

PROJECTS RELATED TO PRECIOUS METALS (Au, Ag)

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Field and laboratory work, compilation and preparation of articles on gold mineralization in Newfoundland and Labrador continued in 2013. Collaborative work with Memorial University researchers, in part funded through the Research and Development Corporation, is an important component of this research. Current activity is in central and western Newfoundland, and in the Burin Peninsula to Bonavista Bay area of eastern Newfoundland.

Field work in 2013 in central and western Newfoundland emphasized recent discoveries such as the Jackson's Arm and Kramer projects in White Bay and the Staghorn, Goldquest and Goldrange prospects, adjacent to the Burgeo Highway. Older discoveries were also visited, including O'Reilly, Slip, Cracker, Corvette, Goldstash, Tibbey's Point, Chiouk Brook and Breccia Pond, along the trace of the Dog Bay Line near Gander. Field work will be followed up with laboratory investigations including: visible/near-infra-red spectrometry, petrographic analysis, litho-geochemistry, isotopic geochemistry, mineral chemistry, fluid inclusion analysis and U-Pb and ^{40}Ar - ^{39}Ar geochronology. The results from work on the Huxter Lane gold deposit were published in Current Research 2013, and more results from other deposits will appear in Current Research 2014.



Quartz-veined, altered, tonalite of the Shrek zone (Metals Creek Resources) Coney Head complex, Jackson's Arm, western Newfoundland. This material yielded 4.67g/t Au.



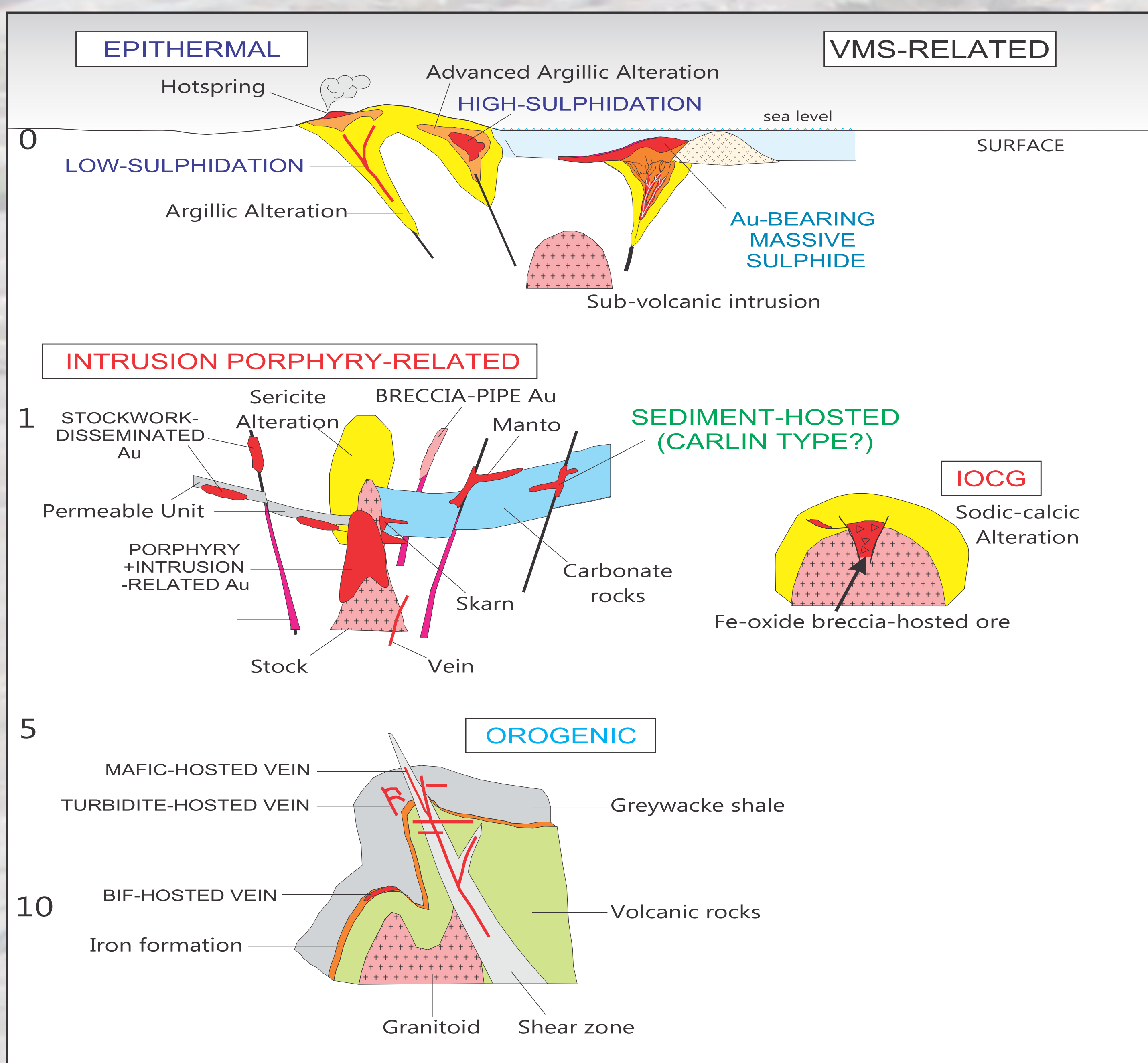
Crustiform quartz and minor pyrite filling spaces around bleached and silicified Badger Group(?) sedimentary rock fragments, O'Reilly showing, southwest of Glenwood.



Dumortierite alteration associated with advanced argillic alteration, Strange prospect.



Silicified flow-banded rhyolite from the eastern end of the Hickey's Pond - Point Rosie alteration belt.



Generalized settings of gold mineralization in Newfoundland.

The late Neoproterozoic epithermal alteration and related mineralization in the western Avalon Zone of Newfoundland represents a totally different environment to the largely mesothermal (orogenic) gold of central Newfoundland. Understanding the nature and genesis of these uniquely-preserved epithermal systems is the focus of a two-year project, which is linked to a M.Sc. study supported by the Research and Development Corporation. Survey field work in 2013 was of limited extent, but laboratory investigations continued, and results will appear in Current Research 2014.