



Iskut region geological compilation: Supporting data and working files

JoAnne L. Nelson



Ministry of
Energy, Mines and
Petroleum Resources



British Columbia Geological Survey GeoFile 2019-02

**Ministry of Energy, Mines and Petroleum Resources
Mines and Mineral Resources Division
British Columbia Geological Survey**

Recommended citation: Nelson, J.L., 2019. Iskut region geological compilation: Supporting data and working files. Ministry of Energy, Mines and Petroleum Resources, British Columbia Geological Survey, GeoFile 2019-02, 2 p.

Front cover: Looking north from Snowfield deposit to Iron Cap (left background) and Brucejack fault (right background) with upper Hazelton strata on cliffs to east. **Photo by Lauren Wilson, 2013.**

Data files for this GeoFile can be downloaded from

http://cmscontent.nrs.gov.bc.ca/geoscience/PublicationCatalogue/GeoFile/BCGS_GF2019-02.zip



Ministry of
Energy, Mines and
Petroleum Resources



Iskut region geological compilation: Supporting data and working files

JoAnne L. Nelson

Ministry of Energy, Mines and Petroleum Resources
British Columbia Geological Survey
GeoFile 2019-02

Iskut region geological compilation: Supporting data and working files



JoAnne L. Nelson^{1a}

¹ Emeritus Scientist, British Columbia Geological Survey, Ministry of Energy, Mines and Petroleum Resources, Victoria, BC, V8W 9N3

^aJoAnne.Nelson@gov.bc.ca

Recommended citation: Nelson, J.L., 2019. Iskut region geological compilation: Supporting data and working files. Ministry of Energy, Mines and Petroleum Resources, British Columbia Geological Survey, GeoFile 2019-02, 2 p.

Keywords: Iskut, Golden Triangle, geology, geochronology, biochronology

Summary

This GeoFile contains files of supporting data and references used in the 2018 geological compilation of the Iskut region between the village of Iskut and Summit Lake (Fig. 1), which is being incorporated into the revised digital geological map of British Columbia. [BCGS_GF2019-02.zip](#) includes: 1) working GIS (.shp) files of geological linework, polygons and centroids, with notes and references; 2) working files of geochronological and biochronological supporting data from published sources with edits and notes by the compiler; 3) reference list of sources for geology; 4) a copy of the paper that justifies Iskut stratigraphic nomenclature (Nelson et al. 2018).

The principal sources of new geological data used in this compilation include Ash et al. (1997) in the Tatogga-Klastline area near the village of Iskut, Alldrick et al. (2004a, 2005a, 2006) in the upper Iskut River area, and Lewis (2001, 2013) in the lower Iskut River area. Other sources for local areas are cited with regard to specific linework segments and geopolygons; they appear in the list of references. The compilation also includes unpublished mapping by J. Nelson in 2004, 2013 and 2014. Published biochronological and geochronological data sets (Souther, 1972; Logan et al., 2000; Lewis et al., 2001; Nadaraju and Lewis, 2001; Cutts et al. 2015) provided essential control on unit ages and assignments. They are included here in files that contain compiler's notes and minor corrections made in the course of compilation.

The maps that form the main basis for this compilation were created at different times by different organizations, and their integration required erection of a common, valid schema of stratigraphic nomenclature. This issue was addressed by a working group in 2017, which included John Waldron of the University of Alberta, Alex Zagorevski of the Geological Survey of Canada, Chris Rees of Imperial Metals, and JoAnne Nelson and Bram van Straaten of the BC Geological Survey. The result of their deliberations (Nelson et al., 2018) is an essential companion to the new digital map.

References cited

- Alldrick, D.J., Stewart, M.L., Nelson, J.L., and Simpson, K.A., 2004a. Geology and mineral deposits of the More Creek - Kinaskan Lake area, northwestern BC. British Columbia Ministry of Energy and Mines, British Columbia Geological Survey Open File 2004-02, 1:50,000 scale.
- Alldrick, D.J., Nelson, J.L., and Barresi, T., 2005a. Geology of the Volcano Creek - More Creek area. British Columbia British Columbia Ministry of Energy and Mines, British Columbia Geological Survey Open File 2005-05, 1:50,000 scale.
- Alldrick, D.J., Nelson, J.L., Barresi, T., Stewart, M.L., and Simpson, K.A., 2006. Geology of the upper Iskut River area, British Columbia British Columbia Ministry of Energy and Mines, British Columbia Geological Survey Open File 2006-2, 1:100,000 scale.
- Ash, C.H., MacDonald, R.J.W., Stinson, P.K., Fraser, T.M., Read, P.R., Psutka, J.F., Nelson, K.J., Arden, K.M., Friedman, R.M. and Lefebvre, D.V. 1997. Geology and mineral occurrences of the Tatogga Lake area, NTS 104G/9NE, 16SE and 104H/12NW, 13SW. British Columbia Ministry of Energy, Mines and Petroleum Resources, British Columbia Geological Survey Open File 1997-3, 1:50,000 scale.
- Cutts, J.A., McNicoll, V.J., Zagorevski, A., Anderson, R.G. and Martin, K. 2015. U-Pb geochronology of the Hazelton Group in the McTagg anticlinorium, Iskut River area, northwestern British Columbia. In: Geological Fieldwork 2014, British Columbia Ministry of Energy and Mines, British Columbia Geological Survey Paper 2015-1, pp. 87-102.
- Lewis, P.D. 2001. Geological maps of the Iskut River area. In Lewis, P.D., Toma, A., Tosdal, R.M. (Eds.), *Metallogenesis of the Iskut River Area, Northwestern British Columbia*. Mineral Deposit Research Unit, Special Publication Number 1. NTS 104B/8, 104B/9, 104B/10, 1:50,000-scale maps.
- Lewis, P.D. 2013. Iskut River Area Geology, Northwest British Columbia (104B/08, 09, 10 & part of 104B/01, 07, 11). *Geoscience BC Report 2013-05*; 3 1:50,000-scale maps, legend and notes; .shp files.
- Lewis, P.D., Mortensen, J.K., Childe, F., Friedman, R.M., Gabites, J.M., Ghosh, D., and Bevier, M.L. 2001. Geochronology data set, Chapter 9. In: Lewis, P.D., Toma, A., Tosdal, R.M. (Eds.), *Metallogenesis of the Iskut River Area, Northwestern British*

Columbia. Mineral Deposit Research Unit, Special Publication Number 1, pp. 89-96.

Logan, J.M., Drobe, J.R. and McClelland, W.C., 2000. Geology of the Forrest Kerr - Mess Creek area, northwestern British Columbia, B.C. Ministry of Energy and Mines, British Columbia Geological Survey Bulletin 104, 164 pp., map scale 1:100,000.

Nadaraju, G. and Lewis, P.D. 2001. Biochronology data set, Chapter 8. In: Lewis, P.D., Toma, A., and Tosdal, R.M. (Eds.), Metallogensis of the Iskut River Area, Northwestern British Columbia. Mineral Deposit Research Unit, Special Publication Number 1, pp. 9-30.

Nelson, J., Waldron, J., van Straaten, B., Zagoresvski, A., Rees, C., 2018. Revised stratigraphy of the Hazelton Group in the Iskut River region, northwestern British Columbia. In: Geological Fieldwork 2017, British Columbia Ministry of Energy, Mines and Petroleum Resources, British Columbia Geological Survey Paper 2018-1, pp. 15-38.

Souther, J.G. 1972. Telegraph Creek map-area, 104G, British Columbia. Geological Survey of Canada Paper 71-44, 38 p. 1:250,000 scale map.

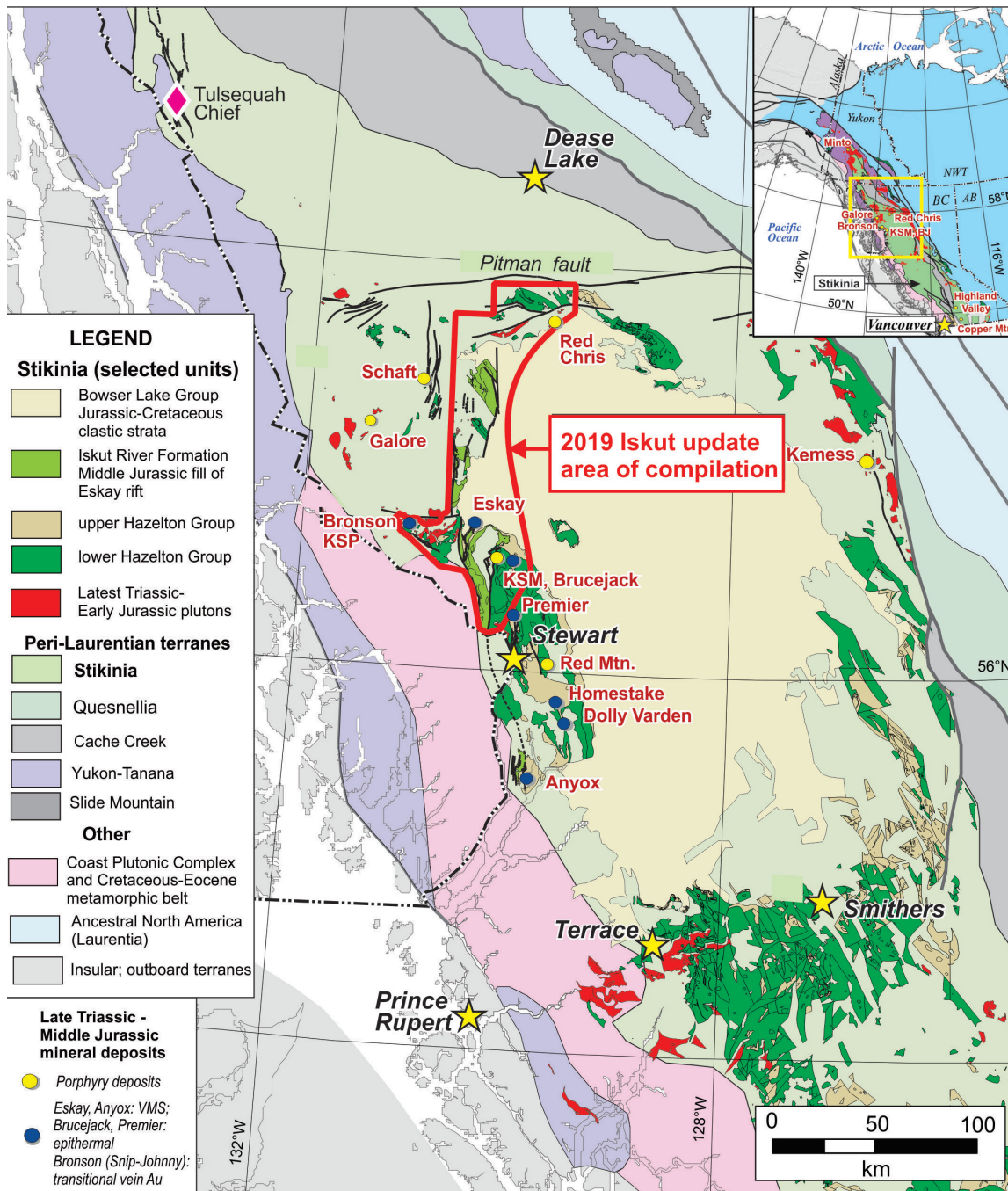


Fig. 1. Regional setting of the Iskut River study area.

British Columbia Geological Survey
Ministry of Energy, Mines and Petroleum Resources