**Project Name:** NΔR

Observation ID: 1 **Project Code:** NAR Site ID: **B578** 

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

**Site Information** 

Locality: Desc. By: G.D. Hubble Narayen Research Station.

Date Desc.: Elevation: 13/08/69 290 metres Sheet No.: 9646 1:100000 Map Ref.: Rainfall: 712 Northing/Long.: 150.8833333333333 Runoff: Rapid

Easting/Lat.: -25.68333333333333 Moderately well drained Drainage:

Geology

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

Geol. Ref.: PRt Substrate Material: Undisturbed soil core, 0.77 m

deep,Adamellite

**Land Form** 

Rel/Slope Class: Undulating low hills 30-90m 3-Pattern Type: I ow hills

10%

Morph. Type: Crest Relief: 24 metres Hillcrest Slope Category: No Data Elem. Type: Slope: Aspect: No Data 0 %

Surface Soil Condition (dry):

**Erosion:** 

**Soil Classification** 

**Australian Soil Classification:** Mapping Unit: N/A Dr3.41 Bleached-Mottled Magnesic Red Kurosol **Principal Profile Form:** 

**ASC Confidence: Great Soil Group:** Red podzolic soil

All necessary analytical data are available.

Site Disturbance: Limited clearing, for example selective logging

**Vegetation:** Low Strata - Tussock grass, , . \*Species includes - Aristida species

Mid Strata - Shrub, , . \*Species includes - None recorded

Tall Strata - Tree, 6.01-12m, Closed or dense. \*Species includes - None Recorded

Surface Coarse Fragments: No surface coarse fragments

**Profile Morphology** 

0 - 0.04 m Dark greyish brown (10YR4/2-Moist); ; Coarse sandy loam; Massive grade of structure; Dry; Weak consistence; 10-20%, fine gravelly, 2-6mm, Quartz, coarse fragments; Field pH 6.2 (pH meter); Common, fine (1-2mm) roots; Clear change to -A2 Very pale brown (10YR7/4-Dry); , 10YR63, 10-20% , 0-5mm, Faint; , 10YR72, 10-20% , 0-5mm, 0.04 - 0.1 m Faint; Coarse sandy loam; Massive grade of structure; Common (1-5 per 0.01m2) Medium (2-5mm) macropores, Dry; Weak consistence; 10-20%, fine gravelly, 2-6mm, Quartz, coarse fragments; Field pH 5.5 (pH meter); Common, fine (1-2mm) roots; Clear change to -

0.1 - 0.2 m Very pale brown (10YR7/4-Dry); , 10YR82, 20-50% , 0-5mm, Faint; , 20-50% , 0-5mm, Faint; A2 Coarse sandy loam; Massive grade of structure; Dry; Weak consistence; 10-20%, medium gravelly, 6-20mm, Quartz, coarse fragments; Field pH 5.8 (pH meter); Few, fine (1-2mm) roots;

Clear change to -

Very pale brown (10YR7/4-Dry); , 10YR82, 20-50%, 0-5mm, Faint; , 2.5YR68, 20-50%, 0-5mm, A3 0.2 - 0.3 m Faint; Sandy clay loam; Massive grade of structure; Dry; Firm consistence; 20-50%, Substrate

material, coarse fragments; Field pH 5.5 (pH meter); Few, fine (1-2mm) roots; Clear change to -

Red (2.5YR4/5-Dry); , 10YR63, 20-50% , 5-15mm, Distinct; , 10YR61, 20-50% , 5-15mm, **B21** 0.3 - 0.54 m

Distinct; Medium clay; Moderate grade of structure, 5-10 mm, Polyhedral; Moderately moist; Firm consistence; 2-10%, medium gravelly, 6-20mm, Substrate material, coarse fragments; Field pH

5.2 (pH meter); Gradual change to -

**B22** Brown (10YR5/3-Dry); , 10R36, 20-50% , 15-30mm, Prominent; , 20-50% , 15-30mm, Prominent; 0.54 - 0.6 m

> Medium clay; Moderate grade of structure, 5-10 mm, Polyhedral; Moderately moist; Firm consistence; 10-20%, medium gravelly, 6-20mm, Substrate material, coarse fragments; Field

pH 5.3 (pH meter); Clear change to -

Dark red (10R3/6-Dry); , 10YR52, 20-50% , 15-30mm, Prominent; , 20-50% , 15-30mm, **B23** 0.6 - 0.77 m

Prominent; Light medium clay; Moderate grade of structure, 5-10 mm, Polyhedral; Moderately moist; Firm consistence; 10-20%, coarse gravelly, 20-60mm, Substrate material, coarse

fragments; Field pH 5 (pH meter); Clear change to -

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Red (2.5YR4/6-Dry); , 5YR68, 20-50% , 15-30mm, Prominent; , 20-50% , 15-30mm, Prominent; Clay loam, coarse sandy; Moderate grade of structure, 5-10 mm, Polyhedral; Moderately moist; Firm consistence; 10-20%, coarse fragments; Field pH 5 (pH meter); Clear change to -0.77 - 0.9 m

С Red (2.5YR4/6-Dry); , 10YR52, 20-50% , 15-30mm, Prominent; , 20-50% , 15-30mm, Prominent; 0.9 - 1.2 m

Clay loam, coarse sandy; Massive grade of structure; Moderately moist; Firm consistence; 10-

20%, coarse fragments; Field pH 5.3 (pH meter);

## **Morphological Notes**

## **Observation Notes**

QUARTZ AND FELDSPAR GRAVELS:

## **Site Notes**

MUNDUBBERA

NAR

Project Name: Project Code: Agency Name: NAR Site ID: B578 Observation ID: 1

**CSIRO** Division of Soils (QLD)

# **Laboratory Test Results:**

Depth	рН	1:5 EC		changeable Cations		Exchangea			CEC	E	ECEC	E	SP
m		dS/m	Ca	Mg	K	Na A Cmol (+)/kg		Acidity I				9	6
0 - 0.04	5.7H	0.02B	1.1K	1.4	0.48	0.13		6.4D					
0.04 - 0.1	5.1H	0.011B	0.11K	0.47	0.26	0.07		5.8D					
0.1 - 0.2	5.2H	0.01B											
0.2 - 0.3	5.2H	0.013B	0.02K	1.1	0.31	0.19		6.6D					
0.3 - 0.54	5.1H	0.02B	0.02K	1.2	0.27	0.32		5.7D					
0.54 - 0.6	5.1H	0.02B											
0.6 - 0.77	4.9H	0.03B	0.02K	5.1	0.39	1.4		12.5D					
0.77 - 0.9	4.8H	0.044B											
0.9 - 1.2	4.6H	0.086B											
Depth	CaCO3	Organic	Avail.	Total	Total	То		Bulk	Pa			Analysis	
		С	P	Р	N		(	Density	G۷	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	9	6	Mg/m3			%		
0 004		0.545	400	0.0405	- 0.40	AD 0	400			F70	20	7	40
0 - 0.04		2.51E	18B	0.019F		-	.43B			57C	20		13
0.04 - 0.1		0.91E	3B	0.02F		-	.51B			53C	22	-	14
0.1 - 0.2		0.65E		0.02F	0.03	-	.51B			48C	22		19
0.2 - 0.3 0.3 - 0.54		0.68E	7B	0.022F 0.018F			0.5B			36C 21C	19 11	-	35
		0.35E 0.21E	<i>1</i> D				0.3B .22B			19C		8 7	62
0.54 - 0.6		-		0.014F		-					11	•	60
0.6 - 0.77		0.09E		0.01F		-	.16B			30C	17 24	-	44
0.77 - 0.9		0.08E		0.01F		-	.15B ).2B			46C	23		18 19
0.9 - 1.2				0.011F		(	J.ZD			46C	23	10	19
Depth	COLE									K sa	t	K unsat	
m		Sat.	0.05 Bar	0.1 Bar g/g	0.5 Bar g - m3/m3	1 Ba	r !	5 Bar 15 I	Bar	mm/l	h	mm/h	

0 - 0.04

0 - 0.04 0.04 - 0.1 0.1 - 0.2 0.2 - 0.3 0.3 - 0.54 0.54 - 0.6 0.6 - 0.77 0.77 - 0.9 0.9 - 1.2

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### **Laboratory Analyses Completed for this profile**

10A\_NR Total element - S(%) - Not recorded

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
15\_NR\_MG
15\_NR\_MG
15\_NR\_NA
Exch. basic cations (K++) - meq per 100g of soil - Not recorded
Exch. basic cations (Mg++) - meq per 100g of soil - Not recorded
Exch. basic cations (Na++) - meq per 100g of soil - Not recorded

17A\_NR Total element - K(%) - Not recorded

3\_NR Electrical conductivity or soluble salts - Not recorded

4\_NR pH of soil - Not recorded

5\_NR Water soluble Chloride - Cl(%) - Not recordede

6Z Organic carbon (%) - Not recorded
7\_NR Total nitrogen (%) - Not recorded
9A\_NR Total element - P(%) - Not recorded

9G\_BSES Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES)

P10\_NR\_C
P10\_NR\_CS
Clay (%) - Not recorded
Coarse sand (%) - Not recorded
P10\_NR\_FS
P10\_NR\_Z
Clay (%) - Not recorded
Fine sand (%) - Not recorded
Silt (%) - Not recorded