



INTENSITY STATEMENT
This is a low intensity soil survey. It is based on aerial photograph interpretation and ground observations of the order of one observation to an approximate area of 175 ha.

SCALE 1:100 000
Kilometres
0 2 4 6 8 10 12

TRANSVERSE MERCATOR PROJECTION

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BASE MAP compiled from Cadastral Map 1:100 000 Sheet 8453, supplied by the Division of Information, Queensland Department of Lands and reproduced with the permission of the Surveyor General, Brisbane.

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Mapping unit ¹	Major attributes of principal soil ²	Great Soil Group ³	Main Principal Profile Forms ⁴	Area (ha)	Mapping unit ¹	Major attributes of principal soil ²	Great Soil Group ³	Main Principal Profile Forms ⁴	Area (ha)
SOILS OVERLYING DEVONIAN-CARBONIFEROUS ACID VOLCANIC AND MINOR SEDIMENTARY ROCKS					SOILS OVERLYING CAINOZOIC CLAY SEDIMENTS (continued)				
UNDULATING LOW HILLS TO GENTLY UNDULATING RISES					ELEVATED, LEVEL PLAINS TO UNDULATING RISES				
V1	Violent A cobbly, hard setting, red-brown to dark, loamy sand to sandy clay loam with neutral reaction trend overlying rock or gravel by 300 mm depth	Lithosol	Uc1.23 Uc1.21 Uc1.43 Uc1.43	10020	Hd	Holding A linear, lattice and normal gilligal complex overlying cemented gravel and sandy clay Mounds: firm to self-mulching, red-brown to grey-brown clay with alkaline reaction trend	No suitable group and red, brown and grey clay	Uc6.31 Uc6.38 Uc6.34 Uc6.3 Uc6.2 Uc6.33	4590
SOILS OVERLYING PERMIAN SEDIMENTARY ROCKS					SOILS OVERLYING TERTIARY VOLCANIC AND PYROCLASTIC ROCKS				
Cw	Cherwell A very rocky and gravelly, red-brown to dark, sand to sandy clay loam with acid to neutral reaction trend overlying sandstone by 600 mm depth	Lithosol	Uc1.23 Uc1.21 Uc1.23 Uc1.24	12950	Ck	Clarkel A gravelly, hard setting, red-brown to brown, sandy loam to clay loam, sandy surface soil either overlying an alkaline red-brown to brown (sandy) clay subsoil or directly overlying sandstone	No suitable group	Dr12.12 Dr12.13 Dr12.13 Dy12.12 Uc1.13	3110
Cl	Clarkel A gravelly, hard setting, red-brown to brown, sandy loam to clay loam, sandy surface soil either overlying an alkaline red-brown to brown (sandy) clay subsoil or directly overlying sandstone	No suitable group	Dr12.12 Dr12.13 Dr12.13 Dy12.12 Uc1.13	3110	Dm	Diamond A self-mulching, red-brown to brown, cracking clay with alkaline reaction trend overlying brightly coloured clay interbedded with layers of weathered basalt	Red and brown clay	Uc6.38 Uc6.34 Uc6.39 Uc6.3	2880
Clcv	Clarkel, variant A stony, hard setting, brown to red-brown clay with alkaline reaction trend overlying sedimentary rocks by 450 mm depth	No suitable group	Uc6.31	480	DmFv	Diamond, footslope variant A coarse self-mulching, red-brown to grey-brown, cracking clay with acid to alkaline reaction trend overlying strongly and coarsely mottled, acid, gleyed clay below 400 mm depth	Grey, brown and red clay	Uc6.39 Uc6.38 Uc6.38 Uc6.2 Uc6.34 Uc6.2	1300
Hf	Heyford A duplex soil with sandstone gravel and hard setting, dark to red-brown, loamy sand to sandy clay loam surface and solonch soil and bleached subsoil over an alkaline, mottled grey, yellow and red-brown clay subsoil overlying sandstone	Solodized solonch and solonch soil	Dy3.43 Dy3.33	14520	Mn	Manar A very fine self-mulching, red to brown, cracking clay with alkaline reaction trend overlying brightly coloured clay interbedded with layers of weathered basalt	Red and brown clay	Uc6.38 Uc6.34 Uc6.34 Uc6.3	3200
SOILS OVERLYING TERTIARY VOLCANIC AND PYROCLASTIC ROCKS					Vc	Vicenza A very fine self-mulching, grey to grey-brown, cracking clay with acid to alkaline reaction trend either overlying buried clay layers or overlying strongly and coarsely mottled, acid, gleyed clay	Grey clay	Uc6.24 Uc6.2 Uc6.28 Uc6.29	17350
Cs	Commissioner A very rocky and stony, hard setting, dark, loamy sand to sandy clay loam with acid reaction trend overlying acid to intermediate volcanic rocks by 300 mm depth	Lithosol	Uc1.44 Uc1.44 Uc1.24	2650	Mt	Martyr A normal, lattice and linear gilligal complex overlying cemented gravel and sandy clay Mounds: hard setting to self-mulching, grey to brown clay with neutral to alkaline reaction trend	No suitable group and grey clay	Uc6.33 Uc6.24 Uc6.28 Uc6.31	1840
Cb	Cheesebro A stony, self-mulching to hard setting, dark to red-brown clay with neutral to alkaline reaction trend overlying basalt by 400 mm depth	No suitable group and black earth	Uc6.32 Uc6.33 Uc6.12 Uc6.31	10590	Km	Kenmar A normal, lattice and linear gilligal complex overlying buried layers Mounds: self-mulching to firm, grey to grey-brown clay with acid to alkaline reaction trend	No suitable group and grey clay	Uc6.33 Uc6.25 Uc6.24	7720
Ri	Russell A self-mulching, grey-brown to red-brown, cracking clay with alkaline reaction trend overlying basalt below 900 mm depth	Grey, brown and red clay	Uc6.22 Uc6.32 Uc6.37	54830	KmP	Kenmar, midlone phase Similar to Kenmar, except for the following: - melonhole gilligal (vertical interval 10-30 m, horizontal interval 10-20 m) - may have abundant, fine to coarse, quartz and iron-stained gravel on the surface of mounds; - a generally coarser self-mulching surface in depressions; - sporadic bleach may be occasionally present below the self-mulch in depressions; - the strongly and coarsely mottled, acid, gleyed clay may be encountered below 750 mm depth in depressions	Black earth and grey clay	Uc6.16 Uc6.15	5810
Rigp	Russell, gilligal phase A linear and lattice gilligal, self-mulching, red-brown to grey-brown, cracking clay with alkaline reaction trend overlying basalt below 800 mm depth	Grey, brown and red clay	Uc6.37 Uc6.22 Uc6.38 Uc6.25	710	Md	Midden A lattice, normal and linear gilligal complex overlying buried layers Mounds: self-mulching to hard setting, brown to red-brown clay with neutral to alkaline reaction trend	No suitable group and brown and grey clay	Uc6.31 Uc6.33 Uc6.33 Uc6.35 Uc6.3 Uc6.2	5560
Risp	Russell, stony phase Similar to Russell except for the presence of common to abundant cobble and stone on the surface	Grey clay to black earth	Uc6.22 Uc6.12	420	Wd	Windradene A very fine self-mulching to firm, and occasionally cracking, dark to red, clay and clay loam with alkaline reaction trend overlying limestone by 400 mm depth	Grey clay and black earth	Uc6.24 Uc6.15 Uc6.15	2580
Fn	Falkner A coarse self-mulching, grey-brown to dark, cracking clay with alkaline to neutral reaction trend overlying basalt below 500 mm depth	Grey clay to black earth	Uc6.22 Uc6.12	7870	Yd	Yackadoo A gravelly, hard setting to firm, red-brown, clay and clay loam with neutral to alkaline reaction trend overlying soft and hard limestone with quartz gravel by 300 mm depth	Brown and red clay	Uc6.38 Uc6.39 Uc6.38 Uc6.35 Uc6.3	1140
Nq	Niagara A very fine self-mulching, red to brown, cracking clay with alkaline reaction trend overlying basalt below 900 mm depth	Red and brown clay	Uc6.37 Uc6.38 Uc6.32 Uc6.34	11660	Ar	Aroa A lattice and linear gilligal complex overlying limestone and calcareous marl below 600 mm depth Mounds: self-mulching, red-brown to grey-brown, mainly cracking clay with alkaline reaction trend	Grey, brown and red clay	Uc6.24 Uc6.2 Uc6.28 Uc6.34 Uc6.38 Uc6.3	3480
Rk	Rankin A very fine self-mulching, grey to grey-brown, cracking clay with alkaline reaction trend overlying mottled, light grey and light yellow orange clay below 900 mm depth	Grey clay	Uc6.22 Uc6.27	370	Wv	Wilvic A gravelly, hard setting to firm, red-brown, clay loam, clay or duplex soil with neutral to alkaline reaction trend overlying quartz gravel by 500 mm depth	No suitable group and red clay	Uc6.31 Uc6.33 Uc6.33 Uc6.35 Uc6.3 Uc6.2	3100
Ds	Dickson A firm to hard setting, red clay with neutral to alkaline reaction trend overlying basalt below 600 mm depth	No suitable group	Uc6.31	2700	Mn	Moramana A self-mulching, grey to red-brown, cracking clay with alkaline to neutral reaction trend overlying unconsolidated sediments or buried rock	Grey, brown and red clay	Uc6.24 Uc6.38 Uc6.34 Uc6.35 Uc6.3 Uc6.2	17000
Dsv	Dickson, shallow variant A gravelly, hard setting to very fine self-mulching, red clay with acid to alkaline reaction trend overlying ferruginised gravel or red tuff by 400 mm depth	No suitable group	Uc6.31 Uc6.53	580	Mmgp	Moramana, gilligal phase A linear and lattice gilligal complex overlying cemented gravel and sandy clay Mounds: very fine self-mulching, red-brown to brown, cracking clay with alkaline reaction trend	Brown and red clay	Uc6.3 Uc6.38 Uc6.34 Uc6.3 Uc6.2	2160
Ki	Kerlogan A self-mulching, red to red-brown, mainly cracking clay with neutral to alkaline reaction trend overlying red tuff below 450 mm depth	Red clay and no suitable group	Uc6.37 Uc6.31	560	SOILS OVERLYING CAINOZOIC GRAVELLY SEDIMENTS				
SOILS OVERLYING CAINOZOIC LESTERITE					GENTLY UNDULATING RISES TO LEVEL PLAINS				
Wd	Windradene A very fine self-mulching to firm, and occasionally cracking, dark to red, clay and clay loam with alkaline reaction trend overlying limestone by 400 mm depth	Rendzina - terra rossa soil	Uc6.31 Uc6.32 Uc6.33 Uc6.31 Uc6.38 Uc6.41	10060	Ln	Lebanon A duplex soil with ferruginised gravel and hard setting, dark to brown, loamy sand to sandy clay loam surface, usually with a bleached subsoil, over a generally mottled grey-brown, yellow-brown and red clay subsoil with neutral to alkaline reaction trend overlying ferricrete	Red-brown earth and non-calcic brown soil	Dr12.13 Dr12.12 Dr12.23 Dr12.22	30
Yd	Yackadoo A gravelly, hard setting to firm, red-brown, clay and clay loam with neutral to alkaline reaction trend overlying soft and hard limestone with quartz gravel by 300 mm depth	Terra rossa soil	Uc6.53 Uc6.11 Uc6.31	1510	Lnrv	Lebanon, red variant A duplex soil with hard setting, red, light sandy clay loam to clay loam, sandy surface, occasional pale subsoil, over red clay subsoil with neutral to alkaline reaction trend overlying ferricrete	Red-brown earth and non-calcic brown soil	Dr12.13 Dr12.12 Dr12.23 Dr12.22	30
Ar	Aroa A lattice and linear gilligal complex overlying limestone and calcareous marl below 600 mm depth Mounds: self-mulching, red-brown to grey-brown, mainly cracking clay with alkaline reaction trend	Red and brown clay and no suitable group	Uc6.37 Uc6.25 Uc6.32 Uc6.31 Uc6.33 Uc6.24	7250	Vf	Villafranca A hard setting, red, massive, gradational soil with acid to neutral reaction trend overlying ferricrete	Red earth	Gn2.11 Gn2.12 Uc6.52	2350
SOILS OVERLYING CAINOZOIC LESTERITE					SOILS OVERLYING QUATERNARY ALLUVIUM				
GENTLY UNDULATING RISES TO LEVEL PLAINS					ALLUVIAL PLAINS				
Ln	Lebanon A duplex soil with ferruginised gravel and hard setting, dark to brown, loamy sand to sandy clay loam surface, usually with a bleached subsoil, over a generally mottled grey-brown, yellow-brown and red clay subsoil with neutral to alkaline reaction trend overlying ferricrete	Solodized solonch and solonch soil, and no suitable group (affinities with solodized solonch and solonch soil)	Dy3.33 Dy3.32 Dy3.43 Dy3.42 Dy3.43 Dy3.12	18170	Mm	Moramana A self-mulching, grey to red-brown, cracking clay with alkaline to neutral reaction trend overlying unconsolidated sediments or buried rock	Grey, brown and red clay	Uc6.24 Uc6.38 Uc6.34 Uc6.35 Uc6.3 Uc6.2	17000
Lnrv	Lebanon, red variant A duplex soil with hard setting, red, light sandy clay loam to clay loam, sandy surface, occasional pale subsoil, over red clay subsoil with neutral to alkaline reaction trend overlying ferricrete	Red-brown earth and non-calcic brown soil	Dr12.13 Dr12.12 Dr12.23 Dr12.22	30	Mmgp	Moramana, gilligal phase A linear and lattice gilligal complex overlying cemented gravel and sandy clay Mounds: very fine self-mulching, red-brown to brown, cracking clay with alkaline reaction trend	Brown and red clay	Uc6.3 Uc6.38 Uc6.34 Uc6.3 Uc6.2	2160
Vf	Villafranca A hard setting, red, massive, gradational soil with acid to neutral reaction trend overlying ferricrete	Red earth	Gn2.11 Gn2.12 Uc6.52	2350	SOILS OVERLYING CAINOZOIC GRAVELLY SEDIMENTS				
Ok	Ok A hard setting, red to grey-brown clay with alkaline to neutral reaction trend overlying ferricrete and weathered clay below 500 mm depth	No suitable group	Uc6.31 Uc6.33 Uc6.34	1240	GENTLY UNDULATING RISES TO LEVEL PLAINS				
Okp	Ok, gravel phase A gravelly, hard setting, red to red-brown, clay and gradational soil with neutral to alkaline reaction trend overlying ferricrete and weathered clay below 200 mm depth	No suitable group	Uc6.31 Gn2.12	600	Wv	Wilvic A gravelly, hard setting, red to red-brown, clay loam, clay or duplex soil with neutral to alkaline reaction trend overlying quartz gravel by 500 mm depth	No suitable group	Uc6.21 Uc6.31 Dr12.12	1250
SOILS OVERLYING CAINOZOIC GRAVELLY SEDIMENTS					ELEVATED, LEVEL PLAINS TO UNDULATING RISES				
GENTLY UNDULATING RISES TO LEVEL PLAINS					ELEVATED, LEVEL PLAINS TO UNDULATING RISES				
Wv	Wilvic A gravelly, hard setting, red to red-brown, clay loam, clay or duplex soil with neutral to alkaline reaction trend overlying quartz gravel by 500 mm depth	No suitable group	Uc6.21 Uc6.31 Dr12.12	1250	En	Eleanor An occasionally normal, linear or lattice gilligal, self-mulching, grey-brown to grey, cracking clay with neutral to alkaline reaction trend overlying buried clay, sand and unconsolidated gravel	Grey clay	Uc6.24 Uc6.25 Uc6.29	5930
Ap	Apron A gravelly, hard setting, red to grey-brown, clay loam, clay loam, gradational soil or duplex soil with neutral to alkaline reaction trend overlying quartz gravel and buried layers by 1100 mm depth	No suitable group	Uc6.31 Gn3.12 Uc6.1 Dy1.42 Uc6.51	3530	Enmp	Eleanor, mottled phase Similar to Eleanor except for the following: - a more frequent occurrence of dark colours in the surface soil and upper part of the subsoil; - the presence of a strongly and coarsely mottled, acid, gleyed clay (which may be alkaline in the upper part) below 1200 mm depth	No suitable group	Uc6.31 Uc6.33	840
SOILS OVERLYING CAINOZOIC CLAY SEDIMENTS					ELEVATED, LEVEL PLAINS TO UNDULATING RISES				
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