BREWSHEET v3.4 (2014-12-14)

user input
calculated

Brew			
Name:	Voodoo Pumpkin Ale		
Brew Date:	2015 September 7	Collected (gal):	10.25
Rack Date:		Racked (gal):	
Keg/Bottle Date:	2015 October 1	Kegged/Bottled (gal):	10.00
Estimated		**Actual**	
ABV (%):	5.3%	ABV (%):	5.0%
OG (SG):	1.054	OG (SG):	1.053
FG (SG):	1.014	FG (SG):	1.014
IBU:	24.1	IBU:	26.3
SRM:	22.2	SRM:	23.3
IBU/Gravity Ratio:	0.44	IBU/Gravity Ratio:	0.50

Grain	Pounds	Potential	SG Share	Color	% Bill
Pale Malt (2-Row) US	16.75	1.036	0.038	2.0	69.35%
Caramel/Crystal 60L	1.25	1.034	0.003	60.0	5.18%
Caramel/Crystal 75L	1.50	1.034	0.003	75.0	6.21%
Munich Malt 10L	2.50	1.035	0.006	10.0	10.35%
Belgian aromatic malt	1.30	1.036	0.003	26.0	5.39%
Belgian Special "B"	0.10	1.030	0.000	220.0	0.42%
Chocolate Malt	0.75	1.028	0.001	350.0	3.11%

Hop	Type	Ounces	Boil Time	Alpha %	IBU	% Bill
Chinook	P	1.00	60	11.0%	16.6	33.33%
Cascade	P	1.00	20	8.2%	7.5	33.33%
Cascade	P	1.00	0	8.2%	0.0	33.33%

Design Notes

Added 1 gal hop absorption due to the pumpkin.
Use 9.0625# canned pumpkin
Bake the pumpkin on a cookie sheet at 350F for 1 hour.
Put the pumpkin in a hop bag so it won't clog the manifold.
Spice additions:
@60: 0.6oz pumpkin pie spice
@20: 0.7oz pumpkin pie spice
@0: 0.9oz pumpkin pie spice

Add vanilla extract after carbonating to taste.
Last time: added one drop of vanilla extract to the hydrometer sample; delicious!
Measured vanilla was 0.25mL vanilla extract per 350mL beer.
So I dumped ~12.5mL vanilla extract in the keg (had already poured ~5 pints).

Batch Variables and Calculations	
Batch Size (gal):	11.00
Grain Temperature (F):	81
Total Grain Weight (lbs):	24.15
Mash	
Mash Time (min):	45
Desired Mash Temperature (F):	156
Strike Water (gal):	9.86
Strike Temperature (F):	172
Mash Ratio (qts/lb):	1.63
Grain Absorption (gal):	3.02
Mash Volume (gal):	11.80
Mash-out Temperature (F):	168
Estimated First Runnings (gal):	6.70
First Runnings (gal):	6.95
First Runnings Gravity (Brix):	17.40
First Runnings Gravity (SG):	1.068
Sparge	
Desired Sparge Temperature (F):	168
Sparge Water (gal):	6.23
Sparge Water Temperature (F):	172
Estimated Second Runnings (gal):	6.70
Second Runnings (gal):	6.45
Second Runnings Gravity (Brix):	7.70
Second Runnings Gravity (SG):	1.030
Estimated Preboil Volume (gal):	13.41
Estimated Preboil Gravity (Brix):	12.73
Preboil Volume (gal):	13.40
Preboil Gravity (Brix):	12.50
Preboil Gravity (SG):	1.049
Extraction Efficiency (%):	76%
Boil	
Boil Time (min):	60
Estimated Evaporation Loss (gal):	1.29
Hop Absorption (gal):	0.08
Volume Left in Kettle (gal):	0.00
Actual Evaporation Rate (gal/hr):	2.06
Actual Evaporation Loss (gal):	2.06
Original Gravity (Brix):	13.54
Batch Size Efficiency (%):	68%
Actual Efficiency (%):	63%
Fermentation	
Primary Fermentation (days):	14
Primary Fermentation Temperature (F):	66
Gravity After Primary Fermentation (SG):	
Temperature of Reading (F):	
Corrected SG:	
Secondary Fermentation (days):	7
Secondary Fermentation Temperature (F):	32
Gravity After Secondary Fermentation (SG):	
Temperature of Reading (F):	
Corrected SG:	
Tertiary Fermentation (days):	
Tertiary Fermentation Temperature (F):	
Final Gravity (SG):	1.014
Temperature of Reading (F):	40
Corrected SG:	1.014
Target Fermentation for Diacetyl Rest (%):	
Target Gravity for Diacetyl Rest (SG):	
Calories per Pint:	175
12 oz. Bottles Required:	102
Carbonation	
Bottling Temperature (F):	
Volumes of CO2:	2.35
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):	0.40
Pellet Hop Absorption Ratio (qts/ oz):	0.10
Cooling Losses (%):	4%
Hydrometer Correction (SG):	0.001

BJCP Style Guidelines	
Style:	Specialty Beer
Code:	23A
OG:	
FG:	
IBU:	
SRM:	
ABV:	
CO2:	2.2-2.5

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):	417
Vials (White Labs/Wyeast):	
Dry Yeast (g):	20.9
Yeast Starter/Slurry	
Vials (White Labs/Wyeast):	
Date Yeast Produced:	
Yeast Viability (%):	
Yeast Growth Rate:	
Yeast Innoculation 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:		Total Weight (lbs):		
Batch Size (gal):		Total Bill:		
Brewhouse Efficiency (%):				
Grain	**Pounds**	**Potential**	**Color**	**% Bill**

Poundage		
Goal (lbs):	16.75	
Amount (lbs | oz.f_oz):	2	4.72
Amount (lbs | oz.f_oz):	2	12.44
Amount (lbs | oz.f_oz):	2	10.96
Amount (lbs | oz.f_oz):	2	12.90
Amount (lbs | oz.f_oz):	2	10.54
Amount (lbs | oz.f_oz):	2	7.65
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):		
Amount (lbs | oz.f_oz):		
Needed (lbs | oz.f_oz):	1	0.79

Hydrometer Correction	
SG:	1.049
Temperature (F):	80
Corrected SG:	1.053

Gravity Calculator		
Brix:		13.54
Specific Gravity:		1.053
Degrees Plato:		12.93

Brix Ethanol Correction	
Original Brix:	
Current Brix:	
SG:	

Brewing Notes

9/7: changed to a 45 min mash; **next time, consider adding flaked oats for body and creaminess.**
Pumpkin was baked for about 2 hours; nice and roasted; great burnt edges.
Collected 13 gal preboil and held to get through hot break; added remaining second runnings periodically as volume boiled down.
10/1: first batch is 1.016 FG (4.8% ABV); aroma is beautiful fall pumpkin pie flavors with a hint of malt, bread, pumpkin, and toast; flavor is delicious brown ale with pumpkin pie spices, light, crisp, clean, and malty; finish is delicious, not too bitter or astringent.
Second batch is 1.014 FG (5% ABV); virtually identical to the first batch except perhaps that this one is a bit more dry and lacks body; still a great beer.
10/4: tasted first batch; delicious and almost carbonated; great flavor without being too powerful.
10/5: added 0.25mL pure vanilla extract to 12oz; perfect amount;
Then added 12.84mL to the first batch (accounting for 24oz already poured);
And added 13.33mL to the second batch.