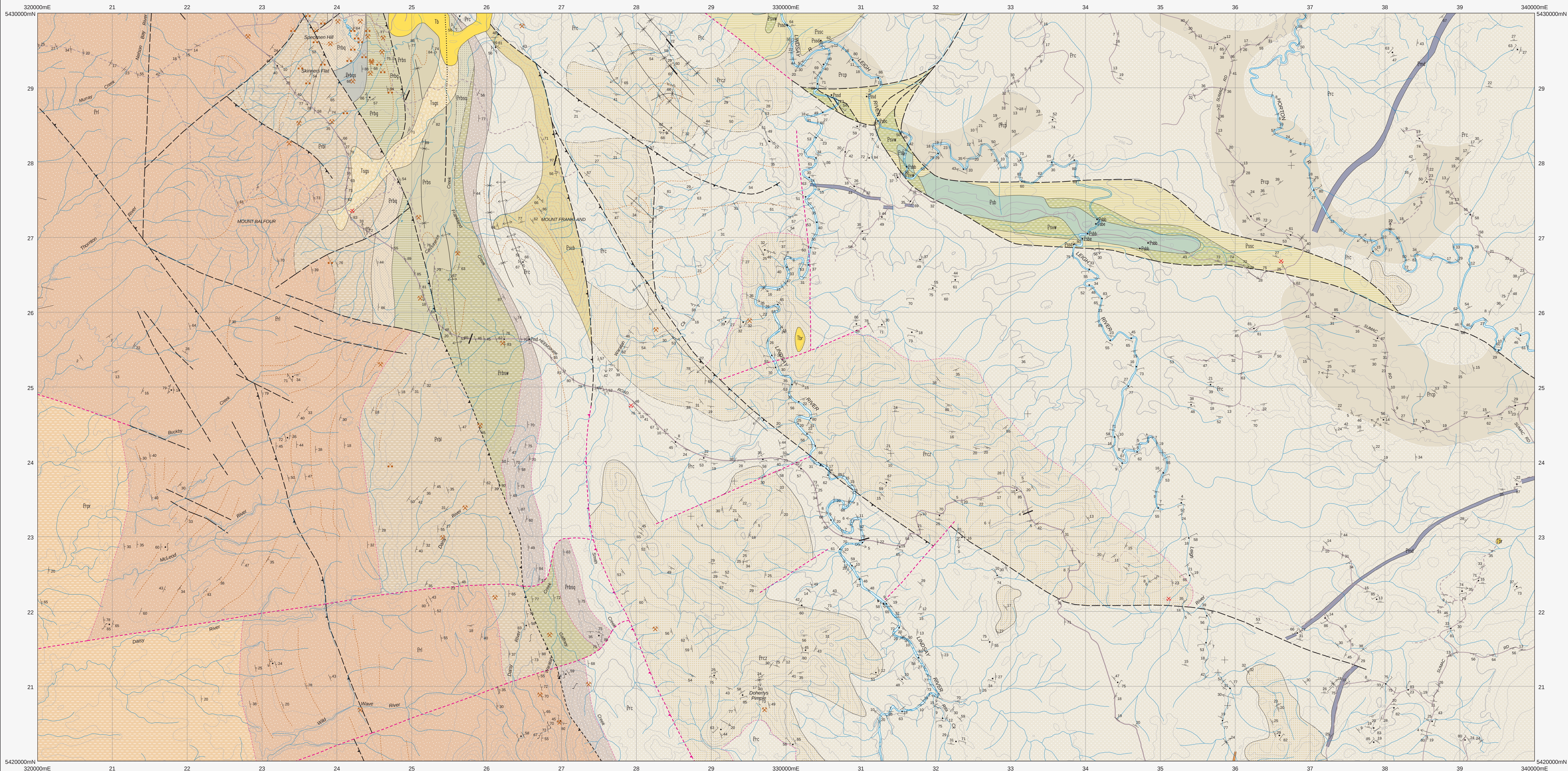
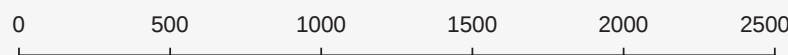


BALFOUR

Scale: 1:25 000



CENOZOIC - PALEOGENE - NEOGENE	Tb	Basalt (Tb); transitional olivine basalt (Tbr) and basanite (Tbs) indicated.
	Tsgs	Interbedded siliceous gravel, quartz sand and clay (Tsgs).
NEOPROTEROZOIC		Angular unconformity.
	Esuv	Interbedded laminated mudstone, siltstone, and (thin) wacke with mafic volcanic detritus (Esuv) (Kopah Creek Formation).
	Esu	Massive basalt (Esu). Varieties with 10 - 13% TiO ₂ (Esu), 15 - 18% TiO ₂ (Esu) and evolved varieties with 16 - 23% TiO ₂ and < 4% MgO (Esu) indicated. (Esu, Esu, Esu, Esu - Spinks Creek Volcanics).
	Esu	Interbedded massive or banded, black, white and grey chert (oolitic in part) and laminated siltstone, with minor dolomite (Esu), some dolomite outcrops indicated (Esu).
MESOPROTEROZOIC		Erosional and transpressive surfaces; low angle unconformity at some localities.
	Esu	Interbedded, black, grey or green, locally pyritic, laminated siltstone and mudstone, with rare sandstone and mud-pale conglomerate (Esu). Some tracts of well exposed fossiliferous black to dark grey pyritic siltstone indicated (Esu). Siltstone with finely developed alteration of siliceous (pale grey) and carbonaceous (dark grey) laminae, commonly with pervasive wavy lamination to small-scale trough cross-lamination, and with beds up to 30cm thick of pale cream to brown plane-laminated (creak, trough, cross-laminated) medium-grained well-sorted quartz sandstone-laminated (Esu, Esu, Esu, Esu - Cowrie Siltstone).

ROCKY CAPE GROUP
TOGARI GROUP
DOLOMITE

ECTASIAN (?)
MESOPROTEROZOIC

Esuq	Pale-weathering, thickly bedded medium to coarse-grained quartzite interbedded with siltstone to fine sandstone, containing some disseminated porphyroblastic chlorite (Esuq). Siltstone with finely developed alteration of siliceous (pale grey) and carbonaceous (dark grey) laminae, commonly with pervasive wavy lamination to small-scale trough cross-lamination, and with porphyroblastic chlorite in some beds. (Esuq). Micaceous fine-grained sandstone with subordinate interbedded siltstone and graphitic shale, and containing porphyroblastic chlorite (Esuq).
Esuq	Laminated to thinly bedded, chloritic to siliceous siltstone to fine sandstone, containing variably disseminated porphyroblastic chlorite (Esuq).
Esuq	Dominantly pale- to medium-grained, micaceous siltstone to siltstone, containing variably disseminated porphyroblastic chlorite (Esuq). (Ernmitts Creek Shale).
Esuq	Mid-dark grey, thin bedded, massive to plane-laminated siltstone with minor pale grey (quartzite) laminae (Esuq). Interbedded packages of quartzite sandstone to siliceous siltstone and laminated carbonaceous shale (Esuq).
Esuq	(Esuq, Esuq, Cassette Creek Quartzite).
Esuq	Siltstone (pale grey) to carbonaceous (dark grey) siltstone, commonly with pervasive wavy lamination to small-scale trough cross-lamination, with finely developed alteration of pale and dark laminae, may show erosional gullies and/or areas of loss of some beds, and classic dykes; quartzite laminae may reach fine sand grade, and some sections include minor packets of pale grey thin-bedded fine-grained quartz sandstone (Esuq). (Slimmers Flat Siltstone).
Esu	Medium grained, trough cross-bedded to parallel-bedded quartzite sandstone, and rare angular quartz-pebble conglomerate and shale (Esu). (Lagoon River Quartzite).
Esu	Dominantly siltstone of varied facies; upper sequence dominantly wavy-to cross-laminated finely alternating siliceous and carbonaceous siltstone similar to unit Esu, merging downward into more varied sequence - typically interbedded mid-dark grey siltstone and pale grey quartz siltstone - fine sandstone, which may show plane-parallel bedding, well developed erosional gullies, classic dykes, and grading, cross-lamination and lensing of the quartz-rich beds (Esu).

ROCKY CAPE GROUP
TOGARI GROUP
DOLOMITE

ECTASIAN (?)
MESOPROTEROZOIC

Esuq	Pale-weathering, thickly bedded medium to coarse-grained quartzite interbedded with siltstone to fine sandstone, containing some disseminated porphyroblastic chlorite (Esuq). Siltstone with finely developed alteration of siliceous (pale grey) and carbonaceous (dark grey) laminae, commonly with pervasive wavy lamination to small-scale trough cross-lamination, and with porphyroblastic chlorite in some beds. (Esuq). Micaceous fine-grained sandstone with subordinate interbedded siltstone and graphitic shale, and containing porphyroblastic chlorite (Esuq).
Esuq	Laminated to thinly bedded, chloritic to siliceous siltstone to fine sandstone, containing variably disseminated porphyroblastic chlorite (Esuq).
Esuq	Dominantly pale- to medium-grained, micaceous siltstone to siltstone, containing variably disseminated porphyroblastic chlorite (Esuq). (Ernmitts Creek Shale).
Esuq	Mid-dark grey, thin bedded, massive to plane-laminated siltstone with minor pale grey (quartzite) laminae (Esuq). Interbedded packages of quartzite sandstone to siliceous siltstone and laminated carbonaceous shale (Esuq).
Esuq	(Esuq, Esuq, Cassette Creek Quartzite).
Esuq	Siltstone (pale grey) to carbonaceous (dark grey) siltstone, commonly with pervasive wavy lamination to small-scale trough cross-lamination, with finely developed alteration of pale and dark laminae, may show erosional gullies and/or areas of loss of some beds, and classic dykes; quartzite laminae may reach fine sand grade, and some sections include minor packets of pale grey thin-bedded fine-grained quartz sandstone (Esuq). (Slimmers Flat Siltstone).
Esu	Medium grained, trough cross-bedded to parallel-bedded quartzite sandstone, and rare angular quartz-pebble conglomerate and shale (Esu). (Lagoon River Quartzite).
Esu	Dominantly siltstone of varied facies; upper sequence dominantly wavy-to cross-laminated finely alternating siliceous and carbonaceous siltstone similar to unit Esu, merging downward into more varied sequence - typically interbedded mid-dark grey siltstone and pale grey quartz siltstone - fine sandstone, which may show plane-parallel bedding, well developed erosional gullies, classic dykes, and grading, cross-lamination and lensing of the quartz-rich beds (Esu).

(White line)
Limit of mapping of sub-unit within undifferentiated rock unit.

IGNEOUS ROCKS

qv	Quartz vein (qv).
Tb	Basalt (Tb); transitional olivine basalt (Tbr) and basanite (Tbs) indicated.
Esu	Massive basalt (Esu). Varieties with 10 - 13% TiO ₂ (Esu), 15 - 18% TiO ₂ (Esu) and evolved varieties with 16 - 23% TiO ₂ and < 4% MgO (Esu) indicated. (Esu, Esu, Esu, Esu - Spinks Creek Volcanics).
Esu	Dolerite dykes (Esu).

Geological boundary - position accurate or approximate.
Geological boundary, transitional - position approximate.
Geological boundary - inferred from interpretation of airborne radiometric data.
Fault - unspecified type, position accurate or approximate.
Fault - unspecified type, concealed.
Thrust fault - position accurate or approximate, teeth on upper plate.
Thrust fault - teeth on upper plate, inferred.
Thrust fault - teeth on upper plate, inferred from airborne radiometric data.
Lithological trend line.
Lineament visible on aerial photographs.
Axial surface trace of major synform.
Axial surface trace of major synform.

Strike and dip of bedding, facing known - right way up; overturned.	Strike and dip of bedding, facing unknown - dipping, vertical, horizontal.	Generalised paleocurrent direction, showing sense of movement.	Strike and dip of cleavage, relative local age S1, S2.	Strike and dip of cleavage, type and relative age unspecified - dipping, vertical.	Strike of vertical crenulation cleavage.	Strike and dip of outcrop-scale fault; vertical.	Strike and dip of dominant joint set.	Trend and plunge of hingeline of minor fold, unspecified relative age; with dip and dip direction of axial surface indicated; vertical axial surface.	Trend and plunge of hingeline of minor fold, unspecified relative age; vergence sinistral; ductile.	Trend and plunge of hingeline of minor fold, unspecified relative age; antiform; synform.	Trend of horizontal hingeline of minor fold, unspecified relative age; with dip and dip direction of axial surface indicated; orifform.	Trend and plunge of hingeline of minor chevron fold, unspecified relative age.	Trend and plunge of hingeline of minor fold, relative local age T1.	Strike of dyke or vein, rock type or mineral specified by RCODE in Point Attribute Table, with dip and dip direction indicated.	Field station for adjacent readings on map.	Notable small outcrop, lithology indicated.	Mineral deposit location - hardrock.	Mineral deposit location - alluvial/alluvial.	Construction material/industrial mineral/gemstone location.
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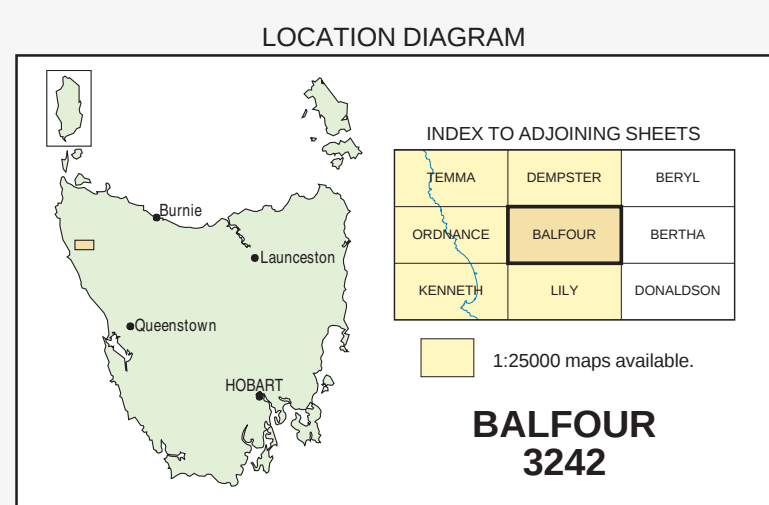
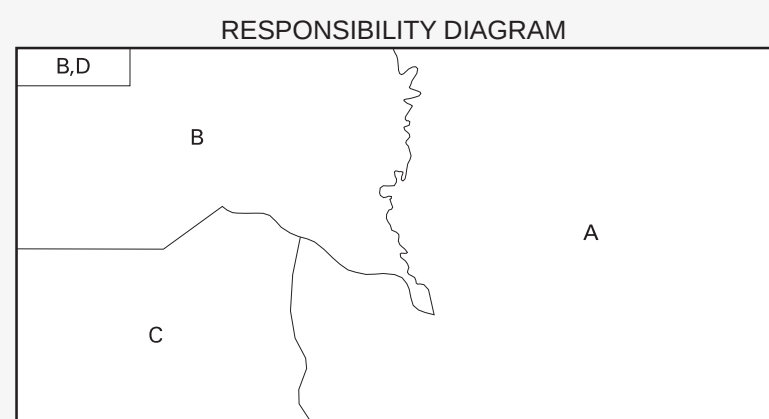
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Digital Geological Atlas 1:25 000 Scale Series, Sheet 3242
Balfour, Mineral Resources Tasmania.

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Mineral Resources Tasmania using G.I.S. software.
Website: www.mrt.tas.gov.au
GDA94 - MGA Zone 55. Contour interval: 20 metres.



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A. J.L. Everard new 1:25 000 scale mapping 1998-99, augmented by interpretation of airborne magnetic and radiometric data and interpretation of aerial photographs.
B. A.R. Reed new 1:25 000 scale mapping 1998-99, augmented by interpretation of airborne magnetic and radiometric data and interpretation of aerial photographs.
C. D.B. Seymour new 1:25 000 scale mapping 1998-99, augmented by interpretation of airborne magnetic and radiometric data and interpretation of aerial photographs.
D. J.L. Everard additional structural information from new fieldwork, 2015.



INDEX TO ADJOINING SHEETS			
BALFOUR	SEYMOUR	BERTHA	
CHRONANCE	BALFOUR	BERTHA	
SEYMOUR	BALFOUR	BERTHA	

1:25000 maps available.

BALFOUR
3242

Profile for this map generated from digital data as at: 22-FEB-2017