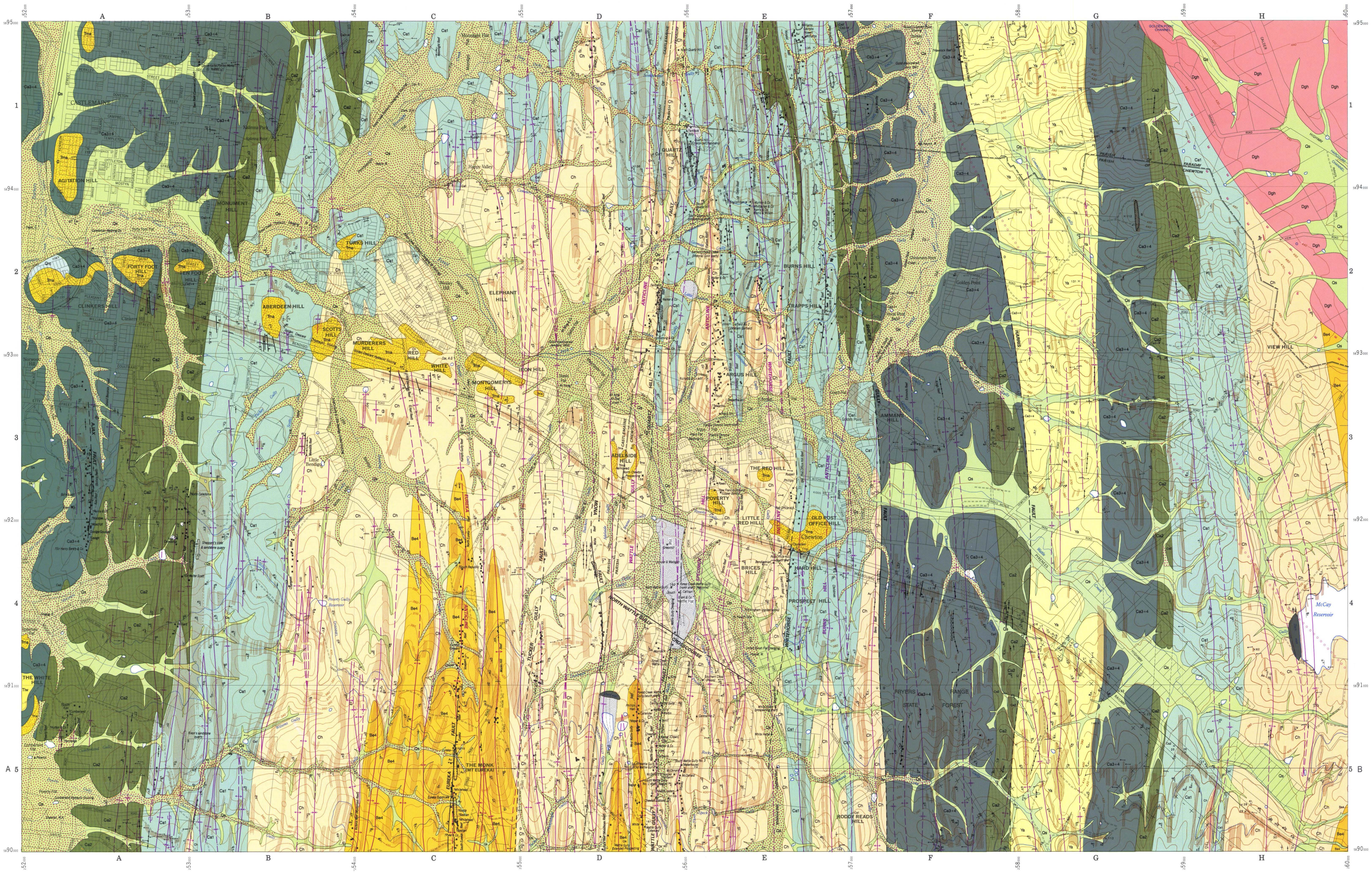
1:10 000 GEOLOGY SERIES
CASTLEMAINE GOLDFIELD
CASTLEMAINE–CHEWTON

CASTLEMAINE GOLDFIELD - CASTLEMAINE-CHEWTON

VICTORIA 1 : 10 000 — GEOLOGICAL SURVEY OF VICTORIA — EPPALOCK 10 000/2.3



MINING COMPANY

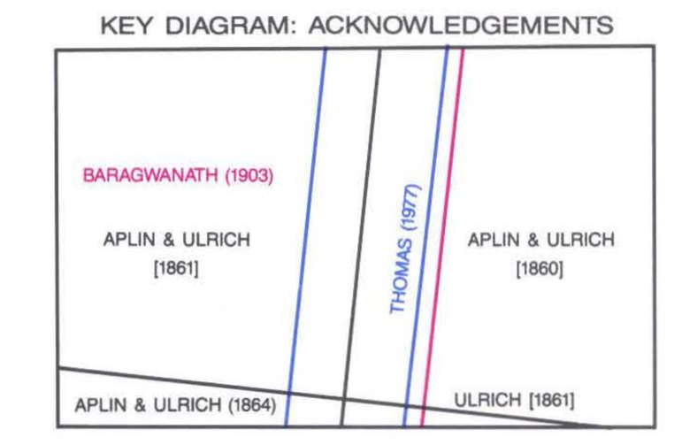
Mining company	Grid square reference
Adams, A. *	F2
Ah Hung *	D3
Ah Jung *	D3
Ah Ming & Co *	D2
Ah Sue *	D3
Ajax	A3
Argus Flat Washing Co *	E3
Argus Hill	E3
Armstrong & Co	D2
Armstrong *	A4
Bastian	C5
Bendigonian	E4
Bolivia adit	A3
Bouch	D4
Brilliant	A4
Caledonian Washing Co *	A2
Callender	D5
Callison *	D4
Central No 2	E5
Central Wattle Gully	D5
Chewton	D5
Chewton Loders	D5
Chewton Options	D5
Chewton United	E3
Clark, G.H. *	C1
Coombs	E1
Cooper	C4
Cox, A.J. *	C1
Cox, A.G *	C3
Cumberland	A5
Cumberland Hydraulic Sluicing *	A5
Daly	D3
Ely, J. *	F2
Endall, J. *	F2
Energetic	D2
Englishman	E2
Eureka	C5
Eureka Syndicate	C5
Eureka Vineyard	C4
Fairbairn	D2, D5
Fairbank	E1
Fermange	A5
Forest Creek Hydraulic Dredging (& Sluicing) *	C1, C2, B2
Forest Creek Wattle Gully	D4
Forest Creek Wattle Gully (north shaft) (Welcome)	D4
Forest Creek Wattle Gully (south shaft)	D5
Fould	E3
Francis Ormond	E3
Francis Ormond (north shaft)	E3
Frank, C. *	A2
Fraser, D. *	F2
Garfield (Forest Creek [Victoria] Gold Reefs)	E2
Garfield No 2 (Madam Garfield)	E2
Golden Crescent Hydraulic Sluicing *	B2, C2, C3
Golden Point Dredging *	F1, F2
Goodge/Goudge?	A4
Grant & Co *	D4
Greenhill	D4
Hall	D5
Harris	C5
Harris & Co	E2
Havelock Reef Co	F1
Hooper, W. *	E4
Hoskyns, G. *	C3
Howell	E1
Hutton & Co	A5
Hydra *	B3
Jolly	E1
Juniper & Madigan *	D4
Kitto	D4
Lewis *	C3
Linnett *	D3
Lloyd	D5
Malstow	A3
Martin	D5
McBull, W. (South Golden Point Dredging?) *	F2
McDonald	D5
McDonald & Hooper	D5
Meyer & Co	D5
Morris & Wilson	E2
Moscript	A4
Mumby & Co	E2
New Francis Ormond (Upper Barkly)	E3
North Caledonia	B3
North Chewton Prospecting	D3
North Quartz Hill	D1
North Wattle Gully	D4
Penna & Co	A3
Phillips	D5
Phillips	E3
Phoenix	A5
Post Office Hill	E3
Post Office Hill (south shaft)	E4
Powell	E3
Py Pieu/Pi Uhe *	E4
Pyke & Co	C5
Quartz Hill (Enterprise/Chapmans)	E1
Reece, W. *	C1
Richards & Co adit	E3
Rodda	C5
Russell	E3
Russell's Golden Point Sluicing	F1
Savage	A4
Scott's Gully & Little Bendigo United Sluicing	B3
Sheehan, N.A. *	A5
Shegog, G. *	A4
Sir Henry Barkly & Co	A4
Sir Walter Scott	B4
Smyth, W.F. *	D3
South Ajax	A5
South Quartz Hill	E2
South Quartz Hill (prospecting shaft)	E2
South Republic	C4
South Wattle Gully No. 1 shaft (Teague)	D5
South Wattle Gully No. 2 (Old Wattle Gully)	D5
South Wattle Gully No. 3 (Waterhouse)	D5
Southern Cross (Priors)	E4
Teague	D5
Terrill	D5
Thompson	E4
Trewartha	E3
Trewartha adit	E3
United Dinah Flat Dredging *	E4
Van Heurck, M. *	F1
Walker & Co	D2
Walker & Co	E2
Walker & Co (c1861)	D5
Walker (Crown)	D5
Wattle Gully	D5
Wattle Gully Dredging *	D4
Wattle Gully Extended	D5
Wattle Gully Extended Prospecting	D5
White	D5
White Horse	E5
White Horse (prospecting shaft)	E5
Whitehead, J.	C5
Whitehead	C5
Whittacker & Co	E2
Williams	E1
Woolcock	D4

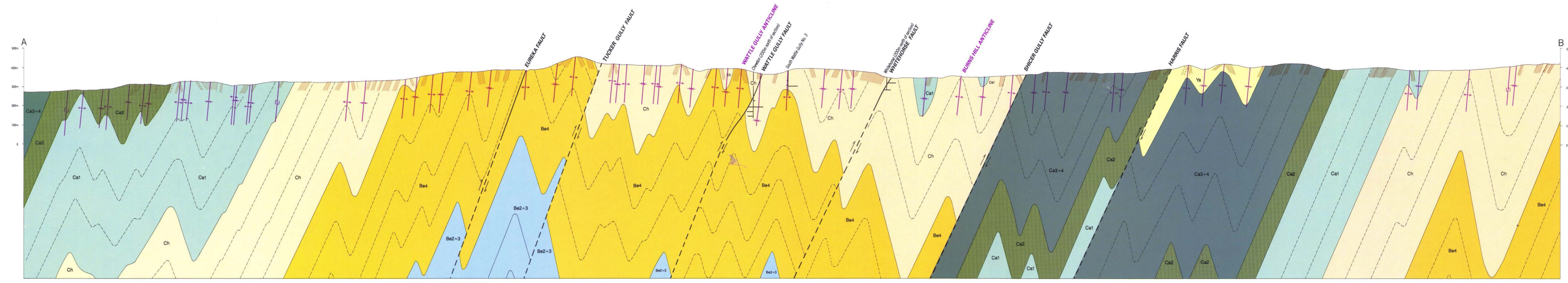
Note: * denotes an alluvial gold mining company, all other listed names are quartz mines.
The prefix "?" against a quartz mine name on the map indicates its main shaft cannot be positively identified although the area of operation is known.

LOCALITIES OF INTEREST

Locality	Grid Square Reference
① "The Anticlinal Fold" – a south plunging anticline in Castlemaine Supergroup	A1
② Calivil Formation gravel	A1
③ Castlemaine Supergroup exposed by sluice mining; showing folds, bedding-parallel veins and faults	C3
④ Massive quartz associated with faulting in the Quartz Hill open cut gold workings	E1
⑤ Folded Castlemaine Supergroup sandstone package	E5
⑥ Wattle Gully Goldmine – operating mine (public entry prohibited but can be viewed from roadside)	D5

KEY DIAGRAM: ACKNOWLEDGEMENTS





PRINCIPAL GOLD PRODUCTION ZONE ON THIS MAP

SECTION SCALE
Horizontal Scale: 1:10 000
Vertical Scale: 1:10 000

RESPONSIBILITIES AND ACKNOWLEDGEMENTS

Geology and compilation: C.E. Willman, 1982–1983 & 1992–1993

Acknowledgements:
Published mapping:
Aplin, C.D.H., & Ulrich, G.,[1860]. *Quarter sheet 13 SW. 1 mile to two inches geological map.* Geological Survey of Victoria.
Aplin, C.D.H., & Ulrich, G., [1861]. *Quarter sheet 14 SE. 1 mile to two inches geological map.* Geological Survey of Victoria.
Aplin, C.D.H., & Ulrich, G., 1864. *Quarter sheet 15 NE. 1 mile to two inches geological map.* Geological Survey of Victoria.
Baragwanath, W., 1903. The Castlemaine Gold-Field. *Geological Survey of Victoria Memoir* **2**.
Thomas, D.E., 1977. *Chewton Goldfield. 8 chains to 1 inch geological map.* Geological Survey of Victoria.
Ulrich, G., [1861]. *Quarter Sheet 9 NW. 1 mile to two inches geological map.* Geological Survey of Victoria.

Unpublished mapping:
S.F. Cox, 1982
Ceplecha, J.P., 1974. Geology and gold mineralization, Chewton goldfield, Victoria. BSc (Hons) thesis, Monash University, Melbourne.

Supervising Geologist, Geological Mapping: P.J. O'Shea,
(under C.R. Dalgarno, Director, Geological Survey, 1994)
General Manager, Geological Survey: T.W. Dickson.

Cartography: S. Wail (1994)
Manager, Draughting: J.P. Kinder

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Published by the Department of Agriculture, Energy & Minerals
P.O. Box 2145, MDC Fitzroy, Vic. 3065

Bibliographic reference: WILLMAN, C.E., 1994. *Castlemaine goldfield – Castlemaine-Chewton 1:10 000 geological map.* Geological Survey of Victoria.

STRATIGRAPHIC LEGEND

PERIOD	Age in millions of years	EPOCH	STAGE	SEDIMENTARY: Marine	SEDIMENTARY: Non-marine, Alluvial Colluvial	IGNEOUS: Intrusive
QUATERNARY	0.1	RECENT			Qrc	
	1.8	PLEISTOCENE			Qs	
TERTIARY	5.0	PLIOCENE				
	22.5	MIOCENE				
	38.0	OLIGOCENE				
	55.0	EOCENE			Tma	
	65.0	PALAEOCENE			Tlw	
Nonconformity						
JURASSIC	144–163	UPPER				(dyke)
Nonconformity						
DEVONIAN		UPPER				Dgh
Major Deformation						
ORDOVICIAN	475	LOWER	Yapeenian	Ya		
			Castlemainian Zone 3 + 4	Ca3+4		
			Castlemainian Zone 2	Ca2		
			Castlemainian Zone 1	Ca1		
			Chewtonian Zone 1+2	Ch		
			Bendigonian Zone 4	Be4		
	487		Bendigonian Zone 2+3	Be2+3		

Unit	Symbol	Description
	Qrc	*Colluvium, hillwash deposit; gravel, sand and clay, moderately to poorly sorted, unconsolidated. Derived mainly from Tma.*
Shepparton Formation	Qs	*Gully alluvium, unconsolidated, original terracing and layering largely destroyed by mining. Undisturbed areas consist of imbricated pebble and cobble gravels overlain by pebbly sand and clay.*
Calivil Formation	Tma	*Perched fluviatile gravel deposits: pebble and cobble gravel, pebbly sandstone to clay-rich sandstone, and siltstone, lenticular bedding, generally moderately sorted and consolidated, ferruginised conglomerate layers frequently form hard 'caps'. Clasts composed of vein quartz, sandstone, slate and occasionally granite. Mining has partially or totally removed some deposits.*
White Hills Gravel	Tlw	*Perched fluviatile gravel deposit, cobble and boulder gravel and ferruginised conglomerate, poorly to moderately sorted, mainly rounded vein quartz clasts. Mining has removed most of the deposit.*
	Jd	*Lamprophyre dykes, grey-green, fine grained, porphyritic (rock relationship diagram only).*
Harcourt Granodiorite	Dgh	*Granodiorite and adamellite, grey, medium grained, equigranular, includes aplitic and pegmatitic dykes*
CASTLEMAINE SUPERGROUP	Ya, Ca3+4, Ca2, Ca1, Ch, Be4, Be2+3	*Sandstone, fine to very coarse grained, with interbedded siltstone and shale; quartz-rich, turbiditic, marine. Colour varies from grey to yellow-brown in sandstone and siltstone and grey-green to purple in shale. Original sedimentary structures well preserved, sandstones are frequently graded, amalgamated and cross-bedded; minor interbedded black shale rich in fossil graptolites; rare thin-bedded silicified limestone. Shale and siltstone has been converted to slate by regional lower greenschist facies metamorphism.*

SCALE 1:10 000

METRES 500 400 300 200 100 0 0.5 1.0 KILOMETRE

AUSTRALIAN MAP GRID — TRANSVERSE MERCATOR PROJECTION
HORIZONTAL DATUM — AUSTRALIAN GEODETIC DATUM 1966

CONTOUR INTERVAL 10 METRES
VERTICAL DATUM — AUSTRALIAN HEIGHT DATUM

SYMBOL LEGEND

GEOLOGY

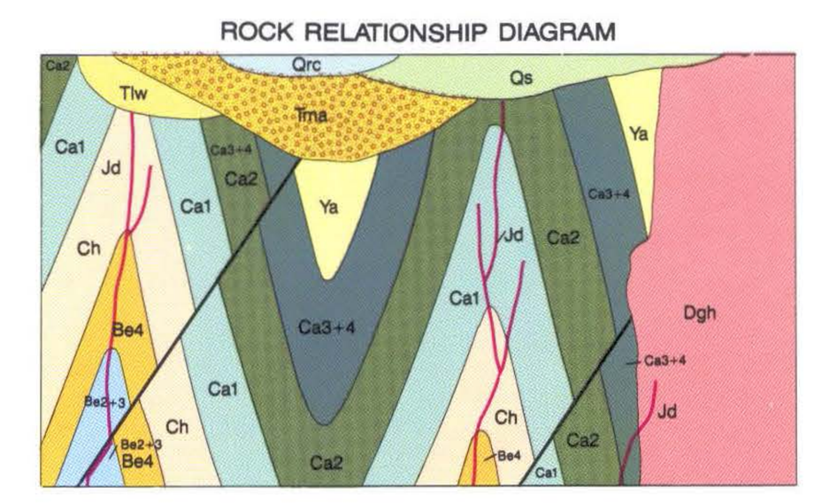
Geological boundary
Geological boundary, concealed
Bedding trend showing dip (after Thomas, 1977)
Reverse fault; triangles on upthrown side: position accurate/inferred
Fault; U/D indicate relative movement, up/down: position inferred
Strike-slip fault; arrows indicate relative horizontal movement: position accurate/inferred
Anticline; position accurate/with plunge
Anticline; position inferred
Syncline; position accurate/inferred
Parasitic fold couple merging into limb of adjacent fold; position accurate/inferred
Minor parasitic folds; indicative of a fold hinge
Stratigraphic younging direction
Bedding orientation; inclined/vertical
Bedding orientation with younging direction/overturned
Bedding orientation with plunge of S_0-S_1 lineation
Cleavage orientation; inclined/vertical
Quartz vein

Sandstone, fine to medium grained
Sandstone, coarse to very coarse grained
Siltstone and shale
Fossil locality, with reference number — ×170
Shaft
Adit
Shallow mine workings; single pit/line of workings
Open cut; gold mine — Au
Slate quarry — S
Mullock heap
Mine tailings heap (battery "sands")
Underground mine workings (section only)
Alluvial diggings, operator named where known — Golden Point Dredging
Excursion locality number — ⑤
Bedding form line (section only)
Approximate limit of contact metamorphism
Hornfels, spotted slate and quartzite — m m

TOPOGRAPHY

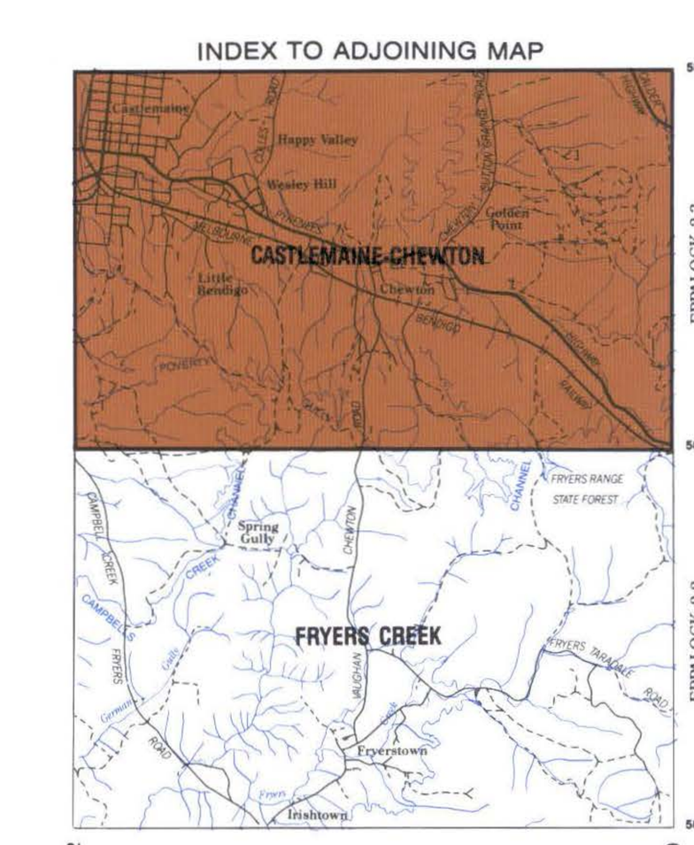
Road, street, road reserve — SAINT ST
Vehicular track
Railway line
State Forest boundary
Parish boundary
Parish name — CHEWTON
River, stream
Water channel, drain
Dam
Water race — RACE
Contours (10 metre interval) — 430

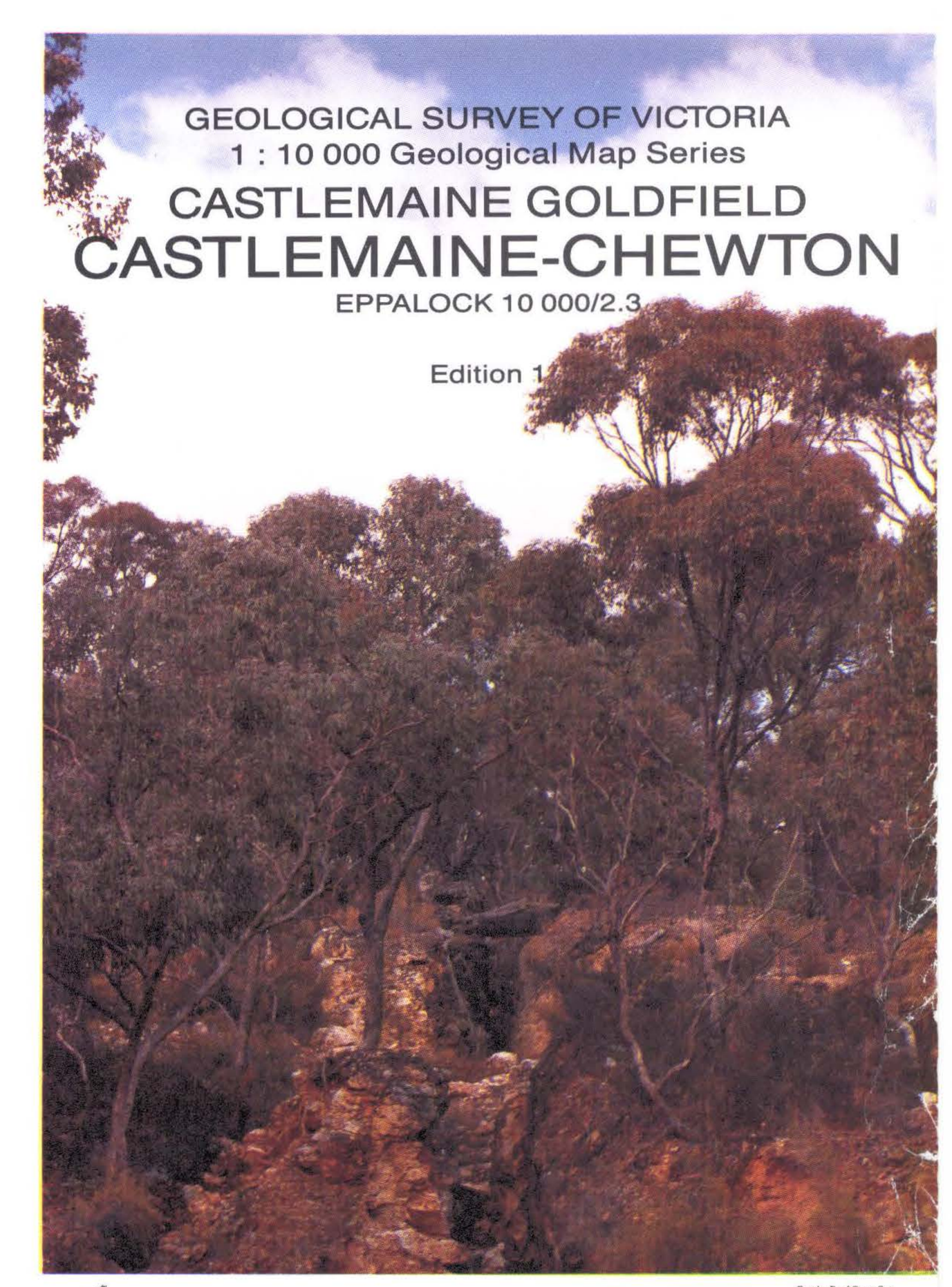
ROCK RELATIONSHIP DIAGRAM



LOCALITY DIAGRAM

INDEX TO ADJOINING MAP





Eureka Reef Open Cut

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Government of Victoria