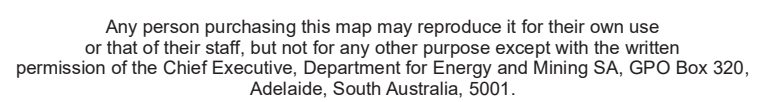
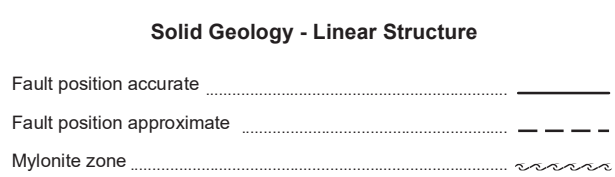
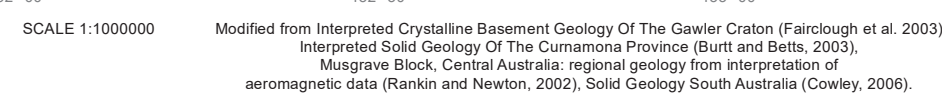
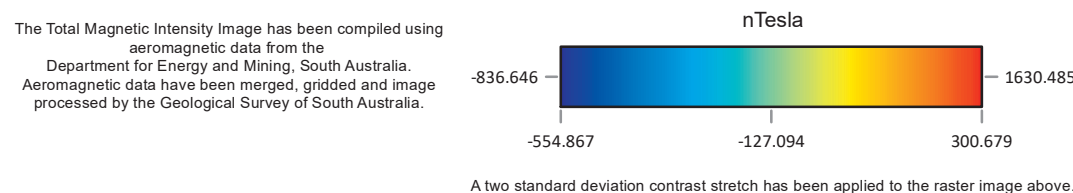


EOLOGICAL SURVEY OF SOUTH AUSTRALIA
DEPARTMENT FOR ENERGY AND MINING



HOLCEINE		PERMIAN	
	HOLCEINE AQUELON UNIT 2: Holceine sand capping dunes in dunefields.		STUART RANGE FORMATION: Shale, homogeneous marine, with minor siltstones and sandstones. Deposited in a quiet water restricted marine environment.
PLEISTOCENE-HOLCEINE		CARBONIFEROUS-PERMIAN	
	QUATERNARY AQUELON SEDIMENTS: Un differentiated Aqueelon pebble sediments.		CARBONIFEROUS-PERMIAN ROCKS: Undifferentiated Carboniferous-Permian rocks.
	QUATERNARY AQUELON UNIT 1: Quaternary dunefields sand.		BORTHIANKA FORMATION: Disconformity of shale intercalated in the basal unit, the upper unit with rhythmically bedded coarse and fine-grained sandstones. Subsequence deposited during glacial transgression and mud flows.
	QUATERNARY AQUELON UNIT 3: Quaternary gypsiferous dunehorizons.	CAMBRIAN	
	QUATERNARY AQUELON UNIT 4: Un differentiated Quaternary, largely composed of the transitional area between the Nubian Sand and Great Victoria Desert. BARTON sheet.		OBERSTADT HILL FORMATION: Siltstones and claystone, micaceous, calcareous and dolomitic in part; minor sandstones, limestone and dolomite. Minor sheet.
	QUATERNARY LACUSTRINE-KAJA UNIT 1: Quaternary gypsiferous sediments.	NEOPROTEROZOIC	
	QUATERNARY REGOULITHCOLLUVIAL SEDIMENTS: Undifferentiated Quaternary colluvial/gypsiferous sediments.		CARDNER DOLEMITES: Dolomite dykes locally invaded by black syenitic basalts. Sm-Nd ages 857-947 and 852-1036. (Lipin ages 857-947-MMA)
PLEISTOCENE		PALAEOPROTEROZOIC	
	PLEISTOCENE ALLUVIAL FLUVIAL UNIT 1: Pleistocene duneification clayey sand, and gravel with some silt. Based on Q62, COOPER PED. TALLARIGA.		PALAEOPROTEROZOIC UNIT 58: Granodiorite boulders, fine to medium-grained, conmagmatic with LSS, L66, BARTON sheet.
	PLEISTOCENE ALLUVIAL FLUVIAL UNIT 2: Pleistocene dune coarse sand.		PALAEOPROTEROZOIC UNIT 60: Dolerite, amphibolite dykes, conmagmatic with LSS, L66, BARTON sheet.
	PLEISTOCENE ALLUVIAL FLUVIAL UNIT 3: Pleistocene gypsiferous and quartz sand in knettes. BARTON sheet.		PALAEOPROTEROZOIC UNIT 65: Dolerite, massive, weakly foliated based on Pro-bored on TALLARIGA.
	PLEISTOCENE ALLUVIAL FLUVIAL UNIT 4: Pleistocene pebble sand, calcareous in part. Based on Q63, TALLARIGA.		PALAEOPROTEROZOIC UNIT 66: Foliated, pink, white, grey xenoliths, pebbles, granodiorite. Based on Pro-bored on TARCOCIA and TALLARIGA.
	PLEISTOCENE ALLUVIAL FLUVIAL UNIT 5: Pleistocene redolene sand associated with alluvial duneforms, lashed terrace gravel. Aluvial influence. Based on Q61, COOPER PED. TALLARIGA.	ARCHAEN PALAEOPROTEROZOIC	
	DELUSSEN FORMATION: Sand, brick red, weakly indurated.		MALIGHTING COMPLEX: Pargomites, ironaceous and aluminous, iron tectonites, gneissic gneiss, felsic and mafic-intermediate rocks and thureatic gneiss. Correlated to gneissic rocks, PROTOSIN-100-280 Ma.
	WHITFERN FORMATION: Sand, brown and orange-brown sand. Dunes, water.		CHRISTIE DOLITES: Dolites with nigrofoliated, strophic, paragonitic, carbonatic calcareous, quartzite. Age (Pb-Pd)245-241 Ma. With banded iron formation.
	PLEISTOCENE CALCAREE: Undifferentiated Pleistocene calcaree.		CHRISTIE DOLITES UNIT 3: Massive, foliated dark granulite with ortho- and clinopyroxene. Based on A101 to TALLARIGA.
FLUOCENE-PLEISTOCENE			KENNELA DOLITES: Dolomite, local pegmatite, pegmatolites, Thureaticus. Correlated to A101.
	FLUOCENE-PLEISTOCENE ALLUVIAL FLUVIAL UNIT 3: Pleistocene to Pleistocene redolene sand, with pebbles. Based on Q61 on primary Q63. Qs on TALLARIGA.		MOBELLA TONALITE: Tonalgite, grey, coarse-grained, poorly foliated plagioclase-quartz-biotite. Syngenetic, 2461 Ma.
	FLUOCENE-PLEISTOCENE ALLUVIAL FLUVIAL UNIT 1: Pleistocene to Pleistocene between yellow-brown sand. Based on C2 on COOPER PED. TALLARIGA.	MISCELLANEOUS	
FLUOCENE			MYLONITE UNIT 1: Mylonite, mylonitized rocks of Kribban Orogeny.
	FLUOCENE SILICETE: Undifferentiated Pleistocene siltstone.		
	FLUOCENE SILICETE UNIT 1: Pleistocene pedogenic and groundwater alluvial. TALLARIGA sheet.		
MOOSE-PLEISTOCENE			
	MOOSE-PLEISTOCENE FERROSEITE UNIT 1: Mooseite to Pleistocene ferrosite in paleosolvent sediments (Pargina Ferrosite) BARTON sheet.		
OLIGOCENE-FLUOCENE			
	MUKUNA FORMATION: Conglomeratic sand, clayey sand and breccia. Poorly sorted.		
EOCENE-PLEISTOCENE			
	GARFORD FORMATION: Melastone, carbonaceous, micaceous, scorioid and scoria, sandstone, minor sandstone and gill formation. Unravelling process from gypsiferous to carbonate melastone. Locustore to flood plain.		
	GARFORD FORMATION UNIT 1: White, grey, dolomitic, argillaceous or gypsiferous. (See Based on T1) on COOPER PED. TALLARIGA.		
	GARFORD FORMATION UNIT 1: White, basifelsic dolomitic limestone, dolomite and calcareous quartzites. Based on T12 on COOPER PED. TALLARIGA.		
	KHASTA FORMATION: Siltstone, the grain; sponge spicules, terration, cross terration, vertical Salsolus burrow, small spines.		
	PONGIA FORMATION: Siltstone, carbonaceous, light sand, carbonaceous. Palaeochannel Rf.		
TERTIARY-PLEISTOCENE			
	TERTIARY-PLEISTOCENE REGOULITHCOLLUVIAL UNIT 1: Felsite, micaceous, highly gypsiferous, dolomite or argillaceous, weakly foliated and calcareous, often with lenticular grey lenticular gravel, sand, silt and dolomite, calcareous to highly argill. Early Tertiary to Pleistocene.		
TERTIARY			
	TERTIARY FERROSITE UNIT 1: Tertiary ferrosite derived of the Cretaceous Surface, developed on Mesozoic and Palaeozoic silt.		
CRETACEOUS-PALEOCENE			
	CRETACEOUS-PALEOCENE DEEP WEATHERING: Undifferentiated deep weathering.		
JURASSIC-CRETACEOUS			
	ALGERCINIA SANDSTONE: Sandstone, fine to coarse-grained, with gravel and pebble layers, and trace micrites. Coarse bedded.		



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(Digital data available upon request)
Current version 2018.Digital

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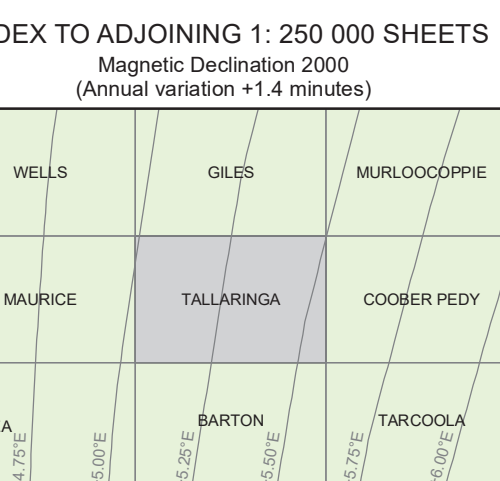
lake boundaries displayed on this map may have been derived from geological interpretation and may not match lakes interpreted by topographic mapping authorities.
Not all structures are represented on this particular map.

R.C. Cobcroft, Director, Geological Survey of South Australia.

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



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

GEOLOGICAL BOUNDARY		CULTURAL FEATURES	
GEOLOGICAL BOUNDARY POSITION ACCURATE	_____	MINOR ROADS	_____
GEOLOGICAL BOUNDARY POSITION APPROXIMATE	_____	VEHICULAR TRACKS	_____
		FENCE	_____
		IDENTIFIED POINT	_____
		BUILDING	_____
		YARDS	_____
		LANDING GROUND	_____
MINING			
DEPOSIT NOT MINING	_____		
LINEAR STRUCTURES		COMMODITIES	
FAULT POSITION ACCURATE	_____	COAL	Coal
FOLIATION TREND METAMORPHIC	_____		
GYPSITE DUNES	_____		
PALEOCHANNEL TRACE	_____	HYDROGRAPHIC AND GEOMORPHIC FEATURES	
TREND-LINE	_____	INTERMITTENT LAKE	
		MINOR WATERCOURSE	
		BORE	
		WATER TANK	
		SAND RIDGE	
STRUCTURAL FEATURES			
LINEAR STRUCTURAL ELEMENT	↑		
TECTONIC FOLIATION - HORIZONTAL	+		
TECTONIC FOLIATION - VERTICAL	+		
TECTONIC FOLIATION	+		