GEOLOGICAL LEGEND

OVERLAP ASSEMBLAGES

PLEISTOCENE AND RECENT

Qs — *Glacial and glaciofluvial deposits, stream deposits, felsenmeer, talus, soil;* **Qal**, *river channel sediments*

PLEISTOCENE

Pv — *Olivine basalt*

MIOCENE TO PLEISTOCENE

MPT — **TUYA FORMATION:** *alkali olivine basalt, tuff, agglomerate, minor trachyte and rhyolite;* **PPv**, *may include areas of underlying Mesozoic and Paleozoic rocks;* **MPdk**, *feldspar-quartz porphyry dikes and basaltic dikes, age uncertain*

EOCENE

Etc — **TANZILLA CANYON FORMATION:** *basal breccia, conglomerate, shale, freshwater limestone, coal;* **Ea**, *conglomerate, sandstone, shale*

Ev — *Rhyolite, chalcedonic rhyolite breccia, tuff;* **Ei**, *biotite-quartz latite porphyry, age uncertain;* **Eahp**, *augite hornblende porphyry*

EARLY EOCENE

Em — **MEEHAUS PLUTON:** *Biotite-augite granodiorite*

CRETACEOUS (?) AND TERTIARY
UPPER CRETACEOUS (?) TO EOCENE

KEs — **SIFTON FORMATION:** *conglomerate, sandstone, shale*

KTs — **SLOKO GROUP:** *rhyolite, dacite and trachyte flows, dikes, breccia*

CRETACEOUS
LOWER AND (?) UPPER CRETACEOUS

KTc — **TANGO CREEK FORMATION OF SUSTUT GROUP:** *conglomerate, sandstone, siltstone, shale*

LATE CRETACEOUS

LKsp — **SNOW PEAK PLUTON:** *biotite-hornblende granite, fine to medium grained*

EARLY CRETACEOUS
CASSIAR PLUTONIC SUITE (**EKBR**, **EKg**):

EKBR — **BEADY RANGE PLUTON:** *biotite granite, medium to coarse grained*

EKg — *Biotite-hornblende granite, age uncertain*

JURASSIC
MIDDLE TO LATE JURASSIC

JTL — **TACHILTA LAKES PLUTON:** *biotite and biotite-hornblende granodiorite, monzodiorite*

JGL — **GRANITE LAKE PLUTON:** *biotite and biotite-hornblende granodiorite*

mLJgd — *Biotite and biotite-hornblende granodiorite*

STIKINE TERRANE

JURASSIC
EARLY TO MIDDLE JURASSIC

mJTs — **THREE SISTERS PLUTON:** **mJTs1**, *leucocratic clinopyroxene-hornblende granodiorite, quartz monzodiorite;* **mJTs2**, *potassic marginal phase: biotite-hornblende quartz monzonite, granite, syenite;* **mJTs3**, *central phase: biotite-hornblende quartz monzodiorite, quartz monzonite;* **mJTs4**, *mafic phase: biotite-hornblende quartz diorite, diorite, gabbro;* **mJTs5**, *fine grained phase: clinopyroxene-biotite-hornblende quartz diorite, diorite and quartz monzodiorite*

JPC — **PALLEN CREEK PLUTON and related plutons:** *biotite-hornblende quartz monzodiorite and quartz monzonite, minor granodiorite*

JT — **TANZILLA PLUTON:** *biotite-hornblende granodiorite*

Jgd — *Granodiorite;* **Jd**, *diorite;* **Js**, *syenite; age uncertain*

LOWER JURASSIC

lJT — **TAKWAHONI FORMATION (lJT, lJTa, lJTgw, lJTv, lJTst, lJTcg):** **lJT**, *undivided greywacke, shale, siltstone, conglomerate, tuff, sandy limestone, arkosic, calcareous sandstone, basal conglomerate;* **lJTsm**, *calcilutite hornfels; Toarcian*

lJTa — *Conglomerate, shale, tuff; Toarcian*

lJTgw — *Greywacke, shale, minor conglomerate; mainly Pliensbachian;* **lJTgm**, *hornfelsed equivalents of* **lJTgw** *including abundant sills and dikes of quartz-feldspar porphyry and granodiorite*

lJTv — *Grey to green andesitic breccia and tuff; age uncertain, may be Bajocian*

lJTst — *Dark grey and black shale, siltstone, tuff, minor greywacke; Sinemurian*

lJTcg — *Coarse, polymictic conglomerate; Sinemurian; may be partly Toarcian*

lJv — *Maroon and green epiclastic sandstone, pyroclastic volcanic rocks, agglomerate, flows; age uncertain*

EARLY JURASSIC

EJT — **TAHLTAN PLUTON:** *zoned ultramafic body; pyroxenite, pyroxene syenite, syenite; rich in apatite and magnetite*

TRIASSIC AND JURASSIC

TrJgd — *Biotite-hornblende quartz diorite, granodiorite, quartz monzonite, diorite;* **TrJgm**, *quartz monzonite*

TRIASSIC
UPPER TRIASSIC

uTrst — **STUHINI GROUP, upper part:** *massive and pillowed porphyritic augite basalt and coarse-bladed feldspar porphyry, aphanitic basalt; local basal granitic-cobble conglomerate;* **uTrsts**, *tuffaceous argillite, greywacke, minor meta-andesite and augite porphyry*

LATE TRIASSIC

LTrCH — **CAKE HILL PLUTON:** *hornblende quartz monzodiorite, granodiorite, weakly to moderately foliated monzodiorite (and metamorphosed equivalents); rare hornblende diorite*

LTrLC — **LATHAM CREEK PLUTON:** *hornblende quartz diorite, monzodiorite, strongly foliated*

LTrCM — **CARIBOO MEADOWS PLUTON:** *augite metagabbro, hornblendite*

LTrK — **KAKETSA PLUTON and related intrusions:** *biotite-hornblende diorite, hornblende diorite; minor biotite-clinopyroxene diorite*

LTrMC — **MANSFIELD CREEK PLUTON:** *diorite and gabbro, strongly kaolinized*

LTrgs — *Augite metagabbro;* **LTrgsm**, *augite-biotite-hornblende gabbro, monzodiorite and monzogabbro, age uncertain*

LTrhb — *Hornblendite*

LTrgm — *Undivided biotite-hornblende quartz diorite, granodiorite, quartz monzonite, diorite*

MIDDLE TRIASSIC

mTrst — **STUHINI GROUP, lower part:** (**mTrsT**, **lmTrsT**, **lTrsT**) *Augite porphyry, meta-andesite, metabasalt, volcanic breccia, may include* **uTrsT**

LOWER AND MIDDLE TRIASSIC

lmTrst — *Argillite, siliceous argillite, greywacke, phyllite; minor chert and limestone;* **lTrsT**, *includes augite porphyry breccia and tuff; may be entirely Lower Triassic*

PERMIAN

Pc — *Massive limestone; may locally include phyllite and ribbon chert;* **Pc**, *may be, in part, older*

Pp — *Phyllite, ribbon chert;* **Pp**, *may be, in part, older*

Pv — *Phyllitic greenstone, phyllite, minor chert and limestone, rusty weathering;* **Pv**, *may be, in part, older*

METAMORPHIC ROCKS

Gn — *Diorite gneiss, amphibolite, migmatite; age uncertain, terrane assignment uncertain*

QUESNEL TERRANE

JURASSIC
LOWER JURASSIC

lJN — **NAZCHA FORMATION:** *greywacke, conglomerate, shale, slate, siltstone; Sinemurian and (?) younger*

TRIASSIC
LATE TRIASSIC

LTrgd — *Hornblende granodiorite, hornblende diorite; commonly foliated; may be in part of Early Jurassic age;* **LTrKgd**, *includes irregular bodies of* **EKg** *and* **mJgd**

UPPER TRIASSIC

uTrc — *Limestone*

uTrSH — **SHONEKTAW FORMATION:** *augite porphyry, feldspar porphyry, tuff, agglomerate, pyroxenite; minor shale, siltstone and greywacke may include some* **LTrg**; **TrJsne**, *undivided Shonektaw and Nazcha formations*

CACHE CREEK TERRANE

JURASSIC
LOWER JURASSIC, may be in part, MIDDLE JURASSIC

Jt — **INKLIN FORMATION:** *penetratively cleaved, phyllitic slate, greywacke, pebble and cobble conglomerate;* **Jte**, *diamictite, possibly Kutcho Formation in part*

TRIASSIC
UPPER TRIASSIC

uTrs — **SINWA FORMATION:** *limestone, commonly argillaceous and fetid*

uTrK — **KUTCHO FORMATION:** *basaltic to rhyolitic schist (flows, breccia, crystal tuff); fine grained volcanic sediments, basic schist, conglomerate (may be basal Inklin Formation, in part);* **TrJk**, *undivided Kutcho, Inklin and possibly Cache Creek rocks*

MISSISSIPPIAN TO TRIASSIC
CACHE CREEK COMPLEX (**MTrK**, **PT**, **PFR**, **MPH**, **MPC**, **MPV**, **MPgs**, **MPu**)

MTrK — **KEDAHDA FORMATION:** *chert, cherty argillite; minor argillite, siltstone and volcanic sandstone; minor volcanic rocks and metamorphosed equivalents;* **MTrKsv**, *sediments and volcanics, undivided;* **MTrKgw**, *greywacke, slate, chert; may be entirely of Late Triassic age ?*

PERMIAN

PT — **TESLIN FORMATION:** *massive limestone, minor mafic volcanics*

PFR — **FRENCH RANGE FORMATION:** *undivided; basalt, tuff, agglomerate; minor chert, argillite;* **PFRt**, *dominantly tuff and agglomerate;* **PFRv**, *dominantly mafic volcanic flows*

UPPER MISSISSIPPIAN TO PERMIAN

MPH — **HORSEFEED FORMATION:** *limestone, dolomitic limestone*

MPC — *Limestone, age unknown*

MPV — *Mafic volcanics, greenstone, age unknown*

MPgs — *Coarse grained to pegmatitic gabbro, diorite;* **MPgv**, *fine grained, foliated gabbro, greenstone; may include small serpentinite bodies*

MPu — *Peridotite, dunite, pyroxenite, generally serpentinized; locally includes pods of nephrite jade and small bodies of listwanite, rodingite and talc*

ANCESTRAL NORTH AMERICA

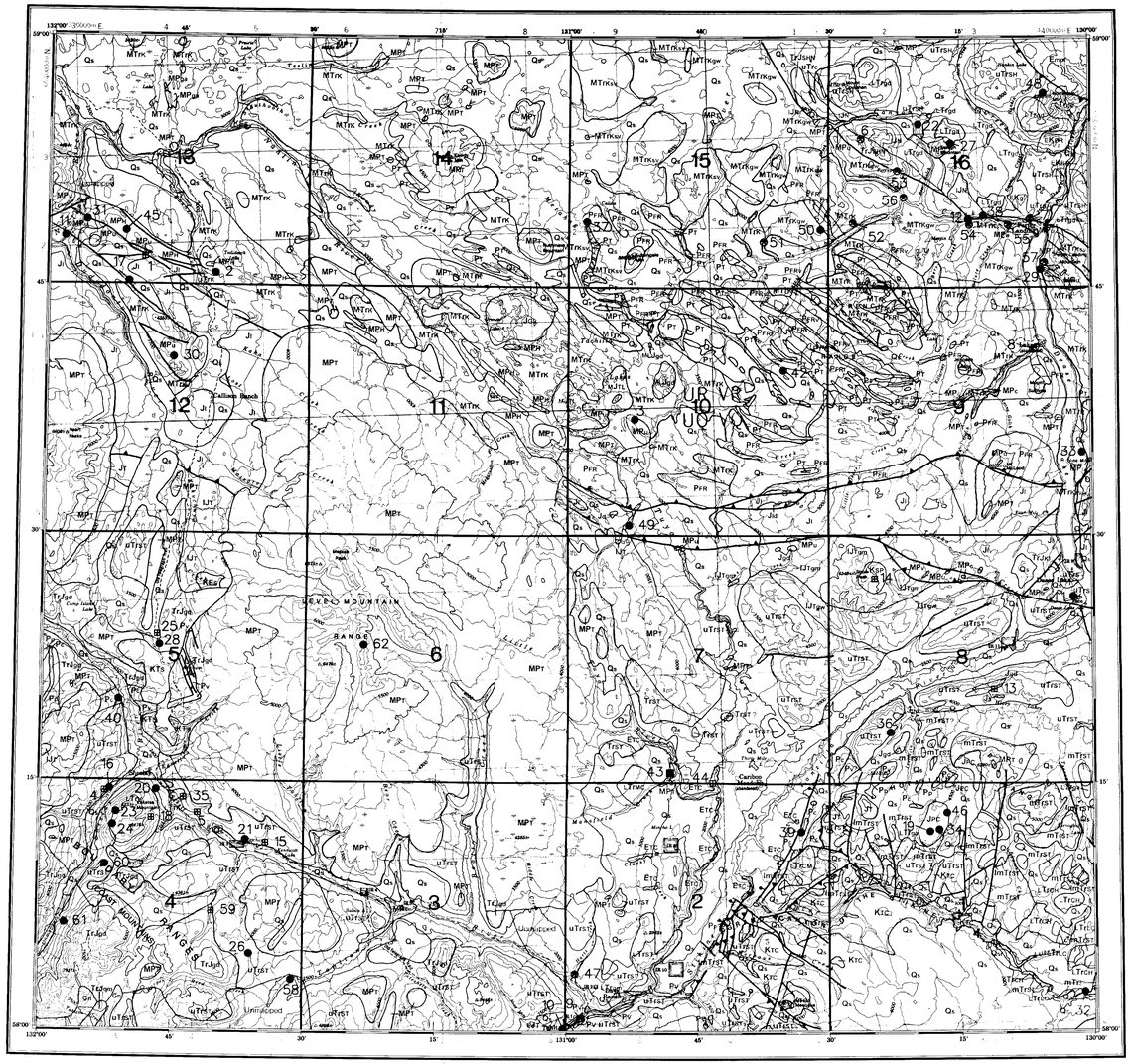
CAMBRIAN
LOWER CAMBRIAN
ATAN GROUP

Eb — **BOYA FORMATION:** *quartzitic sandstone, siltstone, slate, phyllite;* **Eam**, *micaceous quartzite, mica schist, minor crystalline limestone; may include some* **STELKUZ FORMATION**; **Eamv**, *undivided pyritic, hornfelsic slate, argillite, siltstone, quartzite, micaceous quartzite, schist, limestone; variably metamorphosed; mainly Cambrian to Mississippian(?);* **Eamc**, *mainly carbonate;* **Eamgs**, *greenstone*

Geological map and legend compiled from:

Gabrielse, H. (1994): Geology of Dease Lake (104J/E) and Cry Lake (104I) map areas, north-central British Columbia; *Geological Survey of Canada*, Open File 2779, Scale 1:50,000.

Gabrielse, H. et al. (1980): Geology of Dease Lake (104J) map area, British Columbia; *Geological Survey of Canada*, Open File 707, Scale 1:125,000.



BC Ministry of Energy, Mines and Petroleum Resources

Geological Survey Branch

MINFILE MAP
NTS 104J
DEASE LAKE

This MINFILE release researched and compiled by:
G. Owsiacki

Date Revised: **January 1995**

Scale 1:250 000

0 5 10 15 20 25
kilometres

Total Number of Mineral Occurrences: 62

Status
- Producer
- Past Producer
- Developed Prospect
- Prospect
- Showing

104N	104O	104P
104K	104J	104I
104F	104G	104H

MAP LEGEND - 104J

MINFILE NUMBER	NAME	COMMODITIES
001	OPAL LAKE	Ni AU
002	ACE	CU
003	TUYA	AU AG PB ZN
004	KID	CU AU
005	COPPER CREEK	CU AU AG PB ZN
006	FOREST CREEK	AU AG PT
007	THREE CREEK	AU PT
008	DEASE CREEK	AU
009	TAHLTAN RIVER	AU
010	PINTO	CU
011	NW	AU
012	KEYSTONE	AU
013	HU	CU AU MO
014	MACK	MO CU AU WO
015	HOEY	CU AU AG CO
016	GRIZZLY 4,13	CU
017	GG	NI
018	GG	CU AU ZN
019	DISCO	CU AU
020	S	CU
021	OH	CU AU PB ZN
022	JIM	MO CU
023	HO	CU
024	WEST KAKETSA	CU PB ZN
025	PET	CU ZN
026	YI	CU
027	SHIELD	MO CU
028	SHIELD	CU
029	DEASE LAKE	AB
030	DUDIDONTU RIVER	AB
031	NAHLIN RIVER	CU NI
032	BUD	CU
033	EMI	AB
034	STIKINE MOLY	MO CU
035	STAR	CU AU
036	TAN	CU
037	CALATA LAKE	AB
038	ZENDA	CU
039	TANZILLA VALLEY	LS
040	SHESLAY RIVER	LS
041	TATSHO MOUNTAIN	LS
042	FRENCH RANGE	LS
043	THUNDERCLOUD	CU
044	TUYA RIVER	CU
045	NAHLIN RIVER LIMESTONE	LS
046	STIKINE	MO CU
047	HARTZ CREEK	AU
048	ANKI	CU
049	TUYA 2	AU
050	PAL	AU CU
051	FALL GULCH	AU
052	VOWEL CREEK	AU
053	PORCUPINE CREEK	AU
054	BOULDER CREEK	AU
055	DELURE CREEK	AU
056	MOSQUITO CREEK	AU
057	SEYWERD	JD
058	HALO	CU
059	WOLVERINE	AU CU
060	AL 9	CU AU
061	EAGLE	CU AU AG
062	GOLDEN SHOWER	HG

COMMODITY LEGEND

CODE INDEX		COMMODITY INDEX	
AB	Asbestos	Asbestos	AB
AG	Silver	Coal	CL
AU	Gold	Cobalt	CO
CL	Coal	Copper	CU
CO	Cobalt	Gold	AU
CU	Copper	Jade, Nephrite	JD
HG	Mercury	Lead	PB
JD	Jade, Nephrite	Limestone	LS
LS	Limestone	Mercury	HG
MO	Molybdenum	Molybdenum	MO
NI	Nickel	Nickel	NI
PB	Lead	Platinum	PT
PT	Platinum	Silver	AG
WO	Tungsten	Tungsten	WO
ZN	Zinc	Zinc	ZN