CALCAREOUS CLAY LOAM

General Description: Calcareous loam with increasing clay and carbonate content with depth

Landform:	Gentle slopes and flats.	
Substrate:	Gravelly alluvium or slope wash (Telford Gravel)	
Vegetation:	Marieana brevifolia (bluebush)	A. A.



Type Site:	Site No.:	CM083	1:50,000 mapsheet:	6831-4
	District:	Eastern Districts	Easting:	381500
	Property:	Braemar	Northing:	6331650
	Sampling date:	19/11/96	Annual rainfall:	205 mm average

Flat. Firm surface, tending self-mulching, no stones.

Soil Description:

Depth (cm)	Description
0-15	Yellowish red highly calcareous clay loam with moderate granular structure. Clear to:
15-30	Red highly calcareous light clay with moderate polyhedral structure. Clear to:
30-65	Red highly calcareous medium clay with strong polyhedral structure. Gradual to:
65-100	Red massive very highly calcareous medium clay with 10-20% soft carbonate segregations. Diffuse to:
100-150	Red highly calcareous medium clay with moderate polyhedral structure and 20-50% ironstone, quartz and calcrete gravel.



Classification: Endohypersodic, Pedal, Calcic Calcarosol; thick, non-gravelly, clay loamy / clayey, deep



Summary of Properties

Drainage:	Well drained - the soil is unlikely to remain wet for more than a few days following prolonged rain.
Fertility:	Natural fertility is high as indicated by the exchangeable cation data.
рН:	Alkaline at the surface, strongly alkaline with depth.
Rooting depth:	150 cm in pit but few roots below 100 cm.

Barriers to root growth:

Physical:	None.

Chemical: None.

Waterholding capacity: Approximately 130 mm in rootzone.

Seedling emergence:	Good.
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Erosion Potential:

Water: Low.

Wind: Low.

Laboratory Data

Depth cm	pH H ₂ O	pH CaC1₂	CO3 %	5		Org.C %	Avail. P mg/kg	K	mg/kg mg/kg (DTPA)		00		(DTPA)		00		CEC cmol (+)/kg	Exc	hangea cmol(ble Cat (+)/kg	ions	ESP
											Cu	Fe	Mn	Zn	(),	Ca	Mg	Na	K			
Paddock	8.5	7.9	6	0.17	0.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
0-15	8.6	7.9	3	0.15	0.56	-	-	-	-	-	-	-	-	-	23.3	15.2	3.7	0.70	2.08	3.0		
15-30	8.6	7.9	2	0.16	0.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
30-65	8.6	7.9	3	0.17	0.43	-	-	-	-	-	-	-	-	-	27.5	17.1	5.6	1.55	1.68	5.6		
65-100	9.0	7.9	14	0.22	0.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
100-150	9.2	8.1	19	0.27	0.57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Note: Paddock sample bulked from cores (0-10 cm) taken around the pit.

CEC (cation exchange capacity) is a measure of the soil's capacity to store and release major nutrient elements.

ESP (exchangeable sodium percentage) is derived by dividing the exchangeable sodium value by the CEC.

Further information: DEWNR Soil and Land Program



