



AgriTec International
HAY & PASTURE PROGRAM

● PREPARED EXCLUSIVELY FOR [REDACTED]

Feed the stand. Not the lime bill.

A complete hay & pasture program built off your Midwest Labs soil report — where the first dollars protect green-up and regrowth, not a calcium-first pitch your pH doesn't justify. Options, timing, proof, and forage-quality science in one packet.

6.2–6.5

SOIL PH · WORKABLE

3–5

BRAY P1 PPM · VERY LOW

33–56

K PPM · THIN BANK

0.1–0.2

BORON PPM · DEFICIENT

Prepared by [REDACTED] · Director of Sales

Soil data: **Midwest Laboratories**
Report 26-077-0280 · March 20, 2026 · 4 samples



THE SHORT VERSION

What the Soil Is **Actually** Saying

A plain-English read of your four Midwest Labs samples (report 26-077-0280) before the detail pages.

Good talking with you. Going through your soil report across all four samples, the short version is this: your **pH is already in good shape at 6.2–6.5**, so the real opportunity is **not** a lime-first play. The biggest return on these acres comes from timely nitrogen at green-up, accessible potassium after first cutting, and cleaning up the boron and sulfur shortfall that shows up on every sample. P and K are both running low enough that the stand will lean on whatever you give it this season.

This packet is built around that read: **Good / Better / Best** options matched to budget, a season timing calendar, mixing & application guidance, real-world proof and economics, and the forage-quality science behind it all. Start with the soil snapshot — everything after it is built off your numbers.

What's inside

Soil snapshot & signals · Good/Better/Best program · season timing · mixing playbook · proof & economics · forage-quality science · AgriTec vs. Triple 19.

Where to start

The soil write-up first — it's built specifically off your lab numbers. Then pick a tier and set a proof strip on your most responsive field.

The core idea

Not an N-to-N equivalency. A forage conversion system: applied nutrients → uptake → energy → tons + quality → profit.



EXECUTIVE SNAPSHOT

Thin P and K Bank, **Workable pH**

What the lab says the first dollars should do: protect yield where the soil is clearly short, avoid spending where it's already adequate, and build a program that pays its way fast enough to keep scaling.

3.9%**AVG ORGANIC MATTER**

Solid biology potential, not self-supplying on low-testing acres

10.1**AVG CEC**

Moderate holding capacity — timing matters more

6–7**SULFUR RANGE (PPM)**

Low — on the short list for tonnage & protein

1.0–1.4%**K BASE SATURATION**

Below comfortable range — potassium is a real limiter

SPEND HERE FIRST

- **P and K access.** Bray P1 at 3–5 ppm and K at 33–56 ppm — the stand can't sustain hard regrowth on stored fertility alone.
- **Sulfur and boron.** Two of the cheapest response bets in the report: low on nearly every acre, and both influence forage performance well beyond their cost.

NOT THE FIRST DOLLAR

- **Lime & calcium.** Calcium is already 1,470–1,701 ppm and pH is 6.2–6.5. That's not where the first ROI dollar belongs.
- **Blanket zinc & manganese.** Zinc 1.4–2.5 ppm (adequate); manganese is mixed field to field. Keep these tissue- or hay-analysis driven, not blanket spends.

Advisor read

This is the kind of report where honesty matters. The pH is already in the productive zone, so a calcium- or lime-first pitch is not where the best return starts. All four samples carry very low phosphorus and potassium, while sulfur and boron also come in low enough to matter for stand density, regrowth, and forage quality. These acres need a program that helps the stand green up faster, regrow harder after cutting, and avoid paying for broad corrections the test doesn't justify.



WHAT'S LIMITING YIELD — AND WHAT ISN'T

The Signals Behind the Recommendations

The most credible program on this farm acknowledges the real limits. These signals are the backbone of every recommendation that follows.

HIGH-PRIORITY LIMITER

Phosphorus is severely short

Weak Bray P1 runs 3–5 ppm across all four fields. The highest-ROI dollars go toward timely liquid P support, not assuming the soil can feed aggressive regrowth on its own.

HIGH-PRIORITY LIMITER

Potassium is thinner than it looks

K is only 33–56 ppm, with base saturation at 1.0–1.4%. These acres green up, then flatten after cutting or grazing — staged K support belongs at the center of the plan.

CHEAP RESPONSE LEVER

Boron and sulfur are easy wins

Boron is 0.1–0.2 ppm on every sample and sulfur runs 6–7 ppm. Small dollars that protect a lot of tonnage and feed quality when P and K are already tight.

DON'T OVERSPEND

pH is already workable

pH 6.2–6.5 with buffer index 6.8–6.9. The chemistry doesn't justify leading with a lime-first message — this is about feeding and timing, not rescuing acidity.

TARGET ONLY IF NEEDED

Zinc adequate, manganese mixed

Zinc 1.4–2.5 ppm; manganese swings 7–14 ppm. A tissue- or hay-analysis driven approach beats blanket micro loading.

WATCH, DON'T PANIC

Copper is soft on most fields

Copper 0.6–0.9 ppm — low enough to keep on the watch list, but not as financially urgent as P, K, sulfur, or boron.



GOOD / BETTER / BEST

Three Ways to Use AgriTec on These Acres

The honest difference between tiers isn't marketing language — it's what each is trying to buy: first-cut protection, stronger season-long regrowth, or a proof-first program that protects tonnage while starting to close the fertility gap.

GOOD

Green-Up Base

First-cut protection on a tight budget

- ✓ Nitro-Maxx+ 6 gal/ac at early green-up to anchor nitrogen
- ✓ 0-0-30 at 2 gal/ac after first cutting / first strong regrowth
- ✓ BoroLift 1 pt/ac as a soil-test-specific boron correction
- ✓ Optional thin-stand adder: 3-18-18+ at 1-2 gal/ac

RELATIVE COST



BETTER

Regrowth Builder

Tonnage + quality step-up

- ✓ Nitro-Maxx+ 8 gal/ac at green-up — stronger N + chemistry push
- ✓ Aerate 12 oz/ac to help water movement and rooting
- ✓ 0-0-30 at 3 gal/ac after first cutting for regrowth + drought resilience
- ✓ BoroLift 1 pt/ac once per season (boron deficient on every sample)

RELATIVE COST



BEST

Full Season Forage Push

Split N + proof-first resiliency

- ✓ Nitro-Maxx+ split 4 + 4 gal/ac (green-up & after first cutting)
- ✓ 3-18-18+ 2 gal/ac at green-up for low-testing acres
- ✓ 0-0-30 3 gal/ac post-cut (+ optional 3 gal late-season on moisture)
- ✓ Bio-Act 1 qt/ac + Aerate 15 oz/ac + BoroLift 1 qt/ac

RELATIVE COST



A note on the Best tier

On this soil test, the Best tier should still be paired with a separate P/K bank-rebuild line, because these reserves are too low to treat as optional forever. The honest play is tonnage response first, then a disciplined multi-year rebuild — not pretending one spray pass rebuilds the bank.

Per-acre pricing and a delivered quote available on request. Free delivery on all orders.



AGRITEC VS. TRIPLE 19

Compete on Cost. Win on Conversion.

Side-by-side nutrient delivery, per acre. Triple 19 (19-19-19) assumed at a standard 200 lb/ac dry rate. Triple 19 delivers more raw pounds — in a fixed 1:1:1 ratio that rarely matches what forage actually exports.

PER-ACRE DELIVERY	AGRITEC PROGRAM	TRIPLE 19 (200 LB/AC)
Application	Liquid spray, single pass	Dry spread, single pass
Nitrogen (N)	~18 lb/ac (slow-release + biology)	38 lb/ac (fast-release, high loss)
Phosphorus (P ₂ O ₅)	~4 lb/ac (3-18-18+)	38 lb/ac (fixed ratio, excess if not needed)
Potassium (K ₂ O)	~4 lb/ac (3-18-18+)	38 lb/ac (fixed ratio)
Boron	Yes (BoroLift)	None
Carbon / Biology	Yes (NitroMaxx+ backbone)	None
Nutrient efficiency	Higher conversion per lb applied	Standard, ~40–60% N loss typical
Matches forage export?	Adjustable per soil test	Fixed 1:1:1 regardless of need

Why 3-18-18+ instead of 0-0-30

Where soil shows broom sage pressure — typically signalling low phosphorus and/or low pH — 3-18-18+ delivers 18% P and 18% K in one pass (vs. 0-0-30, which carries potassium only). That phosphorus thickens desirable grass stands and makes the environment less favorable for broom sage. The 3% nitrogen is a small bonus, not the driver.

Why dry blends feel cheaper (but often cost more)

One-and-done timing mismatch increases loss and reduces uptake. If pH/Ca and biology are off, you can apply plenty of N and still not convert it to tonnage. The AgriTec system targets what the soil test says the field needs, with biology and carbon improving conversion of every pound. The proof is in the hay test and bale count — not the fertilizer label.



TIMING CALENDAR

When to Run It. Foundation First, Pushes Only When They Pay.

Timing matters more on moderate-CEC, low-testing ground because the stand has no deep nutrient bank to lean on. Run the Foundation to set the engine; add a push only when the field can respond (moisture + demand) and the math pencils.

FOUNDATION

Green-Up Pass

At green-up / first true regrowth

Sets the engine: uptake + conversion + K for water and sugar movement. The default entry point — one clean pass when you already plan to spray.

NitroMaxx+ 8 gal + 0-0-30 3 gal

PUSH #1

Post-Cut

3-7 days after cutting / post-rotation

Hits the highest-payback regrowth window when plants respond. Protects protein and energy through the next regrowth window when moisture is there.

NitroMaxx+ 4 gal + 0-0-30 2 gal

PUSH #2

Mid-Season

Stress window — only with moisture

Supports energy + K during stress and recovery. Optional — must pay for itself. If drought is locking growth, hold it; inputs won't convert.

NitroMaxx+ 4 gal + 0-0-30 2 gal

FALL

Stockpile Support

Late summer / fall

Protects stand persistence and fall recovery; grazing days replace purchased feed. One pass before you shut the gate for winter.

NitroMaxx+ 4 gal + 0-0-30 2 gal

Pass logic through the season

Early green-up: first dollars into nitrogen plus accessible P/K where low-testing acres need to wake up fast and build leaf area. **Post-first cutting:** the highest-payback K window on the page — if the stand is going to flatten, this is where it starts. **Moisture-driven second push:** on premium acres with rainfall or irrigation, a second K or split-N shot protects protein, TDN, and persistence. **Post-season:** plan a disciplined P/K bank rebuild rather than another single spray pass.



TANK-MIX & COMPATIBILITY PLAYBOOK

Jar Test First. Mix in Order. Label Is Law.

A pre-load routine that prevents most compatibility failures. Jar-test any new stack, new generic, or new water source before it goes in the tank.

1 • Jar test first

Match your spray water and temperature, scale products to field ratios, add in order, wait 5–15 min, then decide. If it fails in a jar, it fails in a tank.

2 • Mix in order

Use A.P.P.L.E.S. with constant agitation. Start with at least 10–15% water in the tank before adding products. Never combine concentrates in the inductor.

3 • Spray promptly

Keep agitation on. Don't let complex mixes sit overnight. If the label says no, do not tank-mix.

Default mixing order — A.P.P.L.E.S.

A

Agitation + water

P

Soluble powders (SG/SP)

P

Dry powders
(WP/DF/WDG)

L

Flowables / suspensions
(SC/SE)

E

Emulsifiable concentrates
(EC)

S

Solutions / adjuvants
(last)

Safe default for this program: Water → agitation → dry powders (AMS/WDG) → ECs (if any) → NitroMaxx+ → O-O-30 → surfactant last.

GO — proceed

Uniform with agitation, passes the jar test at field ratios, no screen plugging. Smooth and uniform, or settles but re-suspends easily with more agitation (spray same day).

STOP — do not tank-mix

Heat, gas, curds, gel, hard sludge, strong odor, or a layer that won't re-suspend. Split the application or switch partners — incompatibility plugs screens, cuts efficacy, and damages equipment.

Carrier & coverage

Foundation runs best at **15–20 GPA** for clean coverage (it's ~11 gal/ac of product); pushes can run 10–15 GPA. Coarser droplets and cooler spraying reduce leaf-burn risk. NitroMaxx+ is the engine — the default system does not stack extra humics, biology, or micros on top of it by habit; add-ons are optional and ROI-triggered.



UNIVERSITY + ON-FARM PROOF

What's Working, and How We Validate It

Real outcomes built around a simple system — not product stacking. Proof first, then economics, then a validation protocol you can run on your own farm.

Tuskegee University Hay Trial

Coastal bermudagrass, abnormally dry + extreme heat. NitroMaxx+ 6 gal/ac vs. control.

Control

1,394 lb/ac



NitroMaxx+ 6 gal

2,872 lb/ac



+1,478 lb/ac biomass (+106%) over control, and crude protein +2 points (13% → 15%) — more production under stress means more dependable ROI.

30-Day Soil Snapshot (NitroMaxx+ 6 gal/ac)

Measured change over 30 days in the trial.

SOIL MEASURE	INITIAL	DAY 30
Soil N (lbs/ac)	10	34.25
Soil pH	5.9	6.1
Calcium (lbs/ac)	753	939
Potassium (lbs/ac)	51	67

On-farm proof

~30%

MORE HAY

Horse-hay squares; quality + consistency = faster sell-through (Advanced-Cal)

52

BIG SQUARES

3x3x8 off 28 ac, 3rd-year stand; previous record 42 (Pro-Cal + 0-0-30)

No Lime

PH CORRECTED

County agent quoted 3 tons lime/ac; pH reached mid-6.4 after 3 gal Pro-Cal

Stays Green

DROUGHT RESILIENCE

Better plant efficiency under stress; more dependable next cutting

How we keep it believable — the validation protocol

Step 1: run the Foundation pass on the whole field (or your best field). **Step 2:** leave 2 untreated (or reduced-rate) strips for a clean comparison. **Step 3:** measure in 7–14 days and again at the next cutting — track bales/ac or tons/ac, regrowth speed, hay test (protein, TDN, RFV), and cost per acre vs. added bales. Typical when the limiter is corrected: greener and more uniform at 7 days, thicker stand and faster regrowth at 14, more bales and a better test at next cut.



TDN • PROTEIN • TNV

Forage Quality Drives Cattle Profit

Three numbers tie forage to animal performance and cost-to-gain. If any one "conversion part" is missing, you can apply fertilizer and still not move forage tests — the program is built to remove the common bottlenecks.

TDN • Energy

Total Digestible Nutrients — a practical energy score. Drives gain potential, feed efficiency, and how hard you have to supplement. Built from photosynthesis + sugar movement: **K** (water + sugar), **Mg** (chlorophyll), **P** (ATP/energy transfer), plus micros.

Protein • CP

Crude Protein — the building block for growth, milk, and rumen function. Not just "more N": **sulfur** builds the S-containing amino acids and supports nitrate reduction, while micros (**Mo, Mn, Zn, Fe**) run the enzymes that turn N into true protein.

TNV / RFQ • Value

A single "feed value" score (labs report RFQ/RFV). Drives dollars-per-ton and buyer confidence in horse and dairy markets. Steadier quality prevents the "good week / bad week" intake and gain swings.

The conversion chain

Applied nutrients → uptake efficiency → energy & protein → tons + quality → profit

This is a forage conversion system, not an N-to-N equivalency. Harvest timing still matters — fertility doesn't override maturity; it keeps stands dense, leaves healthy, and regrowth consistent so quality is easier to capture.

Quality accelerators (use on acres that can pay you back)

BIOLOGY

BioAct

Micros + biostimulant (no added N). Enzymes speed nutrient release and cycling; amino acids act as building blocks — helping N become true protein. Typical 0.5–1 qt/ac.

MICRONUTRIENTS

Min-Tec

Balanced micro blend supporting photosynthesis, nitrate conversion, sugar transport, and cell-wall strength — key drivers of TDN, stand health, and consistent protein. Typical 0.25–1 qt/ac.

CARBON

Humic / Fulvic

Improves availability and stress buffering; steadier conversion reduces the "big flush then stall," keeping the canopy leafy and productive. Typical 0.5–2 gal/ac.



HOW TO START

Run It Simple. Validate It. Scale It.

Foundation is the entry point. Set dates around your cut and rotation schedule, run 1–2 strips, track bales and a hay test, then add pushes only if they pay.

Step 1 • Foundation

Run the green-up Foundation pass — the entry point that sets the engine. One clean pass when you already plan to spray.

Step 2 • Prove it

Leave 1–2 test strips (same field, same cutting) and count bales/tons at the next cut. Clean comparison, real numbers.

Step 3 • Add only what pays

Run Push #1 and #2 only when moisture, demand, and response line up. Build the disciplined P/K rebuild over the next seasons.

Fastest way to tailor your plan — reply with five things

1) Acres · 2) Hay / pasture type · 3) Cut count or rotation · 4) Bale value · 5) Soil test (if available). We'll build the ROI around your bale value and cut count, and help you validate before you stack anything.

READY TO SET A PROOF STRIP?

Contact your AgriTec rep to pick fields and book the Foundation pass.

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