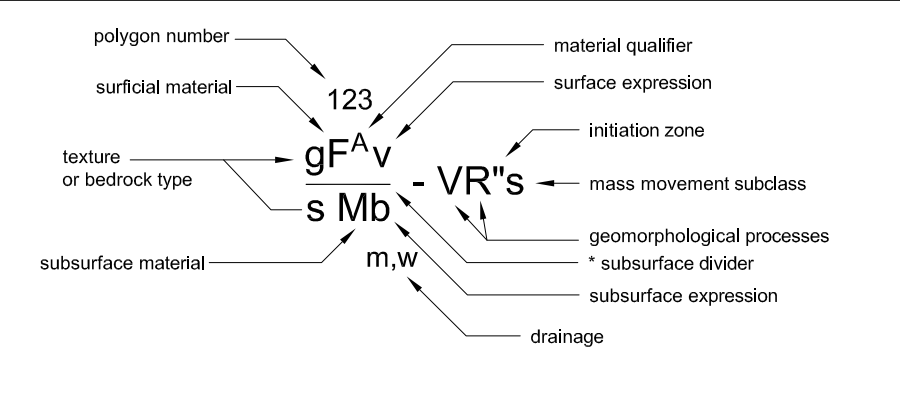


094I/12

LEGEND

EXAMPLE OF MAP SYMBOLS



* The subsurface divider divides layered units which are identified by groups of letters arranged one above the other where one or more kinds of surficial materials overlie a different material or bedrock.

TERRAIN LEGEND **

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|------------------------|-------|----|-----------|----|-----------------|----|------------------------|----|------------------|----|------------------|----|------------------|----|-----------------|--|--|----|---------|--|--|----|---------------|
| <p>SURFICIAL MATERIALS: E Eolian M Morainal (Till) F Fluvial F^o Glacioluvial C Colluvial L Glaciolacustrine O Organic U Undifferentiated Sediments R Bedrock D Weathered Bedrock V Volcanic</p> | <p>TEXTURE: c Clay (< .002 mm) z Silt (.002 - .06 mm) s Sand (.06 - 2 mm) p Pebbles (2 - 64 mm, (sub) rounded) k Cobbles (64 - 256 mm, (sub) rounded) b Boulders (>256 mm, (sub) rounded) r Rubble (64 - 256 mm, (sub) angular) a Blocks (> 256 mm, (sub) angular) x Angular Fragments (> 2 mm) g Rounded Clasts (> .06 mm) d Mixed Rounded and Angular Fragments (> 2 mm)</p> | <p>MODIFYING PROCESSES: -V Gullied or Gullying -A Snow Avalanching -Am Minor Avalanching Active -AJ Major Avalanching Active -AB Old Avalanche Track -AM Mixed Major and Minor Tracks, Active -B Braided -J Anastomosing -M Meandering -E Channelled by Glacial Meltwater -H Kettled -L Seepage Evident -R Rapid Mass Movement -RM Mass Initiation Zone -Rb Rockfall -Rd Debris Flow -Rm Bedrock Slump -Rt Debris Torrent -Rs Debris Slide -S Slow Mass Movement -F Mass Movement Initiation Zone -Fa Tension Cracks -Fp Lateral Spread of Fractured Bedrock -Fu Falling Slump in Bedrock -Fu Falling Slump in Surficial Material -N Notation -I Irregular Channel</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>COMPLEX MAP UNIT SYMBOLS: aCb/R where: / = Greater than (i.e. 60:40 proportionally) b = Much greater than (i.e. 80:20 proportionally) c = Discontinuous</p> | <p>(SUB) SURFACE EXPRESSIONS: b Blanket (> 1 m thick) v Veneer (< 1 m thick) w Mantle of variable thickness (0-3m) x Thin veneer (2-20cm) c Cone - steeper than 26% slope f Fan - up to 26% slope t Terrace - stepped topography p Plain - 0 to 5% slope r Ridged - elongated slopes steeper than 26% h Hammocky - 26-70% slopes s Steep - steeper than 70% m Rolling - elongated slopes with 5-26% slopes u Undulating - slopes less than 26%</p> | <p>MATERIAL QUALIFIERS Superscript: A Active I Inactive</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>BEDROCK TYPES</p> <table border="0"> <tr> <td>uf</td><td>Shale</td> <td>um</td><td>Sandstone</td> </tr> <tr> <td>eb</td><td>Mafic Extrusive</td> <td>al</td><td>Intermediate Extrusive</td> </tr> <tr> <td>ea</td><td>Felsic Extrusive</td> <td>la</td><td>Felsic Intrusive</td> </tr> <tr> <td>ff</td><td>Slate / Phyllite</td> <td>fm</td><td>Gneiss / Schist</td> </tr> <tr> <td></td><td></td> <td>gr</td><td>Granite</td> </tr> <tr> <td></td><td></td> <td>nm</td><td>Metasandstone</td> </tr> </table> | | | uf | Shale | um | Sandstone | eb | Mafic Extrusive | al | Intermediate Extrusive | ea | Felsic Extrusive | la | Felsic Intrusive | ff | Slate / Phyllite | fm | Gneiss / Schist | | | gr | Granite | | | nm | Metasandstone |
| uf | Shale | um | Sandstone | | | | | | | | | | | | | | | | | | | | | | | |
| eb | Mafic Extrusive | al | Intermediate Extrusive | | | | | | | | | | | | | | | | | | | | | | | |
| ea | Felsic Extrusive | la | Felsic Intrusive | | | | | | | | | | | | | | | | | | | | | | | |
| ff | Slate / Phyllite | fm | Gneiss / Schist | | | | | | | | | | | | | | | | | | | | | | | |
| | | gr | Granite | | | | | | | | | | | | | | | | | | | | | | | |
| | | nm | Metasandstone | | | | | | | | | | | | | | | | | | | | | | | |

** Based on: Guidelines and Standards to Terrain Mapping in British Columbia. British Columbia Resource Inventory Committee, 1996.

DRAINAGE CLASSES **

| | | | | | | | |
|---|-------|---|-----------|----|-----------|-----|--|
| r | Rapid | m | Moderate | p | Poor | m-w | Indicates a gradation in drainage from moderate to well; moderate is dominant. |
| w | Well | i | Imperfect | vp | Very poor | p-w | Indicates mainly poor drainage with discrete well-drained areas (e.g. hummocks). |

TERRAIN MAPPING CONVENTIONS

DEPTH OF MATERIAL:
Blanket (b) is not symbolised with these 4 surface expressions.
Veneers are over bedrock, unless symbolised otherwise. For example Mv indicates a shallow morainal deposit over bedrock.

STATUS OF FLUVIAL TERRAIN UNITS:
Fp, Ft units are assumed to be inactive unless otherwise identified.
Ft units involve a single fan or a series of coalescing fans (formerly called an apron).
Ft, Ft units are assumed to be inactive. Terraces are comprised of nearly flat to gently sloping surfaces bounded by a steep escarpment at, or near, the angle of repose. Note that the escarpments are steep, less stable slopes where cuts are prone to raveling. Where these less stable terrace edges are inclusions (<15% of the map unit area), they are not considered in the map unit slope stability rating.
Where a unit is comprised of a number of terraces, the unit encompasses them collectively. Larger, individual terrace escarpments are indicated by an on-site symbol as shown: - - - - -
Very large escarpments are mapped and rated separately (ie. FCbs - a steep scarp of a glacioluvial terrace). Where large scarps are comprised of a succession of layered materials (eg. Glacioluvial over glaciolacustrine over morainal), these are symbolised Us (ie. Undifferentiated and steep).

COLLUVIAL TERRAINS:
Cc, Cb and Cf are considered active and may consist of single or multiple deposits. The modifying process symbol -R is used only to indicate very recent activity.

ORGANIC TERRAIN UNITS:
Small, poorly drained organic deposits (fens, swamps, bogs) are symbolised Op. Veneers and blankets are not distinguished because of high variability and insufficient field-checking to separate them.

GULLYING:
-V is applied to both individual major gullies or branching gully systems (e.g. Mb-V), frequent means a gully spacing of <250 m.
-E is applied on past-glacial meltwater channels which may have overstepped existing terrain and may also be symbolised as shown below:
----- or -----

DEFAULT TEXTURES:
To control symbol complexity, and recognizing that certain material textures predominate within subregions, the following defaults are assumed. Specific particle sizes are indicated only if the material within a map unit is distinctively different. The defaults are:
Mv, Mb, Mw - non-stratified mixed particles (M) in a silty, sandy matrix
Dr - rubby material and weathered bedrock
Cv - rubby sandy
Cb, Cc, Cf - rubby to blocky; coarsest at surface with increasing infillings of silty sand at depth and distance from source
Ft, Fc - mixes of pebbles and cobbles (+/- boulders) with sandy infillings; coarser sediments predominate towards sediment source
Ff, Fp - pebbly to cobbly with sandy infillings, with a thin capping of sand, silty sand or silt
Fg - pebbly sand to sandy bouldery material
Lc - clay rich silt with bouldery mixed fragment inclusions

BOUNDARY LINES AND ON-SITE SYMBOLS **

| | | | | | |
|-----------|--------------------------------|-------|---|-------|---------------------------------|
| — | Definite boundary | ----- | Meltwater channel; small | ----- | Strand line |
| - - - - - | Indefinite boundary | ----- | Meltwater channel; large | ----- | Morainal ridge |
| | Arbitrary boundary | ----- | Scarp or terrace in surficial materials | ----- | Esker direction unknown |
| ===== | Area boundary | ----- | Landslide scar | ----- | Esker direction known |
| ○ | Detailed section site | ----- | Landslide headwall scar | ----- | Ice flow directional indicators |
| ● | Reconnaissance inspection site | ----- | Tension crack | ----- | Trend unknown |
| ▲ | Visual check site | ----- | Blockfield | ----- | Direction known |

AGGREGATE POTENTIAL SYMBOLS

| | |
|---|--|
| <p>Aggregate Potential by Blyth Consulting</p> <p>High: - - - - -</p> <p>Moderate: - - - - -</p> <p>Low: - - - - -</p> | <p>Aggregate Potential by Paul Savinkoff GfT</p> <p>High: [Red Box]</p> <p>Moderate: [Blue Box]</p> <p>Low: [Green Box]</p> |
|---|--|

OTHER SYMBOLS

| | | | |
|-------|-------------------------|-------|------------------|
| + | Pit | ----- | Quarry Potential |
| ----- | Mollard's Prospect Area | ----- | Road |

Sierra / Yoyo / Desan Aggregate Potential Map

1:40,000 scale maps created from TRIM base employed for this project:
094I/11, 12, 13, 14 094J/09, 10, 15, 16
094P/02, 03, 04, 05, 07, 10

November 2002
UTM Zone 10, NAD 83, Contour Interval: 20m

Mapped by: Heather Blyth, M.Sc., D.F.Eng., P.Geo., and Victor Levson, Ph.D., P.Geo. (British Columbia Ministry of Energy and Mines)
Field Checked: September 2002
Monorestitution by: Paul Savinkoff GfT
Air Photographs by: The Province of British Columbia, 1:40,000 1997 Monochrome

For: British Columbia Ministry of Energy and Mines
Any revision or additional geologic information would be welcomed by the authors
c/o Blyth Consulting, 1844 Bueria Vista Avenue, Comox, B.C. V9M 2B7