**Project Name: DER** 

Observation ID: 1 **Project Code:** DER Site ID: H125

**CSIRO Division of Soils (TAS)** Agency Name:

**Site Information** 

Desc. By: K.D. Nicholls Locality: Mt Nelson approx 1.6km west of Signal Station:40m

north of Bitumen Roadfrom Hobart to Signal Station:

Date Desc.: 17/11/55 Elevation: 305 metres Rainfall: 650

Map Ref.: Northing/Long.: 147.33472222222 Runoff: Moderately rapid Easting/Lat.: -42.927777777778 Drainage: Poorly drained

Geology

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

**Land Form** 

Rel/Slope Class: Steep hills 90-300m 32-56% Pattern Type: Hills Relief: No Data Morph. Type: Ridge

Very gently sloped Elem. Type: Hillcrest Slope Category:

Aspect: Slope: 0 % 0 degrees

Surface Soil Condition (dry):

**Erosion:** 

**Soil Classification** 

**Australian Soil Classification: Mapping Unit:** N/A Bleached-Sodic Eutrophic Grey Chromosol **Principal Profile Form:** Dy3.62 Soloth **ASC Confidence: Great Soil Group:** 

All necessary analytical data are available.

Site Disturbance: Extensive clearing, for example poisoning, ringbarking

**Vegetation:** Low Strata - Tussock grass, 0.51-1m, Mid-dense. \*Species includes - None recorded

Mid Strata - Tree, , . \*Species includes - Acacia species Tall Strata - Tree, , . \*Species includes - None Recorded

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

**Profile Morphology** 

0 - 0.06 m Greyish brown (10YR5/2-Moist); ; Sandy loam (Light); Single grain grade of structure; Weak

consistence; 0-2%, Gravel, coarse fragments; CommonClear change to -

0.06 - 0.1 m Light brownish grey (10YR6/2-Moist); ; Loamy sand; Single grain grade of structure; Weak

consistence; 0-2%, Gravel, coarse fragments; Few (2 - 10 %), Ferruginous, Fine (0 - 2 mm),

Concretions; Diffuse change to -

Light brownish grey (10YR6/2-Moist); ; Loamy sand; Single grain grade of structure; Weak 0.1 - 0.13 m

consistence; 2-10%, coarse gravelly, 20-60mm, Dolerite, coarse fragments; Common (10 - 20

%), Ferruginous, , Concretions; Sharp, Wavy change to -

Greyish brown (10YR5/2-Moist); , 10YR56; , 10YR81; Heavy clay; Weak grade of structure, 20-50 0.17 - 0.25 m

mm, Prismatic; Slightly plastic; Normal plasticity; 2-10%, Gravel, coarse fragments;

Greyish brown (10YR5/2-Moist); , 10YR56; , 10YR81; Heavy clay; Weak grade of structure, 20-50 mm, Prismatic; Slightly plastic; Normal plasticity; 2-10%, Gravel, coarse fragments; 0.25 - 0.41 m

0.41 - 0.53 m Reddish yellow (5YR6/8-Moist); , 10YR74; , 10YR52; Heavy clay; Massive grade of structure;

Slightly plastic; Normal plasticity; 10-20%, Gravel, coarse fragments; Sharp, Irregular change to

0.61 - 0.76 m Light yellowish brown (10YR6/4-Moist); , 10YR72; Heavy clay; Massive grade of structure; 20-

50%, Gravel, coarse fragments;

0.94 - 1.07 m Light yellowish brown (10YR6/4-Moist); , 10YR72; Heavy clay; Massive grade of structure; 50-

90%, Gravel, coarse fragments;

## **Morphological Notes**

## **Observation Notes**

0-6CM WORMS:25-76CM ODD LYB SAND POCKETS AND W INCLUSIONS PROMINENT:61-107CM W'D DOLERITE INCREASING:

## Site Notes

**HOBART** 

Project Name: DER
Project Code: DER Site ID: H125
Agency Name: CSIRO Division of Soils (TAS) Observation ID: 1

Project Name: DER
Project Code: DER Site ID: H1:
Agency Name: CSIRO Division of Soils (TAS) Site ID: H125 Observation ID: 1

Laboratory rest results.												
Depth	рН	1:5 EC		nangeable //g	Cations K	Na	Exchangeable Acidity	CEC		ECEC	E	SP
m		dS/m				Cmol (-	+)/kg					%
0 - 0.06	5.2A		1.8H	1.6	0.12	0.21	5.2H 7.6E			11.3B		
0.06 - 0.1	5.3A		1.1H	1.5	0.07	0.27	4.5H 6.4E			9.3B		
0.1 - 0.13	5.5A											
0.17 - 0.25	5.6A		6.5H	10.5	0.05	1.02	4.9H 8.4E			26.5B		
0.25 - 0.41	5.6A											
0.41 - 0.53	5.6A		3.8H	6.2	0.06	1.7	3.8H 6.8E			18.6B		
0.61 - 0.76	6.7A		7.011	0.0	0.00	0.5	4.05			04.70		
0.94 - 1.07	7.7A		7.6H	8.9	0.09	3.5	1.6E			21.7B		
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Tota K	l Bulk Density	Pa GV	rticle CS	Size A	nalysis Silt	
m	%	%	mg/kg	%	%	%	Mg/m3	GV	03	%	Siit	Ciay
0 - 0.06		1.7D		0.002	0.09	92A		1	9B	65	14	8
0.06 - 0.1		1D		0.001				1	9D	65	15	9
0.1 - 0.13					0.06	61A		15	16D	58	14	10
0.17 - 0.25		0.89D		0.002	0.04	19A		4	12D	49	9	31
0.25 - 0.41								3	14D	42	8	35
0.41 - 0.53								13	18D		9	33
0.61 - 0.76	0.002	٨						50 60	45B 54B	28 25	15 11	9 8
0.94 - 1.07	0.002	А						00	U4D	23	11	0
Depth	COLE	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		Sat.	u.ua bar		0.5 Bar g - m3/m		3 DAT 13 E	odf	mm/	h'	mm/h	

0 - 0.06 0.06 - 0.1 0.1 - 0.13

0.17 - 0.25 0.25 - 0.41

0.41 - 0.53 0.61 - 0.76 0.94 - 1.07

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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

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
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)

19A1 Carbonates - rapid titration
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

P10\_GRAV Gravel (%)

P10\_PB\_C
P10\_PB\_CS
Clay (%) - Plummet balance
Coarse sand (%) - Plummet balance
P10\_PB\_FS
P10\_PB\_Z
Clay (%) - Plummet balance
Fine sand (%) - Plummet balance
Silt (%) - Plummet balance

P10A1\_C Clay (%) - Pipette
P10A1\_CS Coarse sand (%) - Pipette
P10A1\_FS Fine sand (%) - Pipette
P10A1\_Z Silt (%) - Pipette