www.foragelab.com mail@foragelab.com I•800•CVAS•LAB 4999 Zane A. Miller Drive

Waynesboro, PA 17268



Cumberland Valley Analytical Services

Laboratory Services for Agriculture

Services and Pricing Guide

August 2019

Revised 8/8/19

History

Cumberland Valley Analytical Services (CVAS) was started in 1994 as a small chemistry forage lab serving the local dairy industry in Maryland and south-central Pennsylvania. Beginning with only 800 square feet of leased space and one employee, CVAS has grown considerably moving into a new custom designed 33,000 sq. ft facility in Waynesboro, PA in March 2017.

CVAS employs over 100 people in its Waynesboro facilities and has satellite locations in Batavia, NY, Madison, WI, and Zumbrota, MN.

CVAS has grown significantly by providing cutting-edge forage and feed evaluation services in a quick, accurate, and cost-effective manner. CVAS was the first to commercialize the Fermentation Analysis in the U.S. and one of the first to offer extensive in vitro digestibility services and analyses for the Cornell and CPM nutritional models.

As the largest chemistry-based feed lab in the U.S., CVAS has the resources to offer one of the most comprehensive sets of NIR forage and feed evaluations available to the industry.

Building on its successful service model, CVAS supports 28 affiliate labs in the U.S., Canada, and globally with NIR technical services (see page 12).

Despite its size and growth, CVAS continues to operate as a fully independent family owned company.



Forage and feed characterization from the field to the feed bunk.



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NIR Packages

NIRI

The NIR I 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.

NIR2

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).

NIR3

The NIR 3 is the NIR 2 Analysis plus wet-chemistry on Chloride (Cl), Sulfur (S), and DCAD.

NIR4

The NIR 4 is the NIR 2 Analysis plus wet-chemistry on Crude Protein, ADF and NDF.

NIR5

The NIR 5 is the NIR 1 Analysis plus wet-chemistry on Crude Protein, ADF, and NDF.

NIR Plus/CNCPS 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.

Soluble Starch Option

Provides a mechanically derived measure of soluble starch.

NIRI Non-Forage Ingredients

Almond hulls, Bakery, Beet Pulp, Brewers Grain, Canola Meal, Corn, Distillers, Corn Gluten Feed, Wheat Midds, Soybean Meal, Soy Hulls, and Small Grains (NIR2-5 are also available).

Manure Package

Provides Dry Matter, Crude Protein, ADF, NDF, Lignin, Starch, Ash, Ca, P, Mg, K.

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.

TMR Mixer 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.

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.

NIR

29.00

37.00

42.00

31.00

9.50

18.00

\$8.00

18.00

60.00

139.00

74.00

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.

Standard Plus Energy

Standard Package plus Fat, Lignin, ADFCP, NDFCP to get Energy Values on Non-Forages.

CPM Plus/CNCPS 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).

RFV Package

Includes Dry Matter, Moisture, Crude Protein, ADF, NDF, calculated RFV (on hays and haylages), Adjusted Protein, NEI, NEm, NEg, and TDN.

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).

Minerals Only

Includes Dry Matter, Ca, P, Mg, K, Na, Fe, Mn, Zn, Cu, and Ash only.

Minerals Only

High concentration materials (mineral ingredients, premixes, high mineral concentrates).

TMR Diagnostic Package

Includes Dry Matter, 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.

Animal Protein Package

Provides Dry Matter, Moisture, Crude Protein, Soluble Protein, Ash, Fat, Ca, P, Cl, and S.

Liquid Sample

- Provides Dry Matter, Moisture, Crude Protein, Ammonia, Fat, Sugar, Ash, Ca, P, Mg, K, Na, Fe, Mn, Zn, and Cu. 57.50
- Above analysis with Karl Fischer moisture appropriate when volatiles other than moisture are present in the sample. 107.00

62.50

87.00

34.00

26.00

40.00

185.00

58.50

38.00

25.00

Wet Chemistry Options

Fermentation Package Includes Dry Matter, Lactic Acid, Acetic Acid, Propionic Acid, Butyric Iso-butyric Acid, 1,2 - Propanediol, Total VFA, pH, Lactic Acid/VFA r Crude Protein equivalent from Ammonia as a percentage of Dry Matt Crude Protein.	atio,
Fermentation Analysis Plus Package Includes Fermentation Analysis as well as a breakdown of Alcohols, A and Lactates.	44.00 (cetates,
Fatty Acid Profile 30 meter column: 22 fatty acids from CI2 to C24, and total fatty acid	65.75 s.
Fatty Acid Profile Other products requiring 100 meter column: C4 to C24 with trans fat	99.75 ty acids.
Milk Fatty Acid Profile 100 meter column: C4 to C24 with trans fatty acids, de novo, mixed, pro total saturated and unsaturated fatty acids, CLA, MUFA, and PUFA.	99.75 eformed,
Free Fatty Acids	29.00
Heavy Metals Includes, Antimony, Arsenic, Barium, Boron, Cadmium, Calcium, Chror Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybde Phosphorus, Potassium, Selenium, Sodium, Sulfur, Thallium, Zinc.	
Mold Count Mold/Yeast Count.	28.00
Mold Identification	49.00
Mold/Yeast Count with Mold Identification.	
PDI/Urease (soy products only) Protein Dispersibility Index (includes PDI, and Urease Activity) Needs run with Crude Protein.	51.50
Micron Particle Size	21.00
Byproduct An add-on to the standard package, fat, lignin, ADFCP, NDFCP, sulfu chloride.	35.50 r, and
DCAD (CI, S) Must also include a package with wet chemistry minerals to calculate DCAD value.	14.00
Soluble Starch Option	22.50
Provides a mechanically derived measure of soluble starch.	
Corn Silage Processing Score (CSPS)	20.00
Physically Effective NDF (PENDF)	20.00
Particle Size Evaluation (Penn State Separator)	8.50

In Vitro Analysis

CVAS has the capacity to run most any sized in vitro project with all samples inoculated from a single run of comingled rumen fluid. Our in vitro facility has over 2000 incubator flask positions.

Multistep In Vitro Protein Eva Based on work by Dr. Debbie Ross and evaluation of feed material is followed I and enzymes. Rumen availability as wel Needs run with Crude Protein.	l Dr. Mike Van Amburgh. An by treatment sequentially wi	th acid
Freeze Dry RUP Needs run with Crude Protein.		149.50
NDF Digestibility In Vitro Per 6, 12, 24, 30, 48 or 240 hrs (uNDF). Or request.		28.50 able upon
NDF Digestibility In Vitro Time	Point Series (6 points)	149.00
Starch Digestibility In Vitro Pe 2, 4, 6, 7, 8, 12, 24, or 30 hrs. Other tir request.		34.50
Starch Digestibility In Vitro Ti (6 points)	me Point Series	182.50
Dry Matter Digestibility In Vit 4, 6, 12, 24, 30, 48, 72, 96, 120, or 240		22.50
Dry Matter Digestibility In Vit (6 points)	tro Time Point Series	109.50
NDF Basic RPE (Rate Pool Eva	aluation)	72.50
Needs run with NDFom. Forage Ingredient	30, 120, an 12, 72, an	d 240 hrs d 120 hrs
NDF Standard RPE		135.00
Forage	4, 8, 12, 24, 48, 72, 120, an	d 240 hrs
Ingredient	4, 8, 12, 24, 48, 72, 120, an	d 240 hrs



TMR

145.00

125.00

Includes Rates and Extent of digestion by gas production, Crude Protein, Soluble Protein, ADFCP, NDFCP, ADF, NDF, Lignin, Starch, Sugar, Fat, Ash, Ca, P, K, S, Na, and peNDF.

Feed and Forage

Includes Rates and Extent of digestion by gas production, NIR of Crude Protein, Soluble Protein, ADFCP, NDFCP, ADF, NDF, Lignin, Starch and Sugar.

In Situ Analysis

CVAS maintains 10 to 12 cannulated lactating cows. This provides flexibility to hang large numbers of bags for in situ evaluations, at the same time having access to large amounts of rumen fluid for in vitro incubations.

Protein Digestibility In Situ Rumen Undegradable Protein (RUP) at 16 hrs.	99.50
Dry Matter Digestibility In Situ Per Time Point 24, 30, or 48 hrs. Other time points available upon request.	73.00
Starch Digestibility In Situ Per Time Point 7, 16, or 24 hrs. Other time points available upon request.	90.00
NDF Digestibility In Situ Per Time Point	99.50

6, 24, 30, 48, 96, or 120 hrs. Other time points available upon request.



In situ

Proximates

TAG I Package Includes Dry Matter, Moisture, Crude Protein, Crude Fat, and Crude	30.00 Fiber.
TAG 2 Package Includes Tag I plus Ash, Ca, and P.	40.00
TAG 3 Package Includes Tag I plus Ash and Ca, P, Mg, K, Na, Fe, Mn, Zn, and Cu.	50.00
TAG 4 Package Includes Dry Matter, Moisture, Ash, Ca, and P.	25.00



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Amino Acids	
Must be run with a Crude Protein.	
Cysteine, Methionine, Lysine plus 9 more Cysteine, Methionine, Lysine, Aspartic Acid, Threonine, Glutamic Ac Proline, Glycine, Alanine, Valine, Isoleucine. and Leucine.	100.00 :id,
Full Profile without Tryptophan Cysteine, Methionine, Lysine, Aspartic Acid, Threonine, Glutamic Acid, Proline, Glycine, Alanine, Valine, Isoleucine, Leucine, Taurine, Hydroxyproline, Serine, Lanthionine, Tyrosine, Phenylalanine, Hydrox Ornithine, Histidine, and Arginine.	136.25 ×ylysine,
Full Profile with Tryptophan Cysteine, Methionine, Lysine, Aspartic Acid, Threonine, Glutamic Acid, Proline, Glycine, Alanine, Valine, Isoleucine, Leucine, Taurine, Hydroxyproline, Serine, Lanthionine, Tyrosine, Phenylalanine, Hydrox Ornithine, Histidine, Arginine, and Tryptophan.	1 56.75 xylysine,
Total Lysine	88.00
Total Methionine	91.75
Tryptophan	88.00
Mycotoxins	
•	100.00
Mycotoxin Screen Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol (DON, Vomitoxin), and Zearalenone.	135.00
Mycotoxin Screen Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol (DON, Vomitoxin), and Zearalenone. Mycotoxins Screen Plus Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol, Zearaleno	135.00
Mycotoxin Screen Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol (DON, Vomitoxin), and Zearalenone. Mycotoxins Screen Plus Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol, Zearaleno Fumonisin (BI, B2, B3), and Ochratoxin.	135.00 one,
Mycotoxin Screen Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol (DON, Vomitoxin), and Zearalenone. Mycotoxins Screen Plus Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol, Zearaleno Fumonisin (BI, B2, B3), and Ochratoxin. Aflatoxin by HPLC	135.00 one, 55.00
Mycotoxin Screen Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol (DON, Vomitoxin), and Zearalenone. Mycotoxins Screen Plus Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol, Zearaleno Fumonisin (BI, B2, B3), and Ochratoxin. Aflatoxin by HPLC Zearalenone by HPLC	135.00 one, 55.00 65.50
Mycotoxin Screen Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol (DON, Vomitoxin), and Zearalenone. Mycotoxins Screen Plus Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol, Zearaleno Fumonisin (BI, B2, B3), and Ochratoxin. Aflatoxin by HPLC Zearalenone by HPLC Fumonisin by HPLC	135.00 Dine, 55.00 65.50 65.50
Mycotoxin Screen Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol (DON, Vomitoxin), and Zearalenone. Mycotoxins Screen Plus Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol, Zearaleno Fumonisin (BI, B2, B3), and Ochratoxin. Aflatoxin by HPLC Zearalenone by HPLC Fumonisin by HPLC Ochratoxin by HPLC	135.00 one, 55.00 65.50 65.50 65.50
Mycotoxin Screen Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol (DON, Vomitoxin), and Zearalenone. Mycotoxins Screen Plus Screen includes Aflatoxin, BI, B2, GI, G2, Deoxynivalenol, Zearaleno Fumonisin (BI, B2, B3), and Ochratoxin. Aflatoxin by HPLC Zearalenone by HPLC Fumonisin by HPLC Ochratoxin by HPLC Deoxynivalenol by HPLC	135.00 one, 55.00 65.50 65.50 65.50 55.00

Aflatoxin, BI, B2, GI, G2, Deoxynivalenol, Zearalenone, Fumonisin (BI, B2, B3), Ochratoxin, and T-2.

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Components

Please add \$6.00 processing charge to each sample not run with a package.

Acid Insoluble Ash 26.75
ADF7.50
ADFom (ash free) 10.00
ADFCP7.50
Ammonia Nitrogen 12.25
Ash7.50
Barium
Boron 13.00
Chloride7.50
Cobalt
Crude Fiber 11.50
Crude Protein7.50
Degradable Protein (S. Griseus) 14.00 Needs run with Crude Protein
Equine Energy No Charge
Ergonovine 120.00
Fat (Acid Hydrolysis)
Fat (Ether Extraction)II.00
Fecal Starch 13.50
Free Fatty Acids 29.00
Gossypol Free
Gossypol Total 275.50
Initial Peroxide (on liquid materials)31.00
Initial Peroxide (on dry materials)
Iodine Value (Fat & Oils)51.50
Iodine, Elemental (Minerals & Metals)79.50
Karl Fischer Moisture 49.50
KOH41.00 Needs run with Crude Protein
Lactose77.25
Lead

Components

Lignin	
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	13.00
aNDF	7.50
aNDFom (ash-free)	10.00
NDFCP	7.50
NDR	7.50
Nitrate	12.00
Non-Protein Nitrogen (NPN) Urea and ammonia, CPE basis	31.50
Pepsin Digestibility 0.2% pepsin as per AOAC. Includes Crude Protein determination	
рН	6.50
Prolamin	29.25
Prussic Acid (Cyanide)	62.00
Salt (as chloride)	7.50
Selenium Expected levels needed	45.00
Soluble Protein	7.50
Starch	13.50
Starch (Gelatinized)	50.00
Sugar, ESC	
Sugar, WSC	12.00
Sulfur	7.50
Trypsin Inhibitor	98.75
Urease Activity (soy products only)	26.25
Expected Levels Needed For Items Belo	w
Vitamin ACa	ll for price
Vitamin D for premixes (LOD 45,359 IU/lb)Ca	ll for price
Vitamin D by LC-MS/MS (LOD 18.1 IU/lb)Ca	ll for price
Vitamin ECa	ll for price

The CVAS Affiliate Network

Building on our successful integration of broad chemistry evaluation services, NIR applications, and web-based data management services, CVAS is able to support others in the business of providing analytical services to the feed industry. Our approach provides not just NIR equations but ongoing support, including definition of needs, equipment recommendations, assisting in the establishment of operations, technical support, quality control, software, and web-based data management. We support affiliate labs around the globe!



CVAS Web-based Data Review and Management System

CVAS continues to provide the most extensive internet-based data management programs available to the industry. Our online data management system not only gives you historical access and unique reporting capabilities but allows you to "mine" valuable statistical information from your samples.

The website provides co-branded reporting, custom report formats, client logging of samples with user-defined data fields, and support for multiple languages.

Samples can now be logged by the user, minimizing the potential for transcription errors and providing additional fields for descriptive data to be associated with the sample.

Results are available by website, fax, email (numerous formats available for importing into most nutritional models) as well as by mail.



Our Mission

Cumberland Valley Analytical Services is committed to providing innovative and cost-effective forage and feed

CVAS Mobile App

Our FORAGELAB app is a convenient way to submit and view sample information via your mobile device. The app is available on the iPhone, iPad and Android platforms. Clients are able to retrieve results almost immediately after the analysis is complete.

In addition, you can ensure prompt handling of your samples by submitting them through the FORAGELAB app. You can include detailed descriptions of your sample, select the analysis you require and even take a source picture of the sample.

Water Analysis

As a provider of diagnostic services to animal agriculture, CVAS provides livestock suitability evaluations of water. Do you know if water quality is an issue in your operation?

Total Coliform and E.coli	22.00
Nitrate Nitrogen and pH	15.00
Livestock Suitability Package	41.00
Includes pH, hardness, total dissolved solids, chlorides, su	lfate, nitrate,
Ca, P, Mg, K, Na, Fe, Mn, Zn, and Cu.	
pН	6.50
Alkalinity	13.00

Alkalinity

Manure Analysis

CVAS is certified by the Minnesota Department of Agriculture for manure testing. With increasing emphasis on stewardship of resources, including implementation of nutrient management planning, manure testing is becoming a routine evaluation for animal production facilities.

Packages	
Base Test Package I	39.75
Total Nitrogen, P ₂ O ₅ , K ₂ O, NH ₄ ⁺ -N, Total Solids, Density.	
Base Test Package 2	34.25
Total Nitrogen, P ₂ O ₅ , K ₂ O, NH ₄ ⁺ -N, Total Solids.	
Base Test Package 3	32.25
Total Nitrogen, P ₂ O ₅ , K ₂ O, NH ₄ ⁺ -N.	
Additional Options	
Water Soluble Phosphorus (PSC included)	12.25
Minerals (Ca, P, K, Mg, Na, Fe, Mn, Zn, and Cu)	12.00
Volatile Solids	7.50
рН	6.50
Total Carbon (C/N Ratio)	28.00

Plant Tissue Analysis

Standard	46.25
N, P, K, Ca, Mg, Na, S, Fe, Mn, Zn, Cu, and B.	
Trace Minerals each	42.25
Cd, Co, Pb, Mo, and Ni.	
Nitrate	12.00
Total Nitrogen	7.50
Total Carbon	28.00
Total Sulfur	7.50
Samples run for Nitrate, Nitrogen, Carbon, or Sulfur without a r	nineral

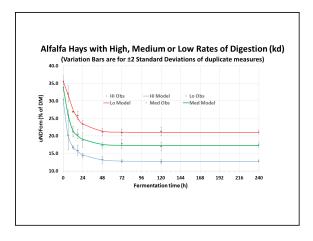
package will incur a \$6.00 processing charge.

Data Services

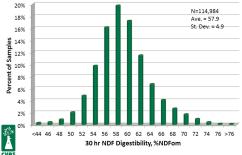
CVAS supports research institutions and industry by providing nutrient data on forages and feeds with data available back as far as 15 years and spanning the U.S. and international geographies. We work with clients on custom analytical needs and have the ability to utilize our database to quickly generate summaries and comparisons of analyses.

Data are only provided in an anonymous fashion that does not compromise any individual business or clients' privileged information.

Below is an example of relationships that can be developed from evaluation of data:







Data Services

Equine Services

Understanding equine nutrition is of critical importance to a horse's health and well-being and has radically changed in recent years. As we learn more about how horses digest and utilize nutrients from feeds, feed choices have broadened and changed. The importance of sugars, fructans, and fiber digestibility is better recognized.

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, ADFCP, NDFCP, Lignin, ADF, NDF, NDFom, Fat, Ash, Calcium (Ca), Phosphorus (P), Magnesium (Mg), and Potassium (K).

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).

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).

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).

Analyses important to troubleshooting equine nutritional problems are listed on other pages. Various nutritional components are listed on pages 10–11, mycotoxins on page 9, mold and yeast evaluations on page 5, and water on page 14.



18.00

29.00

62.50

87.00

Turn-around Time

Wet-chemistry results are returned three to six days following receipt with exceptions for special analyses. Results on NIR samples received by 11:00 a.m. for NIR-1, 2 & 3 are posted the same day. NIR samples submitted to a satellite facility requiring additional chemistry analysis will increase turn-around time by one day.

Accuracy and Precision

CVAS is certified by the National Forage Testing Association in both chemistry and NIR analyses. CVAS also participates in NAPT, AAFCO, MAP, and BIPEA check sample programs. In addition, CVAS is an AOCS approved laboratory to analyze DDGs from cornmeal and aflatoxin in cornmeal.

All samples released by CVAS are reviewed by in-house personnel with years of industry experience.

Mailing / Shipping Options

All shipping charges are subject to change.

CVAS provides sample bags at no charge and shipping materials at 25 cents for large bags and 70 cents for extra large bags. This allows for Priority Mail shipping with no money or paperwork required. We pay the shipping charges and bill back. Packages ship for \$8.00 or more depending on weight.

CVAS also offers UPS Authorized Return Service Labels. Ship samples with no money or paperwork required for a flat rate for the following services:

UPS Return Labels have a 50lb limit. Please remove all old shipping labels from reused boxes to avoid fines from UPS.

UPS Ground Service	\$5.00
UPS Second Day Service	\$25.00
UPS Overnight Service	\$35.00

USPS
PO Box 999
Waynesboro, PA 17268

UPS/Fedex 4999 Zane A. Miller Drive Waynesboro, PA 17268 Pricing

This brochure provides information on pricing and packages as of August 1, 2019 and may change without notice.

Please go to www.foragelab.com for up-to-date information.

Fees and Other Charges

CVAS is committed to keeping charges as low as possible in support of the use of analytical services. However, there are situations where additional charges are necessary due to specific costs of administration or handling.

Please go to www.foragelab.com for additional information.

International samples

Upcharge - approximately 20% See the international price brochure or for specific pricing or go to www.foragelab.com/International-Submissions/Price-List/.

Special handling

Up to \$10.00 per sample without contact for specific client approval.

Liquid samples

Up to 10.00 per sample without contact for specific client approval.

"Grind All" \$5.00 per sample

Additional Labor Charge \$50 / hour in 15-minute increments

Sample forwarding fee

\$6.00 per package. Actual shipping charges will be billed back.

Calling Fee

\$5.00 per specific occurrence

Archival Report Charge

\$2.50 per sample report

Shipping Charges

At published rates using CVAS in-bound shipping services, go to www.foragelab.com/Submitting-Samples/Shipping.

Billing

CVAS sends out bills twice per month around the 1st and 15th of the month for services completed in the previous two weeks. Terms are net 30 with any volume discounts available only when within terms. We do bill third parties on request. To pay by credit card go to our website or https://payment.foragelab.com/.

Key Staff



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Our Mission:

Cumberland Valley Analytical Services is committed to providing innovative and cost-effective forage and feed laboratory testing for the agriculture industry. Combining the most comprehensive array of forage characterization services, cutting-edge information technology, and outstanding customer focus, we will be the global leader in feedstuff analysis and analytics as we support world food production needs.