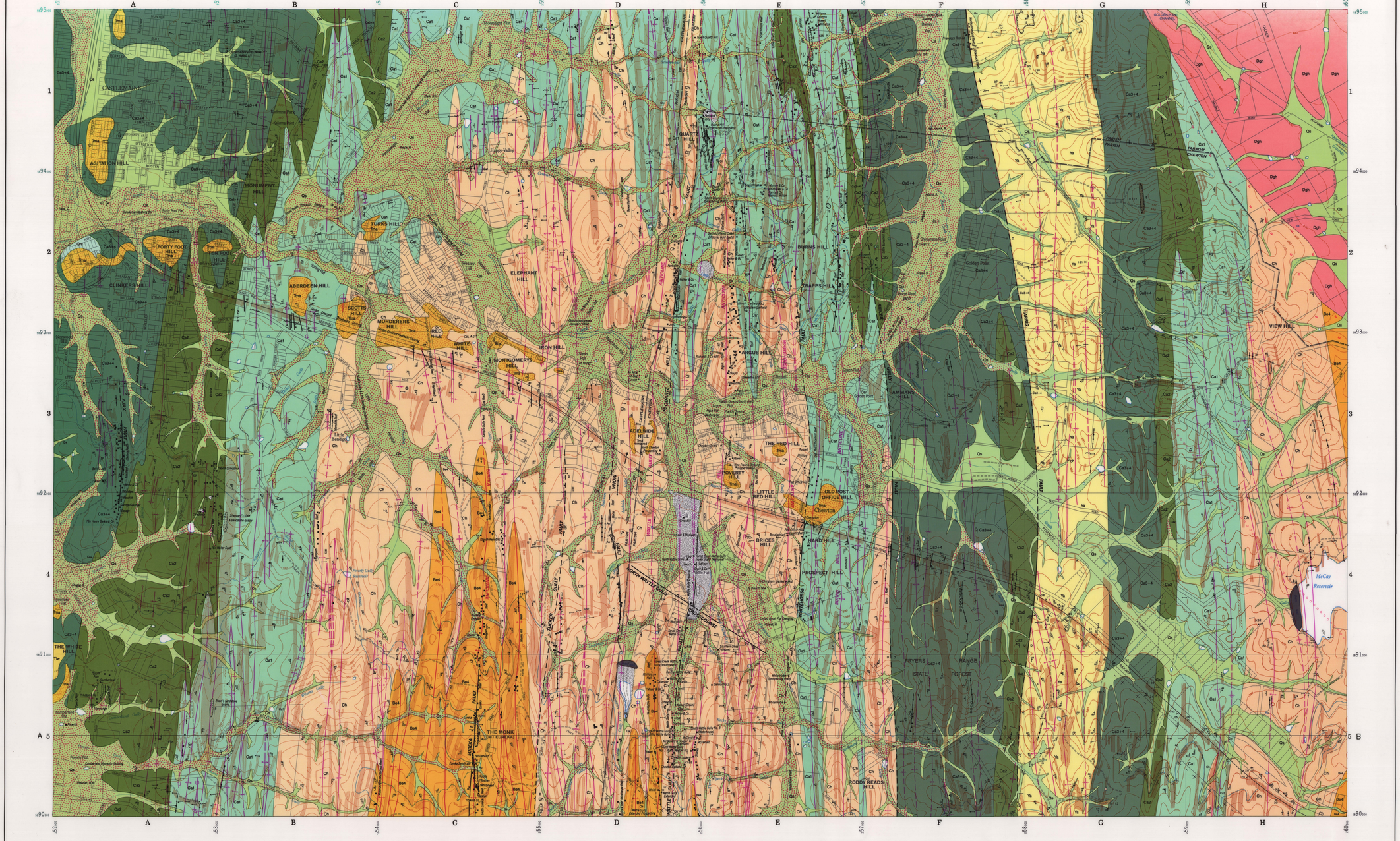
CASTLEMAINE GOLDFIELD - CASTLEMAINE-CHEWTON

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



MINING COMPANY

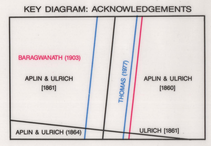
	GRID SQUARE REFERENCE
Adams, A. *	F2
Ah Hung *	D3
Ah Jung *	D3
Ah Ming & Co *	D2
Ah Sue *	D3
Ajax	A3
Ajax Flat Washing Co *	E3
Ajax United	E3
Armstrong & Co	D2
Armstrong *	A4
Bastian	C5
Bendigonian	E4
Bolivia adit	A3
Bosch	D4
Bowyer	A2
Cambrian Washing Co *	D5
Callender	D5
Calliope *	D4
Central No 2	E5
Central Wattle Gully	D5
Chewton	D5
Chewton Lodes	D5
Chewton Options	D5
Chewton United	E3
Clark, G.H. *	C1
Colombo	E1
Cooper	D4
Cox, A.J. *	C1
Cox, W. *	C1
Cumberland	A5
Cumberland Hydraulic Sluicing *	A5
Daly	D3
Ely, J. *	F2
Endell, J. *	F3
Energetic	D2
Energetic	D2
Eureka	C5
Eureka Syndicate	C5
Eureka Vineyard	C5
Fairbairn	D2, D5
Fairbank	E1
Farmanger	A5
Flowed Creek Hydraulic Dredging & Sluicing *	A5, 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
Fraser, D. *	F2
Fraser, D. *	F2
Garfield Flowed Creek (Victoria) Gold Reefs	E2
Garfield No 2 (Master Garfield)	E2
Golden Crescent Hydraulic Sluicing *	B2, C2, C3
Golden Point Dredging *	F1, F2
Gould&Gould*	A4
Grant & Co *	D4
Grant	D5
Hall	D5
Harris	C5
Harris & Co	E2
Hawkins Reef Co	F1
Hooper, W. *	E4
Hooper, G. *	D4
Hotham	C1
Hutton & Co	A5
Hyde *	B3
Jolly	E1
Juniper & Madigan *	D4
Kitto	D4
Lewis *	D4
Lloyd *	D3
Lyon	D5
Malcolm	A3
Martin	D5
McBurt, W. (South Golden Point Dredging)*	F2
McDonald	D5
McDonald & Hooper	D5
Myers & Co	D5
Nicholson & Nixon	C5
Rosslyn	A4
Murray & Co	E2
New Francis Ormond (Upper Bank)	E3
North Caledonia	B3
North Chewton Prospecting	D3
North Quartz Hill	D1
North Water Gully	D4
Penna & Co	A3
Phillips	D5
Phillips	E3
Phoenix	A5
Post Office Hill	E3
Post Office Hill (south shaft)	E4
Pyke	E4
Ty Fleuch (the *	E4
Pyke & Co	C5
Quarry Hill (Enterprise/Chapmans)	E1
Reece, W. *	C1
Richards & Co adit	E3
Riddell	E3
Rosslyn	C5
Russell's Golden Point Sluicing	A4
Savage	A4
Scott's Gully & Little Bendigo United Sluicing	B3
Sheehan, M. A. *	A5
Shipley, G. *	A4
Sir Henry Barkly & Co	A4
Smith, Mrs *	B4
Smyth, W.F. *	D3
South Ajax	A5
South Quartz Hill	E2
South Quartz Hill (prospecting shaft)	E2
South Republic	D4
South Wattle Gully No. 1 shaft (Tregea)	D5
South Wattle Gully No. 2 (Old Wattle Gully)	D5
South Wattle Gully No. 3 (Waterhouse)	D5
Southern Cross (Poole)	E4
Teague	D5
Terrill	D5
Thompson	E4
Trewartha	E3
Trewartha adit	E3
United Dhurringile Flat Dredging *	E4
Van Heurck, M. *	F1
Walker & Co	D2
Walker & Co	E2
Walker & Co (1862)	D5
Walker (Lewis)	D5
Walker (Lyon)	D4
Wattle Gully Dredging *	D4
Wattle Gully Extended	D5
Wattle Gully Extended Prospecting	D5
White	D5
White Horse	E5
White Horse (prospecting shaft)	E5
Whitehead	C5
Whitehead	C5
Whitticker & Co	E2
Williams	E1
Woolcock	D4

Note: * denotes an alluvial gold mining company, all other companies worked lodes.
The prefix '1' 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

	Grid Square Reference
① "The Anticlinal Fold" – a south plunging anticline in Castlemaine Supergroup rocks	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



RESPONSIBILITIES AND ACKNOWLEDGEMENTS

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

Acknowledgements:
Published mapping:

Aplin, C.D.H., & Ulrich, G.,[1980]. *Quarter sheet 13 SW. 1 mile to two inches geological map.* Geological Survey of Victoria.
Aplin, C.D.H., & Ulrich, G., [1981]. *Quarter sheet 14 SE. 1 mile to two inches geological map.* Geological Survey of Victoria.
Aplin, C.D.H., & Ulrich, G., 1984. *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 3.*
Thomas, D.E., 1977. *Chewton Goldfield. 8 chains to 1 inch geological map.* Geological Survey of Victoria.
Ulrich, G., [1981]. *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. Wall (1994)
Manager, Draughting: J.P. Kinder

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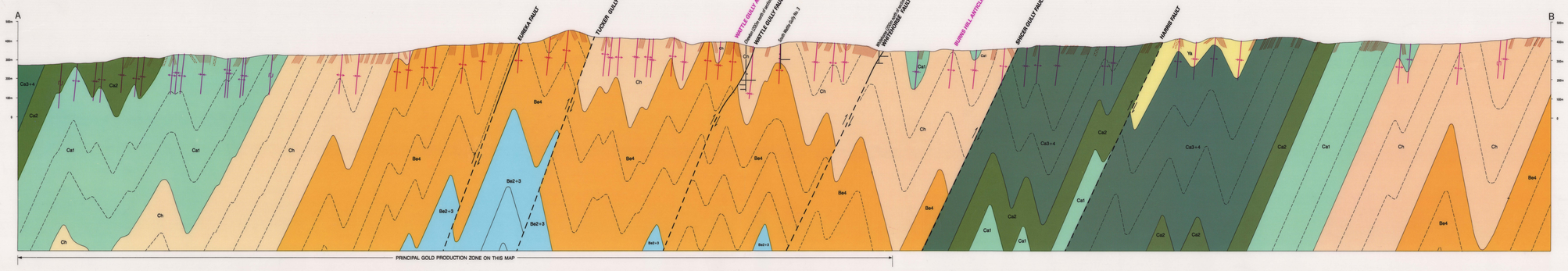


SECTION SCALE

Horizontal Scale: 1:10 000
Vertical Scale: 1:10 000

STRATIGRAPHIC LEGEND

PERIOD	EPOCH	STAGE	Age in millions of years	SEDIMENTARY: Marine	SEDIMENTARY: Non-marine: Alluvial Colluvial	IGNEOUS: Intrusive
QUATERNARY	RECENT		0.1		Qrc	
	PLEISTOCENE		1.8		Qs	
TERTIARY	PLIOCENE		5.0			
	MIOCENE		22.5			
	OLIGOCENE		36.0		Tma	
	EOCENE		55.0			
	PALAEOCENE		65.0		Tlw	
Nonconformity						
JURASSIC	UPPER		144 – 163			Jd
Nonconformity						
DEVONIAN	UPPER					Dgh
Major Deformation						
ORDOVICIAN	LOWER	Yapeenian	475 – 497		Ya	
		Castlemainian Zone 3 + 4			Ca3+4	
		Castlemainian Zone 2			Ca2	
		Castlemainian Zone 1			Ca1	
		Chewtonian Zone 1+2			Ch	
		Bendigonian Zone 4			Be4	
		Bendigonian Zone 2+3			Be2+3	

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 class. Mining has removed most of the deposit.*
Jd	*Lamprophyre dykes, grey-green, fine grained, porphyritic (tock 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_2-S_1 lineation
- Cleavage orientation; inclined/vertical
- Quartz vein

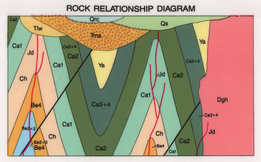
SYMBOL LEGEND

- 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
- Slate quarry
- Mullock heap
- Mine tailings heap (battery "sands")
- Underground mine workings (section only)
- Alluvial diggings, operator named where known (Golden Point Dredging)
- Excursion locality number
- Bedding form line (section only)
- Approximate limit of contact metamorphism
- Hornfels, spotted slate and quartzite

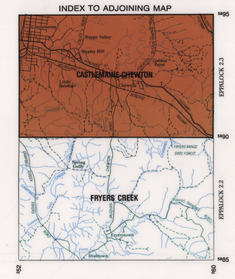
TOPOGRAPHY

- 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)

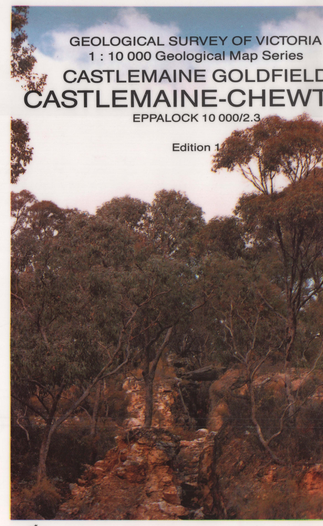
ROCK RELATIONSHIP DIAGRAM



INDEX TO ADJOINING MAP



LOCALITY DIAGRAM



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