

## DEEP CALCAREOUS CLAY LOAM

**General Description:** *Medium textured brown surface soil over a calcareous medium textured silty subsoil grading to alluvium*

**Landform:** Alluvial flats

**Substrate:** Alluvial light clay

**Vegetation:** *Stipa* spp. (spear grass) and bindyi.



<b>Type Site:</b>	Site No.:	CM079	1:50,000 mapsheet:	6830-3 (Lindley)
	Hundred:	Lindley	Easting:	367900
	Section:	95	Northing:	6249050
	Sampling date:	18/11/96	Annual rainfall:	225 mm average

Alluvial flat, 0% slope with a firm surface.

### Soil Description:

Depth (cm)	Description
0-20	Brown clay loam with moderate granular structure. Clear to:
20-45	Brown highly calcareous silty clay loam with moderate polyhedral structure. Gradual to:
45-70	Brown very highly calcareous silty clay loam with moderate blocky structure and 10-20% fine carbonate. Gradual to:
70-100	Brown very highly calcareous silty clay loam with weak prismatic structure and 2-10% soft carbonate. Diffuse to:
100-140	Brown very highly calcareous light clay with weak prismatic structure breaking to moderate blocky, and 10-20% soft carbonate.



**Classification:** Epibasic, 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:** Inherent fertility is high, as indicated by exchangeable cation data.

**pH:** Alkaline throughout.

**Rooting depth:** 140 cm in pit, but few roots below 100 cm.

**Barriers to root growth:**

**Physical:** None.

**Chemical:** None.

**Waterholding capacity:** Approximately 140 mm in rootzone.

**Seedling emergence:** Good.

**Erosion Potential:**

**Water:** Low.

**Wind:** Moderately low - stock will pulverize soil creating an erosion hazard.

### Laboratory Data

Depth cm	pH H <sub>2</sub> O	pH CaCl <sub>2</sub>	CO <sub>3</sub> %	EC1:5 dS/m	ECe dS/m	Org.C %	Avail. P mg/kg	Avail. K mg/kg	SO <sub>4</sub> mg/kg	Boron mg/kg	Trace Elements mg/kg (DTPA)				CEC cmol (+)/kg	Exchangeable Cations cmol(+)/kg				ESP
											Cu	Fe	Mn	Zn		Ca	Mg	Na	K	
Paddock	8.5	7.8	2	0.16	0.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0-20	8.4	7.8	2	0.15	0.55	-	-	-	-	-	-	-	-	25.2	13.6	4.7	0.24	3.45	1.0	
20-45	8.5	7.8	3	0.14	0.43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
45-70	8.7	8.0	16	0.18	0.50	-	-	-	-	-	-	-	-	18.5	7.9	7.2	0.65	1.32	3.5	
70-100	8.8	8.1	14	0.15	0.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
100-140	8.8	8.2	16	0.15	0.37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**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](#)

