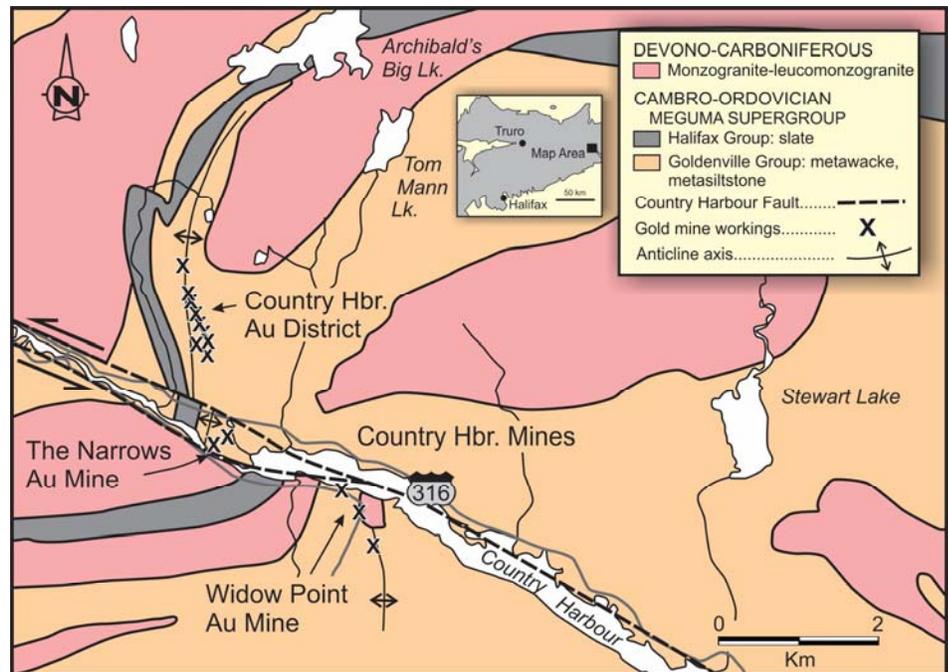


# From the Mineral Inventory Files

## A Severed Gold District

The Nova Scotia mainland is traversed by a series of large, northwest-striking faults. Several of our mainland rivers, for example the Country Harbour, St. Marys, Sheet Harbour, Lahave, Mersey and Roseway rivers, all flow to the southeast because they follow soft, broken rock provided by the regional scale northwest-striking faults. These faults are believed to be Carboniferous or younger, and crosscut the regional scale, east- and northeast-trending folds that deformed the metasedimentary rocks of the Meguma Zone during the Acadian Orogeny 400 million years ago. Formation of these Acadian folds played a key role in the genesis and localization of most of the Meguma Zone's metasediment-hosted, lode gold deposits, so it follows that the northwest faults also postdate and crosscut the gold (Au) deposits. One example of this crosscutting relationship can be found at Country Harbour Mines, Guysborough County (Fig. 1).

There are three past-producing gold mines in this area: the Country Harbour Gold District, the Narrows Gold Mine and the Widow Point Gold Mine (Fig. 1). The Country Harbour Gold District is the largest of the three and has the most substantial production history. A typical Meguma saddle reef Au deposit, it consists of several north-trending, interbedded vein belts on the flanks of a south-plunging anticline. The deposit was discovered in 1861 but did not see significant mining until the period 1890-1911, when most of its 10,219 oz. of gold were produced. Since then it has had several periods of concerted exploration but none has resulted in further production. The Narrows Gold Mine is a site of small scale mining that took place from a couple of shafts and an open cut along the east bank of Country Harbour River (Fig. 1). Some written reports include the Narrows Mine as part of the Country Harbour District while others consider it separate. In any event, it was an insignificant producer and its location within a substantial fault zone and



**Figure 1.** Geological map of the Country Harbour Mines area, Guysborough County, showing the association of the Country Harbour Gold District, Narrows Gold Mine and the Widow Point Gold Mine with the Country Harbour Fault.

adjacent to the river will likely negatively impact any future exploration. The Widow Point Gold Mine is found along the south flank of the Country Harbour River valley (Fig. 1). The year that gold was discovered there is not known and the only mining took place between 1944 and 1949 from an adit and two shafts. Although a small deposit, Widow Point has been the site of a few recent era exploration efforts, all of which returned promising results. A couple of programs during the 1980s, mostly diamond-drilling, defined several interbedded gold-bearing quartz veins and vein stockworks that returned high grade gold levels (>1 oz. Au/tonne). Further exploration drilling in 2010 and 2012 extended the gold-bearing vein systems along strike and down dip and these continued to return high grade concentrations of gold.

Although all three of these sites are now considered as separate gold

deposits, in all likelihood they were originally part of a single deposit that was subsequently severed by sinistral (left-lateral) movements along the regional Country Harbour Fault (Fig. 1). Thus, sinistral motion along the Country Harbour Fault during the Carboniferous ruptured the southern portion of the original Country Harbour Gold District. This resulted in a remnant block of the original deposit being caught up in the fault zone and moved to the site of the present day Narrows Mine. Likewise, the veins that constitute the Widow Point Mine were moved laterally into their present position along the western flank of the fault zone.

This history of fault movement at Country Harbour may have little impact on the future prospects of these gold deposits. It is an interesting geological curiosity nonetheless, with questions still unanswered.

G. A. O'Reilly