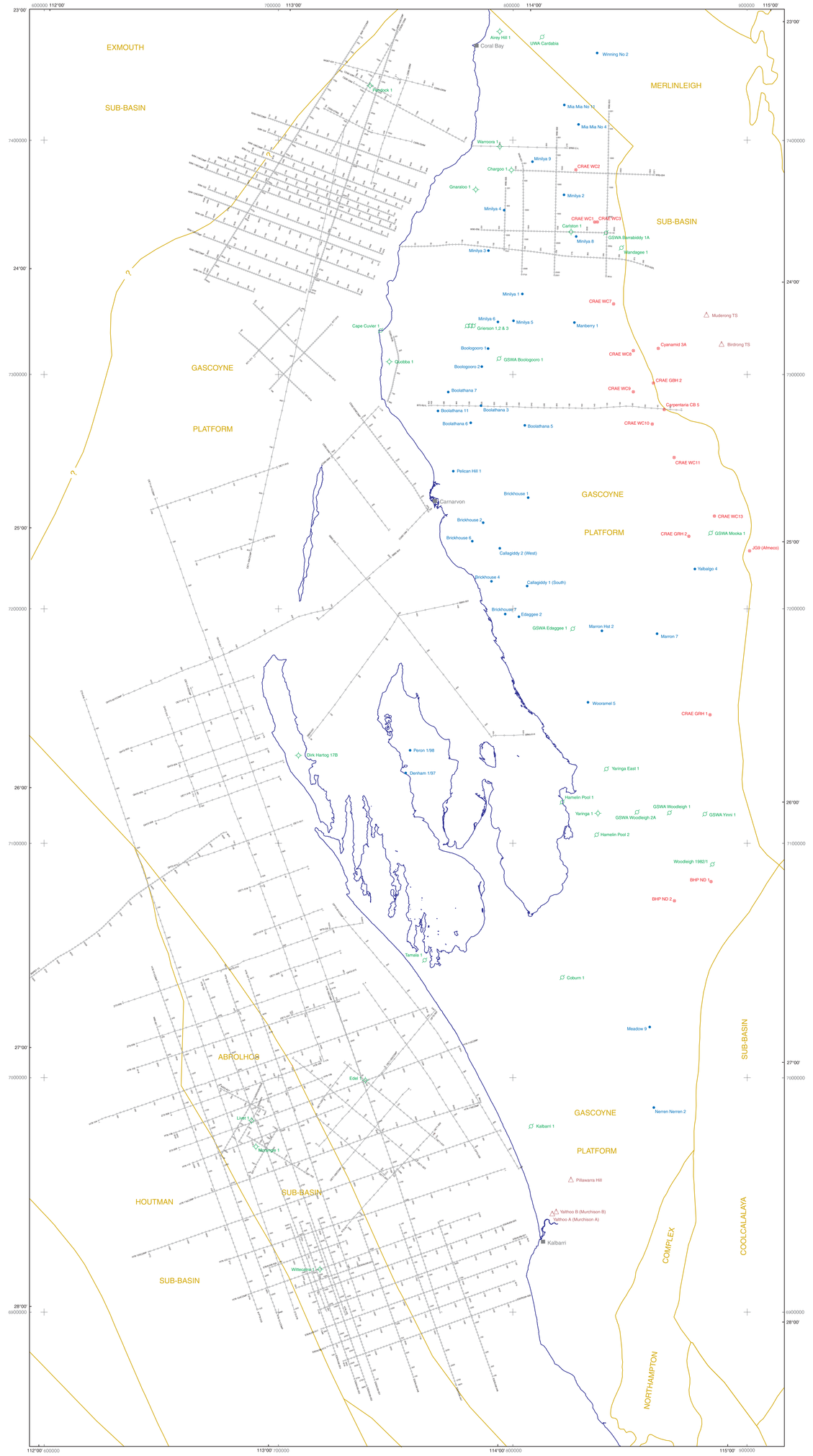

SYMBOLS

- Seismic line showing shotpoints
- Coastline
- Basin subdivision
- Townsite
- Petroleum exploration well (dry, plugged and abandoned)
- Stratigraphic well
- Water bore
- Mineral hole
- Outcrop site

1:100 000 maps shown in black
1:250 000 maps shown in brown

SHEET INDEX

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Edited by G. Loan

Cartography by L. Cosgrove and L. Fogarty

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SCALE 1:750 000

0 10 20 30 40 50
Kilometres

TRANSVERSE MERCATOR PROJECTION
HORIZONTAL DATUM: GEOCENTRIC DATUM OF AUSTRALIA 1994
Grid marks indicate 100 km intervals of the Map Grid of Australia Zone 49

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA
REPORT 87 PLATE 1

LOCATION OF PETROLEUM EXPLORATION AND STRATIGRAPHIC WELLS, WATER BORES, MINERAL HOLES, OUTCROP SITES, AND INTERPRETED SEISMIC LINES

GASCOYNE PLATFORM

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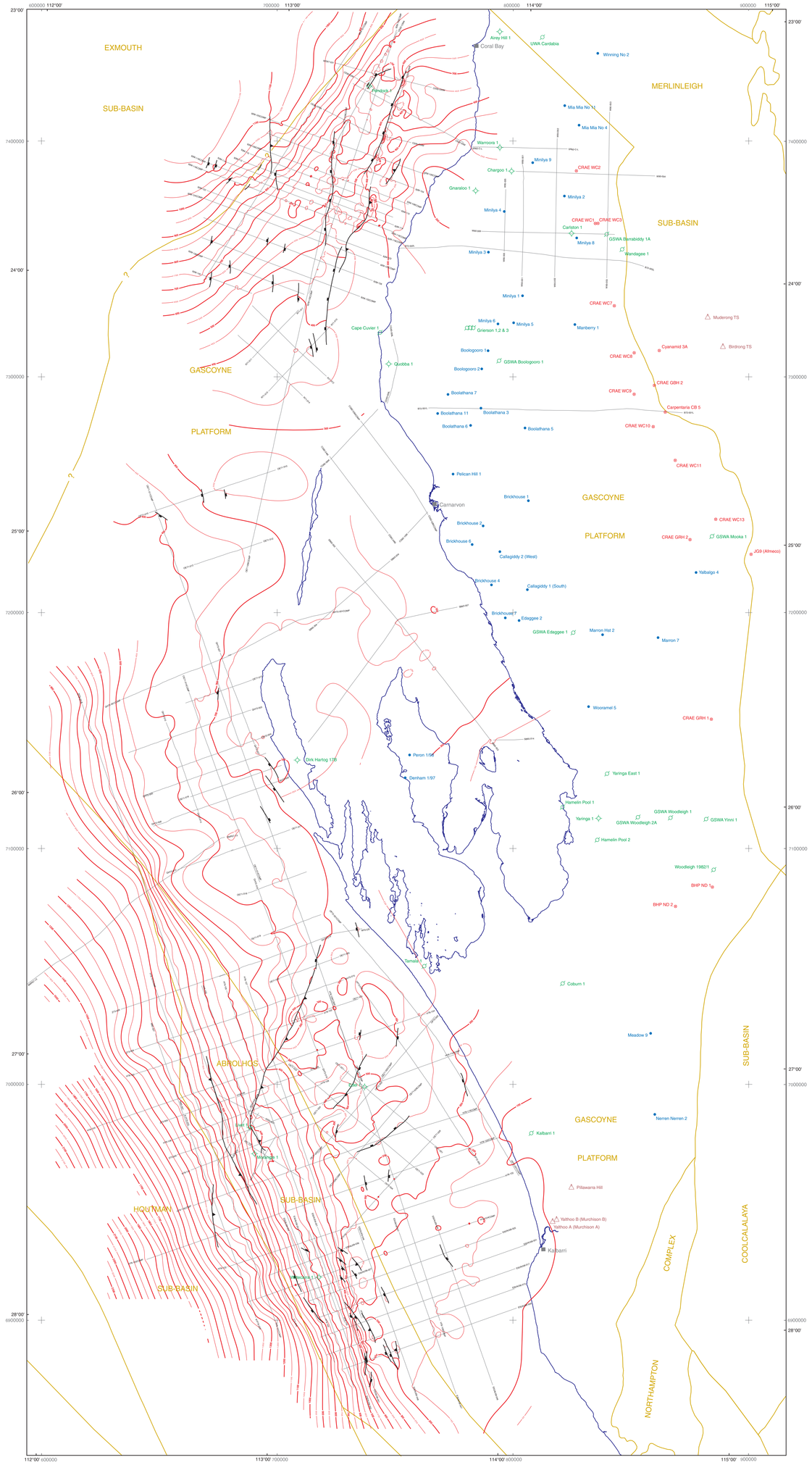
RP1284 16.06.03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MERLINLEIGH
SUB-BASIN
GASCOYNE
PLATFORM
GASCOYNE
PLATFORM
ABROLHOS
SUB-BASIN
HOUTMAN
SUB-BASIN
SUB-BASIN
GASCOYNE
PLATFORM
COOLCALALAYA
COMPLEX
NORTHAMPTON
Coral Bay
Carnarvon
Kalbarri
Airey Hill 1
UWA Cardabia
Winning No 2
Pendock 1
Mia Mia No 1
Mia Mia No 4
Warroora 1
Minilya 9
CRAE WC2
Chargoo 1
Gnaraloo 1
Minilya 2
Minilya 4
CRAE WC1
CRAE WC3
Carlston 1
Minilya 8
GSWA Barrabiddy 1A
Wandagee 1
Minilya 3
Minilya 1
CRAE WC7
Muderong TS
Minilya 6
Minilya 5
Grierson 1,2 & 3
Manberry 1
Cape Cuvier 1
Boologooro 1
GSWA Boologooro 1
CRAE WC8
Cyanamid 3A
Birdrong TS
Quobba 1
Boologooro 2
CRAE GBH 2
Boolathana 7
CRAE WC9
Carpentaria CB 5
Boolathana 11
Boolathana 3
Boolathana 6
Boolathana 5
CRAE WC10
CRAE WC11
Pelican Hill 1
Brickhouse 1
CRAE WC13
Brickhouse 2
CRAE GRH 2
GSWA Mooka 1
Brickhouse 6
Callagiddy 2 (West)
JG9 (Afmeco)
Yalbalgo 4
Brickhouse 4
Callagiddy 1 (South)
Brickhouse 7
Edaggee 2
GSWA Edaggee 1
Marron Hst 2
Marron 7
Wooramel 5
CRAE GRH 1
Dirk Hartog 1/8
Peron 1/96
Denham 1/97
Yaringa East 1
Hamelin Pool 1
GSWA Woodleigh 1
Yaringa 1
GSWA Woodleigh 2A
GSWA Yinni 1
Hamelin Pool 2
Woodleigh 1982/1
BHP ND 1
BHP ND 2
Tamala 1
Coburn 1
Meadow 9
Nerren Nerren 2
Kalbarri 1
Pillawarra Hill
Yalthoo B (Murchison B)
Yalthoo A (Murchison A)
Eneabba 1
Eneabba 1A
Mayanup 1
Eneabba 2
Eneabba 3
Eneabba 4
Eneabba 5
Eneabba 6
Eneabba 7
Eneabba 8
Eneabba 9
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Eneabba 12
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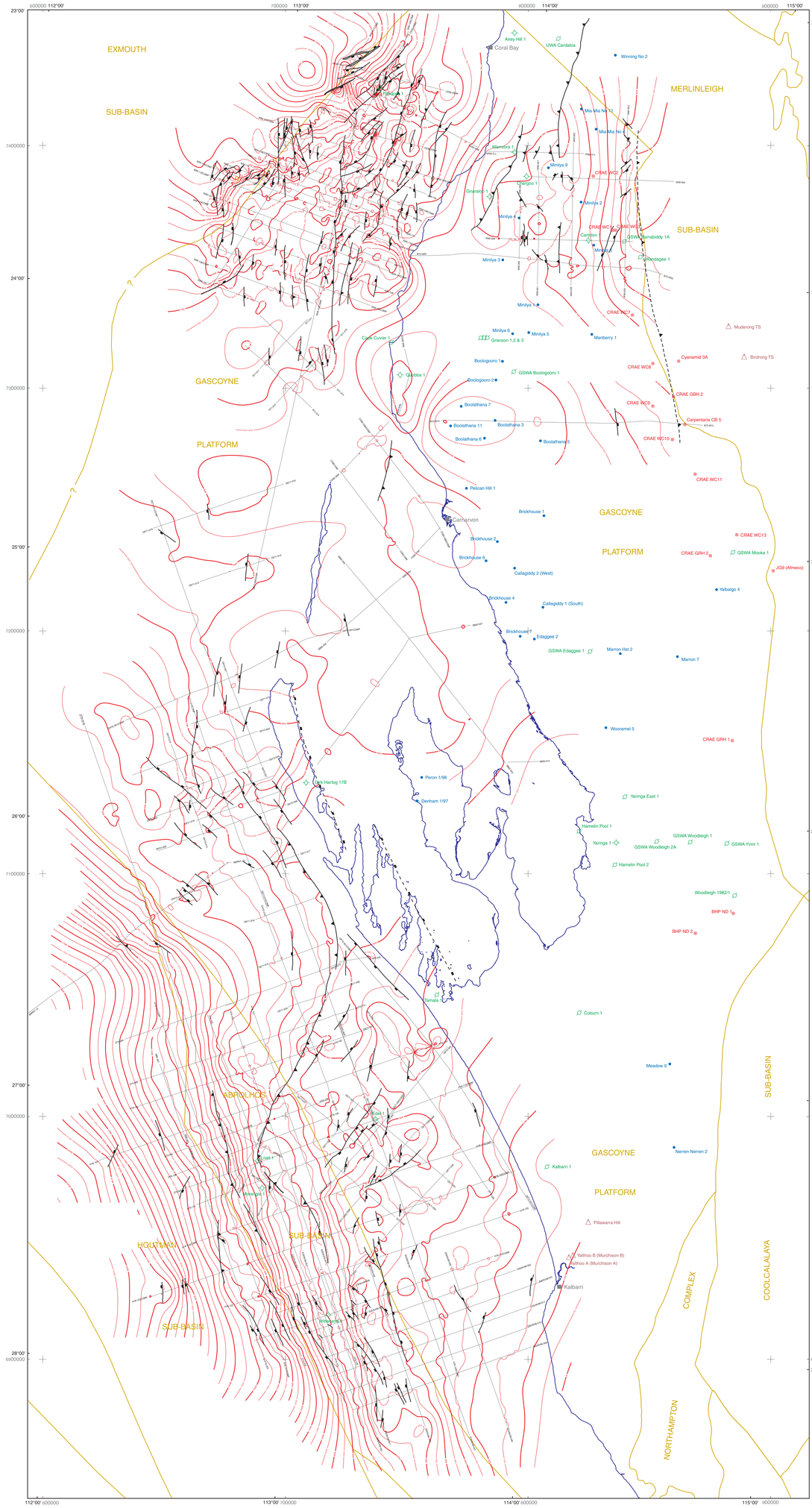

SYMBOLS

- Seismic line
- Coastline
- Basin subdivision
- Normal fault, showing downthrown side and heave; tick on downthrown side
- Reverse fault, tick on upthrown side
- Inferred normal fault, tick on downthrown side
- Two-way time contours (100 milliseconds)
- Two-way time contours (50 milliseconds)
- Townsite
- Petroleum exploration well (dry, plugged and abandoned)
- Stratigraphic well
- Water bore
- Mineral hole
- Outcrop site

SHEET INDEX

1:100 000 maps shown in black
1:250 000 maps shown in brown

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Edited by G. Loan
Cartography by L. Cosgrove and L. Fogarty

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SCALE 1:750 000
0 10 20 30 40 50
Kilometres

TRANSVERSE MERCATOR PROJECTION
HORIZONTAL DATUM: GEOCENTRIC DATUM OF AUSTRALIA 1994
Grid marks indicate 100 km intervals of the Map Grid of Australia Zone 49

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA
REPORT 87 PLATE 3

TWO-WAY TIME STRUCTURE MAP OF THE BASE CRETACEOUS (BREAKUP) UNCONFORMITY

GASCOYNE PLATFORM

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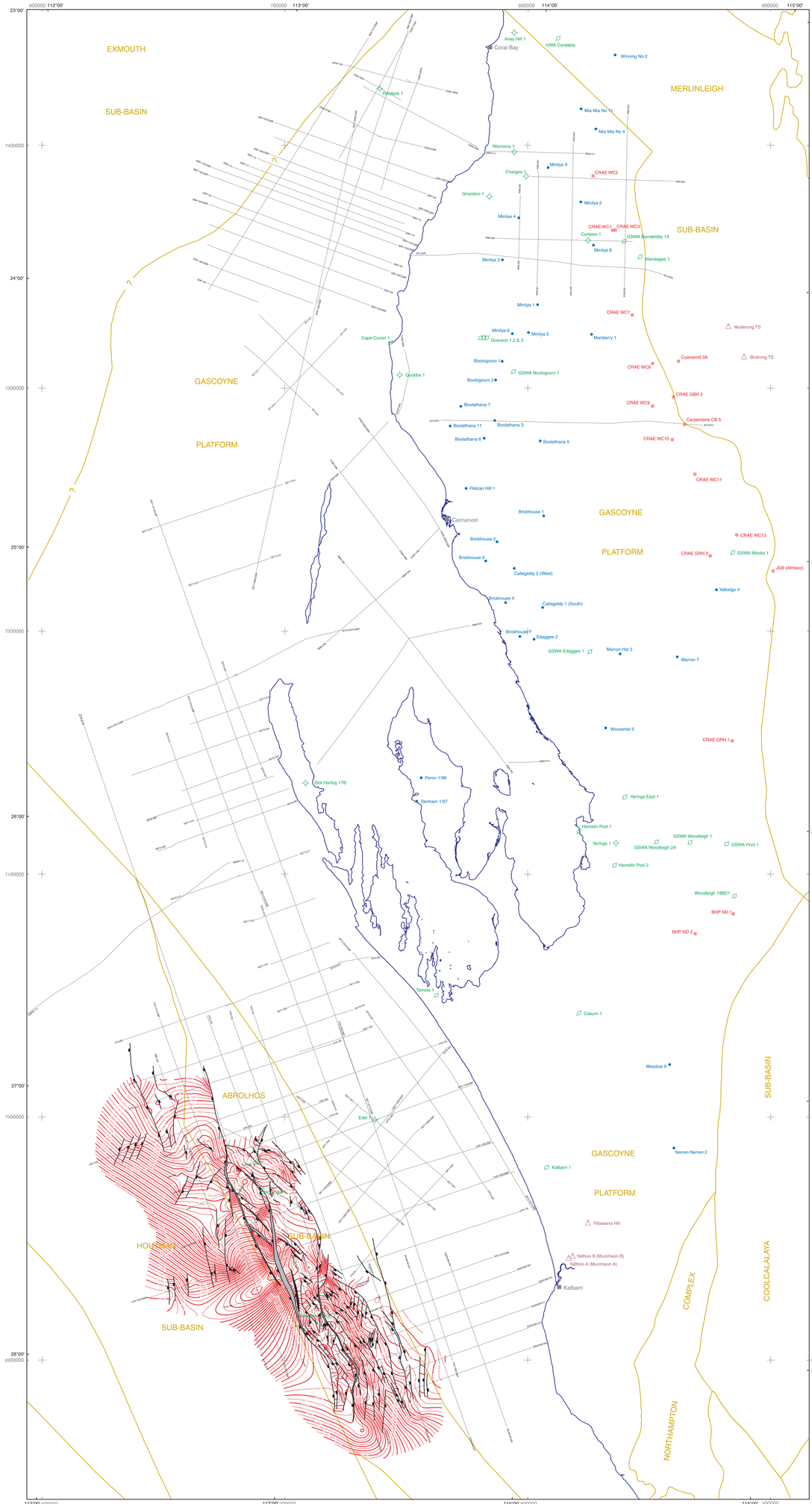
RP289
16.06.03



SYMBOLS

- Seismic line
- Coastline
- Basin subdivision
- Normal fault, showing downthrown side and heave; tick on downthrown side
- Two-way time contours (100 milliseconds)
- Two-way time contours (50 milliseconds)
- Townsite
- Petroleum exploration well (dry, plugged and abandoned)
- Stratigraphic well
- Water bore
- Mineral hole
- Outcrop site

SHEET INDEX

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SCALE 1:750 000
0 10 20 30 40 50
Kilometres

TRANSVERSE MERCATOR PROJECTION
HORIZONTAL DATUM: GEOCENTRIC DATUM OF AUSTRALIA 1994
Grid marks indicate 100 km intervals of the Map Grid of Australia Zone 49

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA
REPORT 87 PLATE 4

TWO-WAY TIME STRUCTURE MAP OF THE TOP KOCKATEA SHALE

GASCOYNE PLATFORM

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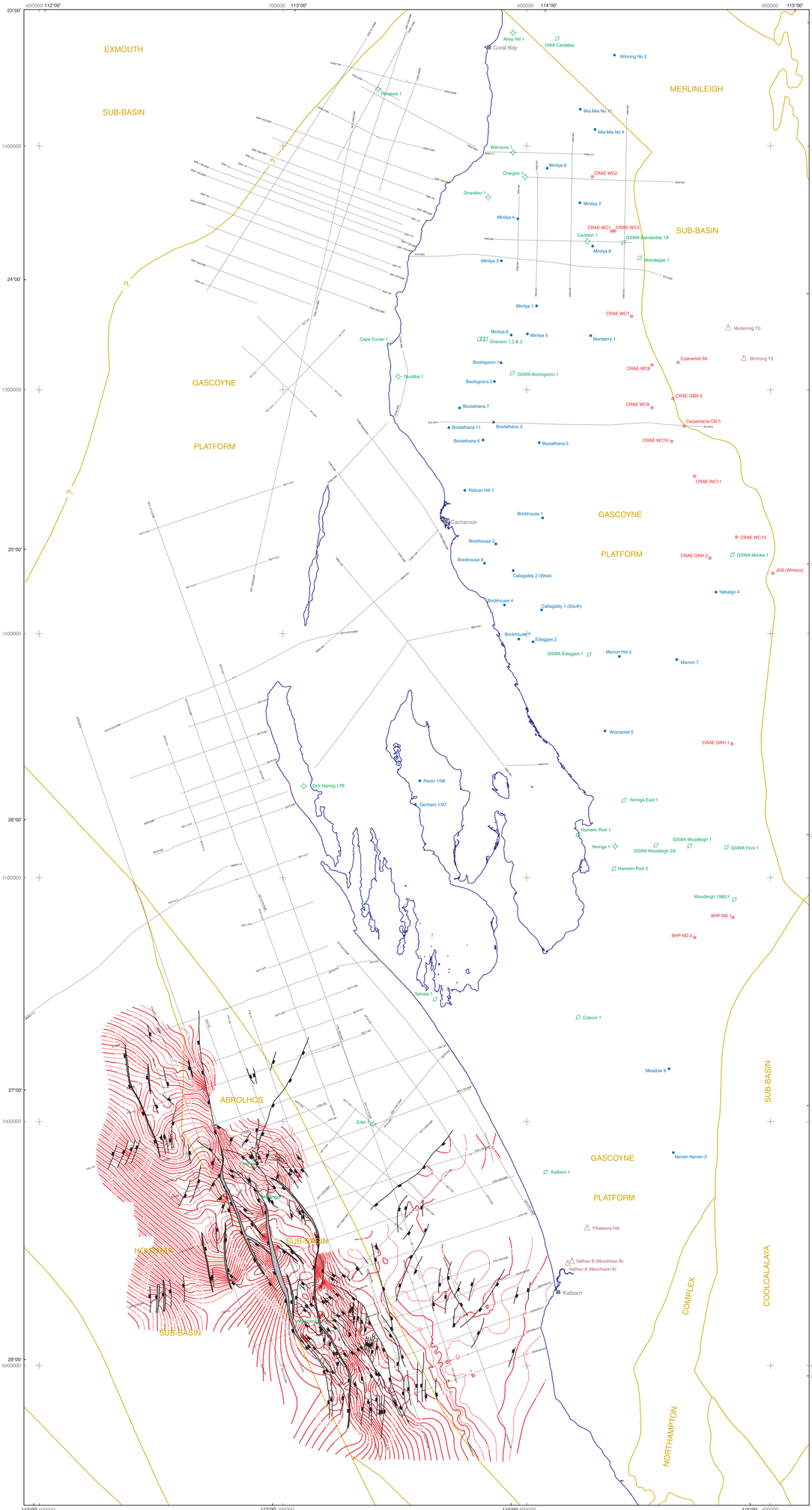

SYMBOLS

- Seismic line
- Coastline
- Basin subdivision
- Normal fault, showing downthrown side and heave; tick on downthrown side
- Two-way time contours (100 milliseconds)
- Two-way time contours (50 milliseconds)
- Townsite
- Petroleum exploration well (dry, plugged and abandoned)
- Stratigraphic well
- Water bore
- Mineral hole
- Outcrop site

SHEET INDEX

1:100 000 maps shown in black
1:250 000 maps shown in brown

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SCALE 1:750 000
0 10 20 30 40 50
Kilometres

TRANSVERSE MERCATOR PROJECTION
HORIZONTAL DATUM: GEOCENTRIC DATUM OF AUSTRALIA 1994
Grid marks indicate 100 km intervals of the Map Grid of Australia Zone 49

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA
REPORT 87 PLATE 5

TWO-WAY TIME STRUCTURE MAP OF THE MID- TO LATE PERMIAN UNCONFORMITY

GASCOYNE PLATFORM

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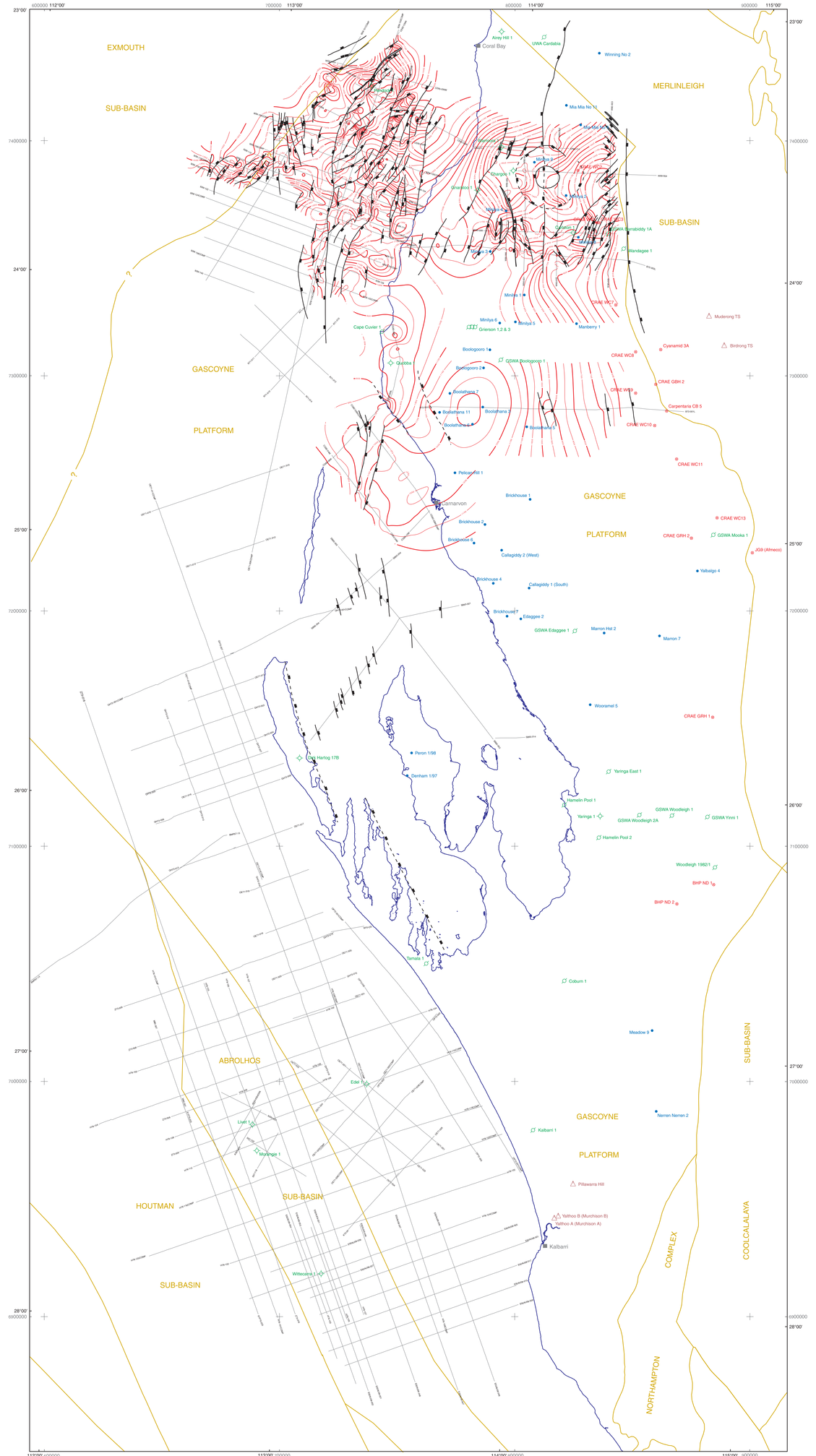
16.06.03


EXMOUTH
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MERLINLEIGH
SUB-BASIN
GASCOYNE
PLATFORM
GASCOYNE
PLATFORM
ABROLHOS
SUB-BASIN
HOUTMAN
SUB-BASIN
COOLCALALAYA
SUB-BASIN
COMPLEX
NORTHAMPTON
Coral Bay
Carnarvon
Kalbarri
Airey Hill 1
UWA Cardabia
Winning No 2
Mia Mia No 1
Mia Mia 1A
Yaringa 2
Yaringa 3
Ajana 1
Ajana 2
Ajana 3
Ajana 4
Ajana 5
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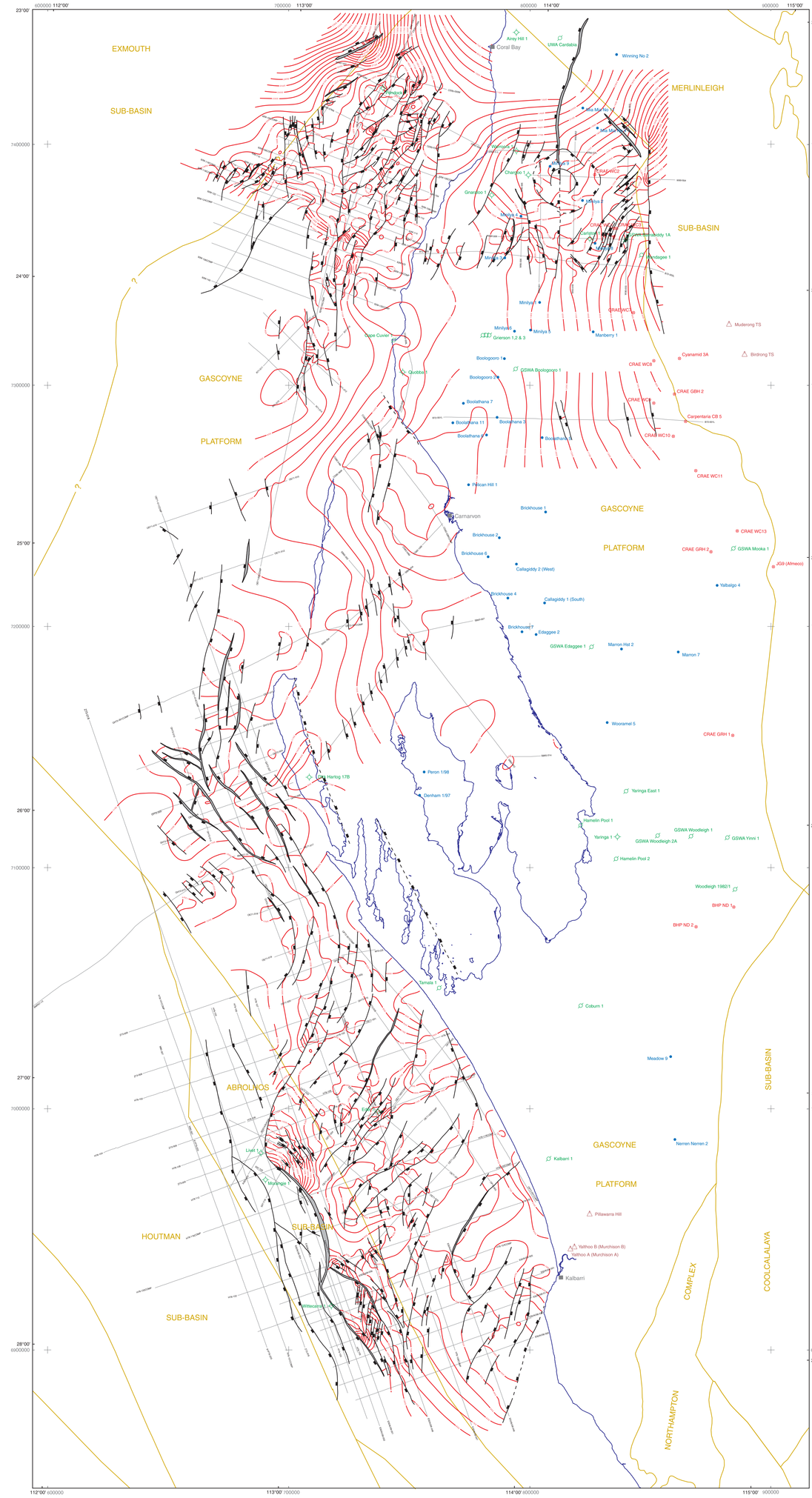

SHEET INDEX

1:100 000 maps shown in black
1:250 000 maps shown in brown

SYMBOLS

- Seismic line
- Coastline
- Basin subdivision
- Normal fault, showing downthrown side and heave; tick on downthrown side
- Inferred normal fault, tick on downthrown side
- Two-way time contours (100 milliseconds)
- Townsite
- Petroleum exploration well (dry, plugged and abandoned)
- Stratigraphic well
- Water bore
- Mineral hole
- Outcrop site

Compiled by R. P. Iasky, C. D'Ercole, and K. A. Blundell

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SCALE 1:750 000
0 10 20 30 40 50
Kilometres

TRANSVERSE MERCATOR PROJECTION
HORIZONTAL DATUM: GEOCENTRIC DATUM OF AUSTRALIA 1994
Grid marks indicate 100 km intervals of the Map Grid of Australia Zone 49

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA
REPORT 87 PLATE 7

TWO-WAY TIME STRUCTURE MAP OF THE TOP TUMBLAGOODA SANDSTONE

GASCOYNE PLATFORM

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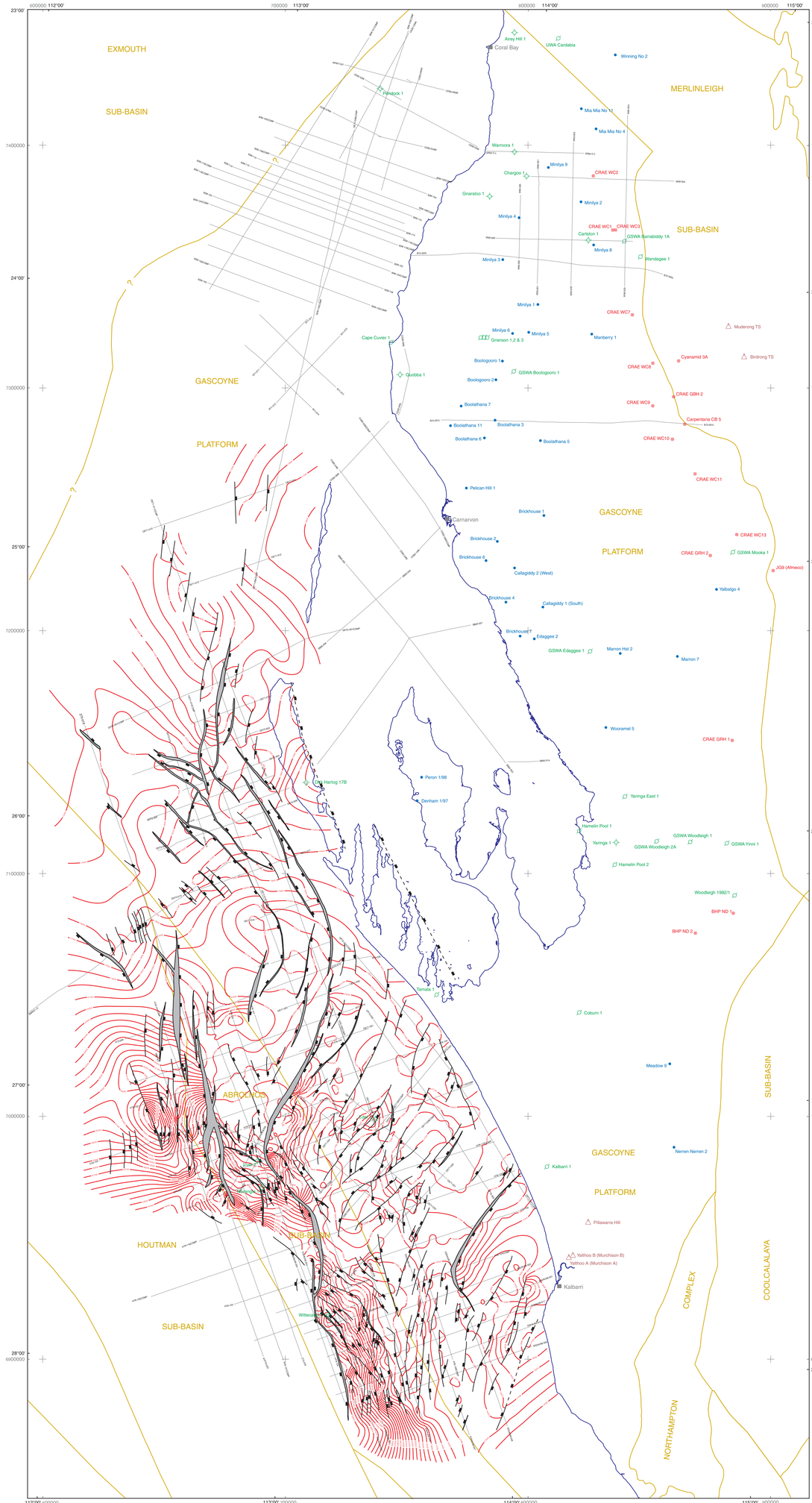
16.06.03



SYMBOLS

- Seismic line
- Coastline
- Basin subdivision
- Normal fault, showing downthrown side and heave; tick on downthrown side
- Inferred normal fault, tick on downthrown side
- Two-way time contours (100 milliseconds)
- Townsite
- Petroleum exploration well (dry, plugged and abandoned)
- Stratigraphic well
- Water bore
- Mineral hole
- Outcrop site

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Edited by G. Loan

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SHEET INDEX

1:100 000 maps shown in black
1:250 000 maps shown in brown

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Geological Survey of Western Australia
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SCALE 1:750 000

0 10 20 30 40 50
Kilometres

TRANSVERSE MERCATOR PROJECTION
HORIZONTAL DATUM: GEOCENTRIC DATUM OF AUSTRALIA 1994
Grid marks indicate 100 km intervals of the Map Grid of Australia Zone 49

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA
REPORT 87 PLATE 8

TWO-WAY TIME STRUCTURE MAP OF THE NEAR-BASEMENT UNCONFORMITY

GASCOYNE PLATFORM

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RP1294
16.06.03

N — 127.9 km — 118 km — 212.3 km — 130.2 km — 103 km — 57 km — 51.7 km — 70 km — S

Wandagee 1
Pendock 1
Quobba 1
Yaringa 1
Dirk Hartog 17B
Tamala 1
Edel 1
Livet 1
Wittecarra 1

GR (API) 0 200 | DT (µs/ft) 140 40 | GR (API) 0 300

Datum = 180m
1030m
436 m
146 m
665 m
398 m
854 m
850 m
686 m

TD 1073 m
TD 2501 m
TD 1931 m
TD 2288 m
TD 1523 m
TD 1275 m
TD 2750 m
TD 1760 m
TD 2890 m

AGE — STRATIGRAPHIC UNITS

CAINOZOIC — undifferentiated

CRETACEOUS — CARNARVON BASIN
- Korojon Calcarenite
- Toolonga Calcilutite
- Winning Group

JURASSIC / TRIASSIC — PERTH BASIN
- Eneabba Formation
- Lesueur Sandstone
- Woodada Formation
- Kockatea Shale
- Wittecarra Sandstone

PERMIAN — undifferentiated

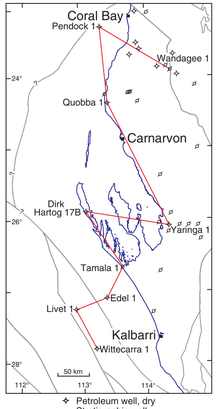
DEVONIAN — CARNARVON BASIN
- Gneudna Formation
- Nannyarra Sandstone
- Sweeney Mia Formation
- Kopke Sandstone
- Faure Formation

SILURIAN — CARNARVON BASIN
- Dirk Hartog Group
- Coburn Formation
- Yaringa Formation
- Ajana Formation

ORDOVICIAN — CARNARVON BASIN
- Tumblagooda Sandstone

?CAMBRIAN—ORDOVICIAN — undifferentiated

- Water
- Sandstone
- Dolomite
- Limestone
- Shale
- Salt
- Siltstone
- Volcanic rock
- Unconformity
- Disconformity



- Petroleum well, dry
- Stratigraphic well
- Tectonic boundary

Compiled by A. J. Mory

Edited by K. Blundell
Cartography by L. Cosgrove and L. Fogarty

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The recommended reference for this plate is:
MORY, A. J., 2003, Well-log correlation, Gascoyne Platform, Southern Carnarvon Basin, Western Australia, *in* Structure and petroleum prospectivity of the Gascoyne Platform, Western Australia by R. P. IASKY, C. D'ERCOLE, K. A. R. GHORI, A. J. MORY, and A. M. LOCKWOOD: Western Australia Geological Survey, Report 87, Plate 9

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GEOLOGICAL SURVEY OF WESTERN AUSTRALIA
REPORT 87 PLATE 9

WELL-LOG CORRELATION
GASCOYNE PLATFORM

SOUTHERN CARNARVON BASIN
WESTERN AUSTRALIA

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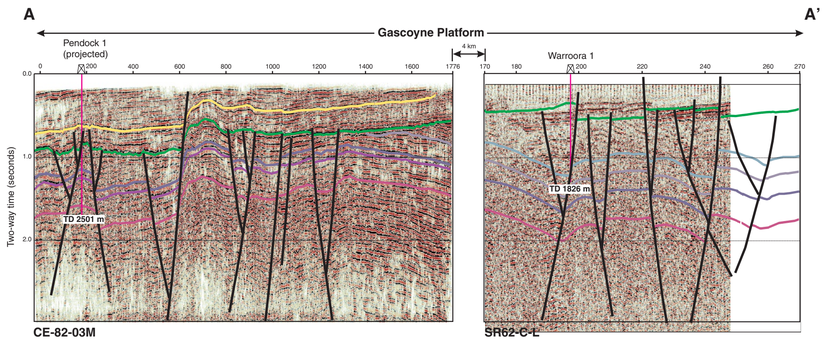

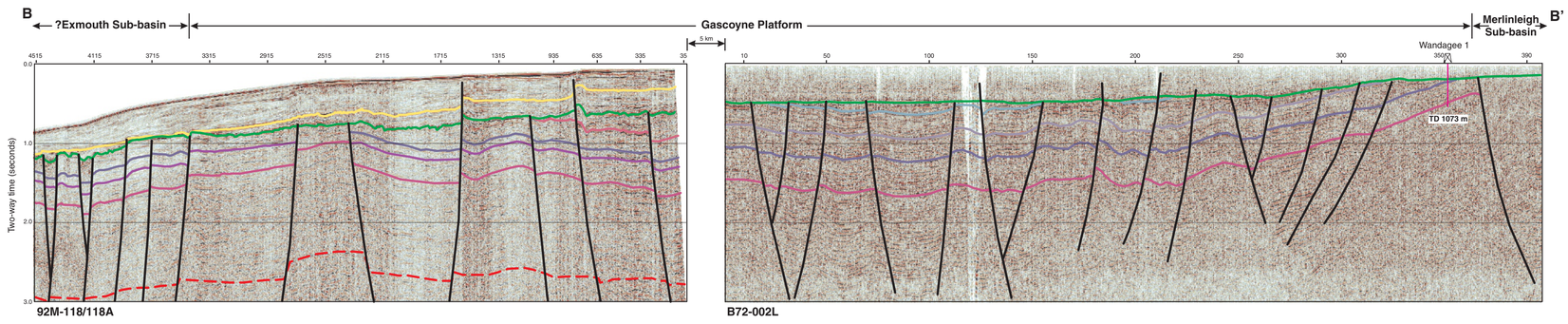

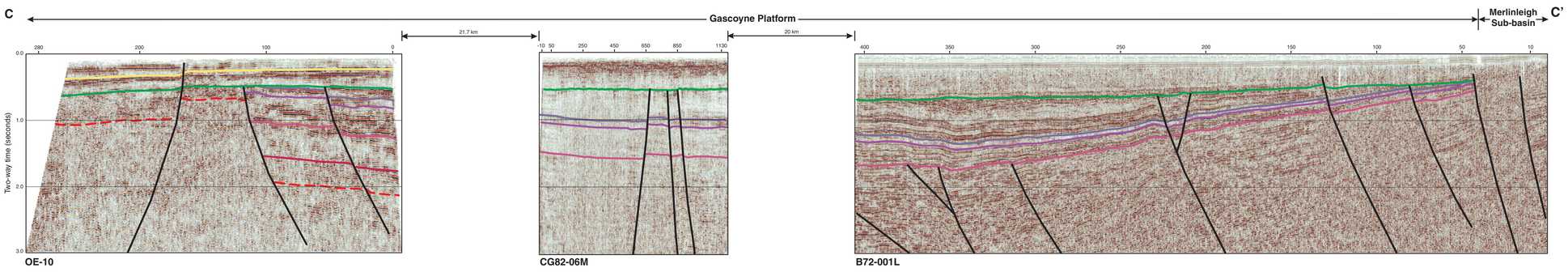

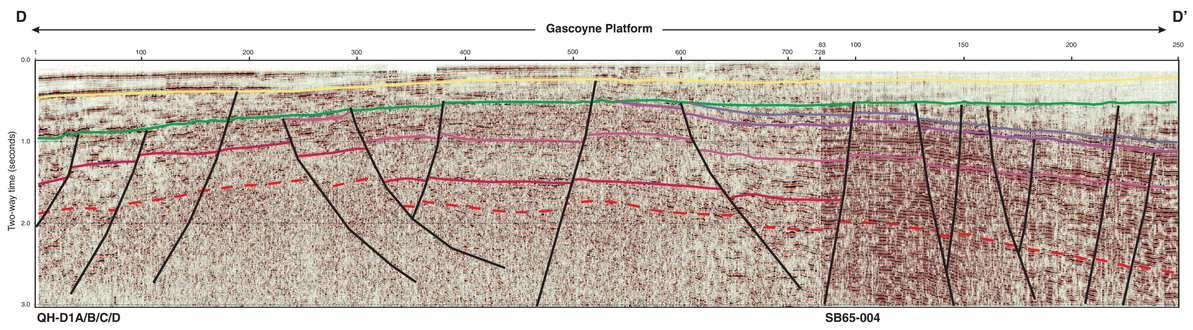

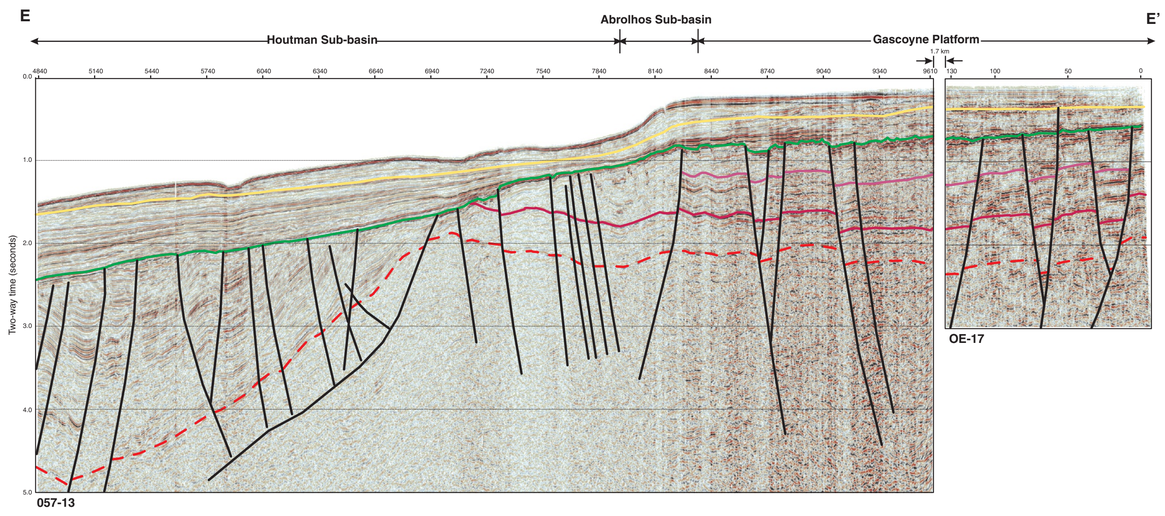

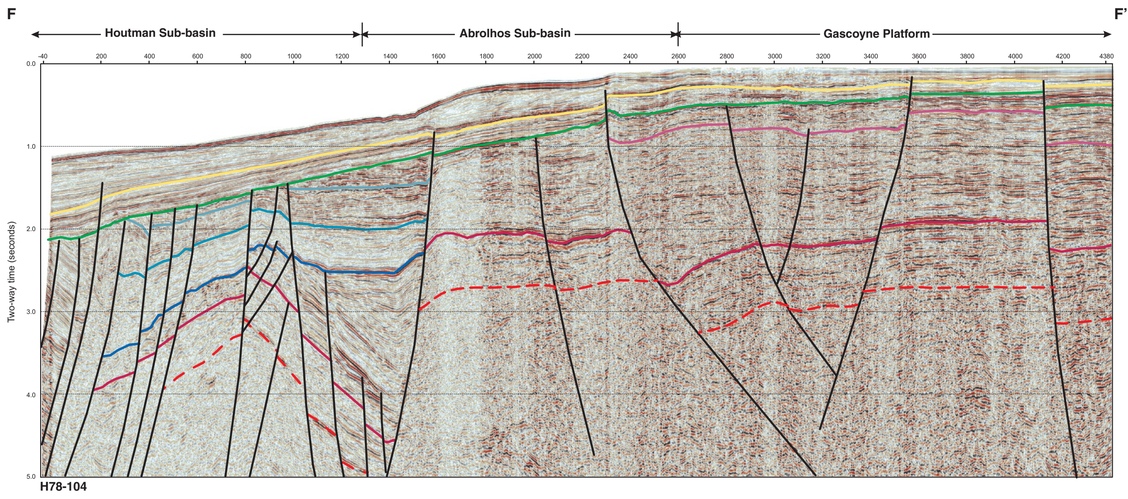

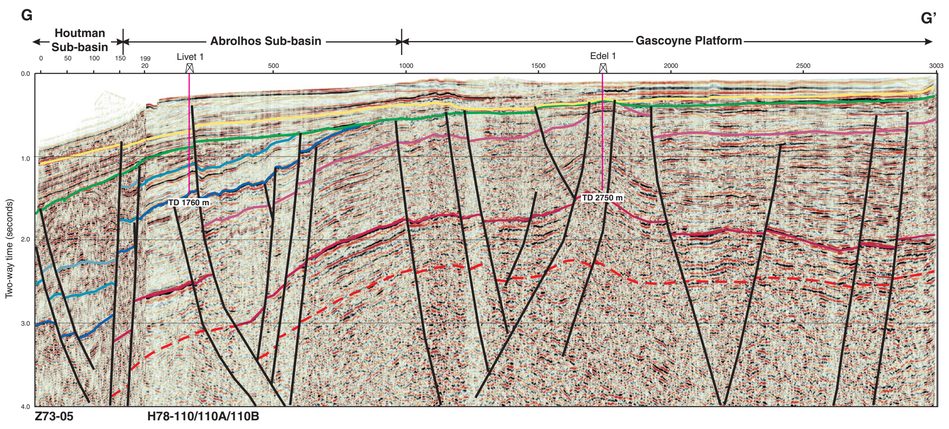

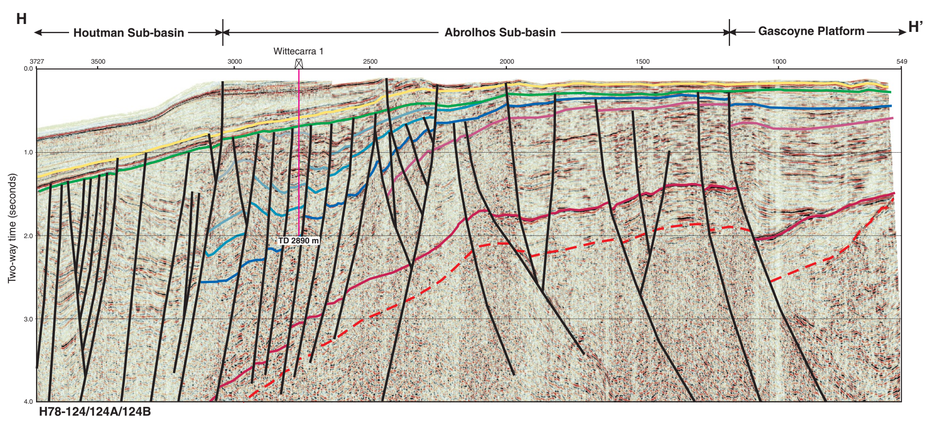

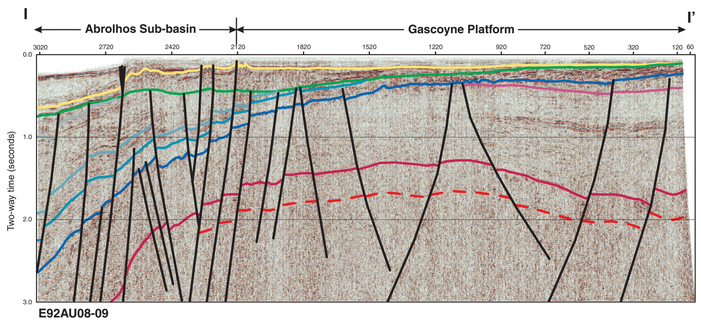

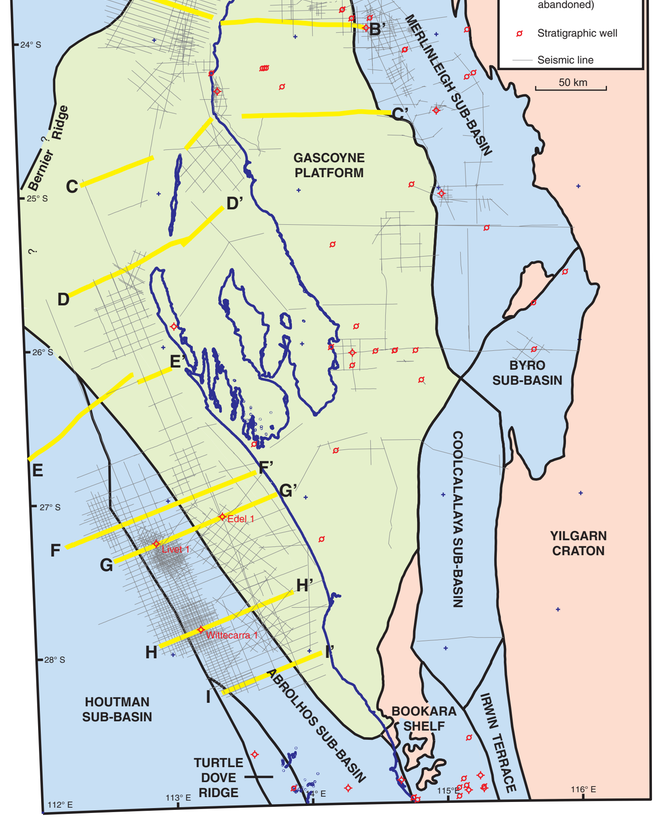

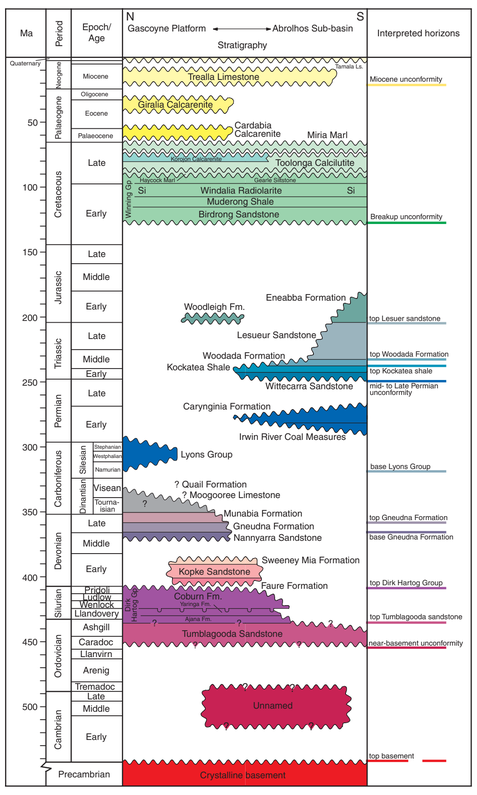

20 km
Horizontal scale for sections

Department of Industry and Resources
CLIVE BROWN MLA, MINISTER FOR STATE DEVELOPMENT
JIM LIMERICK, DIRECTOR GENERAL

Geological Survey of Western Australia
TIM GRIFFIN, DIRECTOR

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA
REPORT 87 PLATE 10

SEISMIC SECTIONS ACROSS THE GASCOYNE PLATFORM

SOUTHERN CARNARVON BASIN
WESTERN AUSTRALIA

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Compiled by R. P. Iasky and K. A. Blundell

Edited by G. Loan
Cartography by L. Cosgrove and L. Fogarty

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