

- ### LEGEND
- #### LAYERED ROCKS
- PALEOCENE**  
siltstone, sandstone, conglomerate  
Ppsc poorly consolidated siltstone, sandstone and conglomerate
- TRIASSIC**  
Grayling and Toad formations (undivided)  
TGT gray, red, and green shale interbedded with thin- to thick-bedded, brown sandstone and siltstone, locally calcareous
- PERMIAN**  
Fantesque Formation  
Pfi dark gray, light gray-weathering, finely crystalline, feld, sandy, bedded limestone; contains thin interbeds of dark gray to black, fissile shale  
Pfs dark gray, siliceous, bedded shale; contains lesser thin interbeds of limestone, limestone concretions and sandy limestone
- EARLY CARBONIFEROUS**  
Mattson Formation  
Cfi pale gray, strongly indurated, fine-grained, quartz sandstone, gray-weathering; locally contains trace amounts of fine pyrobitumen.
- DEVONIAN TO EARLY CARBONIFEROUS**  
Besa River Formation  
DCBR black shale and silty shale with minor limestone nodules
- SILURIAN TO DEVONIAN**  
carbonate  
SDc buff- to gray-weathering, light to medium gray, thick-bedded dolostone and limestone; locally fossiliferous, locally rugged  
SDRR dark gray to black, locally calcareous or dolomitic, graptolitic shale or siltstone with lesser very fine-grained sandstone, bedded chert (porcellanite) and limestone, weathers recessively
- ORDOVICIAN TO SILURIAN**  
quartz sandstone and conglomerate  
OSu gray to buff, quartz-rich sandstone to pebbly sandstone; grains are subround to round; contains beds up to 2 m thick of heavily burrowed, slightly dolomitic, very fine-grained sandstone and siltstone
- ORDOVICIAN**  
Sunblood Formation  
OSu mottled light to dark gray dolostone and limestone; weathers light brownish-gray to buff  
basal-reddish siltstone-sandstone-conglomerate  
Ov massive, dark green, aphanitic basalt; interbedded with maroon sandstone, shale, pebble conglomerate and white sandstone  
dolomitic siltstone  
Os thin bedded, brownish gray, slightly dolomitic siltstone; uppermost part contains thin interbeds of nodular limestone
- CAMBRIAN TO ORDOVICIAN**  
reddish siltstone-argillite-sandstone-conglomerate  
COs grayish-red, maroon and green, laminated siltstone to argillite interbedded with white, pink and maroon sandstone, locally contains quartz-sandstone conglomerate; upper part contains bioturbated limestone with abundant trace fossils
- NEOPROTEROZOIC (?)**  
mafic volcanic rocks  
Pv gray-weathering, thick-bedded, basaltic lapilli tuffs and breccias interbedded with amygdaloidal to vesicular flows, fresh colours are grayish-green with lesser maroon; amygdalae infilled with chlorite and calcite  
Toobally Formation  
Pt dark gray to black, orange-brown weathering, polymictic, matrix-supported conglomerate; matrix mudstone to fine siltstone; clasts dominantly sedimentary sandstone, siltstone, and limestone  
sandstone-pebbly sandstone-siltstone  
Ps pale cream-weathering, pale gray to off-white, moderately indurated, quartz sandstone; subrounded clasts range in size from fine sand to fine pebbles; interbedded with dark gray, laminated siltstone and maroon siltstone

- #### SYMBOLS
- Geological contacts (defined, approximate, assumed).....
- Dextral strike-slip fault (defined, approximate, assumed).....
- Reverse fault (defined, approximate, assumed).....
- Limit of outcrop.....
- Limit of mapping.....
- Bedding (inclined, horizontal).....
- Bedding (observation from air).....
- Bedding (from Gabrielse and Blusson, 1969).....
- Dominant slaty cleavage.....
- Fold axial surface trace (anticline: upright, overturned).....
- Fold axial surface trace (syncline: upright, overturned).....
- Kink fold axial surface trace (anticline).....
- Kink fold axial surface trace (syncline).....
- Line of cross-section.....
- Fossil locality.....
- Geochemical sample locality.....
- Rock Eval sample locality.....
- Esker.....

#### FOSSILS

GSC Locality No.	Material	Unit	CAI	Age Range
C-417197	conodont	COi	3	Early Tremadocian, Early Ordovician
C-417199	conodont	OSu	3	Derrwillan, Middle Ordovician
C-417163	conodont	OSu	3	Early Carbonian, early Late Ordovician
C-417165	conodont	OSu	3	Middle Tremadocian, early Early Ordovician
C-417166	conodont	OSu	3	Arangan-Derrwillan, middle Early Ordovician
C-417167	conodont	OSu	3	middle Arenigian, late Early Ordovician, early Middle Ordovician
C-417198	conodont	Pfs	2	Permian
C-404735	pollen and spores	TGT		Early Triassic

conodonts - Pyle, L., 2004. Biostratigraphy Report, Seventeen samples submitted for conodont microfossil analysis, collected by Lee Pigage (Yukon Geological Survey), map sheet NTS 95D/8. Report No. LJP04-02, 12 p.  
pollen and spores - Utting, J., 2004. Personal communication.

#### REFERENCES

Deklerk, R. (compiler), 2003. Yukon MINFILE - a database of mineral occurrences. Yukon Geological Survey, CD-ROM.

Gabrielse, H. and Blusson, S., 1969. Geology of Coal River map-area, Yukon Territory and District of Mackenzie (95D). Geological Survey of Canada, Paper 68-38, 22 pages.

Pigage, L.C. and MacNaughton, R.B., 2004. Reconnaissance geology of northern Toobally Lake (95D/8), southeast Yukon. In: Yukon Exploration and Geology 2003, D.S. Ermi and L.L. Lewis (editors), Yukon Geological Survey, p. 199-219.

Pyle, L., 2004. Biostratigraphy Report, Seventeen samples submitted for conodont microfossil analysis, collected by Lee Pigage (Yukon Geological Survey), map sheet NTS 95D/8. Report No. LJP04-02, 12 p.

Utting, J., 2004. Personal communication.

Pigage, L.C., 2004. Preliminary geology NTS95D/8 (north Toobally Lakes area), southeast Yukon (1:50 000 scale). Yukon Geological Survey, Open File 2004-19.

Digital cartography and drafting by L.C. Pigage, Yukon Geological Survey.

Any revisions or additional geological information known to the user would be welcomed by the Yukon Geological Survey.

Keep this map in a dark area to keep colours from fading.

Yukon Geological Survey  
Energy, Mines and Resources  
Yukon Territorial Government

**MINERAL OCCURRENCE**  
Yukon MINFILE

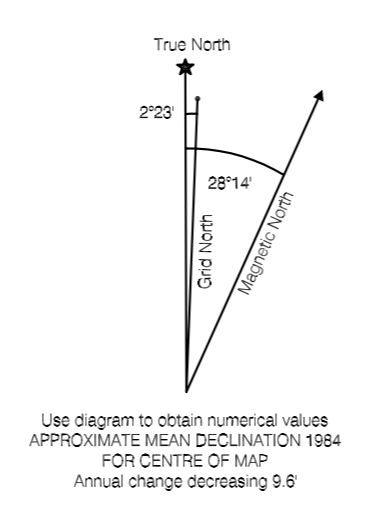
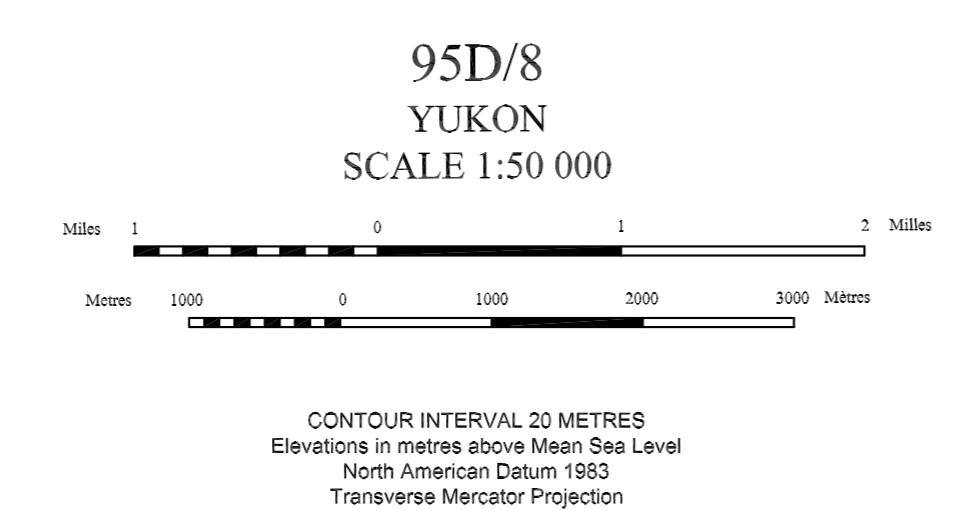
95D 002 GUSTY showing / chalcocite  
traces in sediments

Deklerk, R. (compiler), 2003. Yukon MINFILE - a database of mineral occurrences. Yukon Geological Survey, CD-ROM.



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ONE THOUSAND METRE  
Universal Transverse Mercator Grid  
ZONE 9



95D10	95D9	95D12
95D7	<b>THIS MAP</b>	95D5
95D2	95D1	95D4

OPEN FILE 2004-19

PRELIMINARY GEOLOGY  
NTS 95D/8 (north Toobally Lakes area),  
SOUTHEAST YUKON (1:50 000 scale)

by  
Lee Pigage  
Yukon Geological Survey