

Project Name: BB
Project Code: BB **Site ID:** B360 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By:	C.H. Thompson	Locality:	
Date Desc.:	03/10/58	Elevation:	60 metres
Map Ref.:	Sheet No. : 9543 1:100000	Rainfall:	1100
Northing/Long.:	153.083333333333	Runoff:	Moderately rapid
Easting/Lat.:	-27.583333333333	Drainage:	Well drained

Geology

ExposureType:	Soil pit	Conf. Sub. is Parent. Mat.:	No Data
Geol. Ref.:	To	Substrate Material:	Auger boring, 3.5 m deep, Non-porous, dense, Basalt

Land Form

Rel/Slope Class:	Gently undulating rises 9-30m 1-3%	Pattern Type:	Low hills
Morph. Type:	Simple-slope	Relief:	30 metres
Elem. Type:	Hillslope	Slope Category:	Very gently sloped
Slope:	2 %	Aspect:	0 degrees

Surface Soil Condition (dry): Soft

Erosion: Not apparent (sheet)

Soil Classification

Australian Soil Classification:		Mapping Unit:	N/A
Ferric Mesotrophic Red Ferrosol		Principal Profile Form:	Gn3.11
ASC Confidence:		Great Soil Group:	Krasnozem
Analytical data are incomplete but reasonable confidence.			

Site Disturbance: No effective disturbance. Natural

Vegetation: Low Strata - Tussock grass, 0.51-1m, Mid-dense. *Species includes - None recorded
Mid Strata - Shrub, 1.01-3m, Sparse. *Species includes - Acacia aulacocarpa, Lantana camara
Tall Strata - Tree, 12.01-20m, Mid-dense. *Species includes - None Recorded

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A1	0 - 0.13 m	Dark reddish brown (5YR3/3-Moist); ; Clay loam; Strong grade of structure, 2-5 mm, Subangular blocky; Moist; Non-plastic; Normal plasticity; Slightly sticky; Field pH 6.2 (pH meter); AbundantClear, Smooth change to -
A3	0.13 - 0.2 m	Dark reddish brown (5YR3/3-Moist); , 2.5YR32, 10-20% , 5-15mm, Faint; , 10-20% , 5-15mm, Faint; Light medium clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Moist; Non-plastic; Normal plasticity; Slightly sticky; Field pH 6 (pH meter); AbundantClear, Smooth change to -
B2	0.2 - 0.41 m	Dark red (2.5YR3/8-Moist); ; Medium clay; Moderate grade of structure, 5-10 mm, Polyhedral; Wet; Slightly plastic; Normal plasticity; Moderately sticky; Field pH 6 (pH meter); Diffuse, Smooth change to -
B2	0.41 - 0.76 m	Red (10R4/8-Moist); ; Medium heavy clay; Moderate grade of structure, 5-10 mm, Polyhedral; Moist; Slightly plastic; Normal plasticity; Slightly sticky; Very few (0 - 2 %), Manganiferous, Fine (0 - 2 mm), Concretions; Field pH 6.1 (pH meter); Diffuse, Smooth change to -
B2	0.76 - 1.27 m	Red (10R4/8-Moist); ; Medium heavy clay; Moderate grade of structure, 5-10 mm, Polyhedral; Moist; Slightly plastic; Normal plasticity; Slightly sticky; Very few (0 - 2 %), Manganiferous, Fine (0 - 2 mm), Concretions; Field pH 6 (pH meter); Diffuse, Smooth change to -
B2	1.27 - 1.68 m	Red (10R4/8-Moist); , 10YR68, 2-10% , 0-5mm, Faint; , 2-10% , 0-5mm, Faint; Heavy clay; Moderate grade of structure, 5-10 mm, Polyhedral; Moist; Slightly plastic; Normal plasticity; Slightly sticky; Very few (0 - 2 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Field pH 5.7 (pH meter); Diffuse, Smooth change to -
B3	1.68 - 2.18 m	Red (10R4/8-Moist); , 7.5YR66, 2-10% , 15-30mm, Faint; , 2-10% , 15-30mm, Faint; Heavy clay; Moderate grade of structure, 5-10 mm, Angular blocky; Moist; Slightly plastic; Normal plasticity; Slightly sticky; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Field pH 5.6 (pH meter); Diffuse, Smooth change to -

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B3	2.18 - 2.74 m	Red (2.5YR5/8-Moist); , 7.5YR66, 20-50% , 0-5mm, Faint; , 2.5Y75, 20-50% , 0-5mm, Faint; Heavy clay; Moderate grade of structure; Moist; Slightly plastic; Normal plasticity; Slightly sticky; Very many (50 - 100 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Field pH 5.3 (pH meter); Diffuse, Smooth change to -
B3	2.24 - 3.18 m	Red (2.5YR5/8-Moist); , 10YR88, 20-50% , 0-5mm, Faint; , 2.5Y71, 20-50% , 0-5mm, Faint; Heavy clay; Moist; Slightly plastic; Normal plasticity; Slightly sticky; Many (20 - 50 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Field pH 4.9 (pH meter); Diffuse, Smooth change to -
B3	3.18 - 3.58 m	Dark red (10R3/6-Moist); , 10YR88, 10-20% , 5-15mm, Prominent; , 2.5Y71, 10-20% , 5-15mm, Prominent; Heavy clay; Moderately moist; Slightly plastic; Normal plasticity; Slightly sticky; Many (20 - 50 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Field pH 4.4 (pH meter); Diffuse, Smooth change to -
B3	3.58 - 4.47 m	; Heavy clay;
B3	4.47 - 4.83 m	; Heavy clay;

Morphological Notes

B3 Layer continues

Observation Notes

Site Notes

RUNCORN

Observation ID: 1

Laboratory Test Results:

Depth	pH	1:5 EC	Ca	Exchangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%
0 - 0.13	6.2H	0.01C	5.7K	3	0.15	0.07		21.8J		0.32
0.13 - 0.2	6H	0.01C								
0.2 - 0.41	6H	0.01C								
0.41 - 0.76	6.1H	0.01C	1.6K	3.4	0.02	0.26		12.7J		2.05
0.76 - 1.27	6H	0.01C								
1.27 - 1.68	5.7H	0.01C								
1.68 - 2.18	5.6H	0.01C								
2.18 - 2.74	5.3H	0.02C								
2.74 - 3.18	4.9H	0.02C								
3.18 - 3.58	4.4H	0.02C								
3.58 - 4.47	5.1H	0.02C	0.27K	16.4	0.17	1.7		32.1J		5.30
4.47 - 4.83	5.4H	0.01C								

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 - 0.13		2.76E	2C	0.014F	0.17B				16C	23	22	34
0.13 - 0.2		1.53E							13C	21	18	46
0.2 - 0.41		0.38E										
0.41 - 0.76				0.005F					7C	13	12	70
0.76 - 1.27												
1.27 - 1.68												
1.68 - 2.18												
2.18 - 2.74								60	12C	10	14	66
2.74 - 3.18								14				
3.18 - 3.58								4				
3.58 - 4.47									4C	13	13	71
4.47 - 4.83				0.009F								

[illegible]

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Laboratory Analyses Completed for this profile

15_NR_CA	Exch. basic cations (Ca++) - meq per 100g of soil - Not recorded
15_NR_CEC	CEC - 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
2A1	Air-dry moisture content
3A_TSS	Electrical conductivity or soluble salts - Total soluble salts %
4_NR	pH of soil - Not recorded
5_NR	Water soluble Chloride - Cl(%) - Not recorded
6Z	Organic carbon (%) - Not recorded
7_NR	Total nitrogen (%) - Not recorded
9_NR	Available P (mg/kg) - Not recorded
9A_NR	Total element - P(%) - Not recorded
P10_GRAV	Gravel (%)
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