WQA **Project Name:** 

**Project Code:** WQA Site ID: B631 Observation ID: 1

Agency Name: **CSIRO** Division of Soils (QLD)

**Site Information** 

G.D. Hubble Locality:

Desc. By: Date Desc.: Elevation: 01/09/69 210 metres Sheet No.: 7644 1:100000 Map Ref.: Rainfall: 301 Northing/Long.: 143.86944444444 Runoff: No Data Easting/Lat.: Drainage: -26.525 No Data

Geology

ExposureType: Conf. Sub. is Parent. Mat.: Auger boring No Data

**Substrate Material:** Geol. Ref.: Auger boring, 2 m deep, No Data Q

**Land Form** 

Rel/Slope Class: Gently undulating plains <9m 1-Pattern Type: Plain

No Data Morph. Type: Relief: No Data Elem. Type: Plain Slope Category: No Data 0 % Aspect: No Data Slope:

Surface Soil Condition (dry): Surface crust

**Erosion:** 

**Soil Classification** 

**Australian Soil Classification:** Mapping Unit: N/A Endohypersodic Self-Mulching Red Vertosol Ug5.35 **Principal Profile Form:** ASC Confidence: **Great Soil Group:** Brown clay

Analytical data are incomplete but reasonable confidence.

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

Vegetation:

Tall Strata - Tree, 6.01-12m, Sparse. \*Species includes - None Recorded

Surface Coarse Fragments: 2-10%, coarse gravelly, 20-60mm, subrounded, Quartz

### **Profile Morphology**

A1	0 - 0.1 m	Yellowish red (5YR4/6-Moist); ; Medium clay; Strong grade of structure, 2-5 mm, Granular; Dry; Loose consistence; Abrupt change to -
B2	0.1 - 0.2 m	Yellowish red (5YR4/6-Moist); ; Medium heavy clay; Strong grade of structure, Angular blocky; Dry; Very firm consistence; Very few (0 - 2 %), Gypseous, , Crystals;
B2	0.2 - 0.3 m	Yellowish red (5YR4/6-Moist); ; Medium heavy clay; Strong grade of structure, Angular blocky; Dry; Very firm consistence; Very few (0 - $2$ %), Gypseous, , Crystals;
B2	0.3 - 0.6 m	Yellowish red (5YR4/6-Moist); ; Medium heavy clay; , Lenticular; Dry; Very firm consistence; Very few (0 - $2$ %), Gypseous, , Crystals;
B2	0.6 - 0.9 m	Yellowish red (5YR4/6-Moist); ; Medium heavy clay; , Lenticular; Dry; Very firm consistence; Very few (0 - 2 %), Manganiferous, Medium (2 -6 mm), Soft segregations; Few (2 - 10 %), Gypseous, , Crystals;
B2	0.9 - 1.2 m	Yellowish red (5YR5/6-Moist); ; Medium heavy clay; , Lenticular; Dry; Very firm consistence; Very few (0 - 2 %), Manganiferous, Medium (2 -6 mm), Soft segregations; Few (2 - 10 %), Gypseous, , Crystals;
B2	1.2 - 1.4 m	Yellowish red (5YR5/6-Moist); ; Medium heavy clay; , Lenticular; Dry; Very firm consistence; Very few (0 - 2 %), Manganiferous, Medium (2 -6 mm), Soft segregations; Few (2 - 10 %), Gypseous, , Crystals; Clear change to -
B2	1.4 - 1.5 m	Light yellowish brown (10YR6/4-Moist); , 10YR54, 20-50% , 5-15mm, Distinct; , 2.5YR46, 20-50% , 5-15mm, Distinct; Medium heavy clay; , Lenticular; Dry; Very firm consistence; Few (2 - 10 %), Gypseous, , Crystals;
B2	1.5 - 1.8 m	Light yellowish brown (10YR6/4-Moist); , 10YR54, 20-50% , 5-15mm, Distinct; , 2.5YR46, 20-50% , 5-15mm, Distinct; Medium heavy clay; , Lenticular; Dry; Very firm consistence; Few (2 - 10 %), Gypseous, , Crystals;
B2	1.8 - 2.1 m	Pale brown (10YR6/3-Moist); , 2.5Y84, 20-50% , 5-15mm, Distinct; , 2.5YR46, 20-50% , 5-15mm, Distinct; Medium heavy clay; , Lenticular; Dry; Very firm consistence; Few (2 - 10 %), Gypseous, , Crystals;

### **Morphological Notes**

Project Name: Project Code: Agency Name: WQA

WQA Site ID: B63 CSIRO Division of Soils (QLD) B631 Observation ID: 1

# **Observation Notes**

Site Notes EROMANGA Project Name: Project Code: Agency Name: WQA

WQA Site ID: B63 CSIRO Division of Soils (QLD) B631 Observation ID: 1

## **Laboratory Test Results:**

Depth	pН	1:5 EC		hangeable Vig	Cations K		hangeable Acidity	CEC	EC	CEC	ES	SP
m		dS/m	ou .	"g		Cmol (+)/kg					%	•
0 - 0.1 0.1 - 0.2 0.2 - 0.3 0.3 - 0.6 0.6 - 0.9 0.9 - 1.2 1.2 - 1.4 1.4 - 1.5 1.5 - 1.8 1.8 - 2.1	7.9H 7.8H 7.7H 7.8H 7.9H 7.5H 5.8H 4.8H 4.5H 4.3H	0.36B 2.8B 8.2B 8.5B 10.7B 13.2B 14.2B 33.6B 15.2B		3.6	1.1	1.6	0D					
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Pai GV	rticle Si	ize Aı	nalysis Silt C	tlav
m	%	%	mg/kg	%	%	%	Mg/m3	٥.		%	0	y
0 - 0.1	0.250		23B	0.028F					3C	34	11	51
0.1 - 0.2	0.420		16B	0.025F					3C	31	11	52
0.2 - 0.3 0.3 - 0.6	0.22C 0.19C		15B	0.023F 0.024F					2C 2C	28 28	11 11	49
0.5 - 0.6	0.190			0.024F 0.021F					2C 2C	26 26	11	48 48
0.0 - 0.9	0.290	0.10A	6B	0.02T	0.02				2C 2C	21	9	48
1.2 - 1.4		0.06A	OD	0.021	0.009				1C	22	14	45
1.4 - 1.5		0.06A			0.01				2C	16	13	36
1.5 - 1.8		0.06A	6B		0.014	4B			3C	15	18	42
1.8 - 2.1		0.06A		0.025F	0.016	6B 0.68B			1C	12	16	41
Depth	COLE		Grav	imetric/Vo	lumetric W	ater Conten	ts		K sat	K	unsat	
m		Sat.	0.05 Bar	0.1 Bar g/g	0.5 Bar g - m3/m3		5 Bar 15	Bar	mm/h		mm/h	

<sup>0 - 0.1</sup> 0.1 - 0.2 0.2 - 0.3 0.3 - 0.6 0.6 - 0.9 0.9 - 1.2 1.2 - 1.4 1.4 - 1.5 1.5 - 1.8

**WQA Project Name:** 

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**CSIRO** Division of Soils (QLD) Agency Name:

#### **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 - meg per 100g of soil - Not recorded

15 NR K Exch. basic cations (K++) - meq per 100g of soil - Not recorded Exch. basic cations (Mg++) - med per 100g of soil - Not recorded 15\_NR\_MG 15\_NR\_NA Exch. basic cations (Na++) - meq per 100g of soil - Not recorded

17A\_NR Total element - K(%) - Not recorded

Calcium Carbonate (CaCO3) - Not recorded 19B\_NR

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

Water soluble Chloride - Cl(%) - Not recordede 5\_NR

6A1 Organic carbon - Walkley and Black 7 NR Total nitrogen (%) - Not recorded Total element - P(%) - Not recorded 9A\_NR

9G\_BSES Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES)

P10\_NR\_C Clay (%) - Not recorded

Coarse sand (%) - Not recorded P10\_NR\_CS P10\_NR\_FS Fine sand (%) - Not recorded P10\_NR\_Z Silt (%) - Not recorded XRD\_C\_Hm XRD\_C\_II Hematite - X-Ray Diffraction Illite - X-Ray Diffraction XRD\_C\_Ka XRD\_C\_Mm XRD\_C\_Qz Kaolin - X-Ray Diffraction

Montmorillonite - X-Ray Diffraction

Quartz - X-Ray Diffraction