

This is a repository copy of Characterization of gold mineralization in the northern Cariboo Gold District, British Columbia, Canada, through integration of compositional studies of lode and detrital gold with historical placer production: a template for evaluation of orogenic gold districts.

White Rose Research Online URL for this paper: http://eprints.whiterose.ac.uk/99588/

Version: Accepted Version

Article:

Chapman, RJ and Mortensen, JK (2016) Characterization of gold mineralization in the northern Cariboo Gold District, British Columbia, Canada, through integration of compositional studies of lode and detrital gold with historical placer production: a template for evaluation of orogenic gold districts. Economic Geology, 111 (6). pp. 1321-1345. ISSN 0361-0128

https://doi.org/10.2113/econgeo.111.6.1321

(c) 2016, Society of Economic Geologists, Inc. This is an author produced version of a paper published in Economic Geology. Uploaded in accordance with the publisher's self-archiving policy.

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



Gold type	Alloy characteristics		Inclusion signature	Lode Occurrence(s)		Important placer localities
	Ag (%)	Hg (%)		Location	Ar-Ar age ma ¹	
1	4.5-8.5	-	Bi-Pb sulfides, Ni-Co sulfarsenides	Cariboo Gold Quartz mine, Cow Mountain	146	Burns Ck; Lowhee Ck
2a	5-26	-	Inclusions scarce. pyrite and carbonates,>> (galena, arsenopyrite, chalcopyrite, sphalerite)	BC Vein; Bonanza Ledge, Proserpine, Warspite, Midas adit	143-136	Antler Ck, Cunningham Ck, Keithley Ck, Williams Ck
2b	5-10	-	Insufficient to characterize	Burns Mountain, Fosters Ledge		Slough Ck, Nelson Ck, Lightening Ck
3	14-27	0.4-7	Insufficient to characterize	Unknown Mosquito Creek mine	1/13-1/12	Dragon Ck

TABLE 3. Characteristics of the Main Gold Types Recognized in the Northern CGD.

¹ Mortensen et al. (2011)