MISSISSIPPI STATE UNIVERSITY EXTENSION

Forage and Manure Analysis Laboratories

Below is a list of university forage laboratories where forage producers can send samples for analysis. For a detailed list of other commercial laboratories across the United States that are certified by the National Forage Testing Association (NFTA), please visit https://www.foragetesting.org/.

Name	Address	Method	Basic Analysis	Additional Analysis	Form
Soil & Forage Testing Lab Auburn University	ALFA Agricultural Services & Research Building 961 S. Donahue Drive Auburn University, AL 36849-5411 (334) 844-3958 https://aaes.auburn.edu/soil-forage-water-testing-lab/ (8–10 business days turnaround time)[2]	NIR[1], wet chemistry	DM, NDF, ADF, CP, lignin, TDN, RFQ ($15) feed analysis (DM, ADF, TDN, CP) ($20) manure package (Ca, Mg, K, P, Cu, Fe, Mn, Zn, B, Al), N, C, ash, moisture ($25)	basic + nitrate ($21) basic + nitrate + minerals ($41) feed analysis plus (DM, NDF, ADF, TDN, CP, fat, mineral package) ($40)	Hay & Forage Testing Feed Analysis Poultry Litter Analysis
Soil, Water, and Forage Analytical Laboratory Oklahoma State University	045 Agriculture Hall Stillwater, OK 74078 (405) 744-7771 https://agriculture.okstate.edu/departments-programs/plant-soil/soil-testing/ (3–5 business days turnaround time)	NIR, wet chemistry, combustion	basic (protein and moisture) ($8) basic + energy (CP, moisture, ADF, TDN, NEg, NEl, NEm) ($14) basic + energy + RFV [CP, moisture, ADF, NDF, TDN and energy, RFV (alfalfa only)] ($20)	nitrate and moisture ($6) minerals (Ca, P, Na, Mg, K, S, Mn, Cu, Fe, Zn, moisture) ($12) feed analysis protein or total nitrogen and moisture ($8) minerals (Ca, P, Na, Mg, K, S, Mn, Cu, Fe, Zn, moisture) ($12)	
SFASU Soil, Plant, and Water Analysis Laboratory Stephen F. Austin State University	1924 Wilson Drive Agriculture Bldg. Rm 122 Nacogdoches, TX 75962 (936) 468-4500 https://www.sfasu.edu/academics/colleges/forestry-agriculture/academics/agriculture/research-outreach/soil-plant-water-analysis-lab (5–15 business days turnaround time)	wet chemistry, NIR	regular (moisture content, CP, ADF, TDN) ($12) complete (regular analysis plus Ca, P, K, Mg, Na, S, Fe, Mn, Zn, Cu) ($19) NIR (moisture, CP, ADF, NDF, TDN, IVTD, RFV) ($10)	nitrate ($5) manure analysis (pH, EC, moisture, TN, C, S, P, K, Ca, Mg, Na, Cu, Zn, Fe, Mn) ($20)	Forage and Feed Sample Form Manure Sample Form
Soil, Water, and Forage Testing Laboratory Texas A&M AgriLife Extension Service	2610 F&B Road College Station, TX 77845 (979) 845-4816 https://agrilifeextension.tamu.edu/solutions/soil-testing/ (5–10 business days turnaround time)	wet chemistry, NIR	CP ($5) CP+ minerals (P, K, Ca, Mg, Na, S, Fe Cu, Mn, Zn, B) ($18) CP, ADF, TDN, energy ($12) CP + minerals + ADF ($25) CP, fiber, TDN, IVTD ($10)	nitrates ($5) CP + ADF + nitrates ($17) CP + nitrates ($10) N + minerals (P, K, Ca, Mg, Na, S, Fe Cu, Mn, B) ($18) total N ($5) manure (N, P, K, Ca, Mg, Na, Fe, Cu, Zn, Mn, % moisture) ($20)	Forage Submission Form Manure Sample Form

Name	Address	Method	Basic Analysis	Additional Analysis	Form
Feed and Environmental Water Lab (FEW) University of Georgia	2300 College Station Road Athens, GA 30602-4356 (706) 542-7690 http://aesl.ces.uga.edu/ (1–2 business days turnaround time)	NIR (hay & silage), wet chemistry (hay & silage)	routine (moisture, NDF, ADF, crude fiber, CP, lignin, TDN, RFQ) ($12) routine + nitrate (moisture, NDF, ADF, crude fiber, CP, lignin, nitrate, TDN, RFQ) ($15) routine (moisture, NDF, crude fiber, CP, TDN) ($28) routine + nitrate (moisture, NDF, crude fiber, CP, nitrate, TDN) ($31)	routine + nitrate + minerals (moisture, NDF, ADF, crude fiber, CP, lignin, nitrate, TDN, RFQ, 10 minerals) ($32) routine + nitrate + minerals (moisture, NDF, crude fiber, CP, nitrate, TDN, 10 minerals) ($48) manure (N, P, K, Ca, Mg, Na, Fe, Al, B, Cu, Zn, Mn, % moisture) ($20)	Submission forms: Beef & Dairy Sheep & Goat Horses Manure Sample Form
Soil, Plant, and Pest Center University of Tennessee	5201 Marchant Drive Nashville, TN 37211-5112 (615) 832-5850 https://soillab.tennessee.edu/ (10–14 business days turnaround time)	NIR	Beef Cattle basic (moisture, DM, RFQ, CP, TDN, NEm, NEg, ADF, NDF, Lignin, Ash, Ca, P, Mg, K) ($17) Horse basic (moisture, DM,RFQ, CP, DE, ADF, NDF, lignin, ash, Ca, P, Mg, K) ($17) Small Ruminant basic (moisture, DM, RFQ, CP, TDN, NEm, NEg, ADF, NDF, lignin, ash, Ca, P, Mg, K) ($17) Dairy basic (moisture, DM, RFQ, CP, NEL, NEm, IVTDMD48h, ADF, NDF, WSC, NFC, lignin, sugar, fructan, ash, Ca, P, Mg, K) ($17)	Beef Cattle basic + Cu + Zn + Mn + S ($30) basic + nitrates ($20) Horse professional (basic + sugar, fructan, starch, NSC, WSC, Zn, Cu, Mn) ($30) Small Ruminant basic + Cu, Zn, Mn, S ($30) basic + nitrates ($20) Dairy basic + Cu, Zn, Mn, S ($30) basic + nitrates ($20) nitrates (beef, small ruminant, dairy) ($10)	Submission Form
MS State Chemical Lab	310 President's Circle 1145 Hand Lab Mississippi State, MS 39762 (662) 325-3428 https://www.mscl.msstate.edu/ (30 business days turnaround time)		moisture, CP, fiber ($30) moisture, CP, fiber, fat, ash ($50) fiber, ADF ($30), NDF ($25), crude ($30), lignin ($25)	Ca and P ($50) TDN ($50)	Submission Form

[1]NIR = Near Infrared
[2]Turnaround times are based on when the sample is actually received and not the time when the sample was shipped. Most of the labs will send results via email.
Nutritive Value: DM = Dry Matter; CP = Crude Protein; ADF = Acid Detergent Fiber; NDF = Neutral Detergent Fiber; TDN = Total Digestible Nutrients; CF = Crude Fiber; NEl = Net Energy of Lactation; NEg = Net Energy of Gain; NEm = Net Energy of Maintenance, RFV = Relative Feed Value; RFQ = Relative Forage Quality; IVTD = In vitro True Digestibility; DE = Digestible Energy; IVTDMD48h = In vitro True Dry Matter Digestibility at 48 hours; WSC = Water Soluble Carbohydrates; NFC = Nonfibrous Carbohydrates.
Minerals: N (nitrogen), Ca (calcium), P (phosphorous), K (potassium), Mg (magnesium), Mn (manganese), Na (sodium), S (sulfur), Cu (copper), Fe (iron), Zn (zinc), B (boron), Al (Aluminum), NO_3 (nitrate).
Note: Prices are per sample and are subject to change. Please check the laboratory website for updated pricing information.

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