SANDY LOAM OVER RED CLAY LOAM ON ROCK
(Jericho soil)

General Description: *Loamy sand to loam over a well structured red clay loam to light clay, grading to weathering basement rock at shallow depth.*

Landform: Ridges of undulating to rolling low hills.

Substrate: Haematite quartzites and associated schists of the Hutchison Group.

Vegetation: Eucalyptus cladocalyx woodland.

Type Site: Site No.: EL145

50,000 sheet:	6028-1 (Lincoln)	Hundred:	Wanilla
Annual rainfall:	525 mm	Sampling date:	1982
Landform:	Upper slope in a landscape of rolling low hills, 15% slope		
Surface:	Firm		

Soil Description:

Depth (cm)	*Description*
0-7	Dark reddish brown sandy loam with granular structure and 10% schist fragments (10-50 mm). Clear to:
7-25	Yellowish red clay loam with subangular blocky structure and 2-10% amphibolite fragments (10-50 mm). Gradual to:
25-80	Weak red massive loamy sand with more than 75% ferruginous schist fragments (100-300 mm). Diffuse to:
80-100	Yellowish red massive loam with 25-50% ferruginous schist fragments (100-300 mm).

Classification: Haplic, Eutrophic, Red Chromosol; thin, slightly gravelly, loamy / clay loamy, shallow

Summary of Properties

Drainage Well drained. The soil rarely remains wet for more than a few days following heavy or prolonged rainfall.

Fertility Inherent fertility is moderate, although the exchangeable cation data are misleading due to the inadvertent location of the site on an old sheep camp. Nutrient retention capacity is low because of the low clay content of the surface. However, the more clayey subsoil at shallow depth has good retention capacity.

pH Neutral throughout the soil profile, strongly acidic in the weathered rock below the profile.

Rooting depth Not recorded. Estimate 25 cm in pit.

Barriers to root growth

Physical: The main barrier is the underlying rock.

Chemical: There are no apparent chemical barriers.

Water holding capacity Approximately 40 mm in the root zone.

Seedling emergence: Satisfactory, although hard setting in some soils affects establishment.

Workability: Satisfactory, although some surfaces may set hard, limiting cultivation.

Erosion Potential

Water: Moderate.

Wind: Low.

Laboratory Data

Depth cm	Sand %	Silt %	Clay %	pH H_2O	pH $CaC1_2$	CO_3 %	EC1:5 dS/m	ECe dS/m	Org.C %	Avail. P mg/kg	Trace Elements mg/kg (DTPA)				CEC cmol (+)/kg	Exchangeable Cations cmol(+)/kg				ESP
											Cu	Fe	Mn	Zn		Ca	Mg	Na	K	
0-7	82	13	5	7.0	-	0	0.64	3.15	9.76*	220*	3.24	106	22.0	6.22	38.0*	21.0	6.0	0.41	1.80	1.1
7-25	51	21	28	6.5	-	0	0.11	0.96	1.57	5	0.90	16	2.2	0.38	13.0	5.5	1.7	0.20	0.48	1.5
25-80	86	8	6	7.1	-	0	0.14	1.57	-	-	-	-	-	-	7.4	1.4	2.1	0.49	0.42	6.6
80-100	60	21	19	4.7	-	0	0.15	0.82	-	-	-	-	-	-	6.5	0.7	1.6	0.50	0.05	7.7

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.

* High values due to site's location on old sheep camp.