

HEAVY MINERAL SAMPLES

Heavy Mineral Samples are those collected for the purpose of locating minerals with a specific gravity greater than 2.65 (ie heavier than Quartz) They are therefore collected for the location of Diamonds, Garnets, Ilmenites, Chromites and Gold; but most commonly used in Diamond Exploration.

Because it is the mineral grains in these samples that are important the samples are generally large (15 - 20 kg).

Trap Sites

Heavy Mineral Samples are collected from natural trap sites occurring in the stream channel. Such trap sites are Pot - Holes, Boulder Jumbles, Rock Bars, Tree - Roots (crossing the channel), Point Bars
These are listed in order of importance meaning a greater ability to trap and concentrate Heavy Minerals.

When considering where in the trap site the Heavy Minerals are likely to be, it is important to understand the stream in full flood. At such a time the WHOLE bedload moves - not just the surface material. As the bedload moves any Heavy Minerals will gradually sink to the base of the sediment load where it is likely to get trapped in any holes or obstructions. Successive floods will only serve to concentrate the material already in the trap sites

Hence it is important to get to the base of the stream load and trap site to collect a suitable sample that will have a chance of collecting any Heavy Minerals that may be present.