

Some remarks concerning the geology of the "Canadian Basin", Yukon Territory.

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The area visited is to be found on mapsheet 115J & 115K(E $\frac{1}{2}$), Snag-sheet, scale 1:250,000; and can be reached by 15 miles walking along an old "Cat-road" starting at the mouth of Britannia Creek (Yukon River). Cabins are located on both ends of the road, the cabin at the Canadian Basin being part of an old camp-site on a placer-gold property. At both camp-sites much equipment is left behind.

The Canadian Basin i.s.s. is located at an altitude of about 4000 feet, above timber-line; water was abundant (at this time of the year) in the creek, but the nearest timber is approximately 2 - 3 miles distant from the campsite, at the head of the Casina Creek. Even there timber is only available in very limited amounts.

The Basin consists mainly of biotite-granite, either evenly grained or porphyritic, which grades laterally into biotite-gneisses (evenly fine-grained, porphyritic or "granite-spotted"). Intercalated in this series of granites and gneisses is a body (Lens?) of mostly fine-grained quartzitic or aplitic material, which has locally a very brecciated appearance ("porphyry?"). The Canadian Creek takes its course through this, apparently softer, rock.

It is presumed that this rock is the hostrock of the gold found in the placer-mine⁹ at the campsite. Gold, panned from the creek at the campsite, showed very little evidence of transportation. Furthermore, several pits have been found in the Basin all located on ~~this~~ outcrops of this aplitic-quartzitic brecciated rock. Panning of this material on outcrops however failed to reveal the presence of gold.

At the head of Casina-Creek this rock is strongly impregnated by iron (hematite-magnetite) marking this rock as a hostrock of mineralization. Probably solid hematite-magnetite ore is somewhere present around here as indicated by the presence of samples of this material at the campsite. Samples of pretty solid galena were also found at the cabin but on the field-trips no trace of this material has been found.

In general this area is ideal for prospecting, outcrops and float being very numerous and abundant, at least above timberline.