

WATERFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Ballynamuck Boreholes
Other names used for site	
IGH THEME	IGH16 Hydrogeology
TOWNLAND(S)	Ballynamuck West
NEAREST TOWN	Dungarvan
SIX INCH MAP NUMBER	Waterford 31
NATIONAL GRID REFERENCE	223634 94718
1:50,000 O.S. SHEET NUMBER	82 1/2 inch Sheet No. 22

Outline Site Description

The Ballynamuck Boreholes are the public water supply source for the Dungarvan area. The source consists of four bored wells which together provide approximately 6,000m³ of water per day.

Geological System/Age and Primary Rock Type

The wells are between 12.7m and 27.5m deep and are bored into a sequence of alluvial clays, glacial till and Waulsortian limestones. The alluvial clays are 6m deep, with the clay underlain by glacial till, and the depth to bedrock at the site approximately 11m-12m.

The lower portion of the boreholes is drilled into Waulsortian limestone bedrock, which is known to be karstified in the Dungarvan area and which has the potential to yield large quantities of groundwater through conduit flow.

Main Geological or Geomorphological Interest

Combined, the four boreholes have been proven to be capable of supplying up to 10,000m³ per day, or 10 million litres of water. These boreholes comprise therefore potentially some of the best yielding wells in Ireland.

It is considered that the River Colligan, which is only metres from the boreholes laterally, is perched on top of the alluvial clay deposits. Temperature and conductivity readings taken from the well water during a pumping test at Ballynamuck in 1994 suggested that the boreholes were not drawing any water from the river.

Site Importance

These are exceptionally productive bored wells which are among the top-yielding wells in the country. They are of County Geological Site importance.

Management/promotion issues

The boreholes are well protected with secure fencing surrounding and secure concrete, sunken chambers containing their caps.



Two of the four boreholes are underneath the traffic cones.



Four boreholes are contained in the yard at Ballynamuck West, underneath manhole covers.



