

2022 Domestic Pricing Effective February 1st.

| Test | Description | 2021 Price |
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| NIR Packages | | |
| NIR1 Package | The NIR 1 Analysis includes tests for Dry Matter, Moisture, Crude Protein, ADFCP, NDFCP, Soluble Protein, ADF, NDF, Lignin, Starch, Sugar, Fat, Ash, Calcium (Ca), Phosphorus (P), Magnesium (Mg), and Potassium (K) and pH on ensiled forage. Calculated values are provided for Available Protein, Adjusted Protein, Degradable Protein, NEI, NEm, NEg (OARDC Summative Energy Equation), NSC and NFC. | \$ 19.50 |
| NIR2 Package | The NIR 2 is the NIR 1 Analysis with wet-chemistry Minerals - Calcium (Ca), Phosphorus (P), Magnesium (Mg), Potassium (K), Sodium (Na), Iron (Fe), Manganese (Mn), Zinc (Zn), and Copper (Cu). | \$ 29.50 |
| NIR3 Package | The NIR 3 is the NIR 2 Analysis plus wet-chemistry on Chloride (Cl), Sulfur (S), and DCAD. | \$ 37.75 |
| NIR4 Package | The NIR 4 is the NIR 2 Analysis plus wet-chemistry on Crude Protein, ADF and NDF. | \$ 42.75 |
| NIR5 Package | The NIR 5 is the NIR 1 Analysis plus wet-chemistry on Crude Protein, ADF, and NDF. | \$ 31.50 |
| NIR Plus Option | Provides 30 hr NDF Digestibility with Kd rate, an NIR evaluation of fermentation acids (for ensiled forages), as well as a uNDF at 30 hrs, a uNDF at 120 hrs and 240 hrs, total fatty acids, and soluble fiber. This option also includes a soil contamination probability index of low, medium, or high for forages. A nitrate probability is reported as low, medium, or high. For corn silage, the NIR Plus Option provides 12 hr NDF digestibility and 7 hr (4mm) starch digestibility. | \$ 9.50 |
| CPM Option | Provides Neutral Detergent Residue (NDR) in place of aNDF analysis. | |
| NIR Non-Forage Ingredients | Almond hulls, Bakery, Beet Pulp, Brewers, Canola, Corn, Distillers, Gluten Feed, Midds, SBM, and Small Grains. | \$ 18.50 |
| Manure Package | Provides Dry Matter, Crude Protein, ADF, NDF, Lignin, Starch, Ash, Ca, P, Mg, K. | \$ 18.50 |
| Apparent Nutrient Digestibility by TMR and Fecal Evaluation | Includes an NIR Plus evaluation of a high group TMR and associated fecal matter to generate an evaluation of apparent NDF and starch digestibility. | \$ 61.25 |
| TMR Mixture Evaluation Package | (Set of 5 samples analyzed to assess mixer efficiency) NIR analysis with chemistry minerals. This package includes Dry Matter, Crude Protein, Soluble Protein, ADF, NDF, ADFCP, NDFCP, Lignin, Fat, Starch, Sugar, Ash, Ca, P, Mg, K, Na, Fe, Mn, Zn, Cu, Cl, and S. | \$ 141.75 |

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| TMR Control - NIR Package | NIR analysis with chemistry minerals. This package includes Dry Matter, Crude Protein, Soluble Protein, ADF, NDF, ADFCP, NDFCP Lignin, Fat, Starch, Sugar, Ash, Ca, P, Mg, K, Na, Fe, Mn, Zn, Cu, Cl, and S. Also included is an evaluation for peNDF, SPS (starch processing score), and the Penn State Particle Size Evaluation. | | \$ 75.50 |
| Chemistry Packages | | | |
| Standard Package | Includes Dry Matter, Moisture, Crude Protein, Adjusted Protein, Soluble Protein, calculated Degradable Protein (Forages only), Acid Detergent Fiber (ADF), Neutral Detergent Fiber (NDF), Ash, NFC, (Energy values on forages only) TDN, NEI, NEm, NEg, RFV (for hays and haylages), and Ca, P, Mg, K, Na, Fe, Mn, Zn, and Cu with pH on an ensiled forage. | | \$ 38.75 |
| Standard Plus Energy | Standard Package plus Fat, Lignin, ADFCP, NDFCP to get Energy Values on Non-Forages. | | \$ 63.75 |
| CPM Plus Package | Includes the Standard Analysis and Lignin, Fat, ADFCP, NDFCP, Chloride, Sulfur, Starch, Sugar, TDN, NEI, NEm, and NEg. When combined with our Fermentation Analysis a Soluble Fiber is calculated. (Energy values on forages only). | | \$ 88.75 |
| RFV Package | Includes Dry Matter, Moisture, Crude Protein, ADF, NDF, calculated RFV (on hays and haylages), Adjusted Protein, NEI, NEm, NEg, and TDN. | | \$ 25.50 |
| Basic NDF Package | Dry Matter, Moisture, Crude Protein, ADF, NDF, Minerals (Ca, P, Mg, K, Na, Fe, Mn, Zn, and Cu), pH on ensiled forages, with calculated values for Adjusted Protein, TDN, NEI, NEg, NEm and Ash. (Energy values on forages only). | | \$ 34.75 |
| Minerals Only | Includes Dry Matter, Ca, P, Mg, K, Na, Fe, Mn, Zn, Cu, and Ash. | | \$ 26.50 |
| Minerals Only (High Concentration) | Includes Dry Matter, Ca, P, Mg, K, Na, Fe, Mn, Zn, Cu, and Ash. | | \$ 40.75 |
| TMR Diagnostic Package | Includes DM, Crude Protein, Soluble Protein, Ammonia, ADF, NDF, ADFCP, NDFCP, Lignin, Fat, Starch, 7-hour Starch Degradability, Sugar, Ash, Ca, P, Mg, K, Na, Cl, S, Fe, Mn, Zn, Cu, Lactic Acid, Acetic Acid, Butyric Acid, peNDF, (physically effective NDF - Mertens), SPS (starch processing score) and the Penn State Particle Size Evaluation. | | \$ 188.75 |
| Animal Protein Package | Provides Dry Matter, Moisture, Crude Protein, Soluble Protein, Ash, Fat, Ca, P, Cl, and S. | | \$ 59.75 |
| Liquid Sample | Provides Dry Matter, Moisture, Crude Protein, Ammonia, Fat, Sugar, Ash, Ca, P, Mg, K, Na, Fe, Mn, Zn, and Cu. | | \$ 58.75 |

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| Liquid Sample | Above analysis with Karl Fischer moisture - appropriate when volatiles other than moisture are present in the sample. | | \$ 109.25 |
| Wet Chemistry Options | | | |
| Fermentation Package | Includes Dry Matter, Lactic Acid, Acetic Acid, Propionic Acid, Butyric Acid, Iso-butyric Acid, 1, 2 - Propanediol, Total VFA, pH, Lactic Acid/VFA ratio, Crude Protein equivalent of Ammonia as a percentage of Dry Matter and Crude Protein | | \$ 30.00 |
| Fermentation Analysis Plus Package | Includes Fermentation Analysis as well as a breakdown of Alcohols, Acetates, and Lactates. | | \$ 45.00 |
| Fatty Acid Profile, 30m column | 30 meter column: 22 fatty acids from C12 to C24, and total fatty acids. | | \$ 67.00 |
| Fatty Acid Profile, other products, 100m column | Other products requiring 100 meter column: C4 to C24 with trans fatty acids. | | \$ 99.75 |
| Milk Fatty Acid Profile, 100m column | 100 meter column: C4 to C24 with trans fatty acids, de novo, mixed, preformed, total saturated and unsaturated fatty acids, CLA, MUFA, and PUFA. | | \$ 99.75 |
| Free Fatty Acids | | | \$ 29.50 |
| Toxic Elements | Arsenic, Lead, Chromium, Mercury | | \$ 65.00 |
| Mold Count | Mold/Yeast Count | | \$ 28.50 |
| Mold Identification | Mold/Yeast Count with Mold Identification | | \$ 50.00 |
| PDI/Urease (soy products only) | Protein Dispersibility Index (includes PDI, and Urease Activity). Needs run with Crude Protein. | | \$ 52.50 |
| Micron Particle Size | | | \$ 21.50 |
| Byproduct | An add-on to the standard package, fat, lignin, ADFCP, NDFCP, sulfur, and chloride. | | \$ 36.25 |
| DCAD (CL, S) | Must also include a package with wet chemistry minerals to calculate DCAD value. | | \$ 14.25 |
| Corn Silage Processing Score (CSPS) | | | \$ 20.50 |
| Wet CSPS | | | \$ 20.50 |
| Physically Effective NDF (PENDF) | | | \$ 20.50 |
| Particle Size Evaluation | Penn State Separator | | \$ 8.75 |
| In Vitro Analysis | | | |
| MSPE | Based on work by Dr. Debbie Ross and Dr. Mike Van Amburgh. An In vitro evaluation of feed material is followed by treatment sequentially with acid and enzymes. Rumen availability as well as intestinal digestibility is provided. Needs run with Crude Protein. | | \$ 121.50 |
| MSPE, Freeze Dry | Needs run with Crude Protein. | | \$ 152.50 |
| NDF Digestibility In Vitro Per Time Point | 6, 12, 24, 30, 48 or 240 hrs (uNDF). Other time points may be available upon request. | | \$ 29.00 |

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| NDF Digestibility In Vitro Time Point Series (6 points) | | \$ | 152.00 |
| Starch Digestibility In Vitro Per Time Point | 2, 4, 6, 7, 8, 12, 24, or 30 hrs. Other time points may be available upon request. | \$ | 35.25 |
| Starch Digestibility In Vitro Time Point Series (6 points) | | \$ | 186.25 |
| Dry Matter Digestibility In Vitro Per Time Point | 4, 6, 12, 24, 30, 48, 72, 96, 120, or 240 hrs. | \$ | 23.00 |
| Dry Matter Digestibility In Vitro Time Point Series (6 points) | | \$ | 111.75 |
| NDF Basic RPE (Rate Pool Evaluation) for Forages | 30, 120, and 240 hrs. Needs run with NDFom. | \$ | 74.00 |
| NDF Standard RPE for Forages | 4, 8, 12, 24, 48, 72, 120, and 240 hrs. Needs run with NDFom. | \$ | 137.75 |
| NDF Basic RPE for Ingredients | 12, 72, and 120 hrs. Needs run with NDFom. | \$ | 74.00 |
| NDF Standard RPE for Ingredients | 4, 8, 12, 24, 48, 72, 120, and 240 hrs. Needs run with NDFom. | \$ | 137.75 |
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| In Situ Analysis | | | |
| Protein Digestibility In Situ | Rumen Undegradable Protein (RUP) at 16 hrs. | \$ | 101.50 |
| Dry Matter Digestibility In Situ Per Time Point | 24, 30, or 48 hrs. Other time points may be available upon request. | \$ | 74.50 |
| Starch Digestibility In Situ Per Time Point | 7, 16, or 24 hrs. Other time points may be available upon request. | \$ | 91.75 |
| NDF Digestibility In Situ Per Time Point | 6, 24, 30, 48, 96, or 120 hrs. Other time points may be available upon request. | \$ | 101.50 |
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| Proximates | | | |
| TAG 1 Package | Includes Dry Matter, Moisture, Crude Protein, Crude Fat and Crude Fiber. | \$ | 30.50 |
| TAG 2 Package | Includes Tag I plus Ash, Ca and P. | \$ | 40.75 |
| TAG 3 Package | Includes Tag I plus Ash and Ca, P, Mg, K, Na, Fe, Mn, Zn, Cu. | \$ | 51.00 |
| TAG 4 Package | Includes Dry Matter, Moisture, Ash, Ca and P. | \$ | 25.50 |
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| Amino Acids | | | |
| Must be run with Crude Protein. | | | |
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| Cysteine, Methionine, Lysine plus 9 more | Cysteine, Methionine, Lysine, Aspartic Acid, Threonine, Glutamic Acid, Proline, Glycine, Alanine, Valine, Isoleucine, and Leucine. | \$ | 102.00 |
| Full Profile without Tryptophan | Cysteine, Methionine, Lysine, Aspartic Acid, Threonine, Glutamic Acid, Proline, Glycine, Alanine, Valine, Isoleucine, Leucine, Taurine, Hydroxyproline, Serine, Lanthionine, Tyrosine, Phenylalanine, Hydroxylysine, Ornithine, Histidine, and Arginine. | \$ | 139.00 |

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| Full Profile with Tryptophan | Cysteine, Methionine, Lysine, Aspartic Acid, Threonine, Glutamic Acid, Proline, Glycine, Alanine, Valine, Isoleucine, Leucine, Taurine, Hydroxyproline, Serine, Lanthionine, Tyrosine, Phenylalanine, Hydroxylysine, Ornithine, Histidine, Arginine, and Tryptophan. | | \$ 160.00 |
| Total Lysine | | | \$ 89.75 |
| Total Methionine | | | \$ 89.75 |
| Tryptophan | | | \$ 89.75 |
| Mycotoxin Screen by LC-MS/MS | | | |
| Mycotoxin Basic | Aflatoxin (B1, B2, G1, G2), Deoxynivalenol, and Zearalenone | | \$ 101.00 |
| Mycotoxin Plus | Aflatoxin (B1, B2, G1, G2), Deoxynivalenol, Zearalenone, Fumonisin (B1, B2, B3), T-2, and HT-2 | | \$ 148.00 |
| Mycotoxin Premier | Aflatoxin (B1, B2, G1, G2), Deoxynivalenol, Zearalenone, Fumonisin (B1, B2, B3), T-2, HT-2, 3-Acetyl DON, 15-Acetyl DON, and Ochratoxin A | | \$ 254.00 |
| Mycotoxin, individual | Aflatoxin (B1, B2, G1, G2), Deoxynivalenol, Zearalenone, Fumonisin (B1, B2, B3), T-2, HT-2, or Ochratoxin A | | \$ 66.75 |
| Components | | | |
| Acid Insoluble Ash | | | \$ 19.50 |
| ADF | | | \$ 7.75 |
| ADFom (ash free) | | | \$ 10.25 |
| ADFoCP | | | \$ 7.75 |
| Ammonia Nitrogen | | | \$ 12.50 |
| Ash | | | \$ 7.75 |
| Barium | | | \$ 40.25 |
| Boron | | | \$ 13.25 |
| Chloride | | | \$ 7.75 |
| Cobalt | | | \$ 38.76 |
| Crude Fiber | | | \$ 11.75 |
| Crude Protein | | | \$ 7.75 |
| Degradable Protein (<i>S. griseus</i>) | Needs run with Crude Protein. | | \$ 14.25 |
| Equine Energy | | | |
| Ergonovine | | | \$ 122.50 |
| Fat (Acid Hydrolysis) | | | \$ 28.00 |
| Fat (Ether Extract) | | | \$ 11.25 |
| Fecal Starch | | | \$ 13.75 |
| Gossypol Free | | | \$ 410.50 |
| Gossypol Total | | | \$ 281.00 |
| Initial Peroxide (on liquid materials) | | | \$ 31.50 |
| Initial Peroxide (on dry materials) | | | \$ 93.75 |
| Iodine Value (Fat & Oils) | | | \$ 52.50 |
| Iodine, Elemental (Minerals & Metals) | | | \$ 81.00 |

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| Karl Fischer Moisture | | \$ | 50.50 |
| KOH | Needs run with Crude Protein. | \$ | 48.00 |
| Lactose | | \$ | 78.75 |
| Lead | | \$ | 38.75 |
| Lignin | | \$ | 11.25 |
| Moisture Only (Dry Matter) | Moisture loss at 135°C for 2 hrs for feed ingredients; 105°C for 3 hrs for forages. | \$ | 3.50 |
| Molybdenum | | \$ | 13.25 |
| aNDF | | \$ | 7.75 |
| aNDFom (ash-free) | | \$ | 10.25 |
| aNDF-CP | | \$ | 7.75 |
| aNDR | | \$ | 7.75 |
| Nitrate | | \$ | 12.25 |
| Non-Protein Nitrogen (NPN) | Urea and ammonia, CPE basis | \$ | 32.25 |
| Pepsin Digestibility | 0.2% pepsin as per AOAC. Includes Crude Protein | \$ | 55.25 |
| pH | | \$ | 6.75 |
| Prolamin | | \$ | 29.75 |
| Prussic Acid (Cyanide) | | \$ | 63.25 |
| Salt (as chloride) | | \$ | 7.75 |
| Selenium | Expected levels needed. | \$ | 46.00 |
| Soluble Protein | | \$ | 7.75 |
| Starch | | \$ | 13.75 |
| Starch (Gelatinized) | | \$ | 51.00 |
| Soluble starch | | \$ | 18.50 |
| Sugar (ESC) | | \$ | 11.25 |
| Sugar (WSC) | | \$ | 12.25 |
| Sulfur | | \$ | 7.75 |
| Trypsin Inhibitor | | \$ | 100.75 |
| Urease Activity (soy products only) | | \$ | 26.75 |
| Vitamins | | | |
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| Water Analysis | | | |
| Total Coliform and E.coli | Done at Fraser and is in Canadian dollars | \$ | 46.35 |
| Nitrate Nitrogen and pH | | \$ | 15.25 |
| Livestock Suitability Package | Includes pH, hardness, total dissolved solids, Ca, P, Mg, K, Na, Fe, Mn, Zn, Cu, chlorides, sulfate, and nitrate. | \$ | 41.75 |
| pH | | \$ | 6.75 |
| Alkalinity | | \$ | 13.25 |
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| Manure Analysis | | | |
| Base Test Package 1 | Total Nitrogen, P2O5, K2O, NH ₄ ⁺ -N, Total Solids, Density | \$ | 40.50 |
| Base Test Package 2 | Total Nitrogen, P2O5, K2O, NH ₄ ⁺ -N, Total Solids | \$ | 35.00 |
| Base Test Package 3 | Total Nitrogen, P2O5, K2O, NH ₄ ⁺ -N | \$ | 33.00 |
| Water Soluble Phosphorus | PSC included | \$ | 12.50 |

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| Minerals (with manure package) | Ca, P, K, Mg, Na, Fe, Mn, Zn, and Cu | | \$ | 12.25 |
| Volatile Solids | | | \$ | 7.75 |
| pH | | | \$ | 6.75 |
| Total Carbon | C/N Ratio | | \$ | 15.00 |
| Plant Tissue Analysis | | | | |
| Standard | N, P, K, Ca, Mg, Na, S, Fe, Mn, Zn, Cu, and B | | \$ | 47.25 |
| Trace Minerals each | Cd, Co, Pb, Mo, and Ni | | \$ | 43.00 |
| Samples run for Nitrate, Nitrogen, Carbon, or Sulfur without a mineral package will incur a \$6.00 processing charge. | | | | |
| Nitrate Nitrogen | | | \$ | 12.25 |
| Total Nitrogen | | | \$ | 7.75 |
| Total Carbon | | | \$ | 15.00 |
| Total Sulfur | | | \$ | 7.75 |
| Equine Services | | | | |
| Equine Basic | This NIR package includes Dry Matter, Moisture, Digestible Energy, NSC, NFC, RFV (hays and haylages only), Starch, Sugar (WSC and ESC), Crude Protein, Soluble Protein, ADF, NDF, NDFom, ADFCP, NDFCP, Lignin, Fat, Ash, Calcium (Ca), Phosphorus (P), Magnesium (Mg), and Potassium (K). | | \$ | 18.25 |
| Equine Lancer | This package includes Dry Matter, Moisture, Digestible Energy, NSC, NFC, RFV (hays and haylages only), Starch, Sugar, Crude Protein, Soluble Protein, ADFCP, NDFCP, Lignin, WSC, ADF, NDF, NDFom, Fat, Fatty Acids (total), and Ash by NIR. Chemistry minerals are provided, superior analytically to NIR predictions, including Calcium (Ca), Phosphorus (P), Magnesium (Mg), Potassium (K), Sodium (Na), Iron (Fe), Manganese (Mn), Zinc (Zn), and Copper (Cu). | | \$ | 29.50 |
| Equine Chemistry Basic | This package is similar to the Equine Lancer package but uses reference chemistry methods in place of more economical NIR. It provides Dry Matter, Moisture, Digestible Energy, NSC, NFC, RFV (hays and haylages only), Starch, WSC, Crude Protein, Soluble Protein, ADF, NDF, Ash, Calcium (Ca), Phosphorus (P), Magnesium (Mg), Potassium (K), Sodium (Na), Iron (Fe), Manganese (Mn), Zinc (Zn), and Copper (Cu). | | \$ | 63.75 |

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| Equine Chemistry Complete | This package includes Dry Matter, Moisture, Digestible Energy, NSC, NFC, RFV (hays and haylages only), Starch, Sugar, Crude Protein, Soluble Protein, WSC, ADF, NDF, ADFCP, NDFCP, Lignin, Fat, Ash, Calcium (Ca), Phosphorus (P), Magnesium (Mg), Potassium (K), Sodium (Na), Sulfur (S), Chloride (Cl), Iron (Fe), Manganese (Mn), Zinc (Zn), and Copper (Cu). | | \$ 88.75 |
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