

BREWSHEET v3.3 (2012-03-18)

user input
calculated

Brew					
Name:	Hot Ass Blonde Whole Lotta Rosie				
Brew Date:	2013 August 31	Collected (gal):	11.10		
Rack Date:	2013 September 23	Racked (gal):			
Key/Bottle Date:	2013 September 23	Kegeged/Bottled (gal):	10.00		
Estimated		Actual			
ABV (%):	4.1%	ABV (%):	4.6%		
OG (SG):	1.042	OG (SG):	1.048		
FG (SG):	1.011	FG (SG):	1.013		
IBU:	19.7	IBU:	19.0		
SRM:	4.6	SRM:	4.7		
IBU/Gravity Ratio:	0.47	IBU/Gravity Ratio:	0.40		

Grain					
Northwestern Pale Ale malt	Pounds	Potential	SG Share	Color	% Bill
Munich Malt 10L	16.59	1.036	0.038	2.8	90.02%
Carapils/Dextrine	0.92	1.035	0.002	10.0	4.99%
	0.92	1.033	0.002	2.0	4.99%

Hop	Type	Ounces	Boil Time	Alpha %	IBU	% Bill
Willamette	P	2.33	60	4.8%	18.9	82.33%
Willamette	P	0.50	5	4.8%	0.8	17.67%

Design Notes
 Either soak peppers in vodka for about a week and add to the keg.
 Or add peppers in the keg (in a mesh bag).
 7/11: soaked several varieties of peppers in vodka to see how they differ in flavor and aroma.
 0.125 c cayenne and 0.25 c Anaheim, jalapeno, poblano, and serrano (8 oz jars filled halfway).
 7/12: added habanero to the tests.
 7/20: tasted samples: 1 serrano, 2 poblano, 3 cayenne, 14 Anaheim/jalapeno, 6 habanero.
 Need to try roasting the peppers.
 7/21: soaked several dried varieties: ancho, cascabel, arbol, and chipotle.
 7/25: added red pepper flakes and ground pequin.
 7/27: added more dried varieties: California, New Mexico, morita, puya, pasilla, and pequin.
 Note: ancho is dried poblano, chipotle is dried and smoked jalapeno, California is dried Anaheim, morita is dried and smoked jalapeno (smaller than chipotle), and pasilla is dried chilaca.
 7/28: tried 2:1 ratio of serrano and Anaheim (in Dos Testes) - it was close!
 7/29: decided to take half of this brew and pour ~1.5 gal of steeped rosa de Jamaica.
 Rosa de Jamaica: 0.5c hibiscus calyces, 4c water, boil 2 min, steep 10 min, add 4c water, cool.
 So that's 1c hibiscus calyces per gal of wort.
 7/30: tried 4 oz rosa with 10 oz PBR; aroma very subtle and light; flavor light but more pronounced.
 Tried 6 oz rosa with 8.5 oz PBR; aroma and flavor about to the level that seems right.
 Way too much tea needed; try adding at flameout? Maybe try brewing a very small batch w/ DME?
 8/23: added ghost chilis

Batch Variables and Calculations	
Batch Size (gal):	11.00
Grain Temperature (F):	81
Total Grain Weight (lbs):	18.43

Mash	
Mash Time (min):	60
Desired Mash Temperature (F):	150
Strike Water (gal):	9.14
Strike Temperature (F):	164
Mash Ratio (qts/lb):	1.98
Grain Absorption (gal):	2.30
Mash Volume (gal):	10.62
Mash-out Temperature (F):	168
Estimated First Runnings (gal):	6.70
First Runnings (gal):	6.90
First Runnings Gravity (Brix):	13.75
First Runnings Gravity (SG):	1.053

Sparge	
Desired Sparge Temperature (F):	170
Sparge Water (gal):	6.23
Sparge Water Temperature (F):	175
Estimated Second Runnings (gal):	6.70
Second Runnings (gal):	6.50
Second Runnings Gravity (Brix):	5.60
Second Runnings Gravity (SG):	1.022
Estimated Preboil Volume (gal):	13.40
Estimated Preboil Gravity (Brix):	9.80
Preboil Volume (gal):	13.40
Preboil Gravity (Brix):	9.35
Preboil Gravity (SG):	1.036
Extraction Efficiency (%):	74%

Boil	
Boil Time (min):	60
Estimated Evaporation Loss (gal):	1.29
Hop Absorption (gal):	0.07
Volume Left in Kettle (gal):	-0.25
Actual Evaporation Rate (gal/hr):	1.43
Actual Evaporation Loss (gal):	1.43
Original Gravity (Brix):	12.30
Batch Size Efficiency (%):	80%
Actual Efficiency (%):	78%

Fermentation	
Primary Fermentation (days):	14
Primary Fermentation Temperature (F):	66
Gravity After Primary Fermentation (SG):	
Temperature of Reading (F):	
Corrected SG:	3
Secondary Fermentation (days):	32
Secondary Fermentation Temperature (F):	
Gravity After Secondary Fermentation (SG):	
Temperature of Reading (F):	
Corrected SG:	
Tertiary Fermentation (days):	
Tertiary Fermentation Temperature (F):	
Final Gravity (SG):	1.015
Temperature of Reading (F):	40
Corrected SG:	1.013
Target Fermentation for Diacetyl Rest (%):	
Target Gravity for Diacetyl Rest (SG):	
Calories per Pint:	159
12 oz. Bottles Required:	102

Carbonation	
Bottling Temperature (F):	2.45
Volumes of CO2:	
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):	1.29
Leaf Hop Absorption Ratio (qts/oz):	0.20
Pellet Hop Absorption Ratio (qts/oz):	0.10
Cooling Losses (%):	4%
Hydrometer Correction (SG):	-0.001

BJCP Style Guidelines	
Style:	Blonde Ale
Code:	6B
OG:	1.038-1.054
FG:	1.008-1.013
IBU:	15.0-28.0
SRM:	3.0-6.0
ABV:	3.8-5.5%
CO2:	2.3-2.6

Yeast Strain	
Yeast Strain:	Danstar American West Coast (Dry Ale)
Type:	Dry Ale
Attenuation (%):	70-78%
Actual Attenuation (%):	73%
Fermentation Temp (F):	60-70F
Flocculation:	high

Required Amounts	
Cell Count (billions):	326
Vials (White Labs/Wyeast):	
Dry Yeast (g):	16.3

Yeast Starter/Slurry	
Vials (White Labs/Wyeast):	
Date Yeast Produced:	
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	

Batch Scaling				
Desired OG:	1.042	Total Weight (lbs):	18.44	
Batch Size (gal):	11.00	Total Bill:	100.00%	
Brewhouse Efficiency (%):	70%			
Grain				
	Pounds	Potential	Color	% Bill
Northwestern Pale Ale malt	16.59	1.036	2.8	90.00%
Munich Malt 10L	0.92	1.035	10.0	5.00%
Carapils/Dextrine	0.92	1.033	2.0	5.00%

Poundage	
Goal (lbs):	16.59
Amount (lbs oz f. oz):	2 10.12
Amount (lbs oz f. oz):	2 11.39
Amount (lbs oz f. oz):	2 13.08
Amount (lbs oz f. oz):	2 11.10
Amount (lbs oz f. oz):	2 11.81
Amount (lbs oz f. oz):	2 7.33
Amount (lbs oz f. oz):	
Amount (lbs oz f. oz):	8.61
Amount (lbs oz f. oz):	
Amount (lbs oz f. oz):	
Amount (lbs oz f. oz):	
Amount (lbs oz f. oz):	
Amount (lbs oz f. oz):	
Needed (lbs oz f. oz):	0 0.00

Hydrometer Correction	
SG:	1.011
Temperature (F):	76
Corrected SG:	1.012

Gravity Calculator	
Brix:	11.00 11.90
Specific Gravity:	1.043 1.046
Degrees Plato:	10.60 11.43

Brix Ethanol Correction	
Original Brix:	
Current Brix:	
SG:	

Brewing Notes	
8/31: Collected 5.6 gal @ 1.044 OG for hot ass blonde Collected 5.5 gal @ 1.048 OG for whole lotta rosie; I guess the hibiscus added sugar. Average is 1.046 OG. After collecting for hot ass blonde, brought remainder of volume to a boil, added the hibiscus calyces, turned off the heat, and steeped for ~15 min; the recirculated, cooled, and collected. In total, added 5.5 c hibiscus calyces. 9/8: had to change airlocks about 4 times and wipe the lids due to very active fermentation. Still bubbling away quite frequently, although I won't need to replace the airlocks again. The final combination of pepper tinctures (for 5 gal) is: 80mL (2.7 oz) cayenne, 80mL (2.7 oz) ancho, 13.33mL (0.45 oz) morita, 6.66mL (0.225 oz) ghost. 9/15: sampled rosie: still a slight krausen; 1.013 SG; color is rose (almost like a rose champagne); tart and yeasty aroma with noticeable hibiscus "fruitiness"; quite pleasant and refreshing Flavor is initially huge hibiscus tartness that immediately gives way to slight maltiness an a typical lager aftertaste; crisp, clean, and quite refreshing! I don't think it needs more hibiscus. Also, added 1 drop of red food coloring to 2 oz beer; improved the color a bit to accentuate rosie. Sampled chili: still a slight krausen; 1.012 SG; color is typical blonde ale; aroma is light and yeasty perhaps with a bit of graininess; flavor is malty with a hint of body and creaminess; quite light. I like the way BRY97 ferments these brews; wait one or two more days before cold crashing. 9/18: cold crashed both batches.	9/23: kegged. Rosie: 1.013 FG (4.6% ABV); beautiful rose color; aroma is slight fruit and clean; flavor is initially tart and fades quickly to a fruitiness that fades more slowly to grain; delicious! Nice subtle hibiscus flavor that lets the blonde ale come through beautifully. Chili: 1.011 FG (4.3% ABV); nice grainy aroma and quite light; flavor is light and grainy with nice bread and biscuit notes, perfect for adding the pepper tinctures; perfect bitterness. Tincture amounts: 77mL cayenne, 57mL ancho, 29mL serrano, 18mL morita, and 9mL ghost. Aroma with chili peppers was awesome!