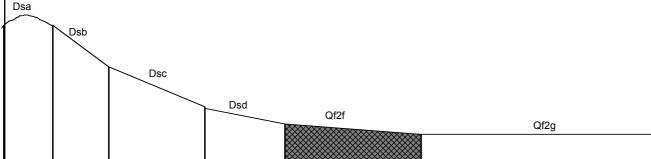
MAP UNIT SYMBOL: Qf2f MAP UNIT: Quaternary fan (sedimentary), gentle slope. Area: 688 ha Dsa



GENERAL DESCRIPTION: A.

These colluvial fans have developed on some of the gentle lower slopes of the Devonian sedimentary hills. The soils are yellow duplex with very dark grey loam top soils grading into bleached clay loams and then into brownish-yellow lightmedium clay subsoils. Sometimes the change in texture in the profile may be more gradational. Randomly scattered coarse fragments are abundant throughout the profile and there are many red and brown mottles in the subsoil. The soils are acidic and generally low in nutrients. These soils are very similar to the gentle sedimentary slopes (dse), the major difference being the many randomly distributed gravel fragments.

SITE CHARACTERISTICS:

| Parent Material Age: | Devonian | | Depth to Seas. Watertable: | >5.0m | |
|------------------------------------|---------------|---|----------------------------|-------------------------|--|
| Parent Material Lithology: | Sediments | | Flooding Risk: | Nil | |
| Landform Pattern: | Undulating lo | w hills | Drainage: | Moderately well drained | |
| Landform Element: | Fan | | Rock Outcrop: | 0% | |
| Slope a) common: | 9% | | Depth to Hard Rock: | >1.5m | |
| Slope b) range: | 4-10% | | Present Land Use: | Grazing | |
| Potential Recharge to Groundwater: | | DW . | | | |
| Major Vegetation Species: | R | River Red Gum, Red Stringybark, Narrow-leaved Peppermint, Blackwood | | | |

LAND DEGRADATION:

| Land Degradation | Water Erosion | | Wind Erosion | Mass Movement | Salting | Acidification |
|------------------|---------------|-----------|--------------|------------------|---------|---------------|
| | sheet / rill | gully | | | | |
| Susceptibility | Moderate | High | Moderate | Low | Low | Low |
| Incidence | Low - Mod | Low - Mod | Low | Low | Low | Not available |

В. SOIL PROFILE

PROFILE DESCRIPTION

| A 1 | 0-110mm | Very dark grey (10YR3/1) loam, weak granular structure, peds 2-5mm, rough fabric, moderately firm consistence, common fine sedimentary gravel fragments, pH 3.8. Clear transition to: |
|------------|-------------|--|
| A2 | 110-595mm | Light yellowish-brown (10YR6/4) sandy clay loam, bleached (10YR7/4) when dry, a few fine faint red mottles, apedal, earthy fabric, moderately firm consistence, many medium sized sedimentary gravel fragments, pH 4.5. Clear transition to: |
| В | 595-1500+mm | Brownish-yellow (10YR6/6) light medium clay, many medium faint red and brown mottles, moderate angular blocky structure, peds 2-5mm, moderately firm consistence, smooth fabric, abundant fine sedimentary gravel fragments, pH 4.2. |

CLASSIFICATION

Factual Key (Northcote): Dy3.41 (major) Gn 3.84 (minor)

Australian Soil Classification: Bleached-Acidic, Magnesic, Yellow Dermosol; thick,

very gravelly, loamy,/clayey, very deep.

CL **Unified Soil Group:**

INTERPRETATION OF LABORATORY ANALYSIS

| Horizon | pH (CaCl ₂) | %Gravel | E.C. (salts) | Nutrient Status | Р | К | Al | Organic matter | Dispersibility |
|---------|----------------------------|---------|-----------------|--------------------|---|---|----|-------------------|----------------|
| A1 | 3.8** | 57.4 | VL | VL | D | S | Т | Н | L |
| A2 | 4.5** | 26.8 | VL | VL | D | D | Т | VL | VL |
| В | 4.2** | 39.4 | VL | L | D | D | Т | L | М |

VL : Very low

L:Low M:Moderate H : High VH : Very High

D : Deficient S : Satisfactory

T: Toxic

* see appendix D for analytical results

** : Strongly acidic

N.A.: Not Available

SOIL PROFILE CHARACTERISTICS:

Permeability: Moderate (average 119 mm/day, range 33-234 mm/day)

High $(156 \text{ mmH}_2\text{O})$ **Available Water Capacity:**

Linear Shrinkage (B horizon): Low (7%)

C. LAND CAPABILITY ASSESSMENT

| Land Use Class | | Major Limiting Feature(s)/Land Use | | | | |
|----------------------------------|-------------|---|--|--|--|--|
| Agriculture | $C_3T_3S_4$ | High gravel/stone/boulder content, highly susceptibile to gully erosion | | | | |
| Effluent Disposal (septic tanks) | 3 | Moderate drainage | | | | |
| Farm Dams | 5 | Poor dispersion in subsoil | | | | |
| Secondary Roads | 3 | Moderate slope, moderate drainage, Unified Soil Group | | | | |
| Rural Residential | 5 | Farm dams | | | | |
| Small Farms | 5 | Farm dams | | | | |