Frank Robert Brunton

Job Title: Paleozoic Geoscientist (**GS3** - Groundwater Initiative; Industrial Minerals) – **PGeo**, Ontario Geological Survey, Ministry of Energy, Northern Development & Mines, Sudbury, Ontario P3E 6B5

Toll: 1-888-415-9845 ext. 5956: **Tel:** 1-705-670-5956; **Fax:** 1-705-670-5905

Cell: 1-705-920-3775 **Email:** frank.brunton@ontario.ca; and fbrunton@uwo.ca

Job Description: Main research interests involve field-based mapping of Ontario's Paleozoic bedrock & groundwater resources. This approach involves: 1) basin analysis studies – sequence stratigraphy / sedimentology / paleobiology / bio-chemostratigraphy, and paleobiogeographic reconstructions; 2) creation of 3D models; 3) karst mapping and assessment – leading to collaboration with other provincial ministries to create mitigation and guidance documents for land-use planners and regulators; 4) rock and water chemistry; 5) development of innovative research/models for Paleozoic history of Ontario basins – including theories/hypotheses in hydrogeological and geophysical techniques/applications; 6) coordination/review of project plans and leading project teams; and 7) collaboration between various ministry staff and academic researchers, including field-based training of geoscience students, various municipal staff, and environmental consultants. Such studies require the preparation of inventory reports, databases, maps and graphics; and updating of Paleozoic geology / stratigraphy and industrial minerals, and mapping of bedrock potable groundwater and deeper basin flow systems.

Karst mapping in Ontario – Root Cave – one of Ontario's most ornamented caves; Early Silurian Gasport-Goat Island formations, Bruce Peninsula, Southern Ontario.

I have more than 30yrs experience as a research scientist and consultant – focusing on mapping of carbonate platforms – applying sedimentologic, stratigraphic, sequence stratigraphic, biostratigraphic, chemostratigraphic, hydrostratigraphic, karst and potable bedrock groundwater studies. This research involves investigation of interplay of basin tectonics and sea level fluctuations to explain evolution of stratigraphic architecture, spanning Phanerozoic time.

I am a registered Professional Geoscientist in Ontario (**P.Geo.**).