## 2015/11/06 - Palisade Bitter (Mass Dilution)

Name	Palisade Bitter (Mass D	ilution)			
Style	Extra Special/Strong Bitter		Brew Date	2015-11-06	
Туре	All Grain		Boil Size	21.2 gal	
IBU's	26.4		Batch Size	20.0 gal	
Color	6.1 SRM		Boil Time	60 min	
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	Estimated		Actual	Actual	
Pre-Boil OG	1.045				
OG	1.047		1.045		
FG	1.012		1.012		
ABV	4.7%		4.7%		
Efficiency	75.0%				
Grain	31.0 lbs	Pale Malt, N - 2014 Fall	Maris Otter	ris Otter 91.2%	
	1.5 lbs	Caramel/Cr	ystal Malt - 40L	4.4%	
	1.5 lbs	Carafoam	Carafoam 4.4%		
Mash	75 mins	150 F	Infusion	Infusion	
	10 mins	168 F	Mash Out	Mash Out	
Hops	60 mins	3.5 oz	Palisade (7.5%)	24.4 IBU	
	10 mins	1.0 oz	Palisade (7.5%)	2.5 IBU	
	2 mins	0.5 oz	Palisade (7.5%)	0.3 IBU	
Additions	15 min	1.0	Whirlfloc Tablet		
		<u> </u>			
Yeast	4.0	Safale S-04	Safale S-04		
Fermentation	Primary	14 days	68.0 F		
	Cold Crash	2 days	37.0 F	37.0 F	
	Bottle/Keg	1 days	37.0 F		
	Force Carbonation	10.7 psi	37.0 F		

Notes

Mass dilution. Added grain to mash tun then added

Added grain to mash the nadded
10 gal water at 168
Mash temp seemed to go down to 132F
Took a while for it to get to 150.
Need to investigate mash temp probe.
Going to boil for 10 gal batch and dilute when going into carboys with previously boiled

water.
Aiming for:
Boil size: 10.8Gal
Pre boil OG: 1089
OG: 1094

OG: 1094
Something wrong
OG: 1074
Vol: 4gal
Ok. Split batch and diluted to 8gal.
OG (9 hours after pitch): 1045
Dry hopped one carboy with 1 oz palisade

Tasting notes:
Good. Kinda watery. Maybe cuz of the dilution.
Interesting taste. No complaints.