



Scuttlebutt Porter Kit

A Brewometer User Example
By Ben and Ty Newell

As homebrewing enthusiasts, what else would we give each other for birthday and holiday presents than brewing kits? The following example shows the results from using the Brewometer with Homebrew Heaven's rendition of Scuttlebutt Brewing Company's Porter.

The kit consists of 2 pounds of specialty grains, dry malt extract, bittering hops, finishing hops and Irish Moss. The original specific gravity (OG) range is 1.044 to 1.060 with an estimated final gravity (FG) of 1.008 to 1.016. We used the kit's liquid yeast option.

We started the brew on January 14, 2006. The specialty grains were processed first per kit instructions. The screen print below shows the two pounds of specialty grains to result in a relatively small change of specific gravity with a sugar content of 1.4%. The Brewometer is put in "Wort" mode by selecting the Wort button (this is also the default screen when the software is started). Prior to taking the reading, a pure water

sample was placed on the Brewometer for temperature zeroing. It is important to let the Brewometer and sampling fluid reach room temperature. Specific gravity and the associated determination of sugar and alcohol are very sensitive to temperature level.

Notice on the previous screen that an FG of 1.0 has been entered on the Wort screen. If the low sugar malt were allowed to ferment to an FG of 1.0, the alcohol would be less than 1% with approximately 0.2% (the limit of the Brewometer's accuracy) of sugar remaining. This brew would surpass Michelob Ultra with only 18 calories (and a taste to match!).

Addition of the dry malt extract and continued processing of the wort resulted in an OG of 1.055 as shown in the next screen capture below. This is in the range described by the kit. An estimated FG of 1.012 was entered in the screen below, showing that fermentation to this level would result in 6% ABV, a sugar level of 4.7%, and a nice hefty intake of 218 calories in a 12 ounce glass.

We discussed the wisdom of including a caloric estimator in the software, and we



decided that such information is valuable. Our intent is not to discourage the creation of rich beer, but to add additional information for your brew processing. While some people argue over sugar, our view is that it is one of the most important building blocks of nature and this sugar is glucose, the human body's most basic fuel.

The beer was bottled on February 4, 2006. A bottle was opened on March 5, 2006 and a sample was placed on the Brewometer. The Brewometer was set in "Beer" mode (after first using the temperature zeroing function in "Wort" mode with water). Because a "Beer" mode reading must determine *two unknown* factors (the remaining sugar and the alcohol), the OG reading of 1.055 must be entered into the screen. If the OG is unknown, all is not lost because a specific gravity (FG) reading can be taken with a hydrometer. In "Beer" mode, different OGs are entered into the Brewometer screen until the FG measured matches the displayed FG. This is a useful technique for analyzing beers of unknown OG and alcohol that you would like to recreate.



As shown in the screen above, we were a bit anxious in bottling and should have let the brew ferment a bit longer. Our beer ended with an FG of 1.020, slightly above the high end of suggested FG of 1.016. This shows a reasonable 4.1% ABV, however, a fair amount of unfermented sugar at 6.6% remains. The estimated caloric value of the beer is 204. Notice that the tradeoff in

calories between the previous estimate for the Wort and this value are similar. The change of a glucose sugar molecule into two alcohol molecules (and the released carbon dioxide molecules) does not significantly change the caloric value, however as most brewing enthusiasts would agree, we prefer to minimize the sugar contribution to calories.

The final result is shown below. A very nice tasting Porter with excellent flavor! We were very pleased with the ease and quality of Homebrew Heaven's kit.



Happy Brewing! Brew for Health!