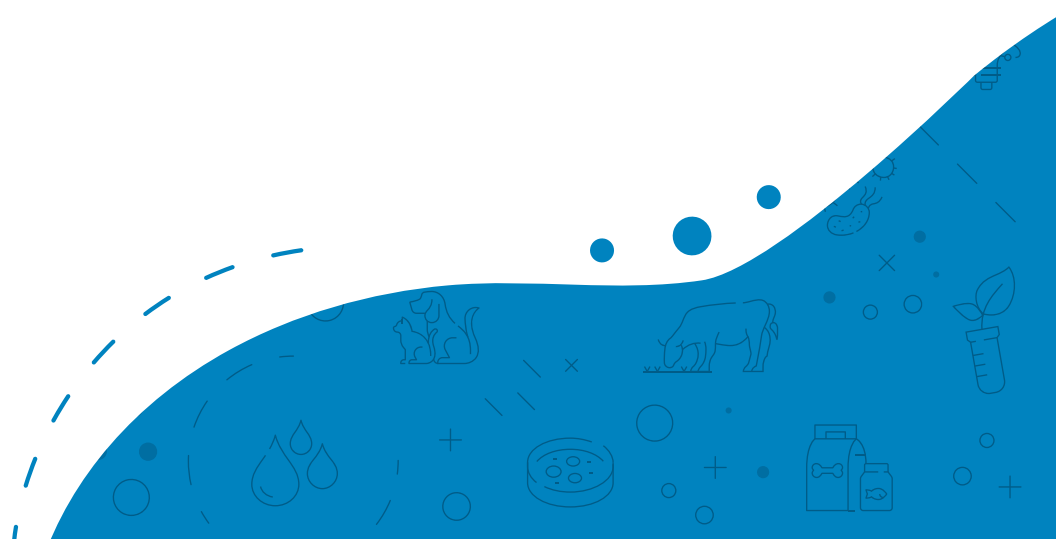


The graphic features a dark blue banner at the top left with the text "AGRICULTURE SECTION" in white, bold, sans-serif font. Below the banner is a large blue area containing various white line-art icons related to agriculture and food processing, such as a corn cob, a water pump, a house, a person wearing a headset, a bottle, and a fruit. The background also includes abstract elements like circles, dots, and curved lines. In the bottom right corner, there is a small logo consisting of a hexagon with a circle inside it.



## CATALOG OF ANALYTICAL SERVICES



# GETTING STARTED WITH MIDWEST LABORATORIES

Choosing where to go for your organization's testing services is essential to ensuring the success of your organization. You want a testing facility where you'll find the specialized expertise you need, along with advanced technology to guarantee the accuracy of your results. We are happy to be your analytical laboratory of choice. Get started by registering on the myLab Portal, review our available analyses and call our client services team with any additional questions. Create sample submission paperwork on myLab portal

## STEP 1. PICK YOUR ANALYSIS PACKAGE

Select from one of the many comprehensive analysis packages we've prepared for every industry we serve. You can also browse our full analysis offerings in our Catalog. It is broken out by the industries that we serve. All analyses will be invoiced after 30 days.



## NOT SEEING AN ANALYSIS YOU NEED?

Submit a Method Development Request form and our team will research adding it to our services: [midwestlabs.com/new-method-development-request](https://midwestlabs.com/new-method-development-request)

## STEP 2. COMPLETE YOUR SUBMITTAL FORM

Sending in proper submittal paperwork with your samples is required at Midwest Labs. Proper paperwork serves as a packing slip to include in the box with your samples and ensures that testing are completed as accurately and efficiently as possible.



Submittal forms can be auto-created through our myLab Portal site, or printed from [midwestlabs.com/resources/submittal-forms](https://midwestlabs.com/resources/submittal-forms) resources section and manually filled out.

## STEP 3. HOW TO MAIL YOUR SAMPLES

Once your samples are prepared, labeled, and boxed up with your submittal form, please ship them to:

**Midwest Laboratories**

**13611 B Street, Omaha, NE 68144**

We also accept samples Monday through Friday from 8 am to 4 pm with local drop off and a drop box at our main entrance for after hours.



When using a Midwest Labs box, please utilize the space on top to mark each box. **Submittal forms are required with your samples.** If you are shipping multiple boxes, a submittal form must be included in every box.

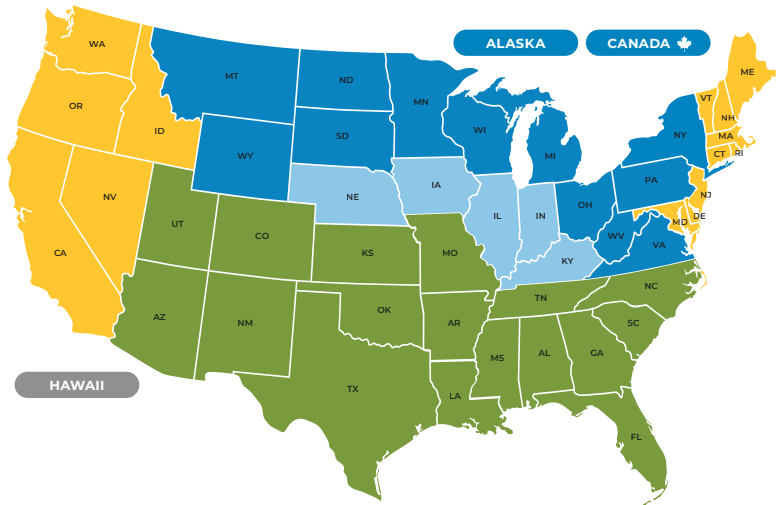




# SPECIALTY SERVICE OFFERINGS

## AGRONOMIC RECOMMENDATIONS & TRAININGS

Midwest Laboratories offers agronomic consulting and training by our team of Field Agronomists. Located in three states and traveling North America our field representatives are available for on site trainings, seminars, personalized client meetings, and in season planning. Contact your representative below for in-depth agronomic consultation.



### West Coast & North East Region

**Ashley Babl**

*Field Representative*

*(Specialty Crops / Agriculture)*

(402) 804-0413

ABabl@midwestlabs.com

### Southern Region

**Jim Grilliot**

*Field Representative*

*(Agriculture)*

(402) 699-2613

JGrilliot@midwestlabs.com

### Northern Region, Canada & International Accounts

**Jim Fasching**

*Field Representative (Agriculture)*

(507) 273-3339

JFasching@midwestlabs.com

### Eastern Midwest Region

**Tim Radmacher**

*Field Representative*

*(Nutrient Management/Agriculture)*

(531) 222-6972

TRadmacher@midwestlabs.com

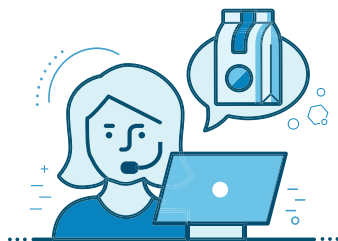
For a formal sales quote or customized analysis package,  
please contact your account manager.

## ACCESSIBLE & RESPONSIVE CLIENT SERVICE TEAM

Our client service staff is always on hand to assist you with questions during our standard business office hours. If you are unable to call, you have the option to text your inquiry to our client service staff. Responses will be sent back to your mobile device.

**CALL US: 402. 334. 7770**

**TEXT US: 402. 313. 4050**



Questions can also be submitted through our website at

**MIDWESTLABS.COM/CONTACT-US**

Our main office is located at **13611 B STREET, OMAHA, NE 68144.**

Standard business office hours: Monday – Friday, 8:00am – 5:00pm CST

Standard sample receiving hours: Monday – Friday, 8:00am – 5:00pm CST

Saturday receiving hours: 8:00am – 12:00pm CST via USPS, UPS, FedEx, and Speedee

Our Offices and Laboratories are closed in observation of the following US holidays:

New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day.

## CUSTOMIZED CLIENT ONBOARDING & FREE ONLINE RESOURCES

Our Client Onboarding Specialist is available to help you get started and submit your samples. We offer training on the MyLab Portal, sampling supplies, custom analysis packages, or user settings and overall account set up. Ultimately, we work to create a seamless onboarding experience for all of our partners.

We also have an online resource library available at **MIDWESTLABS.COM**, allowing you to research topics at your leisure. The library includes white papers, MyLab Portal training guides, agronomic recommendations, and industry specific reference guides along with helpful FAQ documents that cover common questions.

## API INTEGRATION

Customized API integration is available for our REST API systems. For access to our API system and test platform please contact your account manager.

## ENVIRONMENTAL FIELD SAMPLING

Midwest Labs offers environmental field sampling for wastewater treatment plants, city municipalities, manufacturing facilities and more. Please contact our environmental account management team with your permit and required sampling plan for a formal project quote. Sampling supplies, travel, and service fee is separate from the cost of analysis.



# GENERAL SUBMISSION PROCESS

## DISCOUNTED SHIPPING LABELS & SAMPLING SUPPLIES

All samples are to be received by Midwest Laboratories during normal business hours. Samples will be received via Walk In, USPS, UPS, FedEx, and Speedee delivery services. Samples must be received with a completed sample submittal form to be accepted for analysis. Please contact your account manager with questions regarding delivery times.



Midwest Labs accepts shipment from all major couriers. Discounted shipping options are available to Midwest Labs clients for UPS, Speedee Delivery, and FedEx. Please ship your samples directly to: **MIDWEST LABORATORIES, 13611 B STREET OMAHA, NE 68144.**

Sampling supplies are available to order through your myLab Portal account or by contacting your account manager. Supplies can be shipped directly to you or picked up at our shipping warehouse located at **13505 C STREET OMAHA, NE 68144** during the following business hours: Monday – Friday, 7:00am – 4:00pm CST.

## REGULATORY OR HOLD TIME SENSITIVE SAMPLES

Samples that are subject to a regulatory 'hold time' must be delivered by 4:00PM, Monday-Friday. **If your sample is submitted in a sterile bottle for water testing please be advised hold times may apply.** Samples may be rejected or require resampling if not received within the required time frame for analysis. Contact your account manager or refer to the sample submission instructions included with your supplies to learn if hold times apply to your sample.

## TURNAROUND TIME

Turnaround time will vary depending upon the analysis requested, the matrix of the sample, and other additional factors. We are committed to processing each sample as soon as possible. Additional turnaround time details can be found throughout the fee schedule. For questions on turnaround time or expected results please contact your account manager. A partial or verbal report may be available upon request.

## REPORTED RESULTS

Midwest Laboratories offers access to your reports via email, mail, or through our online myLab Portal. Account holders can create a myLab user profile to access their results, print sample submission paperwork, and view billing statements or invoices through one convenient dashboard and online profile. All reports will be emailed unless paper copies are requested at time of account set up.

## INVOICING

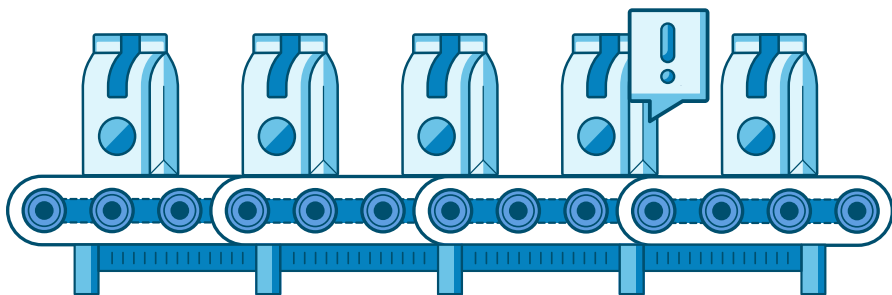
You will be invoiced at the beginning of each month for any work completed in the month prior. Once you receive your invoice, you may pay through the myLab Portal with a credit card, send in a check, or call in payment. All analysis is subject to NET30 Payment terms unless an RFP or formal agreement has been signed and documented with agreed upon payment terms. A valid account number and invoicing email address or physical mailing address will be required at time of sample submission.



## RUSH & OUTSOURCING PROGRAMS

The Rush Program is a fee-based premium service reserved for customers who need accelerated turnaround time for a sample or requested analysis. Rush requests must be submitted to our Rush Coordinator for an estimated cost and an estimated turnaround time. A price quote will be provided and a signed acknowledgment must be returned to begin rush analysis. We will respond to all rush requests on the same day as received, Monday-Friday (8:00am-4:30pm CST). Rush requests received outside of these hours will be addressed immediately on the following business day. A rush fee will be applied to all rush orders and not all analysis are available for the Rush Program. Please contact our Rush Coordinator for more information at [RUSH\\_COORDINATOR@MIDWESTLABS.COM](mailto:RUSH_COORDINATOR@MIDWESTLABS.COM).

Don't see the analysis you need? Reach out to your Account Manager and ask about our Outsource Program. Midwest Laboratories may be able to forward your sample along to a trusted, 3rd party lab on behalf of us. We take care of the shipping, handling and reporting.



## **LABOR & CONSULTING FEES**

Midwest Laboratories reserves the right to charge a fee for labor and consulting. This may include clerical, corporate office, technical consulting, chemist assistance, sample prep, or IT integrations and API services. Please contact your account manager for specialized project requests and a project quote.

## **ADDITIONAL FEES INCLUDE:**

### **ADDITIONAL SAMPLE PREPARATION**

An additional sample prep fee may be added to the cost of analysis if the sample is a large volume, requires compositing, preservations are required or the sample is a complex matrix that requires validation.

### **RE-RUN POLICY**

Clients questioning the results of their analysis may request a re-run or re-test of the sample. If the re-run confirms the original result, within method uncertainty or variability, Midwest Labs reserves the right to charge for the rerun analysis. Expected levels or acceptable range may be requested prior to rerunning the analysis.

### **MANUAL REPORTING**

Midwest Laboratories offers a universal REST API upon request. To receive API information, please contact your Account Manager. Requests for data, submissions, and transfers must be coordinated with IT management and approved by the Midwest Laboratories Management Team. API integration projects will be assessed a fee based upon programming time and complexity of the project.

### **METALS PREP FEE**

The Laboratory will select the method deemed to be most appropriate unless the client or a regulatory body specifies a method. Each sample must be prepared by an appropriate method of digestion, filtration or extraction.



## QUALITY CONTROL

Midwest Laboratories follows rigorous Quality Control specifications set forth by the reference methods we perform and by our Accreditation Bodies.

Midwest Laboratories carries extensive NELAC and ISO 17025 accreditations as demonstrated by our commitment to quality. Midwest Laboratories has met stringent quality requirements for precision and accuracy. The scope of our accreditations can be obtained through our website. ISO 17025 and NELAC accreditation can be requested by calling the QA Director or your Account Manager.

If requested, a QA/QC report can be issued to support analytical data. Quality Control paperwork may be charged depending upon the time involved. Please contact QA Director at 402-334-7770 for additional information.



**BBB RATING & ACCREDITATION**

### IN-HOUSE QUALITY CONTROL PERSONNEL

- Quality Assurance Director
- Director of Customer Success
- Quality Control Analysts

### WE PARTICIPATE IN THE FOLLOWING PROFICIENCY TESTING PROGRAMS:

- Phenova (drinking water, wastewater, hazardous waste)
- AAFCO (animal feed, pet food ingredients, mycotoxins)
- AOAC (microbiology)
- FAPAS (various food analyses)
- AACC (Vitamins, Minerals, Proximates; dietary fiber; sugar profile)
- ALP (soil analysis)
- NAFT (soil and plant analysis)
- CAPP (compost analysis)
- Magruder (fertilizer analysis)
- MAP (manure analysis)
- USDA (GMO)
- Wisconsin Proficiency Test Program
- ALTA (Soils)
- Iowa DALs (Soils)

## This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



**AGRICULTURE**

# AGRICULTURE INTRODUCTION



For more than 40 years, we have been the industry leader in providing expedient, reliable, and traceable analytical services for the agriculture industry. From soil and plant health to water quality a diverse analytical testing plan is the first step in creating high yielding, sustainable agriculture.

## POPULAR ANALYSIS WE OFFER:

- Soil & Soil Health
- Plant Tissue
- Plant Parasitic Nematodes
- Irrigation Water
- Stalk Nitrate

Please reference the following section for a list of available analytical services. Services are listed by name, along with their required sample size, turnaround time, and price. Here is an example of how our analyses are listed:

★ ANALYTICAL PACKAGE *	Required Sample Size	Turnaround Time	PRICE
Description of test package and included analyses. <a href="#">Recommendation notes</a>			

Below the analytical package name will be a description of test package and a list of all included analyses. In some cases there may also be [special recommendation notes](#) listed with the description. Our most popular and commonly used packages will be noted with a star icon (★). Some analyses may also be marked with an asterisk (\*) or other symbols, letting you know to reference the additional notes in the footer of the page.

## PERMIT REQUIREMENTS

To ensure that Midwest Laboratories can accept your samples, please refer to the USDA/APHIS Federal Domestic Soil Quarantines map to confirm that your soil is permitted to be transported from its domestic origin to the laboratory.

[www.aphis.usda.gov/plant\\_health/permits/organism/soil/downloads/Fed-SoilRegs.pdf](http://www.aphis.usda.gov/plant_health/permits/organism/soil/downloads/Fed-SoilRegs.pdf)

Please note, if your soil is coming from a regulated area we are only able to run tests found in the Agriculture Soils section. Also once the regulated soil sample is received at Midwest Laboratories, it cannot be returned or forwarded.

For more information on permit requirements, please reference the Midwest Laboratories website: [midwestlabs.com/resources/permits](http://midwestlabs.com/resources/permits)

Our client service staff is always on hand to assist you with questions: [402.334.7770](tel:402.334.7770) | [contactus@midwestlabs.com](mailto:contactus@midwestlabs.com)  
If a quicker turnaround time is needed, please contact our Rush Coordinator: [rush\\_coordinator@midwestlabs.com](mailto:rush_coordinator@midwestlabs.com)



## AGRICULTURE SOILS

**SAMPLE AMOUNT NEEDED:** 1 soil sample bag filled to the FILL LINE (approx. 2 cups).

Order soil bags, shipping labels, and boxes through [mylab.midwestlabs.com](https://mylab.midwestlabs.com) or contact Client Services at 402.334.7770 for proper supplies.

	Turnaround Time	Price With Recommendations*	Price Without Recommendations
<b>★ S1A (BASIC)</b>	3 BD	<b>\$10.50</b>	<b>\$9.30</b>
Organic Matter, Available Phosphorus (P1 Weak Bray and P2 Strong Bray), Exchangeable Potassium, Magnesium, Calcium and Hydrogen, Soil pH, Buffer Index, Cation Exchange Capacity, Percent Base Saturation of Cation Elements			
<b>S1AN</b>	3 BD	<b>\$13.20</b>	<b>\$11.50</b>
Nitrate-N, plus S1A [Organic Matter, Available Phosphorus (P1 Weak Bray and P2 Strong Bray), Exchangeable Potassium, Magnesium, Calcium and Hydrogen, Soil pH, Buffer Index, Cation Exchange Capacity, Percent Base Saturation of Cation Elements]			
<i>Recommended for grain crops that will require nitrogen.</i>			
<b>S1B</b>	3 BD	<b>\$10.50</b>	<b>\$9.30</b>
Same as test S1A with Olsen Bicarbonate Phosphorus in place of P2 Strong Bray Phosphorus			
<i>Recommended for areas of high soil pH (over 7.1).</i>			
<b>S1C</b>	3 BD	<b>\$11.50</b>	<b>\$10.30</b>
Olsen Bicarbonate Phosphorus, plus S1A [Organic Matter, Available Phosphorus (P1 Weak Bray and P2 Strong Bray), Exchangeable Potassium, Magnesium, Calcium and Hydrogen, Soil pH, Buffer Index, Cation Exchange Capacity, Percent Base Saturation of Cation Elements]			
<b>S1AEC</b>	3 BD	<b>\$12.20</b>	<b>\$11.00</b>
Soluble Salts, plus S1A [Organic Matter, Available Phosphorus (P1 Weak Bray and P2 Strong Bray), Exchangeable Potassium, Magnesium, Calcium and Hydrogen, Soil pH, Buffer Index, Cation Exchange Capacity, Percent Base Saturation of Cation Elements]			
<b>S1ANEC</b>	3 BD	<b>\$14.92</b>	<b>\$13.22</b>
Soluble Salts and Nitrate-N, plus S1A [Organic Matter, Available Phosphorus (P1 Weak Bray and P2 Strong Bray), Exchangeable Potassium, Magnesium, Calcium and Hydrogen, Soil pH, Buffer Index, Cation Exchange Capacity, Percent Base Saturation of Cation Elements]			

For determining optimum herbicide application rate, we recommend adding a Texture analysis (pg 17).

\* Recommendations: Include up to 3 crops or 3 yields upon request.

Additional recommendations can be requested for additional charge.

	Turnaround Time	Price With Recommendations*	Price Without Recommendations
<b>S2</b>	3 BD	<b>\$13.40</b>	<b>\$12.30</b>
Soluble Salts, Sodium, and Excess Lime, plus S1A [Organic Matter, Available Phosphorus, (P1 Weak Bray and P2 Strong Bray) Exchangeable Potassium, Magnesium, Calcium and Hydrogen, Soil pH, Buffer Index, Cation Exchange Capacity, Percent Base Saturation of Cation Elements. <i>Recommended for areas of high soil pH (over 7.1).</i>			
<b>S2N</b>	3 BD	<b>\$15.90</b>	<b>\$14.70</b>
Nitrate-N, Soluble Salts, Sodium, and Excess Lime, plus S1A [Organic Matter, Available Phosphorus (P1 Weak Bray and P2 Strong Bray), Exchangeable Potassium, Magnesium, Calcium and Hydrogen, Soil pH, Buffer Index, Cation Exchange Capacity, Percent Base Saturation of Cation Elements] <i>Recommended for grain crops that will require nitrogen.</i> <i>Recommended for soil where manure has been applied frequently or heavily.</i>			
<b>★ S3C</b>	3 BD	<b>\$26.50</b>	<b>\$25.50</b>
A complete analysis including S1A, S2N and S3 [Organic Matter, Available Phosphorus (P1 Weak Bray and P2 Strong Bray), Exchangeable Potassium, Magnesium, Calcium and Hydrogen, Soil pH, Buffer Index, Cation Exchange Capacity, Percent Base Saturation of Cation Elements, Nitrate-N, Soluble Salts, Sodium, and Excess Lime, Sulfur, Zinc, Manganese, Iron, Copper, Boron] <i>Recommended if a field has never been sampled before. Recommended for legume crops.</i>			
<b>S3M (MEHLICH)</b>	3 BD	--	Call for pricing
Organic Matter, pH; Mehlich extraction: Phosphorus, Potassium, Magnesium, Calcium, Sodium, Sulfur, Zinc, Manganese, Iron, Copper, Boron, Cation Exchange Capacity, Percent Base Saturation of Cation Elements			
<b>S3CM (MEHLICH)</b>	3 BD	--	Call for pricing
Organic Matter, pH; Mehlich extraction: Phosphorus, Potassium, Magnesium, Calcium, Sodium, Sulfur, Zinc, Manganese, Iron, Copper, Boron, Cation Exchange Capacity, Percent Base Saturation of Cation Elements; plus Nitrate-N, Excess Lime, Soluble Salts			
<b>SUBSOIL NITRATE-N</b>	3 BD	<b>\$6.00</b>	<b>\$5.50</b>
<b>S3†</b>	3 BD	<b>\$14.00</b>	<b>\$13.00</b>
Sulfur, Zinc, Manganese, Iron, Copper, Boron <i>Recommended for legume crops.</i>			
<b>S4†</b>	3 BD	<b>\$9.20</b>	<b>\$8.40</b>
Zinc, Manganese, Iron, Copper			
<b>S5†</b>	3 BD	<b>\$6.80</b>	<b>\$6.00</b>
Sulfur, Zinc			
<b>S6†</b>	3 BD	<b>\$12.80</b>	<b>\$11.80</b>
Sulfur, Zinc, Manganese, Boron <i>Recommended for legume crops.</i>			

For determining optimum herbicide application rate, we recommend adding a Texture analysis (pg 17).

\* Recommendations: Include up to 3 crops or 3 yields upon request.

Additional recommendations can be requested for additional charge.

	Turnaround Time	Price With Recommendations*	Price Without Recommendations
<b>PRE-SIDEDRESS NITRATE TEST (PSNT)</b>	3 BD	--	<b>\$7.50</b>
Nitrate-N + Ammonium-N			
<b>★ GARDEN SOIL TESTING PACKAGE</b>	3 BD	<b>\$15.00</b>	<b>\$15.00</b>
Organic Matter, Nitrate-N, Phosphorus, Potassium, pH, Magnesium, Calcium, Sodium, Soluble Salts, CaCO <sub>3</sub> Buffer Index, Cation Exchange Capacity, Excess Lime			
<b>★ LAWN SOIL TESTING PACKAGE</b>	3 BD	<b>\$15.00</b>	<b>\$15.00</b>
Organic Matter, Nitrate-N, Phosphorus, Potassium, pH, Magnesium, Calcium, Sodium, Soluble Salts, CaCO <sub>3</sub> Buffer Index, Cation Exchange Capacity, Excess Lime			
<b>★ SOIL HEALTH COMPLETE</b>	3 BD	--	<b>\$65.00</b>
Comprised of three components:			
1. An in-depth soil analysis (S3C) that will address the chemical aspects of the soil test			
2. 1-day CO <sub>2</sub> C			
3. The Haney Test with a Soil Health Calculation			
<b>SOIL HEALTH BASIC</b>	3 - 5 BD	--	<b>\$55.00</b>
Comprised of three components:			
1. A basic soil analysis (S1AN) that will address the chemical aspects of the soil.			
2. 1-day CO <sub>2</sub> C test			
3. The Haney test with a Soil Health Calculation			
<b>INDIVIDUAL SOIL ANALYSIS</b>			
Aluminum (Extractable)	7 - 10 BD	--	<b>\$18.00</b>
Ammonium-N	3 BD	--	<b>\$7.50</b>
Amino Sugar Nitrogen Test	3 BD	--	<b>\$28.00</b>
Boron <sup>†</sup>	3 BD	<b>\$2.95</b>	<b>\$2.55</b>
Bulk Density (undisturbed method)	5 - 7 BD	--	<b>\$10.00</b>
Chloride	3 BD	--	<b>\$7.50</b>
C:N Ratio	3 BD	--	<b>\$24.00</b>
Copper <sup>†</sup>	3 BD	<b>\$2.95</b>	<b>\$2.55</b>
Electrical Conductivity (Soluble Salts)	3 BD	--	<b>\$6.00</b>
Electrical Conductivity (Soluble Salts) with paste extract	3 BD	--	<b>\$16.00</b>
Humic Matter	3 BD	--	<b>\$15.00</b>
Iron <sup>†</sup>	3 BD	<b>\$2.95</b>	<b>\$2.55</b>
Manganese <sup>†</sup>	3 BD	<b>\$2.95</b>	<b>\$2.55</b>
Mehlich Phosphorus (Colorimetric) <sup>†</sup>	3 BD	--	<b>\$3.00</b>
Mehlich Phosphorus (ICP) <sup>†</sup>	3 BD	--	<b>\$3.00</b>

\* Recommendations: Include up to 3 crops or 3 yields upon request.

Additional recommendations can be requested for additional charge.

† Must be combined with a Soil Package found on pg 13 -15.

	Turnaround Time	Price With Recommendations*	Price Without Recommendations
Molybdenum (Extractable)	3 – 5 BD	--	<b>\$25.00</b>
Nitrate-N	3 BD	<b>\$6.00</b>	<b>\$5.50</b>
Olsen Bicarbonate Phosphorus <sup>†</sup>	3 BD	--	<b>\$1.00</b>
Total Organic Carbon	3 – 5 BD	--	<b>\$25.00</b>
Organic Matter (Walkley Black Titration)	3 BD	--	<b>\$35.00</b>
pH	3 BD	--	<b>\$6.00</b>
pH with paste extract	3 BD	--	<b>\$16.00</b>
PT2 – Total Minerals Assay (Totals of N, S, P, K, Mg, Ca, Na, Fe, Al, Mn, Cu, Zn)	3 BD	--	<b>\$22.00</b>
Quantitative CaCO <sub>3</sub>	3 BD	--	<b>\$27.00</b>
Resistivity by saturated paste extract	3 BD	--	<b>\$20.00</b>
Saturated Paste Extract	3 BD	--	<b>\$10.00</b>
Silicon (Extractable)	3 – 5 BD	--	<b>\$25.00</b>
Sodium <sup>†</sup>	3 BD	<b>\$2.55</b>	<b>\$2.15</b>
Sodium Adsorption Ratio (SAR) with paste extract	3 BD	--	<b>\$20.00</b>
Sulfur <sup>†</sup>	3 BD	<b>\$4.35</b>	<b>\$3.95</b>
Total Cation Exchange Capacity (EPA 9081)	3 BD	--	<b>\$40.00</b>
Total Kjeldahl Nitrogen	5 – 7 BD	--	<b>\$14.00</b>
Total Nitrogen	3 BD	--	<b>\$12.00</b>
Total Carbon	3 BD	--	<b>\$25.00</b>
Total Phosphorus	3 BD	--	<b>\$12.00</b>
Water Soluble Carbon	3 BD	--	<b>\$10.00</b>
Water Soluble Extraction (P, K, Mg, Ca, Na, S) <sup>†</sup>	3 BD	--	<b>\$5.50</b>
Zinc, Manganese, Iron, Copper, Boron (each element) <sup>†</sup>	3 BD	<b>\$2.95</b>	<b>\$2.55</b>

\* Recommendations: Include up to 3 crops or 3 yields upon request.

Additional recommendations can be requested for additional charge.

<sup>†</sup> Must be combined with a Soil Package found on pg 13 –15.



	Turnaround Time	Price
<b>RECOMMENDATIONS ONLY</b>	3 BD	<b>\$3.00</b>
New recommendations on old reports (per sample)		
<b>ADDITIONAL SOIL ANALYSIS — SOIL PHYSICAL MEASUREMENTS</b>		
Available Moisture ( <i>1/3 plus 15 BAR limits measured with membrane apparatus</i> )	5 - 7 BD	<b>\$21.50</b>
Individual BAR	5 - 7 BD	<b>\$16.00</b>
Bulk Density ( <i>Disturbed Soil</i> )	3 - 5 BD	<b>\$5.35</b>
Bulk Density ( <i>Undisturbed Soil- price includes sleeve return</i> )	5 - 7 BD	<b>\$10.00</b>
Grain Size ( <i>ASTM D6913 &amp; D7928</i> )	4 - 6 BD	<b>\$65.00</b>
Receiving Moisture	5 - 7 BD	<b>\$3.00</b>
Texture ( <i>% Sand, Silt, Clay</i> ) by hydrometer	3 - 5 BD	<b>\$11.20</b>
<b>COMPOSITE SAMPLE PREPARATION</b>	5 - 7 BD	<b>\$5.00</b>
Per sample group		
<b>SOIL PHYSICAL MEASUREMENTS FOR COMPOSTING INPUT</b>		
Grain Size ( <i>(ASTM D6913 &amp; D7928)</i> )	4 - 6 BD	<b>\$65.00</b>
Texture ( <i>% Sand, Silt, Clay</i> ) by hydrometer	3 - 5 BD	<b>\$11.20</b>



## AGRICULTURE SPECIALIZED REPORTING OPTIONS

<b>SPECIALIZED SOIL REPORTING</b>	3 BD	<b>\$0.50</b>
First Form Option (per sample)		

**FIRST FORM:** First Form reports include soil data, graphics, and maintenance + build recommendation format. Many options may be made automatically standard for your account. Contact the laboratory for details.

**REPORTING OPTIONS:** Standard Recommendations are made for as many as three crops or three yields, or a combination of different crops and yields. You must supply the crop and yield goal information.



## AGRICULTURE PLANTS

	Required Sample Size	Turnaround Time	Price
★ <b>PLANT TISSUE COMPLETE ANALYSIS</b>	Call for sample size *	3 BD	<b>\$22.00</b>

Nitrogen, Sulfur, Phosphorus, Potassium, Magnesium, Calcium, Sodium, Iron, Manganese, Copper, Boron, Zinc

<b>PLANT TISSUE MINERAL PACKAGE</b>	Call for sample size *	3 BD	<b>\$17.00</b>
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Sulfur, Phosphorus, Potassium, Magnesium, Calcium, Sodium, Iron, Manganese, Copper, Boron, Zinc

<b>PETIOLE COMPLETE</b>	Call for sample size *	3 BD	<b>\$22.00</b>
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Sulfur, Phosphorus, Potassium, Magnesium, Calcium, Sodium, Iron, Manganese, Copper, Boron, Zinc, Nitrate-N

★ <b>STALK NITRATE PACKAGE</b>	Call for sample size *	3 BD	<b>\$16.00</b>
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Nitrate-N

### SEED GERMINATION

*Performed with Soil-less Media. Please allow 10 -14 days for germination tests.*

Warm Germination	1lb	varies †	<b>\$20.00</b>
Cold Stress Germination	1lb	varies †	<b>\$20.00</b>

Common seeds analyzed: corn, soybeans, oats, alfalfa, clover, rye, wheat, fescue and barley.  
Please call lab for addition information on crops not listed.

### INDIVIDUAL ANALYSIS FOR PLANT TISSUES

Ammonium-N	--	3 BD	<b>\$10.00</b>
Biomass (dry weight)	--	3 BD	<b>\$15.00</b>
Carbon	--	3 BD	<b>\$10.00</b>
Chloride	--	3 BD	<b>\$10.00</b>
Colbalt	--	3 BD	<b>\$24.00</b>
Molybdenum	--	3 - 5 BD	<b>\$24.00</b>
Nitrate-N	--	3 BD	<b>\$10.00</b>
Nitrogen, Total	--	3 BD	<b>\$10.00</b>
Selenium	--	3 - 5 BD	<b>\$36.00</b>
Silicon	--	3 BD	<b>\$60.00</b>
TKN	--	3 BD	<b>\$10.00</b>
Whole sample prep	--	3 BD	<b>\$15.00</b>

*Discounts are available for multiple samples received dried and ground.*

\* Contact Client Services at 402.334.7770 for proper sample amount or reference our online sampling resources:

[midwestlabs.com/resources/product-sampling-guides](http://midwestlabs.com/resources/product-sampling-guides)

† Turnaround times will vary. 14 day minimum is required for calculation test.

Contact Client Services at 402.334.7770 for more information.

	Required Sample Size	Turnaround Time	Price
★ <b>POTTING SOIL CONTAINER MEDIA EXTRACT</b>	3 BD	--	<b>\$25.00</b>

pH, Conductivity (Soluble Salts), Nitrate-N, Phosphorus, Potassium, Magnesium, Calcium, Sodium.  
(Listed as Growth Media Extract on myLab Portal)

★ <b>POTTING SOIL EXTENDED CONTAINER MEDIA EXTRACT</b>	3 BD	--	<b>\$35.50</b>
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pH, Conductivity (Soluble Salts), Nitrate-N, Phosphorus, Potassium, Magnesium, Calcium, Sodium,  
Sulfur, Zinc, Manganese, Iron, Copper, Boron. (Listed as Growth Media Extract Extended on myLab Portal)

<b>GMO DETECTION (DDPCR)</b>	Required Sample Size	Turnaround Time	Basic Screen Price	Event Specific Price
Alfalfa	100g	3 - 5 BD	<b>\$175.00</b>	<b>\$100.00</b>
Canola	100g	3 - 5 BD	<b>\$175.00</b>	<b>\$100.00</b>
Corn	100g	3 - 5 BD	<b>\$350.00</b>	<b>\$100.00</b>
Flax	100g	3 - 5 BD	<b>\$175.00</b>	<b>\$100.00</b>
Papaya	100g	3 - 5 BD	<b>\$175.00</b>	<b>\$100.00</b>
Potato	100g	3 - 5 BD	<b>\$175.00</b>	<b>\$100.00</b>
Rapeseed (Canola)	100g	3 - 5 BD	<b>\$175.00</b>	<b>\$100.00</b>
Rice	100g	3 - 5 BD	<b>\$175.00</b>	<b>\$100.00</b>
Soy	100g	3 - 5 BD	<b>\$295.00</b>	<b>\$100.00</b>
Sugar Beets	100g	3 - 5 BD	<b>\$175.00</b>	<b>\$100.00</b>
Squash/Zucchini	100g	3 - 5 BD	<b>\$175.00</b>	<b>\$100.00</b>
Tomato	100g	3 - 5 BD	<b>\$175.00</b>	<b>\$100.00</b>
Wheat	100g	3 - 5 BD	<b>\$175.00</b>	<b>\$100.00</b>



## AGRICULTURE PARASITIC PLANT NEMATODES

**SAMPLE AMOUNT NEEDED:** 1 soil sample bag filled to the FILL LINE (approx. 2 cups).  
Order soil bags, shipping labels, and boxes through [mylab.midwestlabs.com](http://mylab.midwestlabs.com) or contact Client Services  
at 402.334.7770 for proper supplies.

### NEMATODE ASSAYS (AG SOIL)

Plant Parasitic Nematode Analysis (Live Parasite ID) *	7 - 10 BD	<b>\$58.00</b>
Plant Parasitic Nematode Analysis (Compost) (Live Parasite ID) *	7 - 10 BD	<b>\$68.00</b>
Cyst Nematode Identification (Ag Soil) (Egg Count)	3 - 5 BD	<b>\$28.00</b>
Cyst Nematode (Compost) (Egg Count)	3 - 5 BD	<b>\$38.00</b>

\* Recommended that samples for Live Plant Parasitic Identification should be kept in a cool environment.

## This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Our client service staff is always on hand to assist you with questions: [402.334.7770](tel:402.334.7770) | [contactus@midwestlabs.com](mailto:contactus@midwestlabs.com)  
If a quicker turnaround time is needed, please contact our Rush Coordinator: [rush\\_coordinator@midwestlabs.com](mailto:rush_coordinator@midwestlabs.com)

## TERMS OF USE

PLEASE READ THESE TERMS OF USE CAREFULLY. BY ACCESSING OR USING THIS WEB SITE, YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS DESCRIBED HEREIN AND ALL TERMS INCORPORATED BY REFERENCE. IF YOU DO NOT AGREE TO ALL OF THESE TERMS, DO NOT PROCEED WITH TESTING.

We reserve the right to change or modify any of the terms and conditions contained in the Terms or any policy or guideline of the Sites, at any time and in our sole discretion. Any changes or modification will be effective immediately upon posting of the revisions on the Sites, and you waive any right you may have to receive specific notice of such changes or modifications.

Analysis Services Agreement

### MIDWEST LABORATORIES, INC. STANDARD TERMS AND CONDITIONS

- 1. EFFECT OF TERMS.** All Customers who place an order with Midwest Laboratories, Inc. along with its affiliates, agents, related entities, subsidiaries, officers, shareholders, employers, and assigns ("MIDWEST") are subject to the following Terms and Conditions.
- 2. CONFIDENTIALITY.** Reports and/or other information as requested are provided only to the Customer or those designated by the Customer unless otherwise required by law. Customer and/or its designees agrees not to use report or data in any manner that may harm or has the potential to harm the reputation or business of MIDWEST. Customer may not publish the name of MIDWEST without written approval.
- 3. TEST AND CONTROL ARTICLE CHARACTERIZATION.** If submitted by Customer, the Customer is fully responsible for all test/control article characterizations, and the Customer agrees that MIDWEST is fully relying on the Customer for such test/control characterizations. This includes, but is not limited to, identity, strength, purity, composition and stability. Further, the Customer as a sponsor shall be responsible for the methods of synthesis, fabrication, or derivation of the sample. MIDWEST makes no representations or warranties of any kind (express or implied) about the representative nature of the test/control article submitted by the Customer.
- 4. DELIVERY OF SAMPLES.** Customer is responsible for samples until they are received by MIDWEST personnel. MIDWEST is not responsible for samples that are rejected because of holding time or improper preservation or storage before samples are received by MIDWEST personnel.
- 5. ACCEPTANCE OF SAMPLES.** If MIDWEST determines that the sample will not yield valid data for any reason (including but not limited to sample preservation, improper sample containers, or samples that require modification of the normal procedures) samples will not be accepted and MIDWEST will notify Customer of such determination. If modification of the procedures is possible, fees for the modification will be determined. If Customer agrees to the fees verbally or in writing the samples will be accepted and processed for the agreed upon fees.

6. **STANDARD SERVICES.** Analyses within stated turnaround times (calculated in business days, excluding weekends and holidays), if MIDWEST has stated in writing a turnaround time, otherwise, as is reasonable in the industry. Rush analysis, weekend and holiday service is available but may incur additional costs. It is Customer's responsibility to inquire of such charges prior to submission of samples for analysis.
  7. **RUSH ANALYSIS.** Rush Turnaround Times (TAT) are available upon request and must be approved by an MIDWEST team member prior to sample submission. MIDWEST is not liable for extensions of TATs as a result of highly-contaminated samples. Turnaround times may be extended as a result of improper sampling, preservation, sample matrix, wide ranges of analyte concentration or other issues outside of MIDWEST's control.
  8. **ACCEPTANCE OF TEST REPORTS.** All reports and letters issued by MIDWEST are for the exclusive use of the Customer to whom they are addressed. No other entity or person may rely upon or use such letter or report without the written consent of MIDWEST. MIDWEST reports apply only to the specific samples tested under stated test conditions and protocols and test results are not necessarily indicative of the qualities of apparent identical or similar testing or conditions. MIDWEST shall have no liability for any deductions, inferences or generalizations drawn by the Customer or others from MIDWEST's reports. If the Customer requests verification of any part of the test report, MIDWEST shall be notified within thirty (30) days of submission of the report to the Customer. Failure to notify within this thirty (30) day period acknowledges acceptance of the report. Should additional work be required for verification purposes, MIDWEST shall be entitled to the reasonable value of the additional work performed by MIDWEST. Payment for any test report or other MIDWEST invoice shall not be conditioned upon acceptance and/or approval of a third party or the results of the test.
  9. **HAZARDOUS WASTES.** Customer must notify MIDWEST of any materials suspected of being hazardous and provide the appropriate documentation and packaging of such samples. MIDWEST reserves the right to refuse samples that may cause a hazard to which MIDWEST is not equipped to handle and will return samples to the Customer. It is the responsibility of Customer to label and meet all regulations on samples that are hazardous. Hazardous samples may be returned to Customer or Fees may be applied to have hazardous material properly and safely disposed of by a third party.
  10. **QUALITY ASSURANCE.** MIDWEST agrees to follow their Quality Assurance Manual and Method SOPs unless specified in writing. It is up to Customer to determine if these procedures meet their needs prior to placing the order.
  11. **RETENTION OF SAMPLES.** Unless otherwise specified water samples are stored for a minimum of 14 days after completion of the work order. Empty containers and samples that are analyzed for microbiology are disposed of immediately. MIDWEST may have the capacity to store samples for longer periods of time for further or additional analysis, if requested prior to sample disposal. Additional fees may be applied.
  12. **CANCELLATION POLICY.** All orders cancelled may be subject to a cancellation fee. If sample(s) are processed for analysis before cancellation has been requested, cost of prep completed and/or full analysis cost will be charged.
  13. **REPORTS.** Reports will be kept for 3 years unless otherwise required by law or specified in writing.
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- 14. VALID ORDERS.** It is the sole responsibility of the Customer to determine that services ordered are suitable for the purposes of the Customer's intended use. Any order provided to MIDWEST, notwithstanding the fact that such order may have been given or signed by a person not authorized by the Customer, shall be deemed to constitute a valid order.
- 15. PAYMENT TERMS.**
- MIDWEST reserves the right to request an initial retainer fee before MIDWEST begins work on the matter. Any retainer will be deposited and credited to Customer's account and will be applied toward all invoiced fees and costs incurred in this matter. MIDWEST will bill against the retainer as fees are expended. Should MIDWEST anticipate at any time that costs will exceed the amount in retainer, it MAY request pre-payment in MIDWEST's sole discretion. Upon termination of this Agreement, and the payment of any sums due and owing to MIDWEST, any excess will be refunded to Customer.
  - To the extent that any invoice exceeds the amount of the retainer held on credit, and such costs are invoiced, Customer agrees to pay the invoices within 15 days of the date on the invoice, unless otherwise designated in writing by MIDWEST.
  - Invoice Disputes. Customer shall notify MIDWEST in writing of any dispute with any invoice (along with substantiating documentation and a reasonably detailed description of the dispute) within 15 days from the date of such invoice. Customer will be deemed to have accepted all invoices for which MIDWEST does not receive timely notification of dispute and shall pay all undisputed amounts due under such invoices within 15 days.
  - The Customer's obligation to pay MIDWEST is not in any way conditioned upon Customer receiving payment from any third party or on any specific result from MIDWEST's services. If the Customer fails to make payment according to the agreed upon terms, MIDWEST shall have the full right to cease all work, withhold test data and or reports, and cause all invoices to be immediately due and payable, even if such ceasing would compromise the Customer's study and require the Customer to prepare and submit new samples. Customer is still obligated to pay for the testing up to the date testing is ceased by MIDWEST.
  - In the event the Customer defaults in making payment of any amount that has become due and owing, the full outstanding balance (whether due or not) will immediately become due and payable without further notice to the Customer.
  - Past Due accounts will be charged 1.5% per month of the unpaid balance. Customer agrees to reimburse MIDWEST for the costs of collection of past due debts including but not limited to collection and legal fees, to the fullest extent permissible by applicable law. Customer may not defer billing to a third party. MIDWEST will not be responsible for holding times or deadlines that are missed because of changes or delays in payment. Payments are accepted by check, ACH or credit card. Credit card payments incur a 3% fee if payment is made after the date of the invoice. Returned checks are charged \$25 fee

- 16. WARRANTIES.** Services performed by MIDWEST, including its works and reports are not governed by the Uniform Commercial Code (UCC). Except as stated expressly herein, MIDWEST disclaims all warranties, express or implied, including any warranties of merchantability or fitness for a particular purpose. MIDWEST shall have no liability for incidental or consequential damages of any nature whatsoever. The Customer acknowledges and agrees that MIDWEST provides no warranty, express or implied regarding any supplies, devices, or monitoring.
- 17. CUSTOMER REMEDIES.** MIDWEST warrants the accuracy of the results of samples as submitted, no other warranty or liability for the use of the result is expressed or implied. Expressly, MIDWEST will provide services in accordance with this Agreement and MIDWEST will not have any responsibility other than to exercise reasonable skill and care in the performance of services. In the event any court of competent jurisdiction or arbitrator makes a final determination that MIDWEST has failed to comply with such standards of conduct in providing services and that such failure directly caused the Customer harm, MIDWEST will be responsible to compensate the Customer for such direct harm, PROVIDED, HOWEVER, that the amount of such compensation will not exceed the cost of services provided that caused the Customer harm or the damages incurred, whichever is less, and that, under no circumstances will MIDWEST be liable to the Customer for any incidental, indirect, consequential, or punitive damages. EXCEPT AS OTHERWISE PROVIDED EXPRESSLY HEREIN, MIDWEST MAKES NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, WHETHER EXPRESS OR IMPLIED, WITH RESPECT TO THE SERVICES PROVIDED OR GOODS SOLD, INCLUDING, BUT NOT LIMITED TO, ANY "IMPLIED WARRANTY OF MERCHANTABILITY" OR "FITNESS FOR A PARTICULAR PURPOSE."
- 18. LITIGATION.** MIDWEST and Customer waive the right to a trial by jury.
- 19. INDEMNIFICATION.** Customer agrees to indemnify MIDWEST for gross negligence or misconduct on the part of Customer or its agents unless such gross negligence is a result of negligent or willful omissions on the part of MIDWEST.
- 20. THIRD PARTY CLAIMS.** CUSTOMER AGREES TO INDEMNIFY AND HOLD HARMLESS MIDWEST AND ITS DIRECTORS, OFFICERS, EMPLOYEES, AFFILIATES, AGENTS, AND SUBCONTRACTORS (EACH AN "INDEMNIFIED PARTY") FROM ALL LOSSES AND EXPENSES (INCLUDING REASONABLE ATTORNEYS' FEES) ARISING OUT OF, OR RELATED TO, CLAIMS ASSERTED BY THIRD PARTIES THAT RELATE TO THE TESTING RESULTS OR TESTING DATA PROVIDED BY MIDWEST TO CUSTOMER, OR THE MANUFACTURE, MARKETING, OR SALE OF CUSTOMER'S PRODUCTS OR THAT RELATE TO THE SERVICES RENDERED.
- 21. RELEASE AND WAIVER.** TO THE EXTENT PERMITTED BY LAW, CUSTOMER WAIVES AND RELEASES MIDWEST AND ITS DIRECTORS, OFFICERS, EMPLOYEES, AFFILIATES, AGENTS AND SUBCONTRACTORS FROM ALL LIABILITY, CLAIMS, DEMANDS, ACTIONS, OR CAUSES OF ACTION FOR ANY ALLEGED LOSS, DAMAGE, OR INJURY, OTHER THAN A CLAIM FOR COMPENSATION FROM MIDWEST PURSUANT TO SECTION 8. THIS RELEASE AND WAIVER COVERS ALL CLAIMS ARISING IN TORT AS WELL AS THOSE ARISING UNDER ANY STATE OR FEDERAL STATUTE, THAT IN ANY WAY ARISE OUT OF, OR RELATE TO, THE SERVICES OR PERFORMANCE OR ALLEGED NON-PERFORMANCE UNDER ANY AGREEMENT BETWEEN THE PARTIES.
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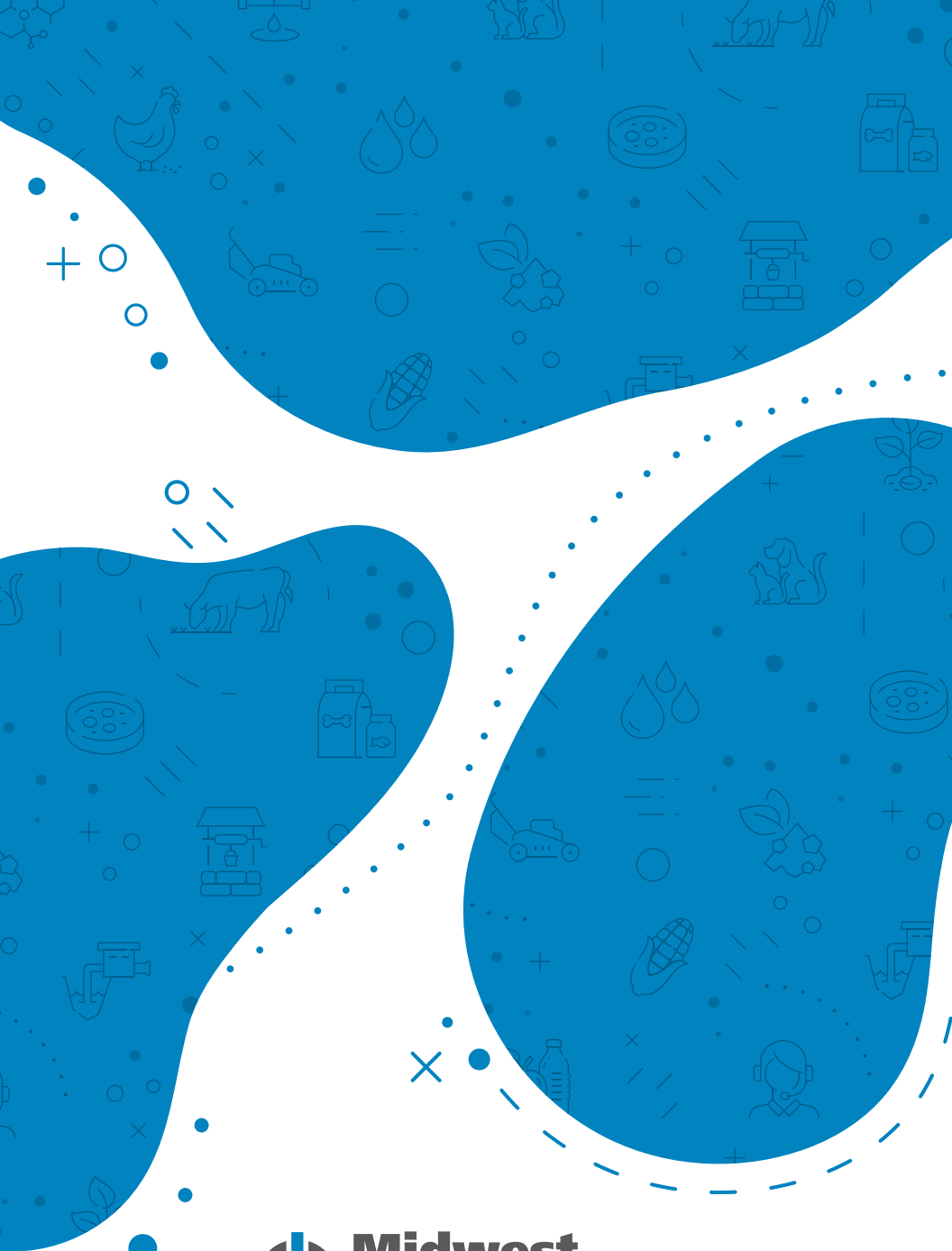


- 22. RECOVERY OF LEGAL/COLLECTION COSTS.** Should MIDWEST instruct its attorneys or collection agent to collect any overdue amounts, or to take any action against the Customer in the implementation or protection of MIDWEST's rights, MIDWEST shall be entitled to the recovery of all legal fees, costs and/or collection costs arising therefrom, to the fullest extent permissible by law.
- 23. GOVERNING LAW AND CONSENT TO JURISDICTION.** The Customer hereby agrees that this Agreement and all other agreements between MIDWEST and the Customer shall be deemed to be made and governed by the Laws of the State of Nebraska. The Customer hereby consents that any legal action brought by MIDWEST for collection of any fees or invoices not paid by the Customer or other remedies sought by MIDWEST, shall be brought in a court of competent jurisdiction in Douglas County, Nebraska, or if the action is to be in federal court, in the U.S. District Court for the District of Nebraska.
- **COPYRIGHT.** The Customer acknowledges and agrees that all testing protocols or processes used to generate test results are the sole ownership of MIDWEST. No rights or ownership of MIDWEST's copyrights or other intellectual property of MIDWEST is transferred by invoicing the Customer for protocols used in the performance of the service by MIDWEST. Customer agrees that it shall not infringe upon any of the intellectual property rights of MIDWEST. Nothing in this Agreement shall be construed as a sale or transfer of MIDWEST's copyrights, trademarks or any other intellectual property owned or held by MIDWEST. Until such time as the Customer has paid MIDWEST in full with respect to any services provided by MIDWEST, the license to use any test results or any data related thereto shall be prohibited and shall remain the property of MIDWEST. MIDWEST shall, in its sole discretion, without notice to the Customer, be entitled to take possession of any such reports which have not been paid for or for which payment is overdue. Customer shall not be entitled to a credit with respect to services that may have been partially paid for.
  - **MISCELLANEOUS.** The failure of a party to insist upon strict performance of any provision of this Agreement or to exercise any right arising out of this Agreement shall neither impair that provision or right nor constitute a waiver of that provision or right, in whole or in part, in that instance or in any other instance. Any waiver by a party of a particular provision or right shall be in writing, shall be as to a particular matter and, if applicable, for a particular period of time and shall be signed by such party. If any provision of this Agreement or the application thereof is held invalid, the invalidity shall not affect other provisions or applications of the Agreement which can be given effect without the invalid provisions or applications and to this end the provisions of this Agreement are declared to be severable.

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