Certificate of Analysis

Customer Information

Client: CWL Brands
Attention:
Address:

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: Tropical Tango B15
Lot Number: CWLTT 261802B15
Description: Liquid botanical extract
Condition: Good
Job ID: ISO06752
Sample ID: I18858
Received: 06APR2026
Completed: 06APR2026
Issued: 10APR2026

Test Results

Mitragyna Alkaloids (UHPLC-DAD) **Method Code: T102** **Tested: 08APR2026 | 2113**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Mitragynine	Report Results	8.72	mg/mL	0.015	N/A
7-Hydroxymitragynine	Report Results	0.0150	mg/mL	0.0020	N/A
Paynantheine	Report Results	1.33	mg/mL	0.015	N/A
Speciogynine	Report Results	1.06	mg/mL	0.015	N/A
Speciociliatine	Report Results	2.11	mg/mL	0.015	N/A
Total Mitragyna Alkaloids	Report Results	13.2	mg/mL	0.015	N/A

Mitragyna Alkaloids (UHPLC-DAD) **Method Code: T102** **Tested: 08APR2026 | 2113**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Mitragynine	Report Results	0.845	w/w%	0.0015	N/A
7-Hydroxymitragynine	Report Results	0.00146	w/w%	0.00020	N/A
Paynantheine	Report Results	0.128	w/w%	0.0015	N/A
Speciogynine	Report Results	0.103	w/w%	0.0015	N/A
Speciociliatine	Report Results	0.204	w/w%	0.0015	N/A
Total Mitragyna Alkaloids	Report Results	1.28	w/w%	0.0015	N/A

Elemental Impurities (ICP-MS) **Method Code: T301** **Tested: 07APR2026 | 1343**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Arsenic	NMT 1.50	<LOQ	ug/g	0.006	PASS
Cadmium	NMT 0.50	<LOQ	ug/g	0.002	PASS
Mercury	NMT 0.20	<LOQ	ug/g	0.002	PASS
Lead	NMT 0.50	0.055	ug/g	0.002	PASS

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Residual Solvents: Class I (GC-MS)

Method Code: T201 **Tested: 08APR2026 | 0104**

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: 08APR2026 | 0104**

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: 08APR2026 | 0104**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Pentane	NMT 5000	<LOQ	ug/g	125	PASS
Ethanol	NMT 5000	4,491	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

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PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
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

Pesticides (GC-MS/MS) **Method Code: T401** **Tested: 06APR2026 | 1626**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Acephate	NMT 0.1	ND	mg/Kg	0.01	PASS
Azinphos-ethyl	NMT 0.1	ND	mg/Kg	0.01	PASS
Azinphos-methyl	NMT 1	ND	mg/Kg	0.01	PASS
Bromophos-ethyl	NMT 0.05	ND	mg/Kg	0.01	PASS
Bromophos-methyl	NMT 0.05	ND	mg/Kg	0.01	PASS
Chlorfenvinphos	NMT 0.5	ND	mg/Kg	0.01	PASS
Deltamethrin	NMT 0.5	ND	mg/Kg	0.01	PASS
Diazinon	NMT 0.5	ND	mg/Kg	0.01	PASS
Dichlofluanid	NMT 0.1	ND	mg/Kg	0.01	PASS
Dichlorvos	NMT 1	ND	mg/Kg	0.02	PASS
Dimethoate (and Omethoate, sum)	NMT 0.1	ND	mg/Kg	0.01	PASS
Omethaote	Report Results	ND	mg/Kg	0.01	N/A
Dithiocarbamates (sum, as CS2)	NMT 2	ND	mg/Kg	0.10	PASS
Dithiocarbamate, manganese	Report Results	ND	mg/Kg	0.05	N/A
Dithiocarbamate, zinc	Report Results	ND	mg/Kg	0.05	N/A
Ethion	NMT 2	ND	mg/Kg	0.01	PASS
Etrimphos	NMT 0.05	ND	mg/Kg	0.01	PASS
Fenchlorphos	NMT 0.1	ND	mg/Kg	0.02	PASS
Fenchlorphos oxon	Report Results	ND	mg/Kg	0.01	N/A
Fenitrothion	NMT 0.5	ND	mg/Kg	0.01	PASS
Fenpropathrin	NMT 0.03	ND	mg/Kg	0.01	PASS
Fensulfothions (sum)	NMT 0.05	ND	mg/Kg	0.04	PASS
Fensulfothion-oxon	Report Results	ND	mg/Kg	0.01	N/A
Fensulfothion-oxonsulfone	Report Results	ND	mg/Kg	0.01	N/A
Fensulfothion-sulfone	Report Results	ND	mg/Kg	0.01	N/A
Fenthions (sum)	NMT 0.05	ND	mg/Kg	0.02	PASS
Fenthion oxon	Report Results	ND	mg/Kg	0.02	N/A
Fenthion oxonsulfone	Report Results	ND	mg/Kg	0.02	N/A

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PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Fenthion oxonsulfoxide	Report Results	ND	mg/Kg	0.02	N/A
Fenthion sulfone	Report Results	ND	mg/Kg	0.02	N/A
Fenthion sulfoxide	Report Results	ND	mg/Kg	0.02	N/A
Flucythrinate	NMT 0.05	ND	mg/Kg	0.01	PASS
Fluvalinate	NMT 0.05	ND	mg/Kg	0.01	PASS
Fonophos	NMT 0.05	ND	mg/Kg	0.01	PASS
Malathion (and oxon, sum)	NMT 1	ND	mg/Kg	0.02	PASS
Malathion oxon	Report Results	ND	mg/Kg	0.01	N/A
Mecarbam	NMT 0.05	ND	mg/Kg	0.01	PASS
Methacriphos	NMT 0.05	ND	mg/Kg	0.01	PASS
Methamidophos	NMT 0.05	ND	mg/Kg	0.01	PASS
Methadathion	NMT 0.2	ND	mg/Kg	0.01	PASS
Monocrotophos	NMT 0.1	ND	mg/Kg	0.01	PASS
Parathion-ethyl (and oxon, sum)	NMT 0.5	ND	mg/Kg	0.02	PASS
Paraoxon ethyl	Report Results	ND	mg/Kg	0.01	N/A
Parathion-methyl (and oxon, sum)	NMT 0.2	ND	mg/Kg	0.02	PASS
Paraoxon methyl	Report Results	ND	mg/Kg	0.01	N/A
Pendimethalin	NMT 0.1	ND	mg/Kg	0.01	PASS
Phosalone	NMT 0.1	ND	mg/Kg	0.01	PASS
Pirimiphos ethyl	NMT 0.05	ND	mg/Kg	0.01	PASS
Pirimphos methyl (and N-desethyl-, sum)	NMT 4	ND	mg/Kg	0.03	PASS
N-desethylpirimiphos methyl	Report Results	ND	mg/Kg	0.02	N/A
Procymidone	NMT 0.1	ND	mg/Kg	0.01	PASS
Profenofos	NMT 0.1	ND	mg/Kg	0.01	PASS
Prothiophos	NMT 0.05	ND	mg/Kg	0.01	PASS
Pyrethrum (sum of following six)	NMT 3	ND	mg/Kg	0.05	PASS
Cinerin I	Report Results	ND	mg/Kg	0.05	N/A
Cinerin II	Report Results	ND	mg/Kg	0.05	N/A
Jasmoline I	Report Results	ND	mg/Kg	0.05	N/A
Jasmoline II	Report Results	ND	mg/Kg	0.05	N/A
Pyrethrin I	Report Results	ND	mg/Kg	0.05	N/A
Pyrethrin II	Report Results	ND	mg/Kg	0.05	N/A
Quinalphos	NMT 0.05	ND	mg/Kg	0.01	PASS
Tetradifon	NMT 0.3	ND	mg/Kg	0.01	PASS
Vinclozolin	NMT 0.4	ND	mg/Kg	0.01	PASS
Aldrin (and Dieldrin, sum)	NMT 0.05	ND	mg/Kg	0.02	PASS
Dieldrin	Report Results	ND	mg/Kg	0.01	N/A
Alachlor	NMT 0.05	ND	mg/Kg	0.01	PASS
Bromopropylate	NMT 3	ND	mg/Kg	0.01	PASS
Chlordanes (sum)	NMT 0.05	ND	mg/Kg	0.02	PASS
cis-Chlordane	Report Results	ND	mg/Kg	0.01	N/A
trans-Chlordane	Report Results	ND	mg/Kg	0.01	N/A
oxy-Chlordane	Report Results	ND	mg/Kg	0.02	N/A
Chlorpyrifos-ethyl	NMT 0.2	ND	mg/Kg	0.01	PASS
Chlorpyrifos-methyl	NMT 0.1	ND	mg/Kg	0.01	PASS
Chlorthal-dimethyl	NMT 0.01	ND	mg/Kg	0.01	PASS

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PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Cyfluthrin	NMT 0.1	ND	mg/Kg	0.02	PASS
lambda-Cyhalothrin	NMT 1	ND	mg/Kg	0.01	PASS
Cypermethrins	NMT 1	ND	mg/Kg	0.02	PASS
DDT (sum of DDT, DDE, DDD)	NMT 1	ND	mg/Kg	0.01	PASS
o,p-DDT	Report Results	ND	mg/Kg	0.01	N/A
p,p-DDT	Report Results	ND	mg/Kg	0.01	N/A
o,p-DDE	Report Results	ND	mg/Kg	0.01	N/A
p,p-DDE	Report Results	ND	mg/Kg	0.01	N/A
o,p-DDD	Report Results	ND	mg/Kg	0.01	N/A
p,p-DDD	Report Results	ND	mg/Kg	0.01	N/A
Dicofol	NMT 0.5	ND	mg/Kg	0.01	PASS
Endosulfans	NMT 3	ND	mg/Kg	0.01	PASS
Endosulfan I	Report Results	ND	mg/Kg	0.01	N/A
Endosulfan II	Report Results	ND	mg/Kg	0.01	N/A
Endosulfan sulfate	Report Results	ND	mg/Kg	0.01	N/A
Endrin	NMT 0.05	ND	mg/Kg	0.01	PASS
Fenvalderate (and esfen-, sum)	NMT 1.5	ND	mg/Kg	0.02	PASS
Esfenvalerate	Report Results	ND	mg/Kg	0.02	N/A
Heptachlor (and epoxide, sum)	NMT 0.05	ND	mg/Kg	0.02	PASS
Heptachlor epoxide (cis/trans)	Report Results	ND	mg/Kg	0.01	N/A
Hexachlorobenzene	NMT 0.1	ND	mg/Kg	0.01	PASS
Hexachlorohexanes (sum)	NMT 0.3	ND	mg/Kg	0.01	PASS
alpha-Hexachlorocyclohexane	Report Results	ND	mg/Kg	0.01	N/A
beta-Hexachlorocyclohexane	Report Results	ND	mg/Kg	0.01	N/A
delta-Hexachlorocyclohexane	Report Results	ND	mg/Kg	0.01	N/A
Lindane	NMT 0.6	ND	mg/Kg	0.01	PASS
Methoxychlor	NMT 0.05	ND	mg/Kg	0.01	PASS
Mirex	NMT 0.01	ND	mg/Kg	0.01	PASS
Pentachloroanisole	NMT 0.01	ND	mg/Kg	0.01	PASS
Permethrins (sum)	NMT 1	ND	mg/Kg	0.01	PASS
cis-Permethrin	Report Results	ND	mg/Kg	0.01	N/A
trans-Permethin	Report Results	ND	mg/Kg	0.01	N/A
Piperonyl butoxide	NMT 3	ND	mg/Kg	0.01	PASS
Quintozene (sum of following two)	NMT 1	ND	mg/Kg	0.09	PASS
Pentachloroaniline	Report Results	ND	mg/Kg	0.02	N/A
Methyl pentachlorophenyl sulfide	Report Results	ND	mg/Kg	0.05	N/A
Tecnazene	NMT 0.05	ND	mg/Kg	0.01	PASS
S-421	NMT 0.02	ND	mg/Kg	0.01	PASS

Microbial Examination **Method Code: T005** **Tested: 08APR2026 | 1356**

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
Salmonella spp.	Not Detected in 25 g	Not Detected	N/A	1 CFU/25g	PASS
Shiga-toxin producing E. coli	Not Detected in 25 g	Not Detected	N/A	1 CFU/25g	PASS

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Loss on Drying **Method Code: T505** **Tested: 07APR2026 | 1530**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Loss on Drying	Report Results	96.2	%	0.1	N/A

7-Hydroxymitragynine Limit (0.04%) **Method Code: 813** **Tested: 08APR2026 | 2113**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
7-Hydroxymitragynine	NMT 400 PPM	384	ppm	53	PASS

7-Hydroxymitragynine Relative Alkaloid Ratio **Method Code: T102** **Tested: 08APR2026 | 2113**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
7-Hydroxymitragynine	Report Results	0.114	% of Total Alkaloids	N/A	N/A

Foreign Matter Inspection **Method Code: T501** **Tested: 08APPR2026 | 1527**

PARAMETER	SPECIFICATION	RESULT	UNIT	LOQ	NOTES
Foreign Matter	NMT 3%	<LOQ	%	0.05	PASS

pH (Acidified Food) **Method Code: T502** **Tested: 07APR2026 | 1503**

PARAMETER	SPECIFICATION	RESULT	UNIT	RANGE	NOTES
pH	Report Results	3.62	N/A	2 - 12	N/A

Unit Weight Analysis (Gravimetric) **Method Code: T503** **Tested: 07APR2026 | 1103**

PARAMETER	SPECIFICATION	RESULT	UNIT	RANGE	NOTES
Density	Report Results	1.032	g/mL	0.5-1.5	N/A

Additional Report Notes

T102 result, LOQ and unit converted from w/w% to mg/mL using a laboratory measured density of 1.032 g/mL. 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). T401 performed by a registered outsourcing facility.

Revision History

Report ID: 317c5e45-bea2-4911-af17-a4d6f2303829
rev 00 - Initial release.
rev 01 - Added T401 results.

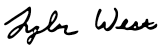
Abbreviations

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

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Authorization

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

Signature:		**Position:**	Laboratory Director
		Department:	Management
Name:	Tyler West	**Date:**	10APR2026

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