GRADATIONAL SANDY LOAM OVER CALCRETE
(Deep Terre soil)

General Description: *Sandy loam grading to a red sandy clay loam, calcareous with depth*

Landform: Gently undulating plain
with low sandhills.

Substrate: Calcrete.

Vegetation:

Type Site: Site No.: EC087

1:50,000 sheet:	6030-4 (Murdinga)	Hundred:	Cowan
Annual rainfall:	405 mm	Sampling date:	10/11/93
Landform:	Depression between sandhills		
Surface:	Soft with 2-10% calcrete stone		

Soil Description:

Depth (cm)	*Description*
0-10	Dark brown soft sandy loam. Clear to:
10-43	Strong brown and yellow soft heavy sandy loam. Gradual to:
43-65	Yellowish red friable sandy clay loam with weak fine subangular blocky structure. Abrupt to:
65-	Calcrete.

Classification: Haplic, Petrocalcic, Red Kandosol; medium, slightly gravelly, loamy / clay loamy, moderate

Summary of Properties

Drainage Well drained. The soil never remains wet for more than a couple of days at a time.

Fertility Inherent fertility is moderately low, as indicated by the exchangeable cation data. Phosphorus levels are high, but copper appears to be deficient. Nitrogen levels depend on legume content of pastures and cropping history. Organic carbon concentrations are satisfactory.

pH Slightly acidic at the surface, slightly alkaline at depth.

Rooting depth 65 cm in pit.

Barriers to root growth

Physical: The calcrete prevents deeper root growth.

Chemical: There are no chemical barriers.

Water holding capacity Approximately 85 mm in the root zone.

Seedling emergence: Satisfactory.

Workability: Soft surface is easily worked.

Erosion Potential

Water: Low.

Wind: Moderately low.

Laboratory Data

Depth cm	pH H_2O	pH $CaC1_2$	CO_3 %	EC1:5 dS/m	ECe dS/m	Org.C %	Avail. P mg/kg	Avail. K mg/kg	SO_4 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	6.2	5.8	0	0.05	0.24	1.1	50	151	-	0.5	0.1	20	7.4	0.5	6.1	5.6	0.9	0.13	0.46	2.1
10-43	6.9	6.3	0	0.04	0.13	0.3	8	64	-	0.8	0.1	4	1.8	0.1	6.9	8.2	1.1	0.18	0.23	2.6
43-65	7.8	7.5	0.2	0.14	0.80	0.3	4	47	-	0.3	0.1	5	0.4	0.2	10.5	8.4	1.5	0.33	0.19	3.1

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.