a-RuCl₃ is a layered antiferromagnetic Mott insulator that is believed to host a Kitaev quantum spin liquid, and notably there has been a claim for non-Abelian transport seen in a quantized thermal Hall conductance experiment. Seeking a means to access this physics by electronic means, we have begun exploring this material by exfoliation a la graphene. In particular we have incorporated RuCl₃ flakes into so-called van der Waals heterostructures. While the electrical conductivity of RuCl₃ alone is seen to drop like a rock with decreasing temperature, when placed in close proximity to monolayer graphene we observe an anomalously high conductivity through the combined system. Moreover we find evidence of multiband transport and clear signatures of a ‘critical resistivity’ due to electron scattering by spin fluctuations near a magnetic phase transition. All of these effects vary with an applied gate voltage. It appears that proximity to graphene induces a charge transfer to RuCl₃ that is sensitive to and perhaps controllable by an external voltage.