BEER STYLE	Dunkelweizen (All Grain)		Belgian Pale Ale (All Grain)		Belgian Golden Strong Ale (All Grain)	
Brewing Date	6/27/2004	10	7/4/2004	11	7/11/2004	12
Bottling Date	7/18/2004		7/25/2004		8/1/2004	
Primary Fermenter	3.0	gallons	3.0	gallons	3.0	gallons
Secondary Fermenter	2.8	gallons	2.8	gallons	2.8	gallons
Malt	Munich Malt	3 lbs	Belgian Pilsner Malt	6 lbs	Belgian Pilsner Malt	8 lbs
	Red Wheat Malt	5 lbs	Belgian Caravienne	1 lb	Cara-Pils Malt	1 lb
	Roasted Wheat	2 oz			Cane Sugar	1 lb
Color, SRM	14.4		9.2		4.4	
Color, MCU	21.2		9.2		4.4	
Actual Color, SRM						
First Rest	15 minutes		12 minutes		15 minutes	
Water, gallons	1.5 gallons		1.5 gallons		2.0 gallons	
Temperature	121°		128° - 125°		128° - 125°	
Second Rest	45 minutes		63 minutes		60 minutes	
Water, gallons	1.5 gallons		1.5 gallons		1.5 gallons	
Temperature	148°-152° (150° average)		148°-152° (150° average)		148°-152° (150° average)	
Third Rest						
Water, gallons						
Temperature						
Mashout Temperature	167°		169°		166°	
Sparge Water, gallons	2.5 gallons		2.5 gallons		2.25 gallons	
Boiling Time	60 minutes		60 minutes		75 minutes	
Boiling Hops	Tettnanger pellets (5.0%)	0.5 oz	Tettnanger pellets (5.0%)	0.5 oz	Czech Saaz pellets (3.0%)	1.5 oz
Finishing Hops					Czech Saaz pellets (3.0%)	0.5 oz
IBUs	13.9		27		30	
Yeast	White Labs Hefeweizen Ale (WLP300) (22 oz starter)	1 vial	White Labs Belgian Golden Ale (WLP570) (22 oz starter)	1 vial	White Labs Belgian Golden Ale (WLP570) (22 oz starter)	1 vial
Water/Treatment	All tap water 1 tsp Irish Moss		5 gallons DI, 0.5 gallons tap water 1 tsp Irish Moss		5 gallons DI, 0.75 gallons tap water 1 tsp Irish Moss	
Original Gravity						
Maximum		1.073		1.072		1.100
Target	(75% extraction)	1.055	(75% extraction)	1.054	(75% extraction)	1.077
Measured		1.055		1.058		1.080
Primary Gravity		1.015		1.018		1.034
Ending Gravity		1.015		1.012		1.027
Extract Efficiency, %		75%		81%		80%
Apparent Attenuation		73%		79%		66%
BU/GU		0.25		0.47		0.38
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	4.20%	5.25%	4.83%	6.04%	5.57%	6.96%
Lock Installed	-		-		-	
Secondary Fermenter	7/4/2004		7/11/2004		7/18/2004	
Days in Primary	7		7		7	
Days in Secondary	14		14		14	
Primary Fermenter Temp		68°-72°		72°-75°		72°-75°
Secondary Fermenter Temp		68°-72°		72°-75°		72°-75°
Priming Sugar, cups	Corn Sugar	5/8	Corn Sugar	1/2	Corn Sugar	1/2
Water, cups		2		2		2
Number of Bottles		28		29		28
Comments						
Brewing	Hops added at 50 minutes.		Hops added at 50 minutes.		Boiling hops added at first wort. Finishing hops split at 30 and 15 minutes.	
Fermentation	Active fermentation at 16 hours.		Active fermentation at 17 hours.		Active fermentation at 16 hours.	
Beer			Third in Pale Low OG Beers at QUAFF Oktoberfest 2004			
Source of Recipe	Custom recipe.		Custom recipe.		Custom recipe.	

BEER STYLE	Belgian Dubbel (All Grain)	Belgian Tripel (All Grain)	Hydromel (Mead)
Brewing Date	9/6/2004 13	10/10/2004 14	11/28/2004 15
Bottling Date	10/2/2004	11/7/2004	
Primary Fermenter	3.0 gallons	3.0 gallons	3.0 gallon
Secondary Fermenter	2.8 gallons	2.8 gallons	2.8 gallon
Malt	Belgian Pale Malt 6 lbs Belgian Caravienne Malt 3 lb Dark Candi Sugar 0.5 lb	German Pilsner Malt 10 lbs Cane Sugar 1 lb	See Mead Log
Color, SRM	15.9	4.9	
Color, MCU	28.2	4.9	
Actual Color, SRM			
First Rest	10 minutes	15 minutes	
Water, gallons	2.0 gallons	2.25 gallons	
Temperature	128° - 127°	132° - 130°	
Second Rest	60 minutes	75 minutes	
Water, gallons	1.75 gallons	1.75 gallons	
Temperature	148°-152° (150° average)	154°-150° (152° average)	
Third Rest			
Water, gallons			
Temperature			
Mashout Temperature	168°	168°	
Sparge Water, gallons	2.25 gallons	2.25 gallons	
Boiling Time	60 minutes	60 minutes	
Boiling Hops	Saaz pellets (3.9%) 1 oz	Saaz pellets (3.9%) 1 oz	
Finishing Hops		Saaz pellets (3.9%) 1 oz	
IBUs	21	26	
Yeast	Wyeast 1214 Belgian Abbey yeast 1 tube	Wyeast 1214 Belgian Abbey yeast 1 tube	
Water/Treatment	5 gallons DI, 1 gallon tap water 1 tsp Irish Moss	5 gallons DI, 1.25 gallon tap water 1 tsp Irish Moss	
Original Gravity			
Maximum	1.096	1.114	
Target	(75% extraction) 1.074	(75% extraction) 1.089	
Measured	1.082	1.096	
Primary Gravity	1.034	1.034	
Ending Gravity	1.017	1.017	
Extract Efficiency, %	85%	84%	
Apparent Attenuation	79%	82%	
BU/GU	0.26	0.27	
	wt% vol%	wt% vol%	
Potential Alcohol, %	6.83% 8.53%	8.30% 10.37%	
Lock Installed	9/10/2004	10/16/2004	
Secondary Fermenter	9/13/2004	10/17/2004	
Days in Primary	7	7	
Days in Secondary	19	21	
Primary Fermenter Temp	72°-75°	72°	
Secondary Fermenter Temp	72°-75°	65°-70°	
Priming Sugar, cups	Corn Sugar 1/2	Corn Sugar 1/2	
Water, cups	2	2	
Number of Bottles	27	28	
Comments			
Brewing	Hops added at beginning of boil.	Boiling hops added at 50 minutes. 1/2 oz hops added at 30 minutes, 1/4 oz at 15 minutes, 1/4 oz at 2 minutes.	
Fermentation	Active fermentation at 36 hours.	Active fermentation at 28 hours.	
Beer			
Source of Recipe	Custom recipe.	Custom recipe.	

BEER STYLE	Berliner Weisse (All Grain)		Straight Lambic (All Grain - Split Batch)		Framboise (All Grain - Split Batch)	
Brewing Date	12/18/2004	16	1/1/2005	1	1/1/2005	2
Bottling Date	1/16/2005		2/6/2005		2/27/2005	
Primary Fermenter	3.0 gallons		3.0 gallons		2.8 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		3.0 gallons	
Malt	German Pilsner Malt Wheat Malt	2.5 lbs 1.5 lbs	German Pilsner Malt Wheat Malt	3.5 lbs 2.5 lbs	German Pilsner Malt Wheat Malt Raspberries Country raspberry concentrate	3.5 lbs 2.5 lbs 3 lb 1 lb
Color, SRM		1.9		3.1		3.1
Color, MCU		1.9		3.1		3.1
Actual Color, SRM						
First Rest		15 minutes		12 minutes		12 minutes
Water, gallons		1.0 gallon		1.35 gallons		1.35 gallons
Temperature		122° - 120°		123°		123°
Second Rest		45 minutes		83 minutes		83 minutes
Water, gallons		1.0 gallon		1.15 gallons		1.15 gallons
Temperature		154°-144° (148° average)		156°-147° (151° average)		156°-147° (151° average)
Third Rest						
Water, gallons						
Temperature						
Mashout Temperature		165°		167°		168°
Sparge Water, gallons		2.35 gallons		2.12 gallons		2.12 gallons
Boiling Time		20 minutes		60 minutes		60 minutes
Boiling Hops	Saaz pellets (3.9%)	0.25 oz	Saaz pellets (3.9%) (old stale pellets)	0.375 oz	Saaz pellets (3.9%) (old stale pellets)	0.375 oz
Finishing Hops						
IBUs		3		9		9
Yeast	White Labs WLP029 Kölsch yeast (no starter)	1 vial	Wyeast Lambic Blend (3278) (22 oz starter)	1 vial	White Labs WLP001 California ale yeast (22 oz starter), Wyeast Lambic Blend (3278) (from straight lambic)	1 vial
Water/Treatment	all tap water no Irish Moss		all tap water no Irish Moss		all tap water no Irish Moss	
Original Gravity						
Maximum		1.044		1.072		1.072
Target	(75% extraction)	1.033	(75% extraction)	1.054	(75% extraction)	1.054
Measured		1.038		1.070		1.070
Primary Gravity		1.011		1.045		1.035
Ending Gravity		1.011		1.036		1.012
Extract Efficiency, %		86%		97%		97%
Apparent Attenuation		71%		49%		83%
BU/GU		0.08		0.13		0.13
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	2.84%	3.54%	3.57%	4.46%	6.09%	7.61%
Lock Installed	-		-		-	
Secondary Fermenter	12/26/2004		1/9/2005		1/9/2005	
Days in Primary	8		8		8	
Days in Secondary	21		28		49	
Primary Fermenter Temp		66°		66°		66°
Secondary Fermenter Temp		66°		66°		66°
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/2	Corn Sugar	1/2
Water, cups	+ 0.5 gallons water	9		2		2
Number of Bottles		34		30		28
Comments						
Brewing	Hops added at beginning of boil. 4.5 hour brew session		Split batch with framboise. Hops added at 50 minutes.		Split batch with straight lambic. Raspberries and primary wort added to yeast from straight lambic batch. Transferred to tertiary 2/4.	
Fermentation	Active fermentation at 16 hours.		Active fermentation at 16 hours.		Active fermentation at 16 hours.	
Beer	1/2 gallon of water added to reduce equivalent OG to 1.032, FG to 1.009, Third in Sour Beers at 2005 AFCHBC		Second in Sour Beers at 2005 AFCHBC		QUAFF representative for AHA Club Only	
Source of Recipe	Custom recipe.		Custom recipe.		Custom recipe.	

BEER STYLE	Irish Red Ale (All Grain)		Belgian Blond Ale (All Grain)		American Stout (All Grain)	
Brewing Date	2/5/2005	3	2/21/2005	4	4/2/2005	5
Bottling Date	3/4/2005		4/1/2005		4/30/2005	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	Two-Row Malt Crystal 20°L Malt Black Patent Malt	5 lbs 2 lbs 2 oz	Belgian Pilsner Malt Cara-Pils Malt Corn Sugar	7 lbs 1 lb 1 lb	Two-Row Malt Crystal 20°L Malt Black Patent Malt	7 lbs 2 lbs 1 lb
Color, SRM		15.5		3.9		43
Color, MCU		26.2		3.9		151
Actual Color, SRM						
First Rest		5 minutes		15 minutes		15 minutes
Water, gallons		1.62 gallons		1.75 gallons		1.62 gallons
Temperature		125°		124°		125°-123°
Second Rest		85 minutes		60 minutes		80 minutes
Water, gallons		1.38 gallons		1.75 gallons		1.38 gallons
Temperature		155°-145° (152° average)		156°-152° (154° average)		156°-152° (153° average)
Third Rest						
Water, gallons						
Temperature						
Mashout Temperature		169°		169°		168°
Sparge Water, gallons		2.5 gallons		2.25 gallons		2.5 gallons
Boiling Time		60 minutes		60 minutes		90 minutes
Boiling Hops	Kent Golding pellets (6.6%)	0.5 oz	Tettanger pellets (4.4%)	1 oz	Centennial pellets (9.0%)	1 oz
Finishing Hops	Kent Golding pellets (6.6%)	0.5 oz	Tettanger pellets (4.4%)	0.5 oz	Cascade pellets (5.8%)	1 oz
IBUs		25		26		63
Yeast	White Labs WLP004 Irish Ale yeast (no starter)	1 vial	White Labs WLP550 Belgian Ale yeast (no starter)	1 vial	White Labs WLP001 California Ale yeast (25 oz starter)	1 vial
Water/Treatment	all tap water no Irish Moss		all tap water no Irish Moss		all tap water 1/2 tsp Irish Moss	
Original Gravity						
Maximum		1.074		1.091		1.096
Target	(75% extraction)	1.056	(75% extraction)	1.071	(75% extraction)	1.072
Measured		1.056		1.070		1.074
Primary Gravity		1.017		1.028		1.024
Ending Gravity		1.016		1.016		1.022
Extract Efficiency, %		76%		77%		77%
Apparent Attenuation		71%		77%		70%
BU/GU		0.45		0.37		0.85
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	4.20%	5.25%	5.67%	7.09%	5.46%	6.83%
Lock Installed	-		-		4/8/2005	
Secondary Fermenter	2/12/2005		2/27/2005		4/10/2005	
Days in Primary	7		6		8	
Days in Secondary	20		33		20	
Primary Fermenter Temp		66°		66°		66°
Secondary Fermenter Temp		66°		66°		66°
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/2	Corn Sugar	1/3
Water, cups		2		2		2
Number of Bottles		28		29		28
Comments						
Brewing	Boiling hops added at 50 minutes. Finishing hops added at 10 minutes.		Corn sugar added before boil. Boiling hops added at 50 minutes. Finishing hops split at 15 and 2 minutes.		Boiling hops added at 50 minutes. Finishing hops split at 30 and 5 minutes.	
Fermentation	Active fermentation at 16 hours.		Active fermentation at 16 hours.		Fermentation beginning at 21 hours.	
Beer						
Source of Recipe	Custom recipe.		Custom recipe.		Custom recipe.	

BEER STYLE	Belgian Wit (All Grain)		Baltic Porter (All Grain)		Decoction Weizen (All Grain)	
Brewing Date	4/16/2005	6	5/1/2005	7	6/11/2005	8
Bottling Date	5/8/2005		6/9/2005		7/3/2005	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	Belgian Pilsner Malt Red Wheat Flakes	3.5 lbs 3.5 lbs	Two-Row Malt Crystal 20°L Malt Chocolate Malt	9 lbs 2 lbs 8 oz	German Pilsner Malt German Wheat Malt	2 lbs 4 lbs
Color, SRM		3.8		23		2.8
Color, MCU		3.8		62		2.8
Actual Color, SRM						
First Rest		15 minutes		20 minutes		30 minutes
Water, gallons		1.5 gallons		2.25 gallons		2.25 gallons
Temperature		128°		126°-125°		128°-120°
Second Rest		120 minutes		70 minutes		60 minutes
Water, gallons		1.5 gallons		2.25 gallons		~1.3 gallons decoction
Temperature		156°-148° (151° average)		158°-152° (154° average)		144°-154° (148° average)
Third Rest						5 minutes
Water, gallons						~1.1 gallons decoction
Temperature						
Mashout Temperature		166°		170°		165°
Sparge Water, gallons		2.5 gallons		2.0 gallons		3.25 gallons
Boiling Time		60 minutes		105 minutes		60 minutes
Boiling Hops	Czech Saaz pellets (3.0%)	1 oz	Perle pellets (8.9%)	0.5 oz	Saaz pellets (3.0%)	0.75 oz
Finishing Hops	Orange peel Coriander	0.25 oz 0.5 oz	Perle pellets (8.9%)	0.25 oz		
IBUs		16		32		12.7
Yeast	White Labs WLP400 Belgian Wit yeast (22 oz starter)	1 vial	White Labs WLP810 San Francisco Lager yeast (25 oz starter)	1 vial	White Labs Hefeweizen Ale (WLP300) (25 oz starter)	1 vial
Water/Treatment	all tap water 1/2 tsp Irish Moss (15 minutes)		all tap water 1/2 tsp Irish Moss (15 minutes)		All tap water 1/2 tsp Irish Moss (15 minutes)	
Original Gravity						
Maximum		1.072		1.117		1.065
Target	(75% extraction)	1.054	(75% extraction)	1.088	(75% extraction)	1.049
Measured		1.060		1.088		1.038
Primary Gravity		1.016		1.040		1.012
Ending Gravity		1.016		1.028		1.012
Extract Efficiency, %		83%		75%		58%
Apparent Attenuation		73%		68%		68%
BU/GU		0.27		0.36		0.33
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	4.62%	5.78%	6.30%	7.88%	2.73%	3.41%
Lock Installed	-		5/7/2005		-	
Secondary Fermenter	4/25/2005		5/8/2005		6/18/2005	
Days in Primary	9		7		7	
Days in Secondary	13		32		15	
Primary Fermenter Temp		68°		68°		70°
Secondary Fermenter Temp		68°		68°		71°-73°
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.		Boiling hops added at 65 minutes. Finishing hops added at 30 minutes.		Double decoction. Hops at 50 minutes. Lousy extraction!	
Fermentation	Fermentation beginning at 24 hours.		Fermentation beginning at 15 hours.		Fermentation active at 16 hours.	
Beer	QUAFF Representative in AHA Belgian and French Ale Club Only		First in Porters at 2006 NHC First Round. **2006 NHC Final Round Gold Medal.**			
Source of Recipe	Custom recipe.		Custom recipe.		Custom recipe.	

BEER STYLE	Infusion Weizen (All Grain)		Extra Special Bitter (All Grain)		English Mild (All Grain)	
Brewing Date	7/16/2005	9	8/20/2005	10	9/5/2005	11
Bottling Date	8/6/2005		9/10/2005		9/25/2005	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	German Pilsner Malt White Wheat Malt	2 lbs 4 lbs	American Two-Row Malt Crystal 20°L Malt	5 lbs 1 lb	American Two-Row Malt Crystal 20°L Malt	3.5 lbs 1 lb
Color, SRM		2.86		7.8		13.8
Color, MCU		2.86		7.8		18.7
Actual Color, SRM						
First Rest		15 minutes		15 minutes		15 minutes
Water, gallons		1.5 gallons		1.37 gallons		1.13 gallons
Temperature		128°-125°		130°-127°		129°-127°
Second Rest		75 minutes		75 minutes		75 minutes
Water, gallons		1.5 gallons		1.38 gallons		1.12 gallons
Temperature		156°-152° (153° average)		156°-152° (153° average)		156°-152° (153° average)
Third Rest						
Water, gallons						
Temperature						
Mashout Temperature		166°		166°		169°
Sparge Water, gallons		2.25 gallons		2.75 gallons		2.75 gallons
Boiling Time		60 minutes		60 minutes		60 minutes
Boiling Hops	Hallertauer pellets (3.8%)	0.5 oz	East Kent Golding pellets (5.5%	1.15 oz	Fuggles pellets (4.0%)	0.75 oz
Finishing Hops			East Kent Golding pellets (5.5%	0.85 oz		
IBUs		10.7		40		17.2
Yeast	White Labs Hefeweizen Ale (WLP300) (25 oz starter)	1 vial	White Labs Irish Ale (WLP004) (25 oz starter)	1 vial	White Labs English Ale (WLP002) (25 oz starter)	1 vial
Water/Treatment	All tap water 1/2 tsp Irish Moss (15 minutes)		All tap water 1/2 tsp Irish Moss (15 minutes)		All tap water 1/2 tsp Irish Moss (15 minutes)	
Original Gravity						
Maximum		1.065		1.060		1.047
Target	(75% extraction)	1.049	(75% extraction)	1.045	(75% extraction)	1.035
Measured		1.050		1.054		1.042
Primary Gravity		1.012		1.014		1.014
Ending Gravity		1.012		1.014		1.014
Extract Efficiency, %		77%		90%		89%
Apparent Attenuation		76%		74%		67%
BU/GU		0.21		0.74		0.41
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	3.99%	4.99%	4.20%	5.25%	2.94%	3.68%
Lock Installed	-		8/23/2005		9/10/2005	
Secondary Fermenter	7/23/2005		8/28/2005		9/11/2005	
Days in Primary	7		8		6	
Days in Secondary	14		13		14	
Primary Fermenter Temp		70°		73°-75°		70°-72°
Secondary Fermenter Temp		71°-73°		70°-75°		70°-72°
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/3	Corn Sugar	1/3
Water, cups		2		2		2
Number of Bottles		28		28		28
Comments						
Brewing	Hops at 50 minutes.		Boiling hops at 50 minutes. Finishing hops added at 15 minutes (1/4 oz), 5 minutes (1/4 oz), 2 minutes (1/4 oz), end of boil (1/4 oz). Brewed as Best Bitter, but ESB strength.		Hops added at 50 minutes.	
Fermentation	Fermentation active at 16 hours.		Fermentation active at 18 hours.		Fermentation active at 18 hours.	
Beer						
Source of Recipe	Custom recipe.		Custom recipe.		Custom recipe.	

BEER STYLE	Smoked Scotch Holiday Ale (All Grain)		Scottish Heavy Ale (All Grain)		Belgian Tripel (All Grain)	
Brewing Date	10/8/2005	12	11/25/2005	13	12/10/2005	14
Bottling Date	11/12/2005		12/18/2005		1/8/2006	
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	4 lbs	Belgian Pilsner Malt	8 lbs
	Crystal 40°L Malt	1 lb	Crystal 60°L Malt	8 oz	Cara-Pils Malt	1 lb
	Peated Malt	4 oz	Peated Malt	2 oz	Corn Sugar	1 lb
	Black Malt	4 oz	Chocolate Malt	1 oz		
Color, SRM		21		13		3.9
Color, MCU		51		16		3.9
Actual Color, SRM						
First Rest		15 minutes		13 minutes		15 minutes
Water, gallons		2.3 gallons		1.13 gallons		2.0 gallons
Temperature		130°-129°		132°-128°		127°-126°
Second Rest		75 minutes		475 minutes		75 minutes
Water, gallons		2.2 gallons		1.12 gallons		2.0 gallons
Temperature		160°-150° (156° average)		155°-150° (156° average)		158°-148° (153° average)
Third Rest						
Water, gallons						
Temperature						
Mashout Temperature		169°		169°		168°
Sparge Water, gallons		2.25 gallons		2.85 gallons		2.25 gallons
Boiling Time		120 minutes		60 minutes		90 minutes
Boiling Hops	Fuggles pellets (4.0%)	1 oz	Fuggles pellets (4.0%)	0.6 oz	Styrian Golding pellets (4.9%)	1 oz
Finishing Hops					Styrian Golding pellets (4.95%)	1 oz
IBUs		18.6		13.7		40
Yeast	White Labs Irish Ale (WLP004) (22 oz starter)	1 vial	White Labs Edinburgh Ale (WLP028) (no starter)	1 vial	White Labs Trappist Ale (WLP5004) (25 oz starter)	1 vial
Water/Treatment	All tap water 1/2 tsp Irish Moss (15 minutes)		All tap water 1/2 tsp Irish Moss (15 minutes)		All tap water 1/2 tsp Irish Moss (15 minutes)	
Original Gravity						
Maximum		1.118		1.049		1.102
Target	(80% extraction)	1.093	(80% extraction)	1.039	(80% extraction)	1.084
Measured		1.088		1.044		1.080
Primary Gravity		1.034		1.016		1.020
Ending Gravity		1.034		1.015		1.018
Extract Efficiency, %		75%		90%		78%
Apparent Attenuation		61%		66%		78%
BU/GU		0.21		0.31		0.50
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	5.67%	7.09%	3.05%	3.81%	6.51%	8.14%
Lock Installed	10/14/2005		-		12/17/2005	
Secondary Fermenter	10/15/2005		12/4/2005		12/23/2005	
Days in Primary	7		9		13	
Days in Secondary	28		14		16	
Primary Fermenter Temp		70°-72°		66°-68°		64°-66°
Secondary Fermenter Temp		70°-72°		64°		64°-66°
Priming Sugar, cups	Corn Sugar	1/3	Corn Sugar	1/3	Corn Sugar	1/2
Water, cups		2		2		2
Number of Bottles		27		28		28
Comments						
Brewing	Hops added at 50 minutes.		Hops added at 50 minutes.		Boiling hops at 50 minutes. Finishing hops added at 15 minutes (1/4 oz), 10 minutes (1/4 oz), 5 minutes (1/4 oz), 2 minutes (1/4 oz).	
Fermentation	Fermentation active at 18 hours.		Fermentation active at 18 hours.		Fermentation active at 18 hours.	
Beer	First in Smoked Beers at 2006 Del Mar.		Fifth in Scottish Ales at 2006 Del Mar.		First in Strong Belgian Ales at 2006 AFCHBC	
Source of Recipe	Custom recipe.		Custom recipe.		Custom recipe.	

BEER STYLE	Munich Dunkel (All Grain)	Munich Helles (All Grain)	Oktoberfest (All Grain)
Brewing Date	1/14/2006 1	1/21/2006 2	2/4/2006 3
Bottling Date	2/26/2006	2/20/2006	3/5/2006
Primary Fermenter	3.0 gallons	3.0 gallons	3.0 gallons
Secondary Fermenter	2.8 gallons	2.8 gallons	2.8 gallons
Malt	Munich Malt (3°0L) 4 lbs Vienna Malt (3.5°L) 4 lbs Chocolate Malt 4 oz	Pilsner Malt 5 lbs Vienna Malt (3.5°L) 1.5 lbs	Pilsner Malt 4.5 lbs Munich Malt (30°L) 2.5 lbs
Color, SRM	23	3.7	9
Color, MCU	60.6	3.7	9
Actual Color, SRM			
First Rest	40 minutes	10 minutes	10 minutes
Water, gallons	3.0 gallons	1.5 gallons	1.5 gallons
Temperature	122°-124°	128°-129°	126°-128°
Second Rest	45 minutes	60 minutes	60 minutes
Water, gallons	~1.6 gallons decoction	1.5 gallons	1.5 gallons
Temperature	146°-150° (149° average)	148°-158° (156° average)	148°-158° (156° average)
Third Rest	10 minutes		
Water, gallons	~1.5 gallons decoction		
Temperature			
Mashout Temperature	170°	166°	166°
Sparge Water, gallons	3.0 gallons	2.9 gallons	2.9 gallons
Boiling Time	60 minutes	90 minutes	90 minutes
Boiling Hops	Hallertauer pellets (3.5%) 1.25 oz	Hallertauer pellets (3.5%) 0.75 oz	Hallertauer pellets (3.5%) 1.25 oz
Finishing Hops	Hallertauer pellets (3.5%) 0.5 oz	Hallertauer pellets (3.5%) 0.5 oz	
IBUs	23.3	22	23.4
Yeast	White Labs WLP820 Oktoberfest yeast (25 oz starter) 1 vial	White Labs WLP820 Oktoberfest yeast (from Dunkel batch)	White Labs WLP833 German Bock yeast (25 oz starter) 1 vial
Water/Treatment	all tap water 1/2 tsp Irish Moss	all tap water 1/2 tsp Irish Moss	all tap water 1/2 tsp Irish Moss
Original Gravity			
Maximum	1.078	1.068	1.072
Target	(75% extraction) 1.058	(75% extraction) 1.051	(75% extraction) 1.054
Measured	1.061	1.054	1.060
Primary Gravity	1.038	1.020	1.024
Ending Gravity	1.038	1.020	1.024
Extract Efficiency, %	78%	79%	83%
Apparent Attenuation	38%	63%	60%
BU/GU	0.38	0.41	0.39
	wt% vol%	wt% vol%	wt% vol%
Potential Alcohol, %	2.41% 3.02%	3.57% 4.46%	3.78% 4.73%
Lock Installed	1/20/2006	-	-
Secondary Fermenter	1/21/2006	1/28/2006	2/12/2006
Days in Primary	7	7	8
Days in Secondary	36	23	21
Primary Fermenter Temp	60°	60°	62°
Secondary Fermenter Temp	60°	60°	62°
Priming Sugar, cups	Corn Sugar 1/2	Corn Sugar 1/2	Corn Sugar 1/2
Water, cups	2	2	2
Number of Bottles	29	29	29
Comments			
Brewing	Boiling hops added at 50 minutes. 1/4 oz added at 15 minutes, 1/4 oz added at 2 minutes.	Boiling hops added at 80 minutes. 1/4 oz added at 30 minutes, 1/4 oz added at 2 minutes.	Boiling hops added at 80 minutes. 1/4 oz added at 30 minutes, 1/4 oz added at 2 minutes.
Fermentation	Fermentation beginning at 24 hours.	Fermentation at 16 hours.	Fermentation at 16 hours.
Beer	Second in Dark Lagers in 2006 NHC First Round. First in German Dark Lagers at 2006 Del Mar.	Third in 2006 NHC First Round (as a Dortmund Export. First in German Light Lagers at 2006 Del Mar. Fourth in German Pilsner at 2006 Del Mar.	First in Oktoberfests at 2006 Del Mar. Best of Lager Division
Source of Recipe	Custom recipe.	Custom recipe.	Custom recipe.

BEER STYLE	Straight Lambic (All Grain - Split Batch)		Kriek (All Grain - Split Batch)		Bavarian Hefeweizen (All Grain)	
Brewing Date	**3/12/2006**	**4**	**3/12/2006**	**5**	**9/3/2006**	**6**
Bottling Date	**8/19/2006**		**9/4/2006**		**10/1/2006**	
Primary Fermenter	3.0 gallons		2.8 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		3.0 gallons		2.8 gallons	
Malt	American Two-Row Malt Flaked Wheat Crystal Malt (20°L)	3.5 lbs 2.5 lbs 0.5 lbs	American Two-Row Malt Flaked Wheat Crystal Malt (20°L) Dark Sweet Cherries	3.5 lbs 2.5 lbs 0.5 lbs 3 lb	German Pilsner Malt Wheat Malt	2 lbs 4 lbs
Color, SRM		6.5		6.5		2.9
Color, MCU		6.5		6.5		2.9
Actual Color, SRM						
First Rest		10 minutes		10 minutes		15 minutes
Water, gallons		1.35 gallons		1.35 gallons		1.5 gallon
Temperature		127°		127°		128°-127°
Second Rest		85 minutes		85 minutes		45 minutes
Water, gallons		1.15 gallons		1.15 gallons		1.5 gallon
Temperature		156°-150° (153° average)		156°-150° (153° average)		158°-150° (154° average)
Third Rest						
Water, gallons						
Temperature						
Mashout Temperature		168°		168°		168°
Sparge Water, gallons		2.12 gallons		2.12 gallons		2.5 gallons
Boiling Time		60 minutes		60 minutes		80 minutes
Boiling Hops	Hallertauer pellets (3.8%) (old stale pellets)	0.375 oz	Fuggle pellets (4.0%) (old stale pellets)	0.375 oz	Hallertauer pellets (4.2%)	0.5 oz
Finishing Hops						
IBUs		9		9		13
Yeast	Wyeast Lambic Blend (3278) (22 oz starter)	1 vial	White Labs WLP001 California ale yeast (22 oz starter), Lambic Blend (from straight lambic)	1 vial	White Labs WLP300 Hefeweizen yeast (22 oz starter)	1 vial
Water/Treatment	all tap water 1/4 tsp Irish Moss		all tap water 1/4 tsp Irish Moss		all tap water 1/4 tsp Irish Moss	
Original Gravity						
Maximum		1.069		1.069		1.065
Target	(75% extraction)	1.052	(75% extraction)	1.052	(75% extraction)	1.049
Measured		1.056		1.056		1.052
Primary Gravity		1.017		1.008		1.016
Ending Gravity		1.011		1.008		1.016
Extract Efficiency, %		81%		81%		80%
Apparent Attenuation		80%		86%		69%
BU/GU		0.16		0.16		0.25
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	4.73%	5.91%	5.04%	6.30%	3.78%	4.73%
Lock Installed	-		-		-	
Secondary Fermenter	3/26/2006		3/26/2006		9/10/2006	
Days in Primary	14		14		7	
Days in Secondary	146		162		21	
Primary Fermenter Temp		66°		66°		66°
Secondary Fermenter Temp		66°		70°		66°
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/2	Corn Sugar	1/2
Water, cups		2		2		2
Number of Bottles		30		28		28
Comments						
Brewing	Split batch with framboise. Hops added at 50 minutes.		Split batch with straight lambic. Raspberries and primary wort added to yeast from straight lambic batch. Transferred to tertiary 6/18.		Hops added at 60 minutes	
Fermentation	Active fermentation at 72 hours.		Active fermentation at 14 hours.		Active fermentation at 16 hours.	
Beer	8 bottles of straight lambic at 1.008. Bottled 8/19. Rest blended with January 2005 lambic for gueuze.		Fourth in Sour Ales at 2007 Del Mar.			
Source of Recipe	Custom recipe.		Custom recipe.		Custom recipe.	

BEER STYLE	Gueuze #1 Blend		Traditional Mead (Mead)		Gueuze #2 Blend	
Brewing Date	1/1/05 and 3/12/06	7	10/14/2006	8	1/1/05 and 3/12/06	9
Bottling Date	10/1/2006				10/22/2006	
Primary Fermenter			4 @ 1 gallon			
Secondary Fermenter			4 @ 1 gallon			
Malt			See Mead Log			
Color, SRM		5.4				5.4
Color, MCU		5.4				5.4
Actual Color, SRM						
First Rest						
Water, gallons						
Temperature						
Second Rest						
Water, gallons						
Temperature						
Third Rest						
Water, gallons						
Temperature						
Mashout Temperature						
Sparge Water, gallons						
Boiling Time						
Boiling Hops						
Finishing Hops						
IBUs		9				9
Yeast	Wyeast Lambic Blend (3278)	1 vial			Wyeast Lambic Blend (3278)	1 vial
Water/Treatment						
Original Gravity						
Maximum		1.070				1.070
Target	(75% extraction)	1.052			(75% extraction)	1.052
Measured		1.061				1.064
Primary Gravity						
Ending Gravity		1.010				1.008
Extract Efficiency, %		87%				91%
Apparent Attenuation		84%				88%
BU/GU		0.15				0.14
	wt%	vol%			wt%	vol%
Potential Alcohol, %	5.35%	6.69%			5.88%	7.35%
Lock Installed	-				-	
Secondary Fermenter	8/19/2006				8/19/2006	
Days in Primary						
Days in Secondary	43				64	
Primary Fermenter Temp		60°-70°				60°-70°
Secondary Fermenter Temp		60°-70°				60°-70°
Priming Sugar, cups	Corn Sugar	1/8			Corn Sugar	1/2
Water, cups		1/2				2
Number of Bottles		9				28
Comments						
Brewing	1/3 of straight lambic from 1/12/05 and 2/3 from 3/12/06				60% of straight lambic from 1/12/05 and 40% from 3/12/06	
Fermentation						
Beer			First in Traditional Meads at 2007 Del Mar Fair. Best of Show in Meads and Ciders		First in Sour Ales at 2007 AFCHBC. Fifth in Sour Ales at 2007 Del Mar Fair.	
Source of Recipe	Custom recipe.				Custom recipe.	

BEER STYLE	Blueberry Vanilla Mead (Mead)	Scottish Export (All Grain)	Belgian Dubbel (All Grain)
Brewing Date	**10/29/2006 10**	**12/2/2006 11**	**12/16/2006 12**
Bottling Date		**12/23/2006**	**1/13/2007**
Primary Fermenter	3.0 gallons	3.0 gallons	3.0 gallons
Secondary Fermenter	2.8 gallons	2.8 gallons	2.8 gallons
Malt	**See Mead Log**	Maris Otter Malt 5 lbs Caramel Malt (40°L) 1 lb Roasted Wheat 2 oz	Belgian Pilsner Malt 7 lbs CaraPils Malt 4 oz Special B 4 oz Dark Candi Sugar 1 lb
Color, SRM		15.5	14.3
Color, MCU		26.4	20.9
Actual Color, SRM			
First Rest		15 minutes	20 minutes
Water, gallons		1.5 gallons	1.75 gallons
Temperature		128°-129°	128°-126°
Second Rest		45 minutes	55 minutes
Water, gallons		1.5 gallons	1.75 gallons
Temperature		160°-150° (157° average)	156°-154° (155° average)
Third Rest			
Water, gallons			
Temperature			
Mashout Temperature		166°	168°
Sparge Water, gallons		2.25 gallons	2.0 gallons
Boiling Time		60 minutes	60 minutes
Boiling Hops		East Kent Golding pellets (3.5%) 0.5 oz	Styrian Golding pellets (3.0%) 0.5 oz
Finishing Hops			
IBUs		14	14
Yeast		White Labs WLP028 Edinburgh yeast (22 oz starter) 1 vial	White Labs WLP530 Abbey Ale yeast (22 oz starter) 1 vial
Water/Treatment		all tap water 1/2 tsp Irish Moss	5 gal DI water, 0.5 gal tap water 1/2 tsp Irish Moss
Original Gravity			
Maximum		1.065	1.088
Target		(75% extraction) 1.049	(80% extraction) 1.072
Measured		1.058	1.073
Primary Gravity		1.019	1.025
Ending Gravity		1.019	1.025
Extract Efficiency, %		89%	83%
Apparent Attenuation		67%	66%
BU/GU		0.24	0.19
		wt% vol%	wt% vol%
Potential Alcohol, %		4.10% 5.12%	5.04% 6.30%
Lock Installed		-	12/23/2006
Secondary Fermenter		12/10/2006	12/26/2006
Days in Primary		8	10
Days in Secondary		13	18
Primary Fermenter Temp		65°	65°
Secondary Fermenter Temp		62°	62°
Priming Sugar, cups		Corn Sugar 1/2	Corn Sugar 1/2
Water, cups		0.8 gallons	2
Number of Bottles		38	28
Comments			
Brewing		Hops added at 50 minutes. Beer diluted with 0.8 gallons to hit OG = 1.045 and FG = 1.015.	Hops added at 50 minutes. Brewed with Michelle Hurst.
Fermentation		Fermentation at 16 hours.	Fermentation evident at 34 hours.
Beer		QUAFF representative for Scottish Ale Club Only. National Club-Only First Place. First in Scottish and Irish Ales at 2007 Del Mar.	
Source of Recipe		Custom recipe.	Custom recipe.

BEER STYLE	Classic American Pilsner (All Grain)		Vienna (All Grain)		American Lite Lager (All Grain)	
Brewing Date	1/1/2007	1	1/20/2007	2	2/4/2007	3
Bottling Date	2/3/2007		2/18/2007		3/10/2007	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	6-row Pale Malt Flaked Maize	5 lbs 2 lbs	Vienna Malt Munich Malt	4 lbs 3 lbs	6-row Pale Malt Flaked Maize	3 lbs 1.5 lbs
Color, SRM		2.9		11.4		1.9
Color, MCU		2.9		12.4		1.9
Actual Color, SRM						
First Rest		5 minutes		15 minutes		15 minutes
Water, gallons		1.5 gallons		1.5 gallons		1.12 gallons
Temperature		119°		126°		122°
Second Rest		90 minutes		60 minutes		45 minutes
Water, gallons		1.5 gallons		1.5 gallons		1.13 gallons
Temperature		158°-150° (153° average)		157°-150° (154° average)		154°-150° (152° average)
Third Rest						
Water, gallons						
Temperature						
Mashout Temperature		168°		167°		168°
Sparge Water, gallons		2.6 gallons		2.6 gallons		2.75 gallons
Boiling Time		70 minutes		70 minutes		60 minutes
Boiling Hops	Hallertauer pellets (4.0%)	1.3 oz	Hallertauer pellets (3.6%)	0.75 oz	Hallertauer pellets (4.0%)	0.4 oz
Finishing Hops	Hallertauer pellets (4.0%)	0.7 oz	Hallertauer pellets (3.6%)	0.25 oz	Hallertauer pellets (4.0%)	0.1 oz
IBUs		36		17		10
Yeast	White Labs WLP810 San Francisco lager yeast (22 oz starter)	1 vial	White Labs WLP838 Southern German lager yeast (22 oz starter)	1 vial	White Labs WLP810 San Francisco lager yeast (22 oz starter)	1 vial
Water/Treatment	5 gallons DI, 0.62 gallons tap water 1/2 tsp Irish Moss		5 gallons DI, 0.5 gallons tap water 1/2 tsp Irish Moss		3.5 gallons DI, 1.5 gallons tap water 1/2 tsp Irish Moss	
Original Gravity						
Maximum		1.072		1.068		1.048
Target	(75% extraction)	1.054	(75% extraction)	1.051	(75% extraction)	1.036
Measured		1.059		1.066		1.044
Primary Gravity		1.024		1.024		1.016
Ending Gravity		1.024		1.022		1.014
Extract Efficiency, %		82%		97%		92%
Apparent Attenuation		59%		67%		68%
BU/GU		0.61		0.26		0.23
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	3.67%	4.59%	4.62%	5.78%	3.18%	3.98%
Lock Installed	-		-		2/10/2007	
Secondary Fermenter	1/13/2007		2/3/2007		2/16/2007	
Days in Primary	12		14		12	
Days in Secondary	21		15		22	
Primary Fermenter Temp		57°		57°		57°-60°
Secondary Fermenter Temp		57°		57°-60°		57°-60°
Priming Sugar, cups	Corn Sugar	1/2	Corn Sugar	1/2	Corn Sugar	1/2
Water, cups		2		0.75 gallons		0.5 gallons
Number of Bottles		28		36		34
Comments						
Brewing	Boiling hops added at first wort. 0.35 oz added at 15 minutes, 0.35 oz added at 2 minutes.		Boiling hops added at 60. 0.13 oz added at 15 minutes, 0.125 oz added at 2 minutes. Brewed with Derek Robinson.		Boiling hops added at 50 minutes. 0.05 oz added at 15 minutes, 0.05 oz added at 2 minutes.	
Fermentation	Fermentation beginning at 20 hours.		Fermentation beginning at 20 hours.		Fermentation active at 27 hours.	
Beer	First in Pilsners at 2007 NHC First Round. First in Pilsners at 2007 Del Mar. **2007 NHC Final Round Gold Medal.**		After dilution, OG=1.052, FG=1.017		After dilution, OG=1.037, FG=1.012. First in Light Lagers at 2007 Del Mar.	
Source of Recipe	Custom recipe.		Custom recipe.		Custom recipe.	

BEER STYLE	American Standard Lager (All Grain)	American IPA (All Grain)	Imperial IPA (All Grain)
Brewing Date	2/16/2007 4	3/3/2007 5	3/31/2007 6
Bottling Date	3/24/2007	3/25/2007	4/22/2007
Primary Fermenter	3.0 gallons	3.0 gallons	3.0 gallons
Secondary Fermenter	2.8 gallons	2.8 gallons	2.8 gallons
Malt	6-row Pale Malt 4 lbs Flaked Maize 2 lbs	Two-row Malt 8 lbs Caramel Malt (40°L) 8 oz CaraPils Malt 8 oz	Two-row Malt 10 lbs Caramel Malt (40°L) 8 oz CaraPils Malt 8 oz
Color, SRM	1.9	9.1	9.7
Color, MCU	1.9	9.1	9.7
Actual Color, SRM			
First Rest	10 minutes	20 minutes	20 minutes
Water, gallons	1.5 gallons	2.0 gallons	2.25 gallons
Temperature	122°-120°	124°-123°	127°
Second Rest	50 minutes	65 minutes	55 minutes
Water, gallons	1.5 gallons	2.0 gallons	2.25 gallons
Temperature	154°-150° (152° average)	154°-150° (153° average)	154°-150° (153° average)
Third Rest			
Water, gallons			
Temperature			
Mashout Temperature	168°	166°	170°
Sparge Water, gallons	2.25 gallons	2.0 gallons	2.0 gallons
Boiling Time	60 minutes	60 minutes	75 minutes
Boiling Hops	Hallertauer pellets (4.0%) 0.5 oz	Centennial pellets (9.4%) 1 oz	Centennial pellets (8.8%) 2 oz
Finishing Hops		Cascade pellets (4.2%) 2 oz	Cascade pellets (5.8%) 2 oz
IBUs	10	55	108
Yeast	White Labs WLP810 San Francisco lager yeast (from previous batch) 1 vial	White Labs WLP001 California ale yeast (22 oz starter) 1 vial	White Labs WLP001 California ale yeast (22 oz starter) 1 vial
Water/Treatment	4 gallons DI, 1.25 gallons tap water 1/2 tsp Irish Moss	all tap water 1/2 tsp Irish Moss	all tap water 1/2 tsp Irish Moss
Original Gravity			
Maximum	1.065	1.089	1.106
Target	(80% extraction) 1.052	(80% extraction) 1.070	(80% extraction) 1.085
Measured	1.053	1.075	1.080
Primary Gravity	1.020	1.024	1.030
Ending Gravity	1.020	1.019	1.020
Extract Efficiency, %	82%	84%	75%
Apparent Attenuation	62%	75%	75%
BU/GU	0.19	0.73	1.35
	wt% vol%	wt% vol%	wt% vol%
Potential Alcohol, %	3.46% 4.33%	5.88% 7.35%	6.30% 7.88%
Lock Installed	-	3/8/2007	
Secondary Fermenter	3/2/2007	3/10/2007	4/7/2007
Days in Primary	14	7	7
Days in Secondary	22	15	15
Primary Fermenter Temp	57°	65°	65°
Secondary Fermenter Temp	57°	62°	62°
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	Hops added at 50 minutes.	Boiling hops added at 50 minutes. 1/2 oz added at 15 minutes, 1/2 oz added at 5 minutes, 1/2 oz added at 2 minutes, 1/2 oz added in secondary.	Boiling hops added at first wort (70 minutes). 1/2 oz added at 15 minutes, 1/2 oz added at 5 minutes, 1/2 oz added at 2 minutes, 1/2 oz added in secondary.
Fermentation	Fermentation active at 18 hours.	Fermentation at 16 hours.	Fermentation beginning at 20 hours.
Beer	Fourth in Light Lagers at 2007 Del Mar.	Fourth in IPAs at 2007 Del Mar.	First in IPAs at 2007 Del Mar.
Source of Recipe	Custom recipe.	Custom recipe.	Custom recipe.

BEER STYLE	Cherry Vanilla Mead (Mead)	Traditional Mead (Mead)	Peppermint Metheglin (Mead)
Brewing Date	4/15/2007 7	5/12/2007 8	5/12/2007 9
Bottling Date			
Primary Fermenter	3.0 gallons	5.0 gallons	5.0 gallons
Secondary Fermenter	2.8 gallons	2.8 gallons	2.0 gallons
Malt	See Mead Log	See Mead Log	See Mead Log
Color, SRM Color, MCU Actual Color, SRM			
First Rest Water, gallons Temperature			
Second Rest Water, gallons Temperature			
Third Rest Water, gallons Temperature			
Mashout Temperature			
Sparge Water, gallons			
Boiling Time			
Boiling Hops			
Finishing Hops			
IBUs			
Yeast			
Water/Treatment			
Original Gravity Maximum Target Measured Primary Gravity Ending Gravity Extract Efficiency, % Apparent Attenuation			
BU/GU			
Potential Alcohol, %			
Lock Installed			
Secondary Fermenter			
Days in Primary			
Days in Secondary			
Primary Fermenter Temp			
Secondary Fermenter Temp			
Priming Sugar, cups Water, cups			
Number of Bottles			
Comments			
Brewing			
Fermentation			
Beer			
Source of Recipe			

BEER STYLE	Sweet Stout (All Grain)		Roggenbier (All Grain)		ESB (All Grain)	
Brewing Date	6/23/2007	10	7/7/2007	11	8/4/2007	12
Bottling Date	7/22/2007		8/3/2007		8/25/2007	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	Maris Otter Malt	5 lbs	Pilsner Malt	2 lbs	Maris Otter Malt	5 lbs
	Caramel Malt (60°L)	8 oz	Caramel Malt (80°L)	1 lb	Caramel Malt (60°L)	8 oz
	Chocolate Malt	8 oz	Rye Malt	4 lbs		
	Roasted Barley	8 oz	Chocolate Malt	2 oz		
Color, SRM		32		17.6		11.4
Color, MCU		101		36		12.3
Actual Color, SRM						
First Rest		5 minutes		15 minutes		10 minutes
Water, gallons		1.5 gallons		1.5 gallons		1.25 gallons
Temperature		124°		120°-122°		126°-124°
Second Rest		55 minutes		45 minutes		55 minutes
Water, gallons		1.5 gallons		1.5 gallons		1.25 gallons
Temperature		159°-154° (157° average)		159°-156° (157° average)		156°-146° (153° average)
Third Rest						
Water, gallons						
Temperature						
Mashout Temperature		166°		169°		168°
Sparge Water, gallons		2.5 gallons		2.625 gallons		2.8 gallons
Boiling Time		60 minutes		60 minutes		60 minutes
Boiling Hops	Kent Golding pellets (5.0%)	1 oz	Hersbrucker pellets (2.2%)	1 oz	Kent Golding pellets (4.0%)	1.5 oz
Finishing Hops			Hersbrucker pellets (2.2%)	1 oz	Kent Golding pellets (4.0%)	0.25 oz
					Kent Golding pellets (4.0%)	0.25 oz
IBUs		28		16		36
Yeast	White Labs WLP004 Irish ale yeast (25 oz starter)	1 vial	White Labs WLP300 Hefeweizen yeast (25 oz starter)	1 vial	White Labs WLP002 English ale yeast (25 oz starter)	1 vial
Water/Treatment	all tap water 1/2 tsp Irish Moss		all tap water 1/2 tsp Irish Moss		all tap water 1/2 tsp Irish Moss	
Original Gravity						
Maximum		1.065		1.070		1.057
Target	(75% extraction)	1.049	(75% extraction)	1.052	(75% extraction)	1.043
Measured		1.052		1.054		1.052
Primary Gravity		1.024		1.022		1.015
Ending Gravity		1.024		1.022		1.015
Extract Efficiency, %		80%		77%		91%
Apparent Attenuation		54%		59%		71%
BU/GU		0.54		0.30		0.69
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	2.94%	3.68%	3.36%	4.20%	3.89%	4.86%
Lock Installed	6/29/2007		-		8/8/2007	
Secondary Fermenter	7/1/2007		7/14/2007		8/12/2007	
Days in Primary	8		7		8	
Days in Secondary	21		20		13	
Primary Fermenter Temp		72°		72°		72°
Secondary Fermenter Temp		72°		72°		72°
Priming Sugar, cups	Corn Sugar	1/3	Corn Sugar	1/2	Corn Sugar	1/3
Water, cups	Lactose - 1/2 pound	3 cups		2		2
Number of Bottles		30		30		29
Comments						
Brewing	Hops added at 50 minutes.		Boiling hops added at 50 minutes. Finishing hops added at 15 minutes and 5 minutes.		Boiling hops added at 50 minutes. Finishing hops added at 15 minutes and 2 minutes.	
Fermentation	Fermentation beginning at 20 hours.		Fermentation evident at 10 hours.		Fermentation active at 16 hours.	
Beer	FG = 1.032 after lactose and corn sugar added					
Source of Recipe	Custom recipe.		Custom recipe.		Custom recipe.	

BEER STYLE	Seven-Grain Brandy Barrel Baltic Porter (All Grain)		Vanilla Cinnamon Baltic Porter (All Grain)		Rauchbier (All Grain)	
Brewing Date	8/19/2007	13	9/30/2007	14	11/11/2007	15
Bottling Date	9/15/2007		10/28/2007		12/10/2007	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	Two-Row Malt	8 lbs	Two-Row Malt	8 lbs	Rauchmalt	5 lbs
	Caramel Malt (20°L)	8 oz	Caramel Malt (20°L)	1 lb	Dark Munich Malt	2 lbs
	Caramel Malt (40°L)	8 oz	Caramel Malt (80°L)	1 lb	Roasted Wheat	2 oz
	Caramel Malt (60°L)	8 oz	Flaked Wheat	1 lb		
	Caramel Malt (80°L)	8 oz	Chocolate Malt	3.5 oz		
	Chocolate Malt	4 oz				
	Flaked Oats	1 lb				
Color, SRM		22		21		16.7
Color, MCU		55		52		31.7
Actual Color, SRM						
First Rest		15 minutes		15 minutes		15 minutes
Water, gallons		2.38 gallons		2.38 gallons		1.6 gallons
Temperature		122°		123°		125°
Second Rest		60 minutes		70 minutes		50 minutes
Water, gallons		2.12 gallons		2.12 gallons		1.4 gallons
Temperature		154°-150° (152° average)		154°-150° (152° average)		154°-150° (152° average)
Third Rest						
Water, gallons						
Temperature						
Mashout Temperature		170°		168°		170°
Sparge Water, gallons		2.0 gallons		2.0 gallons		2.5 gallons
Boiling Time		100 minutes		90 minutes		60 minutes
Boiling Hops	Perle pellets (6.6%)	0.75 oz	Perle pellets (6.6%)	0.75 oz	Hallertauer pellets (4.2%)	1 oz
Finishing Hops	Perle pellets (6.6%)	0.25 oz	Perle pellets (6.6%)	0.25 oz		
			Cinnamon sticks	3		
			Vanilla beans	2		
IBUs		27		27		23
Yeast	White Labs WLP810 San Francisco lager yeast (25 oz starter)	1 vial	White Labs WLP004 Irish Ale yeast (25 oz starter)	1 vial	White Labs WLP830 German lager yeast (22 oz starter)	1 vial
Water/Treatment	all tap water 1/2 tsp Irish Moss		all tap water 1/2 tsp Irish Moss		5.5 gallons tap water 1/2 tsp Irish Moss	
Original Gravity						
Maximum		1.114		1.113		1.069
Target	(75% extraction)	1.085	(75% extraction)	1.085	(80% extraction)	1.055
Measured		1.088		1.088		1.059
Primary Gravity		1.029		1.028		1.024
Ending Gravity		1.023		1.026		1.024
Extract Efficiency, %		77%		78%		86%
Apparent Attenuation		74%		70%		59%
BU/GU		0.31		0.31		0.39
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	6.83%	8.53%	6.51%	8.14%	3.67%	4.59%
Lock Installed	8/25/2007		-		11/18/2007	
Secondary Fermenter	8/26/2007		10/8/2007		11/24/2007	
Days in Primary	7		8		13	
Days in Secondary	20		20		16	
Primary Fermenter Temp		72°		69°		57°
Secondary Fermenter Temp		72°		69°		57°-60°
Priming Sugar, cups	Corn Sugar	1/3	Corn Sugar	1/3	Corn Sugar	1/2
Water, cups		2		2		2
Number of Bottles		29		29		30
Comments						
Brewing	Boiling hops added at 50 minutes. Finishing hops added at 15 minutes. 1 oz of oak chips in 100 mL brandy added in secondary		Boiling hops added at 50 minutes. Finishing hops added at 15 minutes. Cinnamon and vanilla beans added in secondary.		Hops added at 50 minutes.	
Fermentation	Fermentation beginning at 15 hours.		Fermentation beginning at 15 hours.		Fermentation beginning at 20 hours.	
Beer						
Source of Recipe	Custom recipe.		Custom recipe.		Custom recipe.	

BEER STYLE	Seven-Grain Brandy Barrel Baltic Porter (All Grain)		Vanilla Cinnamon Baltic Porter (All Grain)		Rauchbier (All Grain)	
Brewing Date	8/19/2007	13	9/30/2007	14	11/11/2007	15
Bottling Date	9/15/2007		10/28/2007		12/10/2007	
Primary Fermenter	3.0 gallons		3.0 gallons		3.0 gallons	
Secondary Fermenter	2.8 gallons		2.8 gallons		2.8 gallons	
Malt	Two-Row Malt	8 lbs	Two-Row Malt	8 lbs	Rauchmalt	5 lbs
	Caramel Malt (20°L)	8 oz	Caramel Malt (20°L)	1 lb	Dark Munich Malt	2 lbs
	Caramel Malt (40°L)	8 oz	Caramel Malt (80°L)	1 lb	Roasted Wheat	2 oz
	Caramel Malt (60°L)	8 oz	Flaked Wheat	1 lb		
	Caramel Malt (80°L)	8 oz	Chocolate Malt	3.5 oz		
	Chocolate Malt	4 oz				
	Flaked Oats	1 lb				
Color, SRM		22		21		16.7
Color, MCU		55		52		31.7
Actual Color, SRM						
First Rest		15 minutes		15 minutes		15 minutes
Water, gallons		2.38 gallons		2.38 gallons		1.6 gallons
Temperature		122°		123°		125°
Second Rest		60 minutes		70 minutes		50 minutes
Water, gallons		2.12 gallons		2.12 gallons		1.4 gallons
Temperature		154°-150° (152° average)		154°-150° (152° average)		154°-150° (152° average)
Third Rest						
Water, gallons						
Temperature						
Mashout Temperature		170°		168°		170°
Sparge Water, gallons		2.0 gallons		2.0 gallons		2.5 gallons
Boiling Time		100 minutes		90 minutes		60 minutes
Boiling Hops	Perle pellets (6.6%)	0.75 oz	Perle pellets (6.6%)	0.75 oz	Hallertauer pellets (4.2%)	1 oz
Finishing Hops	Perle pellets (6.6%)	0.25 oz	Perle pellets (6.6%)	0.25 oz		
			Cinnamon sticks	3		
			Vanilla beans	2		
IBUs		27		27		23
Yeast	White Labs WLP810 San Francisco lager yeast (25 oz starter)	1 vial	White Labs WLP004 Irish Ale yeast (25 oz starter)	1 vial	White Labs WLP830 German lager yeast (22 oz starter)	1 vial
Water/Treatment	all tap water 1/2 tsp Irish Moss		all tap water 1/2 tsp Irish Moss		5.5 gallons tap water 1/2 tsp Irish Moss	
Original Gravity						
Maximum		1.114		1.113		1.069
Target	(75% extraction)	1.085	(75% extraction)	1.085	(80% extraction)	1.055
Measured		1.088		1.080		1.059
Primary Gravity		1.029		1.028		1.024
Ending Gravity		1.023		1.026		1.024
Extract Efficiency, %		77%		78%		86%
Apparent Attenuation		74%		70%		59%
BU/GU		0.31		0.31		0.39
	wt%	vol%	wt%	vol%	wt%	vol%
Potential Alcohol, %	6.83%	8.53%	6.51%	8.14%	3.67%	4.59%
Lock Installed	8/25/2007		-		11/18/2007	
Secondary Fermenter	8/26/2007		10/8/2007		11/24/2007	
Days in Primary	7		8		13	
Days in Secondary	20		20		16	
Primary Fermenter Temp		72°		69°		57°
Secondary Fermenter Temp		72°		69°		57°-60°
Priming Sugar, cups	Corn Sugar	1/3	Corn Sugar	1/3	Corn Sugar	1/2
Water, cups		2		2		2
Number of Bottles		29		29		30
Comments						
Brewing	Boiling hops added at 50 minutes. Finishing hops added at 15 minutes. 1 oz of oak chips in 100 ml. brandy added in secondary		Boiling hops added at 50 minutes. Finishing hops added at 15 minutes. Cinnamon and vanilla beans added in secondary.		Hops added at 50 minutes	
Fermentation	Fermentation beginning at 15 hours		Fermentation beginning at 15 hours		Fermentation beginning at 20 hours	
Beer			Fifth in Spice/Herb/Veggie Beers at 2008 SDCo Fair		Second in Smoked Beers at 2008 AFCI IDC. Third in Smoked Beers at 2008 NHC Final Round. Second in Smoked Beers at 2008 SDCo Fair	
Source of Recipe	Custom recipe		Custom recipe		Custom recipe	