

BEER-3

American Society of Brewing Chemists
BEER CHECK SERVICE

9/30/2012

<i>Sub #</i>	<i>Specific Gravity</i>	<i>Alcohol</i>	<i>Real Extract</i>	<i>Color</i>	<i>Bitterness Units</i>	<i>Protein</i>	<i>Reducing Sugars</i>	<i>Iron</i>	<i>Refractive Index</i>	<i>Copper</i>	<i>Diacetyl</i>	<i>Total Acidity</i>
15	1.01233	4.48	5.12	39.50	33.80						32.300	
18	1.01331 AX	4.37 BX	5.40 CX	39.63 D1	32.60 E1							
64	1.01323 A2	4.38 B1	5.19 C1		32.60 E1	0.55 F1						0.18 L1
67	1.01331 AX	4.33 BX	5.37 CX	36.03 D1	31.00 E1							1.42 L2
83								0.09 H2				
95	1.01335 AX	4.34 B5	5.40 CX	35.50 D1	33.00 E1	0.56 F1	1.31 G2	0.05 H2		0.03 J1	17.330 KX	0.13 L1
108	1.01188 A2	4.52 B5		* 25.00 D1	27.30 E1							
132	* 1.01026 A2	4.48 B5		38.00 D1	33.00 E1						8.000 K1	
133	1.01331 A2	4.31 BX	5.38 CX	35.82 D1	34.70 E1							
138	1.01215	* 5.85	5.19	40.00	31.00			* 0.28		0.06	4.000	
143	1.01370 A2			43.43 DX	30.00 E1							0.24 L1
144	1.01339 A2	4.38 B5	5.43 CX	38.71 D1	26.20 E1							* 3.21 LX
149	1.01331 A2	4.37 B5	5.41 CX	40.30 D1	33.25 E1						2.580 KX	0.20 L1
150	1.01200 A2	4.48 B5	5.12 CX	39.52 D1	35.65 E1						0.033 K1	* 4.76 LX
153	* 3.35000 AX	4.60 B5		37.60 D1	33.80 E1							
155	* 3.70000 A2			29.97 D1	30.90 E1						25.565 K1	
157	1.01300 AX			41.16 D1	36.00 E1							
158	1.01342 A2	* 5.59 B5	5.43 C2	* 70.00 D1	33.90 E1							
159	1.01372 A2	4.31 B1	5.48 C1	41.80 D1	33.50 E1	0.55 F1	1.29 G2	0.10 H1		0.04 J1	0.030 KX	0.17 L1
161	1.01319 A1	4.54 B2	5.37 C2	41.90 D1	30.00 E1	0.57 F1					0.010 K2	0.35 L1
165	1.01330 AX	4.38 BX	5.41 CX	40.90 D1	32.20 E1						39.000 KX	2.36 LX
169	1.01217 A2	4.50 B5	5.18 CX	44.50 D1	35.30 E1	0.55 FX	1.32 G2	0.03 H2		0.04 J1	0.030 KX	0.17 L1
170	1.01170 A2	4.60 B4	5.20 C1	* 4.06 D1	32.56 E1			0.11 HX		0.04 JX		0.21 L1
173	1.01334 A2	4.41 BX	5.43 CX	37.00 D1	31.20 E1	0.55 F1	1.14 G2	0.06 H1		0.02 J2		0.20 L2
174	1.01340 A2	4.34 B5	5.41 CX	35.20 D1	33.50 E1	0.53 FX	1.21 G2	0.03 H2		0.07 J1	* 83.100 KX	0.19 L1
176	1.01338 A2	4.39 B5	5.43 CX	40.10 D1	34.00 E1	0.56 FX	1.31 G2	0.05 H1		0.02 J1	35.000 KX	0.18 L1
177	1.01348 A2	4.43 B3	5.49 C3	49.20 D1	34.20 E1	0.56 FX	1.28 G2	0.04 H2	29.00 I1	0.05 J1	10.000 KX	0.17 L1
183	1.01334 A2	4.41 BX	5.43 CX	37.00 D1	31.20 E1	0.55 F1	1.14 G2	0.06 H1		0.02 J2		0.20 L2

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N	24	22	21	23	27	10	8	10		10	13	15
Mean	1.01303	4.42	5.35	39.25	32.46	0.55	1.250	0.062		0.04	13.375	0.42
Min	1.01170	4.31	5.12	29.97	26.20	0.53	1.140	0.03		0.02	0.010	0.13
Max	1.01372	4.60	5.49	49.20	36.00	0.57	1.320	0.11		0.07	39.000	2.36
Std	0.00060	0.09	0.12	3.81	2.30	0.01	0.08	0.03		0.02	14.731	0.62

** Not Included in Mean*

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<i>Sub #</i>	<i>Calcium</i>	<i>Sodium</i>	<i>pH</i>	<i>Chloride</i>	<i>Foam Collapse Rate</i>	<i>SO2</i>	<i>Sulfate</i>	<i>Yeast Fermentable Extract</i>	<i>Air</i>	<i>CO2 Volume</i>	<i>Ash</i>
15			4.31		290	1.46			0.20	2.79	
18			4.32 O1			1.00 R2					
64		27.2 NX				1.30 RX					
67			4.35 OX		131 Q1				0.75 UX	2.68 VX	
83											
95	37.00 M1	20.2 NX	4.40 O1	300.0 PX		2.00 R1			0.20 UX	2.80 V1	0.20 W1
108			4.18 O1								
132	28.00 M1		4.34 O1						0.00 UX	2.90 V1	
133			4.33 O1		169 QX					2.81 V1	
138	46.91	24.5	4.28						0.20	2.78	
143			4.37 O1						0.25 UX	2.73 VX	
144			4.44 O1							* 0.95 VX	
149			4.30 O1							2.72 VX	
150			4.27 O1					0.00 TX	0.40 UX	2.70 VX	
153			4.24 O1								
155			4.29 O1						0.00 UX	2.80 V1	
157			4.26 O1						0.05 UX	2.80 V1	
158			4.20			0.45 R1			0.20 UX	2.86 V1	
159	45.00 MX		4.33 O1	296.0 P1	262 QX	0.50 R1		0.10 T1	0.20	2.80	0.22 W1
161		43.3 NX	4.25 O1					0.00 T1	0.70 U1	3.06 V1	0.19 W1
165			4.30 O1								
169	40.00 M1		4.27 O1	288.0 P1	216 Q2	1.89 R1		* 3.05 T1	0.10 UX	2.80 V1	0.20 W1
170	54.00 MX	30.0 NX	4.33 O1						1.00 UX	2.80 V1	
173	62.00 M2		4.32 O1		273 QX	3.09 R1					
174	33.00 M1		4.33 O1	283.0 P1	279 QX	0.49 R1			0.30 UX	2.73 VX	0.20 W1
176	43.00 M2		4.32 O1	280.0 P1	274 QX	0.50 R1			0.15	2.85	0.19 W1
177	43.00 MX		4.27 O1	281.0 P1	*470 QX	1.30 R1		0.20 T1	0.20 UX	2.50 VX	0.21 W1
183	62.00 M2		4.32 O1		273 QX	3.09 R1					

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<i>Sub #</i>	<i>Calcium</i>	<i>Sodium</i>	<i>pH</i>	<i>Chloride</i>	<i>Foam Collapse Rate</i>	<i>SO2</i>	<i>Sulfate</i>	<i>Yeast Fermentable Extract</i>	<i>Air</i>	<i>CO2 Volume</i>	<i>Ash</i>
N	11	5	26	6	9	12		4	17	19	7
Mean	44.90	29.0	4.30	288.0	241	1.42		0.08	0.29	2.78	0.20
Min	28.00	20.2	4.18	280.0	131	0.45		0.00	0.00	2.50	0.19
Max	62.00	43.3	4.44	300.0	290	3.09		0.20	1.00	3.06	0.22
Std	10.92	8.7	0.06	8.3	56	0.95		0.10	0.28	0.11	0.01

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<i>Sub #</i>	<i>Apparent Extract</i>	<i>Total VDK</i>	<i>Pentanedione</i>	<i>Free Amino Nitrogen</i>	<i>Viscosity</i>	<i>Dimethyl Sulfide</i>	<i>Total Haze</i>	<i>Extract of Orig. Wort</i>	<i>Iso-Alpha Acids for Beer</i>
15	3.10						9.32	13.72	
18	3.41 XX	0.04 YX						13.78 3EX	
64									
67	3.40 XX						87.00 DD2	13.69 3EX	
83									
95	3.41 X1			89.00 AA1				13.73 EE1	
108									
132							13.60 DDX		
133	3.40 XX	0.04 Y2					82.40 DDX	13.66 3EX	
138	3.14	* 29.00	* 25.000					13.94	
143	3.50 XX	0.06 YX		* 114.00 AA1					
144	3.42 XX						1160.00 DDX	13.83 EE1	
149	3.40 XX		0.000 ZX				889.20 DDX	13.80 EE2	
150	3.07 XX	0.04 Y1	0.007 Z1				2188.00 DDX	13.72 EE1	
153							14.23 DD3		
155									
157									
158	3.43 X2	0.01 Y2						13.80 EE1	
159	3.51	0.01 YX		93.00 AA1	1.75	105.60	63.19 DD1	13.76	
161	3.30 X1	0.01 Y2						14.10 EE2	
165	3.40 XX	0.05 YX	0.008 ZX				1083.00 DDX	13.82 3EX	
169	3.11 X1			85.00 AA1	1.72 3BX			13.84 EE1	
170	2.99 X1						400.00 DD2	14.02 EE2	
173	3.41 XX	0.01 YX						13.88 3EX	
174	3.43 XX	0.05 Y2		82.00 AA1				13.75 EE1	
176	3.42 X2			93.00 AA1				13.85 EE1	
177	3.44 XX			95.00 AA1				13.98 EE2	
183	3.41 XX	0.01 YX						13.88 3EX	

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<i>Sub #</i>	<i>Apparent Extract</i>	<i>Total VDK</i>	<i>Pentanedione</i>	<i>Free Amino Nitrogen</i>	<i>Viscosity</i>	<i>Dimethyl Sulfide</i>	<i>Total Haze</i>	<i>Extract of Orig. Wort</i>	<i>Iso-Alpha Acids for Beer</i>
N	21	11	3	6	2		11	20	
Mean	3.34	0.03	0.005	89.50	1.74		544.54	13.83	
Min	2.99	0.01	0.000	82.00	1.72		9.32	13.66	
Max	3.51	0.06	0.008	95.00	1.75		2188.00	14.10	
Std	0.15	0.02	0.004	5.13	0.02		708.07	0.11	

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