

BEER-1

American Society of Brewing Chemists
BEER CHECK SERVICE

3/31/2013

<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	1.00932	4.18	4.78	18.03	17.42						25.150	
18	1.01116 AX	4.20 BX	4.79 CX	18.17 D1	16.50 E1							
64	1.01127 A2	4.11 B1	4.75 C1									0.28 L1
67	1.01116 AX	4.16 BX	4.75 CX	17.32 D1	19.00 E1							
83								0.06 H2				
95	1.01122 AX	4.19 B5	4.80 CX	17.90 D1	16.90 E1	0.47 F1	1.52 G2	0.01 H2		0.02 J1	15.375 KX	0.14 L1
133	1.01109 A2	4.22 BX	4.78 CX	17.42 D1	15.20 E1							
138	1.00949 A2	4.22 B5	4.83 CX	18.00 D1	16.00 E1		* 0.24 GX	0.05 HX		0.06 JX		
143	1.01050 A2			18.90 DX	16.00 E1							0.17 L1
144	1.01126 AX	4.18 B5	4.81 CX	17.81 D1	13.20 E1							0.17 LX
149	1.01122 A2	4.16 B5	4.79 CX	18.30 D1	17.00 E1						10.000 KX	0.29 L1
153	1.01150 AX	* 5.54 B5		18.20 D1	17.95 E1							
155	* 3.00000 A2			* 13.91 D1	18.15 E1							
159	1.01123 A2	4.15 B1	4.79 C1	17.85 D1	16.30 E1	0.48 F1	1.48 G2	0.05 H1		0.05 J1	20.000 KX	0.15 L1
161	1.01129 A1	4.21 B2	4.75 C2	18.00 D1	15.00 E1	* 0.37 F1		0.00 H1		* 0.24 JX	40.000 KX	0.35 L1
162	1.01122 A2	4.18 B5	4.80 CX	17.93	17.70 E1	0.46 F1	1.54 G2	0.04 H2		0.03 J1	0.030 KX	0.15 L1
165	1.01121 AX	4.17 BX	4.79 CX	17.90 D1	17.50 E1						37.000 KX	0.23 LX
169	1.01121 A2	4.16 B5	4.79 CX	18.08 D1	17.80 E1	0.48 FX	1.54 G2	0.00 H2		0.04 J1	40.000 K1	0.16 L1
170	1.01130 A2	4.26 B4 *	4.95 C1	17.50 D1	12.70 E1							0.24 L1
171	1.00938 A2	* 4.00 BX		18.00 D1	14.00 E1							
173	1.01115 A2	4.19 BX	4.78 CX	17.40 D1	18.90 E1			* 0.30 H1		* 0.14 J2		0.16 L2
174	1.01121 A2	4.16 B5	4.79 CX	18.30 D1	17.00 E1	0.49 FX	1.52 G2	0.01 H2		0.03 J1	0.070 KX	0.17 L1
176	1.01123 A2	4.17 B5	4.79 CX	18.25 D1	17.10 E1	0.47 FX	1.51 G2	0.05 H1		0.04 J1	20.000 KX	0.12 L1
177	1.01119 A2	4.17 B5	4.78 CX	18.40 D1	17.30 E1	0.48 FX	1.54 G2	0.05 H2		0.07 J1	0.050 KX	0.14 L1
179	1.01121 A2	4.19 B5	4.80 CX	18.20 D1	16.91 E1	0.46 FX	1.54 G2	0.02 H2		0.03 J1	0.020 KX	0.13 L1

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N	23	20	19	22	23	8	8	11		9	12	16
Mean	1.01096	4.18	4.79	17.99	16.59	0.47	1.524	0.031		0.04	17.308	0.19
Min	1.00932	4.11	4.75	17.32	12.70	0.46	1.480	0.00		0.02	0.020	0.12
Max	1.01150	4.26	4.83	18.90	19.00	0.49	1.540	0.06		0.07	40.000	0.35
Std	0.00064	0.03	0.02	0.37	1.64	0.01	0.02	0.02		0.02	15.792	0.07

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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			4.27		227	2.11			0.04	2.53	
18			4.30 O1			1.00 R2			0.40 UX	2.39 VX	
64		50.0 N1					RX				
67			4.26 OX		125 Q1				0.62 UX	2.66 VX	
83											
95	63.00 M1	NX	4.30 O1	385.0 PX		4.10 R1			0.30 UX	2.65 V1	0.12 W1
133			4.18 O1		187 QX					2.62 V1	
138	62.22 MX		4.22 O1						0.04 U1	2.60 VX	
143			4.32 O1						0.33 UX	2.57 VX	
144			4.26								
149			4.27 O1							2.60 VX	
153			4.21 O1								
155			4.22 O1						0.05 UX	2.61 V1	
159	61.00 MX		4.24 O1	376.0 P1	225 QX	2.00 R1		0.30 T1	0.35	2.55	0.14 W1
161	* 180.00 MX	36.0 NX	4.14 O1				147.0 SX	0.00 T1			0.15 W1
162	59.00 M2		4.17 O1	* 81.0 P1	112 QX	2.41 R1			0.55	2.61 V1	0.15 W1
165			4.26 O1								
169	65.53 M1	25.3 N1	4.27 O1	368.0 P1	256 Q2	1.94 R1		0.20 TX	0.10 UX	2.60 V1	0.15 W1
170			4.24 O1						* 1.20 UX	2.60 V1	0.14 W1
171			4.31 O1		69 Q1				0.30 UX	2.40 V1	
173	68.00 M2		4.22 O1		220 QX	1.41 R1			0.70	2.69	
174	65.00 M1		4.22 O1	376.0 P1	221 QX	0.55 R1			0.45 UX	2.61 VX	0.14 W1
176	64.00 M2		4.20 O1	390.0 P1	233 QX				0.40 UX	2.61 VX	0.11 W1
177	64.00 MX		4.19 O1	376.0 P1	420 QX	3.50 R1		0.32 TX	0.25 UX	2.70 VX	0.13 W1
179	67.00 MX		4.24 O1	P1	214 QX	3.10 R1			0.50 UX	2.62 VX	0.14 W1

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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	10	3	23	6	12	10		4	16	19	10
Mean	63.88	37.1	4.24	378.5	209	2.21		0.21	0.34	2.59	0.14
Min	59.00	25.3	4.14	368.0	69	0.55		0.00	0.04	2.39	0.11
Max	68.00	50.0	4.32	390.0	420	4.10		0.32	0.70	2.70	0.15
Std	2.72	12.4	0.05	7.8	88	1.11		0.15	0.21	0.08	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	2.86						13.68	12.84	
18	2.86 XX	0.04 YX						12.89 3EX	
64									
67	2.85 XX						83.00 DD2	12.78 3EX	
83									
95	2.87 X1			117.00 AA1				12.88 EE1	
133	2.84 XX	0.03 Y2					21.10 DDX	12.91 3EX	
138		0.04 Y5	0.019 Z1				5.04 DD2	12.96 EE1	
143	* 2.69 XX	0.03 YX		115.00 AA1					
144	2.88 XX					16.05	0.37 DDX	12.87 EE1	
149	2.87 XX		0.000 ZX				66.10 DDX	12.82 EE2	
153							19.73 DD3		
155									
159	2.90	0.01 YX		111.00 AA1	1.54	49.08	8.22 DD2	12.88 EE1	
161	2.90 X1	0.04 Y1					156.00 DD2	12.87 EE2	
162	* 28.80			125.00 AA1				12.85 EE1	
165	2.87 XX	0.05 YX	0.016 ZX				33.40 DDX	12.84 3EX	
169	2.87 X1	0.04 Y5	0.000 Z1	120.00 AA1	1.55 3BX			12.81 EE1	
170	2.89 X1						215.40 DD2	* 13.17 EE2	
171									
173	2.86 XX	0.06 YX						12.87 3EX	
174	2.88 XX	0.04 Y2		114.00 AA1				12.82 EE1	
176	2.88 X2			136.00 AA1				12.84 EE1	
177	2.87 XX			129.00 AA1				12.80 EE1	
179	2.87 XX			120.00 AA1				12.89 EE1	

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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	17	10	4	9	2	2	11	18	
Mean	2.87	0.04	0.009	120.78	1.55	32.57	56.55	12.86	
Min	2.84	0.01	0.000	111.00	1.54	16.05	0.37	12.78	
Max	2.90	0.06	0.019	136.00	1.55	49.08	215.40	12.96	
Std	0.02	0.01	0.010	7.97	0.01	23.36	70.03	0.04	

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