## 2019/04/13 - Ahhh PA

Name	Ahhh PA				
Style	American IPA		Brew Date	2019-04-13	
Туре	All Grain		Boil Size	13.8 gal	
IBU's	89		Batch Size	12 gal	
Color	8 SRM		Boil Time	60 min	
	Estimated		Actual	Actual	
Pre-Boil OG	1.055		1.051		
OG	1.061		1.058		
FG	1.012		1.012		
ABV	6.4%		6.0%		
Efficiency	80%				
Grain	24 lbs		Canadian 2-Row	89.7%	
	1.25 lbs		Carafoam	4.7%	
	1.5 lbs		Weyermann Caramunich II	5.6%	
Water Treatment			HTL (15 gal)	MT (8 gal)	
	Campden Tablets		1	1/2	
	Gypsum		1.5 g	0.8 g	
	Calc Chloride		9.6 g	5.1 g	
	Epson Salt		6.2 g	3.3 g	
	Baking Soda		0.8 g	0.4 g	
Mash	60 mins		154 F	Batch Sparge	
Нор	60 mins	2.7 oz	Amarillo Gold (9.1%)	33.6 IBU	
	15 mins	4.0 oz	Centennial (8.8%)	23.9 IBU	
	15 mins	5.0 oz	Amarillo Gold (9.1%)	30.8 IBU	
	day 7	3.0 oz	Citra (13.2%)		
	day 7	3.0 oz	Crystal (3.5%)		
Additions	15 mins	1	Whirlfloc Tablet		
	15 mins	1	Immersion Chiller		
Yeast	3 sachets Safale US-05				
Fermentation	Primary	14 days	67 F		
	Cold Crash	3 days	37 F		
		,-	1		

Notes Didn't do ph adjustments
Did water adjustments.

HLT set to 168

Mashed in and set hlt to 156. Mashed at 154.

Did batch sparge. Got 4-5 gallons initially and then added 9 gal to mash tun. Recirculated for 10 mins before sparring to kettle. Got 13.5 gallons in boil kettle.

Pre boil og 1051

Boiled at 65% power.

Og: 1058

Amarillo hops were assumed to be 7% at the time. They were from a group buy in Nov 2018 from 2017 growing season. Stored in zip locks in the freezer.

Threw hops in the kettle without hop sock.

Accidentally added 5 min hops at 15. Revised recipe for batch.

Will be a 40 ibus higher.

Fermented in fridge at 67F.

Dry Hoped at day 7

Amarillo hops were from 2017 with 9.1% AA

Day 14: SG 1012. Cold crashing to 2C

Taste: citrus comes through in taste. Not overall nosey. Would be nice if it had more nose.