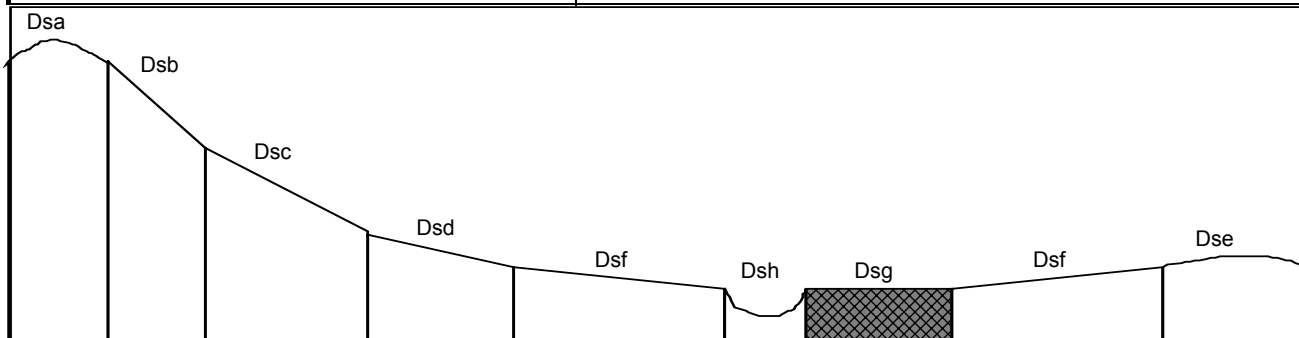


| | |
|------------------------------|----------------------------------------------------------|
| MAP UNIT SYMBOL : Dsg | MAP UNIT : Devonian sediments, very gentle slope. |
| Area : 620 ha | |



A. GENERAL DESCRIPTION :

Very gentle slopes usually found at the bottom of a hill slope adjacent to the drainage line in the undulating sedimentary low hills. The soils in this unit are predominantly yellow duplex, like those on the moderate and gentle slopes. Hardsetting loam top soils overlie bleached gravelly loams and then heavily mottled clays. The profiles are moderately deep. These very gentle slopes are moderately susceptible to salting, gully and wind erosion. In many instances these forms of degradation are due to inappropriate land use and/or management practices.

SITE CHARACTERISTICS :

| | | | |
|-------------------------------------------|---------------------------|-----------------------------------|-------------------------|
| Parent Material Age: | Devonian | Depth to Seas. Watertable: | 2.0-5.0m |
| Parent Material Lithology: | Sediments | Flooding Risk: | Nil |
| Landform Pattern: | Undulating low hills | Drainage: | Moderately well drained |
| Landform Element: | Hillslope | Rock Outcrop: | 0% |
| Slope a) common: | 2% | Depth to Hard Rock: | 0.6-1.2m |
| Slope b) range: | 1-3% | Present Land Use: | Grazing |
| Potential Recharge to Groundwater: | Low | | |
| Major Vegetation Species: | Red Stringybark, Grey Box | | |

LAND DEGRADATION :

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

B. SOIL PROFILE

PROFILE DESCRIPTION

| | | |
|------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A1 | 0-65mm | Hardsetting dark greyish brown (10YR4/2) loam fine sandy, weak subangular blocky structure, peds 2-5mm, rough fabric, moderately weak consistence, high organic matter, pH 4.5. Abrupt transition to: |
| A21 | 65-170mm | Yellowish brown (10YR5/4) silt loam fine sandy, bleached (10YR7/4) when dry, apedal, earthy fabric, moderately strong consistence, many medium sized sedimentary gravel fragments, pH 4.0. Clear transition to: |
| A22 | 170-370mm | Light yellowish brown (10YR6/4) silt loam fine sandy, bleached when dry (10YR8/4), weak subangular blocky structure, peds 10-20mm, rough fabric, moderately strong consistence, many medium sized sedimentary gravel fragments, pH 4.0. Gradual transition to: |
| B2 | 370-950mm | Brownish yellow (10YR6/6) medium-heavy clay, abundant medium sized distinct red and orange mottles, strong subangular blocky structure, peds 10-20mm, smooth fabric, very firm consistence, a few sedimentary gravel fragments, pH 4.5. Clear transition to: |
| B3 | 950-1150mm | Light yellowish brown (10YR6/4) lighy-medium clay, many medium sized prominent red and pale mottles, moderate angular blocky structure, peds 5-10mm, smooth fabric, moderately firm consistence, abundant medium sized sedimentary gravel fragments, pH 4.9. |

CLASSIFICATION

| | |
|----------------------------------------|---------------------------------------------------------------------------------------------|
| Factual Key (Northcote): | Dy3.41 (major) |
| Australian Soil Classification: | Bleached-Sodic, Magnesian, Yellow Chromosol; medium, slightly gravelly, loamy/clayey, deep. |
| Unified Soil Group: | CH |

INTERPRETATION OF LABORATORY ANALYSIS

| Horizon | pH (CaCl ₂) | %Gravel | E.C. (salts) | Nutrient Status | P | K | Al | Organic matter | Dispersibility |
|---------|-------------------------|---------|--------------|-----------------|---|---|----|----------------|----------------|
| A1 | 4.5** | 5.4 | VL | M | D | S | S | M | L |
| A21 | 4.0** | 28.2 | VL | VL | D | S | T | M | L |
| A22 | 4.0** | 34.0 | VL | VL | D | S | T | L | M |
| B2 | 4.5** | 2.7 | VL | L | D | S | T | VL | L |
| B3 | 4.9 | 16.3 | VL | L | D | S | S | VL | L |

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: | Slow (average 25mm/day, range 10-33 mm/day) |
| Available Water Capacity: | Moderate (137 mm H ₂ O) |
| Linear Shrinkage (B horizon): | Low (10%) |

C. LAND CAPABILITY ASSESSMENT

| Land Use | Class | Major Limiting Feature(s)/Land Use |
|----------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Agriculture | C ₃ T ₂ S ₃ | Climate, moderate depth to hard rock, moderate available water capacity, moderately dispersible top soil, moderate gravel/stone/boulder content, moderate susceptibility to gully and wind erosion |
| Effluent Disposal (septic tanks) | 4 | Low permeability |
| Farm Dams | 4 | Low suitability of subsoil, shallow depth to hard rock |
| Secondary Roads | 3 | Moderate drainage, Unified Soil Group |
| Rural Residential | 4 | Effluent disposal, farm dams |
| Small Farms | 3 | Agriculture, effluent disposal, farm dams, secondary roads, buiding foundations |