Project Name: DER
Project Code: DER **Site ID:** H183 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (TAS)

Site Information

Desc. By:	K.D. Nicholls	**Locality:**	On Pinnacle Rd to Mt Wellington .4KM below the "Big Bend" 1.6KM NW OF Pinnacle:
Date Desc.:	13/10/58	**Elevation:**	1091 metres
Map Ref.:		**Rainfall:**	1450
Northing/Long.:	147.233333333333	**Runoff:**	Rapid
Easting/Lat.:	-42.9	**Drainage:**	Imperfectly drained

Geology

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

Land Form

Rel/Slope Class:	Rolling mountains >300m 10-32%	**Pattern Type:**	Mountains
Morph. Type:	No Data	**Relief:**	No Data
Elem. Type:	Cutface	**Slope Category:**	Steep
Slope:	0 %	**Aspect:**	45 degrees

Surface Soil Condition (dry): Self-mulching

Erosion:

Soil Classification

Australian Soil Classification:
Humose Placic Chernic Tenosol
ASC Confidence:
All necessary analytical data are available.

Mapping Unit: N/A
Principal Profile Form: Um7.11
Great Soil Group: Acid peat

Site Disturbance: No effective disturbance. Natural

Vegetation:

Mid Strata - Tree, 0.51-1m, . *Species includes - Bassia species
Tall Strata - Tree, 3.01-6m, Sparse. *Species includes - None Recorded

Surface Coarse Fragments: 50-90%, bouldery, 600mm-2m, , Dolerite

Profile Morphology

0 - 0.15 m	Very dark brown (10YR2/2-Moist); ; Moderate grade of structure, <2 mm, Granular; 20-50%, bouldery, 600mm-2m, Dolerite, coarse fragments; Diffuse change to -
0.15 - 0.3 m	Very dark brown (10YR2/2-Moist); ; Moderate grade of structure, <2 mm, Granular; 20-50%, bouldery, 600mm-2m, Dolerite, coarse fragments; Diffuse change to -
0.3 - 0.43 m	Dark brown (10YR3/3-Moist); ; Loam (Fibric); Weak grade of structure, 2-5 mm, Subangular blocky; 20-50%, bouldery, 600mm-2m, Dolerite, coarse fragments; Diffuse change to -
0.43 - 0.58 m	Dark yellowish brown (10YR4/4-Moist); , 10YR33; Clay loam (Fibric); Weak grade of structure, 2-5 mm, Subangular blocky; Weak consistence; 20-50%, bouldery, 600mm-2m, Dolerite, coarse fragments; Sharp change to -
0.58 - 0.71 m	Strong brown (7.5YR5/8-Moist); , 2.5YR36; Sandy clay loam; Massive grade of structure; Very firm consistence; 10-20%, cobbly, 60-200mm, Gravel, coarse fragments; Sharp change to -
0.71 - 0.71 m	; Massive grade of structure; Rigid consistence; Thin ironpan, Strongly cemented, Massive;
0.71 - 0.72 m	; Massive grade of structure; Very firm consistence; Thin ironpan, Weakly cemented, Massive;
0.74 - 0.89 m	Yellowish red (5YR4/6-Moist); ; Sandy clay loam; Massive grade of structure; Weak consistence; 10-20%, cobbly, 60-200mm, Gravel, coarse fragments; Diffuse change to -

Morphological Notes

Observation Notes

HOR 6 - 71-71.3CM HARD DENSE UPPER CRUST OF IRON PAN:HOR 7 - 71.3-72CM SOFTER LESS DENSE MAIN BODY OF IRON PAN:

Site Notes

HOBART

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Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations Ca	Mg	K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%
0 - 0.15	5.2A	0.095A	4.6B	3.3	0.49	0.3	37.2H		78.3B	
							69.6E			
0.15 - 0.3	5.2A	0.089A								
0.3 - 0.43	5.2A	0.065A	4.8B	0.9	0.33	0.3	25.3H		60.9B	
							57.5E			
0.43 - 0.58	5.4A	0.039A								
0.58 - 0.71	5.5A	0.021A	1.1B	0.94	0.08	0.2	10.4H		26.4B	
							24.1E			
0.74 - 0.89	5.4A	0.024A	2.8B	1.3	0.13	0.2	11.5H		25.9B	
							21.5E			

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 - 0.15		17.4A		0.032A	0.516A			3	6B	27	18	22
0.15 - 0.3		12.2A		0.035A	0.444A							
0.3 - 0.43		9.3A		0.037A	0.373A			1	11B	30	23	21
0.43 - 0.58		5.81A		0.044A	0.249A							
0.58 - 0.71		0.81A		0.06A	0.027A			17	28D	31	21	16
0.74 - 0.89								19	27B	32	16	21

Depth	COLE	Gravimetric/Volumetric Water Contents Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar	K sat	K unsat
m		g/g - m3/m3							mm/h	mm/h
0 - 0.15										
0.15 - 0.3										
0.3 - 0.43										
0.43 - 0.58										
0.58 - 0.71										
0.74 - 0.89										

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Laboratory Analyses Completed for this profile

15A2_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
15A2_K	Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
15A2_MG	Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
15A2_NA	Exchangeable bases- 1M ammonium chloride at pH 7.0, 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
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
5A2	Chloride - 1:5 soil/water extract, automated colour
6A1	Organic carbon - Walkley and Black
7A2	Total nitrogen - semimicro Kjeldahl , automated colour
9A1	Total phosphorus - X-ray fluorescence
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