

BREWSHEET v2.5 (2011-11-13)

Batch			
Brew Name:	Soul Stripper IPA		
Bottle Top Code:	Calories per Pint:		225
Estimated OG:	1.068	Actual OG:	1.068
Estimated FG:	1.016	Actual FG:	1.013
Estimated IBU:	71	Actual IBU:	74
Estimated SRM:	11	Actual SRM:	11
Brew Date:	11/24/11	Collected (gal):	10.50
Rack Date:	12/17/11	Racked (gal):	10.00
Bottle Date:	12/17/11	Bottled (gal):	10.00

BJCP Style Guidelines	
Style:	American IPA
Code:	14B
OG:	1.056-1.075
FG:	1.010-1.018
IBU:	40.0-70.0
SRM:	6.0-15.0
ABV:	5.5-7.5%
CO2:	1.5-2.3

Inventory	
Bottles:	
Gallons:	
Date Checked:	

Efficiency	
Brewhouse:	70%
Batch Size:	70%
Into Boiler:	72%
Into Fermenter:	67%

Yeast Strain	
Yeast Strain:	White Labs WLP001 (California Ale)
Type:	California Ale
Attenuation (%):	73-80%
Actual Attenuation (%):	80%
Fermentation Temp (F):	68-73F
Flocculation:	medium

Yeast Amounts	
Cell Count (billions):	539
Vials (White Labs/Wyeast):	4.6
Dry Yeast (g):	27
Starter Volume (mL):	3250
DME Required (oz):	11.38
Vials Required (w/ Starter):	2.0

ON BREW DAY	
Heat 10.02 gallons of strike water to 168F	
Add grain and mash at 150F for 60 minutes	
Mash-out with 5.81 gallons at 210F, mix and hold for 10 minutes	
Vorlauf and collect first runnings (approx. 11.57 gallons)	
Add 2.37 gallons at 220F to lautur tun and sparge	
Vorlauf and collect second runnings (approx. 2.37 gallons)	
Boil for a total of 60 minutes with the following hop schedule:	
<p><b>Hops:</b></p> <p>2.45 oz Centennial (8.3%) @fwh</p> <p>2.00 oz Cascade (5.5%) @30 min</p> <p>1.50 oz Centennial (8.3%) @30 min</p> <p>3.50 oz Cascade (5.5%) @10 min</p> <p>1.50 oz Columbus (14.5%) @10 min</p> <p>2.25 oz Cascade (5.5%) @0 min</p> <p>1.75 oz Columbus (14.5%) @0 min</p> <p>7.50 oz Cascade (5.5%) (dry hop)</p> <p>4.00 oz Columbus (14.5%) (dry hop)</p>	

Summary	
Soul Stripper IPA	
Batch Size: 11.50 gal (13.94 gal preboil)	
Estimated OG: 1.068 SG (actual: 1.068 SG)	
Estimated FG: 1.016 SG (actual: 1.013 SG)	
Estimated IBUs: 71 (Finseth; actual: 74)	
Estimated Color: 11 SRM (actual: 11 SRM)	
Brewhouse Efficiency: 70% (actual: 70%)	
Boil Time: 60 minutes	
<p><b>Grains:</b></p> <p>26.40# Pale Malt (2-Row) US (2.0L) (82.37%)</p> <p>1.55# British carastan (34.0L) (4.84%)</p> <p>1.55# Caramel/Crystal 60L (60.0L) (4.84%)</p> <p>1.55# Red Wheat (1.5L) (4.84%)</p> <p>1.00# Rice hulls (0.0L) (3.12%)</p>	

Grain	Pounds	Potential	SG Share	Color	% Bill
Pale Malt (2-Row) US	26.40	1.036	0.058	2.0	82.37%
British carastan	1.55	1.035	0.003	34.0	4.84%
Caramel/Crystal 60L	1.55	1.034	0.003	60.0	4.84%
Red Wheat	1.55	1.039	0.004	1.5	4.84%
Rice hulls	1.00	1.000	0.000	0.0	3.12%

Brewing		
Batch Size (gal):	11.50	Estimated First Runnings (gal): 11.57
Total Grain Weight (lbs):	32.05	Desired Sparge Temperature (F): 170
Grain Temperature (F):	68	Sparge Water (gal): 2.37
Mash Ratio (qts/lb):	1.25	Sparge Water Temperature (F): 220
Mash/Lauter Deadspace (gal):	0.25	Estimated Preboil Volume (gal): 13.94
Total Water Needed (gal):	18.20	Boil Time (min): 60
Desired Mash Temperature (F):	150	Evaporation Rate (gal/hr): 1.69
Strike Water (gal):	10.02	Estimated Evaporation Loss (gal): 1.69
Strike Temperature (F):	168	Trub Loss (gal): 0.75
Grain Absorption (gal):	4.01	Volume Left in Kettle (gal): 0.50
Mash-out Temperature (F):	150	Actual Evaporation Rate (gal/hr): 1.69
Mash-out Water (gal):	5.81	Actual Evaporation Loss (gal): 1.69

Hop	Alpha %	Ounces	Boil Time	IBU	% Bill
Centennial	8.3%	2.45	fwh	28.6	9.26%
Cascade	5.5%	2.00	30	10.8	7.56%
Centennial	8.3%	1.50	30	12.2	5.67%
Cascade	5.5%	3.50	10	8.9	13.23%
Columbus	14.5%	1.50	10	10.1	5.67%
Cascade	5.5%	2.25	0	0.0	8.51%
Columbus	14.5%	1.75	0	0.0	6.62%
Cascade	5.5%	7.50	dry	0.0	28.36%
Columbus	14.5%	4.00	dry	0.0	15.12%

Gravity		Collections	
Potential OG:	1.097	First Runnings (gal):	6.80
OG:	1.068	SG of First Runnings:	1.078
OG Temperature (F):	60	SG Temperature (F):	60
Corrected OG:	1.068	Corrected SG:	1.078
SG at Racking:		Second Runnings (gal):	6.64
SG Temperature (F):		SG of Second Runnings:	1.036
Corrected SG:		SG Temperature (F):	60
FG:	1.014	Corrected SG:	1.036
FG Temperature (F):	49	Estimated Preboil SG:	1.057
Corrected FG:	1.013	Preboil Volume (gal):	13.44
Estimated ABV (%):	6.8%	SG of Preboil Volume:	1.060
Actual ABV (%):	7.2%	SG Temperature (F):	60
IBU to Gravity Ratio:	1.08	Corrected SG:	1.060

Diacetyl Rest		Carbonation	
Target Fermentation Completion:		CO2 Volume:	1.90
Target SG for Diacetyl Rest:		Bottling Temperature (F):	
		Priming Sugar (oz):	
		DME (oz):	
		Forced Carbonation (lbs):	

Notes	
Strike: 11.48 gal (~1.43 mash ratio); sparge: 7.47 gal.	12/8: dry hopped; 1.014 SG.
After boil, 1.068 SG from kettle and 1.061 SG at spout (cooled wort)??	12/14: cold crashed.
1.062 SG after 2 gal in first fermenter.	12/17: great fresh hop aroma and flavor; very slight malt flavor; slightly noticeable alcohol bite; nice, pronoun
1.063 SG after 3 gal in first fermenter.	
1.060 SG average for both fermenters??	
Let's call it 1.060 SG.	
Next time, consider using C-75 instead of C-60.	
So the SG deal was due to water in the black end of the medicine dropper.	
Tested this on Hakuna Matata (next batch).	
So will go with 1.068 SG after the tests.	
Technique is to shake the dropper well after sanitizing.	

User Variables	
12 oz Bottles Required:	102
Primary Fermentation Temp. (F):	66
Secondary Fermentation Temp (F):	72
FWH IBU Factor (%):	10%
Strike Temperature Factor (F):	5
Sparge Temperature Factor (F):	3
Mash Time (min):	60
Specific Gravity (Brix):	15.2
Specific Gravity (SG):	1.059

Yeast:	
White Labs WLP001 (California Ale)	
3250 mL starter; ferment, crash cool and decant	
<p><b>Mash/Sparge Schedule:</b></p> <p>Single Infusion, 150F, 60 min; Batch Sparge</p>	
<p><b>Fermentation Schedule:</b></p> <p>Primary Fermentation: 23 days @66F</p> <p>Secondary Fermentation: 0 days @72F</p>	