

Canada

Yukon  
Government



- QUATERNARY**
- Q Alluvium, colluvium and glacial deposits (stippled workings)
  - Qv Volcanic(?) and fragmental volcanic rocks of uncertain composition, age and origin
- LATE CRETACEOUS**
- LKq Medium to coarse grained, locally porphyritic (locally potassium feldspar megacrystic) biotite gneiss and quartzite. Some samples of this suite have U-Pb zircon ages ranging from 64-67 Ma (Jim Mortensen, personal communication, 1993)
  - LKs Medium to coarse grained, locally porphyritic (locally potassium feldspar megacrystic) biotite gneiss and quartzite. Some samples of this suite have U-Pb zircon ages ranging from 90-95 Ma (Jim Mortensen, personal communication, 1993)
- EARLY CRETACEOUS**
- DMc Tomstone plutonic suite
- DEVONIAN AND MISSISSIPPIAN**
- DME Earn Group
  - DMc Grey to black shale, phyllite, siltstone, sandstone, and chert-pebble conglomerate
- OROVICAN, SILURIAN, and DEVONIAN**
- ODrS Road River Group
  - ODrS Steel Formation: beige-orange, massive to well laminated, locally ripple cross-s laminated dolomitic siltstone
  - ODrS Duo Lake Formation: grey to black shale and thin-bedded chert
- UPPER CAMBRIAN - OROVICAN**
- PCIn Rabikellite Formation: laterally persistent calcareous phyllite, thin to medium bedded, matrix dolomitic marble and rare limestone-pebble conglomerate, cherty calcareous rock near intrusions
  - PCHy unconfined
- LOWER - MIDDLE(?) CAMBRIAN**
- LMCq Tan to brown weathering thinly bedded calcareous siltstone, sandstone, shale and limestone
  - LMCs Greenish grey phyllite with mm-scale siltstone laminae and pebbly sandstone and pebbly sandstone and greenish grey chert
  - LMCq Light to dark grey, locally pebbly, white (siliceous meta sandstone) and dark grey phyllite
  - LMCq Dark green massive to fragmental mafic meta volcanic and volcanoclastic rocks
- UPPER PROTEROZOIC(?), LOWER PALEOZOIC(?)**
- PCIn Nerechilla Formation: maroon and green phyllite with cm scale grey green siltstone laminations, locally calcareous sandstone and pebbly sandstone, and sandy limestone member
  - PCHy Yusegru Formation: in northeast corner map area, grey green phyllite, meta sandstone and pebbly meta sandstone, in southern half of map area, greenish grey phyllite, quartzite, muscovite-chlorite phyllite, quartzite, calcareous and micaceous psammite, gritty psammite, rare calc. siliceous rock and marble. PCHy: indicates carbonate and calc-siliceous rich part of succession

- MINERAL OCCURRENCES (I.N.A.C., 1992)**
- Intrusion-hosted:**
- 115P 006 H8BO (RED MOUNTAIN)
  - 115P 007 SPRAGUE (MARTIN)
- Skarn:**
- 115P 007 SPRAGUE (MAHTIN)
  - 115P 008a EAST RIDGE (TEE)
  - 115P 008b EAST RIDGE (SMARK)
  - 115P 009 LUPRUSH
  - 115P 020 OLIVER
- Vein, breccia:**
- 115P 006 H8BO (RED MOUNTAIN)
  - 115P 007 SPRAGUE (TEE)
  - 115P 008 LUGUSI (TEE)
  - 115P 010 RIDGE (STERLING)
  - 115P 025 BOULDER
  - 115P 030 OLIVER
  - 115P 031a THE BAY (SUNSHINE CR. E.)
  - 115P 032 MZKI
  - 115P 036 BANDER
  - 115P 038 JABBERWOCK
  - 115P 039 CRE (WAY CREEK)
  - 115P 091 QUEST
- Work targets:**
- 115P 025 TOH
  - 115P 043 CORTIN
  - 115P 046 WEZ
- unknown**
- unknown
  - unknown
  - unknown

- SYMBOLS**
- Geological contact (defined, approximate, assumed)
  - Fault (defined, approximate, assumed, assumed under cover)
  - Limit of outcrop
  - Airphoto treatment
  - Bedding (upright, overturned, facing unknown)
  - Fold axis and mineral or clast elongation (amount and direction of deformation, two or more tick marks indicate second phase of deformation)
  - Mineral occurrence as enumerated in Yukon Minfile
  - Line of cross-section
  - Breccia zones
  - Summer road

- RELATED REFERENCES**
- BOSTOCK, H.S., 1964, Geology of McQuesten River, Yukon Territory, Geological Survey of Canada, Map 1432.
- EMOND, D.S., 1992, Petrology and geochemistry of feldspar and tungsten mineralized plutons, McQuesten River region, Central Yukon, in: Yukon Geology Vol. 3, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1994-1.
- EMOND, D. and LYNCH, T., 1992, Geology, mineralogy, and geochemistry of feldspar and tungsten mineralized plutons, McQuesten River region, Central Yukon, in: Yukon Geology Vol. 3, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1994-1.
- CORREY, S.P. and ANDERSON, F.G., 1993, Evolution of the northern Trenches, Geological Survey of Canada, Open File 1993-1.
- I.N.A.C., 1992, Yukon Minfile, Exploration and Geological Services, Yukon, Indian and Northern Affairs Canada.
- MURPHY, D.C. and HEON, D., 1994, Geology and mineral occurrences of Sprague Creek area (NTS 115P15), western Selwyn Basin, in: Yukon Geology Vol. 4, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1994-3.
- MURPHY, D.C., HEON, D., and HUNT, J., 1993a, Geological overview of Clear Creek map area, western Selwyn Basin, in: Yukon Geology and Geology 1992, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1992-1.
- MURPHY, D.C., HEON, D., and HUNT, J., 1993b, Geology of Clear Creek map area, Yukon (NTS 115P14), Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1993-1, scale 1:50,000.

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**This paper accompanies the following report:**

MURPHY, D.C. and HEON, D., 1994, Geology and mineral occurrences of Sprague Creek map area (NTS 115P15), western Selwyn Basin, in: Yukon Geology and Geology 1993, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada.

**Indian and Northern Affairs Canada**  
Exploration and Geological Services Division  
Yukon Region

**Open File 1994-3 (5)**  
GEOLOGICAL MAP OF SPRAGUE CREEK MAP AREA (NTS 115P15), WESTERN SELWYN BASIN, YUKON

by  
Donald C. Murphy and Daniela Heon  
Canada/Yukon Mineral Management Agreement  
Geoscience Office

**Geological map of Sprague Creek map area (NTS 115P15), western Selwyn Basin, Yukon, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1994-3 (5), 1:50,000 scale.**

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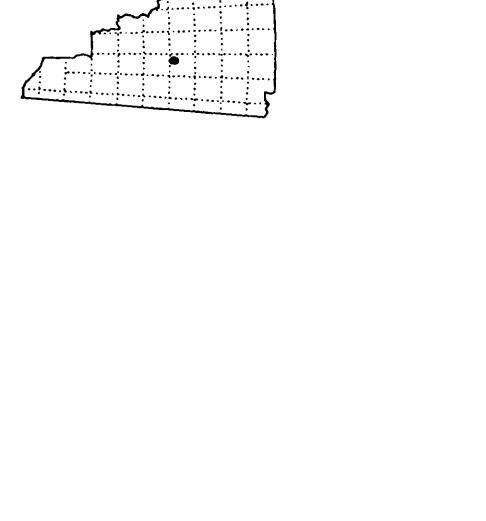
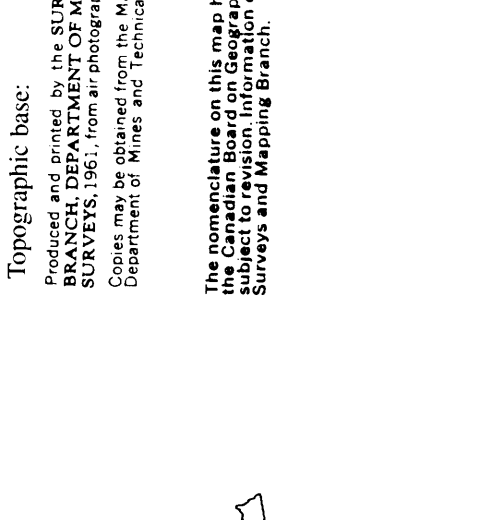
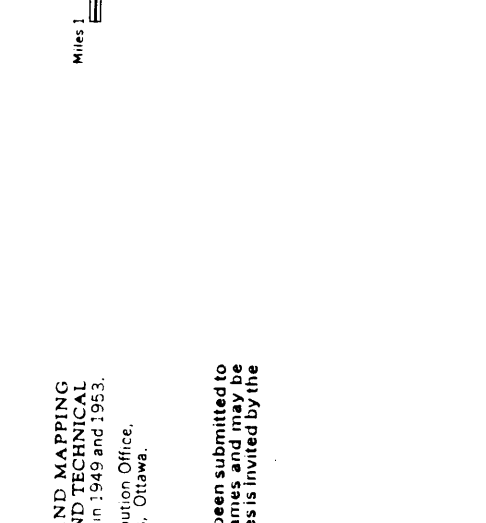
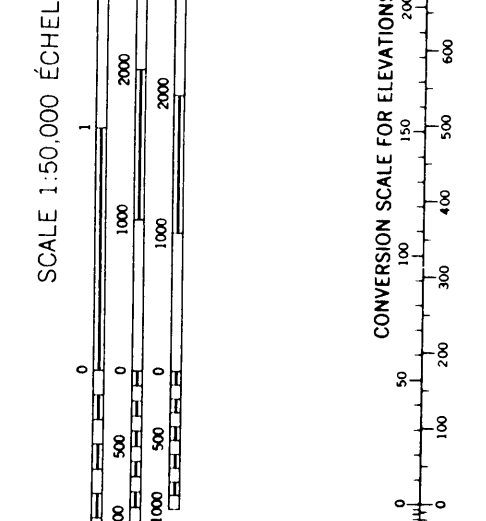
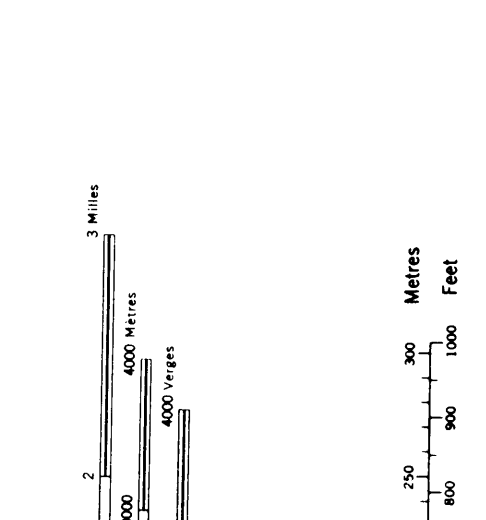
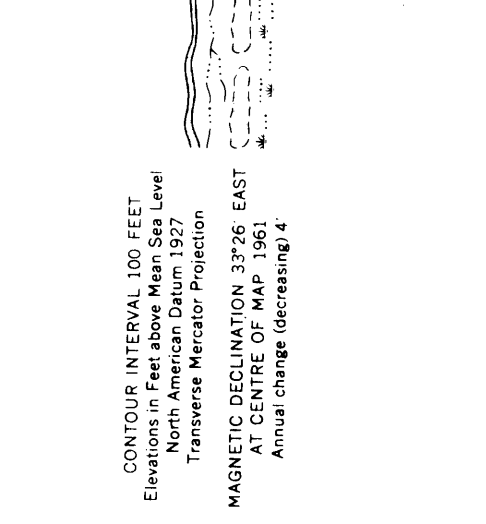
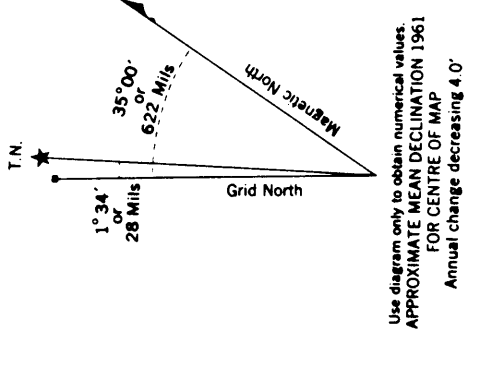
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