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

September 2023



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 about 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 CNCPS 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 36 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.



Take a tour of the CVAS lab with this QR code!



Laboratory services for production and research, feed and food.

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), Potassium (K) and pH on ensiled forage. Calculated values are provided for Available Protein, Adjusted

Protein, Degradable Protein, NEI, NEm, NEg (NRC Summative Energy Equations), NSC and NFC.

NIR₂ 36.00

The NIR 2 is the NIR I Analysis with chemistry Minerals - Calcium (Ca), Phosphorus (P), Magnesium (Mg), Potassium (K), Sodium (Na), Iron (Fe), Manganese (Mn), Zinc (Zn), and Copper (Cu).

NIR3 46.00

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

NIR4 52.25

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

The NIR 5 is the NIR I Analysis plus chemistry on Crude Protein, ADF, and NDF

NIR Plus/CNCPS Option

The option provides significant additional value. Graphical reporting and our expanded range reports are obtained using the Plus Option. Nutrients added include 12hr, 30hr, 120hr, and 240hr NDF digestibility evaluations as well as corresponding uNDF values; fermentation values and soluble fiber on ensiled forages; fatty acid values and a determination of amino acid nitrogen as a percentage of total nitrogen; 7hr starch digestibility; and a qualitative determination of nitrate and soil contamination.

uNDF Precision Time Point Analysis with Pools and Rates

20.25

Amino Acid Analysis

20.25

Soluble Starch Option

11.00

Provides a mechanically derived measure of soluble starch.

NIRI Non-Forage Ingredients

22.50

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

Manure Package

22.50

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

Apparent Nutrient Digestibility by TMR and Fecal Evaluation

Includes an NIRI 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/Moisture, 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

113.25

NIR analysis with chemistry minerals. This package includes Dry Matter/ Moisture, 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.

Chemistry Packages

Standard Package

51.50

Includes Dry Matter/Moisture, Crude Protein, Adjusted Protein, Soluble Protein, calculated Degradable Protein (Forages only), Acid Detergent Fiber (ADF), Neutral Detergent Fiber (NDF), Ash, (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.

Standard Plus Energy

84.25

Standard Package plus Fat, Lignin, ADFCP, NDFCP, NFC, and Energy Values on Non-Forages.

CNCPS Package

117.50

Includes the Standard Analysis and Lignin, Fat, ADFCP, NDFCP, Chloride, Sulfur, Starch, Sugar, NFC, TDN, NEI, NEm, and NEg. When combined with our Fermentation Analysis a Soluble Fiber is calculated.

RFV Package

34.25

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

Basic NDF Package

46.25

Dry Matter/Moisture, Crude Protein, ADF, NDF, Minerals (Ca, P, Mg, K, Na, Fe, Mn, Zn, and Cu), with calculated values for Adjusted Protein, TDN, NEI, NEg, NEm and Ash. (Energy values on forages only).

Mineral Only Package

35.50

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

Mineral Only (High Concentration) Package

54.50

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

TMR Diagnostic Package

248.75

Includes Dry Matter/Moisture, Crude Protein, Soluble Protein, Ammonia, ADF, NDF, ADFCP, NDFCP, Lignin, Fat, Starch, 7-hour Starch Digestibility, 24-hour NDF Digestibility, 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

91.50

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

Liquid Sample Analysis Package

- Provides Dry Matter/Moisture, Crude Protein, Ammonia, Fat, Sugar, Ash, Ca, P, Mg, K, Na, Fe, Mn, Zn, and Cu.

 98.00
- Above analysis with Karl Fischer moisture appropriate when volatiles other than moisture are present in the sample.

 157.25

Feed Mill Mixer Evaluation

462.50

Evaluation of CP, Ash, Ca, P, Mg, K, Na, Fe, Mn, Zn, Cu on 10 samples. Report of analyses including average, standard deviation and COV is available to download on foragelab.com.

Chemistry Options

Fermentation Includes Dry Matter/Moisture, Lactic Acid, Acetic Acid, Propionic Ac Butyric Acid, Iso-butyric Acid, I,2 - Propanediol, Total VFA, pH, Lact VFA ratio, Crude Protein equivalent from Ammonia as a percentage Matter and Crude Protein.	tic Acid/	
Fermentation Analysis Plus Includes Fermentation Analysis as well as a breakdown of Alcohols, A and Lactates.	60.25 Acetates,	
Fatty Acid Profile 30 meter column: 22 fatty acids from CI2 to C24, and total fatty acid	87.50 Is.	
Fatty Acid Profile Other products requiring 100 meter column: C4 to C24 with trans fat	131.50 ty acids.	
Milk Fatty Acid Profile 131.50 100 meter column: C4 to C24 with trans fatty acids, de novo, mixed, preformed, total saturated and unsaturated fatty acids, CLA, MUFA, and PUFA on relative basis only.		
Free Fatty Acids	17.00	
Mold Count Mold/Yeast Count.	37.75	
Mold Identification Mold/Yeast Count with Mold Identification.	66.00	
PDI/Urease (soy products only; must be run with CP) Protein Dispersibility Index (includes PDI and Urease Activity)	61.50	
Micron Particle Size	29.00	
Byproduct An add-on to the standard package, fat, lignin, ADFCP, NDFCP, sulfur, and chloride.	48.50	
DCAD (CI, S) Must also include a package with chemistry minerals to calculate DCAD value.	21.00	
Soluble Starch Option (Needs to be run with chemistry starch) Provides a mechanically derived measure of soluble starch.	30.00	
Corn Silage Processing Score (CSPS) Needs to be run with Starch or a package that includes Starch.	27.75	
Physically Effective NDF (peNDF)	27.75	
Particle Size Evaluation (Penn State Separator)	11.75	
Toxic Elements Panel Includes Arsenic, Lead, Chromium, and Mercury.	81.75	
Trace Elements Panel Includes Cobalt, Copper, Iron, Manganese, Molybdenum, Selenium, a	81.75 and Zinc	

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 Evaluation (MSPE)	160.50
Based on work by Dr. Debbie Ross and Dr. Mike Van Amburgh. An	In vitro
evaluation of feed material is followed by treatment sequentially wi	th acid
and enzymes. Rumen availability as well as intestinal digestibility is provided.	
Needs to be run with Crude Protein	

MSPE, Freeze Dry	201.25
, , , , , , , , , , , , , , , , , , ,	

Needs to be run with Crude Protein.

Ross UIP 99.00
Total tract protein digestibility and indigestibility. Needs to be run with

Total tract protein digestibility and indigestibility. Needs to be run with Crude Protein.

NDF Digestibility In Vitro Per Time Point 38.50 6, 12, 24, 30, 48 or 240 hrs (uNDF). Other time points may be available upon request. A request for a 72 hr or higher time point needs to be run with NDFom.

NDF Digestibility In Vitro Time Point Series (6 points) 225.25

Starch Digestibility In Vitro Per Time Point47.00
2, 4, 6, 7, 8, 12, 24, or 30 hrs. Other time points may be available upon request. Starch by chemistry needs to be done.

Starch Digestibility In Vitro Time Point Series (6 points) Starch by chemistry needs to be done. 275.00

Dry Matter Digestibility In Vitro Per Time Point

32.00

4, 6, 12, 20, 24, 30, 48, 72, 96, 120, or 240 hrs.

Dry Matter Digestibility
In Vitro Time Point Series (6 points)

187.25

NDF Basic RPE (Rate Pool Evaluation)

150.25

Needs to be run with NDFom.

Forage 12, 30, 120, and 240 hrs Ingredient 12, 30, 72, and 120 hrs

NDF Standard RPE

Needs to be run with NDFom.

Forage 4, 8, 12, 24, 48, 72, 120, and 240 hrs 300.50 Ingredient 4, 8, 12, 24, 48, 72, and 120 hrs 263.00

197.50

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. In Situ Analysis are not available for international samples.

Protein Digestibility In Situ	134.00
Rumen Undegradable Protein (RUP) at 16 hrs.	

Dry Matter Digestibility

MSPE. In Situ

In Situ Per Time Point 98.50
24, 30, or 48 hrs. Other time points available upon request.

Starch Digestibility In Situ Per Time Point 121.25
7, 16, or 24 hrs. Other time points available upon request.

NDF Digestibility In Situ Per Time Point 134.00

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



Proximates

TAG I Package Includes Dry Matter/Moisture, Crude Protein, Crude Fat, and Crude	40.00 Fiber.
TAG 2 Package Includes Tag I plus Ash, Ca, and P.	53.00
TAG 3 Package Includes Tag I plus Ash and Ca, P, Mg, K, Na, Fe, Mn, Zn, and Cu.	66.00
TAG 4 Package Includes Dry Matter/Moisture, Ash, Ca, and P.	33.50
Ai.a. A.aida	

Amino Acids

Must be run with a Crude Protein.

Cysteine, Methionine, Lysine plus 9 more	134.50
Cysteine, Methionine, Lysine, Aspartic Acid, Threonine, Glutamic	Acid,
Proline, Glycine, Alanine, Valine, Isoleucine, and Leucine.	

Full Profile without Tryptophan 183.50 Cysteine, Methionine, Lysine, Aspartic Acid, Threonine, Glutamic Acid, Proline, Glycine, Alanine, Valine, Isoleucine, Leucine, Serine, Tyrosine

Proline, Glycine, Alanine, Valine, Isoleucine, Leucine, Serine, Tyrosine,
Phenylalanine, Ornithine, Histidine, and Arginine.

Full Profile with Tryptophan

211.00

Tuni Tonie wich it yptophan	
Cysteine, Methionine, Lysine, Aspartic Acid, Threonine, Glutamic A	cid,
Proline, Glycine, Alanine, Valine, Isoleucine, Leucine, Serine, Tyrosir	ıe,
Phenylalanine, Ornithine, Histidine, Arginine, and Tryptophan.	

Total Lysine	118.50
Total Methionine	118.50
Tryptophan	118.50

800-282-7522 www.foragelab.com



Mycotoxins

 $\label{lem:method: Liquid chromatography-tandem mass spectrometry (LC-MS/MS). }$

Turn-around: 4-6 business days.

Rush service on individual toxins: \$75.50.

	Detection Limit	Mycotoxin Basic Panel	Mycotoxin Plus Panel	Mycotoxin Premier Panel
Aflatoxin BI	I ppb	$\sqrt{}$	\checkmark	\checkmark
Aflatoxin B2	l ppb	$\sqrt{}$	\checkmark	\checkmark
Aflatoxin GI	I ppb	$\sqrt{}$	$\sqrt{}$	\checkmark
Aflatoxin G2	I ppb	$\sqrt{}$	$\sqrt{}$	\checkmark
Deoxynivalenol (DON/Vomitoxin)	0.I ppm	\checkmark	\checkmark	\checkmark
Zearalenone	12.5 ppb	$\sqrt{}$	\checkmark	\checkmark
Fumonisin BI	0.1 ppm		\checkmark	\checkmark
Fumonisin B2	0.1 ppm		\checkmark	\checkmark
Fumonisin B3	0.1 ppm		\checkmark	\checkmark
T2	5 ppb		$\sqrt{}$	\checkmark
HT2	5 ppb		\checkmark	\checkmark
Ochratoxin A	I ppb		$\sqrt{}$	\checkmark
3 Acetyl Don	0.I ppm			\checkmark
I5 Acetyl Don	0.1 ppm			$\sqrt{}$
Citrinin	50 ppb			$\sqrt{}$
Fusarenon X	0.5 ppm			$\sqrt{}$
Nivalenol	0.5 ppm			$\sqrt{}$
Neosolaniol	20 ppb			$\sqrt{}$
Diacetoxyscirpenol (DAS)	100 ppb			\checkmark
Price		\$130.75	\$195.50	\$323.50

Individual toxins: Detection limits as listed above - \$87.50

Components

Please add \$8.50 processing charge to each sample not run with a package.

Acid Insoluble Ash	26.00
ADF	10.75
ADFom (ash free)	14.75
ADFCP	10.75
Needs to be run with ADF	
Ammonia Nitrogen	19.50
Ash	10.75
Barium	53.25
Boron	17.75
Calories (BTU) call	for price
Carbon	20.25
Chloride	15.25
Cobalt	51.50
Crude Fiber	16.00
Crude Protein	10.75
Degradable Protein (S. Griseus)	19.00
Equine EnergyNo	Charge
Ergot/Fescue Alkaloids in Feedstuff	182.50
Fat (Acid Hydrolysis)	29.50
Fat (Ether Extraction)	15.50
Fecal Starch	18.50
Gossypol Free	532.50
Gossypol Total	363.50
1.44.15 11.7 12.11 (1.13	42.00
Initial Peroxide (on liquid materials)	
Initial Peroxide (on Irquid materials)Initial Peroxide (on dry materials)	
Initial Peroxide (on dry materials)	124.00
	124.00 69.75
Initial Peroxide (on dry materials) Iodine Value (Fat & Oils) Iodine, Elemental (Minerals & Metals)	124.00 69.75 107.25
Initial Peroxide (on dry materials) Iodine Value (Fat & Oils)	124.00 69.75 107.25 59.25
Initial Peroxide (on dry materials) lodine Value (Fat & Oils) lodine, Elemental (Minerals & Metals) Karl Fischer Moisture KOH	124.00 69.75 107.25 59.25 49.25

Components

Lignin 13	.25
Moisture Only (Dry Matter)	.75
Molybdenum 17	.75
aNDF10	.75
aNDFom (ash-free) 14	.75
NDFCP 10	
Needs to be run with NDF	
NDR 10	.75
Nitrate 16	.75
Non-Protein Nitrogen (NPN)	.00
Pepsin Digestibility	.50
pH 9	.50
Prolamin (corn grain only)39	.75
Prussic Acid (Cyanide) 83	.50
Salt (as chloride) 17	.75
Selenium 61 Expected levels needed	.25
Soluble Protein	.75
Starch 18	.50
Starch (Gelatinized) 67	.75
Sugar, ESC 16	.75
Sugar, WSC 16	.75
Sulfur10	.75
Trypsin Inhibitor	.25
Urease Activity (soy products only) 20	.00
Expected Levels Needed For Items Below	
Vitamin ACall for pr	ice
Vitamin D for premixes (LOD 45,359 IU/lb)Call for pr	
Vitamin D by LC-MS/MS (LOD 18.1 IU/lb)Call for pr	ice
Vitamin ECall for pr	ice

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 foregreend feet

CVAS Client Portal

CVAS will be introducing a new client portal in 2024. This portal will include enhanced features for efficient logging of samples and will provide the ability to track samples from point of shipment to receipt at the lab, and through the lab analysis process. This will be functional for desktop, tablet, and phone.

For those using the portal there will be opportunity to improve the accuracy of submittal information provided as well as to create a more detailed record of information regarding a sample submission.

The portal will be an easy way to view all samples in process, to track changes in key client forages over time and to monitor overall forage quality on the individual farm or across multiple farms.

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	30.00
Nitrate Nitrogen and pH	20.75
Livestock Suitability Package	55.50
Includes pH, hardness, total dissolved solids, chlorides, sulfate, n	itrate,
Ca, P, Mg, K, Na, Fe, Mn, Zn, and Cu.	
pH	9.50

PH 9.50
Alkalinity 17.75
Fluid Elements 81.75

Antimony, Arsenic, Barium, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Phosphorus, Selenium, Sodium, Sulfur, Thallium, Zinc.

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. Please contact CVAS prior to shipping any international manure samples. Regulations vary depending on country of origin.

Packages

Base lest Package I	/5
Total Nitrogen, Organic Nitrogen, P ₂ O ₅ , K ₂ O, NH ₄ +-N, Total So	lids,
Density.	

Base Test Package 2Total Nitrogen, Organic Nitrogen, P₂O₅, K₂O, NH₄+-N, Total Solids.

Additional Options

Water Soluble Phosphorus (PSC included)	17.00
Minerals (Ca, P, K, Mg, Na, Fe, Mn, Zn, and Cu)	20.25
Volatile Solids	10.75
pH	9.50
Carbon (C/N Ratio)	20.25

Plant Tissue Analysis

Standard	30.75
N, P, K, Ca, Mg, Na, S, Fe, Mn, Zn, Cu, and B.	
Trace Minerals each	51.50
Cd, Pb, Ni, and Co	
Molybdenum	17.75
Nitrate	20.75
Nitrogen	10.75
Carbon	20.25
Sulfur	10.75
Chloride	15.25

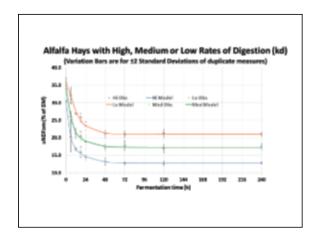
Samples run for Nitrate, Nitrogen, Carbon, or Sulfur without a mineral package will incur a \$8.50 processing charge.

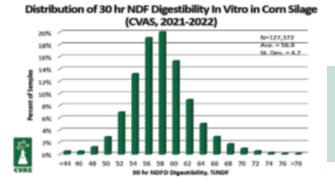
Data Services

CVAS supports research institutions and industry by providing nutrient data on forages and feeds with data available 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:





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 22.50

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 36.00

This 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, NDF, NDFom, Fat, 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

86.75

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 (forages only), 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

134.25

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.



Turn-around Time

Chemistry results are returned three to six days following receipt with exceptions for special analyses. Results on NIR samples received by noon for NIR-I, 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 Oilseed meal and DDGs from 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 USPS 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 \$9.00 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	\$13.50
UPS Second Day Service	\$30.00
UPS Overnight Service	\$44.00

USPS UPS/Fedex

PO Box 999 4999 Zane A. Miller Drive Waynesboro, PA 17268 Waynesboro, PA 17268

Pricing

The pricing and packages provided in this brochure 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 (excluding Canada)

A handling fee of \$12.50 (USD) is charged for each international sample.

Special handling – Some samples that are bulky or required special drying, processing, subsampling, or grinding may be assessed an additional charge.

- Up to \$12.75 per sample without contact for client approval.
- Freeze drying \$10.75 per sample.

Liquid samples – Up to \$12.75 per sample without contact for specific client approval.

"Grind All" - \$8.75 per sample

Ball Milling - \$11.50

Cryo Milling - \$17.25

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

Sample forwarding fee

\$20.00 per package. Actual shipping charges will be billed back.

Calling Fee - \$5.50 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/. A convenience fee will be charged at 3.5% of the transaction amount.

Clients utilizing our drop box route system will be billed \$3.00 per sample to underwrite the cost of drivers, vehicle use, and mileage.

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.

