BREWSHEET v3.3 (2012-03-18)

user input
calculated

Brew			
Name:	Overdose IPA v2		
Brew Date:	2012 September 26	Collected (gal):	5.50
Rack Date:		Racked (gal):	
Keg/Bottle Date:	2012 October 22	Kegged/Bottled (gal):	4.85
Estimated		**Actual**	
ABV (%):	6.1%	ABV (%):	6.2%
OG (SG):	1.060	OG (SG):	1.062
FG (SG):	1.014	FG (SG):	1.015
IBU:	59.9	IBU:	59.0
SRM:	15.0	SRM:	15.0
IBU/Gravity Ratio:	0.99	IBU/Gravity Ratio:	0.95

Grain	Pounds	Potential	SG Share	Color	% Bill
Maris Otter Malt	9.50	1.038	0.046	4.0	71.70%
Munich Malt 10L	1.25	1.035	0.006	10.0	9.43%
Caramel/Crystal 75L	1.00	1.034	0.004	75.0	7.55%
British carastan	1.00	1.035	0.004	34.0	7.55%
Rice hulls	0.50	1.000	0.000	0.0	3.77%

Hop	Type	Ounces	Boil Time	Alpha %	IBU	% Bill
Magnum (GR)	P	0.75	85	12.5%	28.6	14.29%
Chinook	P	0.50	20	11.0%	9.6	9.52%
Simcoe	P	0.50	20	12.2%	10.6	9.52%
Columbus	P	0.50	20	12.9%	11.2	9.52%
Chinook	P	0.50	0	11.0%	0.0	9.52%
Simcoe	P	0.50	0	12.2%	0.0	9.52%
Columbus	P	0.50	0	12.9%	0.0	9.52%
Chinook	P	0.50	dry	11.0%	0.0	9.52%
Simcoe	P	0.50	dry	12.2%	0.0	9.52%
Columbus	P	0.50	dry	12.9%	0.0	9.52%

Design Notes

Add 20 min hops at 10 and 0 at end of wpool.

Batch Variables and Calculations	
Batch Size (gal):	5.50
Grain Temperature (F):	81
Total Grain Weight (lbs):	13.25
Mash	
Mash Time (min):	60
Desired Mash Temperature (F):	153
Strike Water (gal):	6.02
Strike Temperature (F):	168
Mash Ratio (qts/lb):	1.82
Grain Absorption (gal):	1.66
Mash Volume (gal):	7.08
Mash-out Temperature (F):	168
Estimated First Runnings (gal):	4.22
First Runnings (gal):	3.85
First Runnings Gravity (Brix):	16.80
First Runnings Gravity (SG):	1.065
Sparge	
Desired Sparge Temperature (F):	170
Sparge Water (gal):	3.75
Sparge Water Temperature (F):	175
Estimated Second Runnings (gal):	4.22
Second Runnings (gal):	4.15
Second Runnings Gravity (Brix):	6.80
Second Runnings Gravity (SG):	1.026
Estimated Preboil Volume (gal):	8.45
Estimated Preboil Gravity (Brix):	11.61
Preboil Volume (gal):	8.00
Preboil Gravity (Brix):	11.40
Preboil Gravity (SG):	1.044
Extraction Efficiency (%):	75%
Boil	
Boil Time (min):	85
Estimated Evaporation Loss (gal):	2.04
Hop Absorption (gal):	0.09
Volume Left in Kettle (gal):	0.00
Actual Evaporation Rate (gal/hr):	1.13
Actual Evaporation Loss (gal):	1.59
Original Gravity (Brix):	16.00
Batch Size Efficiency (%):	72%
Actual Efficiency (%):	72%
Fermentation	
Primary Fermentation (days):	14
Primary Fermentation Temperature (F):	66
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):	1.017
Temperature of Reading (F):	40
Corrected SG:	1.015
Target Fermentation for Diacetyl Rest (%):	
Target Gravity for Diacetyl Rest (SG):	
Calories per Pint:	206
12 oz. Bottles Required:	50
Carbonation	
Bottling Temperature (F):	
Volumes of CO2:	1.90
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):	1.44
Leaf Hop Absorption Ratio (qts/oz):	0.20
Pellet Hop Absorption Ratio (qts/ oz):	0.10
Cooling Losses (%):	4%
Hydrometer Correction (SG):	-0.001

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

Yeast Strain	
Yeast Strain:	Fermentis Safale US-05 (Dry Ale)
Type:	Dry Ale
Attenuation (%):	75-79%
Actual Attenuation (%):	76%
Fermentation Temp (F):	59-75F
Flocculation:	low-medium

Required Amounts	
Cell Count (billions):	230
Vials (White Labs/Wyeast):	
Dry Yeast (g):	11.5

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:	1.060	Total Weight (lbs):		12.68
Batch Size (gal):	5.50	Total Bill:		100.00%
Brewhouse Efficiency (%):	70%			
Grain	**Pounds**	**Potential**	**Color**	**% Bill**
Maris Otter Malt	9.51	1.038	4.0	75.00%
Munich Malt 10L	1.27	1.035	10.0	10.00%
Caramel/Crystal 75L	0.95	1.034	75.0	7.50%
British carastan	0.95	1.035	34.0	7.50%

Poundage		
Goal (lbs):	9.50	
Amount (lbs | oz.f_oz):	1	14.83
Amount (lbs | oz.f_oz):	2	7.72
Amount (lbs | oz.f_oz):	2	0.95
Amount (lbs | oz.f_oz):	2	2.85
Amount (lbs | oz.f_oz):		13.65
Amount (lbs | oz.f_oz):		
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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):	0	0.00

Hydrometer Correction		
SG:	1.061	
Temperature (F):	77	
Corrected SG:	1.062	

Gravity Calculator			
Brix:	14.40	16.00	
Specific Gravity:	1.056	1.062	
Degrees Plato:	13.70	15.14	

Brix Ethanol Correction	
Original Brix:	
Current Brix:	
SG:	

Brewing Notes

Mash temp went up to ~160F; let it come down and increased mash time to 75 min.
Took ~15 min to come back down to 153F.
Increased boil time to 85 min.
10/7: 1.016 SG (6.1% ABV, 75% attenuation).
Slight hop aroma backed with malt. Flavor is malt with a touch of hops and a stiff (but smooth) bitterness that
Dry hopped.
10/22: Very hoppy, citrusy aroma; I don't notice the “creaminess” of the last batch. Refreshing.
Nice citrusy flavor with a good backing bitterness. Simcoe stands out.
Not much malt, but you can tell it's there as background noise. The hops substantially mute the malt.