

MAP 7. GEOLOGY OF THE BACK PEAK — CRADLE MOUNTAIN LINK ROAD AREA

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| QUATERNARY | |
|---------------------|---|
| Qa | Talus, scree, slope deposits. |
| Qb | Alluvium, swamp deposits — may include older alluvium. |
| Qc | Dune sand deposits. |
| Qd | Coarse gravelly deposits of mainly fluvial and/or glacial origin. |
| Qe | Boulder moraine deposits with glacial waves in places. Marine ridge crest indicated (•••••). |
| TERTIARY | |
| Ta | Silicified breccia of locally derived rock types associated with base or edge of basalt. |
| Tb | Basalt. |
| Tc | Sediments — gravel, sand, clay, minor lignite. |
| Td | Fanitic deposits — age uncertain. |
| SILURIAN — DEVONIAN | |
| SD | Eden Group clastic sequence, including Florence Sandstone (Sf) and Bell Shale (Sb) — in drill holes only. |

| CAMBRIAN — MOUNT READ VOLCANICS | |
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| SOUTHWELL RIVER AREA | |
| CORRELATES OF DUNDAS GROUP & TYNDALL GROUP | |
| C1 | Volcanic conglomerate and sandstone with minor siltstone. |
| C2 | Interbedded siltstone, sandstone, shale and tuff with marine macrofossils. |
| C3 | Dominantly quartz-feldspar-phyllic crystal tuff, and crystal-tuff tuff, pink weathering, with interbedded tuffaceous sandstone and siltstone. Subphite clasts locally at base. Correlate of Corvax Tuff. |
| C4 | Interbedded grey siltstone, sandstone, siliceous greenish-cobble conglomerate. |
| C5 | Dominantly pumice-clast bearing tuff and breccia, including mass-flow units, patchy green-grey pill calcareous, with interbedded vitric ash and flow-banded, quartz-feldspar-phyllic lava (R6). |
| C6 | Interbedded micaceous siltstone, siltstone and granite-grade greywacke, brown-weathering. |
| C7 | Mixed sequence of felsic tuff (including mass-flow breccia), greywacke, siltstone and shale. |
| C8 | Dominantly felsic tuff, quartz-feldspar-phyllic. |
| C9 | Pyritic black shale, siltstone, minor sandstone, Que River Shale. |
| C10 | Basalt of Que-River Volcanics. |
| C11 | Micaceous quartzwacke, well bedded, grey to white weathering, with interbedded siltstone. Correlate of Axial Creek Greywacke. |
| CENTRAL VOLCANIC COMPLEX | |
| C12 | Feldspar-phyllic grey lava. |

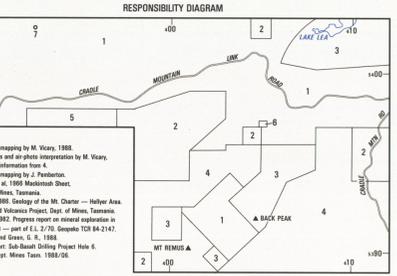
| BLACK BLUFF RANGE 'WINDOWS' | |
|-----------------------------|---|
| B1 | Mainly felsic crystal tuff and crystal-vitric tuff, quartz-feldspar-phyllic. |
| B2 | Mainly vitric tuff and pumice-bearing tuff. |
| B3 | Mainly volcanic sandstone, conglomerate and breccia with minor volcanic rocks. Subphite clasts locally at base. Correlate of Corvax Tuff. |
| B4 | Mainly welded ash-flow tuffs and associated flow-fellied rocks, quartz-feldspar-phyllic. |

| BACK PEAK AREA | |
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| BP1 | Interbedded pale grey vitric tuff, crystal-vitric tuff, tuffaceous sandstone, dark grey cherry siltstone, minor mass-flow tuff. Foliations with large pumice clasts indicated (C6). |
| BP2 | Interbedded quartzite, sandstone, granite conglomerate and minor siliceous breccia. Correlate of Sickle Range Beds. |

| PRECAMBRIAN | |
|-------------|---|
| P1 | Mainly quartzite and platy quartzite with subordinate pelitic layers. |
| P2 | Mainly phyllite and micaceous schist with subordinate quartzite. |

| ORDOVICIAN | |
|-----------------------------------|---|
| O1 | Limestone and minor shale — Gordon Group. |
| LATE CAMBRIAN — EARLY ORDOVICIAN | |
| DEMISON GROUP — OWEN CONGLOMERATE | |
| OC1 | Siltstone and calcareous sandstone — correlate of Florina Valley Mudstone. |
| OC2 | Grey siliceous sandstone, commonly banded or with abundant burrows; minor micaceous. Correlate of Rima Sandstone. |
| OC3 | Pink coarse sandstone and gravelly-pellic conglomerate, locally conglomeratic at base. Clasts of pink chert common. Cross bedding common. |
| OC4 | Conformable unit of dolomite-basalt. |
| OC5 | Dominantly thin-bedded pink to grey sandstone with minor siltstone, calcareous sandstone and pellic conglomerate. Some banded calcareous. |
| OC6 | Cobble-boulder to pebble-cobble conglomerate with minor sandstone lenses, thin-bedded to massive, pale pink to grey in colour. |
| OC7 | Correlate of Middle Owen Conglomerate. |
| OC8 | Grey to pale pink micaceous sandstone with interbedded siltstone and pellic conglomerate. Correlate of Rivena Creek Sandstone. |
| OC9 | Volcanic conglomerate and sandstone — correlate of Jubber Conglomerate. |

| DEVONIAN | |
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| D1 | Dolomite. |
| CAMBRIAN | |
| C13 | Quartz-feldspar-phyllic. |
| C14 | Felsic porphyry, commonly aphanitic. |
| C15 | Quartz-feldspar-biotite-hornblende porphyry. |
| C16 | Feldspar-pyroxene porphyry (F indicates). |



Base map adapted from Payne, Leo, Chiswick, Patrick Pike, Back and Cradle. 1:25,000 map produced by Lands Department, Hobart. Geological map produced by the Cartographic Section of the Geological Survey, Department of Mines, Hobart.

1. 1:10,000 scale mapping by M. Vicary, 1988.
 2. Limited revision and/or photo interpretation by M. Vicary, with additional information from 4.
 3. 1:10,000 scale mapping by J. Pemberton, 1988.
 4. Payne, L. M., ed., 1988. Geological of the Mt. Cham — Hollyer Area. Department of Mines, Tasmania.
 5. Payne, L. M., ed., 1988. Geological of the Mt. Cham — Hollyer Area. Map 1, Mt. Read Volcanics Project, Dept. of Mines, Tasmania.
 6. Williams, W. 1982. Progress report on mineral resources in Mackintosh East — part of E.L. 2/770. Geoplot TCR 84-2147.
 7. Bailey, P. W., and Goss, C. R., 1988. Corvax Tuff. Mt. Read Volcanics Project File 6. Unpubl. Map Dept. Mines Tasmania, 1988/05.

Compiled under the direction of H. Murchie, B.Sc., Director of Mines, Hobart under the authority of the Minister for Mines. Published 1988.

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| Py | Area of alteration 1: mineralisation of country rock. py = pyrite, ha = haematite. |
| Q | Quartz veins. |
| Qa | Ferrous quartz veins. |
| Qb | Ferrous quartz veins. |
| Qc | Prospect or abandoned mine. |
| Qd | Gravel pit or quarry. |
| Qe | Fossil locality. |
| — | Geological boundary — accurate or approximate. |
| --- | Geological boundary — inferred or concealed. |
| --- | Fault — accurate or approximate. |
| --- | Fault — inferred or concealed. |
| --- | Actual surface trace of major anticline, syncline, with plunge where known. |
| --- | Minor fold with plunge. |
| ↘ ↙ | Strike and dip of bedding — facing known, anticline: vertical bedding. |
| ↘ ↙ | Bedding in volcanic or gneissic rock. |
| ↘ ↙ | Strike and dip of dominant cleavage of unspalled tuff in Cambrian or younger rocks; vertical cleavage. |
| ↘ ↙ | Joint. |
| ↘ ↙ | Strike and dip of cleavage in Precambrian rock. S1, S2, unspalled. |

