Project Name: PRO

Project Code: Observation ID: 1 **PRO** Site ID: H127

CSIRO Division of Soils (TAS) Agency Name:

Site Information

Locality: Desc. By: K.D. Nicholls Approx 4KM SSW of Nugent on Nugent/Sorell Road: Date Desc.:

Elevation: 259 metres 18/11/55

Map Ref.: Rainfall: 760 Northing/Long.: 147.73722222222 Runoff: Moderately rapid Easting/Lat.: -42.74583333333333 Drainage: Poorly drained

Geology

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

Substrate Material: Soil pit, 0.6 m deep, Dolerite Geol. Ref.: No Data

Land Form

Rel/Slope Class: Rolling hills 90-300m 10-32% Pattern Type: Hills Morph. Type: No Data Relief: No Data

Elem. Type: Slope Category: Moderately inclined Hillslope Slope: 12.3 % Aspect: 45 degrees

Surface Soil Condition (dry): Self-mulching

Erosion:

Soil Classification

Australian Soil Classification: Mapping Unit: N/A Mottled Eutrophic Yellow Chromosol **Principal Profile Form:** Dy5.62

ASC Confidence: Great Soil Group: Gleyed podzolic

All necessary analytical data are available. soil

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

Vegetation:

Tall Strata - Tree, , . *Species includes - None Recorded

Surface Coarse Fragments: 2-10%, bouldery, 600mm-2m, , Dolerite

Profile Morphology

0 - 0.01 m Organic Layer; Dark grey (10YR4/1-Moist); ; Loam (Fibric); Weak consistence; Sharp change to -

Dark greyish brown (10YR4/2-Moist); ; Fine sandy loam; Weak grade of structure, 2-5 mm, A12 0.01 - 0.06 m

Subangular blocky; Moderately moist; Weak consistence; 0-2%, Gravel, coarse fragments; Few

(2 - 10 %), Ferruginous, , Concretions; Diffuse change to -

Brown (10YR4/3-Moist);; Fine sandy loam (Heavy); Weak grade of structure, 2-5 mm, 0.06 - 0.13 m

Subangular blocky; Weak consistence; 2-10%, Gravel, coarse fragments; Few (2 - 10 %),

Ferruginous, , Concretions; Diffuse change to -

0.13 - 0.25 m Brown (10YR4/3-Moist); ; Fine sandy loam (Heavy); Weak grade of structure, 2-5 mm,

Subangular blocky; Very firm consistence; 10-20%, Gravel, coarse fragments; Few (2 - 10 %),

Ferruginous, , Concretions; Sharp change to -

0.25 - 0.41 m Reddish yellow (7.5YR6/6-Moist); , 10YR73; , 10YR52; Medium clay; Massive grade of structure;

Slightly plastic; Normal plasticity; 10-20%, Gravel, coarse fragments; Few (2 - 10 %),

Ferruginous, , Concretions;

0.46 - 0.61 m Very pale brown (10YR7/3-Moist); , 10YR56; , 10YR52; Medium clay; Massive grade of structure;

Slightly plastic; Normal plasticity; 20-50%, Gravel, coarse fragments;

0.61 - 0.71 m

Morphological Notes

On parent material (dolerite):

Observation Notes

46-61CM GRITTY DECOMPOSED DOLERITE:0-1CM LEAF LITTER AND FAIRLY ORGANICDG LOAM:

Site Notes

BUCKLAND

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Laboratory Test Results:

Depth	pH	1:5 EC		hangeable			Exchangeable	CEC	EC	EC	ESP
m		dS/m	Ca I	Mg	K	Na Cmol (+	Acidity ·)/kg				%
0.01 - 0.06	5.5A		7.2H	4.8	0.19	0.29	6.6H 11.9E		24	l.4B	
0.06 - 0.13	5.7A		6.3H	5	0.21	0.29	6H 10.6E		22	2.4B	
0.13 - 0.25	5.4A		6.6H	5	0.18	0.35	6.5H 11E		23	3.1B	
0.25 - 0.41	6.2A		12.2H	8.5	0.14	0.88	3.3H 7.2E		28	8.9B	
0.46 - 0.61	7A		16H	10.7	0.16	1.1	4.1E		32	2.1B	
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	l Bulk Density	Pa GV	rticle Si CS F		
m	%	%	mg/kg	%	N %	%	Mg/m3	GV		'S S %	ilt Clay
0.01 - 0.06 0.06 - 0.13		2D 1.4D		0.0060		-		1 9	12B 15B	40 39	28 14 26 14
0.00 - 0.13		1.4D 1.2D		0.0031	0.05			14	17B	36	27 16
0.25 - 0.41 0.46 - 0.61		1.01D		0.046 0.028		-		13 43	20B 33B	30 28	21 27 17 21
0.46 - 0.61					0.02	ZOA		43	SSD	20	17 21
Depth	COLE			Gravimetric/Volumetric Water Contents 0.05 Bar 0.1 Bar 0.5 Bar 1 Bar 5 Bar					K sat	Κı	ınsat
m		Sat.	0.05 Bar	0.05 Bar 0.1 Bar 0.5 Bar g/g - m3/m3			5 Bar 15	ar 15 Bar		mm/h	
0.01 - 0.06 0.06 - 0.13											

0.13 - 0.25 0.25 - 0.41 0.46 - 0.61

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Laboratory Analyses Completed for this profile

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

Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts

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15G_C_H1
Exchangeable hydrogen - meq per 100g of soil - Hydrogen By back titration of A or B
Hydrogen Cation - meq per 100g of soil - 1M KCl Exch. Acidity By titration to pH 8.0
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 Total nitrogen - semimicro Kjeldahl , automated colour

9A_HCL Total element - P(%) - By boiling HCl