Certificate of Analysis

Customer Information

Client: Steding and Sons Mercantile
Attention: (737) 895-2303
Address: 1501 Panther Loop #7A
Pflugerville, TX 78660

Testing Facility

Lab: Cora Science, LLC
Address 8000 Anderson Square, STE 113
Austin, Texas 78757
Contact: info@corascience.com
(512) 856-5007

Sample Image(s)

Sample Information

Name: Lazy Luau
Lot Number: SSLL0106
Description: Liquid botanical extract
Condition: Good
Job ID: ISO07245
Sample ID: I20305
Received: 01JUN2026
Completed: 08JUN2026
Issued: 08JUN2026

Test Results

Mitragyna Alkaloids (UHPLC-DAD) **Method Code: T102** **Tested: 05JUN2026 | 1218**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Mitragynine	Report Results	61.5	mg/unit	0.45	N/A
7-Hydroxymitragynine	Report Results	0.167	mg/unit	0.090	N/A
Paynantheine	Report Results	0.765	mg/unit	0.45	N/A
Speciogynine	Report Results	<LOQ	mg/unit	0.45	N/A
Speciociliatine	Report Results	0.594	mg/unit	0.45	N/A
Total Mitragyna Alkaloids	Report Results	63.0	mg/unit	0.45	N/A

Mitragyna Alkaloids (UHPLC-DAD) **Method Code: T102** **Tested: 05JUN2026 | 1218**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Mitragynine	Report Results	0.201	w/w%	0.0015	N/A
7-Hydroxymitragynine	Report Results	0.000546	w/w%	0.00029	N/A
Paynantheine	Report Results	0.00250	w/w%	0.0015	N/A
Speciogynine	Report Results	<LOQ	w/w%	0.0015	N/A
Speciociliatine	Report Results	0.00194	w/w%	0.0015	N/A
Total Mitragyna Alkaloids	Report Results	0.206	w/w%	0.0015	N/A

Loss on Drying **Method Code: T505** **Tested: 04JUN2026 | 1118**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Loss on Drying	Report Results	94.8	%	0.1	N/A

7-Hydroxymitragynine Limit (0.04%) **Method Code: 813** **Tested: 05JUN2026 | 1218**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
7-Hydroxymitragynine	NMT 400 PPM	105	ppm	56	PASS

Elemental Impurities (ICP-MS) **Method Code: T301** **Tested: 04JUN2026 | 1406**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Arsenic	NMT 2.00	<LOQ	ug/g	0.006	PASS
Cadmium	NMT 0.82	<LOQ	ug/g	0.002	PASS
Mercury	NMT 0.40	<LOQ	ug/g	0.002	PASS
Lead	NMT 1.20	0.006	ug/g	0.002	PASS

Residual Solvents: Class I (GC-MS) **Method Code: T201** **Tested: 06JUN2026 | 2326**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
1,1-Dichloroethene	NMT 8	<LOQ	ug/g	0.40	PASS
1,1,1-Trichloroethane	NMT 1500	<LOQ	ug/g	75	PASS
Tetrachloromethane	NMT 4	<LOQ	ug/g	0.20	PASS
Benzene	NMT 2	<LOQ	ug/g	0.10	PASS
1,2-Dichloroethane	NMT 5	<LOQ	ug/g	0.25	PASS

Residual Solvents: Class II (GC-MS) **Method Code: T201** **Tested: 06JUN2026 | 2326**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Methanol	NMT 3000	<LOQ	ug/g	75	PASS
Acetonitrile	NMT 410	<LOQ	ug/g	41	PASS
Dichloromethane	NMT 600	<LOQ	ug/g	15	PASS
1,2-Dichloroethene, (E)	NMT 1870	<LOQ	ug/g	46.75	PASS
1,2-Dichloroethene, (Z)	NMT 1870	<LOQ	ug/g	46.75	PASS
Tetrahydrofuran	NMT 720	<LOQ	ug/g	18	PASS
Cyclohexane	NMT 3880	<LOQ	ug/g	97	PASS
Methylcyclohexane	NMT 1180	<LOQ	ug/g	29.5	PASS
1,4-Dioxane	NMT 380	<LOQ	ug/g	38	PASS
Toluene	NMT 890	<LOQ	ug/g	22.25	PASS
Chlorobenzene	NMT 360	<LOQ	ug/g	9	PASS
Ethylbenzene	NMT 2170	<LOQ	ug/g	54.25	PASS
o/p-Xylene	NMT 2170	<LOQ	ug/g	54.25	PASS
m-Xylene	NMT 2170	<LOQ	ug/g	54.25	PASS
Isopropylbenzene	NMT 70	<LOQ	ug/g	1.75	PASS
Hexane	NMT 290	<LOQ	ug/g	7.25	PASS
Nitromethane	NMT 50	<LOQ	ug/g	1.25	PASS
Chloroform	NMT 60	<LOQ	ug/g	1.5	PASS
1,2-Dimethoxyethane	NMT 100	<LOQ	ug/g	2.5	PASS
Trichloroethene	NMT 80	<LOQ	ug/g	2	PASS
Pyridine	NMT 200	<LOQ	ug/g	5	PASS
2-Hexanone	NMT 50	<LOQ	ug/g	5	PASS
Tetralin	NMT 100	<LOQ	ug/g	2.5	PASS
Total Xylenes	NMT 2170	<LOQ	ug/g	54	PASS

Residual Solvents: Class III (GC-MS) **Method Code: T201** **Tested: 06JUN2026 | 2326**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Pentane	NMT 5000	<LOQ	ug/g	125	PASS

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Ethanol	NMT 5000	<LOQ	ug/g	125	PASS
Diethyl Ether	NMT 5000	<LOQ	ug/g	125	PASS
Acetone	NMT 5000	<LOQ	ug/g	125	PASS
Ethyl Formate	NMT 5000	<LOQ	ug/g	125	PASS
Isopropanol	NMT 5000	<LOQ	ug/g	125	PASS
Methyl Acetate	NMT 5000	<LOQ	ug/g	125	PASS
Methyl tert-Butyl Ether	NMT 5000	<LOQ	ug/g	125	PASS
1-Propanol	NMT 5000	<LOQ	ug/g	125	PASS
2-Butanone	NMT 5000	<LOQ	ug/g	125	PASS
Ethyl Acetate	NMT 5000	<LOQ	ug/g	125	PASS
2-Butanol	NMT 5000	<LOQ	ug/g	125	PASS
2-Methyl-1-Propanol	NMT 5000	<LOQ	ug/g	125	PASS
Isopropyl Acetate	NMT 5000	<LOQ	ug/g	125	PASS
Heptane	NMT 5000	<LOQ	ug/g	125	PASS
1-Butanol	NMT 5000	<LOQ	ug/g	125	PASS
Propyl Acetate	NMT 5000	<LOQ	ug/g	125	PASS
4-Methyl-2-Pentanone	NMT 5000	<LOQ	ug/g	125	PASS
Isoamyl Alcohol	NMT 5000	<LOQ	ug/g	125	PASS
Isobutyl Acetate	NMT 5000	<LOQ	ug/g	125	PASS
1-Pentanol	NMT 5000	<LOQ	ug/g	125	PASS
Butyl Acetate	NMT 5000	<LOQ	ug/g	125	PASS
Anisole	NMT 5000	<LOQ	ug/g	125	PASS
Dimethylsulfoxide	NMT 5000	<LOQ	ug/g	125	PASS

Microbial Examination **Method Code: T005** **Tested: 08JUN2026 | 0835**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Total Aerobic Plate Count	NMT 10,000 CFU/g	<LOQ	CFU/g	10 CFU/g	PASS
Total Yeast and Mold	NMT 1,000 CFU/g	<LOQ	CFU/g	10 CFU/g	PASS
Total Coliforms	NMT 100 CFU/g	<LOQ	CFU/g	10 CFU/g	PASS
Escherichia coli	Not Detected in 10 g	Not Detected	N/A	1 CFU/10g	PASS
Salmonella spp.	Not Detected in 10 g	Not Detected	N/A	1 CFU/10g	PASS

Kavalactones (UHPLC-DAD) **Method Code: T104** **Tested: 05JUN2026 | 0323**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Kavain	Report Results	56.7	mg/unit	0.49	N/A
Dihydrokavain	Report Results	123	mg/unit	0.49	N/A
Methysticin	Report Results	47.3	mg/unit	0.49	N/A
Dihydromethysticin	Report Results	68.7	mg/unit	0.49	N/A
Yangonin	Report Results	37.5	mg/unit	0.49	N/A
Desmethoxyyangonin	Report Results	43.3	mg/unit	0.49	N/A
Flavokawain A	Report Results	3.98	mg/unit	0.49	N/A
Flavokawain B	Report Results	<LOQ	mg/unit	0.49	N/A
Flavokawain C	Report Results	0.611	mg/unit	0.49	N/A
Total Kavalactones	Report Results	376	mg/unit	0.49	N/A

Kavalactones (UHPLC-DAD) **Method Code: T104** **Tested: 05JUN2026 | 0323**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Kavain	Report Results	0.185	w/w%	0.0016	N/A
Dihydrokavain	Report Results	0.401	w/w%	0.0016	N/A
Methysticin	Report Results	0.154	w/w%	0.0016	N/A
Dihydromethysticin	Report Results	0.224	w/w%	0.0016	N/A
Yangonin	Report Results	0.122	w/w%	0.0016	N/A
Desmethoxyyangonin	Report Results	0.141	w/w%	0.0016	N/A
Flavokawain A	Report Results	0.0130	w/w%	0.0016	N/A
Flavokawain B	Report Results	<LOQ	w/w%	0.0016	N/A
Flavokawain C	Report Results	0.00199	w/w%	0.0016	N/A
Total Kavalactones	Report Results	1.23	w/w%	0.0016	N/A

Unit Weight Analysis (Gravimetric) **Method Code: T503** **Tested: 04JUN2026 | 1438**

PARAMETER	SPECIFICATION	RESULT	UNIT	RANGE	NOTES
Density	Report Results	1.022	g/mL	0.5-1.5	N/A

Additional Report Notes

T102 and T104 results, LOQ and unit converted from w/w% to mg/mL using a laboratory measured density and package specified fill volume. T813 results are reported on a dry-weight basis (DWB). Reported values converted from T102 results using the laboratory-measured loss on drying by T505 for each sample:
DWB w/w% = (as-received w/w%) ÷ (1 − moisture%/100).

Revision History

Report ID: c73e30a0-1fe7-4da2-b0e9-8053fd683e47
rev 00 - Initial release.

Abbreviations

ID: identification, **N/A:** not applicable, **LOQ:** limit of quantitation, **CFU:** colony forming units, **w/w%:** weight by weight percent, **mg:** milligrams, **g:** grams, **ug:** micrograms, **mL:** milliliters, **ND:** not detected, **<LOQ:** below limit of quantitation, **NMT:** no more than, **NLT:** no less than, **UHPLC:** ultra-high performance liquid chromatography, **GC:** gas chromatography, **DAD:** diode array detection/detector, **MS:** mass spectroscopy/spectrometer, **ICP:** inductively coupled plasma, **ISO:** International Organization for Standardization, **USP:** United States Pharmacopeia

Authorization

This report has been authorized for release from Cora Science by:

Signature: Tyler West
Name: Tyler West
Position: Laboratory Director
Department: Management
Date: 08JUN2026