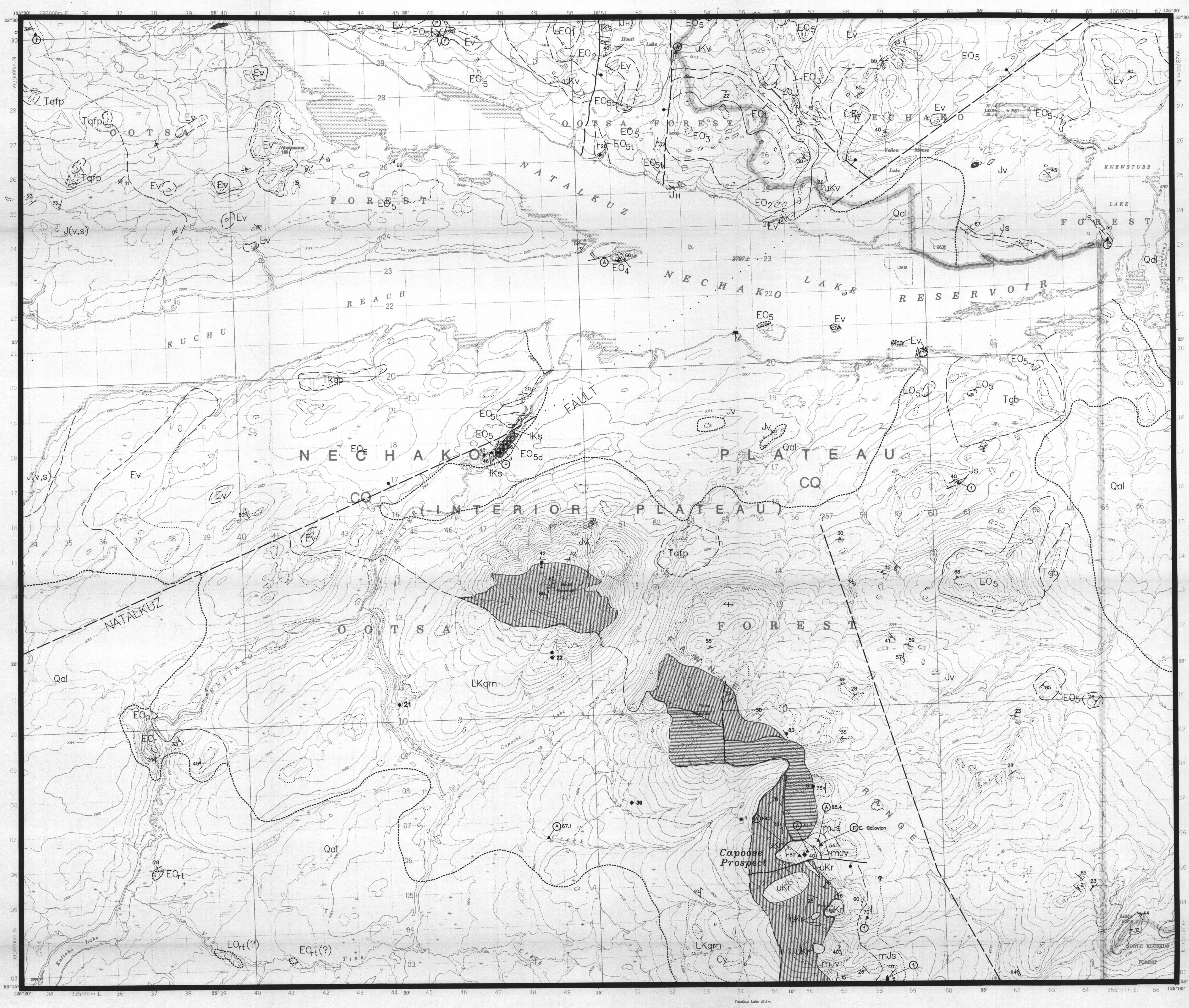
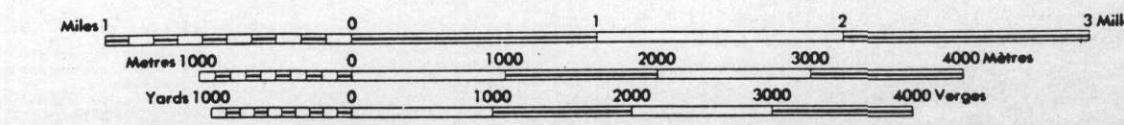


**GEOLOGY
OF THE NATALKUZ LAKE AREA,
CENTRAL BRITISH COLUMBIA**

NTS 93F/6

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SCALE 1:50 000



LAYERED ROCKS

- Qal** GLACIAL DEPOSITS.
- MIOCENE TO QUATERNARY
CHILCOTIN GROUP**
- Cv** OLIVINE BASALT: dark grey; aphanitic or olivine phytic; massive, columnar jointed or flow layered.
- UPPER EOCENE TO OLIIGOCENE
ENDAKO GROUP**
- Ev** BASALT: black to dark grey-brown; augite-hypersthene phytic; massive and columnar jointed; rare flow breccia; locally vesicular or amygdaloidal with chalcedonic silica inclusions.
- LOWER TO MIDDLE EOCENE
OOTSA LAKE GROUP**
- EOt** RHYOLITIC LAPILLI - CRYSTAL TUFF: buff-grey; phenocrysts of quartz up to 30% by volume.
- EO_r** RHYOLITE FLOWS: light grey; quartz and k-feldspar phytic; quartz phenocrysts up to 25% by volume.
- EO_a** ANDESITE FLOWS: maroon; finely laminated and trachytoid texture; minor flow breccia.
- EO_{5(t,d)}** RHYOLITE FLOWS: white, cream, pink; quartz, feldspar and scarce biotite phenocrysts; finely laminated, spherulitic and porphyritic textures; minor peltostone layers. RHYOLITIC TUFFS AND TUFFACEOUS SEDIMENTS (EO_{5t}): white, green and cream; well-bedded ash to lapilli tuff, tuffaceous sandstones to cobble conglomerate, very recessive; rare carbonized plant fragments. RHYOLITE DOME (EO_{5d}): white, sparse feldspar phenocrysts; disseminated pyrite up to 25% by volume; massive; well-developed fracture set; extensively clay altered; pervasive jarosite and limonite alteration.
- EO₄** DACITE FLOWS: light pink to grey; up to 3 per cent biotite phenocrysts.
- EO₃** DACITE FLOWS: light blue-grey; sparse plagioclase and biotite phenocrysts; foggy weathering.
- EO₂₍₁₎** COARSE FELDSPAR ANDESITE FLOWS (EO₂): dark grey to green; feldspar phenocrysts up to 1 cm in diameter; impact trachytic texture. AMYGDALOIDAL ANDESITE FLOWS (EO₂): dark grey to green; amygdaloid filled with silica, chert, calcite and epidote; locally interlayered with Unit EO₂.
- LOWER TO UPPER CRETACEOUS(?)**
- uKr** RHYOLITIC VOLCANICS AND COGENETIC SILLS: white, cream and pink; massive to laminated flows and sills containing finely crystalline red and brown garnet; thickly to thinly bedded ash, crystal and crystal-lapilli tuff.
- uKv** HORNBLENDE ANDESITE BLOCK-LAPILLI TUFF: grey-green to purple; monolithic hornblende-phytic pyroclasts.
- SKENA GROUP**
- IKs** FRAGILE BRECCIA, LITWAC, SILTSTONE AND MUDSTONE: dark grey to black; well bedded carbonaceous; graded bedding common in coarser sediments; clasts are predominantly fine-grained volcanic rocks.
- MIDDLE TO UPPER JURASSIC (?)**
- mJv** ANDESITE TO DACITE(?) CRYSTAL LAPILLI AND BLOCK TUFFS: dark greyish-green, green and maroon; lapilli tuff locally with interbedded crystal and ash tuffs and minor fine grained shale; clasts are feldspar-phytic andesite.
- BOWSER LAKE GROUP
ASHMAN FORMATION**
- mJs** ARGILLITE AND SILTSTONE: dark grey to black; thinly-bedded; abundant shaly faunae; minor massive to thickly-bedded greywacke.
- LOWER TO MIDDLE JURASSIC
HAZELTON GROUP**
- J(v,s)** FELDSPAR AND AUGITE-PHYRIC ANDESITE FLOWS(Jv): dark grey to greenish-grey; crowded feldspar porphyritic and amygdaloidal textures; minor lapilli tuff. ARGILLIC SANDSTONE AND SILTSTONE(Ls): dark olive green to brown; recessive concretionary; minor argillite and grade-ripple conglomerate; locally contains fossils.
- IJh** VARI-GATED GREEN AND MAROON ASH-TUFF AND LAPILLI TUFF: rare accretionary lapilli; minor tuffaceous siltstone and argillite.

INTRUSIVE ROCKS

- TERTIARY**
- Tgb** GABBRO: grey to dark green, fine to medium-grained, salt and pepper texture; feldspar, pyroxene and olivine phytic; massive.
- Tkqp** K-FELDSPAR - QUARTZ PORPHYRY: light grey; quartz and k-feldspar phytic; 5% by volume combined biotite and hornblende phenocrysts. Texturally and mineralogically similar to dacite flows of Unit EO₄.
- Tqfp** QUARTZ - FELDSPAR PORPHYRY: light grey to cream; quartz and feldspar phytic; forms small stocks or dikes.
- LATE CRETACEOUS**
- LKqm** CAPOOSE BATHOLITH: QUARTZ MONZONITE TO GRANODIORITE: pinkish-grey; coarsely crystalline; k-feldspar megacrystic; biotite and hornblende as accessories.

ALTERED ROCKS

- Partial to complete replacement by cryptocrystalline silica ± pyrite.
- Thermal aureole; homogeneous; dense, grey-green rock with partial to complete destruction of primary texture; epidote, chlorite ± amphibole.
- Disseminated pyrite ± limonite ± jarosite.

SYMBOLS

- Geological boundary (defined, approximate, assumed)
- Normal Fault (defined, approximate, assumed)
- Fault (defined, approximate, assumed)
- Bedding, tops known (inclined, vertical)
- Flow layering (inclined, vertical)
- Foliation (inclined, vertical)
- Dike (inclined, vertical)
- Limit of Quaternary cover
- Mineral occurrence - MINFILE number
- Radiometric age determination site - age in millions of years where given
- Macro fossil locality (age determined, in process)
- Paleontology locality (in process)
- Assay sample location
- Area of rock exposure

MINERAL OCCURRENCES

MINFILE NO.	TYPE	NAMES	ECONOMIC MINERALS	DESCRIPTION
093F 021	VEIN	CAP	chalcocite, molybdenite, covellite, pyrite	Sulphide mineralization occurs along fractures in quartz monzonite of the Capoose Lake Batholith. East-west trending dikes of probable Tertiary age occur proximal to mineralized fractures and may be associated with mineralization.
093F 022	VEIN	CAPOOSE, CAP	chalcocite, molybdenite, covellite, pyrite, malachite	North-west - southeast trending fractures within the Capoose Lake Batholith contain Cu-Mo sulphide mineralization. Best assays reported are 0.50% Cu and 0.007% MoS ₂ from a grab sample taken from one of 14 blast pits on the property.
093F 039	DISEMINATED	NED	chalcocite, molybdenite, pyrite	The only outcrop on the property contains trace amounts of disseminated pyrite, chalcocite and molybdenite. The best intersection reported from a percussion drill hole assayed 0.044% MoS ₂ and 0.15% Cu.
093F 040	PORPHYRY	CAPOOSE, CAPOOSE LAKE (or CAPOOSE PROSPECT)	pyrite, sphalerite, galena, chalcocite, arsenopyrite.	Mineralization at the Capoose prospect is hosted in and adjacent to Late Cretaceous garnet-bearing rhyolite sills which intrude Hazelton Group volcanic and sedimentary rocks. Sulphides occur mainly as disseminations but also as veinlets and fracture fillings within the rhyolite. Granges Exploration Ltd. has reported unclassified reserves of 26.3 million tonnes grading 0.51 g/t Au, and 30 g/t Ag.

REFERENCES

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- Tipper, H. (1963): Netchako River Map Area, British Columbia; Geological Survey of Canada Memoir 324, 59 pages.

