

MAYO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Cregganbaun - Doolough
Other names used for site	
IGH THEME	IGH6 Mineralogy, IGH15 Economic Geology
TOWNLAND(S)	Srahiroosky
NEAREST TOWN/VILLAGE	Louisburgh
SIX INCH MAP NUMBER	106
ITM CO-ORDINATES	480970E 771520N
1:50,000 O.S. SHEET NO. 37	GSI BEDROCK 1:100,000 SHEET NO. 10
GIS Code MO035	

Outline Site Description

Gold mineralisation and fuchsites occurring on the lower northern flanks of the Mweelrea mountains at the northwest end of the Doolough Valley.

Geological System/Age and Primary Rock Type

Early Ordovician age (c. 475 million years ago) turbidite sedimentary rocks (containing chromite and fuchsite minerals), and tuff bands of the Sheeffry Formation (Murrisk Group), as well as listvenites (carbonate-rich rocks formed by metasomatic alteration of ultramafic rocks) and lamprophyres and porphyry dykes.

Main Geological or Geomorphological Interest

Gold (Au) mineralisation of significant grade has been identified along the c. 33km long shear zone extending east-west through the central part of the Ordovician sequence in the South Mayo Trough. The gold deposit is known as the Cregganbaun deposit, and occurs within the 10km long and 1km wide Cregganbaun Shear Zone (CSZ). Native gold is visible in quartz veins exposed along the CSZ. Shearing of the rocks (tuffs, listvenites, lamprophyres) in the CSZ led to the development of the quartz veins, in which the gold (and iron, copper, zinc, lead sulphide) occurs. As a result of hydrothermal activity along the CSZ, fuchsite has grown on chromite grains in the turbidite sediments, giving the rocks a distinctive green colour.

Estimates, based on drilling, indicate that the Cregganbaun East Shear Zone contains 530,000 tonnes at 6 grams/tonne Au over a depth of 80m, whilst at Cregganbaun West bedrock sampling has yielded values of up to 280 gram/tonne Au in one metre channel samples. This bedrock gold occurrence has been linked to the Carrownisky River alluvial gold site.

Site Importance – County Geological Site; recommended for Geological NHA

The site is located within the Mweelrea/Sheeffry/Erriff Complex SAC (001932). Similar to the site at Lecanvey, this is a very significant mineralisation locality. Vein-hosted gold is prominent here. The site includes the Mineral Localities* (Minlocs) No. 2406 and No. 2407. Minloc No. 2406 occurs in the east of the Srahiroosky townland, whilst Minloc No. 2407 occurs in the west of the townland. Minloc No. 2409 (Au) occurs in nearby Cushinyen townland to the east. This site requires certain designation as a geological NHA.

Management/promotion issues

The occurrences of gold in the bedrock at the site are not easily observable in the field. The site is not suitable for promotion. Any illegal extraction of the ore-bearing rock should be prohibited.

* The GSI Minerals Programme database contains summary information for over 5450 known mineral localities in the Republic of Ireland



View of Srahroosky from R335 Killary to Louisburgh road, looking west.



View looking south to Doolough valley.



Looking NW towards Croagh Patrick (upper right).



Sheeffry Formation turbidite outcrop at Srahroosky.

