

**Project Name:** WQA  
**Project Code:** WQA      **Site ID:** B637      **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

**Site Information**

<b>Desc. By:</b>	G.D. Hubble	<b>Locality:</b>	
<b>Date Desc.:</b>	01/09/69	<b>Elevation:</b>	280 metres
<b>Map Ref.:</b>	Sheet No. : 7844 1:100000	<b>Rainfall:</b>	400
<b>Northing/Long.:</b>	144.922222222222	<b>Runoff:</b>	Moderately rapid
<b>Easting/Lat.:</b>	-26.872222222222	<b>Drainage:</b>	Moderately well drained

**Geology**

<b>ExposureType:</b>	Auger boring	<b>Conf. Sub. is Parent. Mat.:</b>	No Data
<b>Geol. Ref.:</b>	Qr	<b>Substrate Material:</b>	Auger boring, Unconsolidated material (unidentified)

**Land Form**

<b>Rel/Slope Class:</b>	No Data	<b>Pattern Type:</b>	Plain
<b>Morph. Type:</b>	No Data	<b>Relief:</b>	15 metres
<b>Elem. Type:</b>	Plain	<b>Slope Category:</b>	No Data
<b>Slope:</b>	0 %	<b>Aspect:</b>	No Data

**Surface Soil Condition (dry):** Hardsetting

**Erosion:**

**Soil Classification**

<b>Australian Soil Classification:</b>		<b>Mapping Unit:</b>	N/A
Acidic Mesotrophic Red Kandosol		<b>Principal Profile Form:</b>	Um5.2
<b>ASC Confidence:</b>		<b>Great Soil Group:</b>	Red earth
All necessary analytical data are available.			

**Site Disturbance:** No effective disturbance other than grazing by hoofed animals

**Vegetation:** Low Strata - Tussock grass, , . \*Species includes - Aristida species  
Tall Strata - Tree, , Mid-dense. \*Species includes - Acacia aneura, Eucalyptus populnea

**Surface Coarse Fragments:** 2-10%, fine gravelly, 2-6mm, , Substrate material

**Profile Morphology**

0 - 0.1 m	Red (2.5YR4/6-Moist); ; Clay loam; Massive grade of structure; Firm consistence; 0-2%, fine gravelly, 2-6mm, Substrate material, coarse fragments; Gradual change to -
0.1 - 0.2 m	Dark red (2.5YR3/6-Moist); ; Clay loam; Massive grade of structure; Firm consistence; 0-2%, fine gravelly, 2-6mm, Substrate material, coarse fragments; Gradual change to -
0.2 - 0.3 m	Dark red (2.5YR3/6-Moist); ; Clay loam (Heavy); Massive grade of structure; Firm consistence; 0-2%, fine gravelly, 2-6mm, Substrate material, coarse fragments; Gradual change to -
0.3 - 0.6 m	Red (2.5YR4/6-Moist); ; Clay loam (Heavy); Massive grade of structure; Firm consistence; 0-2%, fine gravelly, 2-6mm, Substrate material, coarse fragments; Gradual change to -
0.6 - 0.9 m	Red (2.5YR4/6-Moist); ; Clay loam (Heavy); Massive grade of structure; Firm consistence; 0-2%, fine gravelly, 2-6mm, Substrate material, coarse fragments; Gradual change to -
0.9 - 1.2 m	Red (2.5YR4/6-Moist); ; Clay loam (Heavy); Massive grade of structure; Firm consistence; 2-10%, medium gravelly, 6-20mm, Substrate material, coarse fragments; Gradual change to -
1.2 - 1.5 m	Reddish yellow (5YR6/6-Moist); , 10YR66, 20-50% , 0-5mm, Prominent; , 2.5Y72, 20-50% , 0-5mm, Prominent; Clay loam (Heavy); Massive grade of structure; Firm consistence; 10-20%, medium gravelly, 6-20mm, Substrate material, coarse fragments; Diffuse change to -
1.5 - 1.8 m	Brownish yellow (10YR6/5-Moist); , 2.5Y72, 20-50% , 0-5mm, Prominent; , 5YR66, 20-50% , 0-5mm, Prominent; Clay loam; Weak grade of structure, 5-10 mm, Polyhedral; Very firm consistence; 10-20%, medium gravelly, 6-20mm, Substrate material, coarse fragments; Diffuse change to -
1.8 - 2 m	Olive yellow (2.5Y6/5-Moist); , 10YR56, 20-50% , 0-5mm, Prominent; , 10YR72, 20-50% , 0-5mm, Prominent; Clay loam; Weak grade of structure, 5-10 mm, Polyhedral; Very firm consistence; 10-20%, medium gravelly, 6-20mm, Substrate material, coarse fragments;

**Morphological Notes**

**Observation Notes**

**Site Notes**

**Project Name:** WQA  
**Project Code:** WQA      **Site ID:** B637      **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

Project Name: WQA  
Project Code: WQA Site ID: B637 Observation ID: 1  
Agency Name: CSIRO Division of Soils (QLD)

**Laboratory Test Results:**

Depth	pH	1:5 EC	Exchangeable Cations		Exchangeable		CEC	ECEC	ESP
m		dS/m	Ca	Mg	K	Na	Acidity		%
						Cmol (+)/kg			
0 - 0.1	5.1H	0.014B	1.8K	0.68	0.84	0.07	7D		
0.1 - 0.2	5H	0.009B							
0.2 - 0.3	4.9H	0.009B	1.2K	0.41	0.64	0.05	5.9D		
0.3 - 0.6	5H	0.008B	1.4K	0.46	0.62	0.05	5.3D		
0.6 - 0.9	5.1H	0.007B							
0.9 - 1.2	5.4H	0.007B	1K	1.6	0.43	0.15	4.3D		
1.2 - 1.5	6.2H	0.017B							
1.5 - 1.8	7.6H	0.023B	4K	4.7	1.3	1.8	1.6D		
1.8 - 2	8.1H	0.071B							

Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Particle		Size	Analysis	
m	%	C	P	P	N	K	Density	GV	CS	FS	Silt	Clay
		%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.1		0.81A	5B	0.027F	0.069B	0.43B			9C	45	11	35
0.1 - 0.2		0.6A		0.03F	0.057B	0.44B			9C	44	10	37
0.2 - 0.3		0.39A	2B	0.026F	0.046B	0.42B			9C	47	11	34
0.3 - 0.6		0.26A		0.023F	0.041B	0.45B			8C	45	10	36
0.6 - 0.9		0.16A			0.032B				9C	41	10	39
0.9 - 1.2		0.12A		0.022F	0.029B	0.45B			8C	43	10	38
1.2 - 1.5		0.1A			0.02B				14C	44	10	29
1.5 - 1.8		0.04A			0.015B				17C	34	14	36
1.8 - 2	0.03C	0.04A		0.016F	0.014B	0.62B			30C	51	10	9

[illegible]

**Project Name:** WQA  
**Project Code:** WQA      **Site ID:** B637      **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

**Laboratory Analyses Completed for this profile**

10A_NR	Total element - S(%) - Not recorded
15_NR_CA	Exch. basic cations (Ca++) - meq per 100g of soil - Not recorded
15_NR_H	Hydrogen Cation - meq per 100g of soil - Not recorded
15_NR_K	Exch. basic cations (K++) - meq per 100g of soil - Not recorded
15_NR_MG	Exch. basic cations (Mg++) - meq per 100g of soil - Not recorded
15_NR_NA	Exch. basic cations (Na++) - meq per 100g of soil - Not recorded
17A_NR	Total element - K(%) - Not recorded
19B_NR	Calcium Carbonate (CaCO3) - Not recorded
2_LOI	Loss on Ignition (%)
2A1	Air-dry moisture content
3_NR	Electrical conductivity or soluble salts - Not recorded
4_NR	pH of soil - Not recorded
5_NR	Water soluble Chloride - Cl(%) - Not recorded
6A1	Organic carbon - Walkley and Black
7_NR	Total nitrogen (%) - Not recorded
9A_NR	Total element - P(%) - Not recorded
9G_BSES	Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES)
P10_NR_C	Clay (%) - Not recorded
P10_NR_CS	Coarse sand (%) - Not recorded
P10_NR_FS	Fine sand (%) - Not recorded
P10_NR_Z	Silt (%) - Not recorded
XRD_C_II	Illite - X-Ray Diffraction
XRD_C_Is	Interstratified clay minerals - X-Ray Diffraction
XRD_C_Ka	Kaolin - X-Ray Diffraction
XRD_C_Qz	Quartz - X-Ray Diffraction