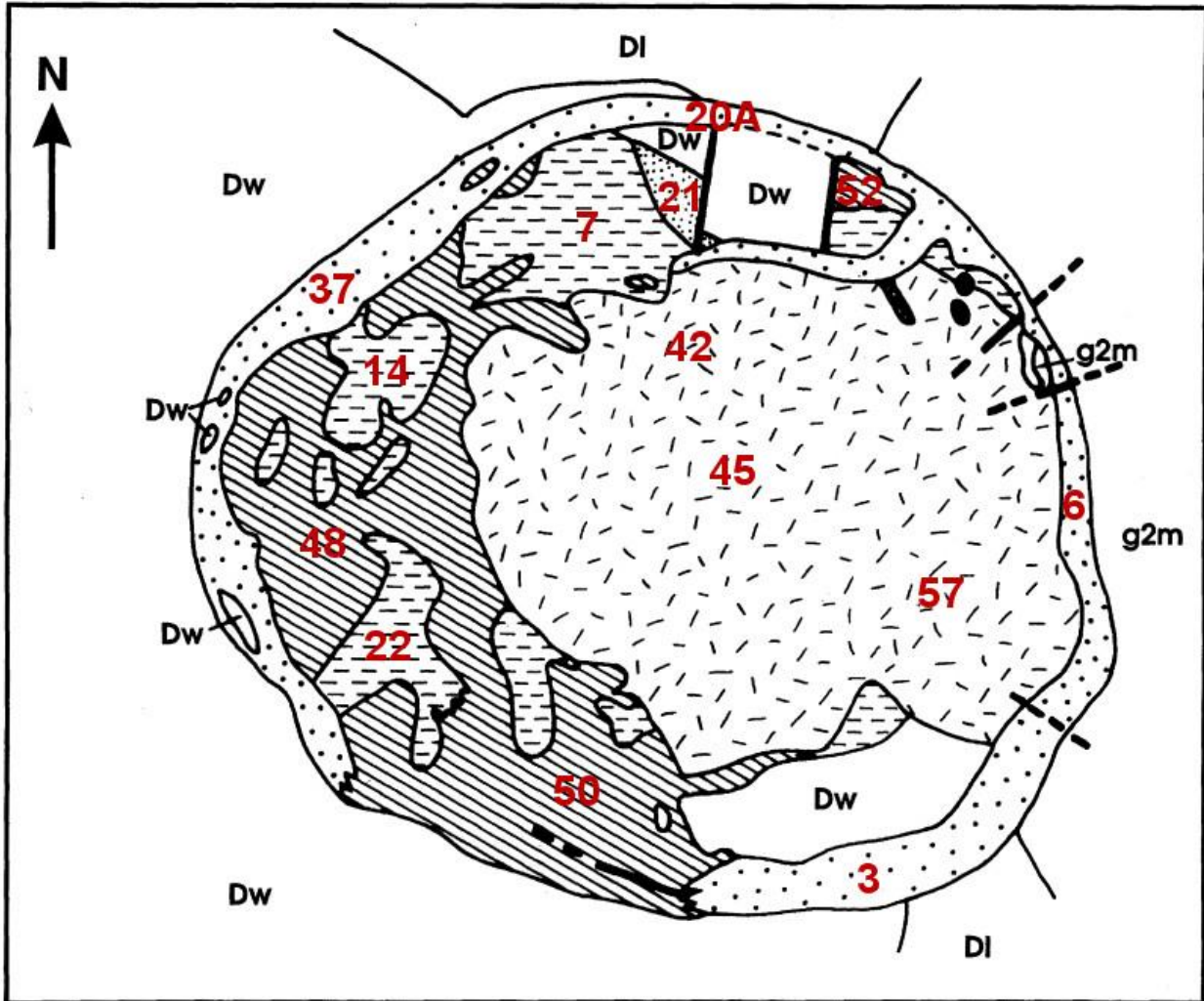


GEOL.3100L – Earth Materials II Laboratory

Geologic Map of an Igneous Intrusion

This is a straightforward, but typical, example of what you might be asked to do in a job/research position – prepare a geologic map. A copy of a partly completed geologic map is attached. Field mapping has revealed that there are five basic geologic units. Your task is to characterize these units. You will be provided with hand specimens and thin sections obtained for the lithologies found in the intrusion. The numbers on the map correspond to the hand specimen and thin section numbers and show the location of each specimen.



1. Write a petrographic description for each unit. The description should include the texture and mineralogy. Describe the minerals that you see and the relationship between the minerals.
2. Once you know the geology of the intrusion, describe the geologic history.





Igneous Units

-  1
-  2
-  Breccia
-  3
-  4
-  5

Devonian

-  g2m Two mica granite
-  Dw Winnepesaukee tonalite

Penn/Miss

-  DI Littleton formation
-  Fault (dashed where inferred)

0 5 km