## LEGEND

## QUATERNARY

POSTGLACIAL

SALISH SEDIMENTS Bog, swamp, and shallow lake deposits: SAb, lowland peat, organic silt loam, and silty clay loam, 0.3 to 10+m thick overlying, in most places, Fg and Fh, in a few places overlying SAi and SAp; SAc, similar to SAb except that organic sediments are overlain by up to 1 m of overbank silt loam, silt, and sand (Fg and Fh); may be more extensive than indicated on map; SAI, peat and marl overlying sand and gravel (SAo)

Mountain stream channel and floodplain (including overbank) sediments: SAi, mainly floodplain gravel and sand deposited by Chilliwack River in Sumas Valley, up to 15 m thick; grades from gravel through sand into silt at the outer edges of a fan-shaped area; in part intermixed with Fraser River Sediments (Fg and Fh) and with lacustrine sediments; SAj, mainly channel gravel and minor sand up to 10+m thick

Slope deposits: SAo, fan and landslide gravel and sand and rubble up to 10 m thick overlying Fraser River Sediments (Fg); SAp, landslide rubble, gravel and minor sand up to 10+m thick overlying SAj and Sa,d,f,j

Eolian sediments: SAt, sand, silt, and silt loam 1 to 3 m thick. Where less than 1 m thick included with underlying material (see below, particularly Sf and PT)

sand, and minor silt loam and silt

FRASER RIVER SEDIMENTS Channel and floodplain sediments overlain in much of the area by overbank sediments: Fa, channel deposits, sand and gravel occurring along present day river channels; Fg, channel and overbank deposits, silty clay loam, silt loam, silty clay, and minor organic sediments up to 4 m thick, includes small areas of SAc; Fh, channel and overbank deposits, sandy loam, loamy

> Fg and Fh are of similar origin and areas mapped as Fg may contain smaller areas of Fh and vice versa. Both have undulating topography resembling ridges and swales, and include meander scrolls, bars, and sloughs. Both overlie modern Fraser River and/or older floodplain and deltaic? sand and gravel up to 60+m thick

### PLEISTOCENE

SUMAS DRIFT

Till, glaciofluvial, and ice-contact deposits: Sa, outwash gravel and sand up to 10+m thick; Sd, ice-contact gravel and sand containing till lenses and clasts of glaciomarine stony clayey silt, more than 5 m thick; Sf, sandy loamy till and substratified drift, 2 to 10 m thick; Sj, glaciofluvial gravel and sand up to 40 m thick underlying Sf. The Sumas Drift deposits exposed between Fraser and Chilliwack River valleys in much of the area are mantled by 0.3 to 1 m of eolian silt and silt loam (SAt)

SUMAS AND PRE-SUMAS DEPOSITS Till, glaciofluvial, glaciomarine, fluvial, and marine sediments: PSa, gravel and sand in part proglacial, may be in part fluvial, probably includes Fort Langley, Vashon, Coquitlam, and older deposits; PSb, stony and stone-free clayey silt, in part glaciomarine, in part marine sediments that may be correlated with Semiahmoo Drift and Fort Langley Formation . As indicated on the map most of these deposits lie beneath Sumas till (Sf) and glaciofluvial sediments (Sj)

 $Tertiary\ bedrock\ including\ sandstone,\ conglomerate,\ and\ siltstone;$ where bedrock is not at the surface it is overlain by glacial deposits and colluvium

# PRE-TERTIARY

Mesozoic and Upper Paleozoic bedrock, includes sedimentary, volcanic, is not exposed at surface it is overlain by thin deposits, normally less than 2 m thick, of glacial, colluvial, and eolian sediments

> The mountain slopes are all subject to landslides, and Fraser, Chilliwack, and Sumas valleys are all subject to flooding

Geological boundary, mainly gradational .....

Geology by J.E. Armstrong 1953-1955, 1974-1975

Additional information from E.C. Halstead 1954-1976 and Province of British Columbia Soils Survey 1956-1965

Compiled by J.E. Armstrong 1977

Geological cartography by P. Corrigan, Geological Survey of Canada

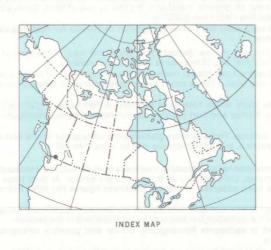
Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

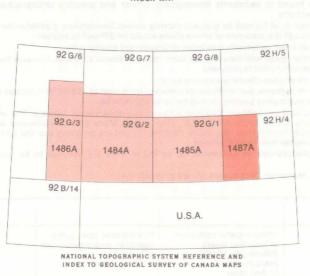
Base map at the same scale published by Surveys and Mapping Branch in 1975

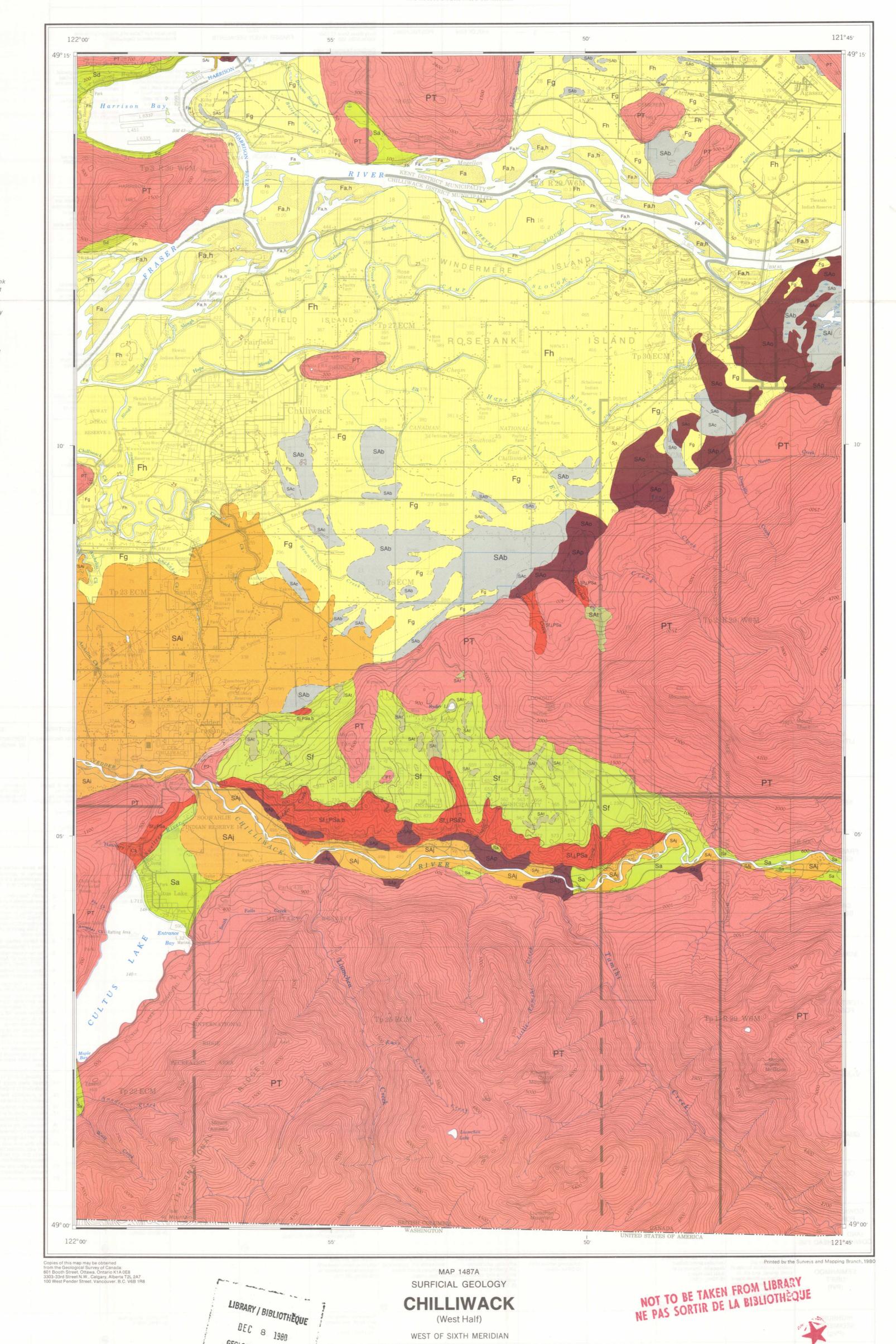
Copies of the topographical edition of this map may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa

> Approximate magnetic declination 1978, 22°12.3′ E decreasing 4.3' annually

Elevations in feet above mean sea level







WEST OF SIXTH MERIDIAN

BRITISH COLUMBIA

Scale 1:50,000

Universal Transverse Mercator Projection

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4 Kilometres

2 Miles

GEOLOGICAL SURVEY COMMISSION GÉOLOGIQUE

1487A

MAP 1487A

CHILLIWACK (West Half)

BRITISH COLUMBIA