

BEWSHEET v3.4 (2014-12-14)

user input
calculated

Brew			
Name:	Loconut		
Brew Date:	2020 May 25	Collected (gal):	5.00
Rack Date:		Racked (gal):	
Keg/Bottle Date:	2020 June 21	Kegeged/Bottled (gal):	5.00
Estimated		Actual	
ABV (%):	6.4%	ABV (%):	6.5%
OG (SG):	1.066	OG (SG):	1.068
FG (SG):	1.017	FG (SG):	1.018
IBU:	31.8	IBU:	34.6
SRM:	45.2	SRM:	48.3
IBU/Gravity Ratio:	0.48	IBU/Gravity Ratio:	0.51

Grain	Pounds	Potential	SG Share	Color	% Bill
Pale Malt (2-Row) US	9.00	1.036	0.041	2.0	60.00%
Munich Malt 10L	2.25	1.035	0.010	10.0	15.00%
British crystal 50-60L	1.00	1.034	0.004	55.0	6.67%
Caramel/Crystal 80L	1.25	1.034	0.005	80.0	8.33%
Chocolate Malt	0.75	1.028	0.003	350.0	5.00%
Roasted barley	0.75	1.028	0.003	450.0	5.00%

Hop	Type	Ounces	Boil Time	Alpha %	IBU	% Bill
Perle (GR)	P	1.75	60	6.7%	31.8	100.00%

Design Notes	
Using RO water; so at dough-in, add: 3.2 ml lactic acid (88%) 4.25 g CaSO4 (calcium sulfate/gypsum) 3.65 g CaCl2 (calcium chloride) 4.7 g MgSO4 (magnesium sulfate/epsom salt) 8.9 g NaHCO3 (baking soda) At boil, add: 2.5 g CaSO4 (calcium sulfate/gypsum) 2.1 g CaCl2 (calcium chloride) 2.7 g MgSO4 (magnesium sulfate/epsom salt) 5.2 g NaHCO3 (baking soda) Target is 5.4 mash pH, 80 ppm calcium, 20 ppm magnesium, 110 ppm sodium, 80 ppm chloride, 190 ppm sulfate Based on notes from last batch, add 75% of the drams of the LorAnn coconut and coffee extracts.	

Batch Variables and Calculations	
Batch Size (gal):	5.50
Grain Temperature (F):	83
Total Grain Weight (lbs):	15.00

Mash	
Mash Time (min):	60
Desired Mash Temperature (F):	155
Strike Water (gal):	5.82
Strike Temperature (F):	171
Mash Ratio (qts/lb):	1.55
Grain Absorption (gal):	1.88
Mash Volume (gal):	7.02
Mash-out Temperature (F):	168
Estimated First Runnings (gal):	3.80
First Runnings (gal):	3.95
First Runnings Gravity (Brix):	18.45
First Runnings Gravity (SG):	1.072

Sparge	
Desired Sparge Temperature (F):	168
Sparge Water (gal):	3.33
Sparge Water Temperature (F):	172
Estimated Second Runnings (gal):	3.80
Second Runnings (gal):	3.86
Second Runnings Gravity (Brix):	7.85
Second Runnings Gravity (SG):	1.030
Estimated Preboil Volume (gal):	7.61
Estimated Preboil Gravity (Brix):	13.35
Preboil Volume (gal):	7.61
Preboil Gravity (Brix):	12.95
Preboil Gravity (SG):	1.050
Extraction Efficiency (%):	73%

Boil	
Boil Time (min):	60
Estimated Evaporation Loss (gal):	1.25
Hop Absorption (gal):	0.04
Volume Left in Kettle (gal):	0.00
Actual Evaporation Rate (gal/hr):	1.77
Actual Evaporation Loss (gal):	1.77
Original Gravity (Brix):	17.41
Batch Size Efficiency (%):	71%
Actual Efficiency (%):	65%

Fermentation	
Primary Fermentation (days):	14
Primary Fermentation Temperature (F):	64
Gravity After Primary Fermentation (SG):	
Temperature of Reading (F):	
Corrected SG:	
Secondary Fermentation (days):	3
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):	1.018
Temperature of Reading (F):	43
Corrected SG:	1.018
Target Fermentation for Diacetyl Rest (%):	
Target Gravity for Diacetyl Rest (SG):	
Calories per Pint:	225
12 oz. Bottles Required:	51

Carbonation	
Bottling Temperature (F):	
Volumes of CO2:	2.15
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):	1.25	
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:	Robust Porter
Code:	12B
OG:	1.048-1.065
FG:	1.012-1.016
IBU:	25.0-50.0
SRM:	22.0-35.0
ABV:	4.8-6.0%
CO2:	1.8-2.5

Yeast Strain	
Yeast Strain:	Danstar New England (Dry Ale)
Type:	Dry Ale
Attenuation (%):	70-78%
Actual Attenuation (%):	73%
Fermentation Temp (F):	59-72F
Flocculation:	medium

Required Amounts	
Cell Count (billions):	252
Vials (White Labs/Wyeast):	
Dry Yeast (g):	12.6

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

Poundage	
Goal (lbs):	
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):	
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):	

Hydrometer Correction	
SG:	1.065
Temperature (F):	73
Corrected SG:	1.068

Gravity Calculator		
Brix:	14.50	17.41
Specific Gravity:	1.056	1.068
Degrees Plato:	13.80	16.39

Brix Ethanol Correction	
Original Brix:	
Current Brix:	
SG:	

Brewing Notes	
8/14: crashed.	
8/21: kegeged; very nice porter with aromas and flavors of roast, malt, slight residual sweetness. Added 0.85 drams of coconut and coffee extracts (perhaps a tad more than I wanted to).	