BONAPARTE BASIN BIOZONATION AND STRATIGRAPHY

GTS 2012 Timescale

AGE (Ma BP)

Period	Epoch	Stage
Quaternary	Holocene	
	Pleistocene	L. Pleist.
		M. Pleist.
		E. Pleist.
Neogene	Pliocene	Gelasian
		Piacenzian
		Zanclean
	Miocene	Messinian
		Tortonian
		Serravallian
		Langhian
		Burdigalian
		Aquitanian
Paleogene	Oligocene	Chattian
		Rupelian
	Eocene	Priabonian
		Bartonian
		Lutetian
		Ypresian
	Paleocene	Thanetian
		Selandian
		Danian
Cretaceous	Late	Maastrichtian
		Campanian
		Santonian
		Coniacian
		Turonian
		Cenomanian
	Early	Albian
		Aptian
		Barremian
		Hauterivian
		Valanginian
		Berriasian
Jurassic	Late	Tithonian
		Kimmeridgian
		Oxfordian
	Middle	Callovian
		Bathonian
		Bajocian
		Aalenian
	Early	Toarcian
		Pliensbachian
		Sinemurian
		Hettangian
Triassic	Late	Rhaetian
		Norian
		Carnian
	Middle	Ladinian
		Anisian
	Early	Olenekian
		Induan
Permian	Lopingian	Changhsingian
		Wuchiapingian
	Guadalupian	Capitanian
		Wordian
		Roadian
	Cisuralian	Kungurian
		Artinskian
		Sakmarian
		Asselian
Carboniferous	Pennsylvanian	Gzhelian
		Kasimovian
		Moscovian
		Bashkirian
	Mississippian	Serpukhovian
		Visean
		Tournaisian
Devonian	Late	Famennian
		Frasnian
	Middle	Givetian
		Eifelian
	Early	Emsian
		Pragian
		Lochkovian
Silurian	Pridoli	
	Ludlow	Ludfordian
		Gorstian
	Wenlock	Homerian
		Sheinwoodian
	Llandovery	Telychian
		Aeronian
		Rhuddanian
Ordovician	Late	Hirnantian
		Katian
		Sandbian
	Middle	Darriwilian
		Dapingian
	Early	Floian
		Tremadocian
Cambrian	Furongian	Stage 10
		Jiangshanian
		Paibian
	Series 3	Guzhangian
		Drumian
		Stage 5
	Series 2	Stage 4
		Stage 3

GTS 2012 Timescale

Australian Dinocyst Zonation

- Protoperidinium leonis
- Achomosphaera ramulifera
- Melitasphaeridium choanophorum
- Tuberculodinium vancampoae
- Protoellipsodinium simplex
- Fromea leos
- Phthanoperidinium comatum
- Gippslandica extensa
- Deflandrea heterophlycta
- Enneadocysta partridgei
- Arachnodinium antarcticum
- Pavulidimorpha asteris
- Membranophoridium perforatum
- Charlesdowniea edwardsii
- Charlesdowniea thompsoniae
- Wilsonidinium ornatum
- Rhombodinium waipawaense
- Apectodinium homomorphum
- Apectodinium hyperacanthum
- Apectodinium reburrus
- Senegalinium dilwynensis
- Eisenackia crassitabulata
- Alisocysta circumtabulata
- Palaeoperidinium pyrrophorum
- Trithyrodinium evittii
- Manumiella druggii
- Microplankton not diagnostic
- Isabelidinium korojonensis
- Xenikoon australis
- Nelsoniella aceras
- Isabelidinium cretaceum
- Odontochitina porifera
- Conosphaeridium striatoconum
- Palaeohystrichophora infusionoides
- Dicnodinium multispinum
- Xenascus asperatus
- Dioxya armata
- Endoceratium ludbrookiae
- Canningnopsis denticulata
- Muderongia tetracantha
- Dicnodinium davidii
- Odontochitina operculata
- Muderongia australis
- Muderongia tetsuidoharia
- Phoberocysta burgeri
- Senoniasphaera tabulata
- Systematophora areolata
- Egmontodinium torynum
- Batioladinium reticulatum
- Dissimulidinium lobispinosum
- Cassiculosphaeridia delicata
- Kalyptea wisemaniae
- Pseudocerastium wherrae
- Dingodinium jurassicum
- Omatia montgomeryi
- Cribroperidinium perforans
- Dingodinium swanense
- Wanaea clathrata
- Wanaea spectabilis
- Ctenidodinium ancorum
- Voodooia tabulata
- Ternia balmei
- Wanaea indotata
- Wanaea verrucosa
- Nannoceratopsis deflandrei
- Dissiliodinium caddaense
- Luehndea assemblage
- Dapcodinium priscum
- Rhaetogonyaulax rhaetica
- Hebecysta balmei
- Wanneria listeri
- Rhaetogonyaulax wigginsii
- Sahulidinium otti

Main references: Helby et al., 1987, 2004; Partridge, 2006.

Australian Spore-Pollen Zonation

- Tubulifloridites pleistocenicus
- Myrtaceidites lipsis
- Foraminisporis bifurcatus
- Upper Triporopollenites bellus
- Lower Triporopollenites bellus
- Upper Proteacidites tuberculatus
- Middle Proteacidites tuberculatus
- Lower Proteacidites tuberculatus
- Upper Nothofagidites asperus
- Middle Nothofagidites asperus
- Lower Nothofagidites asperus
- Proteacidites asperopolus
- Upper Malvacipollis diversus
- Middle Malvacipollis diversus
- Lower Malvacipollis diversus
- Upper Lygistepollenites balmei
- Lower Lygistepollenites balmei
- Upper Forcipites longus
- Lower Forcipites longus
- Tricolporites lilliei
- Nothofagidites senectus
- Tricolporites apoxyexinus
- Phyllocladidites mawsonii
- Hoegisporis uniforma
- Phimopollenites pannosus
- Coptospora paradoxa
- Crybelosporites striatus
- Cyclosporites hughesi
- Foraminisporis wonthaggiensis
- Ruffordiaspora australiensis
- Retriletites watherooensis
- Murospora florida
- Contignisporites cooksoniae
- Dictyotosporites complex
- Callialasporites turbatus
- Ashmoripollis reducta
- Minutosaccus crenulatus
- Samaropollenites speciosus
- Staurosaccites quadrifidus
- Triplexisporites playfordii
- Protohaploxypinus samoilovichii
- Lunatisporites pellucidus
- Protohaploxypinus microcorpus
- Playfordiaspora crenulata
- Dulhuntyispora parvithola
- Dulhuntyispora dulhuntyi
- Didecitriletes ericianus
- Dulhuntyispora granulata
- Microbaculispora villosa
- Praecolpalites sinuosus
- Microbaculispora trisina
- Striatopodocarpites fusus
- Pseudoreticulatispora pseudoreticulata
- Pseudoreticulatispora confluens
- Microbaculispora tentula
- Deusilites tenuistriatus
- Diatomozonotriletes birkheadensis
- Spelaeotriletes ybertii
- Grandispora maculosa
- Anapiculatisporites largus
- Grandispora spiculifera
- Retispora lepidophyta
- Brewer palynoflora
- Spinozonotriletes? sp.
- Geminospora lemurata
- Ancyrospora sp. 565
- Ancyrospora sp. 566
- Aratrisporites? sp.
- Hystrichosporites sp.
- Brochozonotriletes sp.

Main references: Dettmann & Playford, 1969; Helby, 1973; Filatoff, 1975; Dolby & Balme, 1976; Helby et al., 1987; Price, 1997; Partridge, 2006.

N, P Zones KCCM Zones

- N22
- N20/N21
- N18/N19
- N17b
- N17
- N16
- N15
- N14
- N13
- N12
- N11
- N10
- N9
- N8
- N7
- N6
- N5
- N4
- N3, P22
- N2, P21
- N1, P20
- P19
- P18
- P16-17
- P15
- P14
- P13
- P12
- P11
- P10
- P9
- P8
- P7
- P6b
- P6a
- P5
- P4
- P3
- P2
- P1
- PA
- P0
- KCCM1-5
- KCCM6-10
- KCCM11-14
- KCCM15
- KCCM16-17
- KCCM18
- KCCM19
- KCCM20-22
- KCCM23
- KCCM24a-b
- KCCM25
- KCCM26
- KCCM27
- KCCM28-29
- KCCM30
- KCCM31
- KCCM32
- KCCM33
- KCCM34
- KCCM35-36
- KCCM37
- KCCM38
- KCCM39-40
- KCCM41-43
- KCCM44
- KCCM45
- KCCM46
- KCCM47
- KCCM48
- KCCM49
- KCCM50

NP Zones main references: Blow, 1969, 1979; Berggren & Miller, 1998; Berggren et al., 1995; Robaszynski, 1998; Data from ICS databases.

KCCM Zones main references: Howe et al., 2003; Campbell et al., 2004; Revilliou, 2009 (unpublished).

Palaeontological Picks

- Base N17b / Top of N17 Zone
- Base P22 Zone
- Base P18 Zone
- Base P6 Zone
- Base Paleocene
- Base KCN16 Zone
- Intra Odontochitina operculata Zone
- Base S. areolata Zone
- Intra D. jurassicum Zone
- Base D. swanense Zone
- Base T. balmei Zone (= base old W. digitata zone)
- Base Jurassic
- Base Carnian
- Intra S. quadrifidus Zone
- Base Triassic
- Base P.sinuosus Zone

Palaeontological Picks: AGSO ,1996; FAD

Seismic Horizons and Sequences

- Tlmio
- Tmio
- Teoc
- Tbase
- Klmaas
- Kcamp
- Kapt
- Kval
- Jtith
- Jkim
- Jcal
- Jbase
- Trmid
- Ptop
- Pearly

11, 10, 9, 8, 7, 6, 5, 4c, 4b, 4a, 3, 2b, 2a, 1

VT7 Seismic Horizons and Mega-sequences: AGSO, 1998; FAD

Ashmore Platform

Guilford 1

Barracouta Shoal Formation; Oliver Formation; Cartier Formation; Prion Formation; Hibernia Formation; Grebe Sandstone Member (Hibernia Formation); Johnson Formation; Puffin Formation; Brown Gannet Limestone; Jamieson Formation; Echuca Shoals Formation; Ashmore Volcanics; Lower Vulcan Formation; Undifferentiated; Benalla Formation; Undifferentiated; Osprey Formation; Undifferentiated Mount Goodwyn Subgroup; Penguin Formation; Tern Formation; Dombey Formation; Cape Hay Formation; Pearce Formation; Fossil Head Formation

Woodbine Group; Bathurst Island Group; Swan Group; Troughton Group; Sahul Group; Flamingo Group; Hyland Bay Subgroup; Jamieson Subgroup; Vulcan Subgroup; Kennedy Group; Kennedy Group

Vulcan Sub-basin

Warb 1A; Pollard 1; Elasmosaurus 1 ST1; Puffin 1; Pliuri 1; Jabiru 5A, Puffin 2; Snowmass 1; Birch 1 ST1, Swallow 1; Puffin 1-3,5,7-8,10; Puffin 10 ST1,2; Puffin 11 ST2; Skua 7A; Great Auk 1; Swan 1-3 ; Swan 3 ST1; Challis 7; Parry 1, Puffin 4; Puffin 6, Skua 2; East Swan 1; Skua 2; Tahbik 1; Montara 1; Pondercsa 1A; Willeroo 1; Willeroo 1; Maret 1; Katandra 1A; Tenacious 1; Tenacious 1 ST1; Tenacious West ST1; Delamere 1; Kyeding 1; Pasquito 1; Swan 1; Allaru 1 ST2; Capricious 1; East Swan 2; Octavius 1; Leeuwin 1; Rainer 1; Elm 1, Vulcan 1B; Hadrosaurus 1; Jabiru 1A, 3, 4ST, 5A; 6, 7, ST1, 8A ST1; 9 ST3, 12; Montara 2; Swift 1 ST1; Swift North 1 ST1; Bilyara 1, 1 ST1; Cash 1 ST1A; Eclipse 2; Montara 1, 3; Padthaway 1; Vesta 1, Tahbik 1; Maret 1; Cash 1 ST1A; Rainer 1; Octavius 1; Audacious 1; East Swan 1; Jabiru 1A; Skua 2, 7A, 9; Swallow 1; Maret 1; Oliver 1 ST1; Skua 3-5, 8, 9 ST1; East Swan 1; Eclipse 1; Jabiru 2, 10; Rowan 1 ST1; Augustus 1; Eclipse 2; Medusa 1; Pengana 1; Anson 1, Parry 1; Challis 1, 2A, 3-7, 9-10, 12-14; Cassini 1 ST1; Talbot 1, 2 ST1; Maple 1; Brontosaurus 1 ST1; Challis 8A; Challis 8-9, 13, 15

Londonderry High

Barracouta Shoal Formation; Oliver Formation; Oliver Sandstone Member (Oliver Formation); Prion Formation; Hibernia Formation; Grebe Sandstone Member (Hibernia Formation); Johnson Formation; Turnstone Formation; Fenelon Formation; Gibson Formation; Woolaston Formation; Upper Jamieson Formation; Lower Jamieson Formation; Echuca Shoals Formation; Sandpiper Sandstone; Lower Vulcan Formation; Montara Formation; Plover Formation; Nome Formation; Challis Formation; Pollard Formation; Osprey Formation; Fishburn Formation; Ascalon Formation; Mairmull Formation; Penguin Formation; Tern Formation; Dombey Formation; Cape Hay Formation; Pearce Formation; Fossil Head Formation

Turnstone 1 ST1; Avocet 1A, Bardi 1, Drake 1 ST1, Kopper 1, Garganey 1 ST1, Jarrah 1A, Lorikeet 1; Saratoga 1; Avocet 2, Backpacker 1, Barita 1, Drake 1, Garganey 1 ST1, Lorikeet 1, Tancred 1; Avocet 1A, Elder 1, Kopper 1; Tancred 1; Katers 1 ST1; Wimbrel 1; Anderdon 1A ST1, Osprey 1, Plover 1; Defiant 1, Rubicon 1, Prometheus 1

Ashmore Volcanics; Lower Vulcan Formation; Plover Formation; Malita Formation; Nome Formation; Challis Formation; Pollard Formation; Osprey Formation; Fishburn Formation; Ascalon Formation; Mairmull Formation; Penguin Formation; Tern Formation; Dombey Formation; Cape Hay Formation; Pearce Formation; Torrens Formation; Fossil Head Formation

Woodbine Group; Bathurst Island Group; Troughton Group; Sahul Group; Flamingo Group; Hyland Bay Subgroup; Jamieson Subgroup; Vulcan Subgroup; Kennedy Group; Kennedy Group

Laminaria / Flamingo Highs

Barracouta Shoal Formation; Oliver Formation; Cartier Formation/ Oliver Sandstone Member; Prion Formation; Hibernia Formation; Grebe Sandstone Member (Hibernia Formation); Johnson Formation; Turnstone Formation; Fenelon Formation; Gibson Formation; Woolaston Formation; Jamieson/ Wangarlu Formations; Darwin Formation; Echuca Shoals Formation; Upper Frigate Shale; Lower Frigate Shale; Elang Formation; Plover Formation

Elang West 1; Kakatua North 1A; Bluff 1; Firetend 1, Flamingo 1; Bluff 1, Buffalo 1-3, 5; Buller 1, Corallina 1-2; Corallina 2 ST1, 3 ST1; Elang 1-2, Hingkip 1; Kakatua 1, 2, 2 ST1, 3; Kakatua North 2; Koll 1, Kuda Tasi 1-2; Laminaria 1-4, 7, 8 ST1, 9 ST 4; Laminaria East 1; Laminaria Pilot South 1; Bogong 1; Halimeda 1; Layang 1; Squilla 1; Trusek 1; Firebird 1; Elang West DW 1; Bayu 1, Mistral 1; Bogong 1

Woodbine Group; Bathurst Island Group; Troughton Group; Sahul Group; Flamingo Group; Hyland Bay Subgroup; Jamieson Subgroup; Vulcan Subgroup; Kennedy Group; Kennedy Group

Flamingo / Sahul Synclines

Barracouta Shoal Formation; Oliver Formation; Oliver Sandstone Member; Prion Formation; Hibernia Formation; Grebe Sandstone Member (Hibernia Formation); Johnson Formation; Turnstone Formation; Fenelon Formation; Gibson Formation; Woolaston Formation; Wangarlu Formation; Darwin Formation; Echuca Shoals Formation; Sandpiper Sandstone; Upper Frigate Shale; Lower Frigate Shale; Elang Formation; Plover Formation

Coleraine 1; Coleraine 1; Coleraine 1; Ludmilla 1; Rambler 1; Fulica 1, Iris 1; Kittiwake 1 ST1; Schilling 1; Fannie Bay 1; Kittiwake 1 ST1; Lameroo 1; Coleraine 1; Minotaur 1 ST2; Fohn 1 ST1, Rambler 1; Thornton 1

Woodbine Group; Bathurst Island Group; Troughton Group; Sahul Group; Flamingo Group; Hyland Bay Subgroup; Jamieson Subgroup; Vulcan Subgroup; Kennedy Group; Kennedy Group

Troubadour Terrace / Sahul Platform

Barracouta Shoal Formation; Oliver Formation; Cartier Formation; Prion Formation; Hibernia Formation; Grebe Sandstone Member (Hibernia Formation); Johnson Formation; Puffin Formation; Wangarlu Formation; Darwin Formation; Echuca Shoals Formation; Upper Frigate Shale; Lower Frigate Shale; Elang Formation; Plover Formation

Bard 1; Blackwood 1 ST1; Kelp 1; Mandar 1; Troubadour 1; Basilisk 1A, Naga 1; Wallaroo 1; Blackwood 1 ST1; Chudlich 1; Loxton Shoals 1; Sunrise 1-2, Sunset 1; Sunset West 1; Kelp Deep 1; Kelp Deep 1

Woodbine Group; Bathurst Island Group; Troughton Group; Sahul Group; Flamingo Group; Hyland Bay Subgroup; Jamieson Subgroup; Vulcan Subgroup; Kennedy Group; Kennedy Group

Calder and Malita Graben

Barracouta Shoal Formation; Oliver Formation; Oliver Sandstone Member (Oliver Formation); Undifferentiated Prion; Hibernia Formation; Grebe Sandstone Member (Hibernia Formation); Johnson Formation; Puffin Formation; Wangarlu Formation; Darwin Formation; Echuca Shoals Formation; Upper Frigate Shale; Lower Frigate Shale; Elang Formation; Plover Formation; Malita Formation; Cape Londonderry Formation; Fishburn Formation; Ascalon Formation; Mairmull Formation; Penguin Formation; Tern Formation; Dombey Formation; Cape Hay Formation; Pearce Formation; Torrens Formation; Fossil Head Formation

Heron 1; Heron 1-2 Lynedoch 1A ST1; Heron 1; Beluga 1; Jacaranda 1; Lynedoch 1A ST1; Heron 1; Evans Shoal South 1; Heron South 1; Caldita 1, Heron 2; Beluga 1; Heron 1; Evans Shoal South 1; Jacaranda 1; Barossa ST1; Caldita 1; Evans Shoal 1; Heron South 1; Beluga 1, Lynedoch 2; Barossa 1 ST1; Evans Shoal 1-2; Evans Shoal North 1; Heron 1; Heron South 1

Woodbine Group; Bathurst Island Group; Troughton Group; Sahul Group; Flamingo Group; Hyland Bay Subgroup; Jamieson Subgroup; Vulcan Subgroup; Kennedy Group; Kennedy Group

Petrel Sub-basin

Undifferentiated Woodbine Group; Wangarlu Formation; Darwin Formation; Echuca Shoals Formation; Sandpiper Sandstone; Upper Frigate Shale; Lower Frigate Shale; Elang Formation; Plover Formation; Malita Formation; Cape Londonderry Formation; Lower Cape Londonderry Formation (Osprey Formation equivalent); Fishburn Formation; Ascalon Formation; Mairmull Formation; Penguin Formation; Tern Formation; Dombey Formation; Cape Hay Formation; Pearce Formation; Torrens Formation; Fossil Head Formation; Keyling Formation; Dilji Formation; Quion Formation; Treachery Formation; Kuriyippi Formation; Aquitaine Formation; Arco Formation; Sunbird Formation; Sandbar Sandstone; Tanmurra Formation; Kingfisher Shale; Uttling Calcarenite; Yow Creek Formation; Milligans Formation; Bonaparte Formation; Bonaparte Formation; Bonaparte Formation; Basinal Evaporites

Sandpiper 1; Fishburn 1; Tern 1-4; Frigate Deep 1; Blacktip 1; Ascalon 1A; Tommins 1; Tern 2, 3; Ascalon 1; Petrel 1-4, 5, Tars 4; Turtle 2; Petrel 2; Petrel 2; Penguin 1; Polkadot 1; Turtle 1; Blacktip 1; Bougainville 1; Tommins 1; Tern 2; Cambridge 1; Tommins 1; Barnett 1; Blacktip 1, Polkadot 1; Turtle 2; Turtle 1; Barnett 2; Barnett 1, Blacktip North 1, Shakespeare 1, Turtle 1; Tern 1; Marina 1; Turtle 1; Barnett 2; Barnett 1, 3; Cape Ford 1; Kulshill 1; Lacrosse 1; Turtle 1; Turtle 1; Turtle 2; Torrens 1; Marina 1; Barnett 1; Cape Ford 1; Turtle 1, 2; Barnett 1; Cape Ford 1; Kulshill 1; Pelican Island 1; Turtle 1, 2; Cape Ford 1; Lesueur 1; Bonaparte 2; Barnett 2; Turtle 2; Bonaparte 1; Turtle 1; Pelican Island 1; Waggon Creek 1; Ninghing 2; Bonaparte 1; Garimala 1; Vienta 1; Weaber 1, 4; Weaber 5; Keep River 1; Ninghing 1; Waggon Creek 1A; Weaber 2A; Pincombe 1; Bonaparte 1; Garimala 1; Vienta 1; Waggon Creek 1A; Bonaparte 1

Undifferentiated Woodbine Group; Wangarlu Formation; Darwin Formation; Echuca Shoals Formation; Sandpiper Sandstone; Upper Frigate Shale; Lower Frigate Shale; Elang Formation; Plover Formation; Malita Formation; Lower Cape Londonderry Formation (Osprey Formation equivalent); Fishburn Formation; Ascalon Formation; Mairmull Formation; Penguin Formation; Tern Formation; Dombey Formation; Cape Hay Formation; Pearce Formation; Torrens Formation; Fossil Head Formation; Keyling Formation; Dilji Formation; Treachery Formation; Kuriyippi Formation; Aquitaine Formation; Arco Formation; Sunbird Formation; Sandbar Sandstone; Tanmurra Formation; Kingfisher Shale; Uttling Calcarenite; Yow Creek Formation; Milligans Formation; Bonaparte Formation; Bonaparte Formation; Bonaparte Formation; Basinal Evaporites

Woodbine Group; Bathurst Island Group; Troughton Group; Sahul Group; Flamingo Group; Hyland Bay Subgroup; Jamieson Subgroup; Vulcan Subgroup; Kennedy Group; Kennedy Group; Kulshill Group; Wallaby Group; Weaber Group; Ninghing Group; Langfield Group; Cockatoo Group; Ninghing Group equivalent; Langfield Group equivalent; Cockatoo Group equivalent

Short-term Sea-level curve

-100 0 100 200

Age (Ma BP)

Main references: Hardenbol et al., 1998; Haq & Al-Qahtani, 2005; Haq & Schutter, 2008.

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Ord Basin

Glass Hill Sandstone; Bell Conglomerate Member; Glass Hill Sandstone; Pumalili Sandstone Member; Glass Hill Sandstone; Mahoney Group

Overland Sandstone; Eagle Hawk Sandstone; Panton Formation; Linnekar Limestone; Nelson Shale; Headleys Limestone; Antrim Plateau Volcanics; Goose Hole Group

Onshore Carlton Shelf

Border Creek Formation; Point Spring Sandstone; Sunbird Formation; Tanmurra Formation; Burvill Formation; Uttling Calcarenite; Yow Creek Formation; Milligans Formation; Waggon Creek Formation; Mid Tournaisian Breccia; Burt Range Formation; Garimala Limestone; Wungsabal Limestone; Kamilili Formation; Dilji/m Limestone; Hargreaves Formation; Kellys Knob Sandstone; Basinal Evaporites; Pander Greensand; Clark Sandstone; Prettove Sandstone; Skewthorpe Formation; Hart Spring Sandstone; Tamara Formation; Antrim Plateau Volcanics; Carlton Group

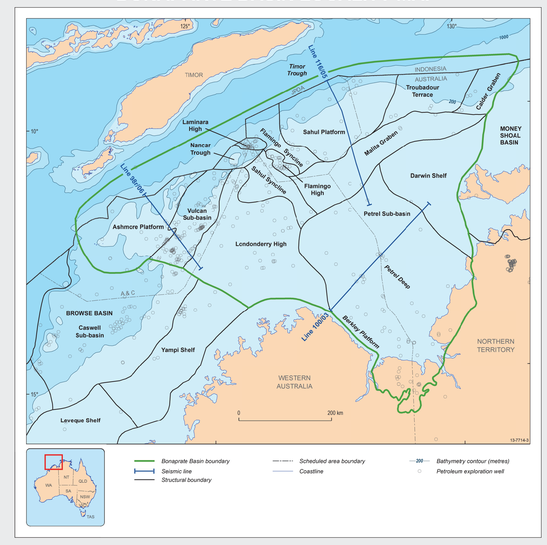
Fairfield Group; Wallaby Group; Weaber Group; Langfield Group; Ninghing Group; Cockatoo Group

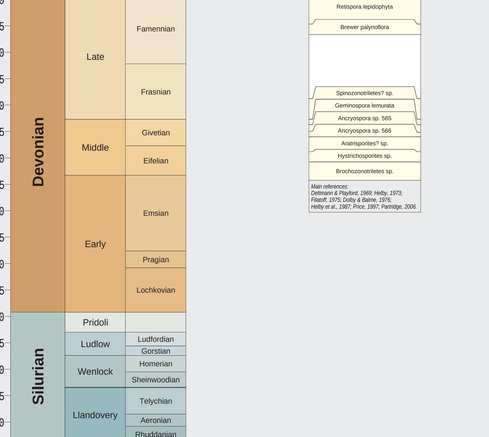
Onshore Burt Range Shelf

Border Creek Formation; Point Spring Sandstone; Tanmurra Formation; Burvill Formation; Uttling Calcarenite; Yow Creek Formation; Milligans Formation; Waggon Creek Formation; Zimmermann Sandstone; Septimus Limestone; Enga Sandstone; Burt Range Formation; Buttons Formation; Hargreaves Formation; Cecil Sandstone; Abney Sandstone; Kumarina Formation; Kellys Knob Sandstone; Ragged Range Conglomerate; Antrim Plateau Volcanics

Fairfield Group; Wallaby Group; Weaber Group; Langfield Group; Ninghing Group; Cockatoo Group

BONAPARTE BASIN LOCALITY MAP





The timescale, biozonation and stratigraphic data in this product has been compiled to the Geologic Time Scale (GTS) (Gradstein, Ogg and Smith), 2012

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This chart represents a revision of previous charts including Australian biozonation schemes calibrated to earlier geological timescales, GTS 2004 and AGSO 1996. The sea-level curve and most international biozonation scheme data are from the International Commission on Stratigraphy (ICS) databases. These data and all Australian biozonation schemes used herein have been compiled in the Timescale Creator software developed by Adam Lugowski, Jim Ogg and Felix Gradstein. A Geoscience Australia version of this software is available to download from the Timescales webpage and contains the full references listed on this chart.

Feedback and comments on the data contained herein are welcome.

Australian Government

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Bonaparte Basin Biozonation and Stratigraphy, 2014 Chart 33

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