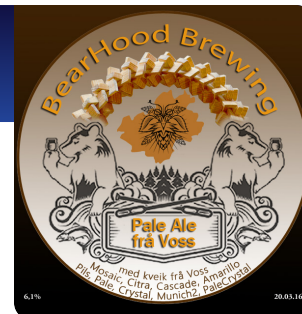


# Pale Ale fra Voss

Amerikansk IPA (6 B)

**Date:** 20 Mar 2016  
**Brewer:** Morten Sevland  
**Batch Size:** 25,00 l  
**Boil Size:** 33,50 l  
**Boil Time:** 90 min  
**Final Bottling Vol:** 23,50 l  
**Equipment:** Electric BIAB (25L) Sparge  
**Fermentation:** Ale, Single Stage

**Est Original Gravity:** 1,065 SG  
**Est Final Gravity:** 1,013 SG  
**Est ABV:** 6,8 %  
**Est Bitterness:** 48,3 IBUs  
**Est Color:** 21,5 EBC  
**Measured Original Gravity:** 1,060 SG  
**Measured Final Gravity:** 1,010 SG  
**Actual ABV:** 6,6 %



## Ingredients

Amt	Name	Type	#	%/IBU
8,00 g	Calcium Sulfate - Gypsum - CaSo4 (Mash 60,0 mins)	Water Agent	1	-
4,00 kg	Pilsner (W) (3,3 EBC)	Grain	2	54,1 %
2,50 kg	Pale Malt (W) (5,0 EBC)	Grain	3	33,8 %
0,25 kg	Amber Malt (TFS) (125,0 EBC)	Grain	4	3,4 %
0,25 kg	Crystal Malt (TFS) (120,0 EBC)	Grain	5	3,4 %
0,20 kg	Munich II (W) (25,0 EBC)	Grain	6	2,7 %
0,20 kg	Pale Crystal Malt (TFS) (75,0 EBC)	Grain	7	2,7 %
20,00 g	Mosaic (2014) [13,50 %] - Boil 60,0 min	Hop	8	27,7 IBUs
1,00 Items	Whirlfloc Tablet (Boil 15,0 mins)	Fining	9	-
25,00 g	Citra (2014) [13,50 %] - Boil 10,0 min	Hop	10	12,6 IBUs
20,00 g	Cascade (2014) [5,60 %] - Boil 10,0 min	Hop	11	4,2 IBUs
25,00 g	Citra (2014) [13,50 %] - Boil 2,0 min	Hop	12	2,9 IBUs
20,00 g	Cascade (2014) [5,60 %] - Boil 2,0 min	Hop	13	1,0 IBUs
2,0 pkg	Safale American (DCL/Fermentis #US-05) [50,28 ml]	Yeast	14	-
1,0 pkg	Norwegian Vossakveik (Voss #NCYC 3995) [124,21 ml]	Yeast	15	-
0,63 tsp	Yeast Nutrient / Servomyces (Primary 15,0 mins)	Other	16	-
25,00 g	Amarillo (2014) [8,90 %] - Dry Hop 7,0 Days	Hop	17	0,0 IBUs
25,00 g	Cascade (2014) [5,60 %] - Dry Hop 7,0 Days	Hop	18	0,0 IBUs
25,00 g	Amarillo (2014) [8,90 %] - Dry Hop 4,0 Days	Hop	19	0,0 IBUs
25,00 g	Cascade (2014) [5,60 %] - Dry Hop 4,0 Days	Hop	20	0,0 IBUs

## Mash Profile

**Mash Name:** TempMash 55-66-72-78 (25L-LowSparge)  
**Sparge Water:** 14,91 l  
**Sparge Temperature:** 78,0 C  
**Adjust Temp for Equipment:** FALSE

**Total Grain Weight:** 7,40 kg  
**Grain Temperature:** 20,0 C  
**Tun Temperature:** 20,0 C  
**Mash PH:** 5,20

## Mash Steps

Name	Description	Step Temperature	Step Time
Mash Low	Add 26,00 l of water at 58,8 C	55,0 C	15 min
Saccharification	Heat to 66,0 C over 15 min	66,0 C	60 min
Mash High	Heat to 72,0 C over 15 min	72,0 C	15 min
Mash Out	Heat to 78,0 C over 15 min	78,0 C	15 min

**Sparge:** Fly sparge with 14,91 l water at 78,0 C

## Carbonation and Storage

**Carbonation Type:** Keg  
**Pressure/Weight:** 86,48 KPA  
**Keg/Bottling Temperature:** 7,2 C  
**Fermentation:** Ale, Single Stage

**Volumes of CO2:** 2,3  
**Carbonation Used:** Keg with 86,48 KPA  
**Age for:** 30,00 days  
**Storage Temperature:** 18,3 C

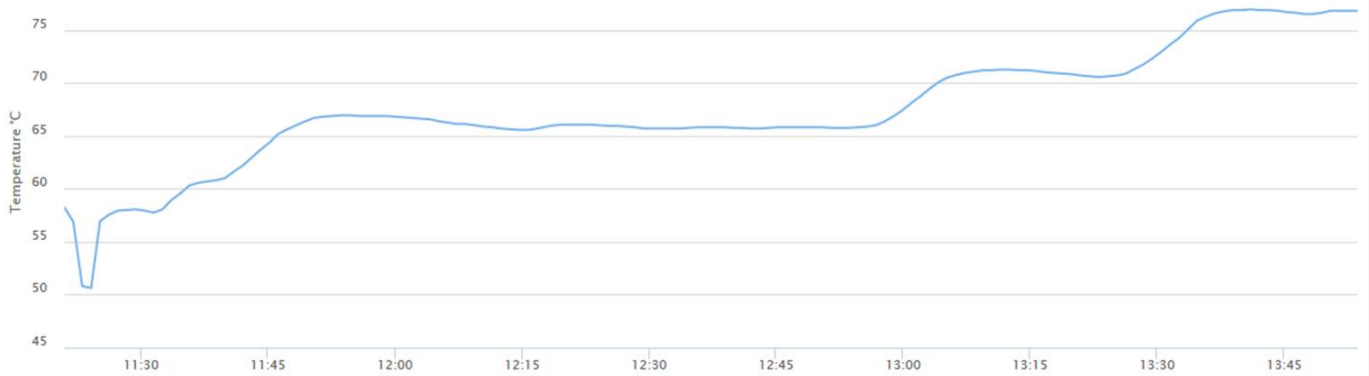
## Notes

Tom for Crystal, spedde på med Amber 50/50  
PH: 5,5  
Delte batchen i 20 liter med US-05 og 10 liter med  
VossaKveik  
All tørrhumle i 20 liter US-05 batchen

29.03.16 - humletilsetning 1  
30.03.16 - SG 1.014 - US-05  
30.03.16 - SG 1.016 - VossaKveik  
14.02.16 - FG 1.010 - US-05  
14.02.16 - FG 1.012 - VossaKveik

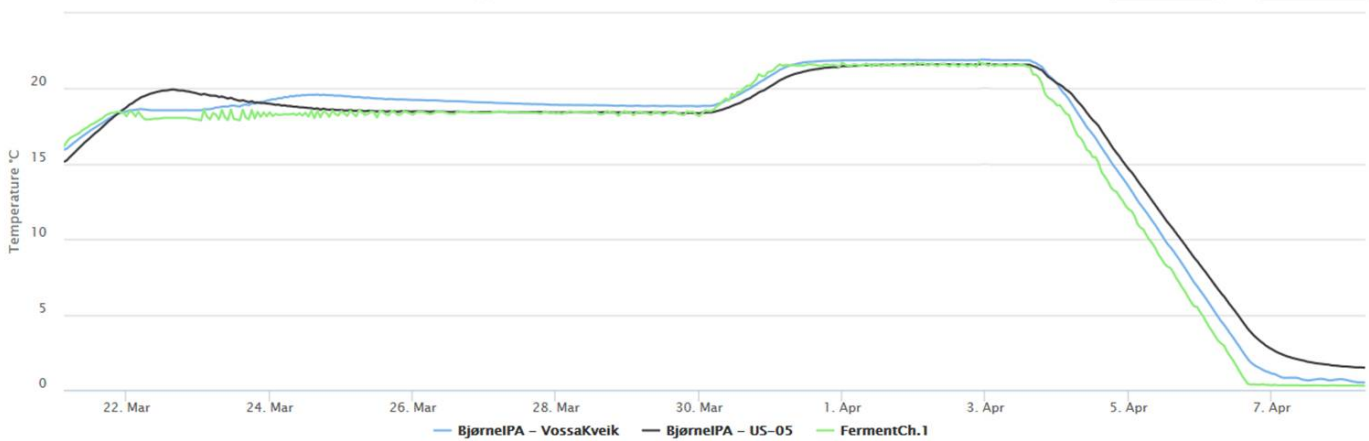
### Mash – Pale Ale frå Voss – Engelsk PA

From Mar 20, 2016 To Mar 20, 2016



### Ferment – Pale Ale frå Voss – Engelsk PA

From Mar 21, 2016 To Apr 8, 2016



Layout by msevland - Created with BeerSmith