

# 43: Powerthirst

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 Date: 02/06/10  
 Category: 23 – Specialty Beer  
 Subcategory: A – Specialty Beer



Kettle Volume: 7.38 gal (S.G.: 1.078)	Efficiency: 63.02%
Boil Duration: 1.75 hr	Attenuation: 89.3%
Evaporation: 1.93 gal	Evap/Hour: 1.1 gal
Water Volume Added: 0.98 L	
Final Volume: 5.5 gal (S.G.: 1.122)	

## Ingredients:

- 22.0 lb Pilsen Malt
- 3.0 lb Munich Malt 1
- 12.0 oz Caramel Malt 40L
- 4.0 oz Caramel Malt 120L
- 360 g Corn Sugar
- 600 g White Table Sugar (Sucrose)
- 60.0 g Galena (10.1%) – added during boil, boiled 60.0 min
- 25.0 g Galena (10.1%) – added during boil, boiled 20.0 min
- 10.0 g Centennial (8.7%) – added during boil, boiled 20.0 min
- 10.0 g Amarillo (7.5%) – added during boil, boiled 20.0 min
- 25.0 g Galena (10.1%) – added during boil, boiled 15.0 min
- 10.0 g Centennial (8.7%) – added during boil, boiled 15.0 min
- 10.0 g Amarillo (7.5%) – added during boil, boiled 15.0 min
- 25.0 g Galena (10.1%) – added during boil, boiled 10.0 min
- 10.0 g Centennial (8.7%) – added during boil, boiled 10.0 min
- 10.0 g Amarillo (7.5%) – added during boil, boiled 10.0 min
- 25.0 g Galena (10.1%) – added during boil, boiled 5.0 min
- 10.0 g Centennial (8.7%) – added during boil, boiled 5.0 min
- 10.0 g Amarillo (7.5%) – added during boil, boiled 5.0 min
- 15.0 g Centennial (8.7%) – steeped after boil
- 15.0 g Amarillo (7.5%) – steeped after boil
- 30.0 g Centennial (8.7%) – added dry to primary fermenter
- 30.0 g Amarillo (7.5%) – added dry to primary fermenter
- 0.0 ea WYeast 1056 American Ale

### Water:

- 6.0 gal Distilled Water
- 5.08 gal Lawrence, IN
- 6.0 g Gypsum (Calcium Sulfate)
- 4.0 g Calcium Chloride (Calcium Chloride (anhydrous))
- 10.0 g Epsom Salts (Magnesium Sulfate)

## Style:

	Recipe	Guideline
Original Gravity:	1.122	1.026 – 1.120
Terminal Gravity:	1.013	0.995 – 1.035
Color:	14.53 °SRM	1.0 – 50.0
Alcohol:	14.56%	2.5% – 14.5%
Bitterness:	110.7	0.0 – 100.0



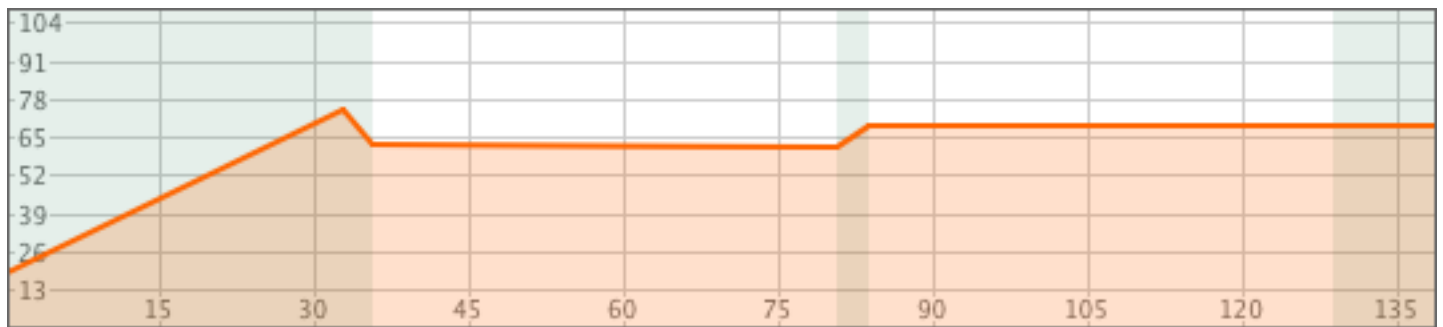
**Analysis:**

	<b>Apparent</b>	<b>Real</b>	<b>Weight</b>	<b>Calories</b>
Original Extract:	28.44 °P	28.44 °P	Alcohol: 27.35 g	188.74 kcal
Attenuation:	89.3%	70.8%	Carbs: 19.69 g	74.82 kcal
Terminal Extract:	3.32 °P	8.32 °P	Protein: 1.38 g	5.51 kcal
% Alcohol: 14.56% ABV		11.41% ABW	Total: 269.07 kcal	

**Schedule:**

Ambient Air: 20 °C  
 Source Water: 15 °C  
 Elevation: 240 m

	<b>Elapsed</b>	<b>Thickness</b>	<b>Final Temp</b>	<b>Available</b>
<b>35.6 min Mash In</b> <i>Liquor: 5.81 gal</i> <i>Strike: 74.75 °C</i> <i>Target: 63.0 °C</i>	00:35:38	1.86 L/kg	63.0 °C	1.39 gal
<b>45.0 min Saccharification Rest</b> <i>Rest: 45.0 min</i> <i>Final: 62.7 °C</i>	01:20:38	1.86 L/kg	62.7 °C	1.39 gal
<b>3.0 min Infusion</b> <i>Water: 2.0 gal</i> <i>Temperature: 97.0 °C</i> <i>Target: 70.0 °C</i>	01:23:38	2.51 L/kg	70.0 °C	3.44 gal
<b>45.0 min Dextrinization Rest</b> <i>Rest: 45.0 min</i> <i>Final: 69.7 °C</i>	02:08:38	2.51 L/kg	69.7 °C	3.44 gal
<b>10.0 min Batch Sparge</b> <i>Sparge #1</i> <i>Volume: 3.56 gal</i> <i>Temperature: 75.0 °C</i> <i>Duration: 10.0 min</i> <i>Total Runoff: 7.07 gal</i>	02:18:38	0.0 L/kg	70.0 °C	0.0 gal



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**Carbonation:****Natural Conditioning**

Beer Temp: 44 °F  
Priming Agent Rate: 4.02 g/L  
Priming Agent Mass: 83.53 g  
Volumes CO2: 2.4

**Forced Carbonation**

Beer Temp: 44.0 °F  
Pressure: 13.2 PSI  
Volumes CO2: 2.4

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**Volume Adjustments:**

-100 mL Kettle  
-.25 gal Fermenter

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**Notes:**

Chilled to 72°F (summer ground water issues, apparently). Pitched ~200 mL of slurry harvested from IPA #17, 21 days after initial pitch. Cooled to 65°F within 6 hours using ice. Fermented in water bath at 64–68°F for 9 days (FG 1.022), then added sugar. Fermented 9 days at 68–72°F for secondary. Dry-hopped 10 days in fermenter.