

BREWSHEET v2.3 (2011-02-26)

Batch			
Brew Name:	Doormat APA		
Bottle Top Code:		Calories per Pint:	135
Estimated OG:	1.045	Actual OG:	1.040
Estimated FG:	1.009	Actual FG:	1.014
Estimated IBU:	31	Actual IBU:	32
Estimated SRM:		Actual SRM:	6
Brew Date:	05/13/11	Collected (gal):	5.50
Rack Date:	06/02/11	Racked (gal):	5.00
Bottle Date:	06/02/11	Bottled (gal):	5.00

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

Inventory	
Bottles:	
Gallons:	
Date Checked:	

Efficiency	
Brewhouse:	70%
Batch Size:	63%
Into Boiler:	80%
Into Fermenter:	63%

Yeast Strain	
Yeast Strain:	Danstar Nottingham (Dry Ale)
Type:	Dry Ale
Attenuation (%):	75-85%
Actual Attenuation (%):	66%
Fermentation Temp (F):	57-70F
Flocculation:	high

Yeast Amounts	
Cell Count (billions):	173
Vials (White Labs/Wyeast):	1.5
Dry Yeast (g):	9
Starter Volume (mL):	
DME Required (oz)	
Vials Required (w/ Starter):	

ON BREW DAY	
Heat 3.05 gallons of strike water to 166F	
Add grain and mash at 150F for 60 minutes	
Mash-out with 1.77 gallons at 210F, mix and hold for 10 minutes	
Vorlauf and collect first runnings (approx. 3.35 gallons)	
Add 5.47 gallons at 180F to lautur tun and sparge	
Vorlauf and collect second runnings (approx. 5.47 gallons)	
Boil for a total of 90 minutes with the following hop schedule:	
1 oz. Cascade @60 minute(s)	
0.5 oz. Cascade @30 minute(s)	
0.5 oz. Cascade @15 minute(s)	
0.5 oz. Cascade @5 minute(s)	

Summary	
Doormat APA	

Batch Size: 5.50 gal (8.82 gal preboil)	
Estimated OG: 1.045 SG (actual: 1.040 SG)	
Estimated FG: 1.009 SG (actual: 1.014 SG)	
Estimated IBUs: 31 (Finseth; actual: 32)	
Estimated Color: 6 SRM (actual: 6 SRM)	
Brewhouse Efficiency: 70% (actual: 63%)	
Boil Time: 90 minutes	
Grains:	
7.00# Pale Malt (2-Row) US (2.0L) (71.79%)	
2.25# Vienna Malt (3.5L) (23.08%)	
0.50# British carastan (34.0L) (5.13%)	

Grain	Pounds	Potential	SG Share	Color	% Bill
Pale Malt (2-Row) US	7.00	1.036	0.032	2.0	71.79%
Vienna Malt	2.25	1.036	0.010	3.5	23.08%
British carastan	0.50	1.035	0.002	34.0	5.13%

Brewing		
Batch Size (gal):	5.50	Estimated First Runnings (gal): 3.35
Total Grain Weight (lbs):	9.75	Desired Sparge Temperature (F): 170
Grain Temperature (F):	82	Sparge Water (gal): 5.47
Mash Ratio (qts/lb):	1.25	Sparge Water Temperature (F): 180
Mash/Lauter Deadspace (gal):	0.25	Estimated Preboil Volume (gal): 8.82
Total Water Needed (gal):	10.29	Boil Time (min): 90
Desired Mash Temperature (F):	150	Evaporation Rate (gal/hr): 1.71
Strike Water (gal):	3.05	Estimated Evaporation Loss (gal): 2.57
Strike Temperature (F):	166	Trub Loss (gal): 0.75
Grain Absorption (gal):	1.22	Volume Left in Kettle (gal): 0.00
Mash-out Temperature (F):	150	Actual Evaporation Rate (gal/hr): 1.83
Mash-out Water (gal):	1.77	Actual Evaporation Loss (gal): 2.75

Hop	Alpha %	Ounces	Boil Time	IBU	% Bill
Cascade	5.4%	1.00	60	17.8	40.00%
Cascade	5.4%	0.50	30	6.9	20.00%
Cascade	5.4%	0.50	15	4.4	20.00%
Cascade	5.4%	0.50	5	1.8	20.00%

Gravity		Collections	
Potential OG:	1.064	First Runnings (gal):	4.10
OG:	1.040	SG of First Runnings:	1.051
OG Temperature (F):	60	SG Temperature (F):	60
Corrected OG:	1.040	Corrected SG:	1.051
SG at Racking:		Second Runnings (gal):	4.90
SG Temperature (F):		SG of Second Runnings:	1.016
Corrected SG:		SG Temperature (F):	60
FG:	1.014	Corrected SG:	1.016
FG Temperature (F):	51	Estimated Preboil SG:	1.032
Corrected FG:	1.014	Preboil Volume (gal):	9.00
Potential ABV (%):	5.8%	SG of Preboil Volume:	1.031
Actual ABV (%):	3.5%	SG Temperature (F):	60
IBU to Gravity Ratio:	0.80	Corrected SG:	1.031

Diacetyl Rest		Carbonation	
Target Fermentation Completion:		CO2 Volume:	2.45
Target SG for Diacetyl Rest:		Bottling Temperature (F):	
		Priming Sugar (oz):	
		DME (oz):	
		Forced Carbonation (lbs):	

Fermentation	
CO2 Released During Fermentation (g):	547.69

Notes	
5/13: strike 3.5 gal, mashout 2.5 gal, sparge 4.75 gal Probably need to check if my thermometer is accurate. Also low mash temp probably has a bit to do with low efficiency.	

User Variables	
12 oz. Bottles Required:	51
Primary Fermentation Temp. (F):	66
Secondary Fermentation Temp (F):	72
FNW/IBU Factor (%):	10%
Strike Temperature Factor (F):	5
Sparge Temperature Factor (F):	4
Mash Time (min):	60
Specific Gravity (Brix):	10.2
Specific Gravity (SG):	1.040

Yeast:	
Danstar Nottingham (Dry Ale)	
Mash/Sparge Schedule:	
Single Infusion, 150F; Batch Sparge	
Mash for 60 min at 150F w/ 3.05 gal of water at 166F	
Mashout w/ 1.77 gal of water at 210F; hold for 10 min	
Batch sparge w/ 5.47 gal of water at 180F; hold for 10 min	
Fermentation Schedule:	
Primary Fermentation: 20 days @66F	
Secondary Fermentation: 0 days @72F	