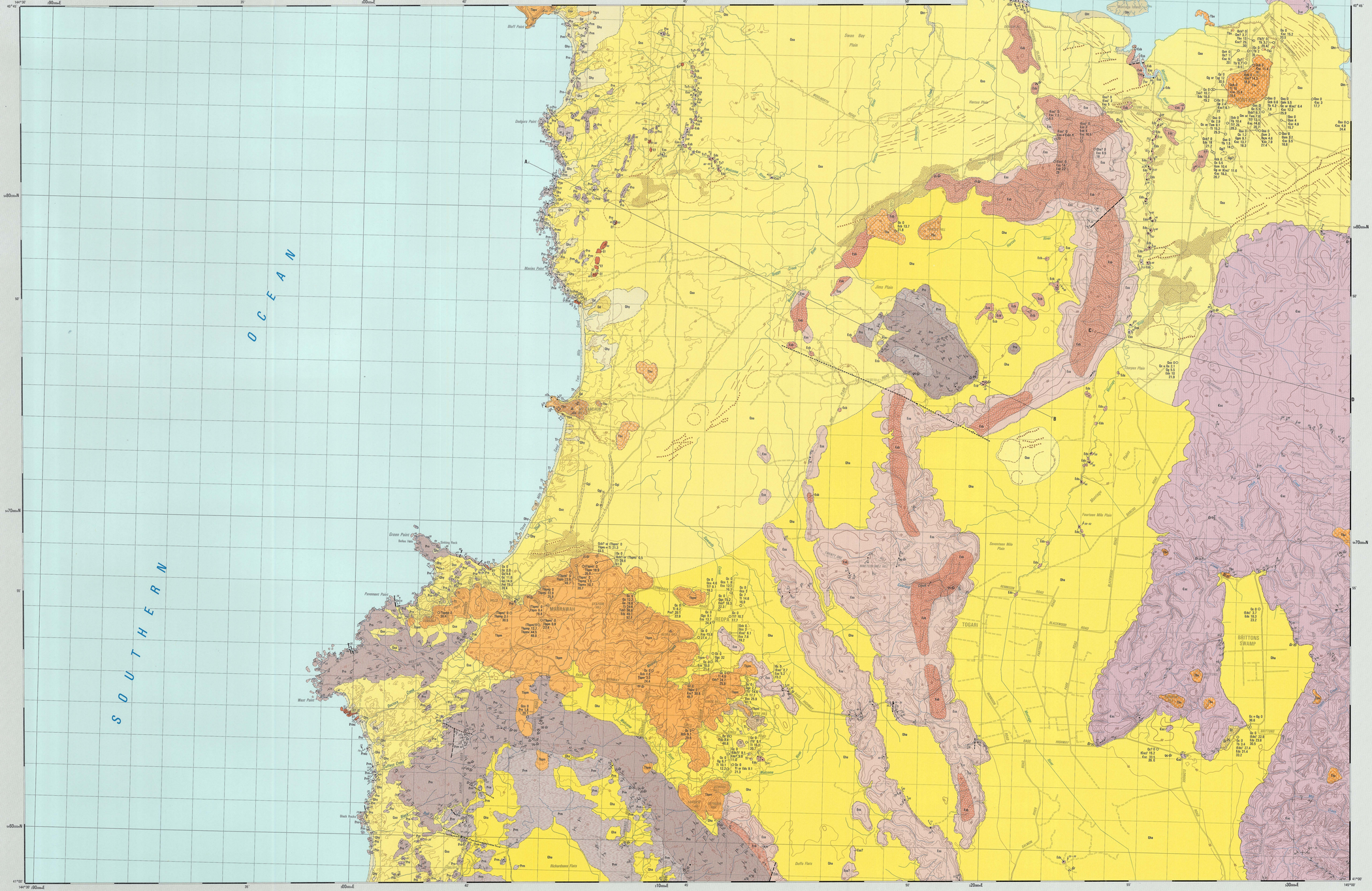
WOOLNORTH

GEOLOGICAL SURVEY OF TASMANIA – DEPARTMENT OF MINES – HOBART

GEOLOGICAL ATLAS 1 : 50,000 — SHEET 7816S — FIRST EDITION 1992

SCALE 1 : 50 000

1 0 1 2 3 4 5 6 KILOMETRES



REFERENCE

CAINOZOIC — QUATERNARY — HOLOCENE

- **Qhz** — *Mud, sandy clay and sand of tidal saline flats.*
- **Qha** — *Alluvium and colluvium — including alluvial deposits of sand, clay-rich sand or gravel; talus and slope-wash deposits; swamp deposits of sand, clay and peat; and deposits rich in chert lag derived with associated soil from Black River Dolomite and Smithton Dolomite.*
- **Qhy** — *Younger active dune and beach sand and beach gravel.*

CAINOZOIC — QUATERNARY — PLEISTOCENE

- **Qd** — *Aeolian calcarenite, partially lithified, showing dune cross-bedding. Probably Pleistocene in age.*
- **Qao** — *Older stabilised windblown sand of predominantly coastal aeolian plain, and older stabilised beach and associated dune sand probably related to higher sea levels during Last Interglacial. Some terrace margins (''''''''''') old sea-cliffs (''''''''''), lunette and associated swamp margins (————), general areas of preserved old dune forms (), trends of preserved old linear dunes (), and trends of relict beach ridges related to Last Interglacial regressive strandlines (————). indicated.*
- **Qt** — *Talus and scree.*
- **Qg** — *Gravel and conglomerate of local derivation; deposits of probable strandline origin probably related to higher sea level during Last Interglacial indicated (Qg).*

CAINOZOIC — TERTIARY

- **Tu: Tuf** — *Siliceous clastic sediment of probable Tertiary age, probably non-marine.*
- **Tu: Tbv** — *Olivine basalt lava, generally non-pillowed, with minor hyaloclastite at Mt Cameron West (CD083736). K/Ar geochronological age 14.5 ± 0.2, 15.5 ± 0.2 Ma at Mt Cameron West, where Tbv overlies Tl. Elsewhere, age relative to other Tertiary units unknown.*
- **Tu: Tl** — *Bioclastic shallow marine limestone of Waterfordian to U.Longfordian age, wholly older than Tbv of Mt Cameron West; age relative to other areas of Tbv unknown; may be partially older and partially younger than Marrawah Volcanics (Tbpm).*
- **Tu: Tbp** — *Crudely bedded basaltic pyroclastics, pillow and tachylitic breccias and hyaloclastite with subordinate olivine basalt lava and pillow lava. Marrawah Volcanics Tbpm; Studland Bay Basalts Tbps.*
- **Tbx** — *Basaltic Tvent agglomerate and breccia, crudely bedded in part and containing angular blocks of subjacent basement rocks (e.g. of Ecc, Edu) and abraded xenocrysts of hornblende. Age relative to other Tertiary units unproven.*

Angular unconformity.

PALAEOZOIC — CAMBRIAN

- **Ecu** — *Polymict lithic conglomerate and wacke, litharenite and laminated siltstone-mudstone, generally well bedded and commonly in 75-130m thick fining-upward cycles; turbiditic in part, with late middle Cambrian marine fossil fauna at [CC311267S], early late Cambrian marine fossil fauna at [CC035808] on adjacent GMITNTON Quadrangle.*
- **Eds** — *Shallow marine dolomitic limestone and dolomite, well bedded to massive, of subridat to Tsuprastial facies. Correlate of Smithton Dolomite.*

PALAEOZOIC — CAMBRIAN? — EOCAMBRIAN?

- **Ecu: Ess** — *Polymict lithic conglomerate and wacke, massive to well bedded, turbiditic and volcaniclastic in part, and laminated siltstone (Ess); massive and minor amygdaloidal tholeiitic basalt lava and coarse pyroclastics (Eab). Correlate of Crimson Creek Formation.*
- **Ecu: Ech** — *Shallow marine thin bedded chert (after carbonate) and subordinate laminated black mudstone, with preserved oolitic and stromatolitic textures in some places. Correlate of Black River Dolomite.*
- **Ecu: Et** — *Monomict (with dominantly orthoquartzite clasts) and minor polymict, massive lithic breccia and bedded lithic conglomerate with subordinate cross-laminated orthoquartzite. Correlate of Forest Conglomerate and Quartzite.*

Erosional and transgressive surface, low-angle angular unconformity at some localities, related to Penguin Orogeny.

PRECAMBRIAN — PROTEROZOIC

- **Pro: Pro** — *Orthoquartzite, well bedded and commonly showing cross lamination of trough and planar-tabular types and oscillation ripple marks, with minor horizons of laminated siltstone.*
- **Pro: Prm** — *Laminated siltstone and mudstone, thin bedded, with minor thin interbeds of cross laminated and oscillation ripple marked orthoquartzite in some places. Minor laminated calcareous or dolomitic mudstone and other carbonate rocks indicated (Prmc).*

ROCKY CAPE GROUP CORRELATES

IGNEOUS ROCKS

TERTIARY

- **Tbv** — *Olivine basalt lava.*

EOCAMBRIAN

- **Eab** — *Massive and minor amygdaloidal tholeiitic basalt lava.*

ADDITIONAL LITHOLOGICAL SYMBOLS IN BOREHOLES

QUATERNARY — *Qc clay; Qcs sandy clay; Qcm marine clay; Qcb boulder clay (with boulders of Tb); Qm mud or mudstone; Qmm marine mud or mudstone; Qs sand, undifferentiated; Qsm marine sand; Qgc gravel and clay; Qgs gravel and sand; Qgm marine gravel; Qp peat.*

TERTIARY — *Tsm mudstone; Tss sand or sandstone; Tcg gravel or conglomerate; Tb undifferentiated Tertiary basalt; within unit Tbpm: Tbpmv basalt lava; Tbpmp basaltic pyroclastics.*

EOCAMBRIAN — *Within unit Eab: Eabv basalt lava; Eabt basaltic tuff and other pyroclastics.*

Unspecified Age — *( )' Regolith derived from unit in brackets, eg (Ecc)' etc.*

- *Geological boundary — position approximate.*
- *Geological boundary — inferred.*
- *Fault — position approximate, downthrown side and/or dip indicated where known.*
- *Fault — inferred thrust, teeth on upper plate, dip indicated.*
- *Fault — inferred.*
- *Fault — inferred and concealed.*
- *Strike and dip of bedding — right way up; overturned; horizontal; facing known vertical; facing unknown vertical, dipping.*
- *Strike and dip of platy flow structure in lava; horizontal.*
- *Strike and dip of early or dominant cleavage — dipping; vertical; dipping with trend and plunge of later crenulation lineation.*
- *Minor fold hinge-line with plunge and dip of axial surface, where known, indicated.*
- *Minor fold hinge-line with vergence indicated (view down plunge): dextral, symmetrical, sinistral.*
- *Borehole with depths in metres of stratigraphic units encountered and final depth. (Data source: waterbore records, Department of Mines, Engineering Geology Section).*
- *Fossil locality.*
- *Field station for adjacent reading or readings on map.*
- *Gravel quarry or pit — operating.*
- *Gravel quarry or pit — abandoned.*

ADDITIONAL SYMBOLS ON SECTIONS

- *Direction of stratigraphic younging.*
- *Trace of cleavage (observed).*
- *Trace of bedding (inferred).*
- *Road*
- *Vehicular track*
- *Trigonometric Station*

Geology by D. B. Seymour, B.Sc. (Hons), Ph.D., P. W. Baillie, B.Sc., M.Sc. (Hons).
Base map redrawn from 1:25 000 map sheets Studland, Montagu, Cameron, Mella, Marrawah, Togari, Bluff and Roger produced by Mapping Division, Department of Environment and Planning, Hobart.
Geological map production by the Cartographic Branch of the Geological Survey, Department of Mines, Hobart.
Cartography by A. J. Hollick and C. A. Meech.
E. Williams, B.Sc. (Hons.), Ph.D., F.G.S., Deputy Chief Geologist in charge of Regional Mapping, Compiled under the direction of M. R. Hargraves — Deputy Secretary and acting Chief Geologist.
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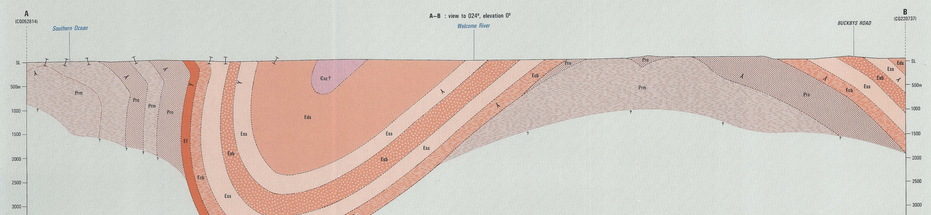
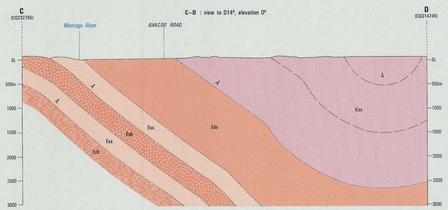


SECTIONS V : H = 1 : 1
(Superficial deposits omitted)



UNIVERSAL GRID REFERENCE

GRID ZONE DESIGNATION: 55J

100 000 METRE SQUARE IDENTIFICATION: 100 | CG

IGNORE the SMALLER figures of any grid number: these are for finding the full co-ordinates. Use ONLY the LARGE figures of the grid number example: 12 000

TO GIVE A STANDARD REFERENCE ON THIS SHEET TO NEAREST 100 METRES:

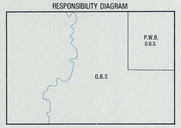
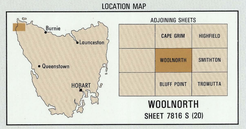
SAMPLE POINT: ⚓ MT CAMERON WEST

1. Read letters identifying 100 000 metre square in which the point lies: CG
2. Read LARGE figures labelling the LEFT of point and read LARGE figures labelling the line in either the top or bottom margin, in on the line itself: 08
3. Estimate tenths from grid line to point: 9
4. Read LARGE figures labelling the BELOW point and read LARGE figures labelling the line in either the left or right margin, in on the line itself: 73
5. Estimate tenths from grid line to point: 2

SAMPLE REFERENCE: CG0897372

If reading toward 10° in one direction, prefix Grid Zone Designation, as: 55CCG0897372

RESPONSIBILITY DIAGRAM



LOCATION MAP