Project Name: Hardsetting Soils

Project Code: HS Site ID: CP293 Observation ID: 1

Agency Name: CSIRO Division of Soils (ACT)

Site Information

Desc. By: C.J. Chartres Locality: Southeast of 'The Rock'. On the southern edge of

Lake Plain.

Date Desc.: 01/01/92 Elevation: No Data Map Ref.: Sheet No.: 8327 1.100000 Rainfall: No Data Northing/Long.: 6094600 AMG zone: 55 Runoff: No Data Easting/Lat.: 513850 Datum: AGD66 Drainage: No Data

Geology

ExposureType: Undisturbed soil core Conf. Sub. is Parent. Mat.: No Data Geol. Ref.: No Data Substrate Material: No Data

Land Form

Rel/Slope Class:No DataPattern Type:No DataMorph. Type:Lower-slopeRelief:No DataElem. Type:HillslopeSlope Category:No DataSlope:%Aspect:45 degrees

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification: Mapping Unit: N/A
N/A Principal Profile Form: N/A
ASC Confidence: Great Soil Group: N/A

Confidence level not specified

Site Disturbance:

Vegetation:

Surface Coarse Fragments:

Profile Morphology

Α1 0 - 0.13 m Dark brown (10YR3/3-Moist); ; Loam; Moderate grade of structure, <2 mm, Granular; Weak consistence; Many A2 0.13 - 0.21 m Brown (10YR5/3-Moist); ; Loam; Weak grade of structure, 5-10 mm, Subangular blocky; Very weak consistence; Many ВА 0.21 - 0.4 m Yellowish brown (10YR5/4-Moist); ; Silty clay loam; Weak grade of structure, 20-50 mm, Prismatic: Firm consistence: Common B21t Yellowish brown (10YR5/6-Moist); ; Silty clay; Weak grade of structure, 10-20 mm, Subangular 0.4 - 0.71 m blocky; Firm consistence; Few R_{22t} 0.71 - 1 m Yellowish brown (10YR5/6-Moist); ; Silty clay; Weak grade of structure, 5-10 mm, Subangular blocky; Weak consistence; Few BC1 1 - 1.35 m Yellowish brown (10YR5/6-Moist); ; Silty clay loam; Massive grade of structure; Firm Yellowish brown (10YR5/6-Moist); , 7.5YR56, 10-20% , 5-15mm, Distinct; Silty clay loam; BC₂ 1.35 - 1.75 m Massive grade of structure; Firm consistence; BC3 1.75 - 2.15 m Yellowish brown (10YR5/4-Moist); , 10YR63, 10-20%, 5-15mm, Faint; Silty clay; Massive grade of structure; Firm consistence; BC4 2.15 - 2.6 m Yellowish brown (10YR5/4-Moist); , 10YR63, 10-20% , 5-15mm, Prominent; Silty clay; Massive grade of structure; Firm consistence;

Morphological Notes

A2 American system, horizon is E.

BA American system, horizon is BE. Fine sand and silt coatings on prism faces in 21-71 cm

horizons.

B21t American system, horizon is Bt1. Fine sand and silt coatings on prism faces in 21-71 cm

horizons.

B22t American system, horizon is Bt2.

Observation Notes

Soil Taxonomy, Typic Natrixeralf, fine.

Site Notes

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Laboratory Tost Posults:

<u>Laboratory</u>	Test Re	sults:										
Depth	pН	1:5 EC		hangeable Vig	Cations K	Na	Exchangeable Acidity	CEC		ECEC	ı	ESP
m		dS/m	Ca i	"g	N	Cmol (+						%
0 - 0.13 0.13 - 0.21 0.21 - 0.4 0.4 - 0.71 0.71 - 1 1 - 1.35	5.51A 6.11A 6.69A 8.47A 8.9A 8.94A	0.09A 0.04A 0.09A 0.14A 0.19A 0.2A	3.1E	0.61 0.82 3.6 6.8 8.2 9.3	0.7 0.58 0.54 0.8 0.99	0.11 0.19 1.1 2.5 3.4 4.5						
1.35 - 1.75 1.75 - 2.15 2.15 - 2.6	8.93A 8.97A 8.81A	0.32A 0.41A 0.38A		0.0		4.0						
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Density	Pa GV	rticle CS	FS	Analysis Silt	
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.13 0.13 - 0.21 0.21 - 0.4 0.4 - 0.71 0.71 - 1 1 - 1.35 1.35 - 1.75 1.75 - 2.15 2.15 - 2.6		1.46C 0.48C 0.31C							13D 14D 12D 11D 8D 7D 1D	51 52 42 37 30 23	16 15 12 11 9 10	18 17 33 40 52 56
Depth	COLE	Sat.	Gravimetric/Volumetric					Bar	K sa	at	K unsat	
m		Sal.	v.və bar		0.5 Bar /g - m3/m		3 DAI 13	Dai	mm/	/h	mm/h	
0 - 0.13 0.13 - 0.21 0.21 - 0.4												

0.21 - 0.4 0.4 - 0.71 0.71 - 1 1 - 1.35 1.35 - 1.75 1.75 - 2.15 2.15 - 2.6

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Laboratory Analyses Completed for this profile

13A1_AL 13A1_FE 13A1_MN 13A1_SI	Oxalate-extractable aluminium Oxalate-extractable iron Oxalate-extractable manganese Oxalate-extractable silicon
13C1_AL	Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon
13C1_FE	Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon
13C1_SI	Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon
15C1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_K	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_MG	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_NA	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
1514	CEC measurement - titration of ammonium and chloride ions
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
6B3	Total organic carbon - high frequency induction furnace, infrared

Total organic carbon - high frequency induction furnace, infrared Clay (%) - Plummet balance
Coarse sand (%) - Plummet balance
Fine sand (%) - Plummet balance
Silt (%) - Plummet balance 6B3 P10_PB_C P10_PB_CS P10_PB_FS P10_PB_Z