Matt's Notes

RECIPE: DATE:

MASH

Strike water Tw = (.2/R)(T2 - T1) + T2 *R = Ratio of water to grain in quarts per pound* *T1 = the temperature of the grains in Fahrenheit (or Celsius)* *T2 = the target temperature of the mash in Fahrenheit (or Celsius)*		TIME: TEMP: VOLUME:
Absorbtion Loss Absorption loss in gallons = (lbs of grain) x 0.20)		LOSS:
Infusion Water Wa = (T2 - T1)(0.2G + Wm)/(Tw - T2) *Wa = The amount of infusion water to add* *Wm = The total amount of water in the mash* *T1 = The initial mash temperature* *T2 = The target mash temperature* *Tw = the actual temperature of the infusion water* *G = The amount of grain in the mash*		TIME: TEMP: VOLUME: TIME: TEMP: VOLUME:

BOIL

Boil Loss Evaporation rate = Pre-Boil Wort * 0.10 (keg kettle is closer to .08) Evaporation loss = (Evaporation Rate / 60) x Total Boil Time Cooling loss = (Total Kettle Wort - Evaporation Loss) x 0.04	90 Min Boil PBW: 1.2 ACW: 1.013 PBW: 6.0 ACW: 5.06 PBW: 11.8 ACW: 10.05 PBW: 14.2 ACW: 11.99	BOIL START TIME:
Hop Additions	TYPE: TYPE: TYPE: TYPE: TYPE:	TIME: TIME: TIME: TIME: TIME:
Cooling Start		TIME:
Cooling End		TIME:
Actual Ending Volume		VOL:
Original Gravity Hydrometer Temp Correction = 1.313454 - 0.132674 x T + 2.057793 x 2.71828 -3 x T^2-2.627634 x 2.71828-6 x T^3 *T = Temperature Deg F*		OG: TEMP: REAL OG:

FERMENTATION

Transfer from Boil to Primary	DATE:	OG:	TEMP:
Amount of Yeast Pitched	Type:	Amount:	
Transfer to Secondary	DATE:	SG:	TEMP:
Final Gravity	DATE:	FG:	TEMP:
Apparent Attenuation AA%=(OG-FG)/OG*100 SG *is original extract* *FG is terminal Gravity as read from the hydrometer*		Apparent Attenuation Percentage:	
ABV Hydrometer Temp Correction = 1.313454 - 0.132674 x T + 2.057793 x 2.71828 -3 x T^2-2.627634 x 2.71828-6 x T^3 *T = Temperature Deg F* *ABV = ((1.05 * (OG – FG)) / FG) / 0.79 * 100*		Alcohol Percentage:	

CARBONATION

Priming Sugar Sugar in grams = 15.195 x Volume in Gallons (Desired CO2 Volume - 3.0378 + .050062 * T - .00026555 * T * T) *T = Temperature at bottling in degrees F*		DATE: Grams of Sugar:
Force Carbonation $P = -16.6999 – 0.0101059 * T + 0.00116512 * T^2 + 0.173354 * T * V + 4.24267 * V – 0.0684226 * V^2$ where *P = Pressure needed (psi)* *T = Temperature of keg in °F* *V = Volumes of CO2 desired*		DATE: PSI:

CALORIES

Calories Calories (12 US oz) bottle Calories = 3621 * FG * (((0.8114 * FG) + (0.1886 * OG) - 1) + (0.53 * ((OG - FG) / (1.775 - OG))))		Calories: