## **American Porter - Wedding**

## American Porter (20 A)

Type: All Grain
Batch Size: 13.50 gal
Boil Size: 16.40 gal
Boil Time: 60 min
End of Boil Vol: 15.10 gal
Final Bottling Vol: 13.00 gal
Fermentation: Ale, Single Stage

Taste Notes:

Date: 11/02/18 Brewer: Asst Brewer:

Equipment: Morebeer Tippy (10 gal batch)

Efficiency: 80.00 % Est Mash Efficiency: 85.9 %

Taste Rating: 30.0



	Ingredients				
Amt	Name	Type	#	%/IBU	Volume
24.00 gal	Reverse Osmosis	Water	1	-	-
12.00 g	Calcium Chloride (Mash)	Water Agent	2	-	-
4.00 g	Epsom Salt (MgSO4) (Mash)	Water Agent	3	-	-
4.00 g	Gypsum (Calcium Sulfate) (Mash)	Water Agent	4	-	-
19 lbs	Brewers Malt 2-Row (Briess) (1.8 SRM)	Grain	5	75.2 %	1.48 gal
2 lbs	Caramel/Crystal Malt - 75 (Bairds) (75.0 SRM)	Grain	6	7.9 %	0.16 gal
2 lbs	Viking Chocolate Light Malt (203.0 SRM)	Grain	7	7.9 %	0.16 gal
1 lbs 8.0 oz	Special Roast (Briess) (50.0 SRM)	Grain	8	5.9 %	0.12 gal
12.0 oz	Viking Black Malt (710.7 SRM)	Grain	9	3.0 %	0.06 gal
1.00 oz	Bravo [14.90 %] - Boil 60.0 min	Hop	10	19.9 IBUs	-
2.00 oz	Bravo [14.90 %] - Boil 10.0 min	Hop	11	14.4 IBUs	-
1.0 pkg	Dry English Ale (White Labs #WLP007) [35.49 ml]	Yeast	12	-	-

## Gravity, Alcohol Content and Color

Est Original Gravity: 1.054 SG Est Final Gravity: 1.011 SG Estimated Alcohol by Vol: 5.7 %

Bitterness: 34.3 IBUs Est Color: 30.8 SRM Measured Original Gravity: 1.055 SG Measured Final Gravity: 1.014 SG Actual Alcohol by Vol: 5.4 % Calories: 184.3 kcal/12oz

	Mash Steps		
Name	Description	Step Temperature	Step Time
Mash In	Add 37.19 qt of water at 162.6 F	150.0 F	60 min

Sparge: Fly sparge with 10.64 gal water at 168.0 F

Mash Notes: Simple single infusion mash for use with most modern well modified grains (about 95% of the time).

	Tempera	Gravity	- 4
11/02/18 17:18:50	67.0 F	1.055 SG	0.7
11/03/18 10:29:38	67.0 F	1.040 SG	1.4
11/04/18 07:21:13	67.0 F	1.028 SG	2.3
11/04/18 14:34:21	69.0 F	-	2.6
11/05/18 07:34:52	69.0 F	1.020 SG	3.4
11/05/18 16:20:37	70.0 F	1.018 SG	3.7
11/06/18 07:53:19	70.0 F	1.016 SG	4.4
11/07/18 08:08:52	70.0 F	1.015 SG	5.4
11/10/18 08:41:24	70.0 F	1.014 SG	8.4

