

LAOIS - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Darkin Well		
Other names used for site	Darken Well		
IGH THEME	IGH1 Karst, IGH16 Hydrogeology		
TOWNLAND(S)	Straboe		
NEAREST TOWN/VILLAGE	Portlaoise		
SIX INCH MAP NUMBER	13		
ITM CO-ORDINATES	649286E 702000N		
1:50,000 O.S. SHEET NUMBER	54	GS1 BEDROCK 1:100,000 SHEET NO.	15

Outline Site Description

This site comprises a significant spring rising within a fenced compound.

Geological System/Age and Primary Rock Type

The feature is a hydrogeological and karstic geology spring that is post-glacial in age, but which flows through pure bedded Lower Carboniferous limestone of the Allenwood Formation, which is interpreted as being buried a few metres below the land surface at the site. The spring may be related to a fault, which passes through the site along a northeast-southwest plane.

Main Geological or Geomorphological Interest

Water which sinks at the Sluggory Cross Roads swallow hole, which is approximately 2.5 kilometres to the southeast of the Darkin Well, is reputed to emerge at the spring, though no karst dye tracing has ever been conducted. The supposition comes from the fact that the spring well became contaminated with silt in 1998 when the M7 Motorway works were working at Sluggory Cross Roads. The spring becomes very silty the day after heavy rainfall.

The spring is contained in a galvanised steel hut and was used as a water supply for a period of 2 months in 2007, but this was only as an emergency stopgap as it is considered too risky to use it continuously, given the flashy nature of the silt content in the emerging water. From estimates of water usage during this time, the spring overflow is considered to be approximately 80 m³ per hour during high flow conditions. The spring has also been known to go dry in hot, dry periods.

Site Importance – County Geological Site

The site is of County Geological Site importance, as a complement to the Sluggory Cross Roads swallow hole site, and as part of a suite of karstic features within the limestone terrain surrounding Portlaoise Town.

Management/promotion issues

Given the wider issue of protecting groundwater quality, the site is managed by Laois County Council, but promoting it would not be advisable without active partnership of the Council and local landowners, especially those adjacent to the Sluggory Cross Roads swallow hole.



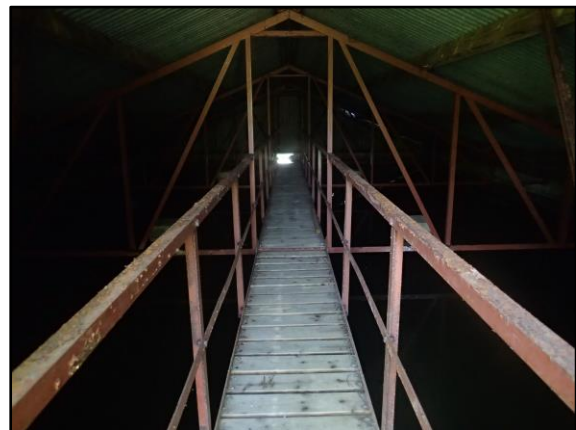
The Darkin Well compound, taken from the road at its entrance.



Looking northwards from the entrance to the spring hut.



The spring emerging at surface, flowing across a 90 degree weir.



A view inside the galvanised steel hut, where a gangway leads across the spring water.

