

MAL-9B

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

9/30/2012

| <i>Sub #</i> | <i>Moisture (%)</i> | <i>% Extract - Fine Ground (D.B.)</i> |             | <i>% Extract - Coarse Ground (D.B.)</i> |          | <i>% Fine - Coarse Difference</i> | <i>Conversion Time (min)</i> | <i>Clarity of Wort (visual)</i> | <i>Color of Wort, 1/2" cell (ASBC)</i> | <i>Diastatic Power, Salt Ext. (Deg.)</i> | <i>Alpha-amylase, Salt Ext.</i> | <i>Soluble Protein</i> | <i>Total Malt Protein</i> | <i>Soluble/Total Protein (D.B.)</i> |
|--------------|---------------------|---------------------------------------|-------------|-----------------------------------------|----------|-----------------------------------|------------------------------|---------------------------------|----------------------------------------|------------------------------------------|---------------------------------|------------------------|---------------------------|-------------------------------------|
| B 25         | 4.5                 | *                                     | 82.8        | *                                       | 82.2     | 0.6                               |                              |                                 | 1.97                                   | 165                                      | 62.0                            | * 5.01                 | * 10.9                    | * 46.0                              |
| B 30         | 4.1                 |                                       | 80.6        |                                         | 80.0     | 0.6                               |                              | TURBID                          | 2.38                                   | 174                                      | 59.5                            | 5.42                   | 12.1                      | 44.9                                |
| B 32         | 4.2                 |                                       | 80.6        |                                         | 79.4     | 1.2                               |                              | CLEAR                           | 2.21                                   | * 203                                    | 68.9                            | 5.43                   | 12.1                      | 44.9                                |
| B 128        | 4.3                 |                                       | 80.6        |                                         | 80.0     | 0.6                               |                              |                                 |                                        | 171                                      | 77.8                            | 5.50                   | 12.3                      | 44.7                                |
| B 129        | 3.9                 |                                       | 80.6        |                                         | 79.5     | 1.1                               | 5                            |                                 | 2.20                                   | 171                                      | 61.9                            | 5.46                   | 12.1                      | 45.1                                |
| <b>N</b>     | <b>5</b>            | <b>4</b>                              | <b>4</b>    | <b>4</b>                                | <b>5</b> |                                   |                              |                                 | <b>4</b>                               | <b>4</b>                                 | <b>5</b>                        | <b>4</b>               | <b>4</b>                  | <b>4</b>                            |
| <b>Mean</b>  | <b>4.2</b>          | <b>80.6</b>                           | <b>79.7</b> | <b>0.8</b>                              |          |                                   |                              |                                 | <b>2.19</b>                            | <b>170.3</b>                             | <b>66.0</b>                     | <b>5.45</b>            | <b>12.1</b>               | <b>44.9</b>                         |
| <b>Min</b>   | <b>3.9</b>          | <b>80.6</b>                           | <b>79.4</b> | <b>0.6</b>                              |          |                                   |                              |                                 | <b>1.97</b>                            | <b>165</b>                               | <b>59.5</b>                     | <b>5.42</b>            | <b>12.1</b>               | <b>44.7</b>                         |
| <b>Max</b>   | <b>4.5</b>          | <b>80.6</b>                           | <b>80.0</b> | <b>1.2</b>                              |          |                                   |                              |                                 | <b>2.38</b>                            | <b>174</b>                               | <b>77.8</b>                     | <b>5.50</b>            | <b>12.3</b>               | <b>45.1</b>                         |
| <b>Std</b>   | <b>0.2</b>          | <b>0.0</b>                            | <b>0.3</b>  | <b>0.3</b>                              |          |                                   |                              |                                 | <b>0.17</b>                            | <b>3.8</b>                               | <b>7.5</b>                      | <b>0.04</b>            | <b>0.1</b>                | <b>0.2</b>                          |

\* Not Included in Mean

Confidentiality Notice: The data contained herein are confidential and intended for subscriber use only. Data from other subscribers are included for comparison purposes only.

MAL-9B

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

9/30/2012

| Sub # | Growth of Acrospires |         |         |       |           | Screen Assortment |          |          |            | NDMA<br>(ug/kg) | Absolute<br>Viscosity | Turbidity<br>(NTU) | Beta Glucan<br>wort (mg/L) |     |      |      |       |
|-------|----------------------|---------|---------|-------|-----------|-------------------|----------|----------|------------|-----------------|-----------------------|--------------------|----------------------------|-----|------|------|-------|
|       | 0-1/4                | 1/4-1/2 | 1/2-3/4 | 3/4-1 | Overgrown | On 7/64"          | On 6/64" | On 5/64" | Thru 5/64" |                 |                       |                    |                            |     |      |      |       |
| B 25  | 0                    | *       | 2       | *     | 26        | *                 | 60       | 12       | 73.3       | *               | 21.3                  | 4.5                | 0.9                        |     | 1.50 | 5.0  | 99    |
| B 30  | 0                    |         | 0       |       | 5         |                   | 94       | 1        | 60.2       |                 | 30.6                  | 8.1                | 1.1                        |     | 1.54 | 15.4 | 108   |
| B 32  |                      |         |         |       |           |                   |          |          | 58.2       |                 | 32.8                  | 8.2                | 0.8                        |     |      | 17.1 | 119   |
| B 128 |                      |         |         |       |           |                   |          |          | 63.5       |                 | 29.9                  | 6.1                | 0.5                        |     | 1.47 | 12.0 | 99    |
| B 129 | 0                    |         | 0       |       | 4         |                   | 92       | 4        | 61.6       |                 | 30.6                  | 7.1                | 0.7                        | 0.8 | 1.49 | 10.9 | 116   |
| N     | 3                    | 2       | 2       | 2     | 3         | 5                 | 4        | 5        | 5          |                 |                       |                    |                            |     | 4    | 5    | 5     |
| Mean  | 0.0                  | 0.0     | 4.5     | 93.0  | 5.7       | 63.4              | 31.0     | 6.8      | 0.8        |                 |                       |                    |                            |     | 1.50 | 12.1 | 108.3 |
| Min   | 0.0                  | 0.0     | 4.0     | 92.0  | 1.0       | 58.2              | 29.9     | 4.5      | 0.5        |                 |                       |                    |                            |     | 1.47 | 5.0  | 99.0  |
| Max   | 0.0                  | 0.0     | 5.0     | 94.0  | 12.0      | 73.3              | 32.8     | 8.2      | 1.1        |                 |                       |                    |                            |     | 1.54 | 17.1 | 119.0 |
| Std   | 0.0                  | 0.0     | 0.7     | 1.4   | 5.7       | 5.9               | 1.3      | 1.5      | 0.2        |                 |                       |                    |                            |     | 0.03 | 4.7  | 9.2   |

\* Not Included in Mean

*Confidentiality Notice: The data contained herein are confidential and intended for subscriber use only. Data from other subscribers are included for comparison purposes only.*

