CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

IEH Analytical Laboratories
3927 Aurora Avenue North
Seattle, WA 98103

Fulfills the requirements of

ISO/IEC 17025:2017

and the

FDA Laboratory Accreditation for Analysis of Foods (LAAF) Accreditation Program

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

Jason Stine, Vice President

Expiry Date: 02 June 2027

Certificate Number: AT-1956

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

FDA Laboratory Accreditation for Analysis of Foods (LAAF) Accreditation Program[1]

IEH Analytical Laboratories

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TESTING

Valid to: **June 2, 2027** Certificate Number: **AT-1956**

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Metals & Minerals (Al, Sb, As, Ba, Be, Bi, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Hg, Mo, Ni, P, K, Se, Ag, Na, Si, Sr, Tl, Sn, Th, Ti, U, V, Zn, Zr)	SOP I-005, I-006, I-007 based on EPA 6020B; AOAC 2013.06; FDA EAM 4.7; USDA FSIS CLG-TM3.06	Agricultural Products Prepared Foods Food Ingredients Soil Biota Water	Microwave/Hot Block Digestion ICP/MS
Metals (As, Cd, Cr, Pb, Hg, Se) [1]	SOPs I-005 and I-006 based on EPA 6020B; AOAC 2013.06; FDA EAM 4.7; USDA FSIS CLG-TM3.06	Agricultural Products Prepared Foods Food Ingredients Soil Biota Water	Hot Block Digestion ICP/MS
Pesticide Multi-residue – Screening, Confirmation & Quantitation	SOP O-014 based on AOAC 2007.01 (QuEChERS); EN 15662; FDA PAM	Raw Ingredients Finished Products	GC/MS
Pesticide Multi-residue – Screening, Confirmation & Quantitation	SOP O-014 based on AOAC 2007.01 (QuEChERS); EN 15662; FDA PAM	Raw Ingredients Finished Products	LC-MS/MS
Veterinary Multi-residue – Screening, Confirmation & Quantitation[1]	SOP O-025 based on USDA FSIS CLG-MRM1.08	Raw Ingredients Finished Products	LC-MS/MS

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Sulfonamide Veterinary Residues – Screening, Confirmation & Quantitation	SOP O-025 based on USDA FSIS CLG-SUL4.04	Raw Ingredients Finished Products	LC-MS/MS
Quinolone Veterinary Residues – Screening, Confirmation & Quantitation	SOP O-025 based on USDA FSIS CLG-FLQ2.00	Raw Ingredients Finished Products	LC-MS/MS
β-Agonist Veterinary Residues – Screening, Confirmation & Quantitation	SOP O-025 based on USDA FSIS CLG-AGON1.10	Raw Ingredients Finished Products	LC-MS/MS
Nitrofuran Metabolites – Screening, Confirmation & Quantitation	SOP O-031 based on USDA FSIS CLG-NFUR2.01; USDA FSIS CLG-NFUR3.01	Raw Ingredients Finished Products	LC-MS/MS
Triazines – Screening, Confirmation & Quantitation[1]	SOP O-021 based on FDA LIB 4422; Toxicol.Sci. 106(1) (2008): 251-262	Raw Ingredients Finished Products	LC-MS/MS
Sudan Dyes– Screening, Confirmation & Quantitation	SOP O-022 based on ASTA Method 28.0	Raw Ingredients Finished Products	LC-MS/MS
Acrylamide – Screening, Confirmation & Quantitation[1]	SOP O-023 based on J. Agric. Food Chem. 54.19 (2006): 7001-7008	Raw Ingredients Finished Products	LC-MS/MS
Triarylmethane Dyes – Screening, Confirmation & Quantitation	SOP O-033 based on USDA FSIS CLG-MG/CV2.02	Raw Ingredients Finished Products	LC-MS/MS
Moisture	SOP F-003 based on AOAC 925.09; AOAC 925.10; AOAC 925.30; AOAC 925.40; AOAC 945.43; AOAC 950.46; AOAC 934.01; AOAC 984.25; AOAC 990.20; USDA FSIS CLG-MOI.04	Raw Ingredients Finished Products	Gravimetric

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Crude Fat	SOP F-004 based on AOAC 948.22; AOAC 963.15; AOAC 991.36; AOAC 2003.05; USDA FSIS CLG-FAT.03	Raw Ingredients Finished Products	Gravimetric
Crude Protein	SOP F-009 based on AOAC 990.03; AOAC 992.15; AOAC 992.23; AOAC 993.13; USDA FSIS CLG-PRO4.04	Raw Ingredients Finished Products	Combustion (Dumas)
Salt	SOP-F-005 based on AOAC 937.09; AOAC 935.47; AOAC 950.52; USDA FSIS CLG-SLT.03	Raw Ingredients Finished Products	Volumetric Titration
Ash	SOP F-007 based on AOAC 920.153; AOAC 923.03	Raw Ingredients Finished Products	Gravimetric
Peroxide Value	SOP F-015 based on MP Biomedicals Peroxide Test Kit	Raw Ingredients Finished Products	UV/Vis Spectrophotometer
Free Fatty Acids	SOP F-016 based on MP Biomedicals Free Fatty Acid Test Kit	Raw Ingredients Finished Products	UV/Vis Spectrophotometer
Patulin – Screening, Confirmation & Quantitation	SOP O-039 based on Mycotoxin Research 37(2) (2021): 119-127	Raw Ingredients Finished Products	LC-MS/MS
Mycotoxins - Screening, Confirmation and Quantitation[1]	SOP O-040 based on Anal. Bioanal. Chem.402.9 (2012): 2675-2686	Raw Ingredients Finished Products	SIDA LC-MS/MS
Pentobarbital – Screening, Confirmation and Quantitation[1]	SOP O-057 based on Korean J. Food Sci. An.37.6 (2017): 847-854	Raw Ingredients Finished Products	LC-MS/MS
Vitamin D – Screening, Confirmation and Quantitation[1]	SOP O-066 based on AOAC 2016.05	Raw Ingredients Finished Products	LC-MS/MS
Cannabinoids (Potency)	SOP O-036 based on PLoS ONE 8: e70052 (2013)	Hemp, Extracts, and Infused Products	LC-MS/MS and HPLC-DAD
Guaiacol and 4-methyl Guaiacol	SOP O-070 based on Metabolites, 10(7): 294	Berries, Wine, Microferments	GC-MS/MS

Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Vitamin B_1 and Vitamin B_6	SOP O-068 based on modifications of AOAC 942.23 and AOAC 2004.07	Raw Ingredients Finished Products	LC-MS/MS
Water (Moisture)	SOP F-020 based on modifications of AOAC 2001.12	Raw Ingredients Finished Products	Karl Fischer Titration
Ethylene Oxide and 2-Chloroethanol[1]	SOP O-071 based on EURL-SRM EO v1; Z Lebensm Unters Forsch (1988) 187:535-540	Raw Ingredients Finished Products	GC-MS/MS
Choline	SOP O-073 based on AOAC 2015.10	Infant Formula and Adult Nutritional Formula	LC-MS/MS
Vitamin A	SOP O-083 based on Journal of AOAC International 99(1) (2016): 223-241	Infant Formula and Adult Nutritional Formula	LC-DAD
Vitamin B12	SOP O-078 based on Journal of Food Quality (2022): 1-7	Infant Formula and Adult Nutritional Formula	LC-MS/MS
Vitamin C	SOP O-084 based on Journal of AOAC International 96(5) (2013): 1065-1067 and Food Chemistry 94 (2006): 626-631	Infant Formula Adult Nutritional Formula Raw Ingredients Finished Products	LC-VWD
Vitamin E	SOP O-077 based on Journal of AOAC International 99(1) (2016): 223-241	Infant Formula and Adult Nutritional Formula	LC-FLD
Tryptophan	SOP O-080 based on Journal of AOAC International 101(4) (2019): 1244-1248	Infant Formula and Adult Nutritional Formula	LC-FLD
Amino Acids	SOP O-082 based on Journal of AOAC International 102(5) (2019): 1574-1588	Infant Formula and Adult Nutritional Formula	LC-DAD
Bisphenols	SOP O-043 based on Journal of Chromatography B 1114-1115 (2019): 154-166	Raw Ingredients Finished Products	LC-MS/MS
Phthalates	SOP O-061 based on Agilent 5991-5025 EN and modifications of GB/T 21911-2008	Raw Ingredients Finished Products	GC-MS/MS
Linoleic Acid	SOP O-079 based on Journal of AOAC International 82(5) (1999): 1128-1134	Infant Formula and Adult Nutritional Formula	GC-MS/MS

Note:

1. Testing to meet the requirements of ANAB Supplemental Requirements SR 2440, FDA Laboratory Accreditation for the Analysis of Foods (LAAF) Accreditation Program. Recognition by the FDA can be confirmed by visiting their website https://www.fda.gov.
2. This scope is formatted as part of a single document including Certificate of Accreditation No. AT-1956.

Jason Stine, Vice President