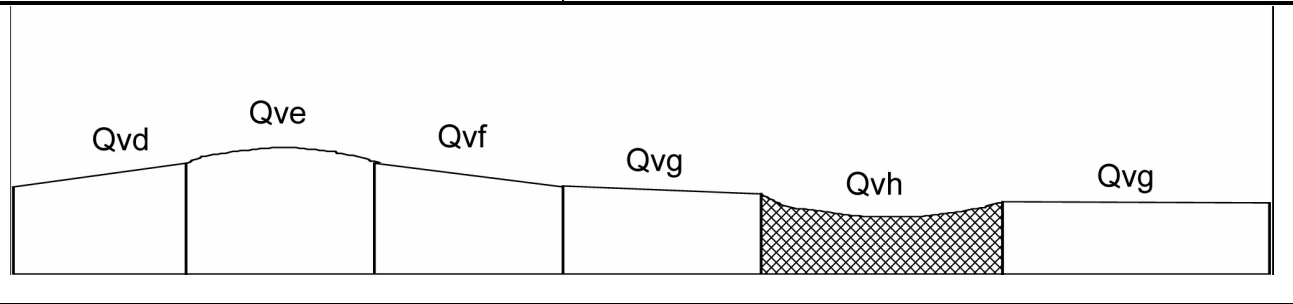


**MAP UNIT SYMBOL: Qvh**

Area: 7 624 ha

**MAP UNIT: Quaternary volcanic, drainage depression**



**A. GENERAL DESCRIPTION**

Volcanic drainage depressions are numerous, particularly on the very gentle and gentle slopes. Some may be slightly exaggerated in width, although there are some quite wide depressions on the very gentle slopes. The smaller and deeply incised depressions have not been mapped. The drainage depressions have a high flood risk due to overland flow which leads to periodic water logging. The soils are quite variable, although duplex soils with dark, mottled subsoils predominate. Minor soil types include duplex soils with a mottled yellowish subsoil, with an A2 horizon absent, or if present is not bleached, uniform clays, and gradational dark soils.

**SITE CHARACTERISTICS**

<b>Parent Material Age:</b>	Quaternary	<b>Depth to seas. Watertable:</b>	>1.1 m
<b>Parent Material Lithology:</b>	Volcanics	<b>Flooding Risk:</b>	High
<b>Landform Pattern:</b>	Lava plain	<b>Drainage:</b>	Moderately well drained
<b>Landform Element:</b>	Drainage depression	<b>Rock Outcrop:</b>	0%
<b>Slope a) common:</b>	2%	<b>Depth to Hard Rock:</b>	>1.1 m
<b>Slope b) range:</b>	1 - 3%	<b>Present Land Use:</b>	Grazing
<b>Potential Recharge to Groundwater:</b> Low			
<b>Major Native Vegetation Species:</b> Rushes, Kangaroo Grass, Manna Gum, Blackwood			

**LAND DEGRADATION**

Land Degradation	Water Erosion		Wind Erosion	Mass Movement	Salting	Acidification
	sheet/rill	gully				
<b>Susceptibility</b>	Moderate	Low	Moderate	Very low	Moderate	Moderate
<b>Incidence</b>	Low	Low	Low	Low	Moderate	Not available

**B. SOIL PROFILE**

**PROFILE DESCRIPTION**

<b>A1</b> 0-60 mm	Very dark greyish brown (10YR3/2) loam, weak subangular blocky structure, peds 2-5 mm, rough fabric, very weak consistence, pH 6.0. Clear transition to:
<b>A3</b> 60-260 mm	Very dark greyish brown (10YR3/2) silty clay loam, strong subangular blocky structure, peds 2-5 mm, rough fabric, very weak consistence, less than 2% medium coarse subangular basalt gravel fragments, pH 6.0. Gradual transition to:
<b>B21</b> 260-520 mm	Very dark greyish brown (10YR3/2) medium clay, strong subangular blocky structure, peds 5-10 mm, smooth fabric, moderately weak consistence, a few medium subangular basalt gravel fragments, pH 6.5. Gradual transition to:
<b>B22</b> 520-810 mm	Very dark greyish brown (10YR3/2) heavy clay, less than 2% fine faint yellow mottles, strong subangular blocky structure, peds 5-10 mm, smooth fabric, moderately weak consistence, a few medium subangular basalt gravel fragments, pH 7.0. Clear transition to:

- B23** 810-915 mm Dark brown (10YR3/3) heavy clay, medium faint orange and yellow mottles are common, strong subangular blocky structure, peds 5-10 mm, smooth fabric, moderately weak consistence, less than 2% fine subangular basalt gravel fragments, pH 7.0. Abrupt transition to:
- B3** 915-990 mm Very dark greyish brown (10YR3/2) heavy clay, medium faint orange and yellow mottles are common, strong subangular blocky structure, peds 5-10 mm, smooth fabric, moderately weak consistence, coarse subrounded basalt gravel fragments are common, pH 7.0. Abrupt transition to:
- BC** 990-1140 mm+ Partially weathered basalt rock.

#### CLASSIFICATION

**Factual Key:** Dd1.12 (major), Dy3.21, Dy3.12, Uf6, Gn3.42/3  
**Australian Soil Classification:** Haplic, Eutrophic, Black Chromosol; medium, non-gravelly, silty/clayey, moderate  
**Unified Soil Group:** CH

#### INTERPRETATION OF LABORATORY ANALYSIS\*

Horizon	pH (CaCl <sub>2</sub> )	% Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
A1	4.8	<1	VL	M	D	S	S	H	L
B1	5.0	1.5	VL	M	D	D	S	H	L
B21	5.5	9.1	VL	H	D	D	S	M	L
B22	5.8	3.3	VL	VH	D	D	S	M	L
B23	6.1	1.4	VL	VH	D	D	S	L	L
B3	6.3	14.5	VL	VH	D	D	S	L	L

VL: Very Low L: Low M: Moderate H: High VH: Very High D: Deficient S: Satisfactory  
 T: Potentially Toxic NA: Not Available \* see appendix D for analytical results \*\* Strongly Acidic

#### SOIL PROFILE CHARACTERISTICS:

**Permeability** Slow (average 70 mm/day, range 30-100 mm/day)  
**Available Water Capacity:** Moderate (143 mm H<sub>2</sub>O )  
**Linear Shrinkage (B horizon):** High (19%)

### C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
<b>Agriculture</b>	C <sub>2</sub> T <sub>1</sub> S <sub>3</sub>	Depth to seasonal watertable, available water capacity, susceptibility to sheet, rill and wind erosion
<b>Effluent Disposal (septic tanks)</b>	5	Flood risk
<b>Farm Dams</b>	3	Linear shrinkage, suitability of subsoil, depth to water table, depth to hardrock
<b>Building Foundations slab</b>	5	Flood risk
<b>stumps/footings</b>	5	Flood risk