DD **Project Name:**

Project Code: B190 Observation ID: 1 DD Site ID:

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

Site Information

Desc. By: Date Desc.: C.H. Thompson Locality:

Elevation: 22/10/53 427 metres Map Ref.: Sheet No.: 9242 1:100000 Rainfall: 610

Northing/Long.: Runoff: 151.525 Moderately rapid Easting/Lat.: -27.558055555556 Drainage: Moderately well drained

<u>Geology</u>

ExposureType: Conf. Sub. is Parent. Mat.: Soil pit No Data

Geol. Ref.: **Substrate Material:** Auger boring, 1.5 m deep, Basalt Tm

Land Form

Rel/Slope Class: Undulating low hills 30-90m 3-Pattern Type: Low hills

Morph. Type: No Data Relief: 30 metres Elem. Type: Pediment Slope Category: No Data 3.5 % Aspect: No Data Slope:

Surface Soil Condition (dry): Self-mulching

Erosion:

Soil Classification

Australian Soil Classification: Mapping Unit: Epicalcareous-Endohypersodic Self-Mulching Black Vertosol **Principal Profile Form:** Ug5.16

Black earth Great Soil Group: **ASC Confidence:**

All necessary analytical data are available.

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

Vegetation:

Tall Strata - Tussock grass, 0.26-0.5m, Sparse. *Species includes - Aristida species, Danthonia species,

Sporobolus

elongatus

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

AB	0 - 0.1 m	Black (10YR2/1-Dry); ; Heavy clay; Strong grade of structure, <2 mm, Granular; Moist; Weak consistence; 0-2%, Basalt, coarse fragments; Field pH 7.6 (pH meter); Clear change to -
B2	0.1 - 0.46 m	Black (10YR2/1-Dry); ; Heavy clay; Moderate grade of structure, 20-50 mm, Angular blocky; Moist; Firm consistence; 0-2%, subrounded, coarse fragments; Field pH 8.5 (pH meter); Gradual change to -
B2	0.46 - 0.58 m	Black (10YR2/1-Dry); ; Heavy clay; Moderate grade of structure, Lenticular; Moderate grade of structure, Angular blocky; Moist; Very firm consistence; 0-2%, subrounded, coarse fragments; Field pH 8.7 (pH meter); Gradual change to -
B2	0.58 - 0.89 m	Very dark grey (10YR3/1-Dry); ; Heavy clay; Moderate grade of structure, Lenticular; Moderate grade of structure, Angular blocky; Moist; Firm consistence; 0-2%, subrounded, coarse fragments; Few (2 - 10 %), Calcareous, , Nodules; Field pH 8.7 (pH meter); Gradual change to -
B2	0.89 - 1.09 m	Very dark greyish brown (10YR3/2-Dry); ; Heavy clay; Moderate grade of structure, Lenticular; Moderate grade of structure, Angular blocky; Moist; Firm consistence; 0-2%, subrounded, coarse fragments; Few (2 - 10 %), Calcareous, , Nodules; Very few (0 - 2 %), Gypseous, , Crystals; Field pH 8.7 (pH meter); Diffuse change to -
	1.09 - 1.3 m	Dark brown (10YR3/3-Dry); , 10YR63; Heavy clay; Moderate grade of structure, Lenticular; Weak grade of structure, Angular blocky; Weak consistence; 2-10%, Shale, coarse fragments; Few (2 - 10 %), Calcareous, , Nodules; Very few (0 - 2 %), Gypseous, , Crystals; Field pH 8.8

Morphological Notes

Observation Notes

0-10CM GRANULAR GRADING TO BLOCKY STRUCTURE

Site Notes

DARLING DOWNS

Project Name: Project Code: Agency Name: DD

DD Site ID: B19
CSIRO Division of Soils (QLD) B190 Observation ID: 1

Laboratory Test Results:

Depth	рН	1:5 EC		angeable Ig	Cations K	E: Na	xchangeable Acidity	CEC	E	CEC	E	SP
m		dS/m	Ca IVI	ig	K	Cmol (+)/					9,	6
0 - 0.1	7.6H	0.04B										
0.1 - 0.46	8.5H	0.2B	38.4K	15.8	0.87	8.4			6	3.4E		
0.46 - 0.58	8.7H	0.56B	00 EV	40.0	0.0	40				CCE		
0.58 - 0.89 0.89 - 1.09	8.7H 8.7H	0.72B 1.08B	29.5K	19.6	0.8	16				66E		
1.09 - 1.3	8.8H	1.06B										
1.00 1.0	0.011	1.070										
5	0.000			-		T	5 "	_				
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	GV		SIZE P	nalysis Silt (`lav
m	%	%	mg/kg	%	%	%	Mg/m3	GV	Co	%	Siit (Jiay
0 - 0.1		3.82E	1141C	0.15F	0.2	6B		1	7C	23	20	44
0.1 - 0.46	0.4C	-		0.244F					5C	19	15	55
0.46 - 0.58		1.55E										
0.58 - 0.89	4.35C		1400C	0.109F	0.0	9B		3	3C	15	19	56
0.89 - 1.09	0.050	0.48E	7000	0.440				4.4	200	40	40	C4
1.09 - 1.3	9.05C	0.26A	700C	0.143F				11	2C	13	13	61
Depth	COLE								K sat	t	K unsat	
m		Sat.	0.05 Bar	0.1 Bar g/g	0.5 Bar ı - m3/m	1 Bar 3	5 Bar 15	вar	mm/h	1	mm/h	

0 - 0.1 0.1 - 0.46 0.46 - 0.58 0.58 - 0.89 0.89 - 1.09 1.09 - 1.3

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Laboratory Analyses Completed for this profile

15 NR Sum of Ex. cations + Ex. acidity - Not recorded

15_NR_CA Exch. basic cations (Ca++) - meq 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 Exch. basic cations (Na++) - meq per 100g of soil - Not recorded 15 NR MG 15_NR_NA

19B_NR Calcium Carbonate (CaCO3) - Not recorded

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

3_NR Electrical conductivity or soluble salts - Not recorded

4_NR pH of soil - Not recorded

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

Organic carbon - Walkley and Black 6A1 Organic carbon (%) - Not recorded 6Z 7_NR Total nitrogen (%) - Not recorded Available P (mg/kg) - Not recorded Total element - P(%) - Not recorded 9_NR 9A_NR

P10_GRAV Gravel (%)

P10_NR_C

Clay (%) - Not recorded Coarse sand (%) - Not recorded Fine sand (%) - Not recorded P10_NR_CS P10_NR_FS P10_NR_Z Silt (%) - Not recorded