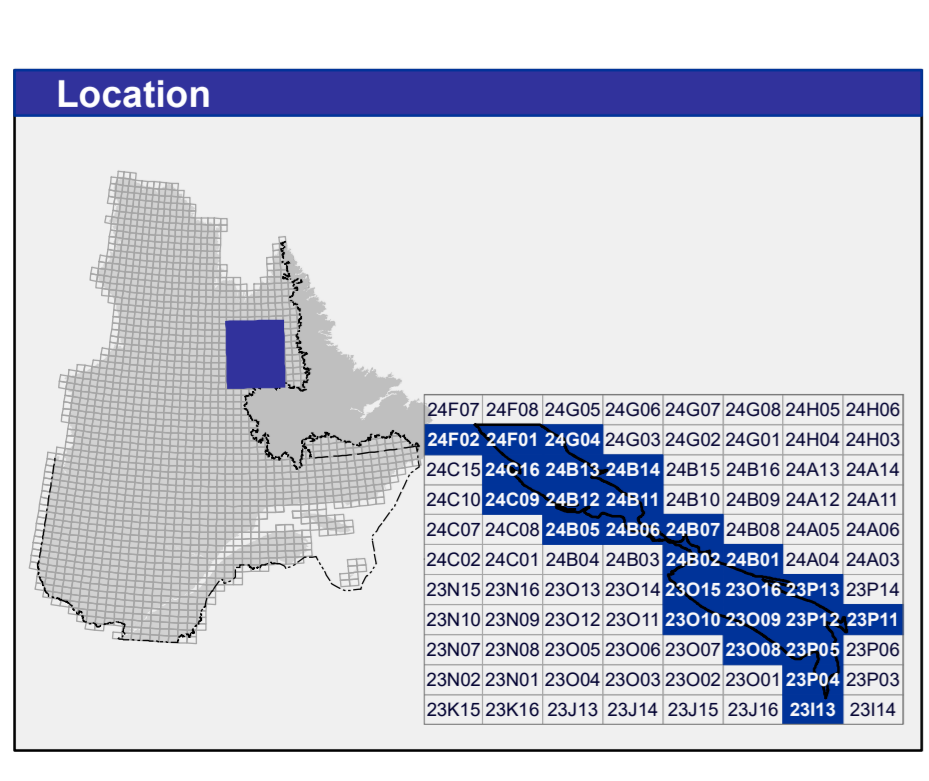
Chromium
Graphite
Zn

SHOWING AND DEPOSIT

Chromium
Copper
Vanadium
Graphite

This geological map in PDF format contains layers that group the various elements of the document (geological zones, hydrography, specific outcrops, etc.). These layers can be displayed or hidden in the "Layers" section of the "Browse Files" in Adobe Acrobat Reader®.

Symbols and abbreviations used on this map are described in the DV 2014-06 publication of the Ministère de l'Énergie et des Ressources naturelles.



Metadata	
Geodetic reference frame:	GRS 80 ellipsoid
Geodetic reference system:	NAD 83 compatible with the world geodetic system WGS 84
Cartographic projection:	Universal Transverse Mercator (UTM), zone 19
Original longitude:	67°00'
Original latitude:	57°00'

Sources	Organization
Data	Ministère de l'Énergie et des Ressources naturelles
Realization	Isabelle Lafauce, Marc-Antoine Vanier

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Map of the Bulletin géologique: http://gdm.mines.gouv.qc.ca/bulletins-geologiques/monothematique/laporte_rqr

To obtain the most recent data for this region, we suggest that you consult the geomatics products of Québec's Geomatics Information System (SIGÉOM).

Bulletin géologique

SIGÉOM
Système d'information géomatique du Québec

Énergie et Ressources naturelles
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