

**Project Name:** NAR  
**Project Code:** NAR      **Site ID:** B579      **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

**Site Information**

<b>Desc. By:</b>	G.D. Hubble	<b>Locality:</b>	Narayan Research Station.
<b>Date Desc.:</b>	14/08/69	<b>Elevation:</b>	290 metres
<b>Map Ref.:</b>	Sheet No. : 9046 1:100000	<b>Rainfall:</b>	712
<b>Northing/Long.:</b>	150.883333333333	<b>Runoff:</b>	Moderately rapid
<b>Easting/Lat.:</b>	-25.683333333333	<b>Drainage:</b>	Moderately well drained

**Geology**

<b>ExposureType:</b>	Soil pit	<b>Conf. Sub. is Parent. Mat.:</b>	No Data
<b>Geol. Ref.:</b>	PRt	<b>Substrate Material:</b>	Undisturbed soil core, 0.7 m deep,Adamellite

**Land Form**

<b>Rel/Slope Class:</b>	Undulating rises 9-30m 3-10%	<b>Pattern Type:</b>	Low hills
<b>Morph. Type:</b>	Mid-slope	<b>Relief:</b>	24 metres
<b>Elem. Type:</b>	Hillslope	<b>Slope Category:</b>	No Data
<b>Slope:</b>	5.6 %	<b>Aspect:</b>	No Data

**Surface Soil Condition (dry):** Hardsetting

**Erosion:**

**Soil Classification**

<b>Australian Soil Classification:</b>		<b>Mapping Unit:</b>	N/A
Bleached Eutrophic Brown Chromosol		<b>Principal Profile Form:</b>	Dy2.42
<b>ASC Confidence:</b>		<b>Great Soil Group:</b>	Yellow podzolic soil
All necessary analytical data are available.			

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

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

Tall Strata - Tree, 6.01-12m, Sparse. \*Species includes - Eucalyptus crebra, Eucalyptus polycarpa

**Surface Coarse Fragments:** No surface coarse fragments

**Profile Morphology**

A1	0 - 0.05 m	Very dark greyish brown (10YR3/2-Moist); ; Coarse sandy loam (Light); Massive grade of structure; Dry; Weak consistence; 10-20%, fine gravelly, 2-6mm, Quartz, coarse fragments; Field pH 6.5 (pH meter); Common, fine (1-2mm) roots; Clear change to -
A21	0.05 - 0.1 m	Brown (10YR4/3-Moist); ; Loamy coarse sand; Massive grade of structure; Dry; Weak consistence; 20-50%, fine gravelly, 2-6mm, Quartz, coarse fragments; Field pH 6 (pH meter); Common, fine (1-2mm) roots; Clear change to -
A21	0.1 - 0.2 m	Brown (10YR4/3-Moist); ; Clayey coarse sand; Massive grade of structure; Dry; Weak consistence; 20-50%, medium gravelly, 6-20mm, Quartz, coarse fragments; Field pH 6 (pH meter); Common, fine (1-2mm) roots; Gradual change to -
A22	0.2 - 0.3 m	Light yellowish brown (10YR6/4-Moist); ; Clayey coarse sand; Massive grade of structure; Dry; Very weak consistence; 20-50%, medium gravelly, 6-20mm, Substrate material, coarse fragments; Field pH 6 (pH meter); Few, fine (1-2mm) roots; Gradual change to -
A22	0.3 - 0.38 m	Light yellowish brown (10YR6/4-Moist); ; Clayey coarse sand; Massive grade of structure; Dry; Very weak consistence; 20-50%, medium gravelly, 6-20mm, Substrate material, coarse fragments; Field pH 7 (pH meter); Few, fine (1-2mm) roots; Clear change to -
B1	0.38 - 0.4 m	Yellowish brown (10YR5/8-Moist); ; Coarse sandy clay loam; Weak grade of structure, 10-20 mm, Angular blocky; Dry; Very firm consistence; 20-50%, medium gravelly, 6-20mm, Substrate material, coarse fragments; Field pH 7 (pH meter); Few, fine (1-2mm) roots; Sharp change to -
B2	0.4 - 0.6 m	Yellowish brown (10YR5/8-Moist); ; Medium clay; Moderate grade of structure, 20-50 mm, Angular blocky; Moderately moist; Strong consistence; 20-50%, medium gravelly, 6-20mm, Substrate material, coarse fragments; Field pH 7 (pH meter); Few, fine (1-2mm) roots; Gradual change to -
B3	0.6 - 0.7 m	Yellowish brown (10YR5/8-Moist); , 10YR52, 20-50% , 0-5mm, Prominent; , 7.5YR58, 20-50% , 0-5mm, Prominent; Medium clay; Weak grade of structure, 20-50 mm; Moderately moist; Strong consistence; 20-50%, medium gravelly, 6-20mm, Substrate material, coarse fragments; Field pH 7 (pH meter); Few, fine (1-2mm) roots; Gradual change to -

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C      0.7 - 0.9 m      Strong brown (7.5YR5/8-Moist); , 10YR52, 20-50% , 0-5mm, Prominent; , 20-50% , 0-5mm, Prominent; Coarse sandy medium clay; Massive grade of structure; Moderately moist; Strong consistence; 20-50%, medium gravelly, 6-20mm, Substrate material, coarse fragments; Field pH 7 (pH meter);

**Morphological Notes**

**Observation Notes**

2-6MM QUARTZ GRIT PRESENT THROUGHOUT:TEXTURES OF 20-40CM HORIZONS ARE GRAVELLY DOMINANT  
FELDSPAR TO 25MM:ALL OTHER      TEXTURES ARE GRITTY, DOMINANTLY 2-6MM QUARTZ:

**Site Notes**

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**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 - 0.05	6.2H	0.02B	3.9K	1.8	0.54	0.09	3.6D		
0.05 - 0.1	5.7H	0.008B	0.95K	0.86	0.24	0.07	2.5D		
0.1 - 0.2	5.3H	0.008B							
0.2 - 0.3	5.5H	0.009B	0.61K	0.76	0.11	0.05	1.7D		
0.3 - 0.38	6.2H	0.01B							
0.38 - 0.4	6.4H	0.014B	3K	4.1	0.18	0.17	2D		
0.4 - 0.6	6.7H	0.014B	4.7K	7.1	0.25	0.5	2.8D		
0.6 - 0.7	6.7H	0.014B	5K	9.2	0.3	0.56	2.6D		
0.7 - 0.9	7.1H	0.02B							

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle		Size	Analysis	
m	%	%	mg/kg	%	%	%	Mg/m3	GV	CS	FS	Silt	Clay
0 - 0.05		1.93E	23B	0.022F	0.111B	3.2B		17	51C	31	7	7
0.05 - 0.1		0.53E	4B	0.013F	0.04B	3.2B		23	51C	33	7	7
0.1 - 0.2		0.36E		0.01F	0.03B	3.2B		31	51C	36	6	7
0.2 - 0.3		0.21E	2B	0.007F	0.021B	3.5B		40	59C	29	5	6
0.3 - 0.38		0.19E		0.011F	0.025B	3.6B		44	55C	28	8	8
0.38 - 0.4		0.35E		0.017F	0.044B	3.2B		37	43C	24	8	25
0.4 - 0.6		0.39E	5B	0.02F	0.045B	2.4B		28	33C	20	9	40
0.6 - 0.7		0.43E		0.017F	0.049B	1.95B		28	35C	17	10	37
0.7 - 0.9		0.2E		0.014F	0.025B	2.05B		44	53C	18	7	25

[illegible]

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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	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
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 recorded
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_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