

Appendix H. Geographic Information System (GIS) Files Representing the Porphyry Copper Mineral Resource Assessment Permissive Tracts, Deposits and Significant Prospects, and Accompanying Metadata, Porphyry Copper Assessment, British Columbia and Yukon Territory, Canada

By Mark J. Mihalasky¹, Arthur A. Bookstrom², Thomas P. Frost³, and Steve Ludington⁴

Description of GIS Files

An ESRI file-geodatabase (003pCu.gdb), containing three feature classes, and an ESRI map document (.mxd) are included with this assessment report. These files may also be down-loaded from the USGS publications website as a compressed file sir2010-5090c_appendix_h.zip. The file-geodatabase feature classes are as follows:

boundary_003pCu is a vector (polygon) feature class that represents an outline of Canada, including country political boundary and coastline. The dataset was extracted from U.S. Department of State (2009) SSIB spatial database.

mineral_sites_003pCu is a vector (point) feature class that represents porphyry copper mineral sites (deposits, significant prospects, and deposit-prospect groups) for the Canadian Cordillera. As defined for this mineral resource assessment, a “mineral site” includes deposits, significant prospects, and spatial groupings of proximal deposits and(or) significant prospects. This dataset includes an inventory of mineral resources in 89 known porphyry copper (and 2 related copper-bearing) ore zones, grouped into 50 porphyry copper deposits, and lists key characteristics of 280 additional porphyry copper and related copper-bearing prospects. See metadata and report for additional details. See appendix F for cited references.

tracts_003pCu is a vector (polygon) feature class that represents porphyry copper mineral resource assessment permissive tracts for the Canadian Cordillera. A mineral resource assessment tract is defined as a geographic area (a tract of land) which is determined to possess certain characteristics and attributes that permit the occurrence of a particular type of mineral deposit. This feature class contains five permissive tracts for the occurrence of porphyry copper deposits: 2 island-arc tracts, 1 tract of transitional, mixed island-arc and continental arc affinities, and 2 continental arc tracts. These polygon features spatially overlap and may require setting a definition query (for example tractID = "003pCu2001") in order to separately display the entire tract. When displaying multiple tracts at the same time, portions of some tracts will be concealed. The attribute table associated with each tract

¹U.S. Geological Survey, mjm@usgs.gov.

²U.S. Geological Survey, abookstrom@usgs.gov.

³U.S. Geological Survey, tfrost@usgs.gov.

⁴U.S. Geological Survey, slud@usgs.gov.

contains cursory information about geologic setting, mineral deposits, and mineral resource assessment estimates. See report and metadata for additional details.

These datasets are contained in an ESRI map document (version 9.3): GIS_SIR5090-B.mxd. All datasets are provided in Albers Conical Equal Area projection, North American Datum of 1983 (see metadata for projection parameters). Also included are separate ASCII files of the metadata for the mineral sites and tracts, located in the folder “003pCu.met”.

References Cited

U.S. Department of State, 2009, Small-scale digital international land boundaries (SSIB)—
Lines, edition 10 and Polygons, beta edition 1: Boundaries and Sovereignty
Encyclopedia (B.A.S.E.), U.S. Department of State, Office of the Geographer and
Global Issues.