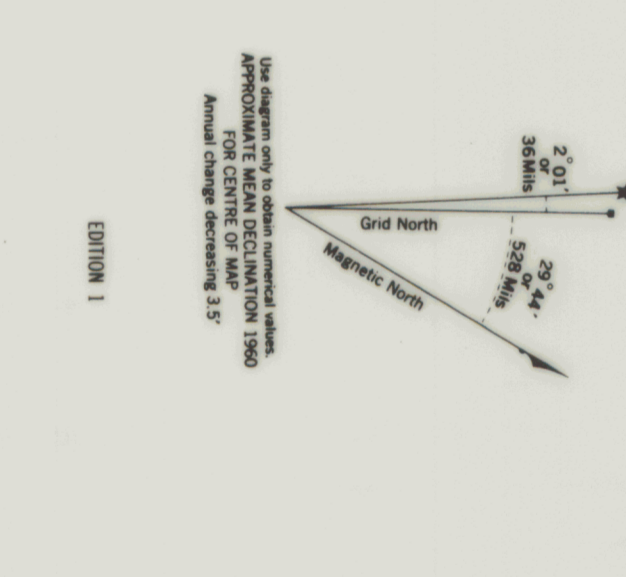
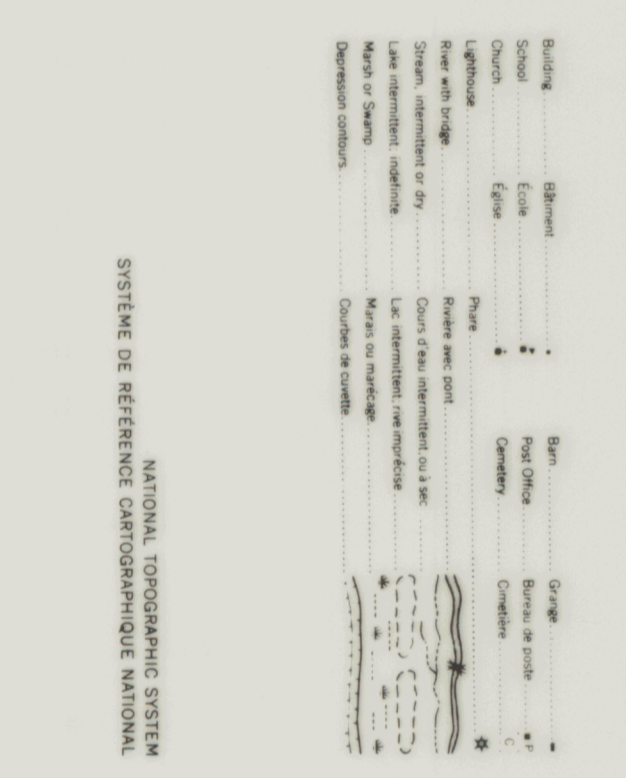
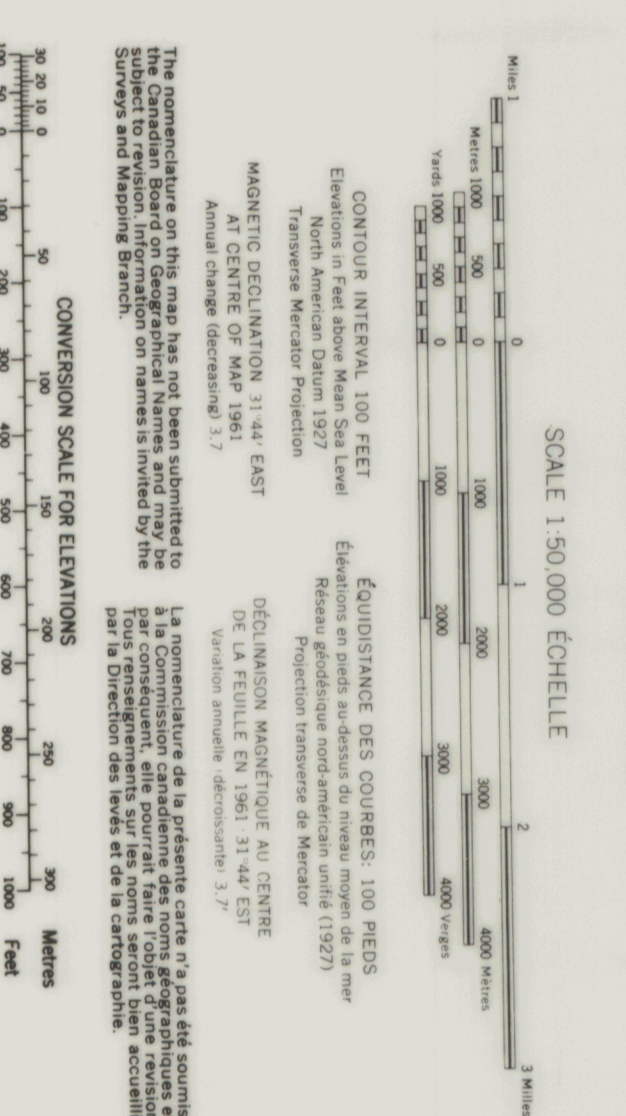
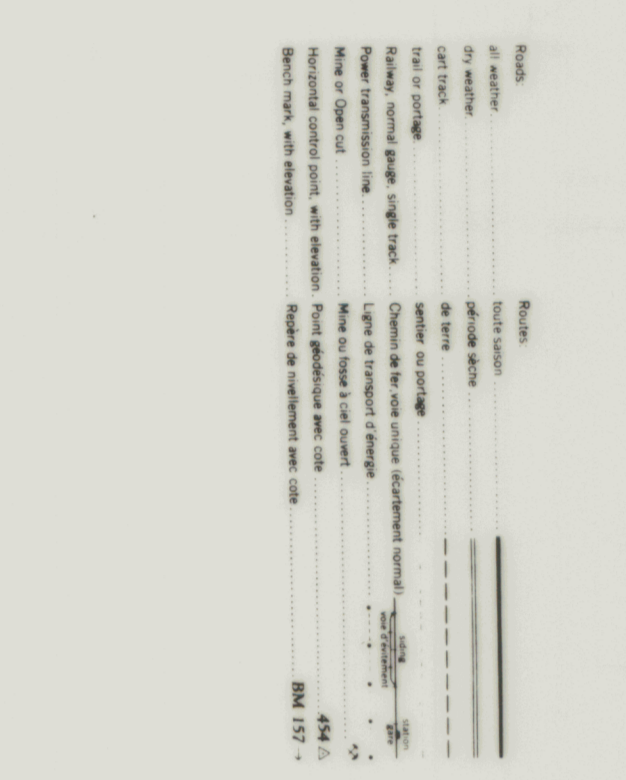
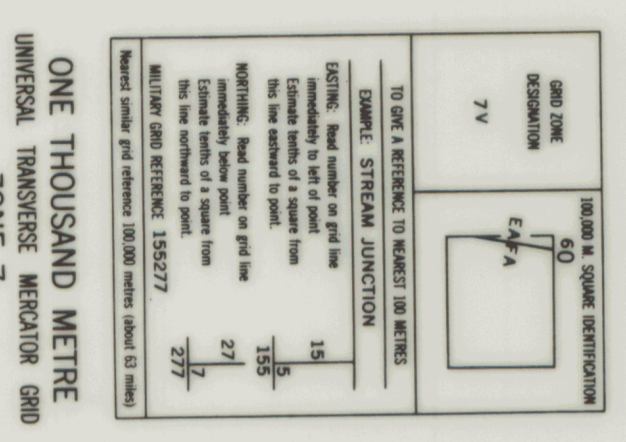


PROVINCE OF ALBERTA  
DEPARTMENT OF MINES AND TECHNICAL SURVEYS  
1987  
Scale 1:50,000  
Geographic coordinates: UTM  
Datum: NAD 83  
Projection: UTM  
Zone: 18N

1150/11	1150/10	1150/9
1150/8	1150/7	1150/8
1150/3	1150/2	1150/1

**SCROGGIE CREEK (1150/2) and BLACK HILLS CREEK (1150/7)**  
YUKON TERRITORY

DATE OF PRODUCTION: 1987  
BY: E. A. FULLER  
REVISIONS: 1987  
Scale 1:50,000  
Geographic coordinates: UTM  
Datum: NAD 83  
Projection: UTM  
Zone: 18N



**LEGEND**

- QUATERNARY**
- Ap Alluvial plain; flat to undulating, commonly meander scoured, typically organic silty sand accumulations on top of sand and gravel.
  - AI Alluvial terrace; flat to undulating, minor channeling, gravel and sand on top of elevated bedrock terraces. May include glacioluvial and relict glacial deposits.
  - AI Alluvial fan; sloping aggregate of sorted and unsorted sediment on alluvial deposits merging with other deposits.
  - GI Glacioluvial terrace; flat to undulating, bedded channel patterns, typically organic silty sand and gravel.
  - GI Glacioluvial terrace related to pre-fled glaciations. Soils developed on red and brown staining, coarse sand and gravel. Sand wedges and ventifacts common.
  - PrGI Meltwater channel (small)

- SYMBOLS**
- Geological contact
  - Glacial limit
  - Terrace scarp
  - Meltwater channel (small)

**SURFICIAL GEOLOGY AND GEOMORPHOLOGY**  
DESCRIPTIVE NOTES

This preliminary map is based on 1983 mapping and airphoto interpretation. Lower Stewart River valley was mapped by inspection of aerial photos, sporadic natural exposures, and a few mining cuts. The area of the Koonvok Plateau is largely unglaciated. However, outwash fans, alluvial fans, and pre-fled terraces are present. The Stewart River valley is a typical pre-fled valley. The Stewart River valley shows several terrace remnants, some can be related to these glaciations. The Stewart River valley is dominated by valley bottom alluvium and elevated terraces. Alluvial fans are common along the valley sides. Glacioluvial terraces occur at various elevations in the valley and are more prominent in the upper reaches. These terraces consist of gravel overlying an elevated bedrock surface, same terraces along the valley margins, and valley fill. A thin cap of high level terrace was used to assign designations as McCollum, Field and pre-fled terraces using the criteria of soil colour, clay shales, thickness, and periglacial features (Morrison and Smith 1987). Some terraces are uncorrelated and may be as old as Tertiary. Phase good occur within the alluvial terraces, alluvial plain deposits and in glacioluvial terraces. Other heavy minerals include magnetite, red garnet, and hematite.

**REFERENCES**

BOSTOCK, H.S., 1966. Notes on glaciation of central Yukon Territory. Geological Survey of Canada, Paper 65-38, 18 p.

FULLER, E.A. and ANDERSEN, E.J., 1983. Pleistocene geology of Black Hills-Creek, Yukon Territory. Geological Survey of Canada, Paper 83-24, 19 p.

HUGHES, O.L., CAMPBELL, R.B., MULLER, J.E. and WHEELER, J.O., 1989. Glacial limits and low patterns, central Yukon Territory south of 65 degrees north latitude. Geological Survey of Canada, Paper 89-24, 19 p.

MORRISON, S.R. and SMITH, C.A.S. (eds), 1987. Guidebook to Quaternary Research in Yukon. XII INQUA Congress, Ottawa, National Research Council of Canada.

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

Open File 1983-8(G)

Edward A. Fuller  
Canada/Yukon Mineral Development Agreement  
Geoscience Office

**SHEET 1 OF 2**

SURFICIAL GEOLOGICAL MAP OF STEWART RIVER VALLEY  
PARTS OF 1150/2, 1150/3, 1150/6 AND 1150/7  
1:50,000 SCALE

Copies of this map and the accompanying report (in Yukon Exploration and Geology, 1983) may be obtained at Canada Map Office, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, 530 Rennie Road, Whitehorse, Yukon Y1A 3V1 (403-667-5204 FAX: 403-688-2170).