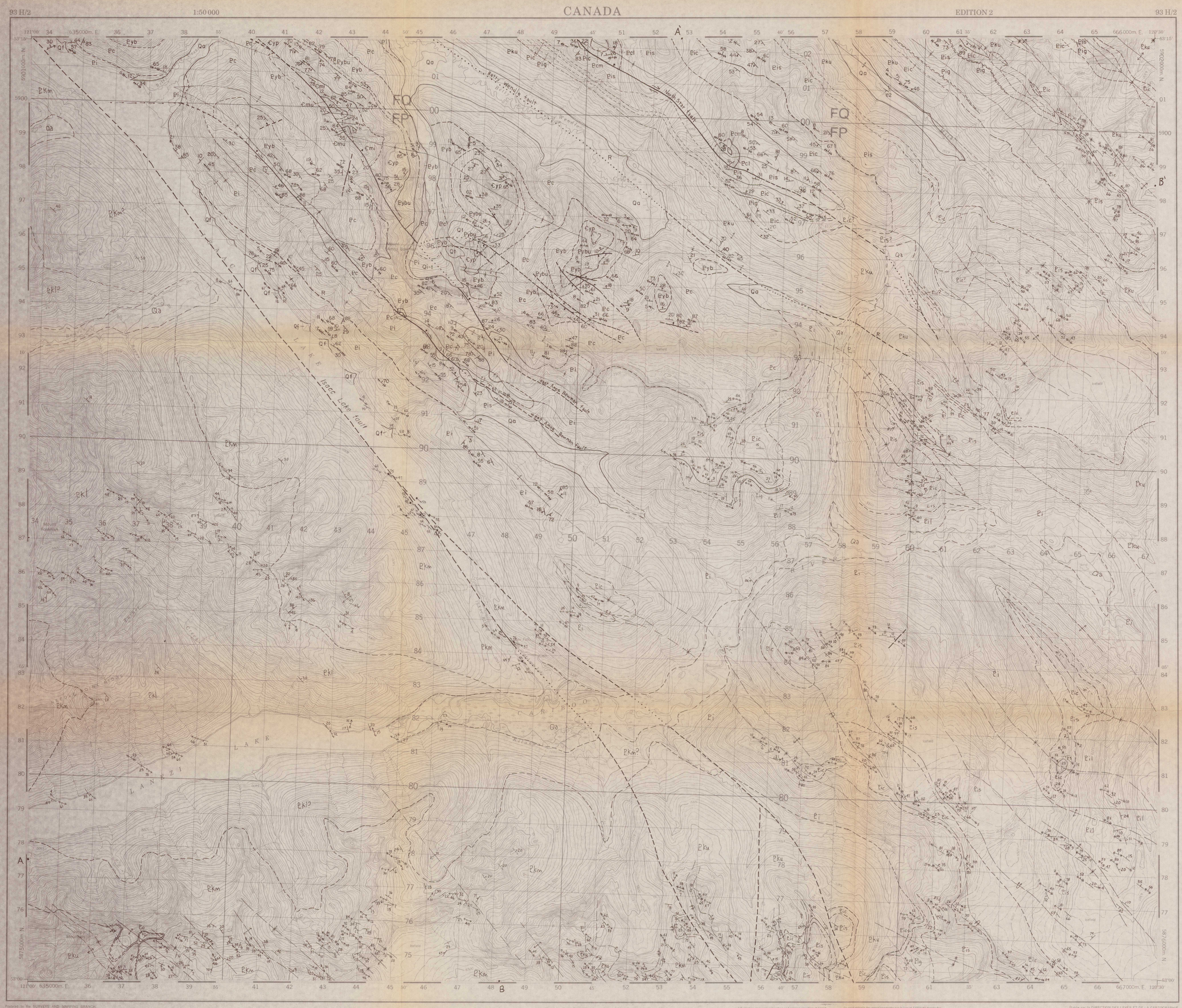
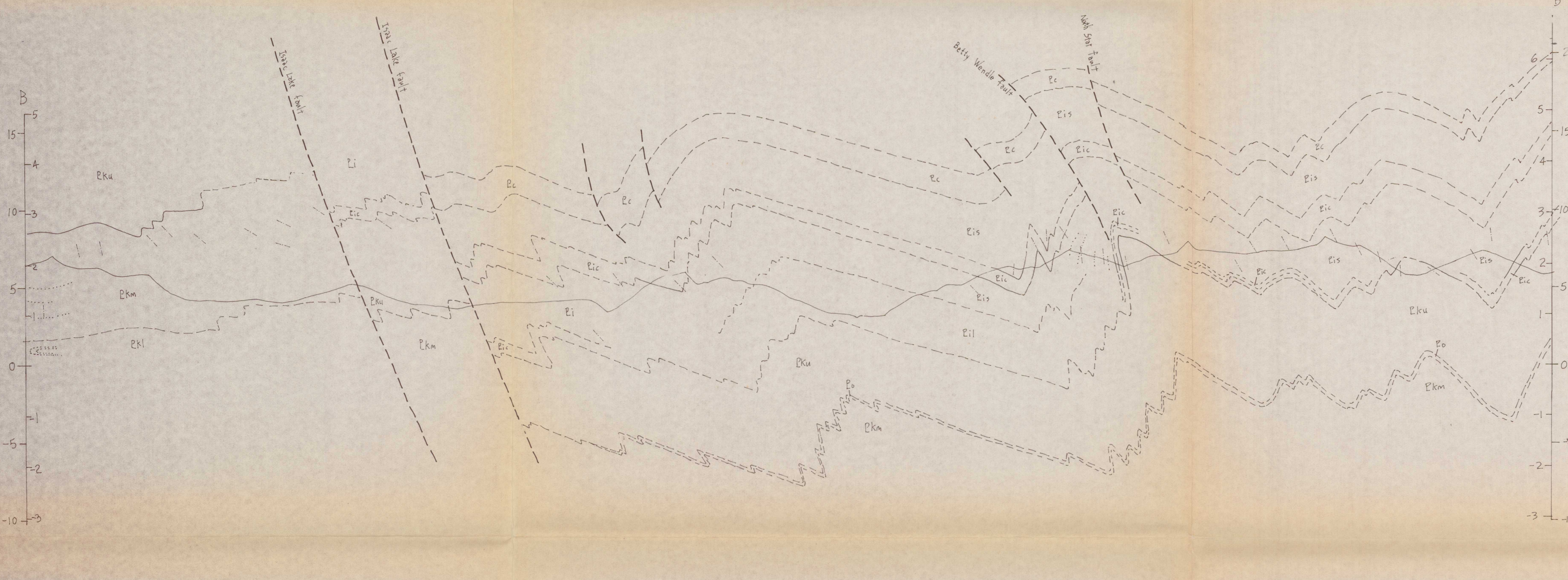




**LEGEND LANEZI MAP-AREA (93H/2)**

- QUATERNARY**
- Qa** Presumably alluvial deposits along the bottoms of montane valleys; gradational in many areas with debris cones and major talus slopes along steep mountain sides
  - Qf** Emergent portion of fan deltas along east shore of Isaac Lake
- LOWER CAMBRIAN**
- Crnu** **MURAL FORMATION:** Archeoelythid-bearing limestone consisting of two massive, thick bedded units with an intervening medium bedded, mudstone-rich interval
  - Emi** **MIDAS FORMATION:** Monotonous sequence of mudstones and silt mudstones with less than 20% medium to thin bedded, typically siltolobated, quartzose sandstones
  - Eyp** **YANKS PEAK FORMATION:** Dominated by sequences of medium and rarely thick bedded, trough and wedge-platol chert stratified quartz arenites and rare quartzite-bed conglomerates, alternating with mudstone rich sequences similar to those that make up the Middas Formation. Siltolobation generally is restricted to the mudstone-rich units and is found only in the upper few beds of the unit
  - Pyb** **YANKEE BELLE FORMATION:** A mixed unit of medium- to thin bedded, low angle unidirectional cross-stratified carbonate and quartzose sandstones within a background of green-colored silt argillites
  - Pybu** **YANKEE BELLE FORMATION (Belly World Member):** A distinctive, argillite unit with a sharp lower contact. The basal division consists of upward-fining, medium- to thin bedded, carbonate-clast conglomerates interbedded with alternating green and purple silt argillites. The basal division grades upwards into a monotonous green argillite sequence with rare, thin bedded, fine-grained sandstones (carbonate ribbons absent). The middle green argillite, which constitutes the thickest division of the member, is overlain by a thin and discontinuous terrigenous carbonate interval interbedded with green argillite
- UPPER PROTEROZOIC (NEOPROTEROZOIC)**
- Pc** **CUNNINGHAM FORMATION (undifferentiated):** Limestone and dolomite unit consisting of planar and wedge-platol, cross-stratified, cold-peak granitones and (to a lesser degree) wackestones. The unit is divided into three informal members northeast of Belly World fault. The upper and lower members (Pcu, Pcl) are thick- to medium bedded, cliff-forming units separated by the middle member (Pcm) a mixed siliciclastic-carbonate interval nearly identical to the Yankee Belle Formation
  - Pcu** CUNNINGHAM FORMATION (upper)
  - Pcm** CUNNINGHAM FORMATION (middle)
  - Pcl** CUNNINGHAM FORMATION (lower)
  - Pi** **ISAAC FORMATION (undifferentiated):** Dominantly dark-colored (blue to black) silt and silt argillite with local concentrations of sandstone or carbonate-clast conglomerates and dolostones. Large green crystals are common and zones of slump-folded mudstone and intrasiltic conglomerates are also present. Sandstones typically are massive or normal graded with ripple cross-bedded to parallel laminated tops
  - Pis** mudstone (siltite): Sequences of ISAAC FORMATION with greater than 90% siltite
  - Pic** carbonate: Sequences of ISAAC FORMATION with greater than 10% carbonate turbidites (bed-parallel bedforms), or carbonate-clast conglomerates and dolostones. Unit Pib is a local black shale that occurs within the upper carbonate unit
  - Pig** felsipathic gne: Sequences of ISAAC FORMATION composed chiefly of medium to thick bedded felsipathic granule sandstones ('gists')
  - Pil** lower: Sequences of ISAAC FORMATION with greater than 10% medium to thick bedded sandstone or granule sandstones ('gists')
  - Pku** Upper KAZA GROUP: medium to thick bedded felsipathic gne and sandstones with interbeds of green to dark grey coloured pelite. Gne are notably light brown to tan in colour and calcareous
  - Po** OLD FORT POINT FORMATION (undifferentiated): A tripartite unit consisting of medium to thick bedded coarse-grained quartzose sandstone and quartz pebble conglomerate sharply overlying black sandstone, local or phylite, locally with thin bedded black crystalline limestone. The base consists of rhythmic interbeds of thin bedded chloritic calcareous siltstone to sandy limestones and green pelite, generally arranged in a fining, thinning upward sequence
  - Pkm** middle KAZA GROUP: Medium to thick bedded felsipathic granule sandstone ('gists') to sandstones with interbeds of green to dark grey coloured pelite. Gne are notably green to greenish grey coloured and pelitic, particularly the interval underlying the Old Fort Point Formation
  - Pkl** lower KAZA GROUP: Thin to medium bedded felsipathic granule sandstones and sandstones with interbeds of dark coloured pelite. Pelite intervals are generally thicker than those within the upper and middle KAZA Group. Gne are commonly calcareous



- MAP SYMBOLS**
- A** end of cross-section line
  - BEDDING**
  - inclined beds, vertical
  - tops known: inclined, vertical, overturned
  - approximate bedding (outcrop not visible)
  - STRUCTURAL ELEMENTS ABOVE GARNET ISOGRAD FOLIATIONS**
  - S1 siltite cleavage: inclined, vertical
  - S2 +/-m-scale crumulation or slaty cleavage: inclined, vertical
  - S3 cm-scale crumulation cleavage: inclined, vertical
  - S4 cm-scale crumulation cleavage
  - shear fabric surfaces, Isaac Lake fault zone
  - second generation shear fabric surfaces, Isaac Lake fault zone
  - LINEATIONS**
  - L1 S0xS1 intersection
  - L2 S0xS2 intersections, S1xS3 crumulations, nullions; F2 fold axes
  - L3 S0xS3 intersections, S1xS3 crumulations
  - slickensite lineation on faults or sheared surfaces
  - STRUCTURAL ELEMENTS BELOW GARNET ISOGRAD FOLIATIONS**
  - (areas north of Lanezi Lake and west of Isaac Lake)
  - FOLIATIONS**
  - S0 primary cleavage, recognized along Lanezi Lake
  - S1 crumulation cleavage (probably equivalent to the S1 slaty cleavage of higher levels)
  - S2 crumulation cleavage
  - S4 cm-scale crumulation cleavage
  - LINEATIONS**
  - L1 S0xS1 intersections
  - L2 S0xS2 intersections, S1xS2 crumulations, nullions; F2 fold axes
  - L3 S0xS3 intersections, S1xS3 crumulations
  - SURFACES**
  - Trace of axial plane of F2 folds: dashed if approximately located, dash-dotted if concealed by younger deposits
  - wedged, overturned, concealed by younger deposits
  - syncline, overturned, concealed by younger deposits
  - Trace of axial plane, younger folds: dashed if approximately located, dash-dotted if concealed by younger deposits
  - dabase dyke, dashed if inferred, dip shown if known
  - intrusive carbonate dyke, dashed if inferred
  - depositional contact, dashed if approximate
  - FAULTS**
  - dashed if approximately located, dotted if concealed. Dip of surface and trend and plunge of slickensides shown if known
  - Reverts, with R in hanging wall
  - Normal, with ball on downthrown side
  - Strike-slip (oblique slip) if with reverse or normal symbols
  - CROSS-SECTION SYMBOLS**
  - Topographic profile
  - end of cross section
  - bedding
  - S1
  - S2
  - S3
  - Contacts: solid if known from nearby information, dashed if approximately located
  - depositional
  - faults
  - strike slip component of motion along faults
  - away from reader; toward reader

- AREAS OF RESPONSIBILITY**
- 1) G.M. Ross and C.A. Ferguson, 1987-1988 assisted by Karen Pallister, Izal Come and Jay Trimmerman and G.M. Ross, 1988 assisted by Mike McDonough
  - 2) C.A. Ferguson, 1989-1990. Assisted by Peter Gibson and Elizabeth Krul
  - 3) D.C. Murphy, 1988. Assisted by Jay Trimmerman
  - 4) Sutherland Brown (1963) published source
- Recommended Citation: Ross, G.M. and Ferguson, C.A., 1996. Geologic map of the Lanezi Lake map-area (93H/2), 1:50,000-scale. Geological Survey of Canada Open File 3264.
- OPEN FILE**  
**3264**  
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