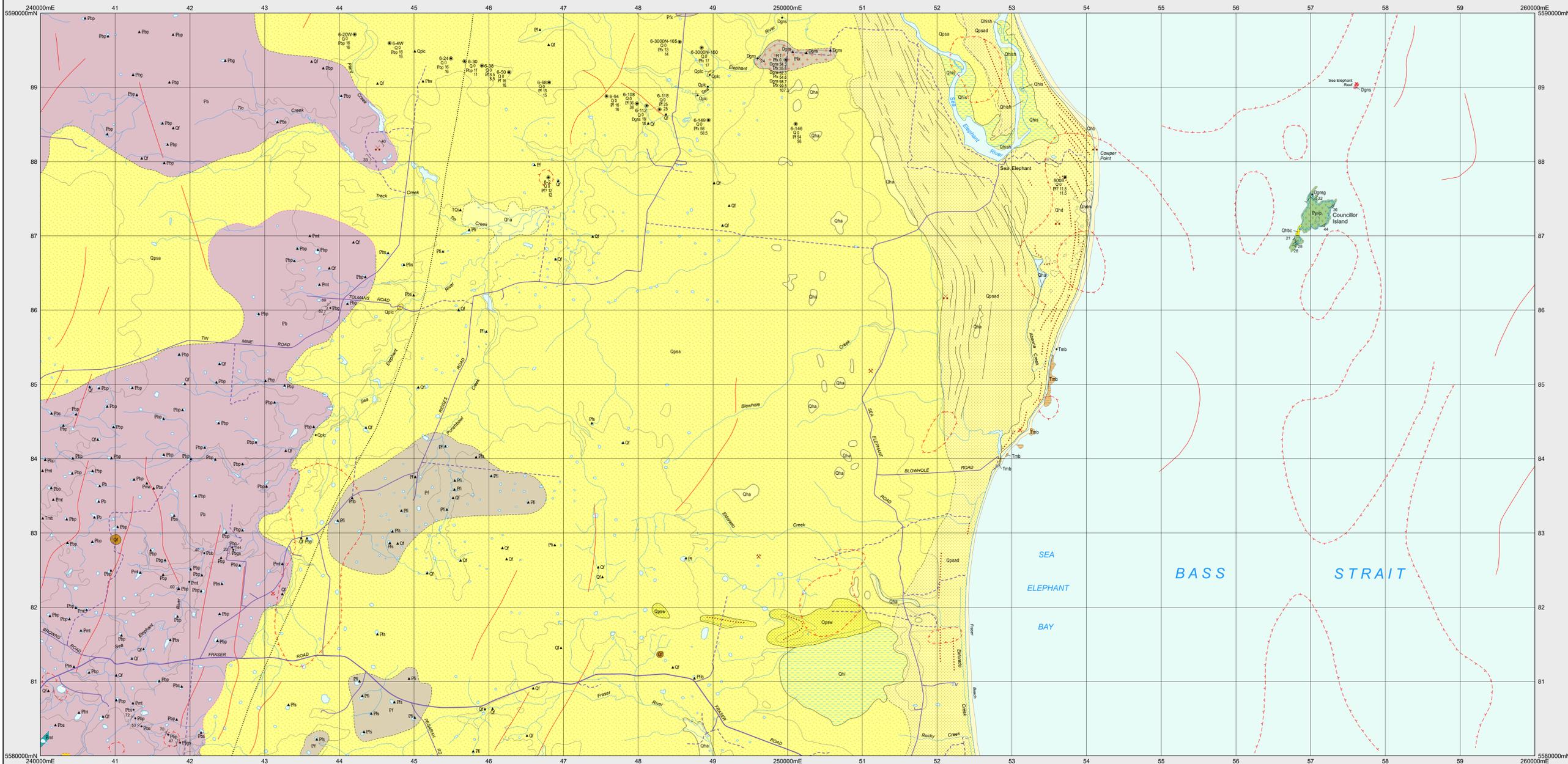


SEA ELEPHANT

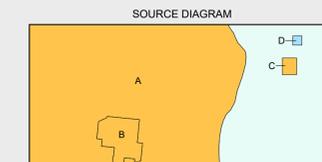
Scale 1:25 000



PERIOD	UNIT	DESCRIPTION	
CENOZOIC	Qhb	Undifferentiated Quaternary sediments (Q).	
	Qhbc	Beach sand (Qhb).	
	Qhbc	Cobble beach deposits (Qhbc).	
	Qhdm	Mobile dune sand (Qhdm).	
	Qhd	Dune sand (Qhd).	
	Qhs	Paralic deposits of clay, silt, sand and minor gravel (Qhs), of modern saltmarsh and tidal flats (Qhs); of unvegetated modern tidal flats (Qhs).	
	Qha	Stream alluvium, swamp and marsh deposits (Qha).	
	Qpsa	Older aeolian dune sand (Qpsa).	
	Qpsd	Stabilised aeolian sand of coastal plain, with underlying marine sand in places (Qpsd).	
	Qpsd	Aeolian and marine sand (unit Qpsa), with preserved relict dune landforms in places (Qpsd).	
MESOZOIC	Qpic	Well-bedded aeolian calcarenite (stiffened calcareous dune sand, "aeolianite") (Qpic).	
	Qf	Ironstone (Qf).	
	TQc	Silicestone (at 245620mE, 5587350mN) (TQc).	
	Tmb	Bioclastic shallow marine limestone (bryozoal calcarenite) (Tmb).	
	Tb	Basalt (Tb).	
	NEO-PROTEROZOIC	Eyyp	Pillowed and tabular lava flows of picritic composition (Shower Droplet Volcanics) (Eyyp).
		Unconformity	Unconformity (not exposed on this sheet).
		PI	Micaceous quartzose siltstone, very fine-grained quartz sandstone and grey-black mudstone (PI), some localities with dominantly sandstone-siltstone (PI); and dominantly siltstone-mudstone with metamorphic biotite (PIb). (PI, PIa, PIb, PIc) - Fraser Formation; poorly exposed on this sheet.
		PIfa	Contact metamorphosed Fraser Formation (PIfa).
		PIfa	Inferred faulted contact.
PIb		Fine-grained quartzose metasediments, metasilstone, quartz-mica schist and phyllite with lower amphibolite facies metamorphic grade (PIb); dominantly metasediments and metasilstone (PIb); dominantly pelitic schist or phyllite (PIb); some localities with metamorphic biotite (PIb); garnet + biotite (PIbg); and staurolite + garnet (PIbg) indicated. (Eb, Ebs, Pbs, Pbsb, Pbsg) - Surprise Bay Formation.	
PIb		Inferred faulted contact.	
PIb		Fine-grained quartzose metasediments, metasilstone, quartz-mica schist and phyllite with lower amphibolite facies metamorphic grade (PIb); dominantly metasediments and metasilstone (PIb); dominantly pelitic schist or phyllite (PIb); some localities with metamorphic biotite (PIb); garnet + biotite (PIbg); and staurolite + garnet (PIbg) indicated. (Eb, Ebs, Pbs, Pbsb, Pbsg) - Surprise Bay Formation.	
PIb		Inferred faulted contact.	
PIb		Fine-grained quartzose metasediments, metasilstone, quartz-mica schist and phyllite with lower amphibolite facies metamorphic grade (PIb); dominantly metasediments and metasilstone (PIb); dominantly pelitic schist or phyllite (PIb); some localities with metamorphic biotite (PIb); garnet + biotite (PIbg); and staurolite + garnet (PIbg) indicated. (Eb, Ebs, Pbs, Pbsb, Pbsg) - Surprise Bay Formation.	
NEO-PROT. PALEOZOIC	Dgns	Hornblende-phyric microgranodiorite porphyry (on Councillor Island at 257020mE, 5587560mN) (Dgns).	
	Dgns	Medium-grained equigranular biotite + minor hornblende monzogranite (See Elephant Granite) (Dgns).	
	Pmt	Tholeiitic metadolerite dykes in Surprise Bay Formation (Pmt).	
	Pma	Strongly fractionated plagioclase-phyric metadolerite in Surprise Bay Formation (Pma).	
	MESO-PROT. PALEOZOIC	Unconformity	Unconformity.

CONTACTS	FAULTS	LINEARS
Geological contact - inferred.	Fault - concealed.	Dune crest.
Geological contact - inferred from magnetic data.	Lineament - visible on aerial photographs.	Lineament - visible in magnetic data.
Geological contact - inferred from radiometric data.	Lineament - visible in magnetic data.	Magnetic gradient or lineament (direction towards lower values indicated).
Geological contact - based on interpretation of aerial photograph.		
Limit of mapping of sub-unit within undifferentiated rock unit.		
Limit of detailed mapping.		

SYMBOL	DESCRIPTION
+	Strike and dip of bedding, facing unknown; horizontal bedding.
+	Strike and dip of plane of primary flattening of pillow.
+	Strike and dip of cleavage of unspecified type and relative age; vertical; parallel to bedding, facing unknown.
+	Strike and dip of primary igneous banding or platy alignment, and schistosity in granite rocks.
+	Strike and dip of kink band, movement sense unspecified.
•	Borehole location with name, depth of rock units encountered, and final depth.
•	Field station for adjacent readings on the map.
•	Notable small outcrop with rock unit indicated.
•	Notable small float or lag occurrence with rock unit indicated.
•	Mineral deposit location - hardrock.
•	Mineral deposit location - alluvial/fallings.
•	Reconnaissance mapping with sparse ground traverses.
•	Remote sensing and/or geophysical interpretation with limited or no ground information.



Geology by J.L. Everard, B.Sc.(Hons), 2022 from the following sources (see source diagram):

A J.L. Everard, 1:25 000 scale geological mapping, 2020-2021.

B G.V. Cumming, 1:25 000 scale geological mapping, 2021.

C Everard, J.L., Calver, C.R., Pemberton, J., Taheri, J. & Dixon, G., 1997. Geology of the islands of southwestern Bass Strait. Tasmanian Geological Survey Record 1997/03.

D Twelvetrees, W.H., 1917. Phosphate deposits in Tasmania. Geological Survey Mineral Resources 1.

REFERENCE THIS MAP AS:

EVERARD J.L. 2022. Digital Geological Atlas 1:25 000 Scale Series, Sheet 2458 Sea Elephant. Mineral Resources Tasmania.

Base data from the LIST, Copyright State of Tasmania.

Map produced by Spatial Information Services, Mineral Resources Tasmania.

Website: www.mrt.tas.gov.au

GDAM - MGA Zone 55. Contour Interval: 20 metres.



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LOCATION DIAGRAM

