

YUKON PLACER ACTIVITY MAP

LEGEND

PLACER ACTIVITY:

- Major gold-bearing streams with significant mechanized placer mining operations
- Proven or potential gold-bearing streams with some prospecting or exploration history, but no significant mechanized placer mining operations.

GLACIAL DEPOSITS:

- Late Pleistocene - Continental / Laurentide (ca.30 Ka)
- McConnell (ca. 22 Ka)
- Red (ca. 200 Ka)
- Pre-Red (from ca. 3 Ma)
- Unglaciated

OTHER GLACIAL FEATURES:

- Major ice flow direction (Duk-Rodkin, 1999a & Bond, 1999)
- Glacial Lakes (Duk-Rodkin, 1999b)
- Present-day Glaciers

BASEMAP FEATURES:

- Major Towns
- Main Roads
- Mining District Boundary

CONTOUR INTERVAL: 100 FEET
Derived from Peak Above Mean Sea Level

North American Datum 1983
Transverse Mercator Projection
Reference Latitude 66° N, Central Meridian 135° W
Horizontal Precision: 1:250,000
Vertical Precision: 1:250,000
Scale: 1:1,000,000

Scale 1:1 000 000

PLACER DEPOSITS OF THE YUKON (modified from W. LeBarge, 1996):

Historic placer mining areas in Yukon can be grouped into eleven main areas: Klondike, Skye, Fortymile, Fortymile, Clear Creek, McQuesten Range, Stewart River, Whitehorse South, Mayo, Dawson Range, Livingston Creek and Klondike. Each area has its own geomorphic setting and depositional history which is related to its glacial history. Three main episodes of Quaternary glacial advances have been described in Yukon; these are commonly known as the pre-Red (multiple), Red and McConnell glacial advances.

Placer deposits in the unglaciated Klondike, Skye, Fortymile and McQuesten ranges occur in valley bottoms, alluvial fans, in glacial gravels and in high-level terraces. These deposits in glaciated areas occur in variously reworked and buried valley bottom, bench and gully settings, in surficial glacial till and glacioluvial gravels, and in non-glacial gravels which were deposited on top of glacial drift.

Targets for new placer deposits in unglaciated areas include drainages such as Stewart, North Lewis and Yukon Rivers, which lie outside of the pre-Red glacial limit. These deposits may occur in abandoned channels, oxbows and point bars, high-level terraces, and in tributary gullies and valley bottom terraces.

Within glaciated areas, placer deposits may be discovered buried in valleys beneath terraces of pre-Red glacial drift along the margins of the pre-Red glacial limit. Meanwhile, placer deposits may also have formed on top of pre-Red glacial drift and may be buried in valleys beneath Red-age non-glacial alluvium. Prospective areas of this type are drainages which are new look gold deposits in the Clear Creek area and in drainages near Keno Hill in the Dawson Range. At the limits of both the Red and McConnell glaciations, surficial pre-glacial or interglacial gravel can often be buried by glacial and glacioluvial deposits. Low-grade surficial pre-glacial or interglacial gravel can also be derived from the reworking of pre-glacial gold-bearing gravel. Prospective areas for these types of placer deposits are the South McQuesten River valley and the creeks draining the Ruby Range on the east side of Klondike Lake. Within the McConnell glacial limit, placer deposits may be found in valleys oriented obliquely to the centerline of the glacial ice. Economic to sub-economic placers may also be found along the marginal channels within the McConnell ice limit. Prospective areas of this type of deposit are drainages which lie to the north of the largest glacial limit.

The possibilities for new placer mining areas within glaciated areas must be investigated, and new placer gold reserves will undoubtedly be found within these areas. These potential gold deposits may be explored by techniques such as surficial mapping, airborne interpretation, and bulk sampling of potential gold-bearing units.

DATA SOURCES AND ACKNOWLEDGEMENTS:

Placer activity was compiled using the local knowledge of Yukon Geology Program (YGP) surficial geologist, J. Bond, and YGP placer geologists, G. Lowy & W. LeBarge, placer occurrence locations from 1:250,000 scale Yukon MINFILE 2001 maps, gold-bearing streams reported on Gilbert's 1970 "Treasure Map", placer operation locations from the Indian and Northern Affairs Canada Place MINFILE Database, and reports from Kraft & Carley's placer compilations (1993-1995).

Yukon-wide glacial deposits are from Duk-Rodkin's 1:1,000,000 scale compilation (1999a). Inset map glacial limits and deposits are primarily from Duk-Rodkin's 1:250,000 scale compilation (1999b) with modifications in the Mayo area from Bond (1999), Bond & Duk-Rodkin (1999), and Hughes (1998).

Topographic base for Yukon-wide map produced by ESRB Digital Chart of the World. Topographic base for inset maps produced by Natural Resources Canada in conjunction with Yukon Land Information Management System (LIMS). Roads and trails for inset maps were modified by Department of Renewable Resources, Yukon Government.

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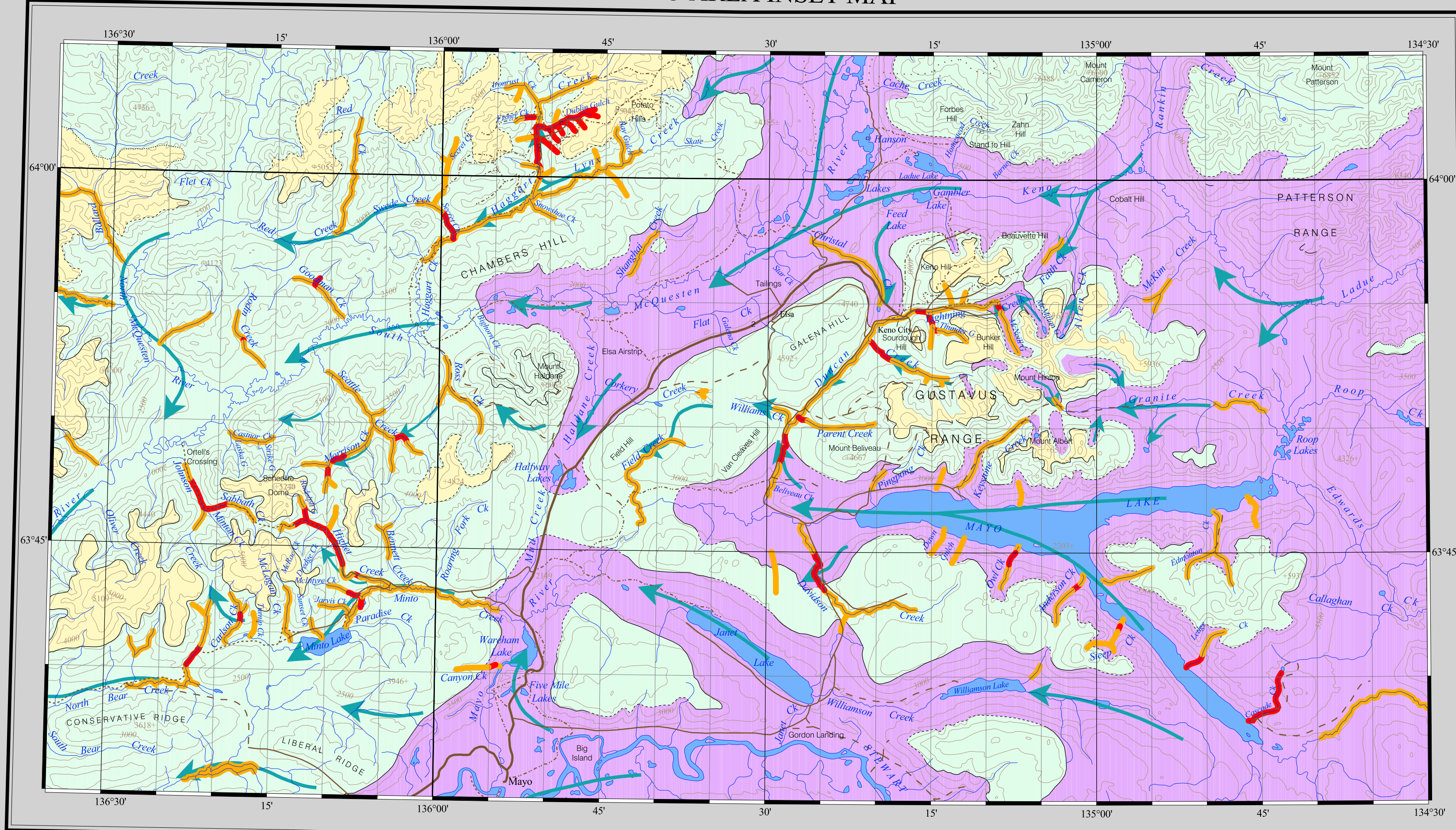
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Any reviews or additional information known to the user would be welcomed by the Yukon Geology Program.

Copies of this map may be purchased from Geoscience Information and Sales, c/o the Whitehorse Mining Recorder, Indian and Northern Affairs Canada, Room 105 - 201 Main St., Whitehorse, Yukon, Y1A 2B5. Tel: (867) 667-3265; Fax: (867) 667-3267; geosales@nrc.gc.ca. This and other YGP publications can be downloaded free of charge at our website: www.geology.gov.yk.ca

MAYO AREA INSET MAP



LEGEND FOR INSET MAPS

GLACIAL LIMITS:

- Established
- Estimated
- Interpolated

ROADS:

- Highway
- 2 Wheel Drive
- 4 Wheel Drive
- Trail
- Winter Trail
- Other

Scale 1: 250 000

0 5 10 Kilometres

0 5 10 Miles

North American Datum 1983
Transverse Mercator Projection
Ten Thousand Metre Grid
Datum: North American Datum 1983
Zone 8 for Map Sheet Map

DAWSON AREA INSET MAP

