

MAP 8. GEOLOGY OF THE MT. CATTLEY-MT. TOR AREA

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QUATERNARY

- Qa Talus, scree, slope deposits.
- Qs Alluvium, swamp deposits — may include other alluvium.
- Qd Dune sand deposits.
- Qg Coarse gravelly deposits of mainly fluvio-glacial and/or glacial origin.

TERTIARY

- Ts Sediments — gravel, sand, clay, minor lignite. Locally silicified gravel (Tsa).
- Tb Basalt.

ORDOVICIAN

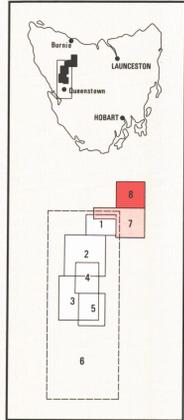
- Oa Limestone and minor shale — Gordon Group.

LATE CAMBRIAN — EARLY ORDOVICIAN

DENISON GROUP — OWEN CONGLOMERATE

- CDm1 Fine-weathering siltstone and calcareous sandstone — correlates of Florence Valley Mudstone. Grey siliceous sandstone, commonly bioturbated or with abundant burrows; sparse macrofossils. Correlates of Meina Sandstone.
- CDm2 Generally pink pebble conglomerate, commonly with clasts of shale and volcanic rocks.
- CDm3 Divergent indicates horizon containing volcanoclastic detritus and minor vesicular basic-intermediate lava flows (CDmb).
- CDm4 Pink coarse sandstone and granite-pebble conglomerate.
- CDm5 Clasts of pink chert common. Cross-bedding common.
- CDm6 Pink pebble-cobble to pebble conglomerate with clasts of pink chert.
- CDm7 Base transgressive and erosional in some areas.
- CDm8 Dominantly thin-bedded pink to grey sandstone with minor siltstone, calcareous sandstone and granite-pebble conglomerate. Bioturbated on some horizons. Rare marine macrofossils.
- CDm9 Cobble-boulder to cobble conglomerate with minor sandstone lenses. Correlates of Middle Owen Conglomerate.
- CDm10 Dominantly well-bedded grey micaceous sandstone and siltstone, grading to pebbly sandstone and pebble-cobble conglomerate in some areas. Correlates of Newton Creek Sandstone.

LOCATION MAP



CAMBRIAN — MOUNT READ VOLCANICS

MT. CATTLEY — TWO HUMMOCKS AREA

CORRELATES OF DUNDAS GROUP AND TYNDALL GROUP

- Volcanoclastic sandstone and conglomerate with intercalated siltstone and minor crystal tuff. Correlates of Tyndall Group.
- Upper unit of flow banded felsic lava intercalated with vitric tuff and pumice-clast tuff.
- Dominantly pumice-clast-bearing tuff and breccia (CDp). Some units of mass-flow tuff (CDmf), felsic lava (CDf) and greywacke-shale (CDg) indicated.
- Mixed sequence of felsic tuff (including mass-flow units), greywacke, siltstone, vitric ash and minor felsic lava. Some units of mass-flow tuff (CDmf) and felsic quartz-phyric lava (CDq) indicated.
- Dominantly micaceous greywacke and siltstone (CDg). Some units of vitric tuff (CDvt), mass flow tuff (CDmf) and a minor occurrence of mafic-intermediate lava (CDim) indicated.
- Dominantly fine-grained vitric tuff with intercalated mass-flow tuff, shale and greywacke. Some units of greywacke-shale (CDg) and mass-flow tuff (CDmf) indicated. May be partly equivalent to other units, particularly CDts and CDp.

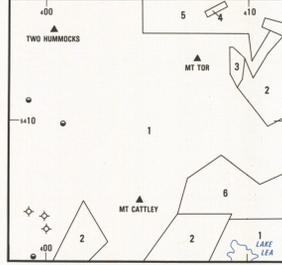
BLACK BLUFF RANGE 'WINDOWS'

- Bedded volcanoclastic conglomerate and sandstone with siltstone interbeds. Some siliceous detritus.
- Mainly felsic crystal tuff and crystal-vitric tuff, quartz-feldspar-phyric.
- Mainly vitric tuff and pumice-bearing tuff.
- Grey, flow-banded feldspar-hornblende-phyric lava (? andesite).
- Mainly volcanoclastic sandstone, conglomerate and breccia with minor volcanic rocks.
- Mainly welded ash-flow tuffs and associated flow-foliated rocks, quartz-feldspar-phyric.

CAMBRIAN INTRUSIVE ROCKS

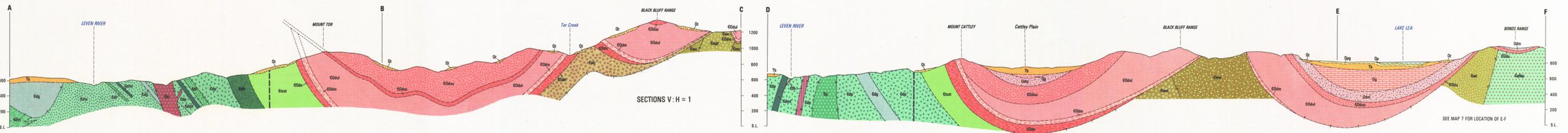
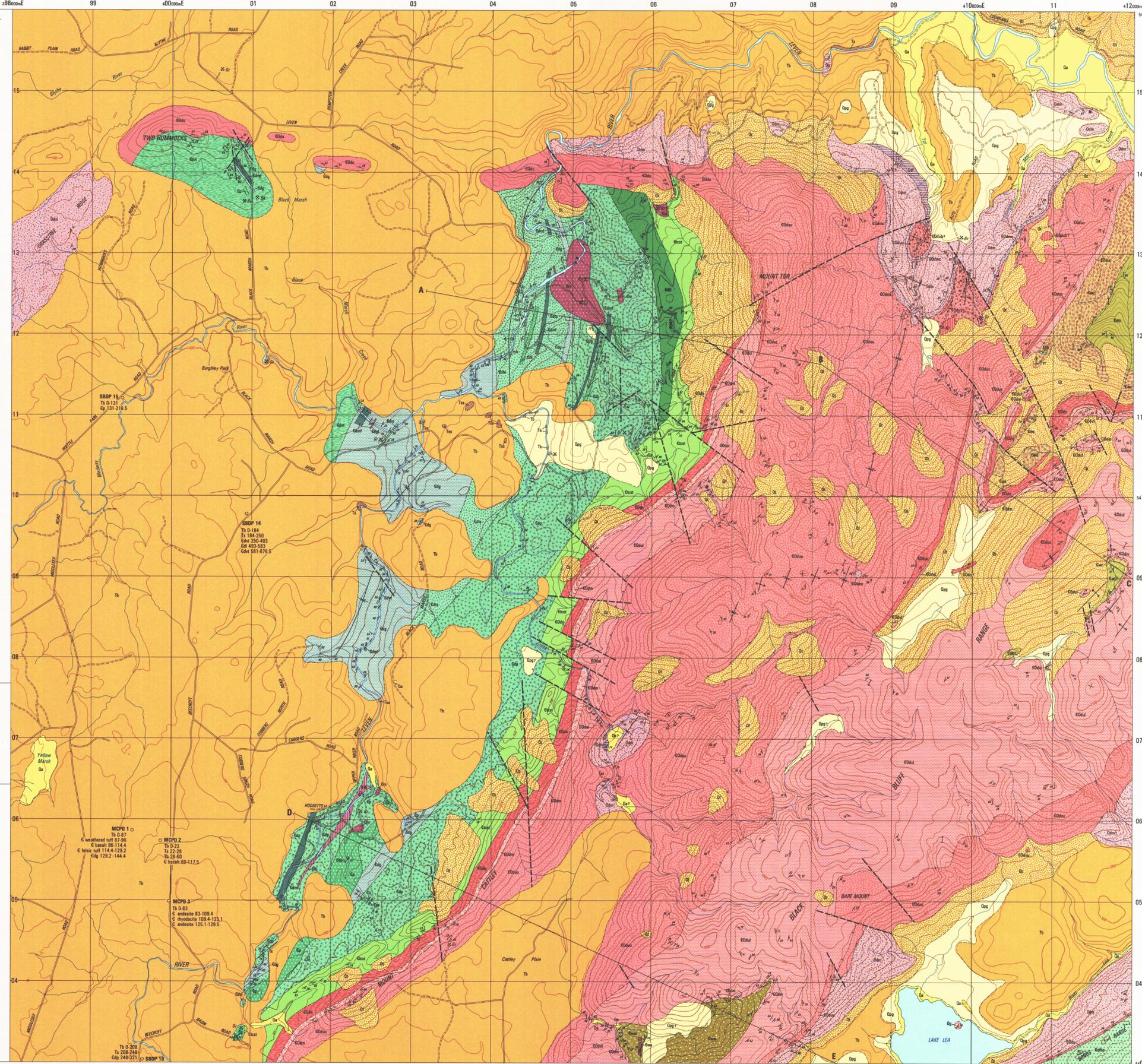
- Felsic porphyry, generally quartz-feldspar-phyric.
- Felsic porphyry commonly spherulitic.
- Quartz-feldspar-biotite ± hornblende porphyry.
- Feldspar-hornblende porphyry, generally pink, spherulitic.
- Feldspar-pyroxene-chlorite-quartz-bearing ophitic-textured intermediate-mafic rock.

RESPONSIBILITY DIAGRAM



- Prospect or abandoned mine with commodity indicated.
- Gravel pit or quarry.
- Prominent quartz vein.
- Fossil locality.
- Geological boundary — accurate or approximate.
- Geological boundary — inferred or concealed.
- Fault — accurate or approximate.
- Fault — inferred or concealed.
- Axial surface trace of major anticline, syncline, with plunge where known.
- Minor fold with plunge, anticline, syncline, unspecified.
- Strike and dip of bedding — facing known, unknown, overturned, vertical, horizontal.
- Banding in volcanic or igneous rock.
- Strike and dip of dominant cleavage of unspecified type in Cambrian or younger rocks; vertical cleavage.
- Joint.

Base map adapted from Gullford, Loane and Lee 1:25 000 maps produced by Lands Department, Hobart. Geological maps produced by the Cartographic Section of the Geological Survey, Department of Mines, Hobart. Cartography by P. B. Hawthell, C. A. Meach, K. D. Covert, B.Sc. (Hons.), Ph.D., Senior Geologist in charge of Mt. Read Project mapping. D. McP. Downes, B.Sc. (Hons.), Ph.D., Supervising Geologist, Economic Geology Section. M. R. Harragan, B.Sc., M.A.I.M.M., Chief Geologist. Compiled under the direction of H. Marshe, B.Sc., Director of Mines, based under the authority of the Minister for Mines. Published 1988. CROWN COPYRIGHT RESERVED.



SECTIONS V : H = 1

SEE MAP 7 FOR LOCATION OF E-F