Department of Infrastructure Energy and Resources
MINERAL RESOURCES TASMANIA

DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
ENDEAVOUR EAST, SHEET 3627

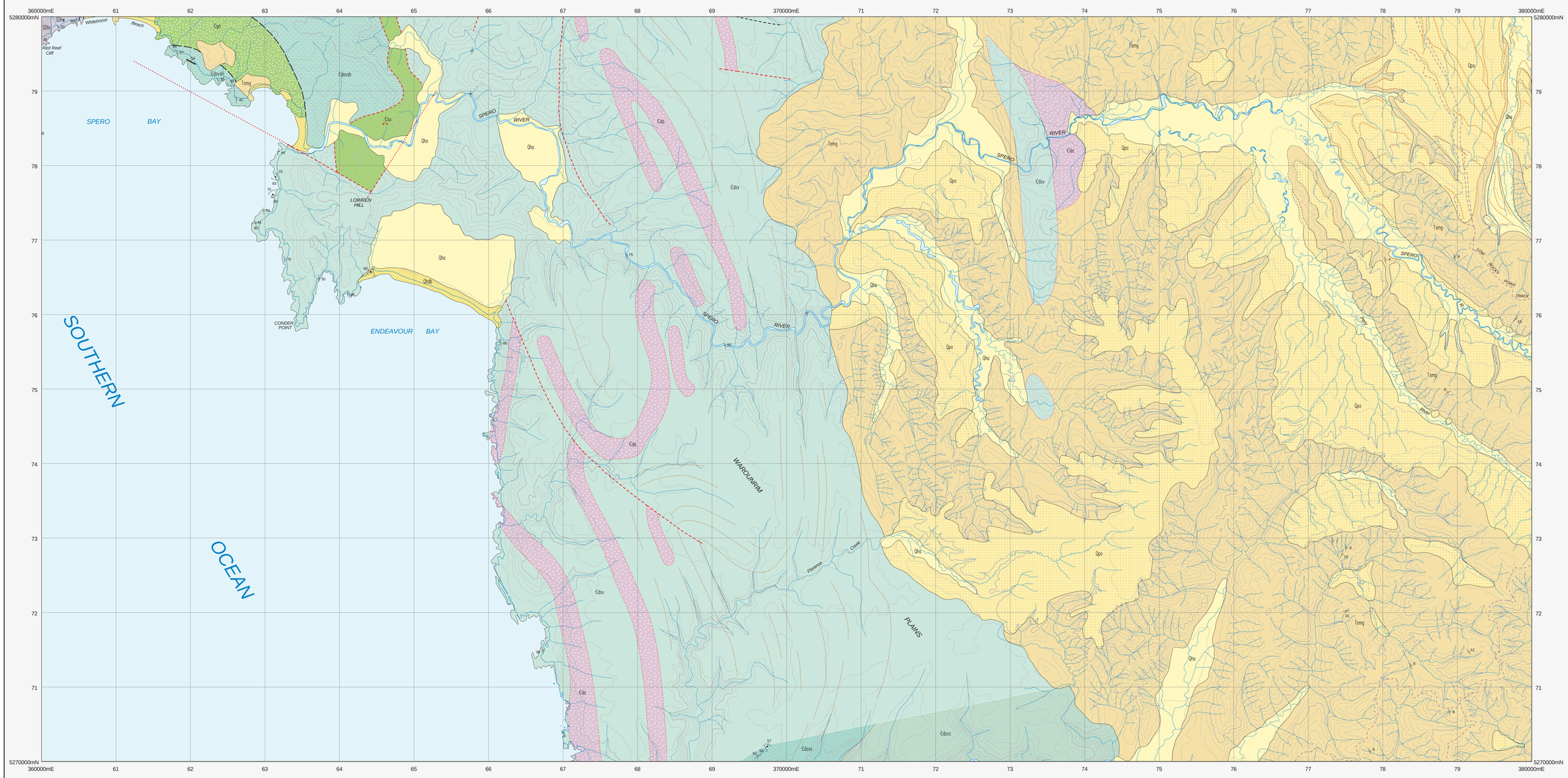
ENDEAVOUR EAST

Scale: 1:25 000

0 500 1000 1500 2000 2500m

INDUSTRY TOURISM RESOURCES

Tasmania
Explore the possibilities



COMPOSITE LEGEND FOR ENDEAVOUR EAST AND ENDEAVOUR WEST

CENOZOIC

- **QUATERNARY**
  - **HOLOCENE**
    - Qhdb — *Modern shore face and associated aeolian dune sand (Qhdb).*
    - Qha — *Alluvium and swamp deposits (Qha).*
  - **?PLEISTOCENE**
    - Qpo — *Older alluvial gravels, mainly on raised terraces developed on Tertiary deposits, and showing a gradational relationship to younger alluvium (Qpo).*
- *Erosional surface.*
- **TERTIARY**
  - Tsmg — *Semi–consolidated interbedded sands, pebble–cobble gravels (up to boulder grade in some places), silts and clays; some horizons contain coalified wood and rare amber (Tsmg).*

Angular unconformity.

PALEOZOIC

- **LATE CARBONIFEROUS**
  - Pth — *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 (Pth). (Correlate of Lower Parmeener Supergroup).*

Angular unconformity due to Middle Devonian polyphase orogeny.

- **EARLY DEVONIAN**
  - SDhw — *Pale–weathering, cross–bedded, well–sorted marine quartz sandstone with minor siltstone and conglomerate; fossiliferous bed near top contains brachiopods, tentaculids and orthoconic cephalopods (SDhw). (Whitehorses Beach Sandstone).*
  - SDhr — *Unfossiliferous redbed sequence of predominantly fine–grained lithic sandstone with subordinate coarse lithic sandstone and lithic conglomerate, arranged in fining–upward sequences (SDhr). (Red Reef Cliff Sandstone).*
  - SDhl — *Interbedded fossiliferous marine limestone and calcareous mudstone, with abundant coral heads up to 0.5m in diameter (SDhl). (Point Hibbs Formation).*

Possible disconformity.

PROTEROZOIC

- **NEO–PROTEROZOIC**
  - **ORDOVICIAN**
    - Ol — *Dark grey limestone, dolomite, calcareous mudstone, minor quartz sandstone and black clay weathering products; in part fossiliferous (Ol).*
    - Os — *Dominantly brown to red–weathering cross–bedded quartz sandstone with current ripples and bioturbation in some beds, and minor pebble conglomerate and siltstone (Os).*

Inferred unconformity

- **MIDDLE CAMBRIAN**
  - €dsv — *Mixed sequence of volcano–sedimentary, sedimentary and volcanic rocks, ranging from felsic to andesitic in composition. May include non–volcanic sedimentary rocks (€dsv).*
  - €da — *Andesitic lavas and breccias and possible intrusives, typically pyroxene–plagioclase–phyric. Includes some units mapped from aeromagnetic signature (€da).*
  - €dsvc — *Dominantly volcaniclastic conglomerate and lithicwacke sandstone with interbedded siltstone and mudstone (€dsvc).*
  - €dsvs — *Dominantly quartz–rich sandstone with interbedded siltstone and mudstone and minor conglomerate (€dsvs).*
  - €dsvsh — *Dominantly siltstone–mudstone sequence, grey to greenish–grey, thin–bedded, with subordinate thin graded turbiditic sandstone units (€dsvsh)*

Inferred erosional surface

- Pon — *Metamorphosed interbedded quartzwacke and mudstone/siltstone (Pon). (Correlate of Donah Formation)*

GORDON GROUP

CORRELATE OF WESTERN VOLCANO–SEDIMENTARY SEQUENCE

CORRELATES OF MOUNT READ VOLCANICS

INTRUSIVE ROCKS

PALEOZOIC

- **JURASSIC**
  - Jd — *Dolerite (Jd).*
- **MIDDLE CAMBRIAN**
  - €da — *Andesitic lavas and possible intrusives (€da).*
- **? EARLY CAMBRIAN**
  - €gd — *Gabbro dykes, intrusive bodies and fault–bounded units (€gd).*
  - €su — *Undifferentiated, generally coarse–grained ultramafic rocks, gabbro and sheared serpentinite (€su).*

ALLOCHTHONOUS SEQUENCES

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 aeromagnetic data.
Fault – unspecified type, concealed, inferred from aeromagnetic data.
Lithological trend line.
Scarp.
Thrust Fault (teeth on upper plate) inferred.
(white line) Limit of mapping of sub–unit within undifferentiated rock unit.

Strike and dip of bedding, facing known – right way up; overturned.
Strike and dip of bedding, facing unknown – dipping; vertical.
Strike and dip of cleavage, type and relative age unspecified – dipping; vertical.
Trend and plunge of hingeline of minor fold, relative local age F2, with dip and dip direction of axial surface indicated.
Strike and dip of crenulation cleavage.
Strike and dip of outcrop–scale fault.
Field station for adjacent readings on the map.
Mineral deposit location – hardrock – Data derived from Mineral Resources Tasmania DEPOSITS data base. Data point position has not been verified in every case.

Compiled by D.B. Seymour, B.Sc.(Hons), Ph.D and D. Green B.Sc.(Hons), Ph.D. 2000 from the following sources (see Responsibility Diagram):

A Unpublished mapping by M.P. McClenaghan, B.Sc.(Hons), Ph.D., 1990.

B Unpublished mapping by A.V. Brown, B.Sc (Hons), Ph.D., 1989.

C Unpublished mapping by D.B. Seymour, B.Sc (Hons), Ph.D., 1989–90.

D New aeromagnetic and airphoto interpretation, with additional information from BHP Co. Ltd. Exploration Dept, 1969: 1 Mile Geological Map –Point Hibbs (Double Cove & Hibbs Belts), EL 13/65 Southwest Tasmania.

E 1:250 000 Geological series, Southwest Tasmania (Endeavour East only).

F BRADBURY, J., PEMBERTON, J., VICARY, M.J. and CORBETT, K.D., 1992. Geology of the D'Aguilar Range area, Map 12. Mt Read Volcanics Project. Department of Mines, Tasmania. (Endeavour East only).

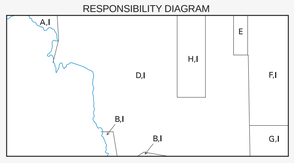
G VICARY, M.J., PEMBERTON, J., BRADBURY, J. and CORBETT, K.D., 1992. Geology of the Wandener River – Moores Valley area, Map 11. Mt Read Volcanics Project. Department of Mines, Tasmania. (Endeavour East only).

H Green, D.C., 2003. Ground truthing WTRMP geophysical interpretations south of Macquarie Harbour. Tasmanian Geological Survey record 2003/12. Mineral Resources Tasmania.

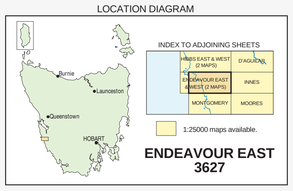
Updated by:

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

RESPONSIBILITY DIAGRAM



LOCATION DIAGRAM



ENDEAVOUR EAST 3627

REFERENCE THIS MAP AS:

SEYMOUR, D.B. and GREEN, D. (compilers) 2004. Digital Geological Atlas 1:25 000 Scale Series. Sheet 3627, Endeavour. Mineral Resources Tasmania.

Base data from the LIST, Copyright State of Tasmania.

Map produced by the Geoscience Information Branch of Mineral Resources Tasmania using G.I.S. software.

GDA94 – MGA Zone 55. Contour Interval: 20 metres.

GDA

Plotfile for this map generated from digital data as at: 23-FEB-2011

WARNING:INKS ARE LIGHT SENSITIVE