

CERTIFICATE OF ANALYSIS

SAMPLE NAME: FG-01-LLCP-12OZ (JAN 24)

SAMPLE CODE: DTS-240307-008

CLIENT: LEILO

BATCH RESULT: PASS



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MATRIX NAME: Beverage
SAMPLE TYPE: Quality Assurance
RECEIVED DATE: Fri, Mar 8, 2024
PUBLISHED DATE: Mon, Mar 18, 2024
BATCH CODE: LLT240901
BATCH SIZE: 53000U
SAMPLE SIZE: 3U
AVERAGE UNIT WEIGHT: 348.22g



KAVAL Kavalactones & Kavains	SOL Residual Solvents USP <467>	ECOLI Total E. Coli & Coliforms Plate	PGUSP Pesticides USP <561>	PLUSP Pesticides USP <561>
TAMC Total Aerobic Bacteria Plate	SS Salmonella & STEC qPCR	BRX Brix of Liquids	DEN Density of Liquids	COOX Carbon Dioxide & Dissolved Oxygen of Liquids
PH pH & Electric Conductivity (EC)_z	TYMFD Total Yeast & Mold Plate	HPMET Heavy Metals 7		

RESULTS REVIEWED BY: Leslie Varela
Laboratory Director
Cambium Analytica
Monday, Mar 18, 2024

RESULTS CERTIFIED BY: Douglas Smith
VP - Scientific Operations
Cambium Analytica
Monday, Mar 18, 2024

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LAB-TM-067 - DETERMINATION OF KAVALACTONES & KAVAINS BY LC-DAD

KAVAL-DTS-240307-008-01 - THU, MAR 7, 2024



ANALYTE	VALUE	VALUE (PER SERVING)	VALUE (PER PACKAGE)	ACTION LIMIT	LOD	LOQ	STATUS
Total Kavalactones	0.242 mg/g	84.37 mg	84.37 mg	N/A			N/A
Dihydrokavain	0.080 mg/g	27.96 mg	27.96 mg	N/A	0.25 ug/g	1 ug/g	N/A
Kavain	0.072 mg/g	24.98 mg	24.98 mg	N/A	0.25 ug/g	1 ug/g	N/A
Dihydromethysticin	0.031 mg/g	10.92 mg	10.92 mg	N/A	0.25 ug/g	1 ug/g	N/A
Methysticin	0.025 mg/g	8.55 mg	8.55 mg	N/A	0.25 ug/g	1 ug/g	N/A
Desmethoxyyangonin	0.018 mg/g	6.30 mg	6.30 mg	N/A	0.25 ug/g	1 ug/g	N/A
Yangonin	0.012 mg/g	4.21 mg	4.21 mg	N/A	0.25 ug/g	1 ug/g	N/A
Flavokavain A	0.002 mg/g	0.68 mg	0.68 mg	N/A	0.025 ug/g	0.1 ug/g	N/A
Flavokavain B	0.002 mg/g	0.78 mg	0.78 mg	N/A	0.025 ug/g	0.1 ug/g	N/A



LAB-TM-004 - DETERMINATION OF RESIDUAL SOLVENTS
SOL-DTS-240307-008-01 - THU, MAR 7, 2024



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
1,2-Dichloroethane	ND	N/A	0.4 ug/g	1.34 ug/g	N/A
2-Methylbutane	ND	N/A	1.54 ug/g	5.14 ug/g	N/A
2-Methylpentane	ND	N/A	0.0462 ug/g	0.154 ug/g	N/A
2,2-Dimethylbutane	ND	N/A	0.98 ug/g	3.27 ug/g	N/A
2,3-Dimethylbutane	ND	N/A	2.19 ug/g	7.32 ug/g	N/A
3-Methylpentane	ND	N/A	0.73 ug/g	2.44 ug/g	N/A
Acetone	ND	N/A	1.57 ug/g	5.23 ug/g	N/A
Acetonitrile	ND	N/A	1.85 ug/g	6.17 ug/g	N/A
Benzene	ND	N/A	0.18 ug/g	0.59 ug/g	N/A
Butane	ND	N/A	1.68 ug/g	5.59 ug/g	N/A
Butanes (Sum of Butane and Isobutane)	ND	N/A	N/A	N/A	N/A
Chloroform	ND	N/A	0.78 ug/g	2.59 ug/g	N/A
Ethanol	238.020 ug/g	N/A	6.02 ug/g	20.1 ug/g	N/A
Ethyl Acetate	ND	N/A	1.95 ug/g	6.49 ug/g	N/A
Ethyl Ether	ND	N/A	1.37 ug/g	4.55 ug/g	N/A
Ethylene Oxide	ND	N/A	0.15 ug/g	0.49 ug/g	N/A
Heptane	ND	N/A	1.31 ug/g	4.37 ug/g	N/A
Hexane	ND	N/A	1.42 ug/g	4.74 ug/g	N/A
Hexanes (Sum of Hexane, 2,2-Dimethylbutane, 2,3-Dimethylbutane, 2-Methylpentane, and 3-Methylpentane)	ND	N/A	N/A	N/A	N/A
Isobutane	ND	N/A	1.6 ug/g	5.34 ug/g	N/A
Isopropyl Alcohol	ND	N/A	4.9 ug/g	16.3 ug/g	N/A
Methanol	ND	N/A	7.89 ug/g	26.4 ug/g	N/A
Methylene Chloride	ND	N/A	1.36 ug/g	4.53 ug/g	N/A
Neopentane	ND	N/A	1.49 ug/g	4.97 ug/g	N/A
Pentane	ND	N/A	1.46 ug/g	4.87 ug/g	N/A
Pentanes (Sum of Pentane, 2-Methylbutane, and Neopentane)	ND	N/A	N/A	N/A	N/A
Propane	ND	N/A	1.95 ug/g	6.51 ug/g	N/A
Toluene	ND	N/A	1.88 ug/g	6.26 ug/g	N/A
Total Xylenes	ND	N/A	2.02 ug/g	6.72 ug/g	N/A
Trichloroethylene	ND	N/A	0.29 ug/g	0.96 ug/g	N/A

LAB-TM-059 - ENUMERATION OF ESCHERICHIA COLI AND TOTAL COLIFORM IN FOODS AND DIETARY SUPPLEMENTS
ECOLI-DTS-240307-008-01 - THU, MAR 7, 2024



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
E. coli	ND	N/A	1 CFU/g	1 CFU/g	N/A
Total Coliforms	ND	N/A	1 CFU/g	1 CFU/g	N/A



LAB-TM-039 - USP 561 PESTICIDES ANALYSIS IN ARTICLES OF BOTANICAL ORIGIN BY GC/TQ
PGUSP-DTS-240307-008-01 - THU, MAR 7, 2024



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Aldrin + Dieldrin	ND	0.05 ug/g	0.2815 ug/g	0.9383 ug/g	PASS
Bromophos Ethyl	ND	0.05 ug/g	0.0185 ug/g	0.0616 ug/g	PASS
Bromophos Methyl	ND	0.05 ug/g	0.026 ug/g	0.0865 ug/g	PASS
Bromopropylate	ND	3 ug/g	0.0236 ug/g	0.0788 ug/g	PASS
Chlordane (Sum of -Cis, -Trans, and Oxychlordane)	ND	0.05 ug/g	0.0549 ug/g	0.1831 ug/g	PASS
Chlorthal-Dimethyl	ND	0.01 ug/g	0.0053 ug/g	0.0178 ug/g	PASS
DDT (Sum of O,P-DDE, P,P-DDE, O,P-DDT, P,P-DDT, O,P-TDE, and P,P-TDE)	ND	1 ug/g	0.0522 ug/g	0.1741 ug/g	PASS
Dicofol	ND	0.5 ug/g	0.0623 ug/g	0.2075 ug/g	PASS
Endosulfan (Sum of Isomers and Sulphate)	ND	3 ug/g	0.0693 ug/g	0.231 ug/g	PASS
Endrin	ND	0.05 ug/g	0.0699 ug/g	0.2329 ug/g	PASS
Fenchlorophos (Sum of Fenchlorophos and Fenchlorophos-Oxon)	ND	0.1 ug/g	0.0929 ug/g	0.3098 ug/g	PASS
Fenitrothion	ND	0.5 ug/g	0.0161 ug/g	0.0537 ug/g	PASS
Fenvalerate	ND	1.5 ug/g	0.0379 ug/g	0.1265 ug/g	PASS
Fluvalinate-Tau	ND	0.05 ug/g	0.1006 ug/g	0.3352 ug/g	PASS
Heptachlor (Sum of Heptachlor, Cis-Heptachlorepoide, and Trans-Heptachlorepoide)	ND	0.05 ug/g	0.1945 ug/g	0.6485 ug/g	PASS
Hexachlorobenzene	ND	0.1 ug/g	0.0253 ug/g	0.0844 ug/g	PASS
Hexachlorocyclohexane (Sum of Isomers Alpha-, Beta-, Delta-, and Epsilon-)	ND	0.3 ug/g	0.0937 ug/g	0.3123 ug/g	PASS
Lindane (Gamma-Hexachlorocyclohexane)	ND	0.6 ug/g	0.0152 ug/g	0.0508 ug/g	PASS
Methacriphos	ND	0.05 ug/g	0.0643 ug/g	0.2145 ug/g	PASS
Methoxychlor	ND	0.05 ug/g	0.0113 ug/g	0.0375 ug/g	PASS
Mirex	ND	0.01 ug/g	0.0075 ug/g	0.0252 ug/g	PASS
Parathion Ethyl + Paraaxon Ethyl	ND	0.5 ug/g	0.0592 ug/g	0.1972 ug/g	PASS
Pentachloroanisole	ND	0.01 ug/g	0.0053 ug/g	0.0178 ug/g	PASS
Procymidone	ND	0.1 ug/g	0.0074 ug/g	0.0248 ug/g	PASS
Quintozene (Sum of Quintozene, Pentachloroaniline, and Methyl-Pentachlorophenyl Sulfide)	ND	1 ug/g	0.0625 ug/g	0.2083 ug/g	PASS
S-421	ND	0.02 ug/g	0.0142 ug/g	0.0474 ug/g	PASS
Tecnazene	ND	0.05 ug/g	0.014 ug/g	0.0465 ug/g	PASS
Tetradifon	ND	0.3 ug/g	0.0167 ug/g	0.0557 ug/g	PASS
Vinclozolin	ND	0.4 ug/g	0.0195 ug/g	0.065 ug/g	PASS



LAB-TM-038 - USP 561 PESTICIDE ANALYSIS IN ARTICLES OF BOTANICAL ORIGIN BY LC/TQ
PLUSP-DTS-240307-008-01 - THU, MAR 7, 2024



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Acephate	ND	0.1 ug/g	0.675 ng/g	3.675 ng/g	PASS
Alachlor	ND	0.05 ug/g	1.800 ng/g	9.800 ng/g	PASS
Azinphos Ethyl	ND	0.1 ug/g	3.450 ng/g	18.850 ng/g	PASS
Azinphos Methyl	ND	1 ug/g	3.000 ng/g	16.375 ng/g	PASS
Chlorfenvinphos	ND	0.5 ug/g	2.325 ng/g	12.700 ng/g	PASS
Chlorpyrifos Ethyl	ND	0.2 ug/g	1.900 ng/g	10.425 ng/g	PASS
Cyfluthrin	ND	0.1 ug/g	13.350 ng/g	72.850 ng/g	PASS
Cypermethrin	ND	1 ug/g	18.150 ng/g	99.000 ng/g	PASS
Deltamethrin	ND	0.5 ug/g	1.225 ng/g	6.725 ng/g	PASS
Diazinon	ND	0.5 ug/g	2.000 ng/g	10.875 ng/g	PASS
Dichlorvos	ND	1 ug/g	2.050 ng/g	11.150 ng/g	PASS
Dimethoate + Omethoate	ND	0.1 ug/g	1.075 ng/g	5.825 ng/g	PASS
Ethion	ND	2 ug/g	0.725 ng/g	3.950 ng/g	PASS
Etrimphos	ND	0.05 ug/g	1.625 ng/g	8.825 ng/g	PASS
Fenpropathrin	ND	0.03 ug/g	2.425 ng/g	13.250 ng/g	PASS
Fensulfothion (Sum of Fensulfothion, Fensulfothion-Oxon, Fensulfothion-Oxon-Sulfone, and Fensulfothion-Sulfone)	ND	0.05 ug/g	8.600 ng/g	46.950 ng/g	PASS
Fenthion (Sum of Fenthion, Fenthion-Oxon, Fenthion-Oxon-Sulfone, Fenthion-Oxon-Sulfoxide, Fenthion-Sulfone, and Fenthion-Sulfoxide)	ND	0.05 ug/g	7.600 ng/g	41.525 ng/g	PASS
Flucythrinate	ND	0.05 ug/g	7.500 ng/g	40.925 ng/g	PASS
Fonophos	ND	0.05 ug/g	0.975 ng/g	5.350 ng/g	PASS
Lambda-Cyhalothrin	ND	1 ug/g	3.425 ng/g	18.700 ng/g	PASS
Malathion + Malaoxon	ND	1 ug/g	2.550 ng/g	13.925 ng/g	PASS
Mecarbam	ND	0.05 ug/g	1.950 ng/g	10.650 ng/g	PASS
Methamidophos	ND	0.05 ug/g	0.225 ng/g	1.225 ng/g	PASS
Methidathion	ND	0.2 ug/g	0.700 ng/g	3.825 ng/g	PASS
Monocrotophos	ND	0.1 ug/g	0.350 ng/g	1.875 ng/g	PASS
Pendimethalin	ND	0.1 ug/g	1.325 ng/g	7.175 ng/g	PASS
Permethrins (Sum of Cis- and Trans-Permethrin)	ND	1 ug/g	0.725 ng/g	3.925 ng/g	PASS
Phosalone	ND	0.1 ug/g	2.150 ng/g	11.675 ng/g	PASS
Phosmet	ND	0.05 ug/g	2.475 ng/g	13.550 ng/g	PASS
Piperonyl Butoxide	ND	3 ug/g	0.975 ng/g	5.300 ng/g	PASS
Pirimiphos Ethyl	ND	0.05 ug/g	0.825 ng/g	4.475 ng/g	PASS
Pirimiphos Methyl (Sum of Pirimiphos-Methyl and n-Desethyl-Pirimiphos-Methyl)	ND	4 ug/g	0.700 ng/g	3.850 ng/g	PASS
Profenophos	ND	0.1 ug/g	1.475 ng/g	8.025 ng/g	PASS
Prothiophos	ND	0.05 ug/g	2.700 ng/g	14.700 ng/g	PASS
Pyrethrins (Sum of Cinerin 1, Jasmolin 1, and Pyrethrin 1)	ND	3 ug/g	10.775 ng/g	58.775 ng/g	PASS
Quinalphos	ND	0.05 ug/g	1.875 ng/g	10.275 ng/g	PASS



LAB-TM-060 - ENUMERATION OF TOTAL AEROBIC COUNT IN FOODS AND DIETARY SUPPLEMENTS

TAMC-DTS-240307-008-01 - THU, MAR 7, 2024



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Total Aerobic Count	ND	N/A	1 CFU/g	1 CFU/g	N/A

LAB-TM-006 - MICROBIAL ANALYSIS BY QPCR

SS-DTS-240307-008-01 - THU, MAR 7, 2024



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Salmonella Spp	ND	N/A	N/A	N/A	N/A
Shiga Toxin Producing E. coli	ND	N/A	N/A	N/A	N/A

LAB-TM-017 - BRIX & DENSITY ANALYSIS

BRX-DTS-240307-008-01 - THU, MAR 7, 2024

ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Brix	1.3 bx	N/A	N/A	N/A	N/A

LAB-TM-017 - BRIX & DENSITY ANALYSIS

DEN-DTS-240307-008-01 - THU, MAR 7, 2024



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Density	1.003 g/mL	N/A	N/A	N/A	N/A

LAB-TM-020 - DETERMINATION OF CARBON DIOXIDE AND DISSOLVED OXYGEN IN BEVERAGES

COOX-DTS-240307-008-01 - THU, MAR 7, 2024



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Dissolved Carbon Dioxide	2.22 vol	N/A	N/A	N/A	N/A
Dissolved Oxygen	691 ug/kg	N/A	N/A	N/A	N/A

LAB-TM-018 - TEST METHOD FOR DETERMINING PH

PH-DTS-240307-008-01 - THU, MAR 7, 2024



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
pH	3.347	N/A	N/A	N/A	N/A

LAB-TM-061 - ENUMERATION OF YEAST AND MOLD IN FOODS AND DIETARY SUPPLEMENTS

TYMFD-DTS-240307-008-01 - THU, MAR 7, 2024

ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Total Yeast and Mold	ND	N/A	1 CFU/g	1 CFU/g	N/A

LAB-TM-044 - DETERMINATION OF HEAVY METALS BY ICP-MS

HPMET-DTS-240307-008-01 - THU, MAR 7, 2024



ANALYTE	VALUE	ACTION LIMIT	LOD	LOQ	STATUS
Arsenic	ND	N/A	0.1985 ug/kg	0.6616 ug/kg	N/A
Cadmium	0.002 ug/g	N/A	0.0817 ug/kg	0.2724 ug/kg	N/A
Chromium	0.026 ug/g	N/A	0.6272 ug/kg	2.0907 ug/kg	N/A
Copper	ND	N/A	0.1546 ug/kg	0.5152 ug/kg	N/A
Lead	ND	N/A	0.2817 ug/kg	0.2817 ug/kg	N/A
Mercury	ND	N/A	0.0171 ug/kg	0.0571 ug/kg	N/A
Nickel	0.006 ug/g	N/A	0.3213 ug/kg	1.0709 ug/kg	N/A

