

LAOIS - COUNTY GEOLOGICAL SITE REPORT

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| NAME OF SITE | Rathleague Spring |
| Other names used for site | Rathleague Warm Spring |
| IGH THEME | IGH16 Hydrogeology |
| TOWNLAND(S) | Rathleague |
| NEAREST TOWN/VILLAGE | Portlaoise |
| SIX INCH MAP NUMBER | 13 |
| ITM CO-ORDINATES | 648750E 696660N |
| 1:50,000 O.S. SHEET NUMBER | 54 GSI BEDROCK 1:100,000 SHEET NO. 15, 16 |

Outline Site Description

A natural spring situated under tree cover, 2km southeast of Portlaoise alongside the R425 road.

Geological System/Age and Primary Rock Type

The spring emerges at the surface through pure-bedded Dinantian (Lower Carboniferous/Mississippian) Allenwood Formation limestone bedrock.

Main Geological or Geomorphological Interest

Rathleague Spring is a karst feature, and is one of several in this region southeast of Portlaoise. (Other local karst features include springs, sinking streams, enclosed depressions). The spring emerges at an elevation of 110 mOD. Rathleague spring is recorded by GSI as a 'Warm' Spring, and was recorded on the early GSI six inch sheets to have a temperature of 14°C. It is situated close to a mapped fault, which lies around 700m to the east. At this fault contact, the Allenwood Formation lies in close proximity to Clogrenan Formation limestones and younger Namurian shales (Luggacurren Shale Formation; Killeshin Siltstone Formation).

Site Importance – County Geological Site

This site is an important County Geological Site. The spring is situated in a Regionally Important Aquifer – Karstified aquifer. This is an important hydrogeological phenomenon of a warm spring in this part of County Laois, and is possibly the county's only warm spring. (Tepid springs have been identified elsewhere, e.g. Kyle Spring). A 1986 paper on the energy potential of groundwater in Ireland listed Rathleague Spring among 17 warm springs (with a temperature >13.5°C) in Leinster, with a water temperature value of 14.5°C recorded on May 10th 1982. Warm spring temperature values are considered 2.5°-7°C above normal.

Management/promotion issues

The well is listed by the GSI as Well Number 23/19SE W148. The spring remains hidden beneath well-established deciduous tree cover and lower vegetation (brambles, ivy). Its situation in close proximity to the R425 road is benefited by this cover. Otherwise fly-tipping could be a greater threat. General 'blown-in' litter was not identified. However, the site requires regular monitoring to ensure these problems and subsequent pollution of the spring does not become an issue. The site is not suitable for general promotion owing to the difficulty of access, proximity to the busy road, and the general undramatic nature of this apparently still, pond of water.



Location of Rathleague Spring hidden amid vegetation alongside R425. Looking northeast.



Entrance gate to *Kilsaran*. Spring to right of gate, beneath trees. Spring emerges and flows north (left) under entrance.



View of spring amid trees, brambles and other scrub. R425 to left. Looking north.



View of spring amid trees, ivy, brambles and other scrub. R425 to left. Looking northeast.

