826543

HEATHER PROPERTY 1987

HS no. H-1; 3.28-3.35m TS no. H-1; 3.28-3.35m

HANDSPECIMEN

THIN SECTION

Mode: (Maroon Bands)

65-70% Quartz - (anhedral, pseudojigsawpuzzle tex, mainly ≤.01mm, also 2-3% .02-.04mm, undulose extinction common in larger mode

25-30% Calcite - (euhedral dissem. crystals 5-10% range .05-.15mm, also fine calcite .01-.02mm as patches & clusters

1-2% Opaques - (Pyrite(?) pseudo cubic outlines, dissem. .01-.02mm dirty look in PPL poss due to hem. dust.)

Mode: (Green Bands)

~~65-68~~% Quartz - (bimodal a) 15% anhedral grains .01-.06mm range, ave. .03mm b) anhedral <.01mm mottled tex.)

5-10% Plagioclase - ~~feathers~~ (Calbite twinning, subh CXS, .04mm ave.)

25-20% Sericite - (small .01mm shreds, dissem +-o, high birf. - poss some chlorite, fine grained hard to tell.)

2% Opaques - (dissem, ≤.01mm-.02mm ave .01mm, irreg shapes)

Mode: (Light Grey / Green Bands) ± Cream

60-65% Quartz - (microcrystalline, anhedral, <.01 mm ave, mottled; 2-5% .01-.03 mm irreg shaped grains with undulose extinction.
Typical of silica gel precipitation (?))

30-35% Calcite - (bimodal 50/50 a) .1-.2 mm subhedral carbonate dissem. grains, hi birf., 60/120 Clvg. b) fine .05-<.01 mm ave <.01 mm calcite grains dissem & clusters.

TR-1% Opaques - (dissem grains <.01 mm some cubic looking)

Texture: Although well laminated in hand specimen, and showing sharp contacts in thin section, no internal lamination/layering is evident within individual bands

Name of Rock:

HS no. H-5-Tz (H-13) TS no. H-5-Tz

HANDSPECIMEN

THIN SECTION

Mode:

45-50% Magnesite (mainly as aggregates forming .5-1mm long eyes or augen // to foliation, individual grains are subhedral, range .02mm-.25mm, ave. .05-.1mm.

50% Talc - (as fibrous aggregates // to foliation, <.01-.02mm ave., disting from ser. by lithogeochem, extrem. high birf.

3% Opaques - (diss. mainly within the talc, lath and square-like shapes, locally note brown-red color - probably chromite
laths(?) // foliation

1-3% Chrysotile (fibrolamellar aggregates with talc, <.01mm, weak birf, colorless, low relief, // foliation)

Textures: extremely well foliated / sheared, locally cataclastic looking tex. at ends of magnesite augens;

Name of Rock:

HS no. MG-8 TS no MG-8

HANDSPECIMEN

THIN SECTION

Mode:

65-70% Carbonate (no fizz ⊂ cold HCl, no litho data, perv carb flood, .01mm ave grainsize, larger in pseudoaugens

8-10% Chlorite (pale green, pleochroic, fine grained aggregates form acicular lenses up to 5mm×1mm

10% Quartz (dissem. grains t-o .01mm-.02mm ave, also assoc ⊂, carbonate & fp in pseudoaugens up to 2mm× 1mm, ave. .5mm x .3mm, undulose extinction common

5-8% Plagioclase (anhedral grains ave .05mm in pseudoaugens, albite twinning, undulose extinction common

2% Opaques (somewhat assoc with chlorite, .01-.02mm ave, irreg shape)

Tr Apatite(?) (prismatic, euhedral <<.01 mm

Texture: well foliated

Name of Rock:

HS no. MT-6 (H-1) TS no. MT-6

HANDSPECIMEN

THIN SECTION

Mode:

55-65% Quartz (anhedral grains part of veins and also assoc. silicification; a) vein qtz range .3 – 1.5mm, ave .5mm, undulose extinction ubiquitous, sutured grain boundaries abundant, grains x-cut by subh-euh. pyrite. b) silicfn qtz (?) <.01 – .03mm, within chl. & interstitial to some vein qtz

20-25% Chlorite (anhedral <.01 – .01mm grains in irreg. bands // to foliation ± qtz grains ± opaques

5-7% Opaques (Pyrite) (range <.01 – .8mm, ave .12 & <.01mm, dissem + diss. in chl bands, euh cubic,

Tr Limonite (interstitial to some qtz grains)

Tr Plagioclase (?) (local lamellar twinning warped, or could be chalcedony with radiating feathery texture

Texture:

Name of Rock:

HS no. 84-01 (54.0m) TS no. 84-01 (54.0m)

HANDSPECIMEN

THIN SECTION

Mode: (HOST ROCK) 50-60% Quartz (broken grains, patches, replacement qtz (?); anhedral grains subangular-rounded, range <.01mm-.2mm, ave .01mm ξ .08mm, undulose ext. ubiquitous, sutured boundaries common, patches (frags) of qtz <.01mm with jigsawpuzzle texture

15-20% Sericite (fine <.01-.02mm shreds, as bands, define foliation/shear, some ser. within qtz grains

15% Chlorite (fine <.01-.02mm shreds with sericite, pale green, pleochroic

5-8% Opaques (subh-euh square outlines, pyrite, <.01mm-.3mm range, ave. .12mm ξ .02mm, some brown grains poss. spinel. Coarser py diss. in qtz frags/lenses, fine py diss +-o ± limonite.

1% Plagioclase (deformed grains .01-.03mm within qtz lenses (?)

Mode: (QTZ VEIN) 95% Quartz (subh-anhedral, range .02mm–1mm, ave. .35mm, undulose ext., some sutured grain boundaries, individual grains fractured and coated with limonite + along grain bound.
~⊥ foliation
.6cm THICK

3-4% Plagioclase (subhedral tabular crystals, range .05–.15mm ave .12mm, occurs as discont. selvage of qtz vein, albite twinning

1% Un ID (high +ve relief, v low birf, colorless, .2mm, margin of vein, poss. 2 clvg @ 90°, TOPAZ?)

1% Limonite (coatings see above)

TEXTURE:

NAME OF ROCK:

HS no. 84-01 (65.53-65.63) TS no. 84-01 (65.53-65.63)

HANDSPECIMEN

THIN SECTION

Mode: 50% Carbonate (weak fizz cold HCl, poss Calcite-Ankerite, anhedral grains. with "dirty" look, range .02mm - .5mm, ave .25mm, replacive

30-35% Quartz (fine .02-.1mm ave, anhed. milled (?) grains subround commuted

5-10% Sericite (v. fine grained <.01-.02mm shreds in bands and dissem.

5% Chlorite (same as ser, occurs with

2-3% Opaques (<.01mm - .07mm, ave .01mm, dissem +-o, coarser grains subhedral, finer anhedral, pyrite?

TEXTURE: Distinct foliation, primary tex destroyed (?) by carbonate ± qtz flood overprint.

Name of Rock:

HS no. MT-702/T TS no. MT-702/T

HANDSPECIMEN

(P) THIN SECTION

mode:

55-60% Quartz (two types 90% a) anhedral-subhedral, some pseudoreticulating elongate otherwise irreg shapes, undulose extinction common, .02mm–1mm range, sutured grain boundaries on large grains common 10% b) frags(?) or patches ± cryptocx qtz with mottled-jigsawpuzzle tex. ≪.01–.03mm range, .005–.01mm ave, individual patches up to 1mm dia. NOTE Qtz embayments in opaques poss suggest replacement

40% Opaques (subh.-euh grains <.01–~~3.0~~mm, ~~fractured~~ ave .8mm, fractured grains healed by quartz, mainly square outline, RTS ∴ ID with reflected light

2-3% Sericite (local aggregate patches & dissem, ave .01–.02mm, gen. localized

Tr Apatite?, Zircon?, Sphene

TEXTURES:

Name of Rock: