

# LOUTH - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Salterstown</b>		
Other names used for site			
<b>IGH THEME</b>	<b>IGH15 Economic Geology</b>		
<b>TOWNLAND(S)</b>	<b>Salterstown</b>		
<b>NEAREST TOWN/VILLAGE</b>	<b>Annagassan</b>		
<b>SIX INCH MAP NUMBER</b>	<b>16</b>		
<b>ITM CO-ORDINATES</b>	<b>711840E 793358N (foreshore)</b>		
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>36</b>	<b>GS1 BEDROCK 1:100,000 SHEET NO.</b>	<b>13</b>

## Outline Site Description

The main site is a small coastal section on southern shore of Dundalk Bay; a ruined church less than 400m southwest is adjacent to the site of 19<sup>th</sup> century excavations.

## Geological System/Age and Primary Rock Type

The coastal section comprises greywackes and siltstones of the Silurian Salterstown Formation, part of the Lower Palaeozoic Longford-Down inlier. The area around the church is also underlain by the Salterstown Formation, not here exposed but present in boulders that make up the boundary wall of the church.

## Main Geological or Geomorphological Interest

The greywackes and siltstones exposed to the east of the slipway on the foreshore at Salterstown are intensely deformed: kinking, brecciation and quartz-carbonate veins are abundant. A sinuous, pinching and swelling fault-breccia zone is well exposed immediately north of the small lay-by 200m southeast of the slipway. The fault-breccia zone is up to 0.7m wide and strikes c.114°, dipping south. It comprises greywacke, siltstone and quartz fragments in a siliceous matrix. Abundant brown-yellow sphalerite (zinc sulphide) is present in quartz-carbonate veins and in the breccia matrix within this fault zone. Lesser amounts of galena (lead sulphide), chalcopyrite (copper-iron sulphide) and pyrite (iron sulphide) can also be observed. Mineralized veins, up to several cm thick, are also abundant in the footwall (northern) part of the outcrop.

In the area of the church, a lead deposit and a copper deposit were apparently mined in the early years of the 19<sup>th</sup> century. The Hibernian Mining Company subsequently sank shafts a drove an underground level in the mid-1820s but operations had ceased by 1827. There is no trace of these operations today. The stone wall that surrounds the ruined church and its graveyard contains greywacke and siltstone boulders with abundant examples of quartz-carbonate veining and brecciation. One boulder was observed with chalcopyrite, pyrite and sphalerite in veined and brecciated greywacke.

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

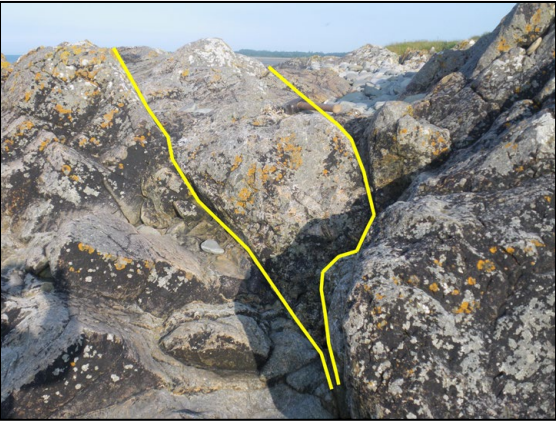
This is the only significant example of exposed sulphide mineralization in county Louth and as such warrants CGS status. It also has some national significance as an excellent exposure of mineralization within a fault-breccia zone in the Lower Palaeozoic Longford-Down tract.

## Management/promotion issues

The site on the foreshore is unprotected but has not been a target for mineral collectors. It is immediately adjacent to the Dundalk Bay SAC and proposed NHA. The area is very popular with swimmers and holiday-makers. The church site contains mineralization only within boulders making up its boundary wall – promotion of this site is not recommended given the risk of damage to the wall.



Salterstown mineralized zone, view to northeast along foreshore.



Mineralized zone on foreshore bounded by faults (yellow lines) (left); zone of brecciation with yellow sphalerite within foreshore mineralized zone (right).



Yellow sphalerite in cross-cutting veins and fractures on foreshore (left); sphalerite and chalcopyrite in quartz veins in boulder from church wall (right).

