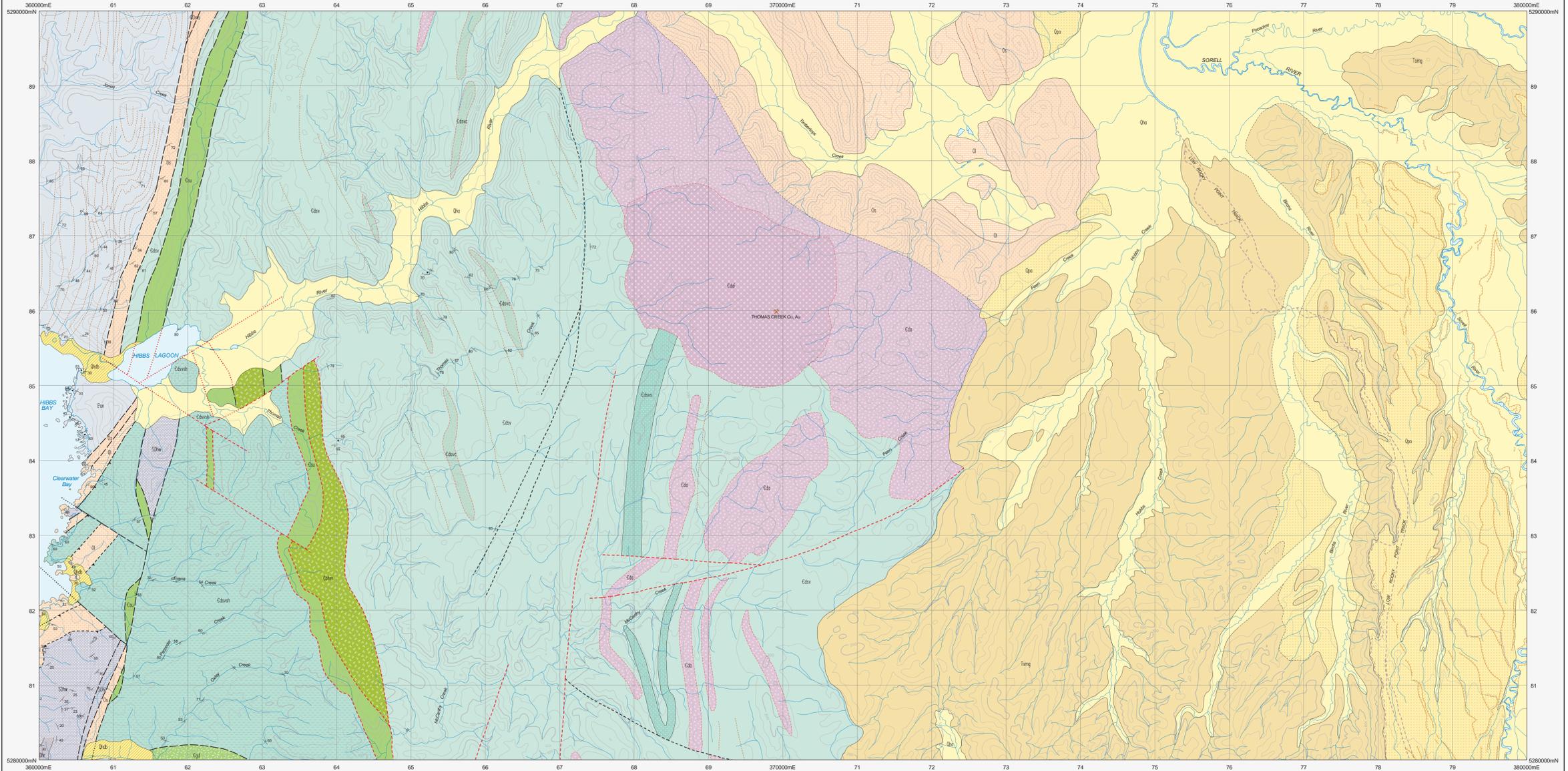


# HIBBS EAST

Scale: 1:25 000



## COMPOSITE LEGEND FOR HIBBS EAST AND HIBBS WEST

| CENOZOIC | PALEOGENE |  |
|----------|-----------|--|
|          | HOLOCENE  | PLIOCENE   |
|          | Ondb      | Modern shore face and associated aeolian dune sand (Ondb).   |
|          | Oha       | Stream alluvium, marsh and swamp deposits (Oha).   |
|          | Opo       | Older alluvial gravels, mainly on raised terraces developed on Tertiary deposits, and showing a gradational relationship to younger alluvium (Opo).  |
|          | Tsmg      | Semi-consolidated interbedded sands, pebble-cobble gravels (up to boulder grade in some places), silts and clays; some horizons contain coaled wood and rare amber (Tsmg).   |
|          | Ph        | Marine sequence of grey, poorly sorted polymict cobble-pebble lithic conglomerate, pebbly lithic sandstone, siltstone, calcareous mudstone and limestone, with abundant marine macrofossils in some beds (Ph). (Correlate of lower Parmelee Supergroup). |
|          | SDhe      | Red-weathering, cross-bedded well-sorted marine quartz sandstone with minor siltstone and conglomeratic fossiliferous bed near top contains brachiopods, tentaculites and trilobitic spongiolites (SDhe). (Whitlakes Beach Sandstone).                   |
|          | SDhr      | Unfossiliferous redbed sequence of predominantly fine-grained lithic sandstone with subordinate coarse lithic sandstone and lithic conglomerate, arranged in fan-gward sequences (SDhr). (Red Reef Cliff Sandstone).                                     |
|          | SDni      | Interbedded fossiliferous marine limestone and calcareous mudstone, with abundant coral reefs up to 0.5m in diameter (SDni). (Point Hibbs Formation).  |
|          |           | Possible disconformity.  |

| PALEOZOIC | LATE CAMBRIAN - ORDOVICIAN |   |
|-----------|----------------------------|---|
|           | ORDOVICIAN                 | CAMBRIAN  |
|           | Oi                         | Dark grey limestone, dolomite, calcareous mudstone, minor quartz sandstone and block clay weathering products; in part fossiliferous (Oi).  |
|           | Oa                         | Grey to pink or reddish siliceous sandstone with subordinate granite-pebble conglomerate and minor siltstone. Cross-bedded in places, bioturbated in places. Ordovician fossils of 3674Dm 5296083m north of this map sheet. Includes distinctive red cross-bedded sandstone sequence of Point Hibbs (Oa). |
|           | COms                       | Marine mudstone-siltstone-sandstone sequence, grey to reddish-grey, with Late Cambrian fossils at 3646Dm 5298363m north of this map sheet (COms).   |
|           |                            | Unconformity  |
|           | Cdsv                       | Mixed sequence of volcano-sedimentary sedimentary and volcanic rocks, ranging from felsic to andesitic in composition. May include non-volcanic sedimentary rocks (Cdv).  |
|           | Cdsv                       | Andesitic lavas and breccias, with volcanoclastic units and possible intrusives. Typically plagioclase-pyroxene-phyric. Includes some units mapped from aeromagnetic signature (Cdv).   |
|           | Cdsv                       | Dominantly volcanoclastic conglomerate-sandstone unit, typically felsic, with weakly positive magnetic character (Cdv).   |
|           | Cdsv                       | Ridge-forming, probable sandstone units, typically non-magnetic (Cdv).  |
|           | Cdvsh                      | Dominantly siltstone-mudstone sequence, grey to greenish-grey, thin-bedded, with subordinate thin graded turbiditic sandstone units (Cdvsh).  |
|           |                            | Inferred erosional surface  |
|           | Cdvm                       | Dominantly intermediate volcanic rocks, including probable high-Mg andesites, and gabbro. Probably structurally emplaced (Cdv).   |
|           | Cdv                        | Undifferentiated, generally coarse-grained ultramafic rocks, gabbro and sheared serpentinite (Cdv).   |
|           | Pon                        | Melanophosed interbedded quartzite and mudstone/siltstone (Pon). Correlate of Donoh Formation.  |

| MESOZOIC | EARLY CAMBRIAN - JURASSIC |   |
|----------|---------------------------|---|
|          | EARLY CAMBRIAN            | MIDDLE CAMBRIAN   |
|          | Id                        | Dolerite (Id).  |
|          | Cdsv                      | Andesitic intrusive rocks, including plagioclase-pyroxene-phyric diorite and granodiorite (Cdv).    |
|          | Cdsv                      | Andesitic lavas and breccias and possible intrusives (Cdv).   |
|          | Cdsv                      | Gabbro dykes, intrusive bodies and fault bounded units (Cdv).                                       |
|          | Cdsv                      | Dipositively intermediate volcanic rocks and gabbro, including probable high-Mg andesites (Cdv).    |
|          | Cdv                       | Undifferentiated, generally coarse-grained ultramafic rocks, gabbro and sheared serpentinite (Cdv). |

| PALEOZOIC | LATE CAMBRIAN - ORDOVICIAN |   |
|-----------|----------------------------|---|
|           | ORDOVICIAN                 | CAMBRIAN  |
|           |                            | Geological boundary - position accurate or approximate.                                       |
|           |                            | Geological boundary - inferred.   |
|           |                            | Geological boundary inferred from airborne magnetic and/or radiometric data.                  |
|           |                            | Fault - unspecified type, position accurate or approximate.                                   |
|           |                            | Fault - unspecified type, inferred.   |
|           |                            | Fault - unspecified type, concealed.  |
|           |                            | Fault - unspecified type, inferred from airborne magnetic and/or radiometric data.            |
|           |                            | Fault - unspecified type, concealed, inferred from airborne magnetic and/or radiometric data. |
|           |                            | Thrust fault, position accurate or approximate, teeth on upper plate.                         |
|           |                            | Thrust fault, inferred, teeth on upper plate.   |
|           |                            | Lithological trend line.  |
|           |                            | Scarp.  |
|           |                            | (white line) Limit of mapping of sub-unit within undifferentiated rock unit.                  |

Compiled by D.B. Seymour, B.Sc.(Hons), Ph.D. and D. Green, B.Sc.(Hons), Ph.D. 2001 from the following sources (see Responsibility Diagram):

A Unpublished mapping by D.B. Seymour, B.Sc.(Hons), Ph.D., 1989-1990.

B Unpublished mapping by B.D. Seymour, B.Sc.(Hons), Ph.D., 1989-1990.

C Unpublished mapping by M.P. McCleughan, B.Sc.(Hons), Ph.D., 1990.

D New interpretation of airborne magnetic and radiometric data and aerial photographs, with minor additional information from BHP Co. Ltd. Exploration Dept., 1989-1 Mile Geological Map - Point Hibbs (Double Cone & Hibbs Bays), E1 131865 Southwest Tasmania.

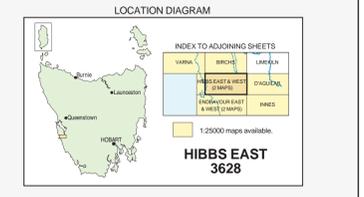
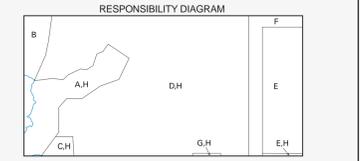
E Bradbury, J., Pemberton, J., Vigary, M.J. & Corbett, K.D., 1992. Geology of (Hibbs East only).

F 1:25000 Geological series, Southwest Tasmania (Hibbs East only).

G Green, D.C., 2003. Ground truthing GPRM geophysical interpretation south of Macquarie Harbour. Tasmania Geological Survey record 2003/12.

Updated by:

H.K.D. Corbett, 2004 as part of the Western Tasmanian Regional Minerals Program.



**REFERENCE THIS MAP AS:**  
SEYMOUR, D.B. and GREEN, D. (compilers) 2004. Digital Geological Atlas 1:25 000 Scale Series, Sheet 3628, Hibbs. Mineral Resources Tasmania.

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Map produced by the Geoscience Information Branch of Mineral Resources Tasmania using G.I.S. software.  
GDA84 - MGA Zone 55. Contour Interval: 20 metres.

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