

# LAOIS - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	Old Rossmore
Other names used for site	
<b>IGH THEME</b>	IGH6 Minerals, IGH9 Upper Carboniferous and Permian, IGH15 Economic Geology
<b>TOWNLAND(S)</b>	Rossmore
<b>NEAREST TOWN/VILLAGE</b>	Bilboa
<b>SIX INCH MAP NUMBER</b>	37
<b>NATIONAL GRID REFERENCE</b>	666440E 673820N
<b>1:50,000 O.S. SHEET NUMBER</b>	61 <b>GSI BEDROCK 1:100,000 SHEET NO.</b> 19

## Outline Site Description

Old Rossmore is a large abandoned coal mine and sandstone quarry comprising several large open pits, extensive waste heaps, derelict processing plant and outcrops of coal.

## Geological System/Age and Primary Rock Type

The bedrock consists of sandstone, shale and coal of the Carboniferous Pennsylvanian (Westphalian) Moyadd Coal Formation and overlying Clay Gall Sandstone Formation.

## Main Geological or Geomorphological Interest

Old Rossmore lies at the eastern edge of the Leinster Coalfield. Both the Moyadd Coal Formation and overlying Clay Gall Sandstone Formation are exposed within the two large quarries on the southern part of the site. A third large quarry to the north is flooded and no exposure of coal was visible during the site visit, while the large quarry to the south appears to have been exploited only for sandstone. A fifth pit, which appears on the 1:50,000 maps as a small lake, is present in the northern part of the old mine site – this area is not included in the Old Rossmore site defined for this audit as it contains no features of heritage interest. The western-most quarry (the Cheswell opencast) is actually located in County Carlow and is also outside the site boundary. Coal from the No. 2 seam or Marine band was mined in both the Cheswell quarry and the eastern quarry by opencast methods in the 1980s; subsequently sandstone was quarried. The Marine Band is 0.31 m thick and is the most widespread and economically important seam in the Leinster Coalfield. It is well exposed in both quarries, particularly in the eastern quarry. The coal, like all coal in the Leinster Coalfield, is anthracite, a high-grade coal with high calorific value. However, also like most coal seams in the coalfield, the Marine Band contains high concentrations of sulphur, evident in the fine-grained pyrite visible throughout the exposure. Coal was also mined here underground in the earlier part of the 20<sup>th</sup> century but few traces of underground mining remain.

## Site Importance – County Geological Site; recommended for Geological NHA

Good exposures of coal and coal-bearing strata are uncommon in the Leinster Coalfield, not least because so much mining took place underground. Old Rossmore is therefore of great significance in this context.

## Management/promotion issues

The site is an abandoned mine site with significant safety concerns, including flooded quarries with steep, unfenced faces. Ongoing, very small-scale extraction has helped maintain exposure of the coal seam. It is of interest mainly to geologists and is not suitable for promotion to the general public in its current form.



View from southwest of eastern quarry; coal exposures (dark grey) in background.



Marine Band coal seam (centre) with shale below and sandstone above.



Marine Band coal seam (close-up, A4 page for scale).

