

## CAVAN - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Bruse Hill Quarry</b>
Other names used for site	
<b>IGH THEME</b>	<b>IGH4 Cambrian to Silurian</b>
<b>TOWNLAND(S)</b>	<b>Bruse</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Arvagh</b>
<b>SIX INCH MAP NUMBER</b>	<b>24</b>
<b>ITM CO-ORDINATES</b>	<b>631466E 798476N</b>
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>34</b>
	<b>GSi BEDROCK 1:100,000 SHEET NO. 8/9</b>

### **Outline Site Description**

This site comprises a disused quarry into the northern side of Bruse Hill, east of Arvagh.

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

The rocks in the quarry are part of the Coronea Formation, which is within Tract 2 in the Northern Belt of the Longford - Down inlier. They are of middle Ordovician age.

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

These rocks are representative of one of two formations comprising a major Tract (numbered 2 by geologists) of rocks in the Northern Belt of the Longford – Down inlier (extending and correlating with the Southern Uplands of Scotland). These Tracts are slices of the ocean floor that once separated northwestern Ireland from southeastern Ireland. The ocean is called the Iapetus Ocean, and is a major element of the geological history of Ireland. Sections of ocean floor were squeezed and stacked up as vertical slivers of rock (now called Tracts) adjacent to the subduction zone that consumed the Iapetus Ocean. The ocean closed over a long period during the Ordovician and early Silurian. The Iapetus Ocean floor rocks are poorly exposed in general and so quarries such as this are important reference sections.

The Coronea Formation is best exposed in this quarry and it is defined as the type locality in the Geological Survey of Ireland map report Sheet 8/9 (although the named townland is in error). It is made up of green greywackes, red shales and minor spilitic lavas. Red shales are particularly abundant in the lower part of the formation, averaging 5-10 m thick but can be up to 30 m thick over several hundred metres laterally. Some of these contain thin beds of chert. The spilitic lavas and other rocks are thought to have been deposited in water depths of over 4000 m.

### **Site Importance – County Geological Site**

The site is an important representative of the Ordovician rocks from the Northern Belt of the Iapetus Ocean floor which once separated Ireland in two halves.

### **Management/promotion issues**

The quarry is abandoned and is private property, and is not suitable for general promotion.



A view of the highest bench in the southern part of the quarry.



A view of the quarry from the roadside entrance.



A view of the main floor of the quarry.





