

Project Name: SAM
Project Code: SAM **Site ID:** B422 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By: C.H. Thompson
Date Desc.: 23/12/59
Map Ref.: Sheet No. : 9443 1:100000
Northing/Long.: 152.885277777778
Easting/Lat.: -27.3561111111111
Locality:
Elevation: 46 metres
Rainfall: 1016
Runoff: Slow
Drainage: No Data

Geology

ExposureType: Soil pit
Geol. Ref.: Qa
Conf. Sub. is Parent. Mat.: No Data
Substrate Material: Soil pit, 0.97 m deep, Unconsolidated material (unidentified)

Land Form

Rel/Slope Class: No Data
Morph. Type: No Data
Elem. Type: No Data
Slope: 1.75 %
Pattern Type: Terrace (alluvial)
Relief: No Data
Slope Category: No Data
Aspect: No Data

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:
 Mottled Eutrophic Grey Chromosol
ASC Confidence:
 All necessary analytical data are available.
Mapping Unit: N/A
Principal Profile Form: Dy3.22
Great Soil Group: Gleyed podzolic soil

Site Disturbance: Cultivation. Rainfed

Vegetation:

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A1p	0 - 0.15 m	Very dark greyish brown (10YR3/2-Moist); ; Silty loam; Weak grade of structure, 10-20 mm; FragmentMany (>5 per 100mm2) Fine (1-2mm) macropores, Moist; Weak consistence; 0-2%, coarse gravelly, 20-60mm, Basalt, coarse fragments; Very few (0 - 2 %), Manganiferous, Medium (2 -6 mm), Nodules; Field pH 5.4 (pH meter); Gradual change to -
A2p	0.15 - 0.2 m	Dark greyish brown (10YR4/2-Moist); ; Silty loam; Massive grade of structure; 20-50 mm; FragmentMany (>5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; 2-10%, coarse gravelly, 20-60mm, rounded, coarse fragments; Few (2 - 10 %), Ferruginous, Medium (2 -6 mm), Nodules; Field pH 5.6 (pH meter); Clear change to -
A2	0.2 - 0.28 m	Weak red (2.5YR5/2-Moist); ; Loam; Massive grade of structure; 20-50 mm, Angular blocky; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Common (10 - 20 %), Ferruginous, Medium (2 -6 mm), Nodules; Field pH 5.8 (pH meter); Abrupt change to -
B2g	0.28 - 0.53 m	Grey (10YR5/1-Moist); , 10YR45, 10-20% , 0-5mm, Faint; , 10YR31, 10-20% , 0-5mm, Faint; Medium clay; Strong grade of structure, 50-100 mm, Prismatic; Strong grade of structure, 20-50 mm, Angular blocky; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Wet; Slightly plastic; Normal plasticity; Few (2 - 10 %), Ferruginous, Medium (2 -6 mm), Nodules; Field pH 6.5 (pH meter); Gradual change to -
B2g	0.53 - 0.76 m	Dark greyish brown (2.5Y4/2-Moist); , 10YR53, 10-20% , 5-15mm, Distinct; , 5YR43, 10-20% , 5-15mm, Distinct; Light medium clay; Moderate grade of structure, 100-200 mm, Prismatic; Weak grade of structure, 50-100 mm, Angular blocky; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Wet; Slightly plastic; Normal plasticity; Field pH 6.9 (pH meter); Diffuse change to
B3g	0.76 - 0.97 m	Grey (2.5Y5/1-Moist); , 7.5YR44, 20-50% , 5-15mm, Distinct; , 7.5YR55, 20-50% , 5-15mm, Distinct; Sandy clay loam; Massive grade of structure; Many (>5 per 100mm2) Very fine (0.075-1mm) macropores, Wet; , Manganiferous, Fine (0 - 2 mm), Soft segregations; Field pH 7.4 (pH meter); Diffuse change to -
C	0.97 - 1.4 m	Brown (10YR4/3-Moist); ; Clayey sand; Massive grade of structure; Wet; , Manganiferous, Fine (0 - 2 mm), Soft segregations; Field pH 7.8 (pH meter); Diffuse change to -
C	1.5 - 1.85 m	Brown (10YR4/3-Moist); , 10YR32, 10-20% , 0-5mm, Faint; , 5Y51, 10-20% , 0-5mm, Faint; Sandy medium clay; Massive grade of structure; Wet; Very plastic; Normal plasticity; , Manganiferous, Fine (0 - 2 mm), Soft segregations; Field pH 7.6 (pH meter);

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Morphological Notes

Observation Notes

FINE SAND GRAINS THROUGHOUT PROFILE; RUSTY ROOT MARKING & LGB ROOT CHANNELS IN B2G; BG FILL IN FISSURES BETWEEN PRISMS.

Site Notes

SAMFORD EAST

Observation ID: 1

Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations			Exchangeable	CEC	ECEC	ESP
m		dS/m	Ca	Mg	K	Na	Acidity		%
						Cmol	(+)/kg		
0 - 0.15	5.4H	0.02B	10.6K	1.5	0.33	0.29	5.8D		
0.15 - 0.2	5.6H	0.01B							
0.2 - 0.28	5.8H	0.01B	8.1K	1.6	0.1	0.33	3.8D		
0.28 - 0.53	6.5H	0.01B	17.2K	5.4	0.13	0.27	2.6D		
0.53 - 0.76	6.9H	0.01B							
0.76 - 0.97	7.4H	0.01B							
0.97 - 1.4	7.8H	0.01B							
1.5 - 1.85	7.6H	0.01B							

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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_H	Hydrogen Cation - 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
3_NR	Electrical conductivity or soluble salts - Not recorded
4_NR	pH of soil - Not recorded
5_NR	Water soluble Chloride - Cl(%) - Not recorded
6A1	Organic carbon - Walkley and Black
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