Department of State Growth
MINERAL RESOURCES TASMANIA

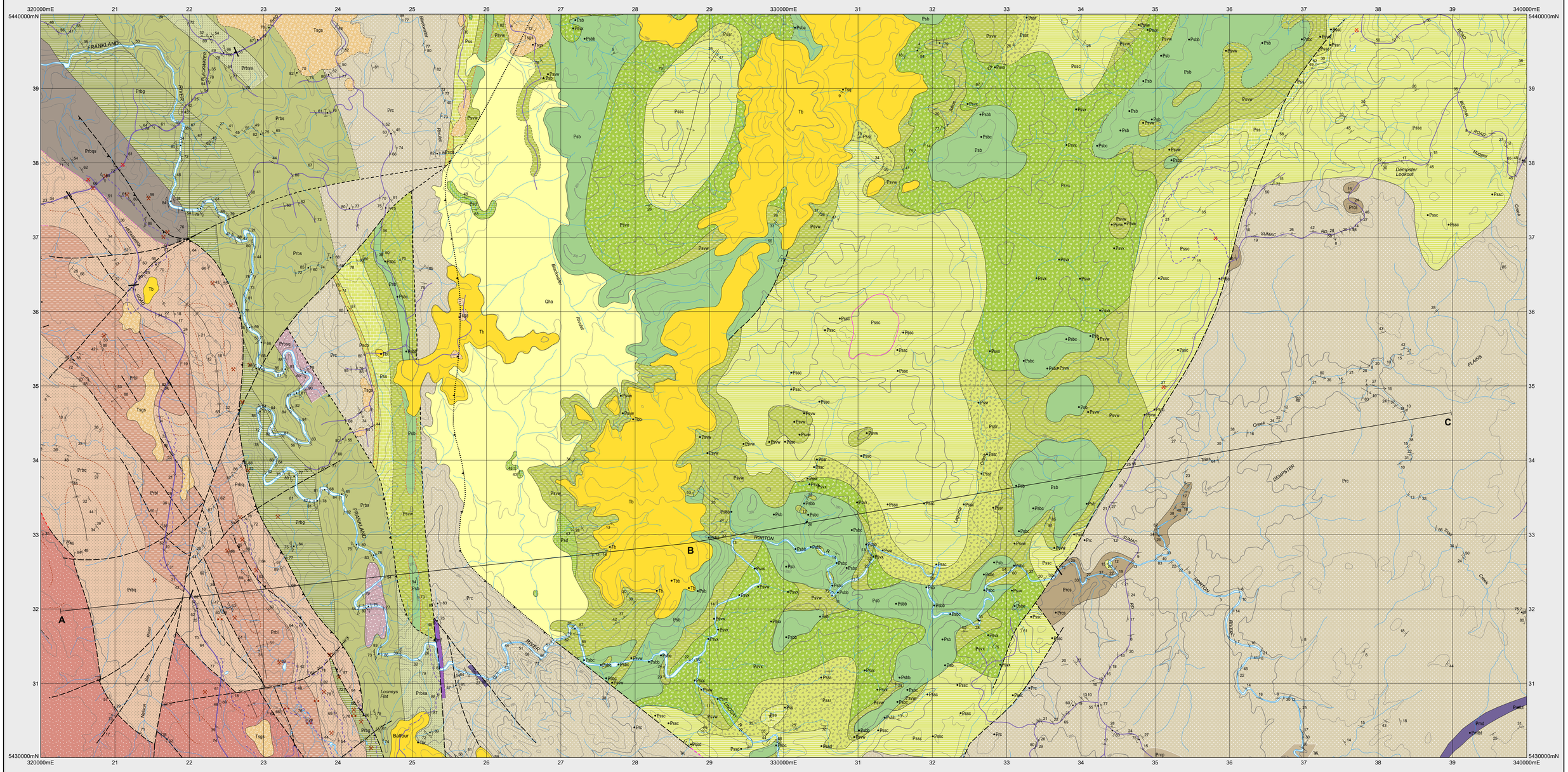
DIGITAL GEOLOGICAL ATLAS 1:25 000 SCALE SERIES
DEMPSTER, SHEET 3243

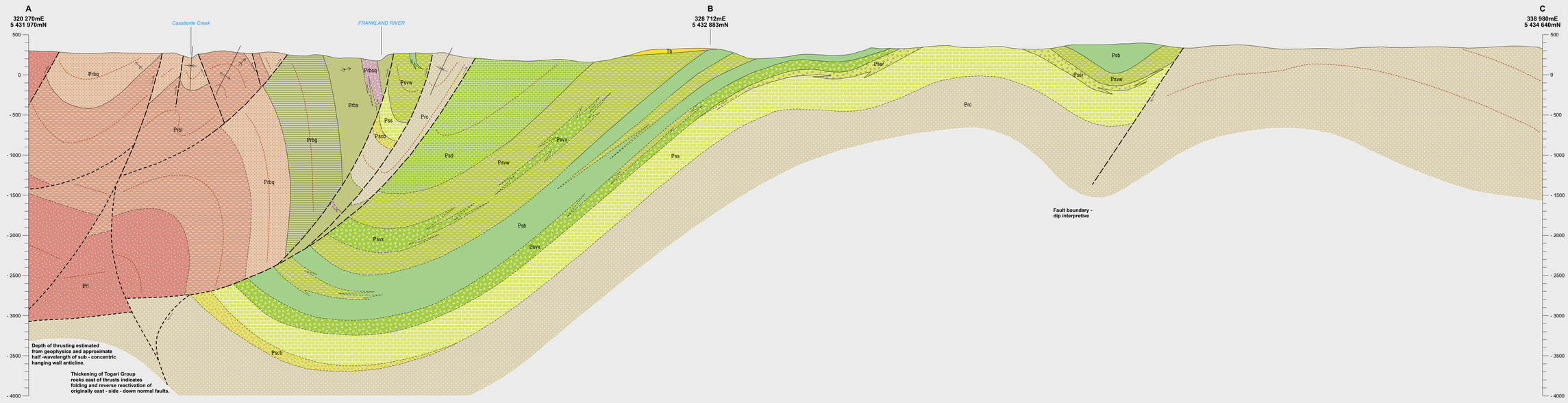
DEMPSTER

Scale 1:25 000

0 500 1000 1500 2000 2500m

Tasmanian Government





SECTION V:H = 1:1

IGNEOUS ROCKS

CENOZOIC — PALEOGENE - NEOGENE

- **Tb** — *Basalt (Tb). Basanite (Tbb), transitional olivine basalt (Tbr) and olivine tholeiite (Tbt) indicated.*

NEOPROTEROZOIC

- **Psb** — *Massive basalt (Psb). Varieties with 0.6-0.7% TiO2 (Psba), 1.0-1.1% TiO2 (Psbb), 1.5-1.8% TiO2 (Psbc) and evolved varieties with 1.6-2.3% TiO2 and < 4% MgO (Psbe) indicated. (Psb, Psba etc: Spinks Creek Volcanics).*
- **Psbxf** — *Medium to coarse-grained or pegmatitic dolerite with alkalic affinities (Psbxf).*
- **Pmd / Pmf** — *Dolerite dykes (Pmd). Foliated variety indicated (Pmf).*
- **• Pmtbt** — *Local occurrences of mafic and felsic dykes (Pmtbt).*

CONTACTS

- *Geological contact.*
- *Geological contact - inferred.*
- *Geological contact - inferred from magnetic data.*
- *Geological contact - inferred from radiometric data.*
- *Unconformable lithological contact.*
- *Igneous intrusive contact.*
- *Limit of mapping of sub-unit within undifferentiated rock unit.*

FAULTS

- *Fault.*
- *Fault - inferred.*
- *Fault - concealed.*
- *Fault - inferred from radiometric data.*
- *Fault - based on interpretation of aerial photographs.*
- *Thrust fault (teeth on upper plate).*
- *Thrust fault (teeth on upper plate) - inferred.*
- *Thrust fault (teeth on upper plate) - concealed.*
- *Thrust fault (teeth on upper plate) - inferred from magnetic data.*
- *Strike-slip fault (sinistral).*

LINEARS

- *Axial surface trace of major antiform.*
- *Axial surface trace of major synform.*
- *Lineament - visible in magnetic data.*
- *Lineament - visible in radiometric data.*
- *Lithological trend line, including bedding trace interpreted from aerial photographs.*

CENOZOIC — QUATERNARY — HOLOCENE

- **Qha** — *Alluvium and swamp deposits (Qha).*

Erosional surface.

CENOZOIC — PALEOGENE - NEOGENE

- **Tb** — *Basalt (Tb). Indurated quartz sand with plant fossils (Tsq) indicated.*
- **Tsgs** — *Interbedded siliceous gravel, quartz sand and clay (Tsgs).*

Angular unconformity.

NEOPROTEROZOIC — TOGARI GROUP — KANJENJAH SUBGROUP

- **Psd** — *Shallow marine dolomite and minor limestone (Psd) (Smithton Dolomite).*
- **Psvw** — *Interbedded laminated mudstone, siltstone, and lithic wacke with mafic volcanic detritus (Psvw). (Keppel Creek Formation).*
- **Psb** — *Massive basalt (Psb). Varieties with 0.6 - 0.7% TiO2 (Psba), 1.0 - 1.1% TiO2 (Psbb), 1.5 - 1.8% TiO2 (Psbc) and evolved varieties with 1.6 - 2.3% TiO2 and < 4% Mgo (Psbe) indicated. (Psb, Psba, Psbb, Psbc, Psbe Spinks Creek Volcanics). Dominantly mixtite (with clasts of basaltic and felsic volcanic rocks, dolomite, chert and mudstone-siltstone in a fine-grained non-dolomitic matrix), with interbedded laminated mudstone, siltstone and calcareous siltstone (Psvx). (Croles Hill Mixtite).*
- **Psvx** — *Dolomitic breccia, with clasts of dolomite, stromatolitic dolomite and oolitic chert in a dolomitic matrix (Psar). (Julius River Member).*

NEOPROTEROZOIC — TOGARI GROUP — BLACK RIVER DOLOMITE

- **Psar, Pss, Pssc** — *Interbedded dolomite, chert, siltstone and mudstone (Pss). Interbedded, massive or banded, black, white and grey chert (oolitic in part) and laminated siltstone, with minor dolomite (Pssc); some dolomite outcrops indicated (Pssd).*
- **Pscb** — *Chert breccia and conglomerate (with clasts dominantly of black, grey and white chert, and subordinate orthoquartzite) interbedded with pale grey-weathering distinctly laminated medium-grained quartzarenite (Pscb). (Correlate of Forest Conglomerate and Quartzite).*

Erosional and transgressive surface; low angle unconformity at some localities.

? MESOPROTEROZOIC

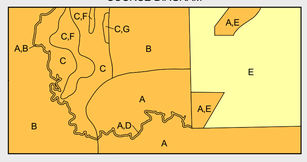
- **Prc, Prcs, Prcp** — *Interbedded, black, dark grey and green, commonly pyritic, laminated siltstone and mudstone, with rare sandstone and mud pellet conglomerate (Prc). Some tracts of well exposed fissile black to dark grey pyritic siltstone indicated (Prcp). Silicified equivalent of Prc (Prcs). (Prc, Prcp, Prcs: Cowrie Siltstone).*

? MESOPROTEROZOIC — ROCKY CAPE GROUP — BALFOUR SUBGROUP

- **Prbs, Prbsa, Prbsq** — *Laminated to thinly bedded, chloritic to siliceous siltstone to fine sandstone, containing variably disseminated porphyroblastic chlorite (Prbs). Micaceous fine-grained sandstone with subordinate interbedded siltstone and graphitic shale, and containing porphyroblastic chlorite (Prbsa). Pale-weathering, thickly bedded medium to coarse-grained quartzite interbedded with siltstone to fine sandstone (Prbsq).*
- **Prbg** — *Laminated chloritic mudstone to siltstone and rare sandstone containing variably disseminated porphyroblastic chlorite (Prbg).*
- **Prbqs** — *Mid-dark grey, thin bedded, massive to plane-laminated siltstone with minor pale grey (quartzose) laminae (Prbqs).*
- **Prbq** — *Interbedded packages of quartzose sandstone to siliceous siltstone and laminated carbonaceous shale (Prbq).*
- **Prbl** — *Laminated to gutter-cast and trough cross-bedded, siliceous to carbonaceous siltstone (Prbl).*
- **Prl** — *Medium grained, trough cross-bedded to parallel-bedded quartzose sandstone, and rare angular quartz-pebble conglomerate and shale (Prl).*

- *Strike and dip of bedding, facing known - right way up; overturned.*
- *Strike and dip of bedding, facing unknown - dipping; vertical; horizontal.*
- *Strike and dip of cleavage, relative age S_1; S_2 - dipping.*
- *Strike and dip of cleavage, type and relative age unspecified - dipping, vertical.*
- *Trend and plunge of hingeline of minor fold, unspecified relative age; with dip and dip direction of axial surface indicated.*
- *Trend and plunge of hingeline of minor fold, unspecified relative age, vergence sinistral.*
- *Trend and plunge of hingeline of minor synform, unspecified relative age.*
- *Strike and dip of outcrop-scale fault of unspecified relative age; thrust fault with dip indicated.*
- *Strike and dip of dominant joint set.*
- *Generalised palaeocurrent direction, showing sense of movement.*
- *Field station for adjacent readings on the map.*
- *Notable small outcrop with rock unit indicated.*
- *Notable small float or lag occurrence with rock unit indicated.*
- *Mineral deposit location - hardrock.*
- *Mineral deposit location - alluvial/tailings.*
- *Construction material/industrial mineral/gemstone location.*

SOURCE DIAGRAM



- Highly detailed (eg. more detailed than 1:25 000 scale mapping).
- Detailed systematic (eg.1:25 000 map or equivalent detail).
- Regional systematic (eg.1:50 000, 1:63 360 map or equivalent detail).
- Regional mapping less detailed than 1:63 360 map or equivalent (all other scales).
- Reconnaissance mapping with sparse ground traverses.
- Remote sensing and/or geophysical interpretation with limited or no ground information.

Compiled by J.L. Everard, B.Sc.(Hons); A.R. Reed, B.Sc. (Hons), Ph.D.; D.B. Seymour, B.Sc.(Hons), Ph.D. and C.R. Calver, B.Sc. (Hons), Ph.D. 1999 from the following sources (see source diagram).

A J.L. Everard, new 1:25 000 scale mapping 1997-1999 including interpretation of airborne magnetic and radiometric data and interpretation of aerial photographs.

B A.R. Reid, new 1:25 000 scale mapping 1997-1999 including interpretation of airborne magnetic and radiometric data and interpretation of aerial photographs.

C D.B. Seymour, new 1:25 000 scale mapping 1997-1999 including interpretation of airborne magnetic and radiometric data and interpretation of aerial photographs.

D C.R. Calver, new 1:25 000 scale mapping 1997-1998.

E EVERARD, J.L., SEYMOUR, D.B., BROWN, A.V. and CALVER, C.R. 1996. Geological Atlas 1:50 000 Series. Sheet 27 (7915N), Trowutta. Mineral Resources Tasmania.

Updated by:

F J.L. Everard, minor amendments and additional structure from traverses along new logging roads, 2016.

G G.V. Cumming, minor amendments from traverses along new logging roads, 2016.

REFERENCE THIS MAP AS:

EVERARD, J.L., REED, A.R., SEYMOUR, D.B. and CALVER, C.R. (compilers) 1999. Digital Geological Atlas 1:25 000 Scale Series. Sheet 3243 Dempster. Mineral Resources Tasmania.

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Map produced by Spatial Information Services, Mineral Resources Tasmania.

Website: www.mrt.tas.gov.au

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

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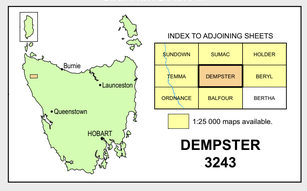
LOCATION DIAGRAM



Map generated: 06-JUN-2024

WARNING: INKS ARE LIGHT SENSITIVE.