

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)
- Reid (ca. 200 Ka)
- Pre-Reid (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

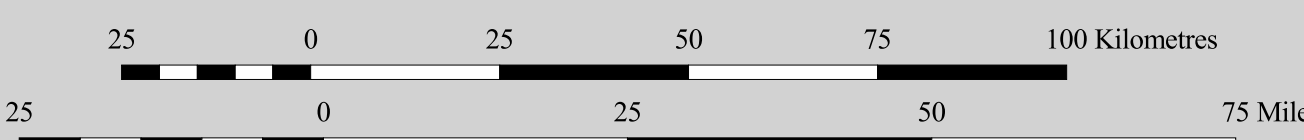
BASEMAP FEATURES:

- Major Towns
- Main Roads
- Mining District Boundary

CONTOUR INTERVAL: 1000 FEET
Elevation in Feet Above Mean Sea Level

North American Datum 1983
Alaska Equal Area Projection
Reference Latitude 59° 14' Central Meridian 120° 12' W
Transverse Mercator
Datum: North American Datum 1983
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, Stikine, Fortymile, Clear Creek, Moosehide Range, Stewart River, Whitehorse South, Mayo, Dawson Range, Livingston Creek and Klusane. Each area has its own geomorphic setting and depositional history which is related to its glacial history. Three main episodes of Quaternary glacial advance have been described in Yukon: these are commonly known as the pre-Reid (multiple), Reid and McConnell glacial advances.

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

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

Within glaciated areas, placer deposits may be discovered buried in valleys beneath terraces of pre-Reid glacial drift and may be buried in valleys beneath Reid-age non-glacial alluvium. Prospective areas of this type are drainages which are not gold-bearing in the Clear Creek area and in drainages near Reid villages in the Dawson Range. At the limits of both the Reid 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 McMillan River valley and the creeks draining the Rocky Range on the east side of Klusane Lake. Within the McConnell glacial limit, placer deposits may be found in valleys oriented obliquely to the advance direction of the glacial ice. Economic to sub-economic placers may also be found along the multiple channels within the McConnell limit. Prospective areas of this type of deposit are drainages which lie to the north of Livingston placer camp.

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 MNFLE 2001 maps, gold-bearing streams reported on Gilbert's (1979) "Treasure Map", placer operation locations from Indian and Northern Affairs Canada Placer MNFLE Database, and reports from Kraft & Cuffey's placer compilations (1993-1996).

Yukon wide glacial deposits are from Duk-Rodkin's (1999a) 1:1 000 000 scale compilation (1999a), latest 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 (1996), and Hughes (1998).

Topographic base for Yukon-wide map produced by ESRI 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.

REFERENCES:

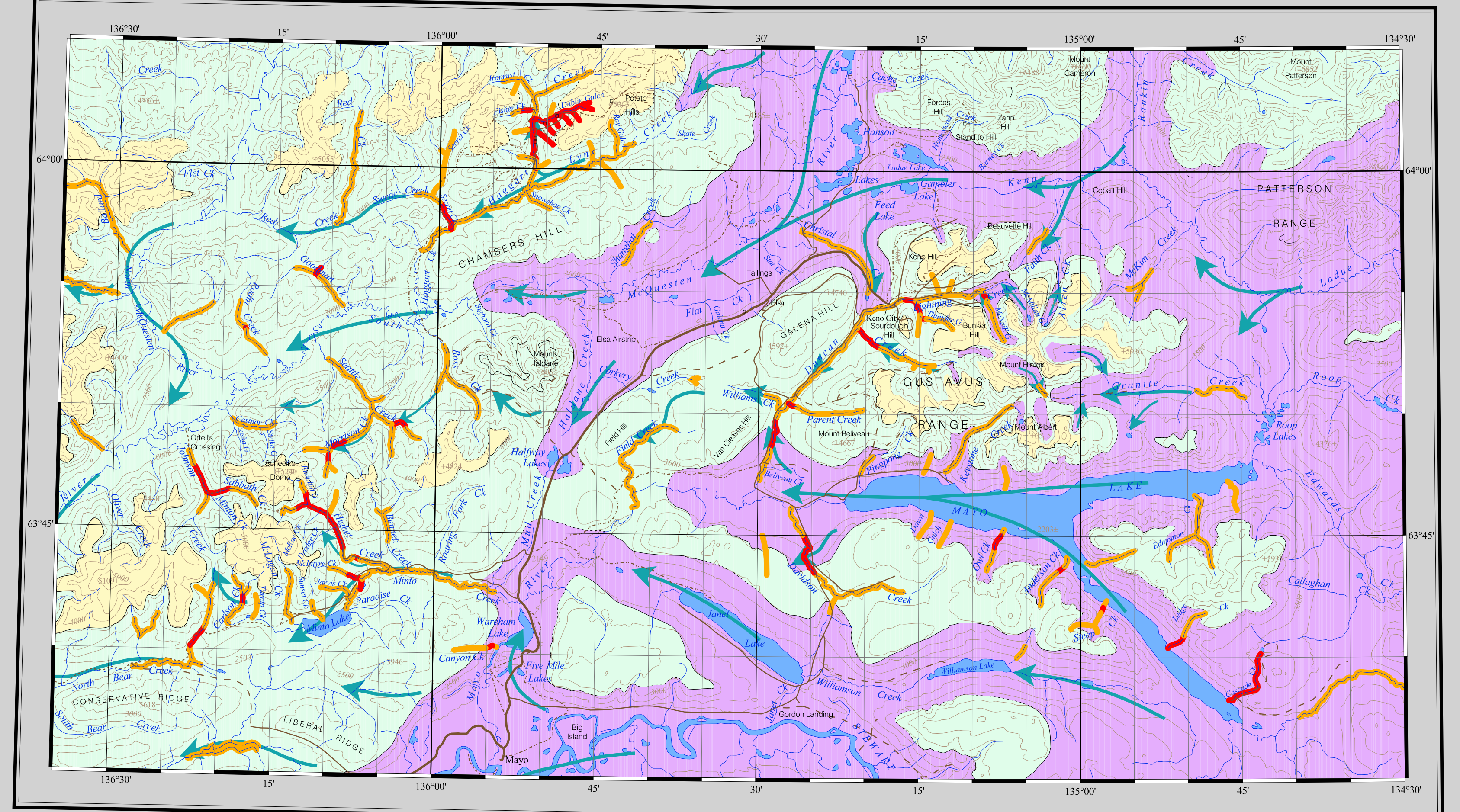
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RECOMMENDED CITATION:

Lowy, G., LeBarge, W., Bond, J. and Lowy, G., 2001. Yukon Placer Activity Map (1:1 000 000 scale), 2001. Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Open File 2001-34. Compilation, digital cartography and drafting by P.B. Lipovsky, Yukon Geology Program.

Any revisions 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 152-300 Main St., Whitehorse, Yukon, Y1A 2B6. Tel: (867) 967-3200; Fax: (867) 967-3207; geosales@mac.gc.ca. This and other YGP publications can be downloaded free of charge at our website: www.geology.yk.ca

MAYO AREA INSET MAP



LEGEND FOR INSET MAPS

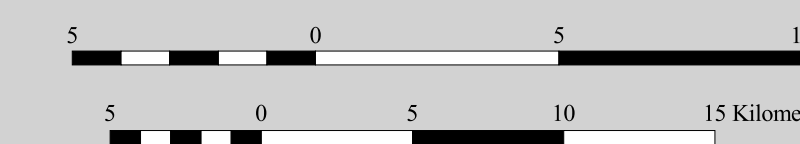
GLACIAL LIMITS:

- Established
- Estimated
- Interpolated

ROADS:

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

Scale 1:250 000



North American Datum 1983
Transverse Mercator Projection
Tait-Thompson Equal Area Spheroid
Datum: North American Datum 1983
Scale: 1:250 000

DAWSON AREA INSET MAP

