

CII LABORATORY SERVICES 

Information & Pricing

Effective July 1, 2008



ISO 9001:2000
Certificate QSR-724



CII LABORATORY SERVICES



CII Laboratory Services was established to serve the grain, milling, baking and food industries with a full service analytical laboratory and test bakery. We function with a highly developed sense of urgency to assist our clients with their needs. Our staff has over two hundred years combined experience in the fields of manufacturing, sales and laboratory analysis. Should you prefer assistance in Spanish, please call 816-268-1172.

CII Laboratory Services is committed to providing reliable results with a rapid turnaround time. Testing for most samples is begun the day they are received. We are constantly increasing our capabilities and will work with you if you require special testing protocols.

All testing is performed by approved methods (ie. AACC, AOAC, ICC, AOCS) with all results confidential. Your results will be faxed or emailed to you upon completion with no additional fee and the original report sent by mail with your invoice to assist in reconciling.

We are committed to quality. CII Laboratory Services participates in numerous check sample and proficiency programs (AACC, API, industry collaboratives and internal check programs). As part of our ISO certification we have internal audit procedures and rigorous internal quality review procedures in place.

Our analytical capabilities are continually expanding so please inquire regarding testing not currently published. Pricing has been established for single samples; discounts may be available based on volume.

Because of confidentiality and ongoing testing, tours are not generally offered.

- **ISO 9001-2000**
- **No minimum fee**
- **VISA/MasterCard accepted**

Please contact us for your testing needs:

For services, prices, technical information:

Gretchen Stewart

Vice President, Sales & Marketing

(303) 774-8262

En español:

Janice Marsh

(816)-268-1172

CII LABORATORY SERVICES



Confidentiality

CII maintains the highest level of confidentiality as an understood policy. We are happy to sign confidentiality agreements with any customer. Results are available only to the paying customer unless the lab is notified otherwise by that customer.

Turnaround Time

CII Laboratory Services understands that every sample received is important and that the results are vital for your business operation. Rush service is available for two times normal price. Please make the notation on the Test Request Form should you need RUSH service. We will make every effort to accommodate your individual circumstances.

Sample Submission

Please refer to our sample size requirements sheet when you submit a sample. A Test Request Form is provided at the back of this brochure which should be included with any sample sent to our laboratory. Please fill it out completely with contact information, billing information (if different) and rush request if applicable. Also, please include expected levels if you know them, especially for vitamins, enrichments, fats, etc. Certain sample types may require additional sample preparation or clean-up because of the matrices or sample type. Such cases may necessitate an additional charge. For our foreign customers, please see our import permit number and sample submission procedures on page 9. All microbiological analyses should be sent to arrive within 24 hours.

Sample Reporting

Results are available via email or fax. A hard copy will accompany your invoice. Please include all appropriate contact information and preferred method of reporting on the Test Request Form provided at the back of this brochure. The Test Request Form is also located on our website, in printable format, at www.ciilab.com.

Repeat Analyses

Repeat analyses (Rechecks) will be performed at the customer's request; however, if the original results are confirmed, an additional charge will be incurred.

Invoicing and Credit Terms

Analyses are invoiced upon completion unless other arrangements are made. Terms are net 15 days. MasterCard and VISA are accepted. For specific questions please call our Accounts Receivable department at (816)-268-1177.

Discounts/Contracts

Discounts or rebates may be available based on an annual volume of work. Special test packages, routine monitoring programs, specific projects or contract quotes are also available. Please contact the Vice President of Sales & Marketing at (303) 774-8262.

CII LABORATORY SERVICES

CII Laboratory Services recognizes the importance of being a leader in the industry and takes an active and leading role in many industry organizations.

Laboratory and Individual Technical Society Memberships and Certifications

ISO 9001-2000

American Association of Cereal Chemists (AACC)

American Association of Cereal Chemists (AACC)
Pioneer Section

American Oil Chemists Society (AOCS)

American Proficiency Institute (API)

Association of Official Analytical Chemists (AOAC)

American Institute of Baking (AIB)

American Society of Baking (ASB)

American Society of Quality (ASQ)

International Association of Operative Millers (IAOM)

Institute of Food Technologists (IFT)

International Association of Food Protection (IAFP)

Kansas Grain & Feed Association (KGFA)

Midwest Allied Trades of the Baking Industry (MATBI)

Missouri Department of Health & Human Services Certification (MDHHS)

National Association of Wheat Growers (NAWG)

Oklahoma Grain and Feed Association (OGFA)

Wheat Quality Council (WQC)

USDA Import Permit # PDEP-06-00100

Support the laboratory that supports the industry.

CIIL LABORATORY SERVICES



PROXIMATE ANALYSES

Moisture (Forced Air Oven)	\$ 12
Moisture (Vacuum Oven)	16
Moisture (Two-Stage)	16
Ash	13
Protein	16
Fat (Ether Extraction)	21
Fat (Acid Hydrolysis)	27
Fiber	
Crude	27
Total Dietary Fiber	101
(Soluble & Insoluble)	
Neutral Detergent Fiber	42
Acid Detergent Fiber	42
Calories (by Calculation) ¹	N/C
Carbohydrate (by Calculation) ¹	N/C

PHYSICAL DOUGH TESTING

Farinograph ²	\$ 37
Alveograph ²	70
Amylograph ^{2,3}	
Standard	58
Modified	58
Starch (Cook/Cool Cycle)	70
Wet Gluten	32
Dry Gluten (requires Wet Gluten)	16
Gluten Index	32
Mixograph ²	42
Extensigraph ²	85

BAKE TESTING-PRODUCT EVALUATION

Pup Loaf	\$ 32
Sponge & Dough (Bread/Buns)	70
Cake	50
Cookies	50
Pancake	27
Texture Analysis	37

¹ Requires protein, moisture, fat and ash determination.

² Requires moisture.

³ Please specify the type of enzyme treatment used.

GRAIN AND FLOUR ANALYSES

Falling Number Value	\$ 16
Experimental Milling ²	50
Thousand Kernel Weight	13
Test Weight	10
Zeleny Sedimentation	21
Grade (Includes FM on Wheat)	13
(Additional factors)	6.50
Starch Damage	37
Total Starch	37
Potassium Bromate (Qualitative)	20
Sanitation (Extraneous & Frags)	58
Sanitation (Foreign Material) ⁵	160
Enrichment (Qualitative)	16

PHYSICAL TESTS

Granulation-Alpine ⁴	\$ 37
Granulation-Rotap per sieve ⁴	13
Brookfield Viscosity	27
Bostwich Viscosity	27
Alkaline Water Retention	21
Solvent Retention Capacity ²	70
Flour Color (Minolta)	19
Sand & Grit	23
Speck Count	21
Kernel Size Distribution	27
Single Kernel Characterization	70
Carbonate (Chittick Method)	
Leavening	64
Mixes	70
Risograph (Gassing Power)	138

MINERALS

Calcium	\$ 16
Magnesium	16
Iron	16
Phosphorous	21
Potassium	21
Sodium	21
Lead	37
Chlorides	16

⁴ Please specify sieve/mesh.

⁵ No biological or chemical ID (object only).

Prices Subject to Change.

CIIL LABORATORY SERVICES



MICROBIOLOGY

Aerobic Plate Count	\$ 13
Bacillus Cereus (Count)	32
Bacillus Cereus (Confirmation)	58
Coliforms (VRBA)	16
Coliforms (MPN)	16
E. coli (MPN)	16
E. coli (confirmation)	21
E. coli (Water)	27
E coli O157H:7	21
E.coli O157H:7 (Confirmation)	75
Fecal Coliforms	21
Fecal Streptococcus	27
Gram Stain	21
Karnal Bunt	180
Lactic Acid Bacteria	32
Lactobacillus	32
Listeria	27
Listeria (Confirmation to species)	7
Listeria monocytogenes	37
Mesophilic Spores	32
Mold	14
Mold Identification	Call
Pseudomonas (Water)	32
Shelf Life and Challenge Studies	Call
Rope Spores	37
Salmonella	21
Salmonella (Confirmation)	16
Salmonella (Serogrouping)	21
Standard Plate Count	14
Staphylococcus (Coag Pos)	14
Staphylococcus (Water)	15
TCK	180
Yeast	14
Yeast & Mold	14

PESTICIDE RESIDUES

Chlorinated Hydrocarbons	\$ 90
Aldrin, Benzene Hexachloride, Chlordane, DDE, DDT	
Dieldrin, Endosulfan, Endrin, Heptachlor Lindane,	
Heptachlor Epoxide, Methoxychlor, Mirex, PCBs	
TDE (DDD), Toxaphene, and others.	
Organo-Phosphate Screen	90
Chlorpyrifos (Dursban), DEF, Diazinon, Ethion,	
Methyl Chlorpyrifos (Reldan), Ethyl Parathion,	
Methyl Parathion, Ronnel, and others.	
Both of the Above	170
Phosphine	318
Dichlorvos	127

SANITATION

Sanitation-Extraneous Matter	
(Insect fragments, rodent hairs)	\$ 58
Sanitation-Foreign Material ⁵	160

WATER TESTING (Certified MDHHS)

pH	\$ 11
Total Conductivity	21
Total Dissolved Solids ⁶	11
Chlorine (Total)	21
Chlorine (Free) ⁷	21
SPC	13
Fecal Coliforms (Water)	22
Fecal Coliforms (Confirmation)	7
Fecal Streptococcus (Water)	27
Pseudomonas (Water)	32

LIPID ANALYSES

Cholesterol	\$ 90
Free Fatty Acids in Fats	21
Free Fatty Acids in Foods	37
Peroxide Value in Fats	21
Peroxide Value in Foods	37
Sesame Seed Surface Oil	37
Total, Saturated, Monounsaturated	148
Trans Fatty Acids	148
No charge when ordered with Total, Sat and Mono	
Fatty Acid Profile	170
Omega 3, 6 Fatty Acids	148
Glycerol	58
Iodine Value-calculate from fatty acid profile	64
Unsaponifiable Matter	42
Insoluble Impurities	32

⁵ No biological or chemical ID (object only).

⁶ Total Dissolved Solids requires Total Conductivity measurement.

⁷ Free Chlorine requires Total Chlorine measurement.



Prices Subject to Change.

CIIL LABORATORY SERVICES



NUTRITIONAL LABELING

Mandatory NLEA Analyses (see page 6)

CHEMISTRY

Titratable Acidity	\$ 16
Titratable Alkalinity	16
pH	11
Water Activity	27
ADA	58
Benzoyl Peroxide (as Benzoic Acid)	27
Bulk Density	16
Salt (from soluble chlorides)	23
Salt (from soluble sodium)	23

SUGAR PROFILE

Sugar Profile	\$ 106
(Dextrose, Sucrose, Fructose, Lactose, Maltose)	
Sugar Alcohols	Call

VITAMIN ANALYSES

Vitamin A (Total as Retinol Palmitate) ⁶	\$ 58
Vitamin C (Ascorbic Acid) ⁶	53
Vitamin C (encapsulated) ⁶	58
Vitamin B1 (Thiamine) ⁶	55
Vitamin B2 (Riboflavin) ⁶	55
Vitamin B3 (Niacin) ⁶	58
Vitamin D Total	95
Vitamin D2 (Ergocalciferol)	95
Vitamin D3 (Cholecalciferol)	95
Vitamin E (high level as alpha-tocopheryl acetate)	127
Vitamin E (low level)	159
Folic Acid ⁶	85

⁶Please note expected levels.

MYCOTOXIN ANALYSES*

HPLC

Aflatoxin (B1, B2, G1, G2)	\$ 74
Vomitoxin (DON) (Deoxynivalenol)	70
Ochratoxin	74
Zearalenone	74
Fumonisin	110
T2	106

ELISA

Aflatoxin	27
Vomitoxin	27
Ochratoxin	32
Zearalenone	32
Fumonisin	32
T2	32

*Please specify either HPLC or ELISA method.

GMO TESTING

GMO

Quantitative Real-Time DNA/PCR (.01% Detection Level for Presence of GMO)	\$ Call
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Semi-Quantitative DNA/PCR Triple Test (0.1% Detection Level for Presence of GMO)	Call
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*Please call regarding sample size requirements.

ALLERGENS

Gluten	\$ Call
Milk/Dairy	Call
Egg	Call
Almond	Call
Peanut	Call
Soy	Call
Walnut	Call
Whey	Call
Histamine	Call

Prices Subject to Change.

CIIL LABORATORY SERVICES



Nutritional Labeling Fee Schedule

Required Parameters

Calories, total (calculation)	\$	NC
Calories, total from fat (calculation)		NC
Fat, total per NLEA (Saturated fat/trans fat included)		148
Cholesterol		90
Sodium		21
Carbohydrate, total (calculation)		NC
Total Dietary Fiber		101
Sugars		106
Protein		16
Vitamin A		58
Vitamin C		53
Calcium		16
Iron		16

Other analyses needed for calculations:

Moisture	\$	12
Ash		13
Sample Prep		7

Analysis Package	Total	\$657
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The Analysis is reported on a per serving basis and a per 100 g. basis. Different or additional serving sizes can be reported for an additional \$15 each.

The labeling package price includes the ash and moisture which are needed to calculate calories and carbohydrates.

Additional or Voluntary Parameters

B1	\$	53
B2		53
Niacin		56
Potassium		21
Soluble & Insoluble Fiber (with TDF)		101
Folic Acid		80
Other tests available		Call

SAMPLE NUTRITIONAL LABEL

Label Creation \$ 50
(Allow 14 days for turnaround)

Nutrition Facts			
Serving Size (55g)			
Servings Per Container			
Amount Per Serving		Calories from Fat 5	
Calories 35			
% Daily Values*			
Total Fat 1g			1%
Saturated Fat 0g			0%
Trans Fat 0g			
Polyunsaturated Fat 0g			
Monounsaturated Fat 0g			
Cholesterol 15mg			5%
Sodium 90mg			4%
Total Carbohydrate 1g			0%
Dietary Fiber 4g			14%
Sugars 0g			
Protein 9g			
Vitamin A 0%	•	Vitamin C 0g	
Calcium 2%	•	Iron 2%	
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.			
	Calories:	2,000	2,5000
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate	300g	375g	
Calories per gram:			
Fat 9 • Carbohydrate 4 • Protein 4			

Prices Subject to Change.



CII Port Services

CII Laboratory Services also provides attendance at grain terminal facilities in the Gulf ports. These services include being in attendance as a vessel is loading, maintaining a log of the loading, receiving splits of FGIS sublots and composite samples for further testing such as mycotoxins, grades, proximate and physical dough testing and many other quality attributes.

Please contact us 7 days in advance at (816) 268-1172 for pricing and the specific procedures to set up attendance for a vessel.

Wheat Crop Survey

CII Laboratory Services is the only commercial laboratory in the United States providing a subscription-based service that allows the client to monitor the domestic wheat crop from the initiation of harvest until its completion. This service provides a daily updated report via our website that details wheat and flour quality attributes, including bake quality. The map on the inside back cover reflects the vast area from which our surveyors collect samples. Three wheat classes, Hard Red Winter, Soft Red Winter, and Hard Red Spring are surveyed. A Hard White Wheat report is generated based on availability of samples. The tests listed below are evaluated in this very extensive survey. If you purchase wheat, sell wheat, produce flour or use flour as an ingredient this information is essential. Please contact us for an example, more information and pricing.

Wheat Testing

Moisture
Ash
Protein
Test Weight
Thousand Kernel Weight
Grade
Flour Yield
Falling Number

Flour Testing

Moisture
Ash
Protein
Falling Number
Wet Gluten
Farinograph
Sedimentation
Color
Size
Starch Damage
Bake (Bread/Cookie)

Other tests available, please call.



Sample Submission Procedures

Fill out a Test Request Form (located on page 12) with as much information as possible. Please submit a Test Request Form for each individual sample package/container and include relevant problems or specific issues in the comments section.

Package the sample(s) in a clean double-wrapped plastic bag. Whirlpacks may be used with a liner bag placed in the mailing box.

① Box the sample and address to:

CII Laboratory Services
10835 NW Ambassador Drive
Kansas City, MO 64153
(816) 891-7337

② If shipping from outside of the United States additionally include:

Commercial Invoice—1 original and 3 copies which include description as follows:

Non-perishable flour sample for laboratory testing

OR

Non-perishable grain sample for laboratory testing

USDA FGIS Import Permit #PDEP-06-00100

③ Send via:

DHL
Federal Express
UPS

Fill out and attach an International Airway Bill. Include adequate identification and testing requests. Include Fax number, email or address and telephone so that we may get results back to you as soon as possible.

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Analysis	Sample Size	Method
ADA	250 g	HPLC
Aflatoxin	100 g	AOAC/ELISA
Aflatoxin	100 g	HPLC
Alveograph	600 g	AACC 54-30
Amylograph (Std)	200 g	AACC 22-10
Ash	100 g	AACC 08-01
B1	250 g	HPLC
B2	250 g	HPLC
Cake	1000 g	AACC 10-90
Calcium	250 g	AOAC 968.08
Cholesterol	250 g	AOAC 969.33
Coliforms	250 g	FDA-BAM
Cookies	500 g	AACC 1050D
Dry Gluten	50 g	ICC 155/AACC 38-12
E.coli	250 g	FDA-BAM
Fat (Ether)	50 g	AACC 30-25
Fat (Acid Hyd)	50 g	AOCS 14.019
Fiber (Crude)	250 g	AACC 32-10
Fiber (Total)	250 g	AACC 32-07
Farinograph	250 g	AACC 54-21
FNV	100 g	AACC 56-81B
Fumonisin	100 g	FGIS 2001/ELISA
Fumonisin	100 g	HPLC
GMO	Call	PCR/ELISA
Grade	1500 g	FGIS
Granulation	250 g	Rotap/Alpine
Iron	250 g	AACC 40-70/AOAC 965.09
Mixograph	200 g	AACC 54-40A
Moisture	100 g	AACC 44-15A
Mold	250 g	FDA-BAM
Niacin	250 g	JAOAC Vol 70 #4
Nutritional Analyses	Call	AACC/AOAC
Ochratoxin	100 g	FGIS 2001/ELISA
Ochratoxin	100 g	HPLC/TLC
Pesticides	100 g	AOAC 970.52
Phosphorus	250 g	AOAC 965.17
Potassium	250 g	AOAC 968.08
Protein	100 g	AACC 46-30
Pup Loaf	600 g	AACC 10-10B
Rope Spores	250 g	FDA-BAM
Salmonella	250 g	FDA-BAM
Sodium	250 g	AOAC 968.08
SPC	250 g	FDA-BAM

CII LABORATORY SERVICES



Analysis	Sample Size	Method
Sponge & Dough	2000 g	AACC 10-11
Starch Damage	25 g	AACC 76-30A
T2	100 g	FGIS 2001/ELISA
T2	100 g	TLC
TKW	100 g	FGIS
Viscosity	500 g	AACC 56-79
Vitamin A	250 g	HPLC
Vitamin C	250 g	AOAC
Vomitoxin	100 g	AOAC/ELISA
Vomitoxin	100 g	HPLC/TLC
Wet Gluten	50 g	ICC 155/AACC 38-12
X-Mill	2000 g	AACC 26-21A
Yeast	250 g	FDA-BAM
Zeleny Sed.	250 g	AACC 56-61A
Zearalenone	100 g	AOAC/ELISA
Zearalenone	100 g	HPLC

This chart is ONLY the most frequently ordered tests. Contact CII Laboratory Services for a complete listing of tests and prices. Numerous other offerings are available.

ISO 9001-2000 Approved Quality Systems



CII LABORATORY SERVICES

10835 NW Ambassador Drive
 Kansas City, MO 64153
 Phone: 816 891-7337
 e-mail: ciisvc@ciilab.com

Test Request Form

Report to: _____ Phone: _____
 Company: _____ Fax: _____
 Address: _____ e-mail: _____

City State Zip

Check box if this is new contact info
 Reports will be emailed unless otherwise notified

Customer Sample ID: _____

Proximate Analysis	Minerals	Miscellaneous
Moisture	Calcium	Semolina Speck Count
Ash	Iron	ADA
Protein (Combustion)	Phosphorus	B1 (Thiamine) ⁶
Fat (Ether Extraction)	Potassium	B2 (Riboflavin) ⁶
Fat (Acid Hydrolysis)	Sodium	Niacin
Crude Fiber		Folic Acid (HPLC) ⁶
Total Dietary (Sol & Insol)		Vitamin A ⁶
Neutral Detergent Fiber	Physical Tests	Vitamin C ⁶
Acid Detergent Fiber	Granulation	Saturated/Unsaturated Fat
Calories (by calculation) ¹	Alpine ⁴	Cholesterol
Carbohydrates (by calculation) ¹	Ro-Tap ⁴	Sugar Profile (HPLC)
	pH	Nutritional Label Analysis (NLEA)
	Brookfield Viscosity	Sesame Seed Surface Oil
	Alkaline Water Retention	Free Fatty Acids
Physical Dough Testing	Flour Color (Minolta)	Peroxide Value
Farinograph ²	Sand and Grit	Pesticide Screen
Alveograph ^{2,3}	Kernel Size Distribution	
Amylograph	Single Kernel Characterization	
Standard	Solvent Retention Capacity ²	
Modified		
Starch (cook/cool)		
Wet Gluten		
Dry Gluten	Mycotoxins	
Gluten Index		
Mixograph	ELISA HPLC	
M, A, P, FN, Farino	Alfatoxin	
M, A, P	Ochratoxin	
	T2	
	Vomitoxin	
	Zearalenone	
	Fumonisin	
Bake Testing		
Sponge & Dough		
Pup Loaf		
Cake		
Cookie		
	Microbiology	
	Standard Plate Count	
	Coliforms	
	E-coli	
	Salmonella (Culture)	
	Staphylococcus (Coag. Positive)	
	Yeast/Mold	
	Listeria	
	Rope Spores	
	Karnal Bunt	
	TCK	
	Coliforms (Water)	
	Pseudomonas (Water)	
Grain and Flour Analysis		
Falling Number		
1000 Kernel Weight		
Test Weight		
Zeleny Sedimentation		
Experimental Milling		
Grade		
Starch Damage		
Total Starch		
Potassium Bromate		
Sanitation-Extraneous Matter		
Sanitation-Foreign Material ⁵		
Qualitative Enrichment		

GMO
 GMO (Elisa PCR)
 Triple Test DNA
 Real Time

***Special Notation on Low Carb:**
 Please note your fiber and protein sources and the use of sugar alcohols, etc. if possible, provide an estimate of these levels. This will expedite the processing of your sample. All information is strictly confidential.

Rush My Analyses!

Additional Charges Will Apply for Rush.
 Comments/additional information:

¹ Requires M, A, P, Fat.
² Requires a moisture result.
³ Please specify the type of enzyme treatment used.
⁴ Please specify screen sizes desired.
⁵ No biological or chemical ID (object only).
⁶ Please note expected levels.

CII LABORATORY SERVICES



10835 NW Ambassador Drive • Kansas City, MO 64153

Phone: (816) 891-7337 • Fax: (816) 891-7450

e-mail: ciisvc@ciilab.com

www.ciilab.com



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