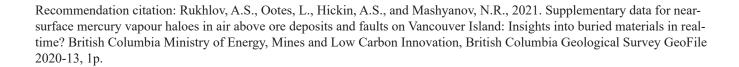


Supplementary data for near-surface mercury vapour haloes in air above ore deposits and faults on Vancouver Island: Insights into buried materials in real-time?

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Ministry of Energy, Mines and Low Carbon Innovation Mines, Competitiveness, and Authorizations Division British Columbia Geological Survey



Front cover: Measuring mercury vapour concentrations at the Lara polymetallic volcanogenic massive sulphide occurrence, southern Vancouver Island. Photo by Adrian Hickin.

Back cover. Atmospheric measurement at exposed terrane-bounding fault, Harling Point, Victoria. Photo by Adrian Hickin.





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Summary

This GeoFile serves as a data repository for interpretations presented by Rukhlov et al. (2021). It provides complete field data and plots of real-time mercury vapour concentrations in near-surface air and simultaneously measured meteorological parameters at 15 locations that include the British Columbia Geological Survey and a variety of known ore deposits, fault structures, and barren rocks on Vancouver Island (BCGS GF2020-13.zip).

Table 1. contains real-time mercury vapour concentrations in air 1-50 cm above ground, simultaneously measured air temperature, relative humidity, atmospheric station pressure, relative pressure adjusted to sea level, wind speed, wind azimuth, GPS locations, and elevation above sea level.

Appendix 1 contains real-time meteorological conditions and Hg vapour concentrations in near-surface atmosphere for each survey of this study. (a) Time (s) vs wind speed (m·s⁻¹). (b) Time (s) vs relative pressure (hPa). (c) Time (s) vs relative humidity (%). (d) Time (s) vs air temperature (°C). (e) Time (s) vs Hg⁰ in air (ng·m⁻³). (f) Rose diagram of wind azimuth. (g) Frequency distribution, Tukey box plot, and probability plot of Hg⁰ in air (ng·m⁻³).

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Reference cited

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