1:250 000

RAVENSTHORPE

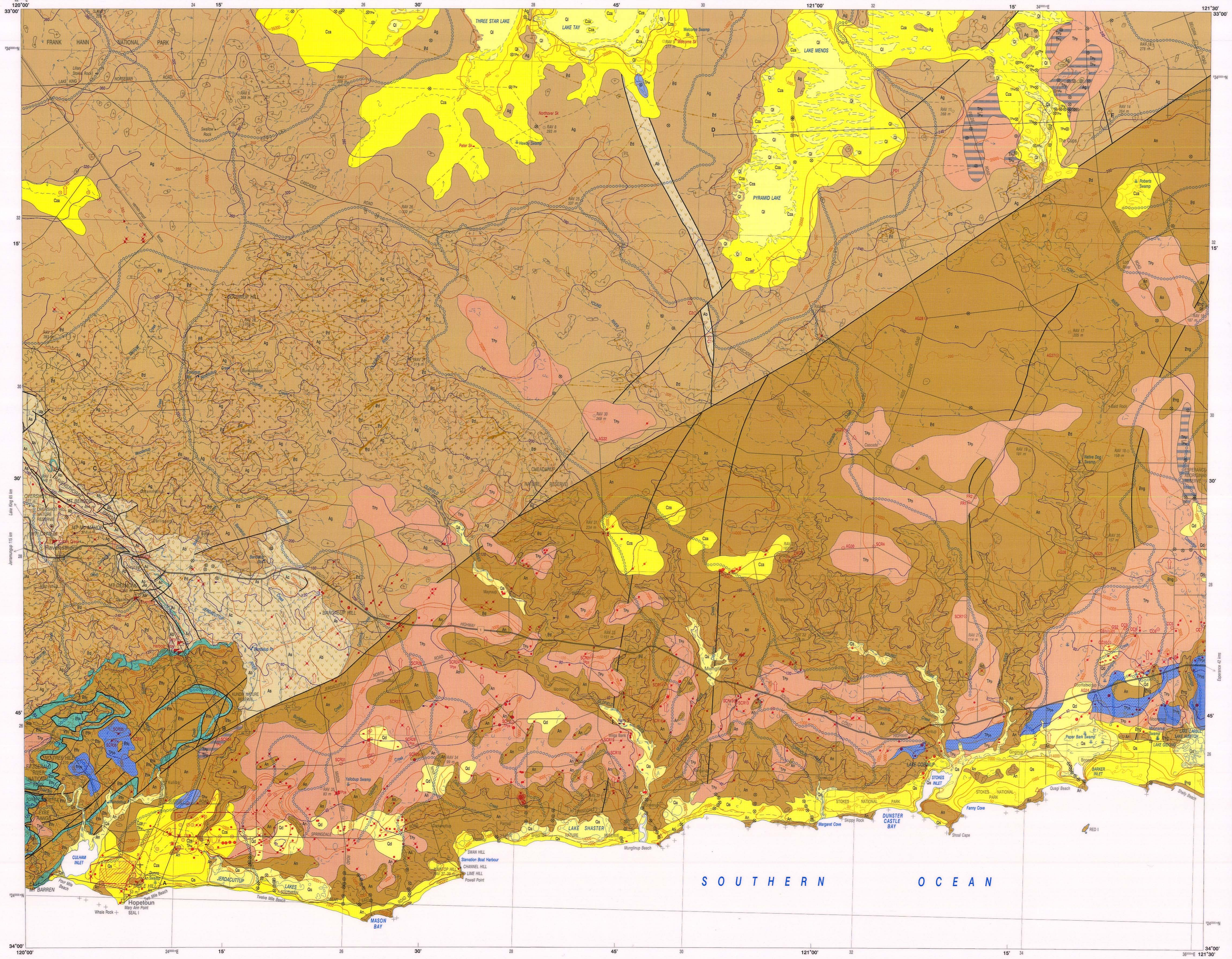
SI51-5

1:250 000 HYDROGEOLOGICAL SERIES

RAVENSTHORPE

GEOLOGICAL SURVEY OF WESTERN AUSTRALIA — WATER AND RIVERS COMMISSION

SHEET SI 51-5



REFERENCE

AQUIFER CHARACTERISTICS

- Surficial aquifer—local sedimentary aquifer, minor groundwater resources
- Surficial aquifer—local sedimentary aquifer, minor to major groundwater resources
- Sedimentary aquifer—extensive aquifer, minor to major groundwater resources
- Sedimentary aquitards and local aquifers—minor groundwater resources
- Sedimentary aquifer overlain by aquitard—minor to major groundwater resources
- Fissured aquifer, locally fractured and jointed—moderate supplies from fracture zones, minor groundwater resources
- Fractured and weathered rocks—local aquifers, with large supplies from fracture zones, minor groundwater resources
- Fractured and weathered rocks—local aquifers, minor groundwater resources
- Fractured and weathered rocks—local aquifers, very minor or no groundwater resources

HYDROGEOLOGY

PHANEROZOIC / CAINOZOIC / QUATERNARY	Qa	Alluvium, minor colluvium—gravel, sand, silt and clay	Minor local aquifers; fresh to saline	
	Qs	Coastal eolian and marine sediments—sand, clay, and limestone	Minor to major aquifers; fresh to saline	
	Ql	Lacustrine and estuarine sediments—mostly clay	Minor shallow aquifer; saline to hypersaline	
	Qd	Eolian dunes and sandsheet	Minor perched, discontinuous aquifer; fresh to brackish	
	Cza	Alluvium, colluvium and sandsheet—mostly sand, gravel, minor clay and silt; mainly overlying Plantagenet Group sediments	Minor to major aquifer; fresh to saline	
TERTIARY / Plantagenet Group	TPps	PALLINUP SILTSTONE Shoreline facies—unconsolidated fine-grained sand and silt	Minor to major aquifer; fresh to saline	BREMER BASIN
	TPpg	Spongolite facies—interlayered siliceous, vuggy spongolite and claystone	Minor to major aquifer; fresh to saline	
	TPp	Brown to grey carbonaceous siltstone, fine-grained sandstone and claystone	Minor aquifer to aquitard; fresh to saline	
	TPw	WERILLUP FORMATION—grey fine- to coarse-grained sand, carbonaceous clay and lignite, bryozoan limestone	Major aquifer; fresh to hypersaline	
	Ed	Dolerite dyke; interpreted where dashed	Very minor local aquifers; saline	
PROTEROZOIC / Mount Barren Group	EBy	KYBULUP SCHIST—phyllite, schist; minor dolomite of the Steere Formation and mafic to ultramafic schist of the Cowerdup Sill: outcrop (indicated by overprint); generally weathered to clay	Minor local aquifers; fresh to saline	ALBANY—FRASER OROGEN
	EBk	KUNDIP QUARTZITE—massive orthoquartzite and micaceous quartzite: outcrop (indicated by overprint)	Minor aquifers; fresh to saline	
	Eng	Granitoid gneiss and granitoid rock: outcrop (indicated by overprint); generally weathered to clay	Very minor local aquifers; brackish to saline	
ARCHAEAN	An	Granitoid gneiss, migmatite, minor augen gneiss: outcrop (indicated by overprint); generally weathered to clay	Very minor local aquifers; brackish to saline	
	Ag	Granitoid rock, porphyritic and even-grained: outcrop (indicated by overprint); generally weathered to sandy clay	Minor local aquifers; brackish to saline	YILGARN CRATON
	Ac	Chert and banded iron-formation	Significant local aquifer; brackish to saline	
	As	Metamorphosed sedimentary and felsic volcanic rocks; sandstone, shale, siltstone, minor dacite and rhyolite	Minor local aquifers; saline	
	Ab	Mafic and ultramafic rocks, basalt, amphibolite, komatiite and minor peridotite	Minor local aquifers; saline	

SYMBOLS

GEOLOGY

- hydrogeological boundary; concealed
- unconformity (section only)
- fault
- extent of weathering (section only)

SURFACE WATER FEATURES

- drainage, intermittent; pool
- lake; permanent, intermittent; swamp
- surface water divide
- surface water pipeline
- RH rockhole
- dam; abandoned

GROUNDWATER FEATURES

- spring
- watertable contour (m AHD)
- watertable (section only)
- isohaline TDS (mg/L)

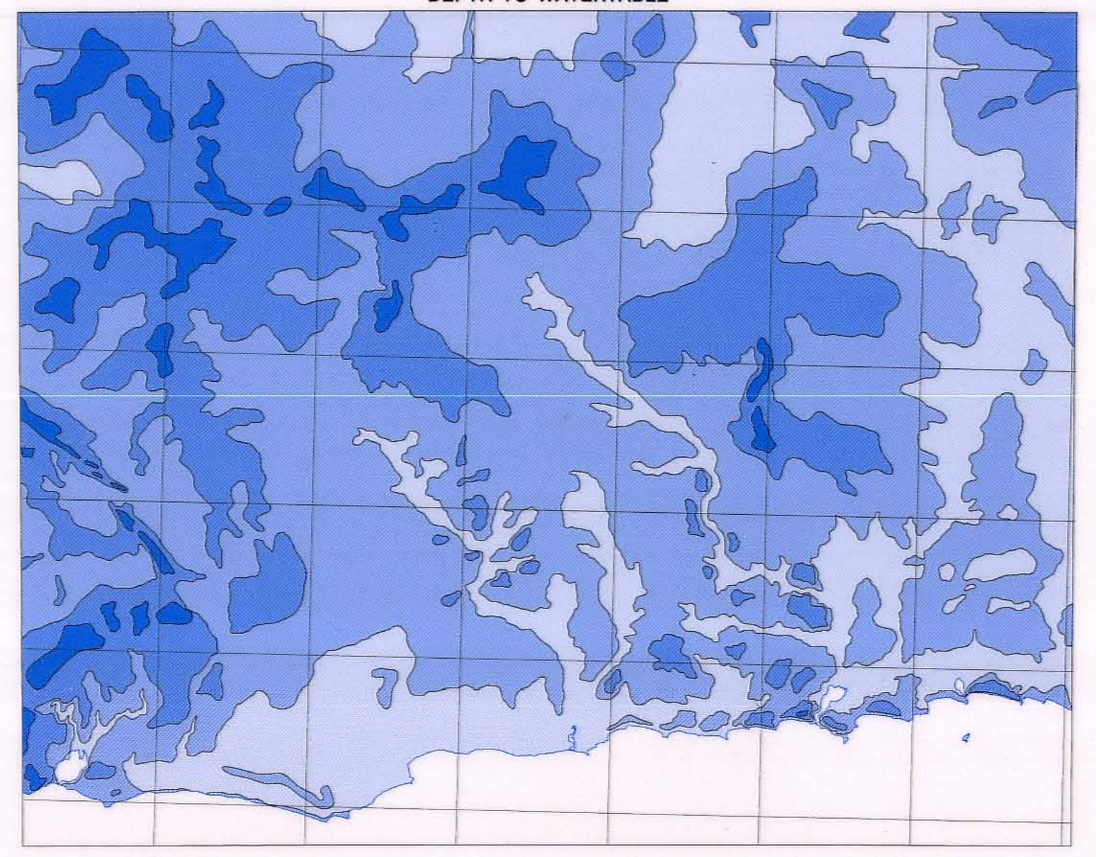
ARTIFICIAL FEATURES

- water bore: yield <50 m³/day; >50 m³/day; artesian
- bore intersecting significant confined aquifer
- water bore, abandoned: yield <50 m³/day; >50 m³/day; dry
- excavated soak for stock watering
- well; shaft
- SCR34 monitoring bore, piezometer
- area with numerous bores, well field, town water supply
- boundary of proposed groundwater control area
- groundwater pipeline
- storage reservoir
- waste disposal site; abandoned
- rising watertable, land salinization
- mineral exploration drillhole; intersecting significant confined aquifer

TOPOCADASTRAL INFORMATION

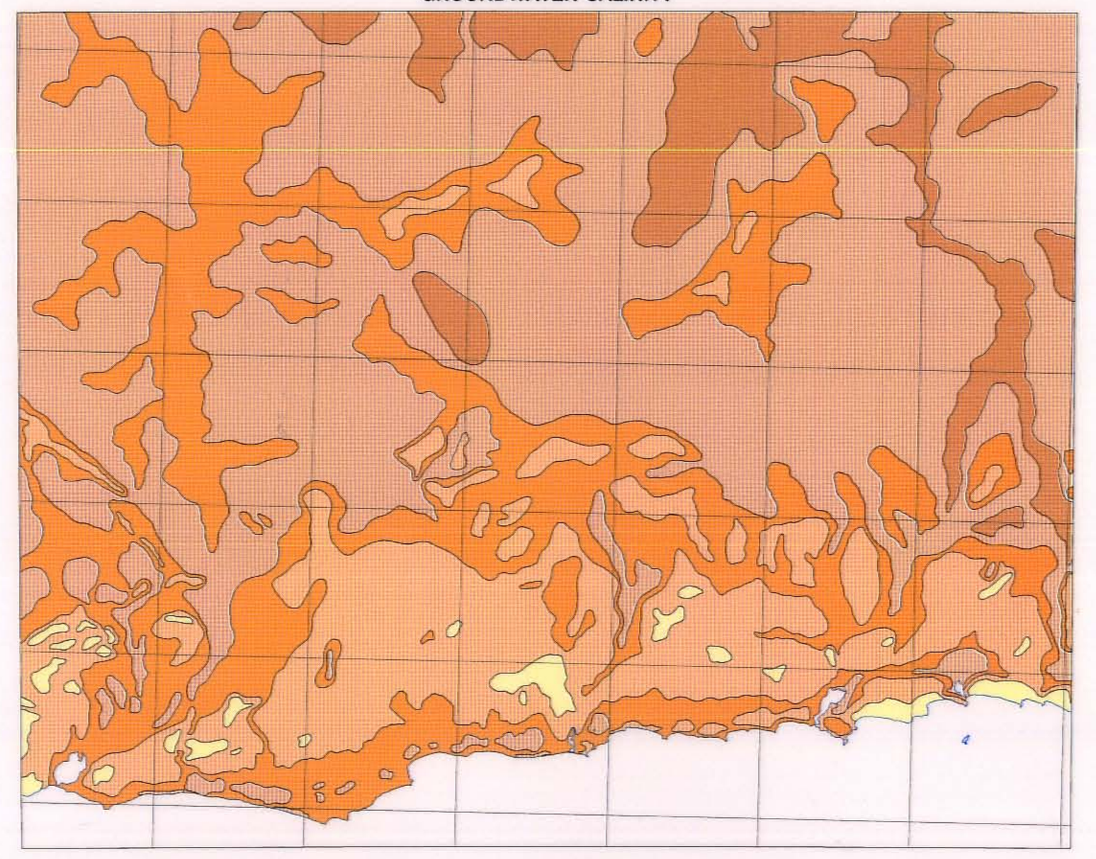
- highway with national route marker
- formed road
- track
- railway, abandoned
- landing ground
- Ravensthorpe — townsite, population 100–1000
- Munglinup — townsite, population <100
- Kundip — locality
- coral reef or submerged rock
- topographic contour line, 50 metre interval (AHD)
- RAV 31 — horizontal control, minor (AHD)
- national park, nature reserve and Aboriginal reserve boundary

DEPTH TO WATERTABLE



0–5, 5–15, 15–25, >25 (m)

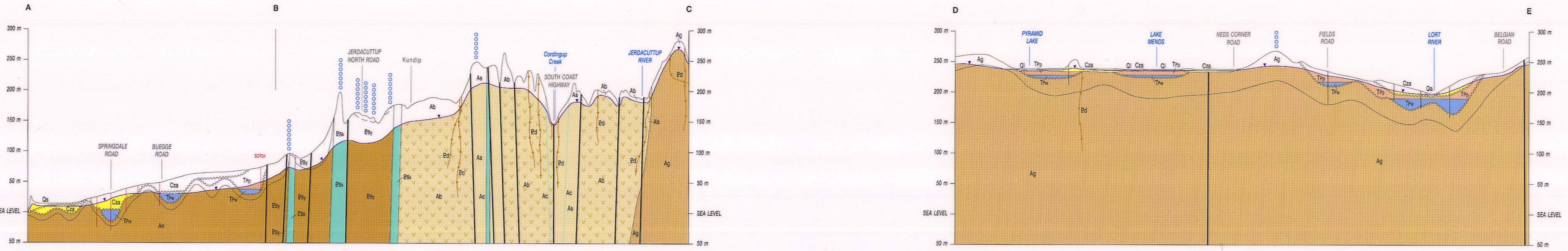
GROUNDWATER SALINITY



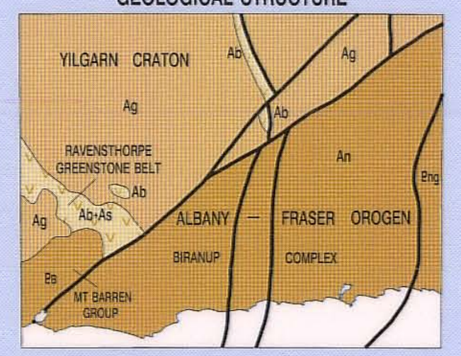
Total dissolved solids (mg/L): 0, 1000, 7000, 14000, 35000, 100000

DIAGRAMMATIC SECTIONS

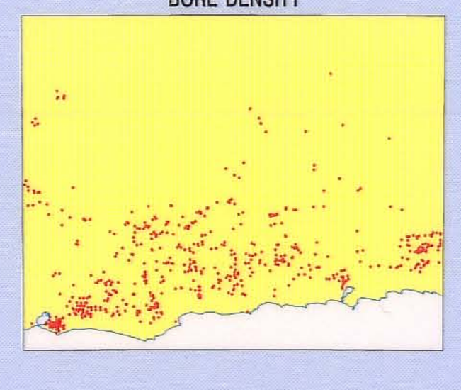
(Bores projected onto section line)
Vertical exaggeration x 50



GEOLOGICAL STRUCTURE



BORE DENSITY



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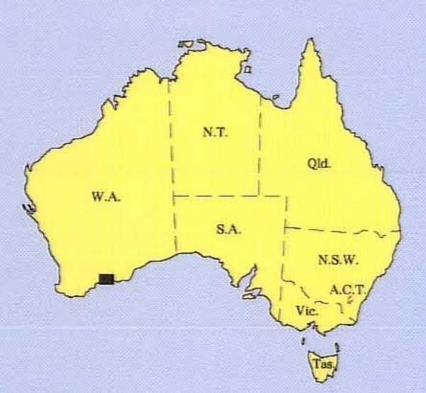
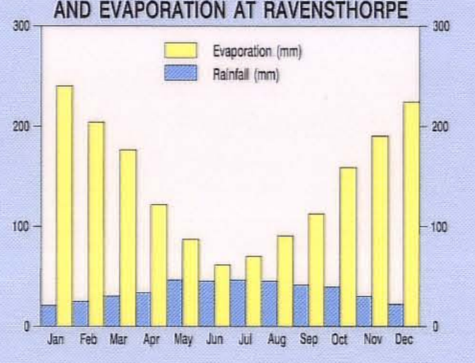
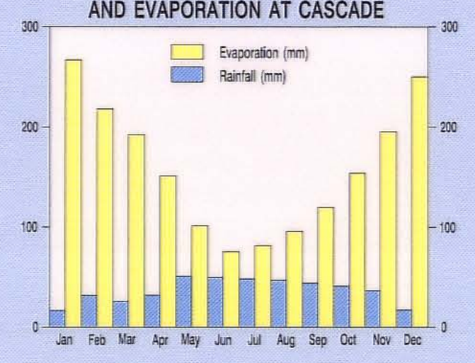


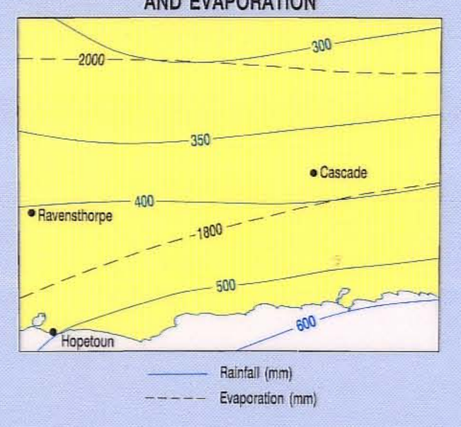
MEAN MONTHLY RAINFALL AND EVAPORATION AT RAVENSTHORPE



MEAN MONTHLY RAINFALL AND EVAPORATION AT CASCADE



AVERAGE ANNUAL RAINFALL AND EVAPORATION



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GOVERNMENT OF WESTERN AUSTRALIA
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MINISTER FOR THE ENVIRONMENT

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WATER AND RIVERS COMMISSION
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GEOLOGICAL SURVEY OF WESTERN AUSTRALIA
PIETRO GUJ, DIRECTOR

SCALE 1:250 000

5000 Metres 0 5 10 15 20 25 30 Kilometres

TRANSVERSE MERCATOR PROJECTION
Grid lines indicate 20000 metre interval of the Australian Map Grid Zone 51

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