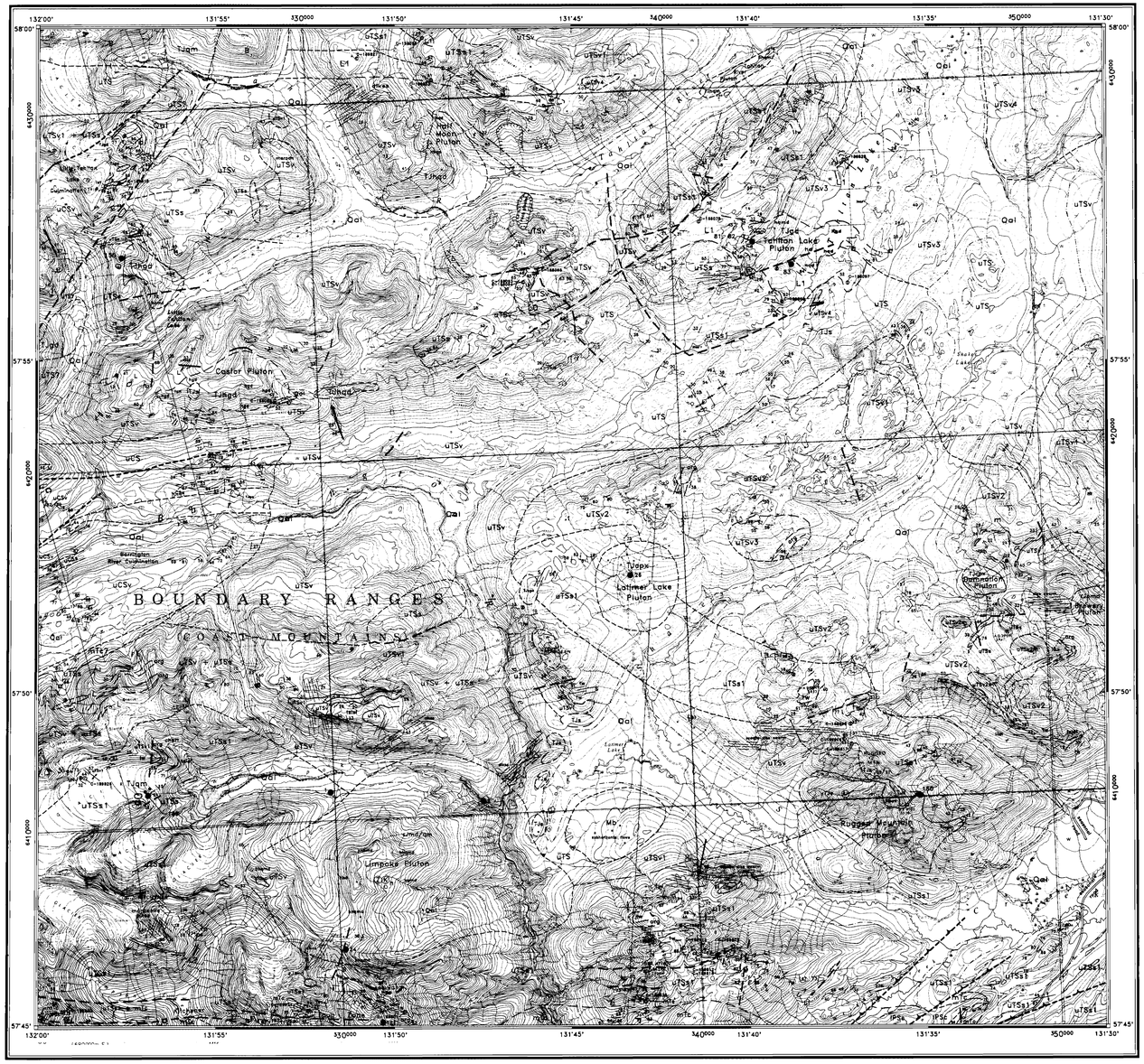
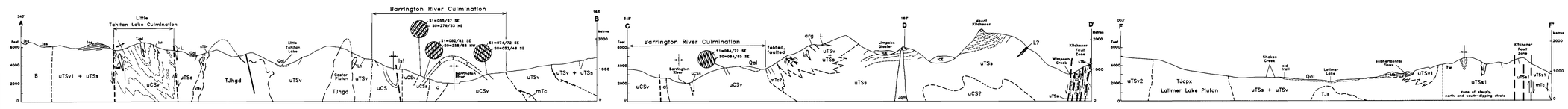




BC Ministry of Energy, Mines and Petroleum Resources

Geological Survey Branch

GEOSCIENCE MAP 1993-6

GEOLOGY OF THE TAHLTAN LAKE AREA, NORTHWESTERN B.C.

NTS 104G/13

By D.A. Brown

SCALE 1 : 50 000

STRATIFIED ROCKS

QUATERNARY

Qal — Alluvium, glacial till, unconsolidated glaciofluvial deposits

MIOCENE OR YOUNGER (?)

Mb — Dark brown weathering, columnar jointed potassic andesite flows, minor tuff

UPPER TRIASSIC

STUHINI GROUP

uTS — Undifferentiated volcanic and sedimentary rocks; argillite (arg); micritic limestone (L); limestone breccia (lbx); tuffaceous wacke (tw)

uTSs — Sedimentary rocks; undifferentiated

Carnian–Lower Norian

uTSs1 — Well-bedded to massive, tuffaceous siltstone, wacke, minor argillite, intraformational limestone–bearing conglomerate rare black chert; rare granitoid–bearing polymictic conglomerate; discontinuous limestone lenses with Carnian to early Norian conodonts (L1); limestone with Ladinian to Carnian conodonts (L0)

uTSv — Volcanic rocks, undifferentiated; volcanic breccia (vbx); maroon volcanic breccia (mvbx); andesite (and); clinopyroxene phyric basalt (pbas); maroon epiclastics (mepi); tuffaceous siltstone (tslst)

uTSv4 — Bladed plagioclase phyric basalt or basaltic andesite flows (p), locally pillowed

uTSv3 — Massive, medium–grained, plagioclase–rich, tuffaceous wacke

uTSv2 — Intermediate volcanic rocks; massive, green hornblende–plagioclase–rich andesite block–tuff, tuff; minor flows; green & maroon andesite lithic fragments; maroon & green (uTSv2m); light grey, hornblende–rich tuff (m)

uTSv1 — Mafic volcanic rocks; augite–porphyritic basalt to basaltic andesite flows and breccia; pyroxene–rich crystal–lithic lapilli tuff; dark green to olive–green, medium–grained, massive volcanic wacke, minor plagioclase

EARLY PERMIAN TO(AND?) MIDDLE TRIASSIC

mTc — Buff, pale green, grey and black chert; siliceous siltstone; maroon & green ash tuff; tuffaceous mudstone

PALEOZOIC STIKINE ASSEMBLAGE

IPSc — Dark to light grey and black calcarenite with minor chert layers and nodules, locally blackiastic; minor argillite (a); maroon and green plagioclase crystal lithic tuff, mudstone (mt)

UPPER CARBONIFEROUS TO LOWER PERMIAN

uCSf — Bedded to laminated sericitic ash tuff and tuffaceous siltstone; varicoloured chert; buff calcareous siltstone

UPPER CARBONIFEROUS

dCSs — Foliated argillite, siltstone, calcareous siltstone and conglomerate

uCSv — Foliated, chloritic, pyroxene–plagioclase phyric, andesite flows and/or sills; crystal tuff and lithic lapilli tuff; massive andesite (a)

PERMIAN OR OLDER

uCS — Unclifferentiated foliated volcanic & sedimentary rocks; recrystallized limestone (lst)

INTRUSIVE ROCKS

TERTIARY AND OLDER DIKES

Andesite (A); basalt (B); felsite (F); dark green, pyroxene–phyric olivine basalt (M); rhyolite (R); syenite (S)

EARLY JURASSIC -- TEXAS CREEK SUITE

eJmd — Medium–grained hornblende monzodiorite; quartz monzonite

LATE TRIASSIC TO EARLY JURASSIC -- COPPER MOUNTAIN SUITE

TJcpx — Magnetite biotite clinopyroxenite

TJs — Medium–grained, biotite clinopyroxene potassium–feldspar syenite, equigranular to megacrystic potassium feldspar phenocrysts; quartz monzonite (qm)

TRIASSIC TO JURASSIC

TJ — Medium–grained, diorite to granodiorite

hd, hbd, hqd, bmd, bhmd, phbmd, bhqm, hqm, bhqmd, hqmd, qmd, hgd, ton

Mafic minerals: b = biotite, h = hornblende, p = pyroxene

Rock names: d = diorite, qd = quartz diorite, md = monzodiorite, qm = quartz monzonite, qmd = quartz monzodiorite, gd = granodiorite, ton = tonalite

UNKNOWN AGE

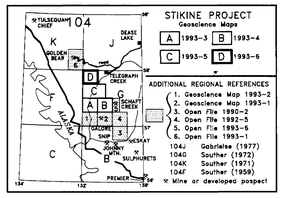
B — Amphibolite (from Souther, 1972)

Geological boundary
- defined
- approximate
- assumed

High–angle fault, surface trace, trend and plunge of slickensides indicated by arrow; solid circle on downthrown side
- defined
- approximate
- assumed

Contractional fault–surface trace; teeth in direction of dip
- defined
- approximate
- assumed

Cross–section line
Bedding: tops unknown, g=gentle, m=moderate, s=steep
Bedding: tops unknown, inclined, parallel to foliation, vertical
Bedding: tops observed, inclined, overturned
Foliation: inclined, vertical, m=mylonitic
Dike; inclined, vertical; composition indicated by abbreviation
Vein; inclined, vertical (q=quartz)
Joint; inclined, vertical
Antiformal axis
Synformal axis
Overturned synclinal axis
Axial plane of minor fold; inclined, vertical
Fold axis of minor fold (arrow indicates plunge)
m, s, and z asymmetry
Glacial striae (undetermined direction of movement)
Dike swarm
Fossil location; age determined (with GSC number)
macrofossil; conodonts; fusulinids; radiolaria
Fossil location; age indeterminate, macrofossil, barren sample
Field station with no structural measurement
Landslide scar
Diamond drill hole
Trench
MINFILE mineral occurrence with number (1040...) — 140
Isotopic age locality (U/Pb, K/Ar, Rb/Sr, Ar/Ar
hb=hornblende, bt=biotite, wr=whole rock)
Limonitic–altered zone (shown as grey tone)



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