

BREWSHEET v3.4 (2014-12-14)

user input
calculated

Brew
Name: Amber Leftovers
Brew Date: 2016 November 27
Rack Date: 2017 January 6
Keg/Bottle Date: 2017 January 6
Collected (gal): 5.50
Racked (gal):
Kegged/Bottled (gal): 5.00
Estimated vs Actual comparison table for ABV, OG, FG, IBU, SRM, and Gravity Ratio.

Grain
Munich Malt 10L
Maris Otter Malt
Pale Malt (2-Row) US
Melanoidin
Belgian aromatic malt
Table with columns: Grain, Pounds, Potential, SG Share, Color, % Bill

Hop
Simcoe
Simcoe
Cascade
Cascade
Table with columns: Hop, Type, Ounces, Boil Time, Alpha %, IBU, % Bill

Design Notes
Empty table for design notes.

Batch Variables and Calculations
Batch Size (gal): 5.50
Grain Temperature (F): 62
Total Grain Weight (lbs): 10.81
Mash
Mash Time (min): 60
Desired Mash Temperature (F): 152
OG (SG): 1.050
FG (SG): 1.012
IBU: 35.4
SRM: 11.1
IBU/Gravity Ratio: 0.67
Sparge
Desired Sparge Temperature (F): 168
Sparge Water (gal): 3.49
Sparge Water Temperature (F): 172
Estimated Second Runnings (gal): 3.96
Second Runnings Gravity (Brix): 3.57
Second Runnings Gravity (SG): 6.50
Preboil Volume (gal): 7.92
Estimated Preboil Gravity (Brix): 10.95
Preboil Volume (gal): 7.92
Preboil Gravity (Brix): 10.20
Preboil Gravity (SG): 1.040
Extraction Efficiency (%): 80%
Boil
Boil Time (min): 60
Estimated Evaporation Loss (gal): 1.40
Hop Absorption (gal): 0.21
Volume Left in Kettle (gal): 0.00
Actual Evaporation Rate (gal/hr): 1.40
Original Gravity (Brix): 13.61
Batch Size Efficiency (%): 74%
Actual Efficiency (%): 74%
Fermentation
Primary Fermentation (days): 22
Secondary Fermentation Temperature (F): 60
Temperature of Reading (F):
Corrected SG:
Secondary Fermentation (days): 19
Temperature of Reading (F): 32
Corrected SG:
Tertiary Fermentation Temperature (F):
Final Gravity (SG): 1.011
Temperature of Reading (F): 40
Corrected SG: 1.011
Target Fermentation for Diacetyl Rest (%):
Target Gravity for Diacetyl Rest (SG):
Calories per Pint: 174
12 oz. Bottles Required: 51
Carbonation
Bottling Temperature (F):
Volumes of CO2: 2.45
Priming Sugar (oz):
DME (oz):
Forced Carbonation (lbs):

System Variables
Brewhouse Efficiency (%): 70%
Volume in Hoses (gal): 0.22
Volume in Wort Chiller (gal): 0.19
Volume in HERMS Coil (gal): 0.25
Mash/Lauter Tun Deadspace (gal): 0.14
Strike to Sparge Volume Ratio (%): 50%
Trub Loss (gal): 0.16
FWH IBU Factor (%): 10%
Strike Temperature Factor (F): 7
Sparge Temperature Factor (F): 4
Estimated Evaporation Rate (gal/hr): 1.40
Leaf Hop Absorption Ratio (qts/oz): 0.40
Pellet Hop Absorption Ratio (qts/oz): 0.10
Cooling Losses (%): 4%
Hydrometer Correction (SG): 0.001

BJCP Style Guidelines
Style: American Pale Ale
Code: 10A
OG: 1.045-1.060
FG: 1.010-1.015
IBU: 30.0-45.0
SRM: 5.0-14.0
ABV: 4.5-6.0%
CO2: 2.2-2.7

Yeast Strain
Yeast Strain: Wyeast 1764 (Rogue Pacman Ale)
Type: Rogue Pacman Ale
Attenuation (%): 72-78%
Actual Attenuation (%): 79%
Fermentation Temp (F): 60-72F
Flocculation: medium-high

Required Amounts
Cell Count (billions): 191
Yeast Starter/Slurry

Yeast Starter/Slurry
Yeast Viability (%):
Yeast Growth Rate:
Yeast Inoculation Rate (million/ml):
Starter Volume Required (ml):
DME Required (oz):
Yeast slurry concentration (billion/ml): 2.5
Non-yeast Percentage (%): 20%
Yeast Slurry Required (ml):

User Variables
Empty table for user variables.

Batch Scaling
Desired OG:
Batch Size (gal):
Brewhouse Efficiency (%): 70%
Total Weight (lbs):
Total Bill:
Grain
Pounds
Potential
Color
% Bill

Poundage
Goal (lbs):
Amount (lbs | oz_f_oz):
Vials (White Labs/Wyeast): 2 | 9.98
Amount (lbs | oz_f_oz): 0 | 12.98
Dry Yeast (g): 1 | 10.91
Amount (lbs | oz_f_oz):
Amount (lbs | oz_f_oz):
Date Yeast Produced:
Amount (lbs | oz_f_oz):
Yeast Viability (%):
Amount (lbs | oz_f_oz):
Yeast Growth Rate:
Amount (lbs | oz_f_oz):
Yeast Inoculation Rate (million/ml):
Amount (lbs | oz_f_oz):
DME Required (oz):
Amount (lbs | oz_f_oz):
Yeast slurry concentration (billion/ml):
Amount (lbs | oz_f_oz):
Non-yeast Percentage (%):
Needed (lbs | oz_f_oz): 0 | 0.00

Hydrometer Correction
SG: 1.051
Temperature (F): 67
Corrected SG: 1.053

Gravity Calculator
Brix: 12.10 | 13.61
Specific Gravity: 1.047 | 1.053
Degrees Plato: 11.61 | 12.99

Brix Ethanol Correction
Original Brix:
Current Brix:
SG:

Brewing Notes
1/6/17: kegged; aroma is hops with nice malt; flavor is similar; a great brew!