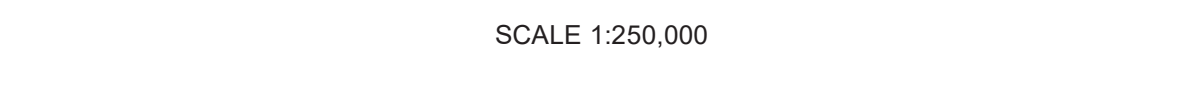
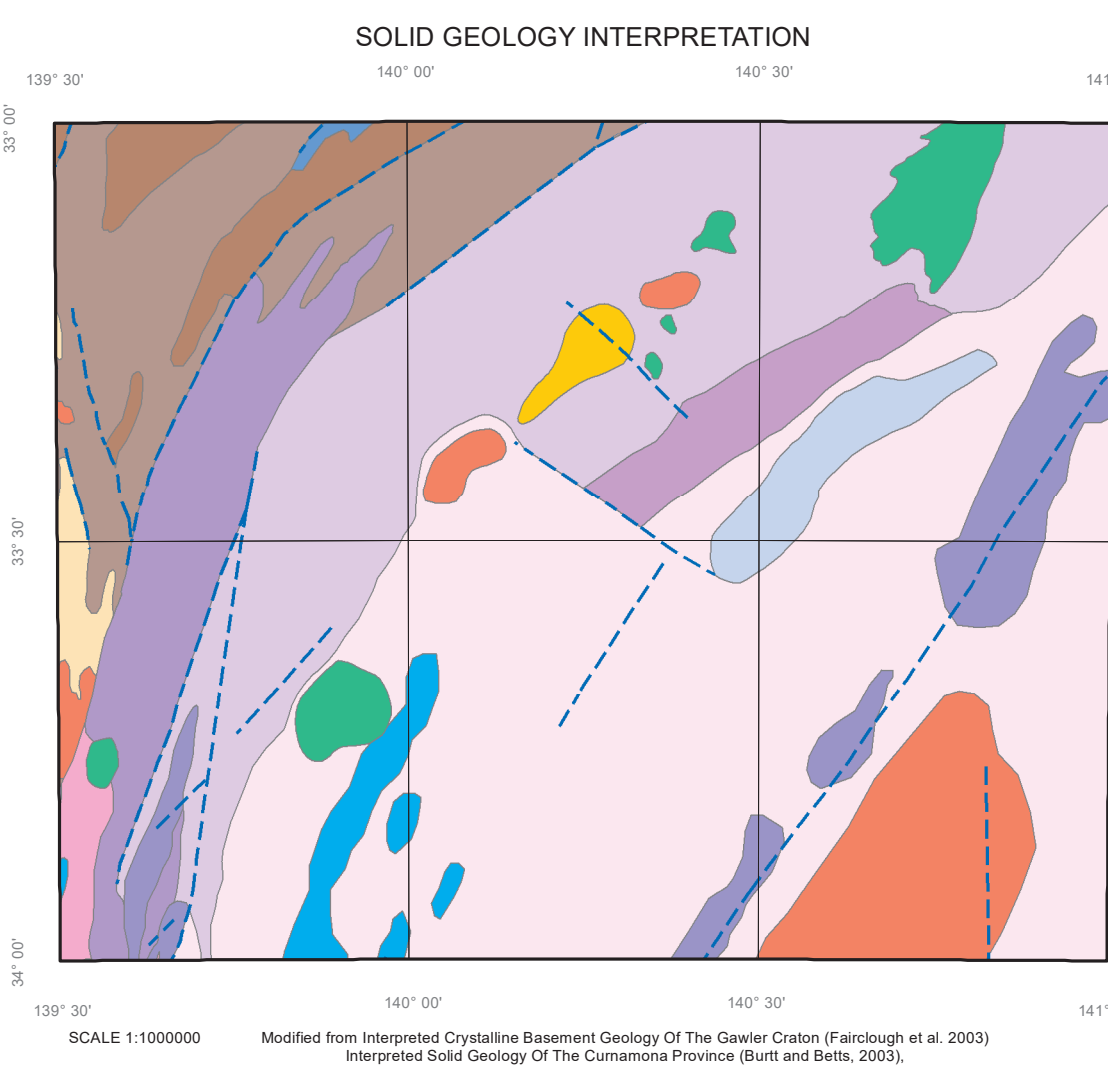


GEOLOGICAL SURVEY OF SOUTH AUSTRALIA
DEPARTMENT FOR ENERGY AND MINING



HOLOCENE			
Qh	HOLOCENE ALLUVIAL/FUVAL SEDIMENTS: Un differentiated Holocene alluvial/fuval sediments.	Nh	BURRA GROUP UNIT 9: Silstone, laminated; shale, sandstone, heavy mineral laminites; quartzite to felsophytic, cross bedding, dolomite, blue-grey to pink grey, tuffaceous.
Oh ₁	HOLOCENE ALLUVIAL/FUVAL UNIT 1: Present day Holocene alluvium; current bedrock.	Ob	BURRA GROUP UNIT 10: Dolomite and dolomitic sandstone interbeds. Based on bracket unit in Ptoyle on CHOWILLA.
Oh ₂	HOLOCENE ALLUVIAL/FUVAL UNIT 2: Holocene alluvium slightly older than present day alluvium (Qh ₁) commonly is laminated related to mean channel.	Nh ₁	BURRA GROUP UNIT 11: Quartzite interbeds. Based on dotted unit in Ptoyle on CHOWILLA.
Oh ₃	COOMABEDJAL FORMATION: Coarse-grained, fossil and fine grained fossil sand deposits. Age 5000-15,000 to 10,000 on C14 at Coomab.	Nh	BLAIR SUBGROUP UNIT 3: Dark grey, laminated with minor calcarenite, dolomite interbeds, quartzite. We to coarse, felsophytic, cross bedded, minor sandstone interbeds, siltite.
Oh ₄	HOLOCENE AECLEAN UNIT 4: Holocene gypsiferous dunes/lunettes.	Ob	BLAIR SUBGROUP UNIT 2: Dolomite interbeds. Based on bracket unit in Ptoyle on CHOWILLA.
Oh ₅	HOLOCENE AECLEAN UNIT 5: Holocene clay/silt lunettes adjacent to Mopons. Based on Oh ₄ on CHOWILLA.	Nh ₂	GILBERT RANGE QUARTZITE: Quartzite, arkose.
Oh ₆	HOLOCENE LACUSTRINE/PLUA UNIT 3: Holocene claypan and lagoonal sediments.	Nh ₃	BLACKWORTH FORMATION: Mudstone, siltstone, shale, partly calcarenous.
PLEISTOCENE-HOLOCENE			
Qp	QUATERNARY ALLUVIAL/FUVAL SEDIMENTS: Un differentiated Quaternary alluvial/fuval sediments.		
Qm	MONGMAN FORMATION: Sand, medium to coarse-grained, bank gravel, fine-grained.		
Qh	YAMBA FORMATION: Clay, loesslike, gypsiferous, gypsum-quartz sand. Dunes, playa lakes.		
PLEISTOCENE			
Qp ₁	PLEISTOCENE ALLUVIAL/FUVAL UNIT 2: Pleistocene gypsiferous coarse-sorted gravel. Based on Qp ₂ on WOODBINA, CUDJUMURRA.		
	PLEISTOCENE ALLUVIAL/FUVAL UNIT 4: Pleistocene low-level alluvial flint gravel. Based on Qp ₂ on preliminary WARINA.		
Qp ₂	PLEISTOCENE ALLUVIAL/FUVAL UNIT 10: Pleistocene red-brown silt and sand silt. Transitional between alluvial Purralie Formation and recent Woolman Formation. Based on Qp ₁ on CLARY.		
Qp ₃	POOKRA FORMATION: Clay, sand and carbonate earth, silt, with gravel lenses.		
Qp ₄	WOOREEN FORMATION: Sand, silt reddish-brown siltly and clayey loess; pedogenic carbonate. Austen.		
Qp ₅	BUNGUNIA LIMESTONE: Limestone and dolomite, thin-bedded, micritic, cherty.		
Qp ₆	PLEISTOCENE CALCARETE: Un differentiated Pleistocene calcarete.		
PLIOCENE-PLEISTOCENE			
Tp ₁	BLANDFORD CLAY: clay, greenish grey, sandy; limestone, thin; and quartz sand; clay, greenish grey, mottled, sandy.		
PLIOCENE			
Tp ₂	NORWEST BEND FORMATION: Limestone, sandy, sandstone, calcarenite, oolitic beds. Eulamee.		
Tp ₃	PLIOCENE CALCARETE: Un differentiated Pliocene calcarete.		
MIOCENE-PLEISTOCENE			
Tm ₁	MIOCENE-PLIOCENE SILICATE UNIT 1: Regionally younger silicates, aprons Late Miocene-Pliocene.		
OLIGOCENE-MIOCENE			
T ₁	MURRAY GROUP UNIT 1: Un differentiated Paba Formation, Morgan Subgroup and Mannum Formation. Ironstone, extorted, bryonal, vireoid, sandstone, calcarenous, minor calcarenite clay and silt.		
CAMBRIAN-ORDOVICIAN			
Co ₁	COLAMERIAN GREGGUS UNIT 1: Acid felsic pyroclastic, microgranite, apfite, rhyolite, rhyodolite. Based on unit 4 on CLARY.		
NEOPROTEROZOIC			
Np ₁	FORTRESS HILL FORMATION: Silstone, gritty, dolomite lenses, and conchals.		
Nh	WALKERBARA SILTSTONE: Silstone, blue-grey. Thin bands of limestone and calcareous siltstone.		
Nh ₁	CAROMA SILTSTONE MEMBER: Silstone, blue and whitish-bedded, grey green, coarse-grained, a parallel laminated, blue-grey siltstone interbed.		
Nh ₂	TARLEY HILL FORMATION: Silstone, grey to black, dolomite and pyrite gritty, greenish to calcareous, very conchoidal, locally cross-bedded, dolomite, grey, faggy to massive, limestone conglomerate, ironstone/iron, pyroclastic.		
Nh ₃	WELVERA FORMATION: Silstone, green. Lower third is fine grained, includes gravel dropstones; middle unit is medium to coarse sandstone, upper unit is siltstone with minor sandstone. Minor calcareite, sandy and calcarenous.		
Nh ₄	WARRONE OLIGOMATE MEMBER: Conglomerate, massive, well rounded pebbles and boulder clasts, siltly and sandy matrix, dolomite, massive to well bedded, grey and brown, felsic, dolomite, massive.		
Nh ₅	BENDA SILTSTONE: Silstone, dark and medium grey, calcarenous, laminated, minor siltly limestone.		
Nh ₆	BENDA SILTSTONE UNIT 2: Presumed quartzite or sandstone interbeds. Based on dotted unit in Ptoyle on CLARY.		
Nh ₇	PALCOO TELITE: Silstone, dark grey, calcarenous, with scattered quartz grains, quartzite, siltite and minor siltstone; green-grey siltite.		
Nh ₈	PALCOO TELITE UNIT 2: Braemar ironstone facies in Pualco Tille as shown in blue on CLARY.		
Nh ₉	PALCOO TELITE UNIT 3: Presumed quartzite or sandstone interbeds. Based on dotted unit in Ptoyle on CLARY.		
Nh ₁₀	PALCOO TELITE UNIT 4: Pelitons of Pualco Tille in which siltite is prominent. Based on unit with red margins in Ptoyle on CLARY.		
Nh ₁₁	APPLA TELITE: Tiltite, quartzite, siltstone, massive, grey.		
Nh ₁₂	APPLA TELITE UNIT 1: Quartzite or sandstone interbeds.		



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(Digital data available upon request)

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Not all structures are represented on this particular map.

Mapping and Compilation by P.A. Rogers, B.Sc. (Hons) with contributions from A. J. Andrejewski, N. Duncan, J.R. Firman, B.Sc. (Hons), R.G. Forbes, Ph.D., D.S. Ker, B.Sc., N.S. Pledue, B.Sc., and

Geological boundaries displayed on this map have been
Derived from geological interpretation and are not
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Copies of this map can be obtained from the
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2020

GEOLOGICAL RELIABILITY DIAGRAM

The diagram is a 4x4 grid. The top-left cell (row 1, column 1) is yellow and contains three points labeled A, B, and C. The top-right cell (row 1, column 4) is labeled D. The remaining cells in the grid are brown.

Chowilla sheet published 1978
Geological Field Observations

INDEX TO 1:100 000 SHEETS		
Murkaby 6831	Lilydale 6931	Canopus 7031
Koomooloo 6830	Parcoola 6930	Chowilla 7030

INDEX TO ADJOINING 1: 250 000 SHEETS

Magnetic Declination 2001
(Annual variation +1.4 minutes)



DIGITAL EDITION
SUBJECT TO AMENDMENT
See published printed map for further information

GEOLOGICAL BOUNDARY		CULTURAL FEATURES	
GEOLOGICAL BOUNDARY POSITION ACCURATE	_____	PRINCIPAL ROAD	_____
GEOLOGICAL BOUNDARY POSITION APPROXIMATE	_____	SECONDARY ROAD	_____
GEOLOGICAL BOUNDARY POSITION APPROXIMATE	_____	MINOR ROADS	_____
		VEHICULAR TRACKS	_____
		FENCE	_____
		WATER PIPELINE	_____
		IDENTIFIED POINT	_____
		BUILDING	_____
		LANDING GROUND	_____
LINEAR STRUCTURES			
CLAYPAN	_____		
FAULT POSITION ACCURATE	_____		
FAULT POSITION APPROXIMATE	_____		
SWAMP/MARSH	_____		
TREND-LINE	_____		
		HYDROGRAPHIC AND GEOMORPHIC FEATURES	
		LAKE	_____
		INTERMITTENT LAKE	_____
		MAJOR WATERCOURSE	_____
		MINOR WATERCOURSE	_____
		SWAMP	_____
		RIPE	_____
		WATER TANK	_____
		SAND RIDGE	_____
STRUCTURAL FEATURES			
ORIGINALLY HORIZONTAL SEDIMENTARY BEDDING	_____		
ORIGINALLY HORIZONTAL SEDIMENTARY BEDDING - VERTICAL	_____		
SLATY CLIFFAGE - VERTICAL	_____		
SLATY CLIFFAGE	_____		

MINING	
PROSPECT	X
DEPOSIT - NO MINING	✕
MINES - METALS AND INDUSTRIAL MINERALS	✕

COMMODITIES	
Fe	Iron
GYPG	Gypsum
SAND	Sand