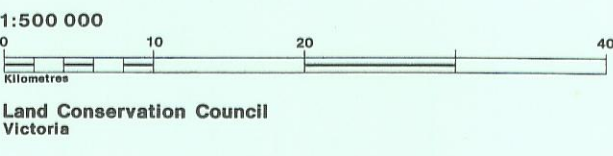


GEOLOGY, MINERAL & STONE PRODUCTION

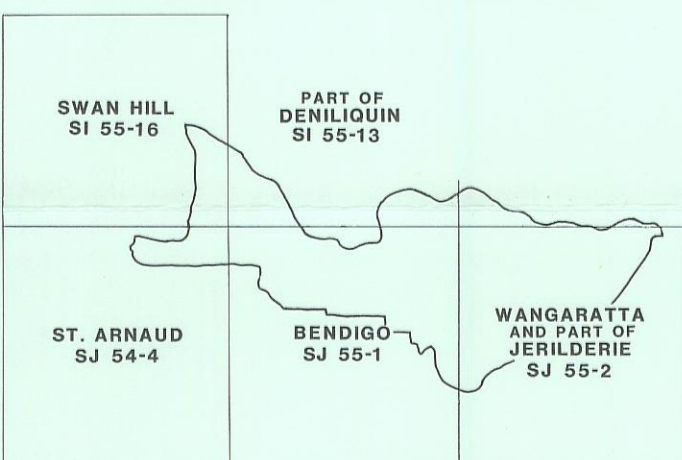
Murray Valley Area



LEGEND

- Geological boundary
 - Normal Fault
 - Reverse Fault
 - Fault Inferred
 - Anticline
 - Syncline
 - Leveed stream course
 - Zone of contact metamorphism
 - Structural lineaments (interpreted from satellite photography)
 - Deep lead-worked out
 - Deep lead-unworked, probable course
 - Bore (on cross-section)
 - Prospective areas for alluvial gold, tin, diamonds
 - Diamonds (alluvial)
 - F Fluorite
 - G Gypsum
 - K Kaolinite
 - IM Iron/Manganese
 - P Phosphorus
 - Q Shire quarries on public land
 - EIL Current Extractive Industry Leases (EIL)
-
- Study area boundary
 - City, town or borough boundary

Key to 1:250 000 geological maps published by Geological Survey of Victoria



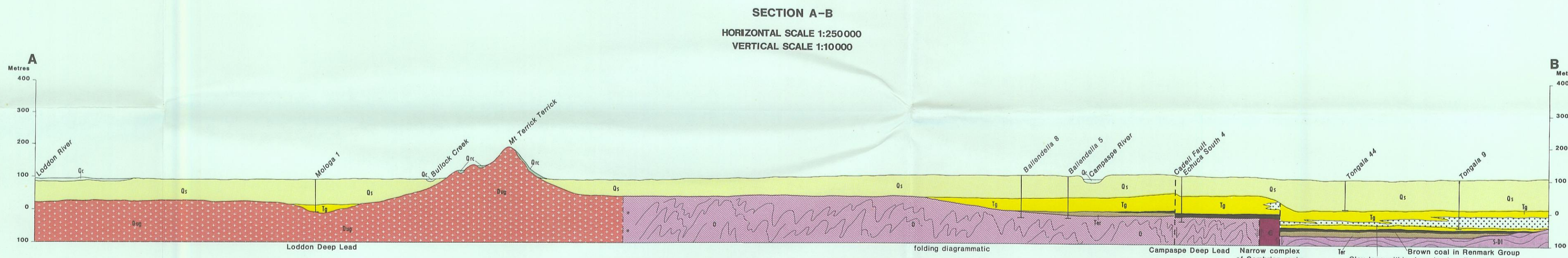
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Grey numbered grid lines are 10,000 metre intervals on the Australian Map Grid, zones 54 & 55. Grid values are shown in full only at the south-west corner of the map.

ERA	PERIOD	EPOCH	TIME SCALE MILLION YEARS	GEOLOGICAL EVENT	SEDIMENTARY						METAMORPHIC
					GLACIAL/PERIGLACIAL	ALLUVIAL	LACUSTRINE/PALUDAL	COLLUVIAL	AEOLIAN	COASTAL	
CENOZOIC	QUATERNARY	RECENT	0			Q1	Q2	Q3	Q4		
		PLEISTOCENE	0-0.1	Initiation of present alluvial system							
	TERTIARY	PLIOCENE	1-8	Renewal of alluvial deposition Marine incursion in the extreme west							
		MIOCENE	5	Minor volcanism in the east							
PALAEOZOIC	DEVONIAN	UPPER	24	Major streams draining highlands, coarse sediment deposited							
		MIDDLE	24	Initiation of subsidence, non-marine deposition							
	SILURIAN	UPPER	446	Major earth movements in the east							
		MIDDLE	446	Marine deposition in geosyncline							
CAMBRIAN	MIDDLE	509									
		LOWER	575	Submarine volcanic activity, igneous intrusion and marine deposition in geosyncline							

Remark Group

- Coonambidgal Formation Q1 Clay, sand and sandy clay with slight soil development, plays deposits; often of grey clay, traces with silt pattern or plains with a network of channels
- Q2 Swamp and lake deposits, clay, silt and mud
- Q3 Clay, sand, gravel, fan deposits, hillwash, scree
- Q4 Source bordering dunes; bedded quartzite sand, yellow to red
- Q5 Lunette deposits, clay, silt, sand, gypsiferous clay and gypsum includes several phases of deposition
- Shepparton Formation Q1 Clay, silt, sand, gravel; surface with numerous leveed stream traces, soil often red-brown
- Perilla Sand T9 Sand, sandstone, silt, clay, shale; white to yellow, lateritized
- T1 Basalt; taichite bearing at Casgrove
- T2 Gravel, sand, conglomerate, mainly quartz; minor clay. Subsurface includes deep lead systems and Calivil Formation in part
- T3 Siltstone, carbonaceous and dolomitic, brown coal and sand, often pyritic and carbonaceous (unit entirely sub-surface)



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		LOWER	575	Submarine volcanic activity, igneous intrusion and marine deposition in geosyncline							

Major Unconformity

- Warby Range Granite Terrick Terrick Granite Pyramid Hill Granite D4 Granite, minor apatite, microgranite
- S1 Undifferentiated mudstone, siltstone, sandstone, minor conglomerate; contact metamorphosed adjacent to granite, forming aureoles of hornfels, quartzite, spotted slate
- S2 Regionally metamorphosed sediments; mica schist, phyllite
- S3 Undifferentiated sandstone, siltstone, shale, black shale, rhythmically interbedded; contact metamorphosed adjacent to granite, forming aureoles of hornfels, quartzite, spotted slate
- G Greenstone, basalt, andesite, dolerite, gabbro, pyroxenite, sepienite, chert, siltstone, minor conglomerate, greywacke, mudstone, agglomerate and tuff

