BREWSHEET v3.3 (2012-03-18)

user input
calculated

Brew			
Name:	Lambic Batch 1 (Ryan)		
Brew Date:	2014 November 24	Collected (gal):	19.00
Rack Date:	2015 November 23	Racked (gal):	19.00
Keg/Bottle Date:	2016 August 6	Kegged/Bottled (gal):	19.00
Estimated		**Actual**	
ABV (%):		ABV (%):	6.2%
OG (SG):	1.050	OG (SG):	1.043
FG (SG):		FG (SG):	1.001
IBU:		IBU:	
SRM:	4.0	SRM:	4.2
IBU/Gravity Ratio:		IBU/Gravity Ratio:	

Grain	Pounds	Potential	SG Share	Color	% Bill
Pale Malt (2-Row) US	27.51	1.036	0.032	2.0	65.00%
Unmalted Raw White Wheat	14.81	1.037	0.018	2.0	35.00%

Hop	Type	Ounces	Boil Time	Alpha %	IBU	% Bill
Debittered	P	13.30	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):	20.00
Grain Temperature (F):	70
Total Grain Weight (lbs):	42.32
Mash	
Mash Time (min):	60
Desired Mash Temperature (F):	113
Strike Water (gal):	18.21
Strike Temperature (F):	128
Mash Ratio (qts/lb):	1.72
Grain Absorption (gal):	5.29
Mash Volume (gal):	21.59
Mash-out Temperature (F):	170
Estimated First Runnings (gal):	12.78
First Runnings (gal):	
First Runnings Gravity (Brix):	
First Runnings Gravity (SG):	
Sparge	
Desired Sparge Temperature (F):	172
Sparge Water (gal):	12.30
Sparge Water Temperature (F):	178
Estimated Second Runnings (gal):	12.77
Second Runnings (gal):	
Second Runnings Gravity (Brix):	
Second Runnings Gravity (SG):	
Estimated Preboil Volume (gal):	25.55
Estimated Preboil Gravity (Brix):	
Preboil Volume (gal):	
Preboil Gravity (Brix):	
Preboil Gravity (SG):	
Extraction Efficiency (%):	
Boil	
Boil Time (min):	240
Estimated Evaporation Loss (gal):	3.80
Hop Absorption (gal):	0.33
Volume Left in Kettle (gal):	0.00
Actual Evaporation Rate (gal/hr):	
Actual Evaporation Loss (gal):	
Original Gravity (Brix):	11.00
Batch Size Efficiency (%):	55%
Actual Efficiency (%):	53%
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):	1.000
Temperature of Reading (F):	78
Corrected SG:	1.001
Target Fermentation for Diacetyl Rest (%):	
Target Gravity for Diacetyl Rest (SG):	
Calories per Pint:	151
12 oz. Bottles Required:	193
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 (%):	97%
Fermentation Temp (F):	
Flocculation:	

Required Amounts	
Cell Count (billions):	1,400
Vials (White Labs/Wyeast):	
Dry Yeast (g):	70.1
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):		
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):		
Amount (lbs | oz.f_oz):		
Amount (lbs | oz.f_oz):		
Needed (lbs | oz.f_oz):		

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

Gravity Calculator			
Brix:	10.25		
Specific Gravity:	1.040		
Degrees Plato:	9.91		

Brix Ethanol Correction	
Original Brix:	
Current Brix:	
SG:	

Brewing Notes

At dough-in: added extra 0.5 gal (too thick) – temp was 114F.
Added 4 gal. Raised temp to 133F instead of 136F.
Water not at 212F so grabbed from Jean's HLT (near 212F but transferred). Raised temp to 135F instead of 150F? Started recirculating and raised to 150F. Added 10 min to rest.
0.75 gal short (of 6 gal collection). Compensate in next addition.
Added extra 0.75 gal to account for lack of collection last time.
Collected 7 gal instead of 7.41 gal.
Collected about 7 gal instead of ~8.5 gal.
Sparged with 10 gal – still about 2 gal short; added water to boil once it had started for about 1 hr.
Preboil brix was 14.2
Added about 3.5 gal after about an hour into the boil: 8.55 brix average.
Average collected is 10.25 brix; 1.040 SG.
Added to mine makes average 1.047 OG.

8/6/16: bottled this batch (R2'); 45 bottles; aroma is raspberries, funk, tart, woody; flavor is quite acidic and sour, dry, beautiful wood and raspberries, funk; quite sour but not overwhelming to me; FG was 1.000 SG @77.6F = 1.001 FG (5.4% ABV!); but it came from a mixed barrel, so... ...ABV most likely closer to 6.2%; this batch is very similar to R2 (see previous sheet).