Project Name: QUA
Project Code: QUA **Site ID:** H91 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (TAS)

Site Information

Desc. By: J. Loveday
Date Desc.: 24/02/54
Map Ref.: Sheet No. : 8214 1:100000
Northing/Long.: 146.933333333333
Easting/Lat.: -41.6166666666667
Locality: 4.1km north of Bracknell:
Elevation: 200 metres
Rainfall: 850
Runoff: Moderately rapid
Drainage: Imperfectly drained

Geology

ExposureType: Soil pit
Geol. Ref.: No Data
Conf. Sub. is Parent. Mat.: No Data
Substrate Material: Basalt

Land Form

Rel/Slope Class: No Data
Morph. Type: Mid-slope
Elem. Type: Hillslope
Slope: 0 %
Pattern Type: Low hills
Relief: No Data
Slope Category: Very gently sloped
Aspect: No Data

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:
Haplic Eutrophic Red Ferrosol
ASC Confidence:
All necessary analytical data are available.
Mapping Unit: N/A
Principal Profile Form: Uf
Great Soil Group: Krasnozem

Site Disturbance: Complete clearing. Pasture, native or improved, cultivated at some stage

Vegetation:

Surface Coarse Fragments:

Profile Morphology

A	0 - 0.064 m	Dark reddish brown (5YR3/4-Moist); ; Light clay; , Granular; Moderately moist; Weak consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), Concretions; Diffuse change to -
A	0.064 - 0.11 m	Dark reddish brown (5YR3/3-Moist); ; Heavy clay; , Angular blocky; , Granular; Moderately moist; Firm consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), Concretions; Sharp change to -
B	0.13 - 0.23 m	Dark red (2.5YR3/6-Moist); , 5YR33; Heavy clay; Moderate grade of structure, 20-50 mm, Angular blocky; , Granular; Moist; Weak consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), Concretions; Diffuse change to -
B	0.23 - 0.36 m	Dark red (2.5YR3/6-Moist); , 5YR33, 2-10% ; , 2-10% ; Heavy clay; Weak grade of structure, Angular blocky; , Granular; Moist; Weak consistence; Very few (0 - 2 %), Ferruginous, Fine (0 - 2 mm), Concretions; Diffuse change to -
B	0.38 - 0.46 m	Red (2.5YR4/6-Moist); ; Heavy clay; Massive grade of structure; Moist; Weak consistence; Diffuse change to -
BC	0.48 - 0.58 m	Red (2.5YR4/8-Moist); , 2.5Y74; , N80; Heavy clay; Moderately moist; Weak consistence; Diffuse change to -
C	0.61 - 0.74 m	Black (5Y2/2-Moist); , 2.5YR66; Heavy clay; Moderately moist; Weak consistence; 0-2%, Gravel, coarse fragments; Diffuse change to -
C	0.74 - 0.91 m	Black (5Y2/2-Moist); , 10YR56; Moderately moist; Weak consistence; 0-2%, Gravel, coarse fragments; Diffuse change to -
C	0.91 - 1.04 m	Black (5Y2/2-Moist); , 10YR56; , 2.5YR66; Moderately moist; Weak consistence;
	1.37 - 1.52 m	Yellowish brown (10YR5/6-Moist); ; Firm consistence;
	2.39 - 2.49 m	;

Morphological Notes

Soft mealy weathered basalt

Observation Notes

VERY OCCASIONAL BA FLOATERS IN PROFILE:74-249CM MEALY W`D BA WITH SOME SOFT MINERALS RETAINING SOME OF ITS BA STRUCTURE

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Site Notes
WESTBURY

Project Name: QUA
Project Code: QUA **Site ID:** H91 **Observation ID:** 1
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Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations				Exchangeable Acidity	CEC	ECEC	ESP
			Ca	Mg	K	Na				
m		dS/m	Cmol (+)/kg							%
0 - 0.064	6.2A		15H	21.4	0.39	0.02	9H 16.5E		53.3B	
0.064 - 0.11	6.2A							42.5C		
0.13 - 0.23	6A		11.2H	26.8	0.16	0.14	7.9H 16.8E		55.1B	
0.23 - 0.36	5.8A									
0.38 - 0.46	5.6A						7.5H	57C		
0.48 - 0.58	5.4A									
0.61 - 0.74	5.3A						7.5H	80C		
0.74 - 0.91	5.7A									
0.91 - 1.04	6A									
1.37 - 1.52	6.2A									
2.39 - 2.49	6.3A									

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis				
								GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.064		3.7D		0.091D	0.35A			1	4D	15	25	48
0.064 - 0.11		2.3D			0.218A							
0.13 - 0.23		1.2D		0.053D	0.126A			0	3D	8	11	77
0.23 - 0.36												
0.38 - 0.46		0.9D		0.045D	0.067A			0	2B	8	17	72
0.48 - 0.58												
0.61 - 0.74								1	8D	31	18	42
0.74 - 0.91												
0.91 - 1.04												
1.37 - 1.52												
2.39 - 2.49												

Depth	COLE	Gravimetric/Volumetric Water Contents						K sat	K unsat
		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar	
m		g/g - m3/m3						mm/h	mm/h
0 - 0.064									
0.064 - 0.11									
0.13 - 0.23									
0.23 - 0.36									
0.38 - 0.46									
0.48 - 0.58									
0.61 - 0.74									
0.74 - 0.91									
0.91 - 1.04									
1.37 - 1.52									
2.39 - 2.49									

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Laboratory Analyses Completed for this profile

15D1_CEC	CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; manual leach
15E1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble
15E1_K	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1_MG	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15G_C_H1	Exchangeable hydrogen - meq per 100g of soil - Hydrogen By back titration of A or B
15G1_H	Hydrogen Cation - meq per 100g of soil - 1M KCl Exch. Acidity By titration to pH 8.0
15J_H	Sum of Ex. cations + Ex. acidity - Sum of basic exch. cations and exch. (Hydrogen)
2_LOI	Loss on Ignition (%)
2A1	Air-dry moisture content
4A1	pH of 1:5 soil/water suspension
5A2	Chloride - 1:5 soil/water extract, automated colour
6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method
7A2	Total nitrogen - semimicro Kjeldahl , automated colour
9A_HCL	Total element - P(%) - By boiling HCl
P10_GRAV	Gravel (%)
P10_PB_C	Clay (%) - Plummet balance
P10_PB_CS	Coarse sand (%) - Plummet balance
P10_PB_FS	Fine sand (%) - Plummet balance
P10_PB_Z	Silt (%) - Plummet balance
P10A1_C	Clay (%) - Pipette
P10A1_CS	Coarse sand (%) - Pipette
P10A1_FS	Fine sand (%) - Pipette
P10A1_Z	Silt (%) - Pipette