

LIMERICK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Tobergal
Other names used for site	<i>Tobar Geal</i> , The White Well
IGH THEME	IGH16 Hydrogeology
TOWNLAND(S)	Moanrue More
NEAREST TOWN/VILLAGE	Newcastle West
SIX INCH MAP NUMBER	44
ITM CO-ORDINATES	531615E 627935N
1:50,000 O.S. SHEET NUMBER 64	GSI BEDROCK 1:100,000 SHEET NO. 17
GIS CODE LK029	

Outline Site Description

A groundwater public water supply source and warm spring.

Geological System/Age and Primary Rock Type

The springs are situated in an area underlain by massive blue-grey Waulsortian limestone bedrock, of Mississippian (Lower Carboniferous) age.

Main Geological or Geomorphological Interest

The Tobergal springs are a very high yielding group of 3-4 springs. A substantial proportion of the output is considered as coming from a deep aquifer, which is probably Kiltorcan Sandstone, deep beneath the underlying limestone.

The site is within mainly pastureland, and situated at an elevation of ~ 61m OD. The Tobergal springs provide a large proportion of the South West Regional Water Scheme. The source is linked to the public water supply at Broadford, and contributes to the supply of a large area stretching from Newcastle West to Dromcolliher. Three of the springs, including Tobergal, are enclosed in a fenced off area. All the springs are surrounded by concrete collecting chambers that are covered and locked.

The discharge from all four springs flows by gravity feed to the pumphouse via one pipe and the surplus overflow then discharges from the pumphouse into a small stream. Groundwater levels in the immediate vicinity of the springs are generally close to surface and this is reflected in the permanently wet conditions within the fenced off site.

The groundwater at Tobergal is a calcium bicarbonate type water. The spring has a temperature of 13.4 - 14.1°C, which is considered to be a few degrees higher than normal groundwater. This indicates that at least some of the groundwater issuing at the spring has been thermally heated and is likely therefore to be coming up from a considerable depth.

Site Importance – County Geological Site

An important County Geological Site due to it being public water supply source. The site is among a group of warm springs located in Munster that share a location on the eastern margin of the Namurian basin where normal limestone groundwater undergoes deep circulation and returns to the surface via fault or fracture zones.

Management/promotion issues

The site is owned by Limerick County Council and is situated on the western side of the L71 road, between Bunoke Cross and Broadford. It is not of sufficient visible interest to be suitable for public promotion. The well is listed in the Geological Survey Ireland Groundwater Wells and Springs database as Well No. 1111NEW067. Geological Survey Ireland published a detailed report on the Tobergal (SW Region) Public Supply Groundwater Protection Zones in 1995. The report is publically available online.



Covered spring at the southwestern end of Tobergal site.



Fence surrounding the County Council owned site at Tobergal, looking east.

