



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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CHEMICAL

Valid To: August 31, 2024

Certificate Number: 2853.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests on foods (human, pet, and animal):

| <u>Test(s)</u>  | <u>Technology</u>                                 | <u>Test Method(s)</u> |
|---|---|-----------------------|
| Allergens (Gluten, Gliadin, Competitive Gliadin, Almond, Milk, Peanut, Pecan, Walnut, Macadamia, Sesame, Crustacean, Mustard, Lupine, Egg, Soy, Hazelnut, Coconut, Fish) <sup>5</sup> | ELISA   | FO 064                |
| Amino Acid Profile (Cysteine and Methionine) <sup>2,3</sup>   | HPLC-PCD  | HPLC 019              |
| Ammoniacal Nitrogen in Fertilizers <sup>2</sup>   | Titration   | WC 015                |
| Antibiotics (Erythromycin, Oxytetracycline, Tetracycline, Chlorotetracycline, Doxycycline, Virginiamycin, Penicillin, and Tylosin) <sup>2</sup>                                       | LC/MS/MS  | LCMS 011              |
| Ash Determination in Feeds <sup>4</sup>   | Gravimetric                                       | FD 019                |
| Ash Determination in Foods <sup>5</sup>   | Gravimetric                                       | FO 022                |
| Available Phosphorus (Direct) in Fertilizers <sup>2,1</sup>   | ICP-AES or Spectrophotometer (depending on level) | WC 089, ME 092        |

| <u>Test(s)</u>  | <u>Technology</u>   | <u>Test Method(s)</u> |
|---|---------------------|-----------------------|
| Available Phosphorus (Indirect) in Fertilizers <sup>2,1</sup>   | ICP-AES             | WC 010, ME 026        |
| Chloride <sup>4</sup>   | Titration           | FD 010                |
| Crude Fiber <sup>4</sup>  | Gravimetric         | FD 039                |
| Fat (Acid Hydrolysis) <sup>4</sup>  | Gravimetric         | FD 027                |
| Fat (Acid Hydrolysis) <sup>5</sup>  | Gravimetric         | FO 008                |
| Fat (Base Hydrolysis) <sup>5</sup>  | Gravimetric         | FO 009                |
| Fat (Ether Extraction) <sup>4</sup>   | Gravimetric         | FD 026                |
| Fat (Petroleum Ether Extraction) <sup>5</sup>   | Gravimetric         | FO 007                |
| Fat Soluble Vitamins (Vitamin D3 and E) <sup>2,3</sup>  | LC/MS/MS            | HPLC 034              |
| Fatty Acid Profile (Saturated, Polyunsaturated, and Mono-unsaturated) <sup>2,3</sup>  | GC-FAMES            | HPLC 004, 008         |
| Fiber (Acid Detergent) <sup>4</sup>   | Gravimetric         | FD 021                |
| Fiber (Neutral Detergent) <sup>4</sup>  | Gravimetric         | FD 022                |
| Genetically Modified Organisms (GMO) <sup>5</sup>   | Digital Droplet PCR | FO 065                |
| Glycoalkaloids in Potato Products <sup>2</sup>  | LC/MS/MS            | HPLC 044              |
| Glyphosate and Metabolites <sup>2</sup>   | LC/MS/MS            | LCMS 028              |
| HPLC-UV – Cannabinoid Potency in Plant, Oil, and Edible Materials <sup>2,7</sup>  | HPLC-UV             | HPLC 059              |
| Lysine <sup>2,3</sup>   | LC/MS/MS            | HPLC 024              |
| Meat Speciation (Sheep, Chicken, Goat, Beef, Pork, Turkey, Horse, Alligator, Bison, Kangaroo, Duck, Venison, Rabbit, Salmon) <sup>5</sup> | Digital Droplet PCR | FO 073                |
| Melamine, Cyanuric Acid, Ammeline, and Ammelide <sup>2</sup>  | LC/MS/MS            | LCMS 018              |



| <u>Test(s)</u>   | <u>Technology</u>           | <u>Test Method(s)</u> |
|--|-----------------------------|-----------------------|
| Mercury (Hg) <sup>1</sup>  | CVAA                        | ME 037, 067           |
| Metals and Minerals in Feed/Animal Foods (Ca, P, Mg, Fe, Na, S, K, Mn, Cu, Zn) <sup>1</sup>  | ICP-AES                     | ME 029, 069           |
| Metals and Minerals in Foods (Ca, Mg, Fe, K, Na) <sup>1,6</sup>  | ICP-AES                     | ME 027, 077           |
| Metals in Feed/Animal Foods (As, Sb, Cd, Pb, Se) <sup>1</sup>  | ICP-AES                     | ME 013, 042           |
| Metals in Foods (As, Pb, Cd, Hg) <sup>6</sup>  | ICP-MS                      | ME 080, 081           |
| Metals in Premixes (Se) <sup>1</sup>   | ICP-AES                     | ME 077, 042           |
| Moisture <sup>5</sup>  | Gravimetric-Vacuum Oven     | FO 002                |
| Moisture Determination in Feeds <sup>4</sup>   | Gravimetric                 | FD 016                |
| Moisture Determination in Feeds <sup>4</sup>   | Gravimetric-Vacuum Oven     | FD 018                |
| Moisture in Meat <sup>5</sup>  | Gravimetric-Convection Oven | FO 001                |
| Moisture, Loss on Ignition, and Ash in Fertilizers <sup>2</sup>  | Gravimetric                 | WC 060                |
| Mycotoxins (Aflatoxin B1, B2, G1, G2, Zearalenone, T2, Ochratoxin, DON, Fumonisin B1, B2, B3) <sup>2</sup>   | LC/MS/MS                    | LCMS 020              |
| Nitrates in Fertilizers <sup>4,1</sup>   | Segmented Flow Analysis     | WC 032, EN 004        |
| Nitrogen and Carbon in Fertilizers <sup>2,4</sup>  | Combustion                  | WC 111, 112           |
| Non-Protein Nitrogen in Fertilizers <sup>2</sup>   | Titration                   | WC 035                |
| Pentobarbital in Pet Food <sup>2</sup>   | GC/MS/MS                    | HPLC 053              |
| Pesticides <sup>2</sup> :<br>(E)-Chlorfenvinphos<br>(Z)-Chlorfenvinphos<br>2,4'-Methoxychlor<br>2-Phenylphenol<br>3,4'-Dichloroaniline<br>4,4'-Methoxychlor olefin<br>Acephate<br>Acetochlor | GC/MS/MS                    | LCMS 021              |

| <u>Test(s)</u>  | <u>Technology</u> | <u>Test Method(s)</u> |
|---|-------------------|-----------------------|
| Acrinathrin<br>Alachlor<br>Aldrin<br>Allidochlor<br>alpha-BHC<br>Ametryn<br>Atrazine<br>Azinphos-ethyl<br>Azinphos-methyl<br>Benfluralin<br>beta-BHC<br>Bifenthrin<br>Bromacil<br>(E)-Bromfenvinphos<br>(Z)-Bromfenvinphos<br>Bromfenvinphos-methyl<br>Bromophos<br>Bromophos-ethyl<br>Bromopropylate<br>Bupirimate<br>Butachlor<br>Butylate<br>Captan<br>Carbaryl<br>Carbophenothion<br>Carfentrazone-ethyl<br>Chlorbenside<br>Chlorfenapyr<br>Chlorfenson<br>Chloroneb<br>Chlorothalonil<br>Chlorpropham<br>Chlorpyrifos<br>Chlorpyrifos-methyl<br>Chlorthal-dimethyl<br>Chlorthiophos-1<br>Chlorthiophos-2<br>Chlorthiophos-3<br>Chlozolate<br>cis-Chlordane<br>cis-Nonachlor<br>Clomazone<br>Coumaphos<br>Cyanazine<br>Cycloate<br>Cyfluthrin-1<br>Cyfluthrin (sum of isomers 2,3,4)<br>Cypermethrin-1<br>Cypermethrin (sum of isomers 2,3,4) |                   |                       |



| <u>Test(s)</u>   | <u>Technology</u> | <u>Test Method(s)</u> |
|--|-------------------|-----------------------|
| Cyprodinil<br>Deisopropylatrazine<br>delta-BHC<br>Deltamethrin-2<br>Demeton-O<br>Demeton-S<br>Desethylatrazine<br>Di-allate-1<br>Di-allate-2<br>Diazinon<br>Dichlobenil<br>Dichlofluanid<br>Dichlorvos<br>Dieldrin<br>Dimethachlor<br>Dimethenamid<br>Dimethoate<br>Diphenamid<br>Diphenylamine<br>Edifenphos<br>Endosulfan ether<br>Endosulfan I<br>Endosulfan II<br>Endosulfan sulfate<br>Endrin<br>Endrin ketone<br>EPN<br>EPTC (Eptam)<br>Ethalfluralin<br>Ethion<br>Ethoprophos<br>Ethylan<br>Etofenprox<br>Etridiazole<br>Fenamiphos<br>Fenarimol<br>Fenchlorphos<br>Fenitrothion<br>Fenpropathrin<br>Fenson<br>Fensulfothion<br>Fenthion<br>Fenvalerate-1<br>Fenvalerate-2<br>Fipronil<br>Fluazifop-P-butyl<br>Fluchloralin<br>Flucythrinate-1<br>Flucythrinate-2 |                   |                       |



| <u>Test(s)</u>   | <u>Technology</u> | <u>Test Method(s)</u> |
|--|-------------------|-----------------------|
| Fludioxonil<br>Fluquinconazole<br>Fluridone<br>Flusilazole<br>Flutolanil<br>Flutriafol<br>Folpet<br>Fonofos<br>gamma-BHC<br>Heptachlor<br>Cis-Heptachlor<br>Hexachlorobenzene<br>Hexazinone<br>Imazalil<br>Iodofenphos<br>Iprodione<br>Isazofos<br>Isodrin<br>Isofenphos<br>Isopropalin<br>lambda-Cyhalothrin<br>Lenacil<br>Leptophos<br>Linuron<br>Malathion<br>Metalaxyl<br>Metazachlor<br>Methacrifos<br>Methamidophos<br>Methiocarb<br>Methoxychlor<br>Methyl Parathion<br>Metolachlor<br>Metribuzin<br>Mevinphos (sum of isomers)<br>MGK-264-1<br>MGK-264-2<br>Mirex<br>Myclobutanil<br>N-(2,4-Dimethylphenyl)formamide<br>Naled<br>Nitalin<br>Nitrapyrin<br>Nitrofen<br>Norflurazon<br>o,p'-DDD<br>o,p'-DDE<br>o,p'-DDT/p,p'-DDD (sum of analytes) |                   |                       |



| <u>Test(s)</u>  | <u>Technology</u> | <u>Test Method(s)</u> |
|---|-------------------|-----------------------|
| <p>Omethoate<br/> Oxadiazon<br/> Oxyfluorfen<br/> p,p'-DDE<br/> Pacllobutrazol<br/> Parathion Ethyl<br/> Pebulate<br/> Penconazole<br/> Pendimethalin<br/> Pentachloroaniline<br/> Pentachloroanisole<br/> Pentachlorobenzene<br/> Pentachlorobenzonitrile<br/> Pentachlorothioanisole<br/> Cis-Permethrin<br/> Trans-Permethrin<br/> Phenothrin-1<br/> Phenothrin-2<br/> Phorate<br/> Phosalone<br/> Phosmet<br/> Piperonyl butoxide<br/> Pirimiphos-ethyl<br/> p,p'-DDT<br/> Pretilachlor<br/> Prochloraz<br/> Procymidone<br/> Prodiamine<br/> Profenofos<br/> Profluralin<br/> Prometon<br/> Prometryn<br/> Promiphos methyl<br/> Propachlor<br/> Propanil<br/> Propargite (sum of isomers)<br/> Propazine<br/> Propisochlor<br/> Propyzamide<br/> Prothiofos<br/> Pyraclofos<br/> Pyrazophos<br/> Pyridaben<br/> Pyridaphenthion<br/> Pyrimethanil<br/> Pyriproxyfen<br/> Quinalphos<br/> Quintozene<br/> Resmethrin-1</p> |                   |                       |



| <u>Test(s)</u>   | <u>Technology</u> | <u>Test Method(s)</u> |
|--|-------------------|-----------------------|
| Resmethrin-2<br>Simazine<br>Sulfotep<br>Sulprofos (Bolstar)<br>tau-Fluvalinate-1<br>tau-Fluvalinate-2<br>Tebuconazole<br>Tebufenpyrad<br>Tecnazene<br>Tefluthrin<br>TEPP<br>Terbacil<br>Terbufos<br>Terbutylazine<br>2,3,5,6-Tetrachloroaniline<br>Tetrachlorvinphos<br>Tetradifon<br>Tetrahydrophthalimide (sum of isomers)<br>Tetramethrin-1<br>Tetramethrin-2<br>Thiabendazole<br>Tolclofos-methyl<br>Tolyfluanid<br>trans-Chlordane<br>Transfluthrin<br>trans-Nonachlor<br>Triadimenol-1<br>Triadimenol-2<br>Triallate<br>Triazophos<br>Trichloronat<br>Tricyclazole<br>Triflumizole<br>Trifluralin<br>Vinclozolin |                   |                       |
| Potassium, High Soluble in Fertilizers <sup>2,1</sup>  | ICP-AES           | WC 099, ME 026        |
| Protein (Crude) <sup>4</sup>   | Combustion        | FO 014                |
| Protein (Crude) in Feed/Animal Foods <sup>4</sup>  | Combustion        | FD 070                |
| Salt-Volhard Method <sup>5</sup>   | Titration         | FO 026                |



| <b><u>Test(s)</u></b>  | <b><u>Technology</u></b> | <b><u>Test Method(s)</u></b> |
|--|--------------------------|------------------------------|
| Sugar Profile (Glucose, Fructose, Sucrose, Maltose, Lactose) <sup>2,3</sup>  | HPLC-RI                  | HPLC 009                     |
| Sulfur in Fertilizers <sup>2,4</sup>   | Combustion               | WC 065                       |
| Taurine <sup>2,3</sup> (Free and Total)  | LC/MS/MS                 | HPLC 049                     |
| Thyroid Hormone in Pet Foods <sup>2</sup>  | LC/MS/MS                 | LCMS 023                     |
| Total Amino Acid Profile (Threonine, Serine, Glutamic Acid, Proline, Glycine, Alanine, Valine, Isoleucine, Leucine, Tyrosine, Phenylalanine, Lysine, Histidine, Arginine) <sup>2,3</sup> | LC/MS/MS                 | HPLC 048                     |
| Total Iodine <sup>6</sup>  | ICP-MS                   | ME 082                       |
| Total/Ortho Phosphorus in Fertilizers <sup>2</sup>   | Spectrophotometer        | WC 004                       |
| Total Starch <sup>4</sup>  | Glucometer               | WC 047                       |
| Total, Soluble, and Insoluble Dietary Fiber <sup>5</sup>   | Gravimetric              | FO 027                       |
| Tryptophan <sup>2,3</sup>  | LC/MS/MS                 | HPLC 025                     |
| Vitamin A <sup>2,3</sup>   | HPLC                     | HPLC 011                     |
| Vitamin A <sup>2,3</sup>   | HPLC-UV                  | HPLC 071                     |
| Vitamin B1 (Thiamine) <sup>2,3</sup>   | HPLC                     | HPLC 022                     |
| Vitamin C <sup>2,3</sup>   | HPLC                     | HPLC 010                     |
| Vitamin D2 & D3 <sup>2,3</sup>   | LC/MS/MS                 | HPLC 064                     |
| Vitamin E <sup>2</sup>   | HPLC-UV                  | HPLC 070                     |
| Water Soluble Vitamins (Vitamin B2 (Riboflavin), Pantothenic Acid, Vitamin B6 (Pyridoxine), Biotin, Folic Acid, Vitamin B12, Niacin, Nicotinamide, Nicotinic Acid) <sup>2,3</sup>        | LC/MS/MS                 | HPLC 035                     |



- <sup>1</sup> Tests performed at Main Building: 13611 B St., Omaha, NE 68144
- <sup>2</sup> Tests performed at Grand 7 Building: 13606 C St., Omaha, NE 68144
- <sup>3</sup> Tests performed at C Building: 13626 C St., Omaha, NE 68144
- <sup>4</sup> Tests performed at PoDeBo Building: 13516 C St., Omaha, NE 68144
- <sup>5</sup> Tests performed at AmBr Building: 13535 C St., Omaha, NE 68144
- <sup>6</sup> Tests performed at DEB Building: 13606 B St., Omaha, NE 68144
- <sup>7</sup> Tests performed at B Street 2 Building: 13505 B St., Omaha, NE 68144

Satellite Location  
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| <u>Test(s)</u>                              | <u>Technology</u>          | <u>Test Method(s)</u> |
|---|----------------------------|-----------------------|
| Crude Fat                                   | Gravimetric                | FD 026                |
| Crude Fiber                                 | Gravimetric                | FD 039                |
| Minerals in Feeds by ICAP                   | ICP-AES                    | ME 029, 069           |
| Moisture/Ash                                | Thermogravimetric Analyzer | FD 082                |
| Protein by Combustion                       | Combustion                 | FD 070                |
| Total, Soluble, and Insoluble Dietary Fiber | Gravimetric                | FR 007                |





# Accredited Laboratory

A2LA has accredited

## MIDWEST LABORATORIES, INC.

Omaha, NE

for technical competence in the field of

### Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of A2LA R204 - *Specific Requirements - Food and Pharmaceutical Testing Laboratory Accreditation Program*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 27<sup>th</sup> day of September 2022.

A blue ink signature of Mr. Trace McInturff.

Mr. Trace McInturff, Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 2853.02  
Valid to August 31, 2024

*For the tests to which this accreditation applies, please refer to the laboratory's Chemical Scope of Accreditation.*