

LEITRIM - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Twigspark
Other names used for site	Barrackpark
IGH THEME	IGH15 Economic Geology
TOWNLAND(S)	Twigspark, Barrackpark
NEAREST TOWN/VILLAGE	Lurganboy
SIX INCH MAP NUMBER	7
ITM CO-ORDINATES	585520E 840500N (open pit)
1:50,000 O.S. SHEET NUMBER 16	GSI BEDROCK 1:100,000 SHEET NO. 7
GISCODE LM032	

Outline Site Description

Small flooded open pit excavation in pasture field.

Geological System/Age and Primary Rock Type

Mississippian (Lower Carboniferous) dolomitized limestone of the Ballyshannon Limestone Formation (c. 330 Ma).

Main Geological or Geomorphological Interest

Two silver mines are recorded on the old six inch maps (1837-1842) in the townlands of Twigspark and Barrackpark but Twigspark is primarily known as a lead mine that was in operation for several years in the 1840s. Renewed exploration in the early 1950s, involving the digging of several pits and trenches, as well as drilling, demonstrated the occurrence of low-grade patchy zinc and lead mineralization in dolomitized limestone, apparently associated with jointing and faulting. Minor copper has also been recorded here. Renewed exploration in the 1980s, including diamond drilling, was not successful. The mineralization occurs near the base of the Carboniferous succession in the area, close to the faulted boundary with the basement rocks of the Slishwood Division, a situation analogous to that at Abbeystown mine, some 20 km to the southwest in County Sligo.

The only visible trace of mining at Twigspark today is the open pit at the southwestern end of the site, near the boundary with Shanvaus townland. The pit is flooded but is surrounded by grassed-over waste heaps that contain examples of mineralization and veining. The pit was reported to have the best mineralization observed during the 1950's period of exploration, with some patches of mineralization exceeding 2 % combined zinc and lead. A distinctive depression in the field may mark the site of the Barrackpark mine, over 100m to the northeast, but there is no other visible evidence for this site.

Site Importance – County Geological Site

Twigspark is by any standards a minor example of an historic mine site in Ireland but it is the only extant metal mine in Leitrim and as such is deserving of CGS status. The open pit and surrounding waste heaps contain examples of mineralization that hold significant interest for those engaged in research on Irish ore deposits.

Management/promotion issues

The site is on private land and access is by permission of the landowner. The current owner is aware of the significance of the site and there does not appear to be any threat to it. The site is likely to be of interest mainly to the exploration industry or academic researchers and does not require further promotion.



View northeast from southwestern end of Twigspark site, waste heap in foreground.



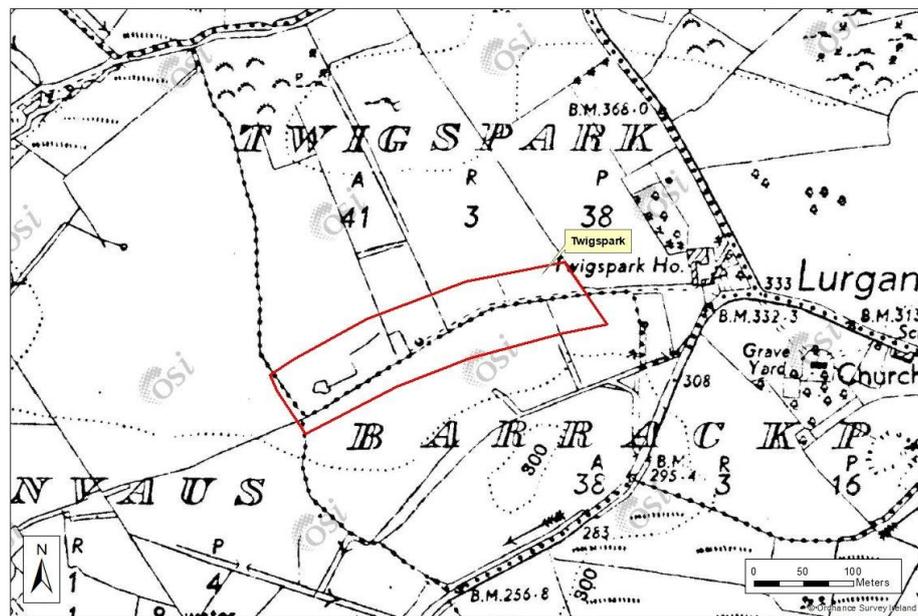
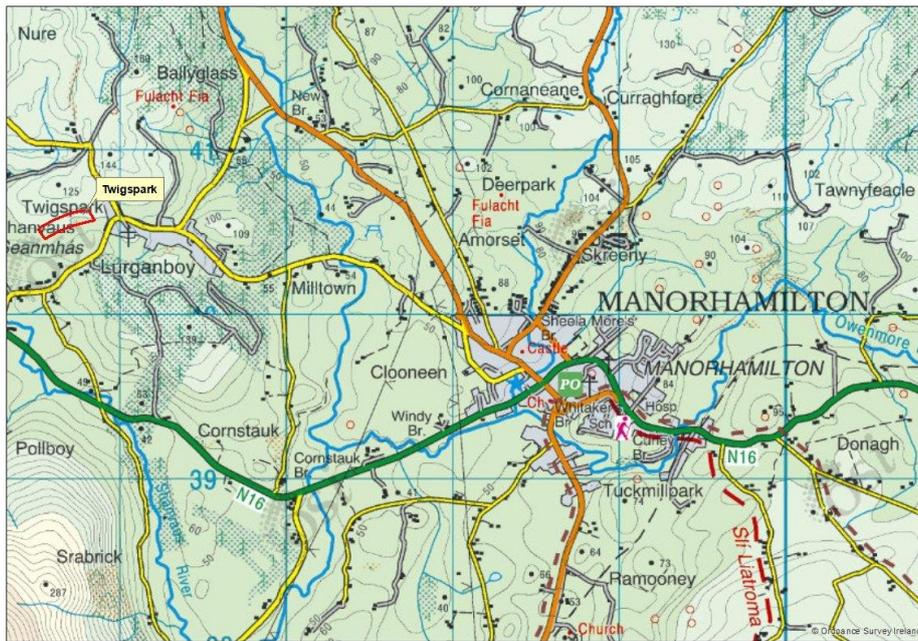
View southwestwards of Twigspark open pit, surrounded almost entirely by grassed waste heaps.



Mineralized block from waste heap, Twigspark.



View northeastwards from Twigspark open pit towards the Barrackpark site – a depression in the ground beside the tree may be a remnant of a mine feature but no other trace of mining is visible on the surface.



Parkes et al., 2020. Geological Survey Ireland.