Project Name: WQR

B438 Observation ID: 1 **Project Code:** WQR Site ID:

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

Site Information

Desc. By: G.D. Hubble Locality:

Date Desc.: Elevation: 259 metres 04/06/60 Map Ref.: Sheet No.: 8743 1:100000 Rainfall: 544 Northing/Long.: 149.241666666667 Runoff: Rapid

Moderately well drained Easting/Lat.: -27.1986111111111 Drainage:

Geology

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

Geol. Ref.: **Substrate Material:** Soil pit, 0.91 m deep, Sandstone No Data

Land Form

Rel/Slope Class: Rolling rises 9-30m 10-32% Pattern Type: Rises Morph. Type: No Data Relief: 10 metres Elem. Type: Slope Category: Plain No Data 0 % Aspect: No Data Slope:

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification: N/A Mapping Unit: Epicalcareous Epipedal Black Vertosol Principal Profile Form: Ua5.12 ASC Confidence: **Great Soil Group:** Brown clay

All necessary analytical data are available.

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

Vegetation: Low Strata - Tussock grass, , Sparse. *Species includes - None recorded

Tall Strata - Tree, 6.01-12m, Isolated plants. *Species includes - None Recorded

Surface Coarse Fragments: 0-2%, stony, 200-600mm,

Profile Morphology

AB 0 - 0.1 m Dark brown (7.5YR3/2-Moist); ; Medium heavy clay; Strong grade of structure, <2 mm, Granular; Moist; Weak consistence; 0-2%, stony, 200-600mm, coarse fragments; Field pH 7 (pH meter); Abundant, fine (1-2mm) roots; Clear change to -Dark brown (7.5YR3/2-Moist); ; Heavy clay; Strong grade of structure, 10-20 mm, Polyhedral; B2 0.1 - 0.25 m Moist; Weak consistence; 0-2%, rounded, Substrate material, coarse fragments; Very few (0 -2 %), Calcareous, , Nodules; Field pH 7.5 (pH meter); Abundant, fine (1-2mm) roots; Gradual B2 0.25 - 0.51 m Dark brown (7.5YR3/2-Moist); ; Heavy clay; Strong grade of structure, 10-20 mm, Polyhedral; Moderately moist; Very firm consistence; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 8.4 (pH meter); Many, fine (1-2mm) roots; Gradual change to -B2 0.51 - 0.76 m Dark greyish brown (10YR4/2-Moist); ; Heavy clay; Strong grade of structure, 50-100 mm, Lenticular; Moderately moist; Strong consistence; Few (2 - 10 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 8.5 (pH meter); FewDiffuse change to Dark greyish brown (10YR4/2-Moist); ; Light medium clay; Weak grade of structure, Lenticular; **B**3 0.76 - 0.91 m

Moderately moist; Very firm consistence; Few (2 - 10 %), Calcareous, , Nodules; Field pH 8.7

(pH meter); Diffuse change to -

; Few (2 - 10 %), Calcareous, , Nodules; Field pH 8.8 (pH meter); 0.91 - 1.07 m

Morphological Notes

Pale yellow (2.5Y7/5) speckled weathered sandstone.

Observation Notes

0-10CM GRANULAR GRADING TO POLYHEDRAL STRUCTURE: SUBSTRATE IS FELDSPATHIC SANDSTONE:

Site Notes

SURAT

Project Name: Project Code: Agency Name: WQR

WQR Site ID: B43 CSIRO Division of Soils (QLD) B438 Observation ID: 1

Laboratory Test Results:

Euboratory root Roodito.												
Depth	pН	1:5 EC		nangeable Mg	Cations K	Na E	xchangeable Acidity	CEC		ECEC	E	SP
m		dS/m		J		Cmol (+)					9	6
0 - 0.1 0.1 - 0.25	7H 7.5H	0.03B 0.05B	31K	8.8	1.1	0.34	3.1D					
0.25 - 0.51	8.4H	0.05B	35.3K	10.8	0.37	1.1	0D					
0.51 - 0.76 0.76 - 0.91	8.5H 8.7H	0.06B 0.07B	35K	11.8	0.3	2	0D					
0.91 - 1.07	8.8H	0.07B										
Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Pa	rticle	Size	Analysis	
m	%	C %	P mg/kg	P %	N %	K %	Density Mg/m3	GV	cs	FS %	Silt	Clay
0 - 0.1		1.1A	30C	0.028F	0.11	15B		0	6C	33	10	47
0.1 - 0.25		0.72A						0	6C	29	12	50
0.25 - 0.51	0.510	0.68A		0.025F	0.07	76B		0	5C	30	11	49
0.51 - 0.76	1.3C	0.61A							6C	28	11	50
0.76 - 0.91	1.9C							2	11C	41	13	30
0.91 - 1.07	4.9C			0.063F								
Depth	COLE	COLE Gravimetric/Volumetric Water Contents K sat K unsat										
m		Sat.	0.05 Bar	0.1 Bar g/g	0.5 Bar g - m3/m	1 Bar 3	5 Bar 15 I	Bar	mm	/h	mm/h	

0 - 0.1 0.1 - 0.25 0.25 - 0.51 0.51 - 0.76 0.76 - 0.91 0.91 - 1.07

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Laboratory Analyses Completed for this profile

Exch. basic cations (Ca++) - meq per 100g of soil - Not recorded Hydrogen Cation - meq per 100g of soil - Not recorded 15 NR CA

15_NR_H

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

2A1 Air-dry moisture content

3_NR Electrical conductivity or soluble salts - Not recorded

pH of soil - Not recorded 4_NR

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

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

Gravel (%)

P10_GRAV 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