11455 Pearl St Northglenn, CO 80233 (303) 296-026

MURRAY-BROWN LABORATORIES, INC.
Beyond the Raw Data

Certificate of Analysis for

Kats Botanicals
750 Hickory Industrial Drive
Old Hickory, TN 37138

Received: 11/19/2025 @ 22.1 °C
Report ID: 2511926

Sample ID: 2511926-001 50mg - Kratom - Gummy - Island Punch - AGG020825

ACR.1a: AC by mass via AOAC 2015.13 (Petrifilm™) Analyzed 11/19/25

Aerobic Plate Count	< 10	CFU/g

CCR.1a: CC by mass via AOAC OM 2018.13 (Petrifilm™) Analyzed 11/19/25

Total Coliform Bacteria	< 10	CFU/g

ECR.1a: EC by mass via AOAC OM 2018.13 (Petrifilm™) Analyzed 11/19/25

Escherichia coli	< 10	CFU/g

GU Pro STEC SLM.2: STEC Salmonella via AOAC PTM 092101 Analyzed 11/20/25

Salmonella spp.	Absent	CFU/25 g	Shiga toxin-producing E. coli	Absent	CFU/25 g

ICPMS.1: Metals via AOAC 2015.01 Modified (ICP/MS) Analyzed 11/24/25

Arsenic (As)	< 0.0200	mg/kg (ppm)	Cadmium (Cd)	< 0.0100	mg/kg (ppm)
Lead (Pb)	< 0.0100	mg/kg (ppm)	Mercury (Hg)	< 0.00500	mg/kg (ppm)

KRA.2: 7-Hydroxymitragynine by LC-MS/MS Analyzed 11/19/25

7-Hydroxymitragynine	2.33	ppm	7-Hydroxymitragynine (Dry Matter Basis)	2.72	ppm (DMB)

MIT.2: Kratom Alkaloids via AOAC 2017.14 (Modified) Analyzed 11/19/25

7-Hydroxymitragynine	< 0.697	mg/gummy	Isorhynchophylline	< 3.48	mg/gummy
Mitragynine	50.1	mg/gummy	Mitraphylline	< 3.48	mg/gummy
Paynantheine	< 0.697	mg/gummy	Speciociliatine	< 0.697	mg/gummy
Speciogynine	< 0.697	mg/gummy	Total Alkaloids	51.1	mg/gummy

Moisture.3: Moisture via AOAC 950.46 (Loss on Drying) Analyzed 11/20/25

Moisture	14.4	g/100 g (%)

ResSolv.1: Residual Solvents by Headspace GC/MS Analyzed 11/20/25

1,2-Dichloroethane	< 1.00	mg/kg (ppm)	2-Propanol	< 50.0	mg/kg (ppm)
Acetone	< 50.0	mg/kg (ppm)	Acetonitrile	< 50.0	mg/kg (ppm)
Benzene	< 0.500	mg/kg (ppm)	Chloroform	< 1.00	mg/kg (ppm)
Cyclohexane	< 50.0	mg/kg (ppm)	Diethyl ether	< 50.0	mg/kg (ppm)
Ethanol	< 50.0	mg/kg (ppm)	Ethyl Acetate	< 50.0	mg/kg (ppm)
Heptane	< 50.0	mg/kg (ppm)	Hexane	< 2.00	mg/kg (ppm)
Methanol	< 50.0	mg/kg (ppm)	Methylene Chloride	< 1.00	mg/kg (ppm)
N,N-Dimethylformamide	< 10.0	mg/kg (ppm)	Pentane	< 50.0	mg/kg (ppm)
Toluene	< 1.00	mg/kg (ppm)	Trichloroethene	< 50.0	mg/kg (ppm)
Xylenes (p-, m-, o-)	< 40.0	mg/kg (ppm)			

YM.1a: YM by mass via AOAC RI 121301 (Petrifilm™) Analyzed 11/19/25

Yeast and Mold	< 10	CFU/g

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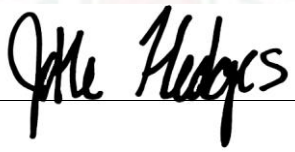
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Gummy Mass (Provided by Client): 3.5 g



Reported By Jake S Hedges, Chemistry Laboratory Supervisor, 11/25/2025

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