GEOLOGY OF THE McLAREN VALE WINE REGION

McLaren Vale is one of the most geologically diverse wine regions in the world. More than 40 unique geological units are present, ranging in age from less than 10,000 years to over 650 million years.

Geology pits have been excavated throughout our region to showcase this unique geology, and to further highlight the relationship between geology and our region's fine wine.



GEOLOGY SITE 1 - THE ANCIENT ROCKS AT PAXTON WINES

The Ancient Rocks is a term used to describe geological units in the region of age greater than 480 million years. These units occur beneath the Willunga Embayment (Willunga Basin) and also to its north, east and south.



GEOLOGY SITE 2 - SOUTH MASLIN SANDS AT KAY BROTHERS AMERY

The South Maslin Sands consists of sands, silts, clays and gravels deposited as the sea advanced over the land about 50 million years ago. It occurs extensively throughout the Willunga Embayment, from north of Kangarilla to Sellicks Beach.



GEOLOGY SITE 3 - BLANCHE POINT FORMATION AT MAXWELL WINES

The Blanche Point Formation consists of sand, silt, clay and limestone. These sediments were deposited in old river channels, lagoons and in shallow marine environments as Australia separated from Antarctica about 35 million years ago.



GEOLOGY SITE 4 - PIRRAMIMMA SANDSTONE AT D'ARENBERG WINES

The Pirramimma Sandstone consists of grey, white and yellow sandstone, siltstone and clays. It is of Pleistocene age (about 2 million years old) and was deposited in an old river channel that extends from Blewitt Springs to the coastline at Aldinga Beach.



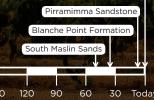
GEOLOGY SITE 5 - THE ALLUVIAL CLAY OF VALLEYS AT WIRRA WIRRA VINEYARDS

The Alluvial Clay of Valleys is a succession of modern age (Holocene) sediments occurring along and adjacent to watercourses in the McLaren Vale region, including Pedler Creek, Malpas Creek and Port Willunga Creek. These sediments generally consist of clay, silt and some minor sand and gravel deposits produced by erosion and surface runoff (stream flows) from the Sellick Hill Range.

GEOLOGICAL TIME SCALE

The rocks occurring in the McLaren Vale Wine Region range in age from less than 1000 years to over 650 million years. The geological time scale shows when key formations were deposited.

450 420 390 360 330 300 270



Alluvial Clay of Valley

Time (millions of years ago)

www.mclarenvale.info

The Ancient Rocks

GEOLOGY PIT LOCATIONS







