

BEER-3

**American Society of Brewing Chemists
BEER CHECK SERVICE**

9/30/2016

Sub #	Specific Gravity	Alcohol	Real Extract	Color	Bitterness Units	Protein	Reducing Sugars	Iron	Refractive Index	Copper	Diacetyl	Total Acidity
18	1.00894 AX	4.12 BX	4.20 CX	13.44 D1	20.60 E1							
64	1.00857 A2	4.08 B1	4.17 C1									
133	1.00894 A2	4.03 B5	4.16 CX	12.50 DX	23.65 E1						14.382 K1	
143	1.00930 A2			* 12.10 D1	19.00 E1			0.08 H2				0.18 L1
144	1.00900 AX	4.14 BX	4.22 CX	13.68 DX	15.00 EX						38.000 KX	
149	1.00725 A2	4.11 B5		13.90 DX	23.50 E1						6.000 K3	
150	1.00910 A2	4.05 B5	4.21 CX	14.06 D1	19.35 E1						34.000 KX	0.32 LX
153	* 1.01175 AX	4.31 BX		13.80 D1	23.55 E1							
155	1.00901 AX	4.14 B5		13.80 D1	20.20 E1							
157	1.00897 A2	4.12 B5		13.86 D1	20.95 E1							
165	1.00895 AX	4.13 BX	4.20 CX	13.83 DX	17.99 EX						49.000 KX	* 3.15 LX
169	1.00904 A2	4.08 B5	4.20 CX	14.40 D1	22.30 E1	0.64 FX	1.01 G2	0.01 H2		0.03 J1	18.000 K1	0.15 L1
170	1.00926 A2	4.18 B5	4.38 C1	13.50 D1	20.00 E1							
190	1.00890 A2	4.10 BX	4.17 CX	13.40 D1	19.60 E1						10.000 KX	
191	1.00890 A2	4.17 B5	4.21 CX	13.60 D1	18.30 E1						4.380 KX	
193	1.00703 A2	* 5.25 B5	* 1.01 C3	* 11.00 D1	20.40 E1							
196	1.00910 A1	3.98 B2		13.90 D1	22.20 E1							
198	1.00906 A2	* 5.24 B5		13.66 D1	20.70 E1							
201	1.00909 A2	4.06 BX	* 4.67 CX	13.40 D1	21.50 E1							0.26 L1
202	* 2.30000 A2			13.80 D1	22.10						45.000 K1	
205	1.00901 A2	4.12 B5		13.20 D1	19.30 E1							
206	1.00744 AX	4.02 BX	4.22 CX	14.06 DX	18.53 EX						29.770 KX	
209	1.00890 A2	4.25 B5		13.20 D1	22.00 E1							
215	1.00906 A2	4.21 B5		13.20 D1	19.65 E1							

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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>
18			4.55 O1			1.02 R2			0.05 UX	2.56 VX	
64		21.0 N1				0.00RX					
133			4.61 O1		295 QX					2.36 V1	
143			4.59 O1		272 Q2				0.20 UX	2.43 VX	
144			4.57 OX								
149			4.61 O1							2.40 VX	
150			4.57 O1								
153			4.70 O1								
155			4.57 O1		249 QX					2.53 VX	
157			4.59 O1						0.25 UX	2.46 V1	
165		21.1 NX	4.44 OX			37.10RX					
169	55.00 M1		4.55 O1	128.0 P1	Q2	3.15 R1		TX	0.10 UX	2.42 V1	0.15 W1
170			4.60 O1								
190			4.62 O1							2.46 VX	
191			4.58 O1							2.45 VX	
193			4.64 O1		*116 Q1					2.41 V1	0.17 W1
196											
198			4.49 OX							2.40 VX	
201			4.68 O1								
202			4.58 O2								
205			4.53 O1							2.60 V1	
206			4.59 O1							2.40 VX	
209			4.49 O1		276 QX					2.70 VX	
215			4.62 O1								

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<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>
N	22	20	11	21	23			2			10	4
Mean	1.00876	4.12	4.21	13.63	20.45			0.044			24.853	0.23
Min	1.00703	3.98	4.16	12.50	15.00			0.01			4.380	0.15
Max	1.00930	4.31	4.38	14.40	23.65			0.08			49.000	0.32
Std	0.00064	0.08	0.06	0.41	2.05			0.05			16.403	0.08

* 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>
N		2	22		4	3			4	14	2
Mean		21.1	4.58		273	1.39			0.15	2.47	0.16
Min		21.0	4.44		249	0.00			0.05	2.36	0.15
Max		21.1	4.70		295	3.15			0.25	2.70	0.17
Std		0.1	0.06		19	1.61			0.09	0.09	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>
N	11	8	7	2		2	5	12	
Mean	2.32	0.04	0.007	126.50		76.30	220.92	12.20	
Min	2.28	0.01	0.000	124.00		39.00	28.22	11.96	
Max	2.38	0.06	0.016	129.00		113.60	416.50	12.58	
Std	0.03	0.01	0.006	3.54		52.75	141.28	0.17	

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