



Utah Department of Agriculture and Food  
**Division of Laboratory Services**  
 4451 South 2700 West  
 Taylorsville, Utah 84129  
 (801) 816-3840

## CERTIFICATE OF ANALYSIS

### Sample Information


<b>Sample ID #</b>	KR25147-1	<b>Issue Date:</b>	06/25/2025
<b>Client:</b>	King B Distribution LLC	<b>Client Email:</b>	brittany@kingbdistro.com
<b>Purpose:</b>	Product Registration	<b>Sample Type:</b>	Gelatinous Cubes
<b>Description:</b>	Cherry Lime kratom kubes		
<b>Batch/Lot Number:</b>	kk001	<b>Date Received:</b>	05/27/2025
<b>Date Collected:</b>		<b>Collected By:</b>	Self Submitted



Notes: This certificate of analysis (COA) replaces the COA issued on 06/23/2025. The Limit of Detection for PCR testing was added to the Microbial Analysis page.

### Testing Summary

Analysis:	Testing Date:	Status:	Notes:
Alkaloids	5/29/2025	PASS	Average Unit Mass = 5.09 g / cube
Microbials	Plating: 05/27/2025 PCR: 06/20/2025	PASS	
Heavy Metals	5/28/2025	PASS	

Approved By:  Date: 06/25/2025  
 Brandon Forsyth, Ph.D  
 State Chemist

The results reported herein pertain only to the indicated sample and may not be used as an endorsement of a product. The results are given under applicable provisions of the Utah Code and represent a true statement of the outcomes of the analyses conducted on the sample received by the laboratory. This report may not be reproduced, except in its entirety. © 2025 All Rights Reserved.



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## CERTIFICATE OF ANALYSIS

**Alkaloid Analysis**

**Status:** PASS

<b>Sample ID:</b>	KR25147-1	<b>Description:</b>	Cherry Lime kratom cubes
<b>Testing Date:</b>	5/29/2025	<b>Reviewed By:</b>	Cameron Cheyne

*Method: Analysis performed using Liquid Chromatography - Mass Spectrometry (LC-MS)*

Measurement	Results (mg/g)	Percent of Total Alkaloid Content	Action Level (%)	Status
7-hydroxymitragynine	ND	ND	2	PASS
Mitragynine	8.5	100.00	--	--
Total Alkaloids	8.5	--	--	--

Notes: Average Unit Mass = 5.09 g / cube

Total Alkaloids is calculated as the direct sum of each of the alkaloid values.

ND = Not Detected, NQ = Not Quantifiable,  
 NT = Not Tested, <LOQ = Below the limit of quantification

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## CERTIFICATE OF ANALYSIS

**Microbial Analysis**

**Status:** PASS

<b>Sample ID:</b>	KR25147-1	<b>Description:</b>	Cherry Lime kratom kubes
<b>Testing Date:</b>	Plating: 05/27/2025 PCR: 06/20/2025	<b>Reviewed By:</b>	Brooke Smith

*Method: Analysis performed using plating methods*

Analyte	Result (cfu/g)	Allowed Limit	Status
TAC	<250	10,000,000	PASS
TYM	<250	100,000	PASS

*Method: Analysis performed using Polymerase Chain Reaction (PCR)*

Organism	Result	Required	Status
E. Coli	NT	<input type="checkbox"/>	--
Salmonella	ND	<input checked="" type="checkbox"/>	PASS
STEC	ND	<input checked="" type="checkbox"/>	PASS
Pseudomonas	NT	<input type="checkbox"/>	--
Aspergillus	NT	<input type="checkbox"/>	--
Staph	NT	<input type="checkbox"/>	--

Notes:

TNTC = Too Numerous To Count, NT = Not Tested, ND = Not Detected, DET = Detected  
 Limit of Detection for PCR is 1 cfu/25 g

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## CERTIFICATE OF ANALYSIS

### Heavy Metal Analysis

**Status:** PASS

<b>Sample ID:</b> KR25147-1	<b>Description:</b> Cherry Lime kratom kubes
<b>Testing Date:</b> 5/28/2025	<b>Reviewed by:</b> Cameron Cheyne

*Method: ACL.AM.004 Analysis performed using Inductively Coupled Plasma - Mass Spectrometry (ICP-MS)*

Analyte	CAS Number	Result (ppm)	Action Level (ppm)	Status
Arsenic	7440-38-2	<LOQ	2	PASS
Cadmium	7440-43-9	ND	0.82	PASS
Lead	7439-92-1	ND	1.2	PASS
Mercury	7439-97-6	ND	0.4	PASS

Notes:

ND = Not Detected, NQ = Not Quantifiable, NT = Not Tested, <LOQ = Below the limit of quantification

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