

## LOUTH - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Drumenagh Quarry</b>		
Other names used for site	Dromeena Quarry		
<b>IGH THEME</b>	<b>IGH11 Igneous Intrusions</b>		
<b>TOWNLAND(S)</b>	<b>Ballymakellet</b>		
<b>NEAREST TOWN/VILLAGE</b>	<b>Jeninstown</b>		
<b>SIX INCH MAP NUMBER</b>	<b>7</b>		
<b>ITM CO-ORDINATES</b>	<b>710123E 810523N</b>		
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>36</b>	<b>GSi BEDROCK 1:100,000 SHEET NO.</b>	<b>8/9</b>

### **Outline Site Description**

The site is an old quarry marked that is marked on the 1910 6-inch map. It is believed to have been last worked around 1960. It has recently been used as a paddock for horses.

### **Geological System/Age and Primary Rock Type**

The rocks exposed in the quarry are gabbros emplaced during the early stages of the formation of the Tertiary Carlingford Igneous Complex.

### **Main Geological or Geomorphological Interest**

The quarry is one of two main locations where the early-stage gabbros of the Carlingford Igneous Complex are exposed. The other is Trumpet Hill, which lies 400m southwest of the quarry. The broad sequence of events in the formation of the Carlingford Complex began with the alkaline basalt flows preserved near Rampark, east of Jeninstown (see Rampark site report). These were followed by intrusion into the Lower Palaeozoic and Lower Carboniferous succession of the gabbros and dolerites in the Drumenagh Hill – Trumpet Hill area, northwest of Jeninstown. Emplacement of the main rock types of the complex, the layered gabbros and the granophyre, followed.

The gabbro in the quarry is massive but is jointed, cut by faults and intruded by thin (typically  $\leq 0.2\text{m}$  thick) dolerite sheets or veins. Some of these veins have chilled margins, indicating intrusion into already-cooled gabbro. Some of the dolerite is in places reduced to a soft, friable rock by shearing. This is well exposed in the southeast corner of the quarry. Also on the southeastern face of the quarry is a 30mm-wide vein of glassy material displaying conchoidal texture typical of obsidian.

### **Site Importance – County Geological Site; may be recommended for Geological NHA**

This is the best exposure of the early-stage gabbro in the Carlingford Igneous Complex and as such warrants designation as a CGS. It is immediately northeast of Trumpet Hill and consideration should be given to extending the boundaries of the proposed Trumpet Hill NHA to include this site.

### **Management/promotion issues**

There appear to be no major threats to the integrity of the site. The quarry is private property and secured by a 3m-high metal gate. It has recently been used as a paddock for horses. Aerial photographs suggest it has not undergone any significant material change in the last 20 years. A limited amount of fly-tipping of household waste (bicycles, a metal sink, etc.) has taken place but the gates should prevent future dumping. As the site is privately owned and gated, permission should be sought if access is required. For this reason, promotion of the site should be limited to those seeking access for scientific purposes.



Drumenagh Quarry, view south from entrance.



Gabbro in southwest face of quarry (left); dolerite vein (D) cutting gabbro in southeast face (right).



Sheared dolerite (above hammer) in southeast face of quarry (left); conchoidal texture in thin, glassy vein cutting gabbro in southeast face of quarry (right).





