Nutritional Analysis - Yellow Peas (Spider)

REPORT NUMBER
15-322-4113

REPORT DATE
Nov 18, 2015

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Midwest Laboratories, Inc.

MONTANA DEPT OF AGRICULTURE
TRESTON VERM randel
321 SOUTH 24TH ST WEST
BILLINGS MT 59101

REPORT OF ANALYSIS
For: (37276) MONTANA DEPT OF AGRICULTURE
NUTRITIONAL ANALYSIS

Sample ID: YELLOW PEAS #000 LIBERTY SPIDER
Lab Number: 2465390

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Level Found</th>
<th>Reporting Limit</th>
<th>Reporting Method</th>
<th>Analyst Date</th>
<th>Verified Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture (vacuum oven)</td>
<td>9.9 %</td>
<td>0.1</td>
<td>AOAC variable *</td>
<td>8/20/15</td>
<td>8/20/15</td>
</tr>
<tr>
<td>Protein</td>
<td>25.0 %</td>
<td>0.1</td>
<td>MWL FO 014 *</td>
<td>8/20/15</td>
<td>8/20/15</td>
</tr>
<tr>
<td>Fat (acid hydrolys)</td>
<td>0.8 %</td>
<td>0.1</td>
<td>AOAC 922.05 (mod)</td>
<td>8/20/15</td>
<td>8/20/15</td>
</tr>
<tr>
<td>Ash</td>
<td>2.1 %</td>
<td>0.1</td>
<td>Ash in Foods *</td>
<td>8/20/15</td>
<td>8/20/15</td>
</tr>
<tr>
<td>Carbohydrates</td>
<td>62.2 Cal</td>
<td>0.1</td>
<td>Calculation *</td>
<td>8/20/15</td>
<td>8/20/15</td>
</tr>
<tr>
<td>Calories</td>
<td>396 Cal</td>
<td>0.1</td>
<td>21 CFR PART 101.9 (CALC)</td>
<td>8/20/15</td>
<td>8/20/15</td>
</tr>
</tbody>
</table>

All results are reported on an AS RECEIVED basis.

Detailed Method Description(s)

Vacuum moisture

Analyses follows MWL FO 002 which references individual AOAC methods for specific materials including beef powders (AOAC 990.19), sugar (AOAC 925.45), flour (AOAC 925.00), pasta (AOAC 926.07), nuts (AOAC 925.40), and others. Samples are weighed in a tin and placed in a special oven that can be sealed, a vacuum produced and temperature regulated. Depending on the material, the amount of sample, vacuum level, temperature, and heating time are followed. After the specified time the samples are re-weighed and the loss in mass is reported as vacuum moisture.

AOAC 992.15 protein

Protein analysis is carried out using MWL FO 014 which is based on AOAC 992.15 and USDA/FSS CLG-PRO004.03. Samples are weighed and placed in an instrument that contains the sample and releases nitrogen. The amount of nitrogen is determined and then multiplied by a factor to convert the nitrogen value to a protein value. The standard reporting level is 0.1%.

Fat (acid hydrolysis)

Analysis follows MWL FO 08 which is based on AOAC 922.06. The homogenized sample is treated with hydrochloric acid and then washed at least twice with both petroleum ether and diethyl ether and the solution placed in a pre-weighted container. The other solution, which contains the dissolved fat, is evaporated and the percent fat determined by the weight gain of the beaker.

Ash in foods

Analysis follows MWL FO 022 which references individual AOAC methods for specific materials including meats (900.02, 920.155, 920.153), confections (AOAC 900.02), spices (AOAC 941.12), pasta (AOAC 925.11), and others. The sample is weighed and ashed at the specified temperature (usually 550 degrees C), cooled in a desiccator and re-weighed. The remaining residue is reported as ash.

Calculation

Analytical results are entered into applicable formulas to provide a calculated result which is reported.
Basic Minerals

REPORT OF ANALYSIS
For: (37270) MONTANA DEPT OF AGRICULTURE
NUTRITIONAL ANALYSIS

Sample ID: GREEN PEAS #04 RICHLAND CRUISER
Lab Number: 2465392

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Level Found</th>
<th>Reporting limit</th>
<th>Reporting method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium (total)</td>
<td>925 ppm</td>
<td>5.0 ppm</td>
<td>ACAC 2011.14 (mod)</td>
</tr>
<tr>
<td>Potassium (total)</td>
<td>7490 ppm</td>
<td>10 ppm</td>
<td>ACAC 2011.14 (mod)</td>
</tr>
<tr>
<td>Sodium (total)</td>
<td>n.d.</td>
<td>25 ppm</td>
<td>ACAC 2011.14 (mod)</td>
</tr>
<tr>
<td>Iron (total)</td>
<td>46.8 ppm</td>
<td>5.0 ppm</td>
<td>ACAC 2011.14 (mod)</td>
</tr>
</tbody>
</table>

All results are reported on an AS RECEIVED basis, n.d. = not detected, ppm = parts per million, ppm = mg/kg

Detailed Method Description(s)

ME 027
Analysis follows MVL ME 027 which is based on ACAC 2011.14. Samples have been prepared by MVL ME 077 using a wet ash process. Sample analysis involves removing the sample extract into the ICP where it is nebulized and introduced into the high temperature plasma which energizes the electrons of the dissolved minerals/metal. As the energized electrons of the minerals/metal return to ground state, energy is released as light. The emitted wavelength(s) and light intensities are used to identify and quantitate the minerals/metal in the sample.