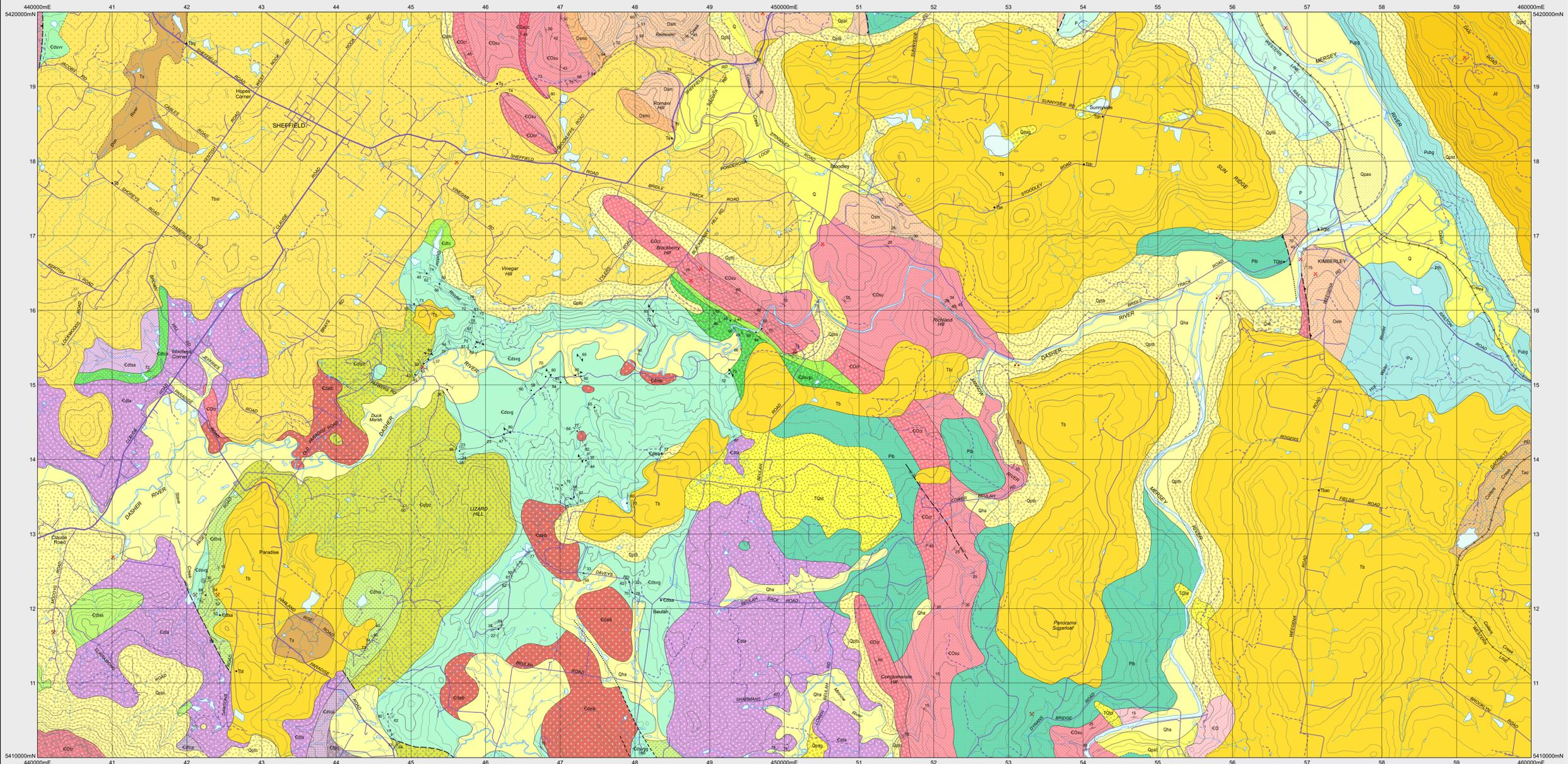


SHEFFIELD

Scale 1:25 000



CENOZOIC	QUATERNARY	
	PLEISTOCENE	HOLOCENE
	Qd	Undifferentiated Quaternary sediments (Q).
	Qha	Stream and river alluvium (Qha).
	Qpa	Older alluvium of river terraces (Qpa).
	Qspg	Older alluvium, dominance of river terraces, dominantly cobble-boulder gravel (Qspg).
	Qst	Quaternary slope deposits: Quartz sandstone and conglomerate talus (Qst). Basalt talus and landslide debris (Qstb). Dolomite talus (Qstd).
	Qclg	Clay and alluvial gravel with dolomite boulders in places (Qclg).
	Qtbl	Till, talus and alluvial gravels (Qtbl).
	Qtd	Boulders of Jurassic dolomite and minor quartzite pebbles in clay, reworked into Quaternary slope deposits in places (Qtd).
	Erosional surface.	
	Tb	Basalt and intercalated sands, clays and conglomerate, usually deeply weathered; inferred from water bore logs and sparse lag (Tb). Basalt (Tb); quartz tholeiite (Tbt); olivine tholeiite (Tto), alkali olivine basalt (Tbo), hawaiite (Tbh), olivine nephelinites (Tbn) indicated. Inferred basalt (Tbi).
	Ts	Sands, clays and conglomerate (Ts). Sand, quartzite gravel and clay, including interbedded deposits (Wesley Vale Sand) of Oligocene age (Tso).
	Erosional surface.	
	Pu	Undifferentiated Permo-Carboniferous sediments (P). Upper glaciomarine sequences of pebbly mudstone, pebbly sandstone and limestone (Pu). Sandstone, mudstone and pebbly mudstone with marine fossils (Bogan Gsp Group) (Pug).
	Pst	Sandstone, mudstone and pebbly mudstone with marine fossils (Psalina Group) (Pst).
	Psh	Quartz sandstone and shale, carbonaceous in places, and minor conglomerate (Mersey Coal Measures) (Psh).
	Ppb	Poorly sorted pebbly mudstone, sandstone and minor conglomerate, marine fossils present in places (Breynton Beds) (Ppb).
	Angular unconformity.	
	Osm	Undifferentiated shallow marine - non-marine siliciclastic conglomerate - sandstone sequences - Owen Group / Gordon Group and correlates (CO). Dominantly very fine- to medium-grained purple, pink or white quartzite, locally cross-bedded or laminated (Osm). Granite to pebble conglomerate, purple, pink or white, with up to 15% chert clasts (Osm).
	Osmc	Granite to pebble conglomerate, purple, pink or white, with up to 15% chert clasts (Osm).
	Angular unconformity.	
	COsu	Pink quartzite, cross-bedded in places (COsu).
	COse	Quartzite-derived pebble conglomerate (COse).
	COcr	Pale pink quartzite-derived, closed- to open-framework, massive pebble-cobble conglomerate with minor pink quartzite beds (COcr).
	Angular unconformity.	

PALEOZOIC	CAMBRIAN	
	TERRELIAN(VAN)	CAMBRIAN SERIES 3
	Ccsc	Mainly volcanoclastic conglomerate and sandstone with minor mudstone. Sparse quartzite clasts and clasts of granite in places (Ccsc).
	Ccspz	Quartz-feldspar + pyroxene + hornblende phytic porphyry. Intrusive to locally extrusive (Ccspz).
	Ccspq	Plagioclase-clinopyroxene-quartz porphyry, typically massive to brecciated (Ccspq).
	Ccst	Mainly quartz-feldspar phytic massive volcanoclastic sandstone with some pebble conglomerate with clasts of quartz phytic rhyolite and rare quartzite (Ccst).
	Ccstb	Andesitic lava and associated volcanoclastic rocks, typically plagioclase-pyroxene phytic. Minor plagioclase phytic dacite lava, basalt lava, andesitic volcanoclastic sediments and breccias. Includes Beulah Andesite (Ccstb).
	Ccstc	Siliceous conglomerate with quartzite and chert clasts, generally interbedded with coarse sandstone (Ccstc).
	Ccstt	Dominantly feldspar-quartz-pyroxene phytic crystal-rich volcanoclastic sandstone derived from andesitic and rhyolitic volcanics with interbedded vitric and pumiceous volcanoclastic sandstone and finely bedded micaceous siltstone (Ccstt).
	Ccstb	Andesitic volcanoclastic conglomerate and sandstone. Typically crystal-rich with plagioclase-quartz-pyroxene crystals. Abundant andesite lava and minor quartzite clasts (Ccstb).
	Ccstc	Mainly andesitic volcanoclastic sandstone with minor siltstone and conglomerate, typically with detrital plagioclase and pyroxene and clasts of andesite. Minor felsic detritus and quartzite clasts in some areas (Ccstc).
	Ccstv	Marine volcano-sedimentary and sedimentary sequences of sandstone, siltstone, mudstone, conglomerate and breccia with some felsic to andesitic volcanics rocks (Doo Range Greywacke) (Ccstv).
	Ccstv	Dominantly non-volcanic sandstone and siltstone, typically siliceous-micaceous, massive to thinly bedded (Ccstv).
	Ccstv	Dominantly siliceous conglomerate and sandstone, typically rich in quartzite clasts (Ccstv).
	Ccstv	Predominantly fine grained ash volcanoclastic siltstone, with minor black-grey siltstone (Ccstv).
	Ccsc	Pale to dark grey or black, distinctly bedded and plane laminated to massive or brecciated chert with minor red and grey siliceous hematitic mudstone and siltstone (Breynton Chert and correlates) (Csc).

PALEOZOIC	INTRUSIVE ROCKS	
	JURASSIC	CAMBRIAN SERIES 3
	Jd	Dolomite (Jd).
	Ccstb	Andesitic-monzodioritic intrusives with biotite, hornblende, pyroxene, feldspar and quartz. Typically massive, pink to brown-weathering. Zircon U-Pb radiometric age 453.5 ± 3.0 Ma from 447537E, 5411546N.
	Ccspz	Quartz-feldspar + pyroxene + hornblende phytic porphyry. Intrusive to locally extrusive (Ccspz).
	Ccspq	Plagioclase-clinopyroxene-quartz porphyry, typically massive to brecciated (Ccspq).

CONTACTS	
—	Geological contact.
- - - - -	Geological contact - inferred.
- - - - -	Unconformable lithological contact.

FAULTS	
- - - - -	Fault.
- - - - -	Fault - inferred.
- - - - -	Fault - concealed.
- - - - -	Normal fault (downtrown side indicated).
- - - - -	Normal fault (upthrown side indicated) - concealed.
- - - - -	Thrust fault (teeth on upper plate).
- - - - -	Strike-slip fault (dextral).

CORRELATES OF WESTERN VOLCANO-SEDIMENTARY SEQUENCE	
—	Geological contact.
- - - - -	Geological contact - inferred.
- - - - -	Unconformable lithological contact.

SOURCE DIAGRAM

Compiled by M.P. McClenaghan, B.Sc.(Hons), Ph.D., 2004 from the following sources (see source diagram):

- A. JENNINGS, I.B., BURNS, K.L., MAYNE, S.J. and ROBINSON, R.G. 1959. Geological Atlas 1:50 000 Series, Sheet 37, Sheffield, Tasmania. Department of Mines.
- B. GULLINE, A.B., BRAYVO, A.P. and NAZU, J.H. 1973. Geological Atlas 1:50 000 Series, Sheet 36 (B155), Frankfort, Tasmania. Department of Mines.
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- D. New 1:25 000 scale mapping by D.C. Green, 1995-1996, D.B. Seymour, 1995-2000 and A.V. Brown, 1993.
- E. CORBETT, K.D. 2004. Updating and revision of the 1:25 000 scale series geological maps covering the Mt Read Volcanics belt in western and northwestern Tasmania. Tasmanian Geological Survey Record 2004/03.
- F. C.R. Calver 2007. Reconnaissance geological mapping.
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- H. VICARY, M.J. and JACKSON, S. 1993. Exploration No. 1592 Beulah Area Report/Exploration Report No. 1592. RIG Exploration Pty Ltd. TOR 93-348.
- I. VICARY, M.J. 2006. Revisions to geological maps in the southern part of the Duff Range/Exploration Report No. 1592, Tasmania with emphasis on Cambrian geology. Tasmanian Geological Survey Record 2006/01.
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- K. J.L. Everard 2007. Limited traverses.

LOCATION DIAGRAM

INDEX TO ADJOINING SHEETS

CASTRA	MALTON	W FRANKFORD
WIMBOT	SHEFFIELD	PANHANA
CETHANA	GOO	DEBORANE

1:25 000 maps available.

SHEFFIELD 4441

REFERENCE THIS MAP AS:
CALVER, C.R., EVERARD, J.L., MCLENNAGHAN, M.P. and VICARY, M.J. (compilers) 2005. Digital Geological Atlas 1:25 000 Series, Sheet 4441 Sheffield, 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
GDA94 - MGA Zone 55. Contour Interval: 20 metres.

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