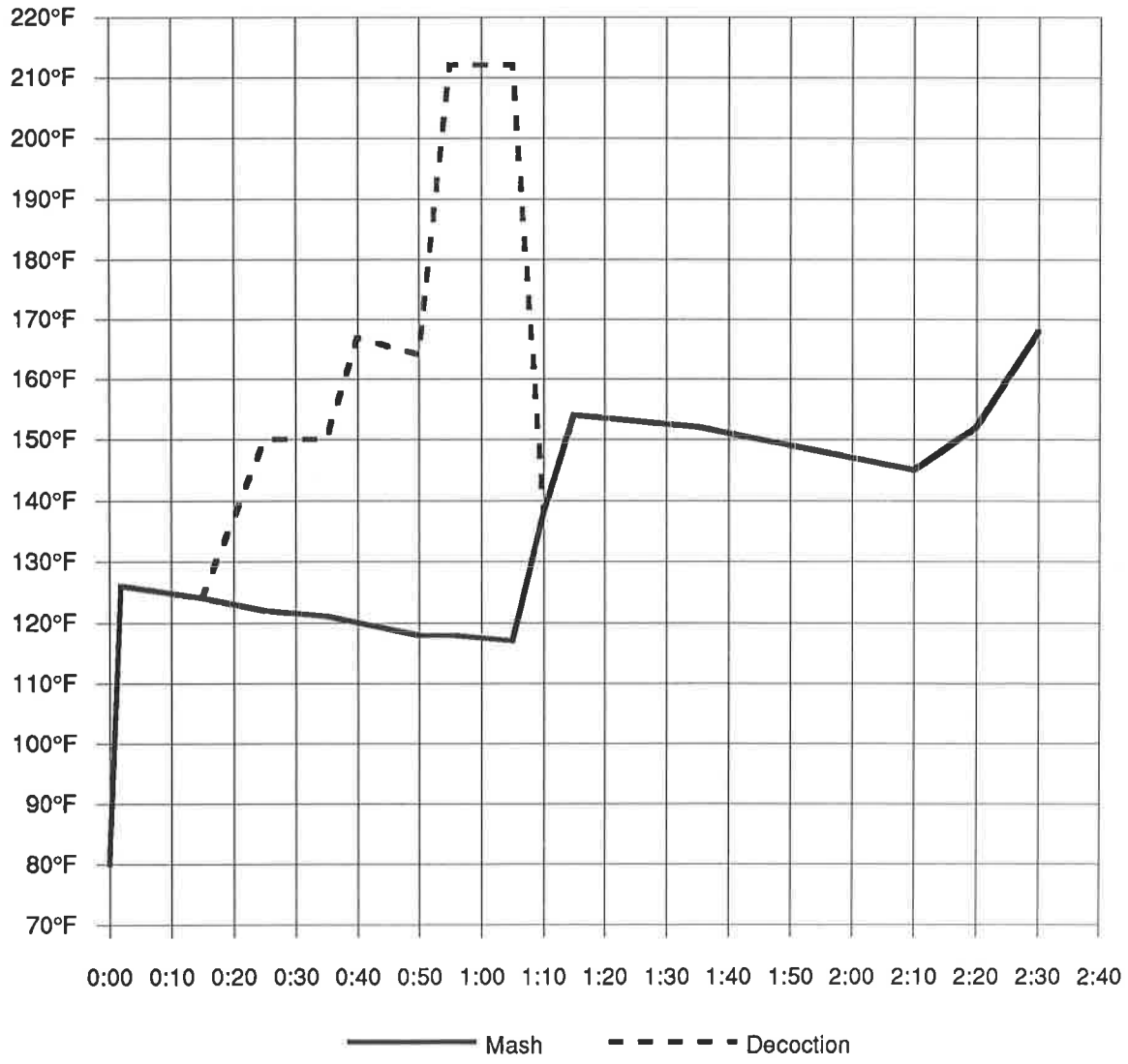
BEER STYLE	Imperial Stout (All Grain)		Belgian Tripel (All Grain)		Barley Wine (All Grain)	
Brewing Date	**11/3/96**	**22**	**11/9/96**	**23**	**11/23/96**	**24**
Bottling Date	**11/24/96**		**12/8/96**		**12/15/96**	
Primary Fermenter		3.0 gallons		3.0 gallons		3.0 gallons
Secondary Fermenter		2.8 gallons		2.8 gallons		2.8 gallons
Malt	British Pale Malt	9 lbs	Belgian Pilsener Malt	10.5 lbs	British Pale Malt	12 lbs
	Crystal Malt 60°	1 lb	Clear Candi Sugar	1 lb	Crystal Malt 40°L	4 oz
	Black Patent Malt	4 oz			Chocolate Malt	2 oz
	Chocolate Malt	4 oz			Brown Sugar	1 lb
	Flaked Barley	8 oz			Flaked Barley	8 oz
					Clover Honey	8 oz
Color, SRM		30		4.7		11
Protein Rest		20 minutes		20 minutes		15 minutes
Water, gallons		2.5 gallons		2.5 gallons		2.9 gallons
Temperature		125°-128°		120°-125°		130°
Mash		60 minutes		60 minutes		60 minutes
Water, gallons		2.0 gallons		1.5 gallons		1.25 gallons
Temperature		148°-152°		146°-150°		152°
Mashout Temperature		165°		168°		167°
Sparge Water, gallons		2.0 gallons		2.5 gallons		2.6 gallons
Boiling Time		65 minutes		75 minutes		120 minutes
Boiling Hops	Kent Goldings (5.0%) whole	1.5 oz	Fuggles pellets (4.2%)	0.5 oz	Brewer's Gold pellets (8.5%)	1 oz
	Fuggles (5.7%) whole	1.5 oz	Hallertauer pellets (3.6%)	0.5 oz	Kent Goldings pellets (5.2%)	1 oz
			Saaz pellets (2.5%)	0.5 oz	Fuggles pellets (4.2%)	1 oz
Finishing Hops	Kent Goldings (5.0%) whole	0.5 oz	Fuggles pellets (4.2%)	0.25 oz	Kent Goldings pellets (5.2%)	1 oz
	Fuggles (5.7%) whole	0.5 oz	Hallertauer pellets (3.6%)	0.25 oz	Fuggles pellets (4.2%)	1 oz
	Kent Goldings (5.2%) pellets	1 oz	Saaz pellets (2.5%)	0.25 oz		
HBUs		16.1		5.2		18.0
HBUs (5 gallon basis)		26.8		8.6		30.0
IBUs		65		23		83
Yeast	White Labs English Ale (pitchable)	1 vial	Wyeast Belgian Abbey (1214) (22 oz starter)	1 pack	Wyeast Irish Ale (1084) (22 oz starter)	1 pack
					Red Star Champagne Yeast	------- 1 pack
Water/Treatment	all tap water 1 tsp Irish Moss		0.5 gallons tap water, 6 gallons DI 1.5 g gypsum, 1 tsp Irish Moss		all tap water 1 tsp Irish Moss	
Lock Installed	11/7/96		11/14/96		11/28/96	
Secondary Fermenter	11/9/96		11/17/96		11/29/96	
Original Gravity						
Maximum		1.109		1.115		1.147
Target		1.087		1.092		1.118
Measured		1.080		1.088		1.116
Primary Gravity						
Ending Gravity		1.023		1.025		1.042
Extract efficiency, %		73%		77%		79%
Apparent Attenuation		71%		72%		64%
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	5.99%	7.48%	6.62%	8.27%	7.77%	9.71%
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/2	Corn Sugar	1/2
Water, cups		2		2		2
Number of Bottles		28		28		29
Comments						
Brewing	Whole hops at 60, 30, and 2 minutes. Pellets at 10 and 2 minutes.		Boiling hops at 50 and 30 minutes. Finishing hops at 2 minutes.		Boiling hops at first wort. Finishing hops at 10 minutes and 2 minutes.	
Fermentation	Fermentation active at 40 hours.		Yeast pack and starter slow to start. Fermentation apparent at 27 hours.		Fermentation active at 14 hours.	
Beer	Very good! (12/15)		Another potentially good beer.		Overly carbonated. (1/10) Gushers. Diacetyl? Thrown out on 4/5/97	
Source of Recipe	Custom recipe		Pierre Rajotte, Belgian Ale, page 123		Custom recipe	

Bock and a Half **Mash Schedule** December 7, 1996

Time	Step	Elapsed	Mash	Decoction
10:40	0:00	0:00	80°F	80°F
10:42	0:02	0:02	126°F	126°F
10:55	0:13	0:15	124°F	124°F
11:05	0:10	0:25	122°F	150°F
11:15	0:20	0:35	121°F	150°F
11:20	0:05	0:40	120°F	167°F
11:30	0:10	0:50	118°F	164°F
11:35	0:05	0:55	118°F	212°F
11:45	0:10	1:05	117°F	212°F
11:50	0:05	1:10	138°F	138°F
11:55	0:05	1:15	154°F	154°F
12:15	0:20	1:35	152°F	152°F
12:50	0:35	2:10	145°F	145°F
13:00	0:10	2:20	152°F	152°F
13:10	0:10	2:30	168°F	168°F



27 batches 1996
116 batches total

HOMEBREW LOG

Lorton Brewing Company

BEER STYLE	English Old Ale (All Grain)		Bock and a Half (All Grain)		Pilsener (All Grain)	
Brewing Date	**11/29/96**	**25**	**12/7/96**	**26**	**12/21/96**	**27**
Bottling Date	**12/27/96**		**1/1/97**		**1/15/97**	
Primary Fermenter		3.0 gallons		3.0 gallons		3.0 gallons
Secondary Fermenter		2.8 gallons		2.8 gallons		2.8 gallons
Malt	British Pale Malt	8 lbs	Klages 2-Row Malt	6 lbs	Klages 2-Row Malt	6 lbs
	Crystal Malt 60°L	8 oz	Munich Malt	3 lbs	Crystal Malt 20°L	8 oz
	Flaked Barley	8 oz	Crystal Malt 20°L	1 lb	CaraPils	8 oz
			Chocolate Malt	2 oz	Flaked Barley	2 oz
			Flaked Barley	4 oz		
Color, SRM		8		12		4.9
Protein Rest		15 minutes		15,70 minutes		30 minutes
Water, gallons		2.0 gallons		3.5 gallons		1.6 gallons
Temperature		125°-130°		118°-125°		120°-125°
Mash		60 minutes		85 minutes		45 minute
Water, gallons		1.5 gallons		1.5 gallons (thick mash)		1.25 gallons
Temperature		155°-156°		145-154°		146°-152°
Mashout Temperature		169°		167°		168°
Sparge Water, gallons		3.6 gallons*		3.0 gallons		3.0 gallons
Boiling Time		75 minutes		60 minutes		60 minutes
Boiling Hops	Kent Goldings pellets (5.2%)	0.75 oz	Tettnanger pellets (4.4%)	1 oz	Saaz pellets (2.5%)	3 oz
	Fuggles pellets (4.2%)	0.75 oz				
Finishing Hops	Kent Goldings pellets (5.2%)	0.25 oz			Saaz pellets (2.5%)	1 oz
	Fuggles pellets (4.2%)	0.25 oz				
HBUs		7.1		4.4		7.5
HBUs (5 gallon basis)		11.8		7.3		12.5
IBUs		38		22		42
Yeast	Wyeast British Ale (1098) (22 oz starter)	1 pack	Wyeast Bavarian Lager (2206) (22 oz starter)	1 pack	Wyeast Bohemian Lager (2124) (22 oz starter)	1 pack
Water/Treatment	all tap water 1 tsp Irish Moss		all tap water 1 tsp Irish Moss		5 gal DI, 0.8 gal tap water 1 tsp Irish Moss	
Lock Installed	12/6/96		12/12/96		12/28/96	
Secondary Fermenter	12/7/96		12/16/96		1/1/97	
Original Gravity						
Maximum		1.091		1.100		1.070
Target		1.073		1.080		1.056
Measured		1.080		1.071		1.051
Primary Gravity						1.014
Ending Gravity		1.035		1.026		1.013
Extract efficiency, %		88%		71%		73%
Apparent Attenuation		56%		63%		75%
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	4.73%	5.91%	4.72%	5.91%	3.99%	4.99%
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/2	Corn Sugar	1/2
Water, cups		2		2		3
Number of Bottles		28		26		28
Comments						
Brewing	*About 1 gallon of first wort spilled. 1.5 pounds of dry malt added as make-up. Hops added at 60, 30, 10 minutes.		Single decoction. Hops added at first wort. Attempted as a doppelbock, but gravity of a bock.		Hops 2 oz at 60 minutes, 1 oz at 30 minutes, 0.5 oz at 10 minutes, 0.5 oz at 2 minutes.	
Fermentation	Fermentation active at 36 hours.		Fermentation active within 24 hours.		Fermentation apparent at 40 hours.	
Beer	Soapy taste. Improved a little with time (4/4). Yellow Ribbon at '97 Del Mar Fair.		A bit yeasty. Maltiness dominates.		Rather harsh hop flavor. Bronze medal for Pilseners at 4th AFCHBC. Red Ribbon at '97 Del Mar Fair.	
Source of Recipe	Custom recipe		Custom recipe		Custom recipe	

BEER STYLE	Mead #5 (Sparkling Raspberry Melomel)		Dortmunder Export (All Grain)		Vienna (All Grain)	
Brewing Date	**1/1/97**	**1**	**1/11/97**	**2**	**1/25/97**	**3**
Bottling Date	**3/25/97**		**2/2/97**		**2/17/97**	
Primary Fermenter		2.8 gallons		3.0 gallons		3.0 gallons
Secondary Fermenter		2.8 gallons		2.8 gallons		2.8 gallons
Malt	Clover Honey Frozen Raspberries Raspberry Concentrate	7.5 lbs 20 oz 12 oz	German Pilsener Malt CaraPils Malt Flaked Barley	6 lbs 12 oz 2 oz	German Pilsener Malt Vienna Malt Crystal Malt 60°L Flaked Barley	4.5 lbs 2 lbs 8 oz 2 oz
Color, SRM				2.9		10.7
Color, MCU				2.9		11.1
Protein Rest				20 minutes		25 minutes
Water, gallons				1.5 gallons		1.75 gallons
Temperature				123°-125°		122°-124°
Mash				55 minutes		40 minutes
Water, gallons				1.1 gallons		1.5 gallons
Temperature				146°-152°		152°-154°
Mashout Temperature				168°		168°
Sparge Water, gallons				3.2 gallons		2.5 gallons
Boiling Time		20 minutes		60 minutes		60 minutes
Boiling Hops			Hallertauer pellets (3.6%)	1.5 oz	Hallertauer pellets (3.6%)	1 oz
Finishing Hops			Hallertauer pellets (3.6%)	0.5 oz	Hallertauer pellets (3.6%)	1 oz
HBUs				5.4		3.6
HBUs (5 gallon basis)				9.0		6.0
IBUs				28		25
Yeast	Wyeast Dry Mead (3632) (22 oz starter) Red Star Champagne	1 pack --------- 1 pack	Wyeast Danish Lager (2042) (22 oz starter)	1 pack	Wyeast Bavarian Lager (2206) (22 oz starter)	1 pack
Water/Treatment	1.5 tsp yeast nutrient		3.3 gal tap water, 2.5 gal DI 1 tsp Irish Moss		3.3 gal tap water, 2.5 gal DI 1 tsp Irish Moss	
Lock Installed	1/1/97		1/18/97		1/31/97	
Secondary Fermenter	2/17/97		1/22/97		2/1/97	
Original Gravity						
Maximum		1.086		1.069		1.071
Target		1.101	(80% extraction)	1.056	(75% extraction)	1.053
Measured		1.101		1.049		1.054
Primary Gravity		1.026		1.013		1.019
Ending Gravity		1.011		1.013		1.017
Extract efficiency, %		117%		71%		76%
Apparent Attenuation		89%		73%		69%
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	9.45%	11.81%	3.78%	4.73%	3.89%	4.86%
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/2	Corn Sugar	1/2
Water, cups		2		2		2
Number of Bottles		29		28		27
Comments						
Brewing	Raspberries and concentrate steeped after boil.		1 oz hops at 50 minutes, 0.5 oz at 30 minutes, 0.5 oz at 5 minutes.		1 oz hops at 50 minutes, 0.5 oz at 10 minutes, 0.5 oz at 5 minutes.	
Fermentation	Fermentation active within 16 hours. Champagne yeast added to secondary.		Fermentation apparent at 48 hours.		Fermentation apparent at 40 hours.	
Beer			Lots of DMS. Blue Ribbon at '97 Del Mar Fair.		Gold medal for Vienna/Oktoberfest at 4th AFCHBC, Best of Show Runnerup.	
Source of Recipe	Custom recipe		Custom recipe		Customized from George Fix, Vienna, page 54.	

BEER STYLE	Tenth Anniversary Pale Ale (All Grain)		Temecula Tripel (All Grain)		English Brown Ale (All Grain)	
Brewing Date	**2/8/97**	**4**	**2/23/97**	**5**	**3/23/97**	**6**
Bottling Date	**3/5/97**		**3/25/97**		**4/13/97**	
Primary Fermenter		3.0 gallons		3.0 gallons		3.0 gallons
Secondary Fermenter		2.8 gallons		2.8 gallons		2.8 gallons
Malt	Klages Two-Row Malt Crystal Malt 60°L Flaked Barley	6.5 lbs 8 oz 2 oz	Belgian Pilsener Flaked Barley Candi Sugar	10.5 lbs 2 oz 1 lb	British Pale Malt Crystal 60°L Malt Chocolate Malt Flaked Barley	5 lbs 8 oz 8 oz 4 oz
Color, SRM		10.6		5.1		22
Color, MCU		10.9		5.1		56
Protein Rest		30 minutes		30 minutes		15 minutes
Water, gallons		1.75 gallons		2.35 gallons		1.5 gallons
Temperature		129°-131°		130°-132°		127°-130°
Mash		35 minutes		60 minutes		45 minutes
Water, gallons		1.5 gallons		1.65 gallons		1.0 gallons
Temperature		150°-156°		145°-152°		152°-154°
Mashout Temperature		168°		168°		170°
Sparge Water, gallons		2.5 gallons		2.4 gallons		3.15 gallons
Boiling Time		60 minutes		70 minutes		65 minutes
Boiling Hops	Cascade pellets (4.1%)	1.5 oz	Hallertauer pellets (4.2%) Saaz pellets (2.3%)	1 oz 0.5 oz	Fuggles pellets (4.2%)	0.9 oz
Finishing Hops	Cascade pellets (4.1%) Cascade pellets (4.1%) dry	0.5 oz 0.5 oz	Saaz pellets (2.3%)	0.5 oz	Fuggles pellets (4.2%)	0.1 oz
HBUs		6.2		5.4		3.8
HBUs (5 gallon basis)		10.3		8.9		6.3
IBUs		35		24		22
Yeast	Wyeast American Ale (1056) (22 oz starter)	2 packs	Wyeast Belgian Abbey (1214) (22 oz starter)	1 pack	Wyeast London Ale (1028) (22 oz starter)	1 pack
Water/Treatment	3.3 gal tap water, 2.5 gal DI 1 tsp Irish Moss		6 gal DI, 0.4 gal tap water 1 g gypsum, 1 tsp Irish Moss		1 tsp Irish Moss	
Lock Installed	2/12/97		2/28/97		3/27/97	
Secondary Fermenter	2/15/97		3/2/97		3/29/97	
Original Gravity						
Maximum		1.071		1.116		1.061
Target	(75% extraction)	1.053	(75% extraction)	1.087	(75% extraction)	1.046
Measured		1.049		1.092		1.050
Primary Gravity		1.016		1.054		1.018
Ending Gravity		1.011		1.023		1.016
Extract efficiency, %		69%		79%		82%
Apparent Attenuation		78%		75%		68%
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	3.99%	4.99%	7.25%	9.06%	3.57%	4.46%
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/3	Corn Sugar	1/3
Water, cups		2		1		2
Number of Bottles		27		Party Pig + 6		29
Comments						
Brewing	1.5 oz hops at 50 minutes, 0.5 oz hops at 5 minutes.		Boiling hops at 60 minutes, Finishing hops at 2 minutes.		0.75 oz hops at first wort, 0.15 hops at 30 minutes, 0.1 hops at 5 minutes.	
Fermentation	Fermentation apparent at 18 hours.		Fermentation at 24 hours.		Fermentation active at 16 hours.	
Beer	American Pale Ale style. Slight grassy taste.		Better than previous tripel (5/1). Red Ribbon at '97 Del Mar Fair.		Good!	
Source of Recipe	Customized recipe.		Customized from Pierre Rajotte, Belgian Ales, page 123.		Customized recipe.	

BEER STYLE	Belgian Dubbel (All Grain)		Oatmeal Stout (All Grain)		Extra Special Bitter (All Grain)	
Brewing Date	**4/6/97**	**7**	**4/27/97**	**8**	**5/18/97**	**9**
Bottling Date	**5/4/97**		**5/17/97**		**6/9/97**	
Primary Fermenter		3.0 gallons		3.0 gallons		3.0 gallons
Secondary Fermenter		2.8 gallons		2.8 gallons		2.8 gallons
Malt	Belgian Pilsener Crystal 60°L Malt Flaked Barley Candi Sugar 75°L	8 lb 8 oz 2 oz 8 oz	British Pale Malt Crystal 120°L Malt Roasted Barley Flaked Oats	5 lbs 8 oz 12 oz 1 lb	British Pale Malt Crystal 60°L Malt Flaked Barley	6 lbs 1 lb 4 oz
Color, SRM		14.6		28		14
Color, MCU		22		81		21
Protein Rest		20 minutes		15 minutes		20 minutes
Water, gallons		1.9 gallons		1.8 gallons		1.8 gallons
Temperature		122°		125°-128°		122°-124°
Mash		70 minutes		60 minutes		55 minutes
Water, gallons		1.25 gallons		1.25 gallons		1.25 gallons
Temperature		150°-153°		148°-154°		148° -152°
Mashout Temperature		170°		166°		167°
Sparge Water, gallons		2.9 gallons		2.8 gallons		2.8 gallons
Boiling Time		60 minutes		65 minutes		60 minutes
Boiling Hops	Styrian Golding pellets (3.0%)	1.5 oz	Northern Brewer (6.9%) pellets	1 oz	Northern Brewer (6.9%) pellets	1 oz
Finishing Hops	Styrian Golding pellets (3.0%)	0.5 oz			Kent Golding pellets (5.0%)	1 oz
HBUs		4.5		6.9		6.9
HBUs (5 gallon basis)		7.5		11.5		11.5
IBUs		21		34		39
Yeast	Wyeast Belgian Abbey (1214) Wyeast Belgian Abbey II (1762) (22 oz starter)	1 pack 1 pack	Wyeast London Ale (1028) (22 oz starter)	1 pack	Wyeast Special London (1968) (22oz starter)	1 pack
Water/Treatment	1 gallon tap, 5 gallons DI 1 tsp Irish Moss		all tap water 1 tsp Irish Moss		2.5 gallons DI, 3.4 gallons tap 3 g gypsum, 1 tsp Irish Moss	
Lock Installed	4/9/97		4/30/97		5/24/97	
Secondary Fermenter	4/12/97		5/4/97		5/25/97	
Original Gravity						
Maximum		1.091		1.070		1.073
Target	(75% extraction)	1.068	(75% extraction)	1.052	(75% extraction)	1.055
Measured		1.071		1.054		1.053
Primary Gravity		1.045		1.019		1.020
Ending Gravity		1.019		1.018		1.017
Extract efficiency, %		78%		77%		73%
Apparent Attenuation		73%		67%		68%
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	5.46%	6.83%	3.78%	4.73%	3.78%	4.73%
Priming Sugar, cups	Corn Sugar	1/3	Corn Sugar	1/2	Corn Sugar	1/3
Water, cups		2		2		2
Number of Bottles		30		29		28
Comments						
Brewing	0.75 oz hops at 50 minutes, 0.75 oz hops at 30 minutes, 0.5 oz hops at 2 minutes.		0.5 oz hops at 55 minutes, 0.5 oz hops at 35 minutes.		NB hops at 50 and 30 min, KG hops at 10 and 2 min. 1/2 gallon of wort spilled. 8 oz of dry extract added	
Fermentation	Fermentation in 24 hours.		Fermentation within 16 hours.		Fermentation beginning at 15 hours.	
Beer	Overcarbonated! (5/25) Diacetyl? (6/20) Last eight bottles thrown out after explosions. (8/4)		Roasty taste. Smooth.		Slightly yeasty, but not bad. (6/28)	
Source of Recipe	Customized from Pierre Rajotte, Belgian Ales, page 123.		Custom recipe.		Custom recipe.	

Lorton Brewing Company

BEER STYLE	English Barley Wine (All Grain)		Biere de Garde (All Grain)		American Amber Ale (All Grain)	
Brewing Date	6/1/97	10	6/22/97	11	7/4/97	12
Bottling Date	6/24/97		7/17/97		7/27/97	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	British Pale Malt	12 lbs	Belgian Pale Malt	3 lbs	Klages Two-Row Malt	6 lbs
	Crystal Malt, 120°L	1 lb	Vienna Malt	6 lbs	Crystal Malt, 90°L	1 lb
	Flaked Barley	4 oz	Crystal Malt, 60°L	8 oz	Flaked Barley	2 oz
	Light Brown Sugar	1 lb	Belgian Carawheat, 21°L	8 oz		
Color, SRM		19		14		16
Color, MCU		42		19.2		27
Protein Rest		15 minutes		20 minutes		15 minutes
Water, gallons		3.0 gallons		2.25 gallons		1.75 gallons
Temperature		132°-134°		126°-128°		126°
Mash		70 minutes		65 minutes		45 minutes
Water, gallons		2.0 gallons		1.5 gallons		1.25 gallons
Temperature		146°-150°		146°-152°		152°-154°
Mashout Temperature		168°		167°		166°
Sparge Water, gallons		2.5 gallons		2.55 gallons		2.8 gallons
Boiling Time		80 minutes		120 minutes		70 minutes
Boiling Hops	Northern Brewer pellets (6.9%)	2 oz	Northern Brewer pellets (6.9%)	0.5 oz	Cluster pellets (7.0%)	0.75 oz
	Kent Golding pellets (5.0%)	1 oz				
Finishing Hops	Kent Golding pellets (5.0%)	1 oz	Northern Brewer pellets (6.9%)	0.5 oz	Cluster pellets (7.0%)	0.25 oz
			Hallertauer pellets (4.2%)	1 oz	Cascade pellets (4.1%)	1 oz
IBUs		85		28		33
Yeast	Wyeast British Ale (1098)	1 pack	Wyeast Munich Lager (2308)	1 pack	Wyeast American Ale (1056)	1 pack
	(22 oz starter) Red Star Dry	1 pack	(22 oz starter)		(22 oz starter)	
	Champagne (secondary)					
Water/Treatment	1 tsp Irish Moss		5 gal DI, 1.3 gal tap water		1 tsp Irish Moss	
	all tap water		1 tsp Irish Moss		all tap water	
Original Gravity						
Maximum		1.147		1.096		1.070
Target	(75% extraction)	1.110	(75% extraction)	1.072	(75% extraction)	1.053
Measured		1.102		1.067		1.047
Primary Gravity		1.044		1.020		1.017
Ending Gravity		1.025		1.018		1.017
Extract Efficiency, %		69%		70%		67%
Apparent Attenuation		75%		73%		64%
BU/GU		0.83		0.42		0.70
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	8.09%	10.11%	5.14%	6.43%	3.15%	3.94%
Lock Installed	6/5/97		6/26/97		7/8/97	
Secondary Fermenter	6/8/97		6/30/97		7/11/97	
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	3/8	Corn Sugar	1/2
Water, cups		2		2		2
Number of Bottles		25		27		27
Comments						
Brewing	Boiling hops at 75 min. Finishing hops at 10 and 2 minutes.		Northern Brewer hops at 50, 30 minutes. Hallertauer at 10, 2 minutes.		Cluster hops at 50, 30, 10 minutes. Cascade hops at 2 minutes.	
Fermentation	Very active fermentation within 15 hours. Champagne yeast added for secondary.		Active fermentation at 15 hours. 3/4 oz French oak chips added on 7/2.		Active fermentation at 18 hours.	
Beer	First place in barley wine at Pacific Brewers Cup. Second place at QUAFF Oktoberfest.					
Source of Recipe	Custom recipe.		Modified from Kit Anderson (Bath, ME). Brewers Network, 3/1/97.		Custom recipe.	

Lorton Brewing Company

BEER STYLE	Weihenstephan Weizen (All Grain)	Berliner Weisse (All Grain)	Picnic Peach Weizen (All Grain)
Brewing Date	7/12/97 13	7/20/97 14	8/3/97 15
Bottling Date	8/2/97	8/9/97	8/23/97
Primary Fermenter	3.0 gallons	3.0 gallons	3.0 gallons
Secondary Fermenter	2.8 gallons	2.8 gallons	2.8 gallons
Malt	German Pilsener Malt 1.5 lbs Wheat Malt 5 lbs Flaked Wheat 4 oz Dry Malt Extract* 8 oz	German Pilsener Malt 1 lb Wheat Malt 2.5 lbs Flaked Wheat 12 oz	German Pilsener Malt 2.5 lbs Wheat Malt 4 lbs Flaked Barley 8 oz
Color, SRM	3	1.5	3
Color, MCU	3	1.5	3
Protein Rest	30 minutes	30 minutes	20 minutes
Water, gallons	1.7 gallons	1.06 gallons	1.75 gallons
Temperature	114°-122°	120°-122°	120°
Mash	90 minutes	85 minutes	100 minutes
Water, gallons	1.25 gallons	0.60 gallons	1.25 gallons
Temperature	140°-154°	142°-160°	148°-152°
Mashout Temperature	168°	166°	164°
Sparge Water, gallons	2.85 gallons	3.30 gallons	2.8 gallons
Boiling Time	65 minutes	15 minutes	60 minutes
Boiling Hops	Hallertauer pellets (4.2%) 0.5 oz	Saaz pellets (2.3%) 0.5 oz	Saaz pellets (4.2%) 0.5 oz
Finishing Hops			Peach extract 2.5 oz (in secondary fermenter)
IBUs	11	4	11
Yeast	Wyeast Weihenstephan (3068) 1 pack (22 oz starter)	Wyeast German Ale (1007) (22 1 pack oz starter)	Wyeast Weihenstephan (3068) 1 pack (22 oz starter)
Water/Treatment	3.5 gal DI, 2.3 gal tap water 1 tsp Irish Moss	1 tsp Irish Moss 0.25 oz lactic acid (end of boil)	1 tsp Irish Moss all tap water
Original Gravity			
Maximum	1.069	1.040	1.070
Target	(75% extraction) 1.052	(75% extraction) 1.030	(75% extraction) 1.053
Measured	* - OG increased to 1.050 1.042	1.032	1.054
Primary Gravity	1.010	1.013	1.013
Ending Gravity	1.013	1.010	1.012
Extract Efficiency, %	61%	80%	77%
Apparent Attenuation	69%	69%	78%
BU/GU	0.26	0.13	0.20
	wt% vol%	wt% vol%	wt% vol%
Potential Alcohol, %	3.05% 3.81%	2.31% 2.89%	4.41% 5.51%
Lock Installed	7/17/97	7/23/97	8/6/97
Secondary Fermenter	7/19/97	7/27/97	8/9/97
Priming Sugar, cups	Corn Sugar 1/2	Speise 44 oz	Corn Sugar 1 oz
Water, cups	2		0.5
Number of Bottles	27	30	5
Comments			
Brewing	Wide range of mash temperatures. Hallertauer hops at 50 minutes. Low extraction - poor wheat grind?	Mash at 142°-146°, 154°, 160°-162°, 166°. Hops added at first wort.	Hops added at first wort.
Fermentation	Active fermentation at 18 hours. *8 oz of dry malt extract added at secondary to raise equivalent OG to 1.050. 3.9% ABW, 4.9% ABV.	Active fermentation at 18 hours. 0.25 oz lactic acid added at transfer to secondary.	Active fermentation at 16 hours.
Beer	Second place in German Wheats at Pacific Brewers Cup. Second place in Wheats at QUAFF Oktoberfest. Best in Class in Wheats at California State Homebrew Competition.	First place in German Wheats at Pacific Brewers Cup.	Party Pig pouch inserted upside down, and failed to inflate. 2.5 gallons thrown out.
Source of Recipe	Custom recipe.	Modified from Eric Warner, German Wheat Beers, page 107.	Custom recipe.

Lorton Brewing Company

BEER STYLE	Belgian Golden Strong Ale (All Grain)		Liz's Tripel (All Grain)		Imperial Stout (All Grain)	
Brewing Date	8/10/97	16	8/17/97	17	8/31/97	18
Bottling Date	9/7/97		9/7/97		9/19/97	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	Belgian Pale Malt	10 lbs	Belgian Pilsener Malt	10 lbs	British Pale Malt	9 lbs
	Flaked Barley	6 oz	Flaked Barley	6 oz	Crystal Malt, 90°L	12 oz
	Candi Sugar, 0°L	1 lb	Candi Sugar, 0°L	1 lb	Chocolate Malt	12 oz
					Black Malt	8 oz
					Roasted Barley	8 oz
					Flaked Barley	2 oz
Color, SRM	8.6		4.9		54	
Color, MCU	8.6		4.9		200	
Protein Rest	30 minutes		30 minutes		30 minutes	
Water, gallons	2.4 gallons		2.4 gallons		2.3 gallons	
Temperature	125°-128°		120°-125°		120°-122°	
Mash	90 minutes		90 minutes		90 minutes	
Water, gallons	1.6 gallons		1.6 gallons		2.0 gallons	
Temperature	146°-152°		140°-154°		147°-153°	
Mashout Temperature	168°		168°		167°	
Sparge Water, gallons	2.4 gallons		2.4 gallons		2.3 gallons	
Boiling Time	60 minutes		70 minutes		70 minutes	
Boiling Hops	Hallertauer pellets (4.2%)	0.75 oz	Hallertauer pellets (4.2%)	0.75 oz	Northern Brewer pellets (6.9%)	1 oz
	Styrian Golding pellets (2.7%)	0.75 oz	Saaz pellets (2.3%)	0.75 oz	Kent Golding pellets (5.0%)	0.5 oz
					Cascade pellets (5.8%)	0.5 oz
Finishing Hops	Hallertauer pellets (4.2%)	0.25 oz	Hallertauer pellets (4.2%)	0.25 oz	Kent Golding pellets (5.0%)	0.5 oz
	Styrian Golding pellets (2.7%)	0.25 oz	Saaz pellets (2.3%)	0.25 oz	Cascade pellets (5.8%)	0.5 oz
IBUs	28		28		67	
Yeast	Wyeast Belgian Abbey (1214) (22 oz starter)	1 pack	Wyeast Belgian Abbey (1214) (22 oz starter)	1 pack	Wyeast British Ale (1098) (22 oz starter)	1 pack
Water/Treatment	5 gal DI, 1.4 gal tap water 1 tsp Irish Moss		5 gal DI, 1.4 gal tap water 1 tsp Irish Moss		all tap water	
Original Gravity						
Maximum		1.113		1.113		1.112
Target	(75% extraction)	1.085	(75% extraction)	1.085	(75% extraction)	1.084
Measured		1.090		1.088	OG increased to 1.084*	1.075
Primary Gravity		1.038		1.016		1.026
Ending Gravity		1.017		1.013		1.024
Extract Efficiency, %		80%		78%		67%
Apparent Attenuation		81%		85%		68%
BU/GU		0.31		0.32		0.89
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	7.67%	9.58%	7.88%	9.84%	5.35%	6.69%
Lock Installed	8/13/97		8/20/97		9/2/97	
Secondary Fermenter	8/16/97		8/24/97		9/3/97	
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/2	Corn Sugar	1/2
Water, cups		2		2		2
Number of Bottles	22 + 1/2 gallon		22 + 1/2 gallon		28	
Comments						
Brewing	0.5 oz of each hops added at 50 minutes. 0.25 oz each at 30 minutes. 0.25 oz each at 15 minutes.		0.5 oz of each hops added at 50 minutes. 0.25 oz each at 30 minutes. 0.25 oz each at 15 minutes.		Boiling hops added at first wort. Finishing hops added at 5 minutes.	
Fermentation	Very active fermentation at 15 hours. Early transfer into secondary. Transfer to tertiary at 1.022 on 8/24		Active fermentation at 14 hours.		Very active fermentation at 14 hours. 12 oz of malt extract added in primary to raise equivalent OG from 1.075 to 1.084 on 9/1. (6.8% ABW, 8.5% ABV)	
Beer			Third place for Belgian/French Ales at QUAFF Oktoberfest. First place in Belgian/French Ales in Queen of Beer.		Second place for Dark Ales at QUAFF Oktoberfest.	
Source of Recipe	Modified from Pierre Rajotte, Belgian Ales, page 123.		Modified from Pierre Rajotte, Belgian Ales, page 123.		Custom recipe.	

Lorton Brewing Company

BEER STYLE	Robust Porter (All Grain)		Best Bitter (All Grain)		Cinnamon Ginger Foreign Stout (All Grain)	
Brewing Date	**9/14/97**	**19**	**10/12/97**	**20**	**10/26/97**	**21**
Bottling Date	**10/5/97**		**11/1/97**		**11/16/97**	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	British Pale Malt	5 lbs	British Pale Malt	4 lbs	British Pale Malt	6 lbs
	Crystal Malt, 60°L	1.5 lbs	Crystal Malt, 40°L	1 lb	Crystal Malt, 40°L	1 lb
	Chocolate Malt	8 oz	Cara-Pils	8 oz	Chocolate Malt	1 lb
	Black Malt	4 oz	Flaked Barley	2 oz	Roasted Barley	8 oz
	Flaked Barley	8 oz			Flaked Barley	8 oz
	Dry Extract*	1 lb				
Color, SRM	33		13		43	
Color, MCU	106		14.3		150	
Protein Rest	30 minutes		30 minutes		30 minutes	
Water, gallons	2.0 gallons		1.4 gallons		2.0 gallons	
Temperature	123°-124°		120°-126°		122°-125°	
Mash	90 minutes		90 minutes		65 minutes	
Water, gallons	1.5 gallons		1.25 gallons		1.75 gallons	
Temperature	146°-152°		149°-154°		149°-152°	
Mashout Temperature	169°		167°		168°	
Sparge Water, gallons	2.5 gallons		3.0 gallons		2.5 gallons	
Boiling Time	60 minutes		60 minutes		80 minutes	
Boiling Hops	Kent Golding pellets (5.0%)	0.75 oz	Northern Brewer pellets (8.8%)	0.75 oz	Kent Golding pellets (5.7%)	0.75 oz
	Fuggles pellets (4.2%)	0.75 oz	Fuggles pellets (4.2%)	0.5 oz	Fuggles pellets (4.3%)	0.75 oz
Finishing Hops	Kent Golding pellets (5.0%)	0.25 oz	Northern Brewer pellets (8.8%)	0.25 oz	Kent Golding pellets (5.7%)	0.25 oz
	Fuggles pellets (4.2%)	0.25 oz	Fuggles pellets (4.2%)	0.5 oz	Fuggles pellets (4.3%)	0.25 oz
					Cinnamon sticks	2
					Ginger	1.5 oz
IBUs	37		39		41	
Yeast	Wyeast Irish Ale (1084) (22 oz starter)	1 pack	Wyeast British Ale (1098) (22 oz starter)	1 pack	Wyeast Irish Ale (1084) (22 oz starter)	1 pack
Water/Treatment	1 tsp Irish Moss		5 gal DI, 0.6 gal tap water 10 g gypsum, 1 tsp Irish Moss		all tap water 1 tsp Irish Moss	
Original Gravity						
Maximum		1.087		1.056		1.085
Target	(75% extraction)	1.069	(75% extraction)	1.042	(75% extraction)	1.064
Measured		1.052		1.046		1.072
Primary Gravity		1.026		1.015		1.028
Ending Gravity		1.022		1.015		1.025
Extract Efficiency, %		60%		82%		85%
Apparent Attenuation		58%		67%		65%
BU/GU		0.71		0.85		0.57
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	3.15%	3.94%	3.26%	4.07%	4.94%	6.17%
Lock Installed	9/18/97		10/15/97		10/27/97	
Secondary Fermenter	9/21/97		10/19/97		11/1/97	
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/2	Corn Sugar	2/5
Water, cups		2		2		2
Number of Bottles		28		28		28
Comments						
Brewing	* Dry extract added to raise gravity. Low extraction due to poor grind. Hops added at 50 and 2 minutes.		0.5 oz NB hops at 50 min, 0.25 oz at 15 min, 0.25 oz at 2 min. 05 oz of Fuggles at 15 min, 0.5 oz at 2 min.		Boiling hops at 55 minutes. Spices at 15 minutes. Finishing hops at 5 minutes.	
Fermentation	Fermentation active within 18 hours.		Fermentation beginning at 15 hours.		Fermentation active at 15 hours.	
Beer			Yeasty taste. (Yeast didn't readily settle.)		Third place in Herb and Spice Beer at 5th AFCHBC. Fourth place in Herb and Spice Beer at '98 Del Mar Fair.	
Source of Recipe	Custom recipe.		Custom recipe.		Custom recipe, with notes from The New Complete Joy of Homebrewing, page 225.	

Lorton Brewing Company

BEER STYLE	Foreign Coffee Stout (All Grain)	Gulliver's English Barley Wine (All Grain)	English Pale Ale (All Grain)
Brewing Date	11/9/97 22	11/23/97 23	11/28/97 24
Bottling Date	11/30/97	3/14/98	12/21/97
Primary Fermenter	3.0 gallons	3.0 gallons	3.0 gallons
Secondary Fermenter	2.8 gallons	2.8 gallons	2.8 gallons
Malt	British Pale Malt 6 lbs Crystal Malt, 40°L 1 lb Chocolate Malt 1 lb Roasted Barley 8 oz Flaked Barley 8 oz	British Pale Malt 14 lbs Crystal Malt, 60°L 1 lb Flaked Barley 8 oz Light Brown Sugar 1 lb	British Pale Malt 6 lbs Crystal Malt, 40°L 4 oz Wheat Malt 4 oz Flaked Barley 6 oz
Color, SRM	43	16	8
Color, MCU	150	28	8
Protein Rest	30 minutes	30 minutes	30 minutes
Water, gallons	2.0 gallons	3.1 gallons	1.7 gallons
Temperature	122°-124°	126°	126°-130°
Mash	95 minutes	120 minutes	60 minutes
Water, gallons	1.75 gallons	2.15 gallons	1.3 gallons
Temperature	150°-154°	144°-154°	146°-153°
Mashout Temperature	169°	168°	168°
Sparge Water, gallons	2.5 gallons	2.5 gallons	2.8 gallons
Boiling Time	75 minutes	100 minutes	70 minutes
Boiling Hops	Kent Golding pellets (5.7%) 1 oz	Northern Brewer pellets (6.9%) 3 oz Fuggles pellets (5.0%) 2 oz	Kent Golding pellets (5.7%) 1 oz
Finishing Hops	Cinnamon Hazelnut Decaf 6 oz (Don Francisco whole beans)	Kent Golding pellets (5.7%) 1 oz	Kent Golding pellets (5.7%) 1 oz
IBUs	31	116	38
Yeast	Wyeast London Ale (1028) 1 pack (22 oz starter)	Wyeast Irish Ale (1084) (22 oz 1 pack starter) Lalvin S. bayanus 4 packs (secondary, tertiary)	Wyeast British Ale (1098) 1 pack (22 oz starter)
Water/Treatment	all tap water 1 tsp Irish Moss	all tap water 1 tsp Irish Moss	5 gallons DI, 0.8 gallons tap water 10g gypsum, 1 tsp Irish Moss
Original Gravity			
Maximum	1.085	1.170	1.070
Target	(75% extraction) 1.064	(75% extraction) 1.130	(75% extraction) 1.052
Measured	1.075	1.117	1.051
Primary Gravity	1.029	1.065	1.029
Ending Gravity	1.029	1.037	1.019
Extract Efficiency, %	88%	69%	73%
Apparent Attenuation	61%	68%	63%
BU/GU	0.41	0.99	0.75
	wt% vol%	wt% vol%	wt% vol%
Potential Alcohol, %	4.83% 6.04%	8.40% 10.50%	3.36% 4.20%
Lock Installed	11/11/97	11/25/97	11/30/97
Secondary Fermenter	11/15/97	11/27/97	12/6/97
Priming Sugar, cups	Corn Sugar 2/5	Corn Sugar 1/3	Corn Sugar 1/2
Water, cups	2	2	2
Number of Bottles	29	26	27
Comments			
Brewing	Boiling hops at first wort. Coffee added after boil.	Northern Brewer and Fuggles hops at 50 minutes. Kent Golding at 5 minutes.	Boiling hops at 50 minutes. Finishing hops at 10 and 2 minutes.
Fermentation	Fermentation active at 15 hours.	Fermentation active at 16 hours. Apparently stalled at 1.065 (12/29). Tertiary fermenter (2/15/98 @ 1.050).	Fermentation beginning at 21 hours.
Beer			
Source of Recipe	Custom recipe, with notes from The New Complete Joy of Homebrewing, page 225.	Custom recipe.	Custom recipe.

26 batches 1997
142 batches total

Lorton Brewing Company

BEER STYLE	American Pale Ale (All Grain)		Foreign Stout (All Grain)		Bohemian Pilsener (All Grain)	
Brewing Date	12/7/97	25	12/28/97	26	1/3/98	1
Bottling Date	12/29/97		1/18/98		1/27/98	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	Klages Two-Row Malt	6 lbs	British Pale Malt	6 lbs	American Two-Row Malt	6 lbs
	Crystal Malt, 40°L	4 oz	Crystal Malt, 40°L	1 lb	Cara-Pils	1 lb
	Wheat Malt	4 oz	Chocolate Malt	1 lb	Flaked Barley	2 oz
	Flaked Barley	6 oz	Roasted Barley	8 oz		
	Dry Malt Extract	4 oz	Flaked Barley	8 oz		
Color, SRM	6		41		3	
Color, MCU	6		144		3	
Protein Rest	30 minutes		30 minutes		30 minutes	
Water, gallons	1.7 gallons		2.0 gallons		1.75 gallons	
Temperature	126°-128°		122°-124°		121°-122°	
Mash	60 minutes		75 minutes		90 minutes	
Water, gallons	1.3 gallons		1.75 gallons		1.6 gallons	
Temperature	149°-154°		144°-154°		147°-155°	
Mashout Temperature	170°		167°		169°	
Sparge Water, gallons	2.8 gallons		2.5 gallons		2.5 gallons	
Boiling Time	70 minutes		80 minutes		60 minutes	
Boiling Hops	Cascade pellets (5.8%)	1 oz	Kent Golding pellets (5.0%)	2 oz	Saaz pellets (4.8%)	1.5 oz
Finishing Hops	Cascade pellets (5.8%)	1 oz			Saaz pellets (4.8%)	1.5 oz
IBUs	39		54		42	
Yeast	Wyeast American Ale (1056) (22 oz starter)	1 pack	Wyeast Irish Ale (1084) (22 oz starter)	1 pack	White Labs Pilsener	1 vial
Water/Treatment	5 gallons DI, 0.8 gallons tap water 10g gypsum, 1 tsp Irish Moss		all tap water 1 tsp Irish Moss		5.5 gallons DI, 0.5 gallons tap water 1 tsp Irish Moss	
Original Gravity						
Maximum		1.071		1.085		1.068
Target	(75% extraction)	1.054	(75% extraction)	1.064	(75% extraction)	1.053
Measured		1.048		1.070		1.056
Primary Gravity		1.018		1.025		1.020
Ending Gravity		1.017		1.025		1.016
Extract Efficiency, %		68%		82%		82%
Apparent Attenuation		65%		64%		71%
BU/GU		0.81		0.77		0.75
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	3.26%	4.07%	4.73%	5.91%	4.20%	5.25%
Lock Installed	12/11/07		12/31/97		1/11/98	
Secondary Fermenter	12/14/97		1/2/98		1/15/98	
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/2	Corn Sugar	1/2
Water, cups		2		2		1
Number of Bottles		27		28		27
Comments						
Brewing	Boiling hops at 50 minutes. Finishing hops at 10 and 2 minutes.		Boiling hops at 60 minutes.		Mini-acid rest (1 lb malt, 0.18 gallons water) for 1 hour. 1 oz hops added at 60 min, 1/2 oz added at 20, 10, 5, and 0 minutes.	
Fermentation	Fermentation beginning at 27 hours.		Fermentation beginning at 18 hours.		Fermentation at 36 hours. Primary fermentation at 42°-56°F.	
Beer	Disappointing!		Gold medal for Stouts at 5th AFCHBC. BOS 3rd Runner-up. Fifth place in Foreign Stout at '98 Del Mar Fair.			
Source of Recipe	Custom recipe.		Custom recipe.		Custom recipe.	

Lorton Brewing Company

BEER STYLE	Scottish Export Ale (All Grain)	American Brown Ale (All Grain)	Kölsch (All Grain)
Brewing Date	1/11/98 2	1/25/98 3	2/22/98 4
Bottling Date	2/1/98	2/15/98	3/14/98
Primary Fermenter	3.0 gallons	3.0 gallons	3.0 gallons
Secondary Fermenter	2.8 gallons	2.8 gallons	2.8 gallons
Malt	British Pale Malt 5 lbs Crystal Malt, 40°L 1 lb Black Malt 2 oz Flaked Barley 2 oz	American Two-Row Malt 5 lbs Crystal Malt, 60°L 1 lb Belgian Chocolate Malt 4 oz Flaked Barley 2 oz	American Two-Row Malt 4 lbs Wheat Malt 1 lb Crystal Malt, 90°L 1 oz Flaked Barley 8 oz
Color, SRM	17	19	3.9
Color, MCU	32	40	3.9
Protein Rest	30 minutes	30 minutes	30 minutes
Water, gallons	1.5 gallons	1.5 gallons	1.4 gallons
Temperature	124°-130°	122°-128°	122°-124°
Mash	90 minutes	90 minutes	90 minutes
Water, gallons	1.30 gallons	1.5 gallons	1.1 gallons
Temperature	152°-160°	150°-158°	146°-154°
Mashout Temperature	170°	170°	168°
Sparge Water, gallons	2.95 gallons	2.75 gallons	3.12 gallons
Boiling Time	60 minutes	65 minutes	75 minutes
Boiling Hops	Fuggle pellets (3.7%) 1 oz	Cascade pellets (5.5%) 1.5 oz	Tettnanger pellets (4.7%) 0.75 oz
Finishing Hops		Cascade pellets (5.5%) 0.5 oz	Tettnanger pellets (4.7%) 0.25 oz
IBUs	20	45	24
Yeast	Wyeast Scottish Ale (1728) 2 packs (22 oz starter) (one new and one old pack)	Wyeast American Ale (1056) 1 pack (22 oz starter)	Wyeast Kölsch (2565) 1 pack (22 oz starter)
Water/Treatment	2.5 gallons DI, 3.25 gallons tap water 1 tsp Irish Moss	all tap water	3.5 gal DI, 2.1 gal tap 1 tsp Irish Moss
Original Gravity			
Maximum	1.062	1.062	1.055
Target	(75% extraction) 1.047	(75% extraction) 1.046	(80% extraction) 1.044
Measured	1.051	1.053	1.048
Primary Gravity	1.017	1.030	1.017
Ending Gravity	1.016	1.024	1.013
Extract Efficiency, %	82%	85%	87%
Apparent Attenuation	69%	55%	73%
BU/GU	0.39	0.85	0.50
	wt% vol%	wt% vol%	wt% vol%
Potential Alcohol, %	3.67% 4.59%	3.04% 3.81%	3.68% 4.59%
Lock Installed	1/15/98	1/31/98	3/1/98
Secondary Fermenter	1/18/98	2/1/98	3/2/98
Priming Sugar, cups	Corn Sugar 1/2	Corn Sugar 1/2	Corn Sugar 1/2
Water, cups	2	2	2
Number of Bottles	28	28	28
Comments			
Brewing	Hops added at 50 minutes.	1 oz hops added at first wort. 1/2 oz each added at 30 and 2 minutes.	3/4 oz hops added at 75 minutes. 1/4 oz added at 20 minutes.
Fermentation	Fermentation at 36 hours.	Fermentation at 24 hours.	Fermentation at 15 hours.
Beer	Gold medal for Scottish Ales at 5th AFCHBC.	Undercarbonated. First place at '98 Del Mar Fair in Mild and Brown Ale.	Second place in AHA NHC First Round Regional.
Source of Recipe	Custom recipe.	Custom recipe.	Custom recipe.

Lorton Brewing Company

BEER STYLE	Scotch Ale (All Grain)	Temecula Peach Weizen (All Grain)	American Robust Porter (All Grain)
Brewing Date	**3/15/98 5**	**3/21/98 6**	**3/29/98 7**
Bottling Date	**4/5/98**	**4/15/98**	**4/24/98**
Primary Fermenter	3.0 gallons	3.0 gallons	3.0 gallons
Secondary Fermenter	2.8 gallons	2.8 gallons	2.8 gallons
Malt	British Pale Malt 8 lbs Crystal Malt, 60°L 1 lb Chocolate Malt 4 oz Peated Barley 4 oz Flaked Barley 2 oz Dry Malt Extract 12 oz	American Two-Row Malt 2 lbs Wheat Malt 5 lbs	American Two-Row Malt 6 lbs Crystal Malt, 60°L 1 lb Chocolate Malt 12 oz Black Malt 2 oz Flaked Barley 2 oz
Color, SRM	20	3	32
Color, MCU	45	3	102
Protein Rest	30 minutes	35 minutes	30 minutes
Water, gallons	2.2 gallons	1.75 gallons	2.0 gallons
Temperature	122°-126°	122°-130°	126°-128°
Mash	90 minutes	90 minutes	65 minutes
Water, gallons	2.0 gallons	1.37 gallons	1.5 gallons
Temperature	154°-157°	152°-156°	151°-156°
Mashout Temperature	170°	169°	170°
Sparge Water, gallons	2.12 gallons	2.75 gallons	2.6 gallons
Boiling Time	70 minutes	70 minutes	65 minutes
Boiling Hops	Kent Golding pellets (5.0%) 1 oz	Tettnanger pellets (4.1%) 0.5 oz	Cascade pellets (4.7%) 1 oz
Finishing Hops		Peach extract 2.5 oz (in secondary fermenter)	Cascade pellets (4.7%) 1 oz
IBUs	25	11.4	31
Yeast	Wyeast Irish Ale (1084) (22 oz starter) 1 pack	Wyeast Weihenstephan (3068) (22 oz starter) 1 pack	Wyeast American Ale (1056) (22 oz starter) 1 pack
Water/Treatment	3.0 gallons DI, 3.3 gallons tap water 1 tsp Irish Moss	3.0 gallons DI, 2.85 gallons tap 1 tsp Irish Moss	all tap water 1 tsp Irish Moss
Original Gravity			
Maximum	1.106	1.071	1.076
Target	(80% extraction) 1.077	(80% extraction) 1.057	(80% extraction) 1.061
Measured	1.083	1.062	1.057
Primary Gravity	1.034	1.025	1.018
Ending Gravity	1.031	1.025	1.018
Extract Efficiency, %	78%	87%	75%
Apparent Attenuation	63%	60%	68%
BU/GU	0.30	0.18	0.54
	wt% vol%	wt% vol%	wt% vol%
Potential Alcohol, %	5.46% 6.83%	3.89% 4.86%	4.09% 5.12%
Lock Installed	3/20/98	3/28/98	4/5/98
Secondary Fermenter	3/21/98	3/28/98	4/9/98
Priming Sugar, cups	Corn Sugar 1/2	Corn Sugar 1/2	Corn Sugar 1/2
Water, cups	2	2	2
Number of Bottles	27	28	27
Comments			
Brewing	Hops added at first wort.	Hops added at first wort. Party Pig pouch failed to inflate. 22 bottles on 4/16.	Boiling hops added at 50 minutes. Finishing hops added at 10 and 2 minutes. Lauter tun ran dry (carryover of grain to brew kettle).
Fermentation	Fermentation at 15 hours.	Fermentation active at 38 hours.	Fermentation at 24 hours.
Beer	Second place in AHA NHC First Round Regional. Second place at '98 Del Mar Fair in English/Scotch Strong Ale.		
Source of Recipe	Custom recipe.	Custom recipe.	Custom recipe.

Lorton Brewing Company

BEER STYLE	Belgian Tripel (All Grain)		Titch's Wit (Belgian Wit) (All Grain)		Weizenbock (All Grain)	
Brewing Date	**4/25/98**	**8**	**5/9/98**	**9**	**5/17/98**	**10**
Bottling Date	**5/17/98**		**6/1/98**		**6/7/98**	
Primary Fermenter	3.0	gallons	3.0	gallons	3.0	gallons
Secondary Fermenter	2.8	gallons	2.8	gallons	2.8	gallons
Malt	American Two-Row Malt	10 lbs	American Two-Row Malt	3 lbs	American Two-Row Malt	3 lbs
	Flaked Barley	2 oz	Wheat Malt	3 lbs	Wheat Malt	5 lbs
	Candi Sugar (0°L)	1 lb	Whole Wheat Flour	4 oz	Crystal Malt, 60°L	1 lb
	Dry Malt Extract*	8 oz	Whole Wheat Flour*	4 oz	Flaked Barley	8 oz
Color, SRM		5.5		2.8		14
Color, MCU		5.5		2.8		19
Actual Color, SRM						
Protein Rest		30 minutes		25 minutes		30 minutes
Water, gallons		2.25 gallons		1.56 gallons		2.14 gallons
Temperature		126°-129°		124°-127°		124°-130°
Mash		90 minutes		90 minutes		90 minutes
Water, gallons		1.75 gallons		1.25 gallons		1.86 gallons
Temperature		149°-154°		150°-156°		152°-154°
Mashout Temperature		170°		169°		167°
Sparge Water, gallons		2.42 gallons		3 gallons		2.32 gallons
Boiling Time		70 minutes		70 minutes		60 minutes
Boiling Hops	Styrian Golding (3.5%)	0.5 oz	Saaz pellets (4.8%)	0.67 oz	Saaz pellets (4.2%)	0.5 oz
	Saaz (4.2%)	0.5 oz				
Finishing Hops	Styrian Golding (3.5%)	0.5 oz	Saaz pellets (4.8%)	0.33 oz	Saaz pellets (4.2%)	0.25 oz
	Saaz (4.2%)	0.5 oz	Curacao orange peels	0.25 oz		
			Crushed coriander	0.5 oz		
IBUs		26.4		19.9		11.3
Yeast	White Labs Trappist Ale (WLP500) (18 oz starter)	1 vial	White Labs Belgian Wit (WLP400) (20 oz starter)	1 vial	Wyeast Weihenstephan (3068) (22 oz starter)	1 pack
Water/Treatment	5 gallons DI, 1.42 gallons tap 1 tsp Irish Moss		5.0 gallons DI, 0.75 gallons tap 1 tsp Irish Moss		all tap water 1 tsp Irish Moss	
Original Gravity						
Maximum		1.117		1.063		1.095
Target	(80% extraction)	1.097	(80% extraction)	1.051	(80% extraction)	1.076
Measured		1.090		1.062		1.077
Primary Gravity		1.017		1.028		1.040
Ending Gravity		1.017		1.020		1.020
Extract Efficiency, %		77%		98%		81%
Apparent Attenuation		81%		68%		74%
BU/GU		0.29		0.32		0.15
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	7.67%	9.58%	4.41%	5.51%	5.98%	7.48%
Lock Installed	4/30/98		5/15/98		5/22/98	
Secondary Fermenter	5/4/98		5/17/98		5/24/98	
Priming Sugar, cups	Corn Sugar	1/2		1/2		1/2
Water, cups		2		2		2
Number of Bottles		28		29		28
Comments						
Brewing	8 oz DME added to raise OG 0.006. Boiling hops at 60 minutes. Finishing hops at 25 minutes and 5 minutes.		*4 oz of flour added to boil to give "iridescent glow". Hops added at 50 and 5 minutes. Orange peel at 15 minutes, coriander at end.		Hops added at 50 and 15 minutes.	
Fermentation	Fermentation active at 16 hours.		Fermentation active at 16 hours.		Fermentation active at 24 hours.	
Beer	Second place in Belgian and French Ales at '98 QUAFF Oktoberfest.				One bottle exploded, 18 thrown out, 9 recapped (6/23). 2 exploded, 4 more thrown out (6/25). Rest thrown out on 6/28.	
Source of Recipe	Custom recipe.		Custom recipe, based on information from Rajotte (Belgian Ales) and Summer '98 Zymurgy.		Custom recipe.	

BEER STYLE	Weizen (All Grain)	Dunkelweizen (All Grain)	Berliner Weisse (All Grain)
Brewing Date	5/24/98 11	5/30/98 12	6/7/98 13
Bottling Date	6/14/98	6/20/98	6/26/98
Primary Fermenter	3.0 gallons	3.0 gallons	3.0 gallons
Secondary Fermenter	2.8 gallons	2.8 gallons	2.8 gallons
Malt	American Two-Row Malt 2 lbs Wheat Malt 5 lbs Flaked Barley 4 oz	American Two-Row Malt 2 lbs Wheat Malt 4 lbs Crystal Malt, 60°L 8 oz Chocolate Malt 8 oz	American Two-Row Malt 2 lbs Wheat Malt 2 lbs Flaked Barley 6 oz
Color, SRM	3.1	21	1.8
Color, MCU	3.1	52	1.8
Actual Color, SRM			
First Rest	30 minutes	30 minutes	30 minutes
Water, gallons	1.8 gallons	1.9 gallons	1.3 gallons
Temperature	124°-127°	124°-127°	118°-122°
Second Rest	90 minutes	90 minutes	90 minutes
Water, gallons	1.5 gallons	1.5 gallons	1.0 gallons
Temperature	154°-157°	152°-156°	145°-156°
Third Rest			
Water, gallons			
Temperature			
Mashout Temperature	169°	169°	169°
Sparge Water, gallons	2.9 gallons	2.85 gallons	2.75 gallons
Boiling Time	60 minutes	60 minutes	20 minutes
Boiling Hops	Tettnanger pellets (4.3%) 0.5 oz	Tettnanger pellets (4.3%) 0.5 oz	Tettnanger pellets (4.3%) 0.25 oz
Finishing Hops	Tettnanger pellets (4.3%) 0.5 oz	Tettnanger pellets (4.3%) 0.25 oz	
IBUs	15.3	13.2	3.3
Yeast	Wyeast Weihenstephan (3068) 2 cups (thin yeast slurry from Weizenbock)	Wyeast Weihenstephan (3068) 1 cup (yeast slurry from Weizen)	Wyeast German Ale (1007) 1 pack (22 oz starter)
Water/Treatment	all tap water 1 tsp Irish Moss	all tap water 1 tsp Irish Moss	all tap water
Original Gravity			
Maximum	1.069	1.069	1.040
Target	(80% extraction) 1.055	(80% extraction) 1.055	(80% extraction) 1.032
Measured	1.056	1.058	1.034
Primary Gravity	1.022	1.018	1.012
Ending Gravity	1.020	1.018	1.012
Extract Efficiency, %	81%	84%	85%
Apparent Attenuation	64%	69%	65%
BU/GU	0.27	0.23	0.10
	wt% vol%	wt% vol%	wt% vol%
Potential Alcohol, %	3.78% 4.73%	4.20% 5.25%	2.31% 2.89%
Lock Installed	5/27/98	6/2/98	6/10/98
Secondary Fermenter	5/30/98	6/5/98	6/11/98
Priming Sugar, cups	Speise 32 oz	Speise 32 oz	Speise 40 oz
Water, cups			
Number of Bottles	30	31	30
Comments			
Brewing	Stuck mash. Hops added at 50 and 15 minutes.	Stuck mash. Hops added at 50 and 15 minutes.	Hops added at first wort.
Fermentation	Fermentation active at 24 hours.	Fermentation active at 18 hours. Very active fermentation.	Fermentation at 22 hours. 0.5 oz lactic acid added at transfer to secondary.
Beer			Third place in German Wheats at '98 QUAFF Oktoberfest. Second in German Wheats at '98 Pacific Brewers Cup.
Source of Recipe	Custom recipe.	Custom recipe.	Custom recipe.

BEER STYLE	Vanille Framboise (All Grain)		English Dark Mild (All Grain)		Belgian Pale Strong Ale (All Grain)	
Brewing Date	**6/21/98**	**14**	**7/11/98**	**15**	**7/25/98**	**16**
Bottling Date	**7/26/98**		**7/31/98**		**8/16/98**	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	3.0 gallons		2.8 gallons		2.8 gallons	
Malt	American Two-Row Malt	3 lbs	British Pale Malt	3.5 lbs	American Two-Row Malt	8 lbs
	Wheat Malt	2.5 lbs	Crystal Malt, 60°L	8 oz	Crystal Malt, 40°L	4 oz
	Crystal Malt, 40°L	8 oz	Chocolate Malt	8 oz	Belgian Special B	1 oz
	Flaked Barley	8 oz	Flaked Barley	4 oz	Candi Sugar, 75°L	6 oz
	Vanilla Extract	1 oz				
	Frozen Raspberries	36 oz				
	Country Raspberry Concentrate	16 oz				
Color, SRM		8		22		13.7
Color, MCU		8		55		18
Actual Color, SRM				>19		9
First Rest		30 minutes		30 minutes		30 minutes
Water, gallons		1.63 gallons		1.2 gallons		1.87 gallons
Temperature		130°-132°		122°		130°-134°
Second Rest		90 minutes		60 minutes		90 minutes
Water, gallons		1.37 gallons		1.1 gallons		1.5 gallons
Temperature		153°-156°		156°-159°		150°-154°
Third Rest						
Water, gallons						
Temperature						
Mashout Temperature		168°		170°		168°
Sparge Water, gallons		2.81 gallons		3.2 gallons		2.75 gallons
Boiling Time		60 minutes		60 minutes		60 minutes
Boiling Hops	Kent Golding pellets (5.2%) (old, sun-baked hops)	0.5 oz	Kent Golding pellets (4.5%)	0.75 oz	Saaz pellets (4.8%)	1 oz
Finishing Hops						
IBUs		13.9		18.5		21
Yeast	Wyeast American Ale (1056) (22 oz starter), Wyeast Lambic Blend (3268) (17 oz starter)	1 pack 1 pack	Wyeast London Ale (1028) (22 oz starter)	1 pack	White Labs Trappist Ale (WLP500) (22 oz starter)	1 vial
Water/Treatment	5 gal DI, 0.8 gal tap water 1 tsp Irish Moss at end of boil		all tap water 1 tsp Irish Moss		5 gal DI, 1.1 gal tap water 1 tsp Irish Moss	
Original Gravity						
Maximum		1.065		1.046		1.086
Target	(80% extraction)	1.052	(80% extraction)	1.037	(80% extraction)	1.070
Measured		1.051		1.040		1.076
Primary Gravity		1.018		1.015		1.018
Ending Gravity		1.011		1.014		1.014
Extract Efficiency, %		78%		87%		88%
Apparent Attenuation		78%		65%		82%
BU/GU		0.27		0.46		0.28
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	4.20%	5.25%	2.73%	3.41%	6.51%	8.14%
Lock Installed	6/24/98		7/14/98		7/28/98	
Secondary Fermenter	6/27/98		7/14/98		7/31/98	
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/3	Corn Sugar	1/2
Water, cups		2		2		2
Number of Bottles		28		29		28
Comments						
Brewing	Hops added at 50 minutes.		Some scorching during heating in protein rest. Hops added at 50 minutes.		3/4 oz hops added at 50 minutes, 1/4 oz added at 20 minutes.	
Fermentation	Fermentation beginning at 18 hours. 1/2 oz French oak chips, 1/2 oz lactic acid, 1 oz vanilla extract added during transfer to tertiary (2.8 gallons) on 7/10. (gravity = 1.014)		Fermentation at 18 hours.		Fermentation active at 17 hours.	
Beer	First in Belgian Lambics at '98 Barley Literate Octoberfest. First in Belgian and French Ales at '98 QUAFF Oktoberfest. First in Lambics at '98 Pacific Brewers Cup. Silver medal (second place) for Lambics at 6th AFCHBC.		Third in Milds and Browns at '98 Pacific Brewers Cup.		Brewed as a dubbel, but not dark enough. First in Belgian and French Ale at Barley Literate Octoberfest. Second in Belgian and French Ale at '98 QUAFF Oktoberfest.	
Source of Recipe	Based on Lambic, by Jean-Xavier Guinard, page 125.		Custom recipe.		Custom recipe.	

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BEER STYLE	Liz's Belgian Strong Dark Ale (All Grain)		Oktoberfest (All Grain)		India Pale Ale (All Grain)	
Brewing Date	8/2/98	17	8/9/98	18	8/22/98	19
Bottling Date	8/23/98		8/30/98		9/14/98	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	American Two-Row Malt	10 lbs	German Pilsener Malt	4.5 lbs	British Pale Malt	9 lbs
	Crystal Malt, 60°L	8 oz	Munich Malt, 10°L	2 lbs	Crystal Malt, 60°L	4 oz
	Belgian Special B	4 oz	Belgian Special B	1 oz		
	Flaked Barley	2 oz	Flaked Barley	4 oz		
	Candi Sugar, 75°L	6 oz				
Color, SRM		18		11		10.3
Color, MCU		37		11.7		10.5
Actual Color, SRM						
Protein Rest		40 minutes		30 minutes		30 minutes
Water, gallons		2.5 gallons		1.75 gallons		2.12 gallons
Temperature		126°-136°		126°-133°		126°-127°
Mash		80 minutes		100 minutes		90 minutes
Water, gallons		1.75 gallons		1.5 gallons		2.0 gallons
Temperature		150°-160°		150°-157°		155°-156°
Mashout Temperature		170°		167°		167°
Sparge Water, gallons		2.25 gallons		2.75 gallons		3.0 gallons
Boiling Time		75 minutes		60 minutes		90 minutes
Boiling Hops	Saaz pellets (3.1%)	1.75 oz	Hallertauer pellets (3.7%)	0.5 oz	Kent Golding pellets (5.0%)	1 oz
	Styrian Golding pellets (2.7%	0.75 oz	Tettnanger pellets (3.8%)	0.5 oz	Fuggles pellets (4.5%)	1 oz
Finishing Hops	Saaz pellets (3.1%)	0.25 oz	Hallertauer pellets (3.7%)	0.25 oz	Kent Golding pellets (4.8%)	2 oz
	Styrian Golding pellets (2.7%	0.25 oz	Tettnanger pellets (3.8%)	0.25 oz		
IBUs		37		21		58
Yeast	White Labs Trappist Ale (WLP500) (22 oz starter)	1 vial	White Labs German Lager (WLP830) (no starter)	1 vial	White Labs Burton Ale (WLP023) (22 oz starter)	1 vial
Water/Treatment	5 gal DI, 1.5 gal tap water 1 tsp Irish Moss		2.5 gal DI, 3.5 gal tap water 1 tsp Irish Moss		all tap water 1 tsp Irish Moss	
Original Gravity						
Maximum		1.111		1.067		1.088
Target	(80% extraction)	1.090	(80% extraction)	1.054	(80% extraction)	1.070
Measured		1.089		1.054		1.071
Primary Gravity		1.016		1.016		1.022
Ending Gravity		1.015		1.015		1.022
Extract Efficiency, %		80%		81%		81%
Apparent Attenuation		83%		72%		69%
BU/GU		0.42		0.39		0.82
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	7.77%	9.71%	4.10%	5.12%	5.14%	6.43%
Lock Installed	8/5/98		8/12/98		8/26/98	
Secondary Fermenter	8/8/98		8/16/98		8/27/98	
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/2	Corn Sugar	1/2
Water, cups		2		2		2
Number of Bottles		28		26		28
Comments						
Brewing	Boiling hops added at 60 minutes, finishing hops at 5 minutes.		Hallertauer at 50 and 5 minutes. Tettnanger at 50 and 2 minutes.		Boiling hops at 60 minutes. Finishing hops (1 oz each) at 10 and 2 minutes.	
Fermentation	Fermentation active at 14 hours.		Fermentation beginning at 15 hours. Warm (70°-72°) until Wednesday when cooled to 60°F.		Very active fermentation at 17 hours.	
Beer					Second place in English and American pale ales at '98 QUAFF Oktoberfest.	
Source of Recipe	Custom recipe.		Custom recipe.		Custom recipe.	

BEER STYLE	Honey Sweet Stout (All Grain)		Braggot (All Grain)		Scotch Ale (All Grain)	
Brewing Date	9/5/98	20	9/12/98	21	10/3/98	22
Bottling Date	10/5/98		10/18/98		10/28/98	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	British Pale Malt	3 lbs	British Pale Malt	4 lbs	British Pale Malt	8 lbs
	Crystal Malt, 60°L	8 oz	Crystal Malt, 70°L	1 lb	Crystal Malt, 60°L	1.5 lb
	Black Malt	12 oz	Mountain Flower Honey	6 lbs	Chocolate Malt	2 oz
	Roasted Barley	8 oz			Peated Barley	4 oz
	Flaked Barley	4 oz			Flaked Barley	4 oz
	Orange Blossom Honey	24 oz				
	Dark Brown Sugar	8 oz				
Color, SRM		44		14		20
Color, MCU		154		20		46
Actual Color, SRM		>19				
First Rest		30 minutes		20 minutes		25 minutes
Water, gallons		1.25 gallons		1.13 gallons		2.0 gallons
Temperature		122°-126°		126°-130°		133°-130°
Second Rest		60 minutes		60 minutes		55 minutes
Water, gallons		1.5 gallons		1.12 gallons		2.0 gallons
Temperature		159°-164°		155°-156°		159°-153°
Third Rest						
Water, gallons						
Temperature						
Mashout Temperature		170°		168°		169°
Sparge Water, gallons		2.8 gallons		2.0 gallons		2.4 gallons
Boiling Time		60 minutes		75 minutes		65 minutes
Boiling Hops	Kent Golding pellets (4.8%)	0.5 oz	-		Kent Golding pellets (5.0%)	1 oz
Finishing Hops	Kent Golding pellets (4.8%)	0.5 oz	-		-	
IBUs		20		0		26
Yeast	White Labs English Ale	1 vial	White Labs Edinburgh Ale	1 vial	Wyeast Scottish Ale (1728)	1 pack
	(WLP002) (22 oz starter)	1 pack	(WLP028) (22 oz starter)		(22 oz starter)	
	Champagne yeast (dry)					
Water/Treatment	all tap water		3 gal distilled, 2.5 gal tap water		3.5 gallons DI, 2.9 gallons tap water	
	1 tsp Irish Moss		1 tsp Irish Moss		1 tsp Irish Moss	
Original Gravity						
Maximum		1.065		1.105		1.101
Target	(80% extraction)	1.056	(80% extraction)	1.095	(80% extraction)	1.081
Measured		1.059		1.088		1.076
Primary Gravity		1.032		1.024		1.030
Ending Gravity		1.022		1.020		1.028
Extract Efficiency, %		91%		84%		75%
Apparent Attenuation		63%		77%		63%
BU/GU		0.34		0.00		0.34
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	3.88%	4.86%	7.14%	8.93%	5.04%	6.30%
Lock Installed	-		9/14/98		10/8/98	
Secondary Fermenter	9/10/98		9/25/98		10/10/98	
Priming Sugar, cups	Corn Sugar	1/3	Corn Sugar	1/4	Corn Sugar	1/3
Water, cups		2		1		2
Number of Bottles		27	13 bottles (still), 14 bottles (sparkling)			28
Comments						
Brewing	Hops added at 50, 30, and 15 minutes.		Sparged with 2.0 gallons. 1.25 gallons tap water added directly to brew kettle. 0.5 gallons of wort lost, replaced with water. Original wort 1.106.		Hops added at first wort.	
Fermentation	Fermentation active at 18 hours. Champagne yeast added after one week in secondary (9/17).		Fermentation active at 7 hours.		Yeast starter had not started at pitching (6 month old yeast). Fermentation active at 24 hours.	
Beer			Bronze medal (third place) for Meads and Braggots at 6th AFCHBC.		Infected. Beer thrown out on December 2	
Source of Recipe	Custom recipe, from information by George De Piro (HBD).		Custom recipe.		Custom recipe.	

BEER STYLE	Badger's Assistant's Period Ale (All Grain)		Comparison Old Ale (All Grain)		Belgian Tripel (All Grain)	
Brewing Date	10/10/98	23	11/8/98	24	11/22/98	25
Bottling Date	11/2/98		11/30/98		12/20/98	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	British Pale Malt	8 lbs	British Pale Malt	8 lbs	Belgian Pilsener	8 lbs
	Crystal Malt, 60°L	8 oz	Crystal Malt, 60°L	8 oz	Table Sugar (sucrose)	2 lbs
	Chocolate Malt	4 oz	Chocolate Malt	4 oz	Flaked Barley	4 oz
	Peated Barley	4 oz	Peated Barley	4 oz		
	Flaked Barley	4 oz	Flaked Barley	4 oz		
Color, SRM		18		18		3.9
Color, MCU		38		38		3.9
Actual Color, SRM						
First Rest		15 minutes		25 minutes		25 minutes
Water, gallons		1.5 gallons		2.1 gallons		1.86 gallons
Temperature		126°-122°		126°-128°		126°-129°
Second Rest		60 minutes		85 minutes		70 minutes
Water, gallons		1.5 gallons		1.7 gallons		1.65 gallons
Temperature		159°		153°-156°		150°-155°
Third Rest	(remaining grain)	40 minutes				
Water, gallons						
Temperature		153°-142°				
Mashout Temperature		169°		165°		167°
Sparge Water, gallons		3.3 gallons		2.6 gallons		2.7 gallons
Boiling Time		60 minutes		60 minutes		60 minutes
Boiling Hops	Kent Golding pellets (5.0%)	1 oz	Kent Golding pellets (5.0%)	1 oz	Styrian Golding pellets (4.0%)	0.5 oz
					Saaz pellets (3.8%)	0.5 oz
Finishing Hops	Kent Golding pellets (5.0%)	0.5 oz	Kent Golding pellets (5.0%)	0.5 oz	Styrian Golding pellets (4.0%)	0.5 oz
					Saaz pellets (3.8%)	0.5 oz
IBUs		33		33		23
Yeast	Wyeast London Ale (1028) (22 oz starter)	1 pack	Wyeast London Ale (1028) (22 oz starter)	1 pack	White Labs Trappist Ale (WLP500) (22 oz starter)	1 vial
Water/Treatment	all tap water 1 tsp Irish Moss		all tap water 1 tsp Irish Moss		5.5 gal DI, 0.7 gal tap water 1 tsp Irish Moss	
Original Gravity						
Maximum		1.092		1.092		1.104
Target	(80% extraction)	1.073	(80% extraction)	1.073	(80% extraction)	1.088
Measured		1.071		1.069		1.087
Primary Gravity		1.022		1.034		1.032
Ending Gravity		1.019		1.027		1.022
Extract Efficiency, %		77%		75%	(78% extraction, w/o sugar)	84%
Apparent Attenuation		73%		61%		76%
BU/GU		0.46		0.48		0.26
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	5.46%	6.83%	4.41%	5.51%	6.82%	8.53%
Lock Installed	10/18/98		11/13/98		11/26/98	
Secondary Fermenter	10/18/98		11/18/98		11/30/98	
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/2	Corn Sugar	1/2
Water, cups		2		2		2
Number of Bottles		28		27		28
Comments						
Brewing	Half of grain mashed at 126° then at 159°, then rest of grain added. Hops added at first wort, 30, and 15 minutes.		Hops added at first wort, 30, and 15 minutes.		Styrian Golding at 50, 30, and 2 minutes. Saaz at 50, 10, and 2 minutes.	
Fermentation	Fermentation active at 19 hours.		Fermentation active at 19 hours.		Fermentation active at 16 hours. Temperature around 60°F.	
Beer						
Source of Recipe	Custom recipe, based on medieval recipe from Badger Roullett in HBD#2814.		Custom recipe.		Custom recipe.	

28 batches 1998
170 batches total

BEER STYLE	Wildcat Barley Wine (All Grain)		Classic American Pilsener (All Grain)		Münchner Helles (All Grain)	
Brewing Date	**11/27/98**	**26**	**12/5/98**	**27**	**12/19/98**	**28**
Bottling Date	**12/31/98**		**1/20/99**		**1/24/99**	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	American Two-Row Malt Crystal Malt, 40°L Flaked Barley Brown Sugar	11 lbs 3 lb 12 oz 1 lb	American Six-Row Malt Flaked Maize Flaked Barley	5 lbs 2 lbs 8 oz	German Pilsener Malt Munich 10°L Malt Flaked Barley	5 lbs 1 lb 4 oz
Color, SRM	17		3		5	
Color, MCU	35		3		5	
Actual Color, SRM			3			
First Rest	15 minutes		15 minutes		10 minutes	
Water, gallons	3.0 gallons		1.63 gallons		1.4 gallons	
Temperature	130°-133°		122°		137°	
Second Rest	90 minutes		20 minutes		20 minutes	
Water, gallons	2.4 gallons		0.62 gallons		0.5 gallons	
Temperature	150°-156°		138°-142°		148°-142°	
Third Rest			60 minutes		70 minutes	
Water, gallons			1.0 gallons		0.5 gallons	
Temperature			156°-150°		148°-158° (154° average)	
Mashout Temperature		165°		168°		170°
Sparge Water, gallons	2.6 gallons		2.73 gallons		3.4 gallons	
Boiling Time	105 minutes		60 minutes		60 minutes	
Boiling Hops	Centennial pellets (9.8%) Cascade pellets (4.7%)	2 oz 1 oz	Cluster pellets (7.0%)	1 oz	Hallertauer pellets (3.7%)	0.75 oz
Finishing Hops	Cascade pellets (4.7%)	1 oz	Styrian Golding pellets (4.0%)	0.5 oz	Hallertauer pellets (3.7%)	0.25 oz
IBUs		109		37		18
Yeast	White Labs California Ale (WLP001) (22 oz starter) Red Star Pasteur Champagne	1 vial 1 pack	White Labs California Lager (WLP810) (22 oz starter), Pilsener Lager (WLP800)	1 vial 1 vial	Wyeast Munich Lager (#2308) (22 oz starter)	1 pack
Water/Treatment	all tap water 1 tsp Irish Moss		all tap water 1 tsp Irish Moss		all tap water 1 tsp Irish Moss	
Original Gravity						
Maximum		1.145		1.074		1.063
Target	(80% extraction)	1.118	(80% extraction)	1.060	(80% extraction)	1.050
Measured		1.104		1.060		1.054
Primary Gravity		1.050		1.027		1.027
Ending Gravity		1.040		1.024		1.021
Extract Efficiency, %	(69% extraction, w/o sugar)	72%		81%		86%
Apparent Attenuation		62%		60%		61%
BU/GU		1.05		0.62		0.33
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	6.72%	8.40%	3.78%	4.73%	3.47%	4.33%
Lock Installed	12/2/98		12/9/98		12/21/98	
Secondary Fermenter	12/6/98		12/13/1998, 1/6/99		1/5/99	
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/2	Corn Sugar	1/2
Water, cups		2		2		2
Number of Bottles		27		28		28
Comments						
Brewing	Hops added at 75, 15 and 2 minutes.		Hops added at 45, 10 and 2 minutes.		Hops added at first wort and 15 minutes.	
Fermentation	Fermentation active at 16 hours. Temperature around 60°F for primary. Pasteur Champagne added for secondary.		Fermentation beginning at 24 hours. Temperature 50° - 52°F. Primary with WLP810 stuck at 1.046. WLP800 added for second primary.		Fermentation beginning at 24 hours. Yeast roused on 1/2/99 for another active fermentation.	
Beer					Silver medal (first place) for German Light Lagers at 6th AFCHBC. Third at AHA NHC First Round Regional.	
Source of Recipe	Custom recipe.		Based on Jeff Renner, Brewing Techniques, Sept/Oct 1995.		Custom recipe.	