BREWSHEET v3.3 (2012-03-18)

user input
calculated

Brew			
Name:	Lambic Batch 2 (Ryan)		
Brew Date:	2014 November 25	Collected (gal):	13.00
Rack Date:	2015 November 23	Racked (gal):	10.00
Keg/Bottle Date:	2016 August 6	Kegged/Bottled (gal):	10.00
Estimated		**Actual**	
ABV (%):		ABV (%):	6.2%
OG (SG):	1.050	OG (SG):	1.054
FG (SG):		FG (SG):	1.004
IBU:		IBU:	
SRM:	4.0	SRM:	4.4
IBU/Gravity Ratio:		IBU/Gravity Ratio:	

Grain	Pounds	Potential	SG Share	Color	% Bill
Pale Malt (2-Row) US	20.63	1.036	0.032	2.0	65.00%
Unmalted Raw White Wheat	11.11	1.037	0.018	2.0	35.00%

Hop	Type	Ounces	Boil Time	Alpha %	IBU	% Bill
Debittered	P	10.00	240	0.0%	0.0	100.00%

Design Notes

Cantillon uses 5g/L of hops (~0.67 oz/gal or ~3.68 oz/5.5 gal).

Batch Variables and Calculations	
Batch Size (gal):	15.00
Grain Temperature (F):	60
Total Grain Weight (lbs):	31.74
Mash	
Mash Time (min):	60
Desired Mash Temperature (F):	113
Strike Water (gal):	14.24
Strike Temperature (F):	129
Mash Ratio (qts/lb):	1.79
Grain Absorption (gal):	3.97
Mash Volume (gal):	16.78
Mash-out Temperature (F):	170
Estimated First Runnings (gal):	10.13
First Runnings (gal):	
First Runnings Gravity (Brix):	
First Runnings Gravity (SG):	
Sparge	
Desired Sparge Temperature (F):	172
Sparge Water (gal):	9.66
Sparge Water Temperature (F):	178
Estimated Second Runnings (gal):	10.13
Second Runnings (gal):	
Second Runnings Gravity (Brix):	
Second Runnings Gravity (SG):	
Estimated Preboil Volume (gal):	20.26
Estimated Preboil Gravity (Brix):	
Preboil Volume (gal):	
Preboil Gravity (Brix):	10.00
Preboil Gravity (SG):	1.039
Extraction Efficiency (%):	
Boil	
Boil Time (min):	240
Estimated Evaporation Loss (gal):	3.80
Hop Absorption (gal):	0.25
Volume Left in Kettle (gal):	0.00
Actual Evaporation Rate (gal/hr):	
Actual Evaporation Loss (gal):	
Original Gravity (Brix):	13.80
Batch Size Efficiency (%):	70%
Actual Efficiency (%):	60%
Fermentation	
Primary Fermentation (days):	7
Primary Fermentation Temperature (F):	72
Gravity After Primary Fermentation (SG):	
Temperature of Reading (F):	
Corrected SG:	
Secondary Fermentation (days):	90
Secondary Fermentation Temperature (F):	72
Gravity After Secondary Fermentation (SG):	
Temperature of Reading (F):	
Corrected SG:	
Tertiary Fermentation (days):	270
Tertiary Fermentation Temperature (F):	72
Final Gravity (SG):	1.003
Temperature of Reading (F):	78
Corrected SG:	1.004
Target Fermentation for Diacetyl Rest (%):	
Target Gravity for Diacetyl Rest (SG):	
Calories per Pint:	167
12 oz. Bottles Required:	102
Carbonation	
Bottling Temperature (F):	
Volumes of CO2:	3.55
Priming Sugar (oz):	
DME (oz):	
Forced Carbonation (lbs):	

System Variables	
Brewhouse Efficiency (%):	65%
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):	10
Sparge Temperature Factor (F):	5
Estimated Evaporation Rate (gal/hr):	**0.95**
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:	Fruit Lambic
Code:	17F
OG:	1.040-1.060
FG:	1.000-1.010
IBU:	2.0-10.0
SRM:	3.0-7.0
ABV:	5.0-7.0%
CO2:	2.6-4.5

Yeast Strain	
Yeast Strain:	White Labs WLP655 (Belgian Sour Mix)
Type:	Belgian Sour Mix
Attenuation (%):	
Actual Attenuation (%):	92%
Fermentation Temp (F):	
Flocculation:	

Required Amounts	
Cell Count (billions):	1,050
Vials (White Labs/Wyeast):	
Dry Yeast (g):	52.6
Yeast Starter/Slurry	
Vials (White Labs/Wyeast):	1
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):	11.11	
Amount (lbs | oz.f_oz):	3	11.75
Amount (lbs | oz.f_oz):	3	12.32
Amount (lbs | oz.f_oz):		
Amount (lbs | oz.f_oz):		
Amount (lbs | oz.f_oz):		
Amount (lbs | oz.f_oz):		
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Amount (lbs | oz.f_oz):		
Amount (lbs | oz.f_oz):		
Amount (lbs | oz.f_oz):		
Needed (lbs | oz.f_oz):	3	9.69

Hydrometer Correction		
SG:		
Temperature (F):		
Corrected SG:		

Gravity Calculator			
Brix:	13.80		
Specific Gravity:	1.054		
Degrees Plato:	13.16		

Brix Ethanol Correction	
Original Brix:	
Current Brix:	
SG:	

Brewing Notes

Increased strike temp to 139F (cold outside!)
Increased dough-in by 0.5 gal to 4.5 gal.
Temp was 90F so added another 0.5 gal which raised it to 92F (too cold outside?)
Added 4 gal instead of 3.17 gal; temp up to 142F.
Collected 2.25 gal.
Added 4 gal; temp at ~154F.
Collected 4.5 gal.
Added 4.75 gal; increased temp to 162F.
Collected 5.125 gal instead of 5.5 gal.
Added 6 gal instead of 6.63 gal of turbid mash into mash tun; raised temp to ~167F.
Recirculated and drained into BK; 1 gal short of 11.9 gal; adjusted sparge to get 20.25 gal total.
Preboil volume near the top of BK; let evaporate for about 30 min before adding hops.

8/6/16: bottled this batch (K); 47 bottles; aroma is fruit, cherries, funk, tart, woody; flavor is quite acidic and sour, dry, beautiful wood and cherries, funk; quite sour but not overwhelming to me; FG was 1.003 SG @78.4F = 1.004 FG (6.5% ABV!); but it came from a mixed barrel, so... ...ABV most likely closer to 6.2%.