Liberty Brewing Sauvignon Bomb Clone (AG)

American IPA (21 A)

Type: All Grain
Batch Size: 23.00 L
Boil Size: 28.50 L
Boil Time: 60 min
Final Bottling Vol: 22.00 L
Fermentation: Ale with Diacetyl Rest

Date: 17 Dec 2018
Efficiency: 75.00 %
Est Mash Efficiency: 81.5 %



Brewing Notes:
This beer has a large dry hop addition which can cause what is known as 'dry hop creep'. This is where enzymes in the hops convert some normally non-fermentable sugars into fermentable ones. This can lower the final gravity raising the ABV as well as reintroduce diacetyl precursors (the target ABV is 7%). One way to address this is to add the dry hops while the yeast is still quite active, bump the temp up, and let ferment completely which is the approach used in the instructions below. Another option is to let ferment fully, drop the temp to 5C and then dry hop for a shorter period (cold and short dry hop). The second option will prevent the ABV increase but, to ensure no additional fermentation in packaging (e.g., bottles), only do this if kegging.

The original recipe uses Warminster Caragold which is no longer available. Gladfield Toffee malt has been substituted which is similar.

1. If flavour minerals are available, add to boil only as mash pH is taken care of with acid malt.
2. If available, add kettle finings and yeast nutrient 15 min before the end of boil.
3. It is recommended that the yeast be rehydrated per the manufacturers instructions. Pitch at 18C and keep as close to this temperature as possible for 3 days. After 3 days, let rise up to 20C.
4. Once fermentation slows (~5 - 10 days), add the dry hop addition and raise temp to 22C for a diacetyl rest.
5. Let ferment completely (~5 days) and, if possible, cold crash for a few days before packaging.
6. Carbonate to 2.6 - 2.7 volumes of CO2.

Mash or Steep Grains

Mash Ingredients

Amt	Name	Type	#	%/IBU	Volume
5.650 kg	Pale Malt, Golden Promise (Thomas Fawcett) (5.9 EBC)	Grain	1	84.3 %	3.68 L
0.700 kg	Gladfield Toffee Malt (10.5 EBC)	Grain	2	10.4 %	0.46 L
0.350 kg	Gladfield Sour Grapes Malt (acid malt) (4.0 EBC)	Grain	3	5.2 %	0.23 L

Mash Steps

Name	Description	Step Temperature	Step Time
Saccharification	Add 21.59 L of water at 71.2 C	66.0 C	60 min
Mash Out	Heat to 76.0 C over 10 min	76.0 C	10 min

Fly sparge with 13.62 L water at 75.6 C
Add water to achieve boil volume of 28.50 L
Estimated pre-boil gravity is 1.058 SG

Boil Ingredients

Amt	Name	Type	#	%/IBU	Volume
10.00 g	Nelson Sauvin [10.10 %] - Boil 60.0 min	Hop	4	9.8 IBUs	-
6.70 g	Gypsum (Calcium Sulfate) (Boil)	Water Agent	5	-	-
3.50 g	Calcium Chloride (Boil)	Water Agent	6	-	-
0.50 Items	Whirlfloc Tablet (Boil 15.0 mins)	Fining	7	-	-
20.00 g	Nelson Sauvin [10.10 %] - Boil 15.0 min	Hop	8	13.0 IBUs	-
1.50 g	Yeast Nutrient (Boil 15.0 mins)	Other	9	-	-
80.00 g	Nelson Sauvin [10.10 %] - Boil 10.0 min	Hop	10	45.7 IBUs	-

Estimated Post Boil Vol: 26.00 L and Est Post Boil Gravity: 1.066 SG

Cool and Transfer Wort

Cool wort to fermentation temperature
Transfer wort to fermenter
Add water if needed to achieve final volume of 23.00 L

Pitch Yeast and Measure Gravity and Volume

Fermentation Ingredients

Amt	Name	Type	#	%/IBU	Volume
2.0 pkg	Safale American (DCL/Fermentis #US-05) [0.05 L]	Yeast	11	-	-

Measure Actual Original Gravity _____ (Target: 1.066 SG)
Measure Actual Batch Volume _____ (Target: 23.00 L)

Fermentation

17 Dec 2018 - Primary Fermentation (3.00 days at 18.0 C ending at 18.0 C)
20 Dec 2018 - Secondary Fermentation (6.00 days at 20.0 C ending at 20.0 C)
26 Dec 2018 - Tertiary Fermentation (5.00 days at 22.0 C ending at 22.0 C)

Dry Hop and Bottle/Keg

Dry Hop/Bottling Ingredients

Amt	Name	Type	#	%/IBU	Volume
140.00 g	Nelson Sauvin [10.10 %] - Dry Hop 4.0 Days	Hop	12	0.0 IBUs	-

Measure Final Gravity: _____ (Estimate: 1.013 SG)
Date Bottled/Kegged: - Carbonation: Bottle with 129.40 g Corn Sugar