

COUNTY: DERBYSHIRE

SITE NAME: DIRTLOW RAKE
AND PINDALE

DISTRICT: HIGH PEAK, Derbyshire Dales

SITE REF: 15 WLM

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981, (as amended).

Local Planning Authority: PEAK PARK JOINT PLANNING BOARD, High Peak Borough Council, Derbyshire Dales District Council

National Grid Reference: SK 156822

Area: 21.5 (ha.) 53.1 (ac.)

Ordnance Survey Sheet 1:50,000: 110

1:10,000: SK 18 SE

Date Notified (Under 1949 Act): –

Date of Last Revision: –

Date Notified (Under 1981 Act): 1990

Date of Last Revision: –

Other Information:

New site.

Description and Reasons for Notification:

Dirtlow Rake is one of the major fissure veins of the South Pennine orefield. The old opencast demonstrates the structure of the vein and the remnant in situ mineralisation and scattered blocks show the typical mineral assemblage of calcite, galena, fluorite, baryte and sphalerite. To the south of Dirtlow Rake 'Pindale Quartz Rock', a silica-fluorite replacement of Carboniferous Limestone, is present both in boulders and in situ in a small quarry. Although poorly exposed this body is thought to have a 'pipe and flat' morphology, in contrast to the vein morphology seen in the Rake. The presence in close proximity, of two characteristic but contrasting types of South Pennine mineral deposits, give this site considerable research and teaching value.

Quarry faces and rock outcrops within Pindale provide excellent exposures of limestone layers formed about 350 million years ago during the early Carboniferous Period of geological time. The character of the limestone changes progressively across the site, recording the influence of an important boundary on the Carboniferous sea-bed, separating a shallow 'shelf' area from a deeper basin. The limestones contain fossil remains of the marine organisms that flourished in the Carboniferous sea, the varieties present varying in response to the environment in which they lived and the limestones formed. The site provides important evidence of the nature of the environment in this area during early Carboniferous times, and complements evidence found at other sites in the Caithness area.