Bridgeland stability conditions have been constructed on curves, surfaces, and in some higher dimensional examples. In several cases, there are only so-called “geometric” stability conditions which are constructed using slope stability for sheaves, whereas in other cases there are more (e.g. coming from an equivalence with representations of a quiver). Lie Fu -- Chunyi Li -- Xiaolei Zhao were the first to provide a general result explaining this phenomena. In particular, they showed that if a variety has a finite map to an abelian variety, then all stability conditions are geometric. In this talk, we test the converse on surfaces that arise as free quotients by finite groups. To do this, we will study stability conditions on equivariant categories. This is based on joint work with Edmund Heng and Tony Licata.