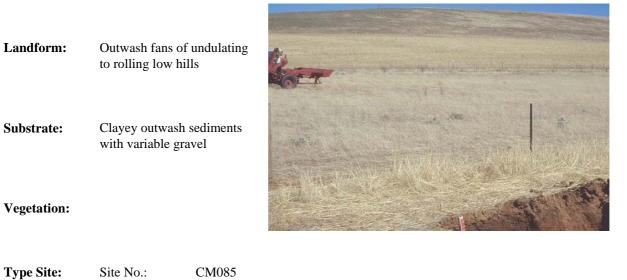
DEEP GRADATIONAL CLAY LOAM

General Description:

Well structured dark reddish brown clay loam to light clay overlying a coarsely structured red heavy clay containing soft carbonate segregations with depth



pe Site:	Site No.:	CM085								
	1:50,000 sheet:	6630-4 (Spalding)	Hundred:	Ayers						
	Annual rainfall:	450 mm	Sampling date:	27/02/97						
	Landform:	Upper slope of gently inclined alluvial fan, 3% slope Firm with 2-10% quartzite stone								
	Surface:									

Soil Description:

Depth (cm)	Description	
0-12	Dark reddish brown light clay loam with weak granular structure and 2-10% siltstone gravel. Abrupt to:	
12-30	Dark reddish brown light clay with weak platy structure breaking to strong polyhedral and 2- 10% siltstone gravel. Clear to:	
30-45	Dark reddish brown light medium clay with strong coarse prismatic structure breaking to strong polyhedral and 2-10% siltstone gravel. Gradual to:	
45-85	Red light medium clay with strong polyhedral structure and 2-10% siltstone gravel. Gradual to:	
85-140	Reddish yellow very highly calcareous massive light clay with 20-50% soft carbonate segregations and 10-20% siltstone gravel. Clear to:	
140-150	Laminar calcrete pan.	



Classification: Haplic, Hypercalcic, Red Dermosol; medium, slightly gravelly, clay loamy / clayey, deep

Summary of Properties

Drainage	Moderately well drained. The soil is unlikely to remain saturated for more then a week.								
Fertility	Natural fertility is moderately high. Test results indicate that all elements analysed are adequately supplied with the possible exception of sulphur. Organic carbon is low.								
рН	Slightly acidic at the surface, alkaline with depth.								
Rooting depth	85 cm in pit.								
Barriers to root growth									
Physical:	There are no apparent barriers.								
Chemical:	There are no apparent barriers.								
Water holding capacity	Approximately 110 mm in root zone.								
Seedling emergence:	Good.								
Workability:	Good.								
Erosion Potential									
Water:	Moderately low, but runoff from upslope must be controlled.								
Wind:	Low.								

Laboratory Data

Depth cm	pH H2O	pH CaC1 ₂	CO3 %	EC1:5 dS/m	ECe dS/m	%	Avail. P mo/ko	Avail. K mg/kg	mg/kg	Boron mg/kg	Trace Elements mg/kg (EDTA)			CEC cmol (+)/kg	Exc	ESP				
											Cu	Fe	Mn	Zn	(1)116	Ca	Mg	Na	Κ	
Paddock	6.6	5.8	0	0.09	-	1.1	53	629	5.6	1.0	2.5	146	256	2.3	10.1	6.7	1.6	0.12	1.15	1.2
0-12	6.5	5.5	0	0.07	-	1.2	78	611	4.9	0.8	2.3	178	226	2.2	9.1	5.3	1.2	0.11	1.19	1.2
12-30	7.2	6.4	0	0.04	-	0.7	30	618	2.7	0.8	4.2	160	451	1.9	17.2	10.6	2.5	0.18	1.13	1.0
30-45	7.5	6.9	0	0.09	-	0.4	18	399	3.1	0.8	3.8	123	378	2.0	19.3	13.8	3.6	0.32	0.76	1.7
45-85	8.1	7.5	0	0.07	-	0.2	23	340	4.2	0.7	3.5	86	299	2.3	18.5	13.2	3.8	0.30	0.68	1.6
85-140	8.8	7.8	26.9	0.04	-	0.1	12	287	17	0.6	0.8	2	3.5	3.2	10.6	7.9	3.1	0.37	0.51	3.5
140-150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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.