



## Summary of Properties

**Drainage:** Well drained. The soil is rarely saturated for more than a day or so following heavy or prolonged rainfall.

**Fertility:** Inherent fertility is high, as indicated by the exchangeable cation data. Surface clay and organic carbon levels are high, providing abundant nutrient retention. Concentrations of all measured elements are adequate, although nitrogen levels were not assessed - depend on legume status of pastures and cropping history.

**pH:** Alkaline at the surface, strongly alkaline with depth.

**Rooting depth:** 30 cm in pit.

### Barriers to root growth:

**Physical:** The partly cemented Class III C carbonate rubble layer severely restricts root growth.

**Chemical:** High pH, sodicity and boron concentrations below 60 cm effectively inhibit deeper root growth.

**Waterholding capacity:** Approximately 35 mm in the rootzone.

**Seedling emergence:** Satisfactory.

**Workability:** Firm surface is easily worked.

### Erosion Potential:

**Water:** Low.

**Wind:** Moderately low.

## 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	
0-10	8.3	7.7	5	0.21	0.99	2.0	62	990	-	3.6	0.25	9.6	7.6	0.59	39.2	29.9	5.23	0.15	3.91	0.3
10-15	8.6	8.0	12	0.18	0.53	1.6	6.3	670	-	4.1	0.33	16	1.6	0.31	45.2	32.2	10.2	0.10	2.73	0.2
15-30	9.1	8.4	24	0.25	0.87	1.1	9.0	610	-	8.4	0.56	8.9	1.3	0.47	34.9	16.7	14.5	1.14	2.60	3.3
30-60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
60-100	10.0	8.7	56	0.87	3.87	0.17	<2.0	840	-	26	0.65	3.5	0.29	0.39	22.0	2.20	9.90	7.72	2.72	32.8
100-140	10.0	8.8	52	0.97	5.30	0.13	<2.0	920	-	29	0.63	3.4	0.25	1.0	24.7	2.07	9.92	9.43	3.29	38.2
140-150	9.1	8.3	2	1.14	4.28	<0.1	<2.0	1200	-	41	0.46	4.5	0.87	0.29	31.2	1.12	13.3	12.32	4.48	39.5

**Note:** 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](#)

