WQA **Project Name:** 

**Project Code:** WQA Site ID: B626 Observation ID: 1

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

**Site Information** 

Desc. By: Date Desc.: G.D. Hubble Locality:

Elevation: 01/09/69 140 metres Map Ref.: Sheet No.: 7547 1:100000 Rainfall: 293 Northing/Long.: 143.2083333333333 Runoff: Rapid

Easting/Lat.: Drainage: Moderately well drained -25.677777777778

Geology

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

Geol. Ref.: **Substrate Material:** Auger boring, 1.2 m deep, Unconsolidated Q

material (unidentified)

**Land Form** 

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

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

Surface Soil Condition (dry): Hardsetting

**Erosion:** Severe (wind); **Soil Classification** 

**Australian Soil Classification:** Mapping Unit: N/A Eutrophic Subnatric Red Sodosol Principal Profile Form: Dr2.41

ASC Confidence: Great Soil Group: Red-brown earth

All necessary analytical data are available.

**<u>Site Disturbance:</u>** No effective disturbance other than grazing by hoofed animals

**Vegetation:** 

Tall Strata - Tree, 3.01-6m, Very sparse. \*Species includes - Acacia cambagei

**Surface Coarse Fragments:** No surface coarse fragments

## **Profile Morphology**

A1	0 - 0.1 m	Reddish brown (5YR5/4-Moist); Reddish yellow (5YR6/5-Dry); ; Fine sandy loam; Moderate grade of structure, Platy; Fine (1-2mm) macropores, Dry; Weak consistence; Sharp change to -							
A2	0.1 - 0.14 m	Pinkish white (7.5YR8/3-Dry); ; Loam; Massive grade of structure; Fine (1-2mm) macropores, Dry; Weak consistence; Sharp change to -							
B2	0.14 - 0.2 m	Reddish brown (5YR4/4-Moist); ; Medium clay; Moderate grade of structure, 10-20 mm, Angular blocky; Dry; Very firm consistence; Gradual change to -							
B2	0.2 - 0.3 m	Reddish brown (5YR4/4-Moist); ; Medium clay; Moderate grade of structure, 10-20 mm, Angular blocky; Dry; Very firm consistence; Gradual change to -							
B2	0.3 - 0.4 m	Reddish brown (5YR4/4-Moist); ; Medium clay; Moderate grade of structure, 10-20 mm, Angular blocky; Dry; Very firm consistence; Gradual change to -							
B2	0.4 - 0.6 m	Reddish brown (5YR4/4-Moist); ; Light clay; , Angular blocky; Dry; Very firm consistence; Gradual change to -							
B2	0.6 - 0.9 m	Yellowish brown (10YR5/4-Moist); ; Light clay; , Angular blocky; Dry; Very firm consistence; Gradual change to -							
В3	0.9 - 1.2 m	Pale brown (10YR6/3-Dry); , 10YR72, 0-2% , 0-5mm, Faint; , 0-2% , 0-5mm, Faint; Sandy medium clay; , Angular blocky; Dry; Very firm consistence; Diffuse change to -							
С	1.2 - 1.3 m	Light yellowish brown (10YR6/4-Dry); , 10YR72, 20-50% , 5-15mm, Distinct; , 7.5YR55, 20-50% , 5-15mm, Distinct; Sandy medium clay; Massive grade of structure; Dry; Very firm consistence; Few (2 - 10 %), Manganiferous, Fine (0 - 2 mm), Soft segregations; Very few (0 - 2 %), Gypseous, , Crystals;							
	1.3 - 1.5 m	Light yellowish brown (10YR6/4-Dry); , 10YR72, 20-50% , 5-15mm, Distinct; , 7.5YR55, 20-50% , 5-15mm, Distinct; Sandy clay loam (Heavy); Massive grade of structure; Very firm consistence; Few (2 - 10 %), Manganiferous, Fine (0 - 2 mm), Soft segregations; Very few (0 - 2 %), Gypseous, , Crystals;							

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1.5 - 1.8 m

Light yellowish brown (10YR6/4-Dry); , 10YR72, 20-50% , 5-15mm, Distinct; , 7.5YR55, 20-50% , 5-15mm, Distinct; Sandy clay loam (Heavy); Massive grade of structure; Very firm consistence; Few (2 - 10 %), Manganiferous, Fine (0 - 2 mm), Soft segregations; Very few (0 - 2 %), Gypseous, , Crystals;

1.8 - 2 m

White (10YR8/2-Dry); , 7.5YR64, 20-50% , 5-15mm, Distinct; , 10YR58, 20-50% , 5-15mm, Distinct; Light clay; Massive grade of structure; Very firm consistence; Few (2 - 10 %), Manganiferous, Fine (0 - 2 mm), Soft segregations; Very few (0 - 2 %), Gypseous, , Crystals;

## **Morphological Notes Observation Notes**

**Site Notes** 

HAMPOON BORE

Project Name: Project Code: Agency Name: WQA

WQA Site ID: B62 CSIRO Division of Soils (QLD) B626 Observation ID: 1

## **Laboratory Test Results:**

Laboratory Test Results:												
Depth	рН	1:5 EC	Ex Ca	changeable Mg	Cations K	Na E	xchangeable Acidity	CEC	EC	EC	ESP	
m		dS/m		9		Cmol (+)					%	
0 - 0.1	6.3H	0.014B										
0.1 - 0.14	6.3H	0.03B										
0.14 - 0.2	6H	0.17B										
0.2 - 0.3	6.5H	0.29B	7.7K	7.8	0.23	2.4	3.2D					
0.3 - 0.4	6.9H	0.4B										
0.4 - 0.6	6.4H	0.49B										
0.6 - 0.9	6H	0.62B										
0.9 - 1.2	6H	0.81B	9.4K	5.5	0.04	2.2	0D					
1.2 - 1.3	5.9H	0.84B										
1.3 - 1.5	5.9H	0.67B										
1.5 - 1.8	5.7H	1.4B										
1.8 - 2	5.7H	0.69B										
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Pai GV	rticle Si		lysis ilt Clay	
m	%	%	mg/kg		N %	к %	Mg/m3	GV		ъ ъ %	lit Clay	
0 - 0.1		0.11A	8B	0.017F	0.01	B 0.19	nR		28C	55	1 15	
0.1 - 0.14		0.08A	5B	0.0171	0.01		,,,		8C	48	24 18	
0.14 - 0.2		0.00A 0.12A	30		0.02				00	40	24 10	
0.2 - 0.3		0.14A		0.022F		6B 0.38	R.		6C	32	9 53	
0.2 - 0.3		0.09A		0.0221	0.02	0.00	,0		00	32	5 55	
0.4 - 0.6		0.03/\ 0.11A			0.01	aR						
0.6 - 0.9		0.1174			0.01	JD						
0.9 - 1.2		0.04A		0.019F	0.01	B 0.33	RR.		9C	47	12 30	
1.2 - 1.3		0.0471		0.0101	0.01	0.00	,,,		50	71	12 00	
1.3 - 1.5												
1.5 - 1.8												
1.8 - 2				0.018F		0.31	В		20C	38	9 31	
Depth	COLE	Sat.	Gra	vimetric/Vol 0.1 Bar	umetric W 0.5 Bar	ater Cont 1 Bar		Bar	K sat	Ku	ınsat	
m		Jal.	o.oo Ddr		0.5 Bar  - m3/m3		3 Dai 13	Jai	mm/h	m	m/h	
0 - 0.1												
0.1 - 0.14												
0.14 - 0.2												
0.2 - 0.3												
0.3 - 0.4												
0.4 - 0.6												
0.6 - 0.9												
0.9 - 1.2												

<sup>0.6 - 0.9</sup> 0.9 - 1.2 1.2 - 1.3 1.3 - 1.5 1.5 - 1.8 1.8 - 2

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## **Laboratory Analyses Completed for this profile**

Total element - S(%) - Not recorded 10A NR

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++) - meq 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

2\_LŌI Loss on Ignition (%) Air-dry moisture content 2A1

3\_NR Electrical conductivity or soluble salts - Not recorded

4\_NR 5\_NR pH of soil - Not recorded

Water soluble Chloride - Cl(%) - Not recordede

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

Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES)

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

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

Montmorillonite - X-Ray Diffraction

XRD\_C\_Qz Quartz - X-Ray Diffraction