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MINERAL RESOURCE DIVISION GEOLOGICAL SURVEY BRANCH

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PRELIMINARY GEOLOGY AND NOBLE METAL GEOCHEMISTRY OF THE POLARIS MAFIC-ULTRAMAFIC COMPLEX

NTS 84C/5 AND 12

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SCALE 1:16 000

LEGEND

POLARIS MAFIC-ULTRAMAFIC COMPLEX

LATE TRIASSIC (?)

- 8 FELSIC INTRUSIONS: SYENITE TO GRANOPHYRE... 7 GABBROIC ROCKS: COMMONLY HORNBLENDE GABBRO... 6 HORNBLENDE CLINOPYROXENITE... 5 MIXED WEHRLITE, CLAVINE CLINOPYROXENITE... 4 CLAVINE CLINOPYROXENITE... 3 WEHRLITE... 2 CLAVINE WEHRLITE... 1 DUNITE

HOST ROCKS

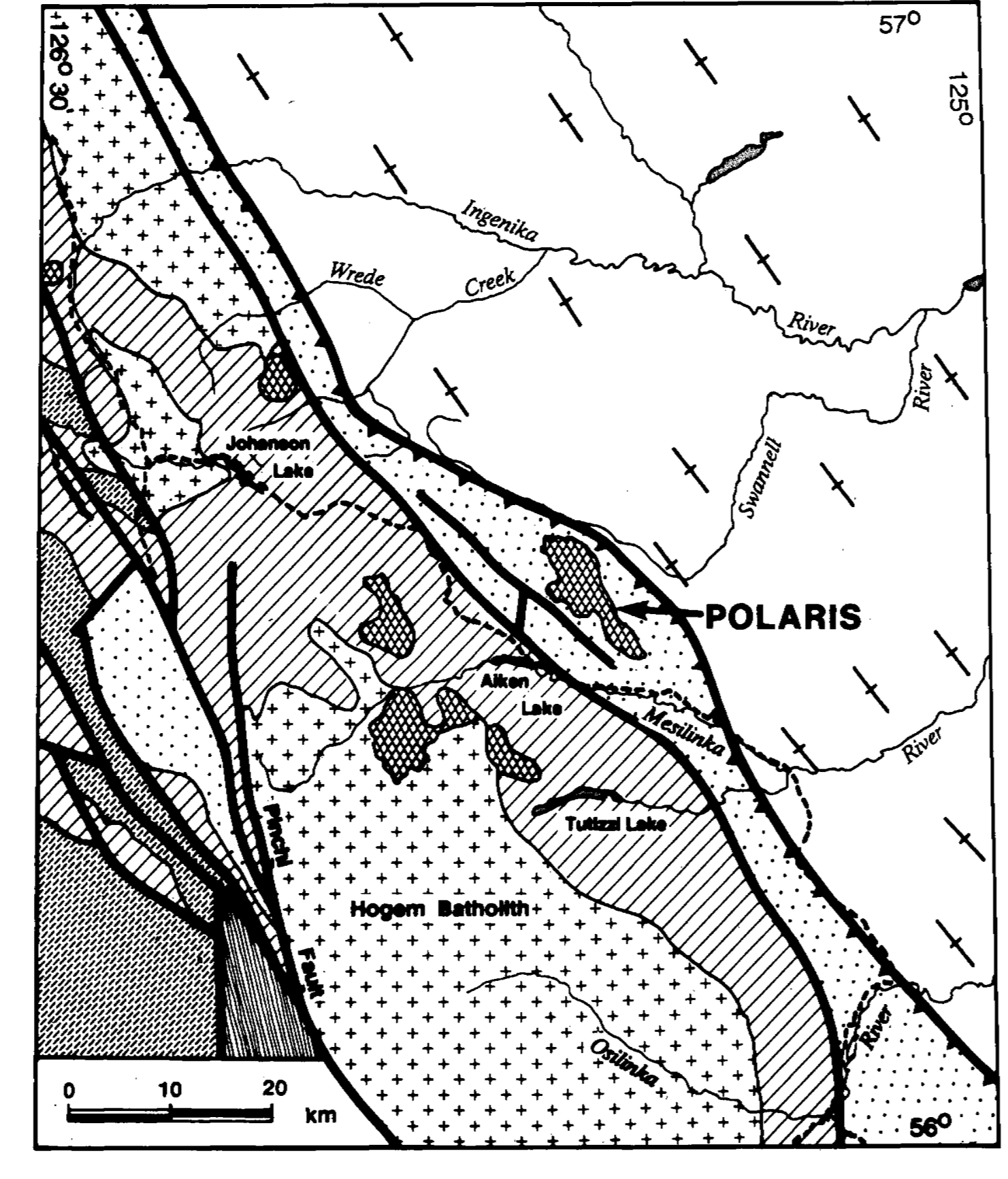
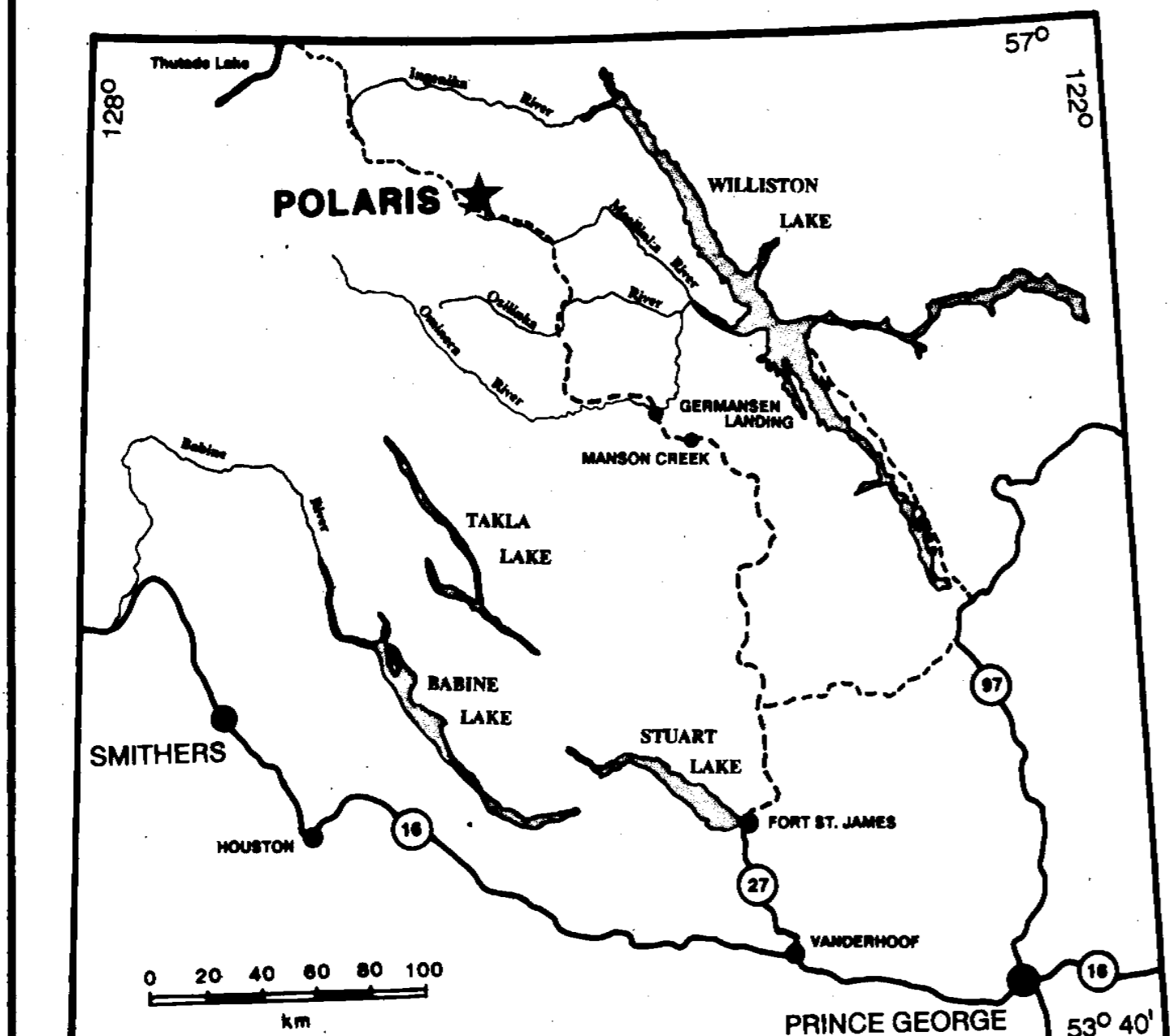
- 9 METASEDIMENTARY AND METAVOLCANIC ROCKS (HARPER RANCH GROUP ?): ARGILLITE, SLISTONE, PHYLLITE, VOLCANICLASTIC ROCKS AND MINOR LIMESTONE...

SYMBOLS

- Geological boundaries (defined or approximate, gradational, assumed) ... Bedding attitude (inclined, vertical) ... Schistosity or foliation attitude (inclined, vertical) ... High-angle fault or shear zone (defined, inferred) ... Limit of extensive outcrop ... Field station locality ... Geochemical sample site ... Chromite locality ... Chromite geochemical sample site

Table with columns: Locality, UTM Zone 10V Easting, Northing, Sample, Pt, Pd (ppb), Rh, Au. Rows categorized by rock types: Dunite, Chromitiferous Dunite, Chromitite, Olivine Wehrlite, Wehrlite, Olivine Clinopyroxenite and Clinopyroxenite, Hornblende Clinopyroxenite and Clinopyroxenite Hornblende, Gabbro, Felsic Dykes, Metavolcanic and Metasedimentary Rocks, Quartz Veins.

* Duplicate sample analyzed. † Net-textured sulphides (25 vol. %). ‡ Thin dyke (<4 m in width). § Marginal phase. Noble metals were preconcentrated by fire assay using 30g splits of 200g of rock powder (<200 mesh) and analyzed by inductively-coupled plasma mass spectrometry by Acme Analytical Laboratories, Vancouver. Detection limits: Pt and Au 1 ppb; Pd and Rh 2 ppb. Accuracy was checked by in-house standard FA-5X (Acme) which contains 100, 100, 20 and 100 ppb Pt, Pd, Rh and Au respectively, and gave on analysis an arithmetic mean (n=7) of 100 ppb Pt (range = 96-104); 99 ppb Pd (96-102); 21 ppb Rh (19-24); and 100 ppb Au (98-104).



- LAYERED ROCKS: Lower to Middle Jurassic Hazelton Group; Upper Triassic Taldie Group; Upper Paleozoic Harper Ranch Group; Cache Creek Group; Upper Proterozoic Ingenika Group. INTRUSIVE ROCKS: Early Jurassic Granitoid rocks; Late Triassic (?) Alaskan-type mafic-ultramafic complex.

