

TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Tobernaloo
Other names used for site	Thurles Water Supply Scheme
IGH THEME	IGH16 Hydrogeology
TOWNLAND(S)	Sheskin
NEAREST TOWN/VILLAGE	Thurles
SIX INCH MAP NUMBER	41
ITM CO-ORDINATES	610005E 658385N (spring emergence)
1:50,000 O.S. SHEET NUMBER 66	GSI BEDROCK 1:100,000 SHEET NO. 18

Outline Site Description

At Tobernaloo a spring emerges from deep glacial till deposits, at the edge of an alluvial, flat, gravels, and flows into a man-made sump feature, before flowing away from the site into a fast-flowing stream. The water supply for much of Thurles Town supply is extracted from the spring at the site.

Geological System/Age and Primary Rock Type

The spring emerges from glacial till that is of Quaternary age. The depth to bedrock at the spring is proven as greater than 5 m, and the bedrock (at depth) is of Lower Carboniferous (Mississippian) age Waulsortian limestones.

Main Geological or Geomorphological Interest

The Thurles Town Water Supply Scheme abstracts 900 m³ per day (200,000 gallons per day) from Tobernaloo Spring. The spring is fed by a regionally important karstified bedrock aquifer. An estimated 1,300 m³ of water per day flows out of the spring.

Groundwater levels are close to or at the ground surface in the vicinity of the spring. The topography around the spring forms a horseshoe, which drives groundwater westwards to discharge at the spring which is located at the point where the clayey, alluvial deposits pinch out.

The groundwater quality at the source is excessively hard, as the spring derives from pure, bedded limestone at depth.

Site Importance – County Geological Site

The spring at Tobernaloo is one of the largest springs in County Tipperary, and work completed by Geological Survey Ireland has shown that the spring has a contributing area of several square kilometres. As the site is also a major water supply source it is also one of the most important hydrogeological sites within the county.

Management/promotion issues

The site is securely fenced off within its own compound, and the spring itself is surrounded by a concrete chamber. Being a secure water supply vulnerable to contamination, the general promotion of the locality is not recommended. General education about the vulnerability of 'spring' groundwater supplies to pollution from septic tanks and agricultural slurry spills and bad spreading practices is highly advisable.

The site is easily seen from the roadside, but is down a long, country lane, and is in quite a remote location given its relative proximity to Thurles Town.



The compound around Tobernaloo, viewed from the road at the south.



The chamber collecting water (left), and the overflow into the adjacent stream (right).



The pumphouse for the Tobernaloo Water Supply Scheme.

