GEOLOGICAL SURVEY OF TASMANIA–DEPARTMENT OF MINES–HOBART

MT READ VOLCANICS PROJECT 1986

MAP 1. GEOLOGY OF THE MT CHARTER–HELLYER AREA

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1 0.5 0 1 2 km

SCALE 1 : 25000

QUATERNARY — Qa — Alluvium, swamp deposits.

Qg — Glacial deposits, mostly till.

TERTIARY — Tb — Basalt.

DEVONIAN – SILURIAN — S-D — Eldon Group sedimentary sequence undifferentiated.

ORDOVICIAN — Ogl — Gordon Group limestone sequence undifferentiated.

EARLY ORDOVICIAN – LATE CAMBRIAN — €Oo — Siliciclastic conglomerate and minor sandstone of Owen Conglomerate (=Denison Group).

WEST OF HENTY FAULT ZONE

DUNDAS GROUP

CAMBRIAN

Cp — Quartz-feldspar porphyry.

Cps — Felsic intrusive, commonly spherulitic and flow-banded, feldspar-quartz-phyric.

Cdq — Cdt — Lithicwacke with interbedded siltstone and mudstone and intercalations of felsic tuff (Cdt).

Cdt — Felsic tuff, generally quartz-feldspar-phyric, often well bedded, with pumice clasts in some cases.

Cds — Cdq — Dominantly shale, siltstone and mudstone, generally black and pyritic, with basal lenses of epiclastic agglomerate (Cde).

Cdb — Cdba — Basaltic lavas and breccias, including pillow lavas with inter-pillow chert.

Cda — Andesitic lavas, breccias and tuffs.

Cd — Cde — Cdba — Cdm — Cdff — Epiclastic breccias and grits with clasts of basalt, andesite, felsic lava and massive sulphide (Cde), intercalations of andesitic volcanics (Cda), vesicular basaltic-andesitic lava (Cdba), flow-banded spherulitic felsic lava (Cdff) and massive sulphide shown.

Cdff — Felsic lava, generally flow-banded and spherulitic, feldspar-quartz-phyric.

Cdal — Cdbal — Cdv — Lower sequence of basaltic and andesitic lavas, breccias and tuffs. Some basaltic (Cdbl) and andesitic (Cdal) units shown. Some intercalations of felsic tuff (Cdtv)

Cdt — Cdtv — Felsic tuff with intercalations of fine grained vitric tuff and minor felsic lavas (Cdtv).

Cdq — Lithicwacke sandstone, commonly micaceous, with interbedded siltstone, felsic tuff and minor basaltic-andesitic volcanics.

WEST AND SOUTH OF MT CHARTER

Cp — Quartz-feldspar porphyry intrusives with possible minor lavas and tuffs

Cds — Cdtv — Dominantly black shale and siltstone with intercalations of felsic vitric tuff (Cdtv).

Cd — Cdff — Cdbas — Felsic lava, mostly feldspar-phyric, massive to vesicular, with zone of flow breccia and epiclastic rocks indicated (Cdlm).

Cdgm — Dominantly micaceous lithicwacke with interbedded siltstone.

Cdg — Cdgs — Dominantly tuffaceous lithicwacke with interbedded siltstone.

CENTRAL VOLCANIC SEQUENCE

Ccv — Ccvt — Ccvvt — Felsic pyroclastic rocks, generally feldspar-phyric. Some units of flamme-bearing ignimbritic tuff (Ccvt) and fine grained vitric tuff (Ccvvt) shown.

Ccvl — Felsic lava, generally feldspar-phyric.

Operating mine, prospect or abandoned mine.

Fossil locality.

EAST OF HENTY FAULT ZONE

FARRELL-MURCHISON SEQUENCE

Cf — Slate, sandstone and tuff sequence of Farrell Slates.

TYNDALL GROUP CORRELATES

Cp — Quartz-feldspar porphyry intrusive

Cps — Felsic intrusive, commonly spherulitic, feldspar-quartz-phyric.

Ct — Ctc — Volcaniclastic conglomerate with minor sandstone and siltstone

Ctf — Ctl — Felsic tuff and agglomerate generally quartz-feldspar-phyric, with intercalations of felsic lava (Ctl).

Cts — Interbedded lithicwacke and siltstone

INTRUSIVE ROCKS

DEVONIAN — Ddl — Dolerite

CAMBRIAN — Cp — Quartz-feldspar porphyry

Cps — Felsic intrusive, commonly spherulitic and flow-banded, feldspar-quartz-phyric.

OVERPRINTS AND MINERALIZATION

PYR — Alteration in volcanic rocks, usually with strong schistosity. ser = sericite, pyr = pyrite

Area of strongly cleaved or disrupted rocks, usually associated with fault zones.

PQ — Massive sulphide lens with mine designation where applicable.

Ba — Barite.

Geological boundary – accurate or approximate.

Geological boundary – inferred or concealed.

Fault – accurate or approximate (dip indicated).

Fault – inferred.

Fault – concealed.

Major fold–axial surface trace.

Early fold.

Later fold.

Unconformity.

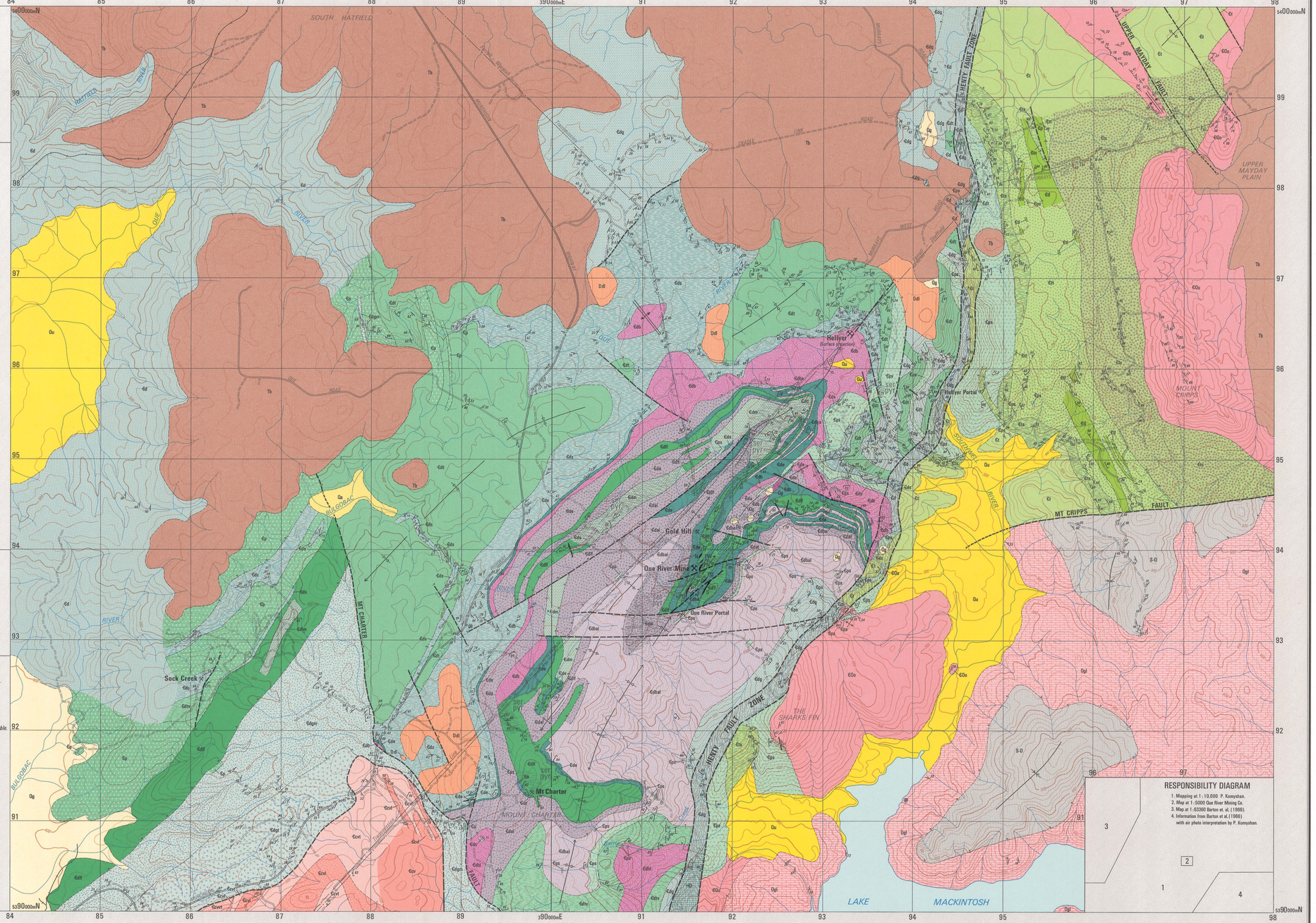
Strike and dip of bedding–facing known; overturned; facing unknown; vertical.

Banding in volcanic or igneous rock; vertical banding.

Strike and dip of cleavage; vertical cleavage.

Minor fold with plunge–antiform, synform, unspecified.

Produced by Department of Mines Cartographic Section



RESPONSIBILITY DIAGRAM

1. Mapping at 1 : 10,000 P. Komyshan.
2. Map at 1 : 50000 Que River Mining Co.
3. Map at 1 :63360 Barton et. al., (1986).
4. Information from Barton et al.,(1986) with air photo interpretation by P. Komyshan.