Mash Made Easy V_6.70 © By: MashRite LLC (All Rights Reserved) 7/8/2019

		By: MashRite LLC (All Rights Reserved) 7/8/2019					
Place Your Recipe's Name Here	Pre-Adjustment Mash Water Alkalinity (ppm) =	113.5	Mash Water Ca++ (ppm) =	42.8	Mash Water Mg++ (ppm) =	0.0	
Malt/Grain Classification (Drop Down)	Grain Bill (Names / Descriptions)	Grains Lovibond Color	Grains Quantity (lbs.)	Grains Calculated DI Mash pH	DI Mash pH Manual Override	Grains Calculated Post Ca & Mg Additions Mash pH	
Base	MARIS OTTER	3	16.88	5.75		5.89	
Munich / Biscuit	VICTORY	25	2.48	5.24		5.38	
Brown / Mid Roast	BROWN	65	1.05	4.97		5.11	
Roasted Malt	CARAFA II	415	0.47	4.60		4.74	
Roasted Malt	PALE CHOCOLATE	225	0.6	4.90		5.04	
Caramel / Crystal	CARAMEL 60	60	1.49	4.78		4.92	
Grists Total Malts/Grains/Sugars & Non-fermentables Weight (Lbs.) =			22.97	~Pre Acid/Base Addition Mash pH =		5.50	
	Sugars & Non-Fermentables Weight (Lbs.) =		0	Desired Target Mash pH =		5.50	
	Acid Malts Effective % Lactic Acid (Avg. is 3%) =		3.00%	88% Lactic (mL) =			
	% of Kolbach pH shift from Ca++ & Mg++ =		75%	10% Phos (mL) =		*** Select only one form of Acid to achieve the target	
	% Log Base 10 Mash pH (Balance Linear) =		100%	Acid Malt (Oz.) =			
	Key			Citric Acid (g) =		Mash pH ***	
	Drop Down User Input	User Input		CRS/AMS (mL) =			
	Calculated Output	Text		Baking Soda (g) =			

		Mash Water M	ineral Additions						
Gypsum (CaSO4)	CaCl2 Prills/Crystal at 75.5 Percent	Epsom Salt (MgSO4)	Table or Pickling Salt (NaCl)	Baking Soda (NaHCO3)	Slaked Lime Ca(OH)2				
Grams	Grams	Grams	Grams	Grams	Grams				
2.70	2.30	0.00	0.00	5.80	0.00				
Sparge Water Mineral Additions									
4.27	3.64	0.00	0.00	N/A	N/A				
Mash Water (gallons)	Sparge Water (gallons)	Total Batch Water (gallons)	Mash Water To Grist Ratio (Qts.	Grist Buffer	Grist Buffer Multiplier				
7.75	12.25	20	1.35	32.08	0.60				
Finished Batch Mineralization (Assumes minerals as above added to both mash and sparge)									
Chloride (ppm)	Sulfate (ppm)	Sodium (ppm)	Calcium (ppm)	Magnesium (ppm)	Sulfate / Chloric Ratio				
37.8	51.4	21.0	42.8	0.0	1.36 : 1				
Cooled post boil volume (Gallons)	Estimated Batch Color (SRM)		l Selector (Drop wn)	IBU's	BU:GU Ratio				
13.5	20.1	Muntons Ma	ris Otter, 5.75	26.53	0.541				
NOTE: If using	CRS/AMS = No								
NOTE: Indic	Mash & Sparge								

Mash Made Easy V_6.70 ©

Release Date: 7/8/2019

Credits:
A.J. deLange
Kai Troester
Derek Scott
Weyermann®
Briess®
D.M. Riffe
Mick Spencer
Glenn Tinseth
Michael L. Hall