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Search for a Standard Model Higgs Boson in Events with Missing Transverse Energy and Jets at CDF KAROLOS POTAMIANOS, Purdue University, CDF COLLABORATION — We present a search for a standard model Higgs boson produced in association with a W or Z boson in $p\overline{p}$ collisions at 1.96 TeV center of mass energy. The data collected with the CDF II detector at the Tevatron collider at Fermilab correspond to an integrated luminosity of 2.1 fb^{-1}. We invesitgate the scenario where the Higgs boson decays into a $b\bar{b}$ pair and where either the Z decays into neutrinos or the lepton from the W-decay escapes detection giving an expected event signature of two b-quark jets, no leptons, and missing transverse energy. We present preliminary results from this search and discuss potential future improvements. A data-driven model of the QCD multi-jet background and advanced analysis techniques used in increasing sensitivity of the search are also discussed.

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