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Chapter 2 : Veldkamp, J - Abanda, P. A. & Hannigan, R. E

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The negative gravity anomaly, caused by the relatively low density of the granites compared to average continental crust , is linear and trends WSW-ENE, parallel with that associated with the Haig Fras granite. However, current understanding of granite pluton shape suggest that most are either laccolithic or lopolithic. Evidence from neodymium and strontium isotopes suggests that the magmas that formed the batholith were mainly the result of partial melting of the lower crust with a minor component of basaltic magma from a mantle source. This lower crustal source is likely to have consisted of both metasedimentary and metavolcanic rocks, of Proterozoic age million to million years old. Over time the slate and sandstone rocks covering the granite were eroded exposing the granite in areas such as Dartmoor and Bodmin Moor. The granite also expanded and horizontal joints were formed. These joints are most clearly seen on exposed pieces of rock such as the Tors of Dartmoor and Bodmin Moor. As the granite erodes further, blocks of eroded granite known as clitter are left. The youngest rocks into which the granites intrude are the Carboniferous Crackington and Bealsmill formations of Namurian to lower Westphalian age. The earliest instance of granitic clasts fragments of the granite which have weathered away and become part of a new sedimentary rock in younger sedimentary sequences is from the Late Permian St. The inferred age of emplacement from this evidence of Late Carboniferous to Early Permian has been confirmed by radiometric dating, although it has shown that the individual intrusions were emplaced over a significant time interval. The earliest dated major intrusion is the Carnmenellis pluton at There is no apparent systematic variation in age of plutons compared to their position within the batholith. This suggests that the batholith grew by the coalescence of a series of separate intrusions over a period of about 25 Ma. Evidence for a stoping mechanism has been described locally from the margin of the Tregonning intrusion, where a series of intrusive sheets extend out from the roof zone of the intrusion into the country-rock. Two mica, Muscovite, Biotite, Tourmaline and Topaz granites, each named for their distinguishing mineral s. Austell and Dartmoor plutons. Dartmoor[edit] This is the largest exposed area of granite which also forms the easternmost development of the batholith. The granite consists of two main types, coarse-grained granite with abundant large alkali feldspar megacrysts and coarse-grained granite with few megacrysts. To the southwest there is an area of coarse-grained granite with small megacrysts and several small exposures of fine-grained granite, particularly in the southeastern part of the outcrop. It appears to have been intruded along the interface between Devonian and Carboniferous rocks. Towards the centre and the western margin of the outcrop there are smaller bodies of fine-grained granite. The central part of the pluton is also coarse-grained but lacks the megacrysts. Between the central megacryst poor and the large megacryst rich coarse-grained granites at the western end, a medium-grained granite is developed with lithium-mica. Smaller bodies of fine-grained granite are found in the central part of the outcrop and at the western end. The central part of the Carnmenellis outcrop is a medium-grained granite with few megacrysts. The bulk of the main outcrop and the Carn Brea and Carn Marth masses consist of coarse-grained megacrystic granite with small megacrysts. Small bodies of fine-grained granite are found towards the west of the Carnemellis outcrop. The Tregonning Granite is mainly a medium-grained lithium-mica granite with a body of fine-grained granite developed towards the northwest of the outcrop. There is an area in the centre which is poor in megacrysts and there are several small and medium-sized masses of fine-grained granite throughout the outcrop. These give emplacement ages of This difference is consistent with fine-grained granite being a roof-pendant to the coarse-grained main phase granite intrusion. The dominant rock type is a megacrystic biotite granite, although the megacrysts are relatively small. In the centre of the pluton a medium-grained granite is developed with few megacrysts, more tourmaline and less biotite than the main variety. It was intruded at Ma and is considered most likely to be a separate but related intrusive body that runs parallel to the Cornubian batholith. In some

cases granitic bodies have been recognised from the mineralization above them, even if the intrusion itself has not been encountered. A series of minor intrusions are found within the country rock and the granites themselves. Common types are pegmatites , aplites and elvans. B â€" Enclave of G1c granite within G1a granite, St. Agnes, Isles of Scilly Granite. C â€" Cligga G2 Granite with sheeted W greisen veins. Coarse-grained granite with large alkali feldspar megacrysts , Dartmoor photo by Ian Stimpson Luxullianite , a tourmalinized granite The main rock forming the batholith is granite , which formed when magma cooled slowly, covered by 2â€"3, metres of slate and sandstone. The slow cooling gave time for crystals to form in the granite which are large enough to see with the naked eye, giving it a granular appearance. These grains are mainly of quartz , feldspar and biotite. Large phenocrysts , several centimetres long, of K-feldspar, are a distinctive feature. Li -mica granite forms a less common type found only in the St. Austell pluton and some smaller intrusions. This tourmalinisation occurred during the late stages of cooling of the granite, as feldspar and mica were partly replaced by tourmaline. They also have a low ratio of sodium to potassium and overall high level of alkalis. The granites are highly enriched in lithium , boron , caesium and uranium and moderately so in fluorine , gallium , germanium , rubidium , tin, tantalum , tungsten and thallium. Given the overall chemistry, the levels of phosphorus are also high. Strontium, barium and the elements from scandium to zinc are relatively depleted. This chemistry is consistent with partial melting of a source consisting of greywackes a variety of sandstone. The early group of granites contain more aluminium than the later set and have steeper slopes on plots of cerium against yttrium. The later group contain more common basic microgranite xenoliths. There is also considerable variation between the individual plutons, with an average of 11 ppm for Dartmoor compared to 94 ppm for Bodmin Moor. The relatively high ammonium content is interpreted to indicate that the granites were derived from a sedimentary protolith, or have been contaminated from such a source after emplacement to high crustal levels. The effects of this can be seen up to a distance of 4 miles from the granite in an area called the metamorphic aureole. The effect of this process depends on the type of rocks which were heated and their distance from the intrusion. Fine grained sedimentary rocks were transformed into hornfels and minerals such as amphibole , pyroxene. At greater distances from the plutons, the only evidence of metamorphism is spotting in these rocks. Garnet developed in calcareous rocks as well as amphibole and pyroxene. The metamorphosis of greenstones has generally led to the formation of hornblende - plagioclase rocks. Fluids rich in these have strongly affected the country rock and locally the granites themselves in a process called metasomatism. The first phase recognised is alkali metasomatism where alkaline components are enhanced , which occurred within and at the margins of the granite. Potassium â€" metasomatism was followed by sodium â€"metasomatism. Finally acid metasomatism enrichment of acid components and depletion of alkalis took place leading to the formation of greisen and tourmalines.

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histories: Applications of geochemistry, magnetics, and remote sensing. Prace Panstwowego Instytutu Geologicznego: Stratigraphic table of Poland, -. Polish Geological Institute, Warsaw, -. The role of the Kupferschiefer in the formation of hydrothermal base metal mineralization in the Spessart ore district, Germany; insight from detailed sulfur isotope studies. Depositional architecture of the Carboniferous Lublin basin. Thesis, Polish Geological Institute Warsaw: Litologia, stratygrafia i sedymentologia. The structural and stratigraphic evolution of the northeast margin of the Sole Pit Basin. Petroleum Geology of Northwest Europe. Graham and Trotman London: Palaeogeography, Palaeoclimatology, Palaeoecology 4: Optical dating of fluvio-deltaic clastic lake-fill sediments â€" A feasibility study in the Holocene Rhine delta western Netherlands. Lower Paleozoic paleogeography of the Brabant Massif and its southern adjoining areas. Mededelingen Rijks Geologische Dienst Sea level and climate changes related to late Palaeozoic cycles. Geological Society of America Bulletin Geological Society Memoir London: Basin Inversion and foreland basin development in the Rhenohercynian zone of south-west England. Rhenohercynian and Subvariscan Foldbelts. International Monograph Series Wiesbaden: Salt as sediment in the Central European Basin System as seen from a deep time perspective. Dynamics of Complex Intracontinental Basins: The Central European Basin System. Quarterly Journal of the Geological Society of London The Geology and Mineral Resources of Yorkshire. A correlation of Triassic rocks in the British Isles, Geological Society Special Report London:

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