



## Zaca Mesa Vineyard Soils

**Our ancient soils rest on the top and eroded sides of high terraces. They were formed from deep alluvium derived from sedimentary materials of gravel and shale. Listed below are soil descriptions found within our vineyard.**

### **CHAMISE SOIL SERIES**

The Chamise series consists of well-drained soils that developed over gravelly beds of silt, clay, and sandy water-deposited materials. These soils have a sandy loam, loam, clay loam or shaly loam surface layer and shaly clay subsoil. Chamise soils normally contain a large number of water-rounded fragments of **Monterey shale** derived from siliceous and ashy shale sources. These soils are found dissected on high terraces at elevations up to 1,500 feet.

#### **CgC – Chamise Loam (2-9% Slopes)**

The surface is brownish-gray with a mixture of sandy loam, shaly sandy loam, loam or clay loam. The surface layer contains 2 to 12 percent shale fragments. Fertility is low and the permeability is moderately slow. This soil occurs on gently sloping areas and is found on high terraces.

#### **ChF / ChG2 – Chamise Shaly Loam (15-75% Slopes)**

The surface is gray shaly loam. It is moderately steep to steep and occurs on sides of dissected, old terraces. The surface layer is typically 16 to 24 inches thick, containing 15 to 90 percent Monterey Shale fragments. Lime is commonly the parent material and is found near the bottom of ridges. Fertility is low and permeability is moderately low.

### **ELDER SOIL SERIES**

The Elder series consists of well-drained sandy loams that developed in alluvium derived from acid shale and sandstone. These soils occur on flood plains and on alluvial fans. Typically, Elder soils contain shale fragments, ranging from a few percent to about 30 percent of the profile. Strata throughout the profile are sandy loam to loam with minor strata of loamy sand, sand, and gravel.

#### **EmC – Elder Loam (2-9% Slopes)**

The surface layer is dark-gray sandy loam about 23 inches thick. The underlying layers are a light-brown stratified sandy-loam and fine sandy-loam. In some areas the soil is loam or shaly loam throughout the profile. It is subject to light run-off from adjacent hills. Fertility is high and permeability is moderate.

### ***Soil Type Locations***

#### **Chamise Loam**

Chapel Blocks  
Cushman A, B & E  
Mariposa Blocks  
Mesa B, C & H

#### **Chamise Shaly Loam**

Cushman F  
Foxen A, B & C  
Mesa A

#### **Elder Loam**

Zaca Block