12-31-2006 Supprise-1 Ale

A ProMash Brewing Session Printout

Recipe: Supprise-1 Ale
Brewing Date: Sunday December 31, 2006
Head Brewer: Lee Scott
Asst Brewer:

AHA Style and Style Guidelines

06-B American-style Ale, American Amber Ale

Min OG:	1.044	Max OG:	1.056	
Min IBU:	20	Max IBU:	40	
Min Clr:	11	Max Clr:	18	Color in SRM, Lovibond

Recipe Specifics

Batch Size (Gal):	5.00	Wort Size (Gal):	5.00
Total Grain (Lbs):	7.00		
Anticipated OG:	1.040	Plato:	9.88
Anticipated SRM:	6.2		
Anticipated IBU:	25.8		
Brewhouse Efficiency:	75 %		
Wort Boil Time:	60	Minutes	

Actual OG:	1.051	Plato:	12.62	
Actual FG:	1.012	Plato:	3.07	
% Alc by Weight:	4.01	by Volume:	5.13	From Measured Gravities.
% ADF:	75.7	% RDF	63.0	Apparent & Real Degree of Fermentation

(% Alcohol, %ADF and % RDF calculated from Hydrometer Readings)

Actual Mash System Efficiency:	75 %
Anticipated Points From Mash:	39.52
Actual Points From Mash:	39.53

Pre-Boil Amounts

Evaporation Rate: 22.50 % Per Hour

Raw Pre-Boil Targets - only targeted volume/gravity and evaporation rate taken into account:

Raw Pre-Boil Wort Size:	6.45	Gal		
Raw Pre-Boil Gravity:	1.031	SG	7.71	Plato

With sparge water, mash water, additional infusions, vessel losses, top-up water and evaporation rate recorded in the Water Needed Calculator:

Water Needed Pre-Boil Wort Size:	7.38	Gal		
Water Needed Pre-Boil Gravity:	1.027	SG	6.77	Plato

Formulas Used

Brewhouse Efficiency and Predicted Gravity based on Method #1, Potential Used.
Final Gravity Calculation Based on Points.
Hard Value of Sucrose applied. Value for recipe: 46.2100 ppppg
% Yield Type used in Gravity Prediction: Fine Grind Dry Basis.

Color Formula Used:	Morey
Hop IBU Formula Used:	Garetz

Grain/Extract/Sugar

%	Amount	Name	Origin	Potential	Color - SRM
7.1%	0.50 lbs.	Crystal 40L	America	1.034	40
85.7%	6.00 lbs.	Maris Otter	Great Britain	1.038	3
7.1%	0.50 lbs.	Vienna Malt	Germany	1.037	3

Potential represented as SG per pound per gallon.

Hops

Amount	Name	Form	Alpha	IBU	Boil Time
0.75 oz.	Simcoe	Whole	11.50	25.8	60 min.
0.25 oz.	Simcoe	Whole	11.50	0.0	10 min.
0.25 oz.	Simcoe	Whole	11.50	0.0	Dry Hopping.

Yeast

WYeast 1084 Irish Ale

Mash Schedule

Mash Type: Single Step
Heat Type: Infusion

Grain Lbs: 7.00
Water Qts: 9.31 - Before Additional Infusions
Water Gal: 2.33 - Before Additional Infusions

Qts Water Per Lbs Grain: 1.33 - Before Additional Infusions

Tun Thermal Mass: 0.34
Grain Temp: 63 F

Dough In Temp: 183 Time: 10
Saccharification Rest Temp: 158 Time: 60
Mash-out Rest Temp: 168 Time: 15
Sparge Temp: 170 Time: 60

Runnings Stopped At: 1.020 SG 5.06 Plato

Additional Infusion Temperatures And Amounts

Mash Out Step: 2.55 Qts of 210 Degree Water Added

Total Mash Volume Gal:3.53 - After Additioanl Infusions

All temperature measurements are degrees Fahrenheit.

Water Needed For Brewing Session

Sparge Amount:	5.75	Sparge Deadspace:	0.00	Total Into Mash:	5.75	
Total Grain Lbs:	7.00	Qts Per Lbs:	1.69	Total From Mash:	2.13	
		Mash Gallons:	2.97			
		Grain Absorption:	0.84			
		Amount Lost in Lauter Tun Deadspace, Grant and Misc. to Kettle:			0.50	
		Top Up Water Added to Kettle:				0.00
		Amount into Kettle:			7.38	
		Boil Time (min):	60.00	Evaporation Rate:	22.50%	
		Amount after Boil:			5.72	
		Left in Kettle Deadspace:			0.50	
		Left in Hopback:			0.00	
		Left in Counterflow Chiller:			0.00	
		Left in Other Equipment / Other Absorption:			0.00	
		Amount to Chillers:			5.22	
		Amount After Cooling (4%):			5.01	

Grain absorption rate is: 0.12 (Gallons Per Lbs)

Evaporation rate is % per Hour

This formulation will yield 5.01 gallons of fermentable wort.

You will need 8.72 gallons of water for the complete brewing session.

Efficiency Specifics

Recipe Efficiency Setting: 75 %

With sparge water, mash water, additional infusions, vessel losses, top-up water and evaporation rate recorded in the Water Needed Calculator:

Target Volume (Gal):	7.38		
Estimated OG:	1.027	Plato:	6.77

Raw Pre-Boil Targets - only targeted volume/gravity and evaporation rate taken into account:

Target Volume (Gal):	6.45		
Estimated OG:	1.031	Plato:	7.71

Post-Boil Targets:

Target Volume (Gal):	5.00		
Estimated OG:	1.040	Plato:	9.88

Recorded Actuals - Measurement Taken In Kettle:

Recorded Volume (Gal):	5.00		
Recorded OG:	1.040	Plato:	9.88

At 100 % extraction from the maximum mash potential:

Total Points:	52.70
Points From Mash:	52.70
Points From Extract/Sugar:	0.00

With the recipe efficiency setting, you should have achieved:

Total Points:	39.52
Points From Mash:	39.52
Points From Extract/Sugar:	0.00

Actuals achieved were:

Actual Points From Mash:	39.53
Actual Mash System Efficiency:	75 %

Fermentation Specifics

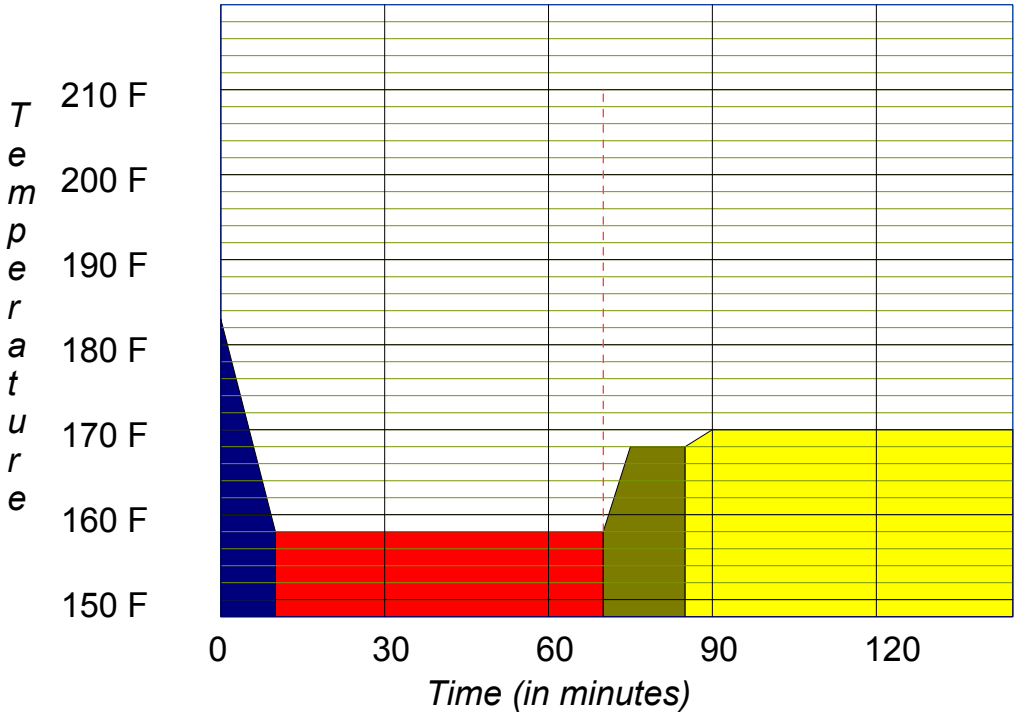
Pitched From:	Starter
Amount Pitched:	1000 mL
Lag Time:	0.00 hours

Primary Fermenter:	Glass
Primary Type:	Closed
Days In Primary:	10
Primary Temperature:	64 degrees F

Secondary Fermenter:	Glass
Secondary Type:	Closed
Days In Secondary:	10
Secondary Temperature:	60 degrees F

Original Gravity:	1.051 SG	12.62 Plato
Finishing Gravity:	1.012 SG	3.07 Plato

Supprise-1 Ale - ProMash Mash Schedule Chart



- Dough In
- Saccharification Rest
- Mash Out
- Sparge

Infusion Spike