

GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Claddaghduff Streamstown Bay
Other names used for site	
IGH THEME	IGH6 Mineralogy, IGH11 Igneous intrusions
TOWNLAND(S)	Leagaun, Grallagh
NEAREST TOWN/VILLAGE	Claddaghduff
SIX INCH MAP NUMBER	21, 22
ITM CO-ORDINATES	458180E 755350N
1:50,000 O.S. SHEET N). 37	GSI BEDROCK 1:100,000 SHEET NO. 10

Outline Site Description

Rocky shoreline with stretches of sandy beach between large outcrops and cliff exposures.

Geological System/Age and Primary Rock Type

Dalradian marbles, psammities and pelites of the Lakes Marble and Streamstown Formations intruded by the late-Caledonian Omev Granite.

Main Geological or Geomorphological Interest

This coastal sequence provides excellent exposure of the contact aureole of the Omev Granite wherein numerous minerals have grown under conditions of high-temperature metamorphism after intrusion of the granite. Minerals observed include andalusite, growing across and thus clearly post-dating the earlier foliation in pelitic rocks, and grossular garnet, diopside, wollastonite and vesuvianite in marbles now altered to calc-silicate skarn. The garnets are particularly striking and, in one location, individual rock layers consist of coarse (> 20 mm) euhedral garnet crystals that comprise over 50 % of the rock.

The contact between the Omev Granite and Streamstown Formation is extremely well exposed at the northern end of the site. The contact is everywhere sharp but interleaved, with thin offshoots of granite injected long the country rock foliation and aplite veins extending out into the aureole. The pelitic rocks at the contact have been hornfelsed and have a massive texture. At the southern end of the site, F3 folds are well developed in pelitic and psammitic lithologies.

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

This is proposed as a County Geological Site and possible NHA. It contains high-quality exposures of the granite / country rock contact, the contact aureole rocks and displays a strikingly well-developed mineralogy, particularly in skarns.

Management/promotion issues

The site is within the boundaries of the Leagaun Machair proposed NHA. It is popular as a geology field trip destination, with regular visits from Irish and overseas universities. Unfortunately, there is abundant evidence of hammered outcrops, particularly in areas of good garnet exposure. Designation of the site and erection of some signage to discourage hammering should be considered. The land fronting the shoreline is in private ownership and access is generally along the beach from the north or south at low tide.



General view, looking north from southern end of site.



Interleaved but sharp contact between Omev Granite (left) and dark grey metasediments of the Streamstown Formation.



Pink garnet, green diopside and dark brown vesuvianite in skarn.



F3 folds in pelites and psammities of Lakes Marble Formation near southern end of site.

