BREWSHEET v2.3 (2011-02-26)

Batch			
Brew Name:	Trippin' on the Tripel		
Bottle Top Code:		Calories per Pint:	262
Estimated OG:	1.080	Actual OG:	1.078
Estimated FG:	1.018	Actual FG:	1.022
Estimated IBU:	33	Actual IBU:	25
Estimated SRM:	7	Actual SRM:	7
Brew Date:	08/19/11	Collected (gal):	5.30
Rack Date:	09/05/11	Racked (gal):	5.00
Bottle Date:	09/05/11	Bottled (gal):	5.00

BJCP Style Guidelines	
Style:	Belgian Tripel
Code:	18C
OG:	1.075-1.085
FG:	1.008-1.014
IBU:	20.0-40.0
SRM:	4.0-7.0
ABV:	7.5-9.0%
CO2:	1.9-2.4

Inventory	
Bottles:	
Gallons:	
Date Checked:	

Efficiency	
Brewhouse:	70%
Batch Size:	69%
Into Boiler:	77%
Into Fermenter:	66%

Yeast Strain	
Yeast Strain:	White Labs WLP500 (Trappist Ale)
Type:	Trappist Ale
Attenuation (%):	75-80%
Actual Attenuation (%):	72%
Fermentation Temp (F):	65-72F
Flocculation:	medium-low

Yeast Amounts	
Cell Count (billions):	298
Vials (White Labs/Wyeast):	2.5
Dry Yeast (g):	15
Starter Volume (mL):	3500
DME Required (oz)	12.25
Vials Required (w/ Starter):	1.0

Grain	Pounds	Potential	SG Share	Color	% Bill
Pilsner (2-Row) Germany	13.75	1.037	0.065	2.0	80.88%
Munich Malt 10L	1.00	1.035	0.004	10.0	5.88%
Belgian aromatic malt	0.25	1.036	0.001	26.0	1.47%
Belgian candi sugar (clear)	2.00	1.036	0.009	5.0	11.76%

Hop	Alpha %	Ounces	Boil Time	IBU	% Bill
Golding (US)	4.0%	1.75	fwh	20.3	50.00%
Tettnanger (US)	3.9%	1.00	83	10.0	28.57%
Tettnanger (US)	3.9%	0.75	10	2.6	21.43%

Brewing			
Batch Size (gal):	5.50	Estimated First Runnings (gal):	4.50
Total Grain Weight (lbs):	17.00	Desired Sparge Temperature (F):	170
Grain Temperature (F):	83	Sparge Water (gal):	4.50
Mash Ratio (qts/lb):	1.56	Sparge Water Temperature (F):	181
Mash/Lauter Deadspace (gal):	0.25	Estimated Preboil Volume (gal):	9.91
Total Water Needed (gal):	12.29	Boil Time (min):	128
Desired Mash Temperature (F):	146	Evaporation Rate (gal/hr):	1.72
Strike Water (gal):	6.63	Estimated Evaporation Loss (gal):	3.66
Strike Temperature (F):	157	Trub Loss (gal):	0.75
Grain Absorption (gal):	2.13	Volume Left in Kettle (gal):	0.00
Mash-out Temperature (F):	156	Actual Evaporation Rate (gal/hr):	1.31
Mash-out Water (gal):	0.00	Actual Evaporation Loss (gal):	2.80

Gravity		Collections	
Potential OG:	1.114	First Runnings (gal):	4.00
OG:	1.078	SG of First Runnings:	1.062
OG Temperature (F):	60	SG Temperature (F):	60
Corrected OG:	1.078	Corrected SG:	1.062
SG at Racking:		Second Runnings (gal):	4.85
SG Temperature (F):		SG of Second Runnings:	1.025
Corrected SG:		SG Temperature (F):	60
FG:	1.022	Corrected SG:	1.025
FG Temperature (F):	58	Estimated Preboil SG:	1.042
Corrected FG:	1.022	Preboil Volume (gal):	8.85
Estimated ABV (%):	8.1%	SG of Preboil Volume:	1.045
Actual ABV (%):	7.4%	SG Temperature (F):	60
IBU to Gravity Ratio:	0.32	Corrected SG:	1.045

Diacetyl Rest		Carbonation	
Target Fermentation Completion:		CO2 Volume:	2.15
Target SG for Diacetyl Rest:		Bottling Temperature (F):	
		Priming Sugar (oz):	
Fermentation		DME (oz):	
CO2 Released During Fermentation (g):	1112.60	Forced Carbonation (lbs):	

ON BREW DAY

Heat 6.63 gallons of strike water to 157F
Add grain and mash at 146F for 60 minutes
Mash-out with 0 gallons at 210F, mix and hold for 10 minutes
Vorlauf and collect first runnings (approx. 4.5 gallons)
Add 4.5 gallons at 181F to lauter tun and sparge
Vorlauf and collect second runnings (approx. 4.5 gallons)
Boil for a total of 128 minutes with the following hop schedule:

Notes

Targets: 1.080 OG, 30 IBU, 5.5 SRM.
Mash at 146F for 60 min and then at 156F for 30 min.
Add candi sugar at 10 mins left in boil.
Add 1g of grains of paradise, 1g of coriander, 5g of orange peel at 10 mins left in boil.
For this first batch, I won't add any spices.
6.625 strike (~1.56 mash ratio); 4.5 gal sparge
Had to add almost 1# rice hulls after the 146F mash; it was "almost" stuck!
Stirred and then recirculated mash at 156F.
Well, forgot FWH and instead added them near boiling; stopped heat for about 10 mins and restarted; we'll see!
Increased boil time (and first two hop addition times) to ensure higher OG.
Ambient temp is 101F with 36% humidity.

9/2: crash cooled.
9/5: a bit higher FG than I wanted, but it should be fine at 7.4% ABV.
9/14: great aroma and flavor but a bit sweet.
Toying around with the idea of letting it get warm to see if it will rouse the yeast.

User Variables	
12 oz. Bottles Required:	51
Primary Fermentation Temp. (F):	66
Secondary Fermentation Temp (F):	72
FWH IBU Factor (%):	10%
Strike Temperature Factor (F):	3
Sparge Temperature Factor (F):	2
Mash Time (min):	60
Specific Gravity (Brix):	20
Specific Gravity (SG):	1.078

Summary

Trippin' on the Tripel

Batch Size: 5.50 gal (9.91 gal preboil)
Estimated OG: 1.080 SG (actual: 1.078 SG)
Estimated FG: 1.018 SG (actual: 1.022 SG)
Estimated IBUs: 33 (Tinseth; actual: 25)
Estimated Color: 7 SRM (actual: 7 SRM)
Brewhouse Efficiency: 70% (actual: 69%)
Boil Time: 128 minutes

Grains:

13.75# Pilsner (2-Row) Germany (2.0L) (80.88%)
1.00# Munich Malt 10L (10.0L) (5.88%)
0.25# Belgian aromatic malt (26.0L) (1.47%)
2.00# Belgian candi sugar (clear) (5.0L) (11.76%)

Hops:

1.75 oz Golding (US) (4.0%) @fwh
1.00 oz Tettnanger (US) (3.9%) @83 min
0.75 oz Tettnanger (US) (3.9%) @10 min

Yeast:

White Labs WLP500 (Trappist Ale)

Mash/Sparge Schedule:

Single Infusion, 146F; Batch Sparge
Mash for 60 min at 146F w/ 6.63 gal of water at 157F
Mashout w/ 0.00 gal of water at 210F; hold for 10 min
Batch sparge w/ 4.50 gal of water at 181F; hold for 10 min

Fermentation Schedule:

Primary Fermentation: 17 days @66F
Secondary Fermentation: 0 days @72F