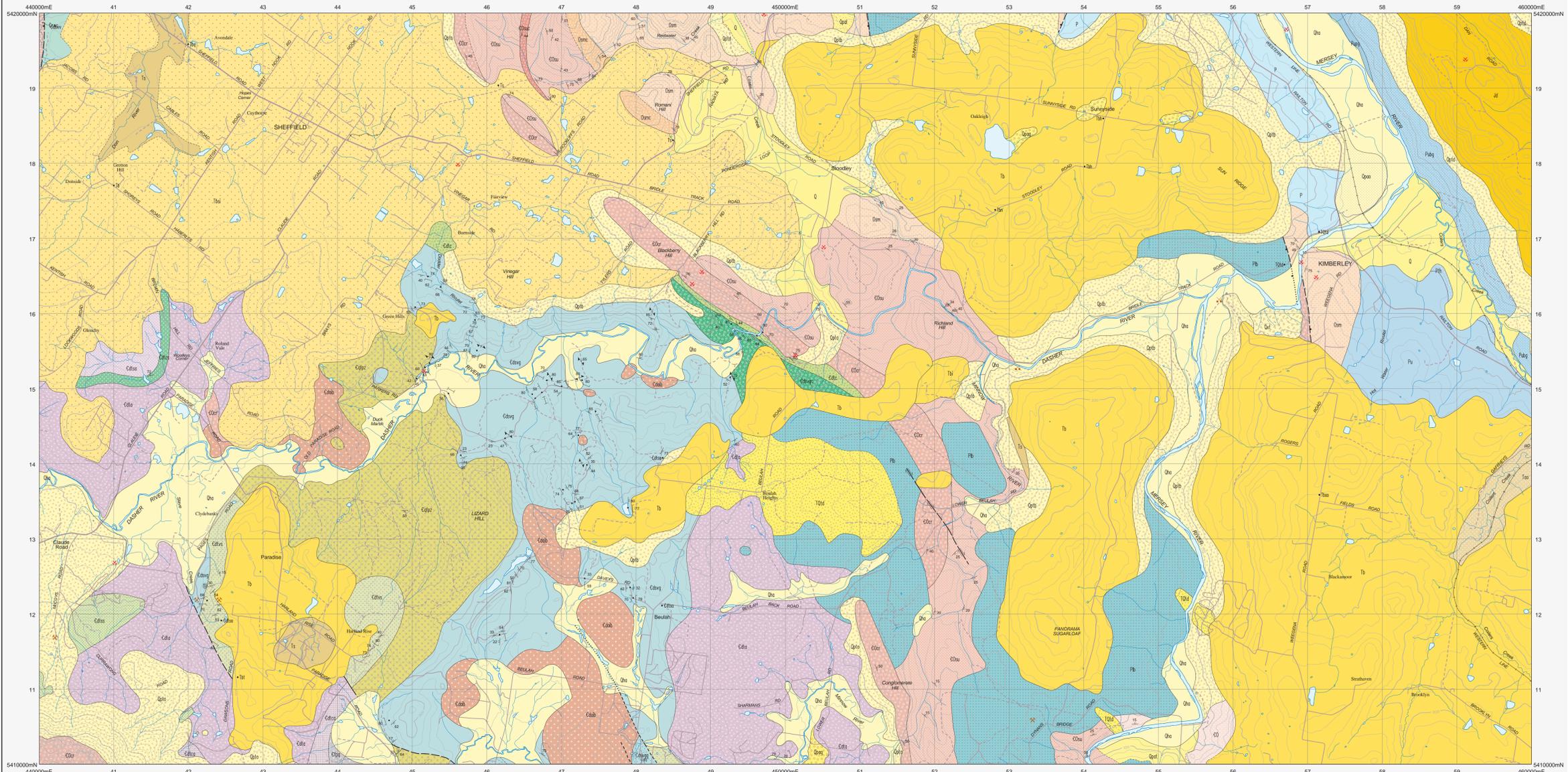


# SHEFFIELD

Scale: 1:25 000



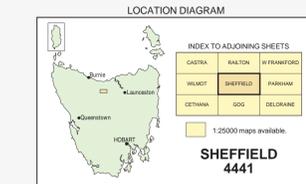
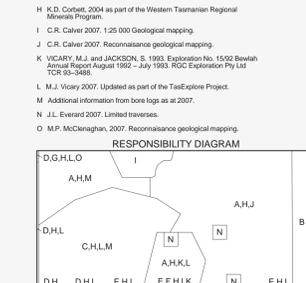
PERIOD	UNIT	DESCRIPTION	
CENOZOIC	HOLOCENE	Qa1	Undifferentiated Quaternary sediments (Q). Landslide deposits predominantly derived from weathered Pleistocene - Neogene rocks (Qa).
		Qa0	Stream and river alluvium (Qa).
		Qpa0	Older alluvium of river terraces (Qpa).
	QUATERNARY	Qpa0	Older alluvium, dominantly of river terraces, dominantly coarse-grained gravel (Qpa).
		Qpa1	Quaternary slope deposits: Quartz sandstone and conglomerate fans (Qpa), Basalt tephra and landslide debris (Qpa), Dolerite tephra (Qpa).
		Qpa2	Clay and alluvial gravel with dolerite boulders in places (Qpa).
		Qpa3	Till, talus and alluvial gravels (Qpa).
	PLEISTOCENE	TQ1a	Boulders of Jurassic dolerite and minor quartzite pebbles in clay; reworked into Quaternary slope deposits in places (TQ).
		Ts1	Erosional surface.
		Ts2	Basalt and intercalated sands, clays and conglomerate; usually deeply weathered; inferred from water bore logs and springs (Ts).
PALEOCENE - NEOCENE	Ts1	Basalt (Ts), quartz tholeiite (Ts), olivine tholeiite (Ts), olivine basalt (Ts), basaltic (Ts), olivine nephelinitic (Ts).	
	Ts2	Sands, clays and conglomerate (Ts). Sand, quartzite gravel and clay, including interbasalt deposits (Mesley Vale Sand) of Oligocene age (Ts).	
	Ts3	Erosional surface.	
PALEOZOIC	CARBONIFEROUS - PERMIAN	Pu	Undifferentiated Permian-Carboniferous sediments (P). Upper glauconitic sequences of pebbly mudstone, pebbly sandstone and limestone (Pu). Sandstone, mudstone and pebbly mudstone with marine fossils (Otago Group) (Pu).
		Pu1	Sandstone, mudstone and pebbly mudstone with marine fossils (Otago Group) (Pu).
	ORDOVICIAN	Ph	Quartz sandstone and shale, carbonaceous in places, and minor conglomerate (Mersey Coal Measures) (Ph).
		Ph1	Poorly sorted pebbly mudstone, sandstone and minor conglomerate, marine fossils present in places (Sprayton Beds) (Ph).
CAMBRIAN	TERRANE (MANT)	Om	Dominantly very fine- to medium-grained, purple, pink or white quartzarenite, locally cross-bedded or bioturbated (Om).
		Om1	Gravels to pebble conglomerate, purple, pink or white, with up to 10% chert clasts (Om).
	WARRANNA SUPERGROUP	CO	Angular unconformity.
		CO1	Pink quartzarenite, cross-bedded in places (CO).
CORRELATE OF ORISKANY GROUP	CO1	Quartzite-derived pebble conglomerate (CO).	
	CO2	Pale pink, quartzite-derived, closed- to open-framework, massive pebble-conglomerate with minor pink quartzarenite beds (CO).	

PERIOD	UNIT	DESCRIPTION	
PALEOZOIC	CAMBRIAN	CO1	Mainly volcaniclastic conglomerate and sandstone with minor mudstone. Sparse quartzite clasts and clasts of granite in places (CO).
		CO2	Quartz-feldspar +/- pyroxene +/- hornblende phyrlic porphyry, intrusive to locally extrusive (CO).
		CO3	Plagioclase-silicoprovane-quartz porphyry, typically massive to brecciated (CO).
		CO4	Mainly quartz-feldspar phyrlic massive volcaniclastic sandstone with some pebble conglomerate with clasts of quartz phyrlic rhyolite and rare quartzite (CO).
		CO5	Andesitic lava and associated volcaniclastic rocks, typically plagioclase-pyroxene phyrlic. Minor plagioclase phyrlic dacite lava, basalt from andesitic volcaniclastic sediments and breccias, includes Shear Andesite (CO).
		CO6	Siliceous conglomerate with quartzite and chert clasts, generally interbedded with coarse sandstone (CO).
		CO7	Dominantly feldspar-quartz-pyroxene phyrlic crystal-rich volcaniclastic sandstone derived from andesitic and rhyolitic volcanics with interbedded vitric and pumiceous volcaniclastic sandstone and finely bedded micaceous siltstone (CO).
		CO8	Andesitic volcaniclastic conglomerate and sandstone. Typically crystal-rich with plagioclase-quartz-pyroxene crystals. Abundant andesite lava and minor quartzite clasts (CO).
		CO9	Mainly andesitic volcaniclastic sandstone with minor siltstone and conglomerate, locally with detrital plagioclase and pyroxene and clasts of andesite. Minor felsic detritus and quartzite clasts in some areas (CO).
		CO10	Marine volcano-sedimentary and sedimentary sequences of sandstone, siltstone, mudstone, conglomerate and breccia with some talus to andesitic volcanic rocks. (Long Range Greywacke) (CO).
TERRANE (MANT)	CO11	Dominantly non-volcanic sandstone and siltstone, typically siliceous-micaceous, massive to thinly bedded (CO).	
	CO12	Dominantly siliceous conglomerate and sandstone, typically rich in quartzite clasts (CO).	
CORRELATE OF ORISKANY GROUP	CO13	Predominantly fine grained ash volcaniclastic siltstone, with minor black-gray siltstone (CO).	
	CO14	Pale to dark gray or black, distinctly bedded and plane laminated to massive or brecciated chert with minor red and gray siliceous hematitic mudstone and siltstone (Borrlington Chert and corrolites) (CO).	

PERIOD	UNIT	DESCRIPTION	
PALEOZOIC	JURASSIC	Jd	Dolerite (Jd).
		Jd1	Andesitic-monzodioritic intrusives with biotite, hornblende, pyroxene, feldspar and apatite. Typically massive, give to brown-weathering. Iron (Jd) radiometric age 43.5 +/- 1.0 Ma from 47937mE 541040mN includes Shear granite and related rocks (CO).
CAMBRIAN	CO15	Quartz-feldspar +/- pyroxene +/- hornblende phyrlic porphyry, intrusive to locally extrusive (CO).	
	CO16	Plagioclase-silicoprovane-quartz porphyry, typically massive to brecciated (CO).	

SYMBOL	DESCRIPTION
—	Geological boundary - position accurate or approximate.
- - -	Inconformable boundary - position accurate or approximate.
- . - . -	Fault - position accurate or approximate.
- - - - -	Fault - inferred.
- . - . - .	Fault - concealed.
—▲—	Normal fault (downtown side indicated) - position accurate or approximate.
—▲—▲—	Normal fault (downtown side indicated) - concealed.
—▲—▲—▲—	Thrust fault (teeth on upper plate) - position accurate or approximate.
—▲—▲—▲—▲—	Strike-slip fault (dextral) - position accurate or approximate.

- Strike and dip of bedding facing known, right way up; vertical facies indicated by single (1/2).
- Strike and dip of bedding facing unknown - dipping vertical.
- Strike and dip of cleavage, type and relative age unspecified - dipping vertical.
- Strike and dip of cleavage or foliation, relative local age 2/2, vertical.
- Notable small outcrop with rock unit indicated.
- Notable small float or log occurrence, with rock unit indicated.
- Field station for adjacent readings on the map.
- Fossil location.
- Mineral deposit location - handrock.
- Mineral deposit location - alluvial/alluvial.
- Construction material/industrial mineral/gemstone location.



REFERENCE THIS MAP AS:  
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GDAS4 - MGA Zone 55. Contour Interval: 20 metres.

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