



License No. 800025015
FL License # CMTL-0003
CLIA No. 10D1094068

Certificate of Analysis

Compliance Test

GRAMINA LLC
25778 US Hwy 19 North Clearwater
Clearwater, FL 33763

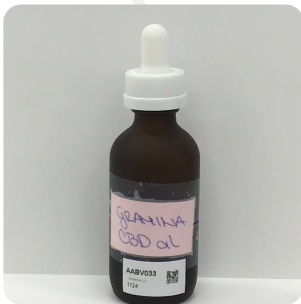
Batch # 01124
Batch Date: 2021-08-26
Extracted From: Hemp

Sampling Method: MSP 7.3.1
Test Reg State: Florida

Order # GRA210826-01002
Order Date: 2021-08-26
Sample # AABV033

Sampling Date: 2021-08-28
Lab Batch Date: 2021-08-28
Completion Date: 2021-09-03

Initial Gross Weight: 99.660 g
Density: 0.979 g/ml



Product Image

Potency
Tested
 Residual
Solvents
Passed

Terpenes
Tested
 Pathogenic
Microbiology
Passed

Heavy Metals
Passed
 Listeria
Monocytogenes
Passed

Mycotoxins
Passed

Pesticides
Passed



Potency - 11

Specimen Weight: 115.180 mg

Analyte	Dilution (1:n)	LOD (%)	LOQ (%)	Result (mg/ml)	(%)
CBD	10.000	0.000054	0.001	97.734	9.983
CBG	10.000	0.000248	0.001	3.248	0.332
CBN	10.000	0.000014	0.001	3.135	0.320
CBC	10.000	0.000018	0.001	1.949	0.199
CBDA	10.000	0.000001	0.001	1.691	0.173
Delta-9 THC	10.000	0.000013	0.001	0.987	0.101
CBDV	10.000	0.000065	0.001	0.494	0.051
THCV	10.000	0.000007	0.001	0.153	0.016
Delta-8 THC	10.000	0.000026	0.001	<LOQ	
CBGA	10.000	0.000008	0.001	<LOQ	
THCA-A	10.000	0.000032	0.001	<LOQ	

Tested
(HPLC/LC/MS)



Potency Summary

Total THC 0.101%	Total CBD 10.134%
Total CBG 0.332%	Total CBN 0.320%
Other Cannabinoids 0.265%	Total Cannabinoids 11.152%



Terpenes Summary

Analyte	Result (mg/g)	(%)
trans-Caryophyllene	1.043	0.104%
Guaiol	0.628	0.063%
alpha-Bisabolol	0.58	0.058%
alpha-Humulene	0.318	0.032%
beta-Myrcene	0.299	0.03%
(R)-(+)-Limonene	0.277	0.028%
Farnesene	0.209	0.021%

Total Terpenes: 0.336%

Detailed Terpenes Analysis is on the following page

Xueli Gao
Ph.D., DABT
Lab Toxicologist

Aixa Sun
D.H.Sc., M.Sc., B.Sc., MT (AAB)
Lab Director/Principal Scientist



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Terpenes - FL

Specimen Weight: 174.200 mg

Tested
(GC/GCMS)

Dilution Factor: 20.000

Analyte	LOQ (%)	Result (mg/g)	(%)	Analyte	LOQ (%)	Result (mg/g)	(%)
trans-Caryophyllene	0.02	1.043	0.104	Guaiol	0.02	0.628	0.063
alpha-Bisabolol	0.02	0.580	0.058	alpha-Humulene	0.02	0.318	0.032
beta-Myrcene	0.02	0.299	0.030	(R)-(+)-Limonene	0.02	0.277	0.028
Farnesene	0.02	0.209	0.021	Ocimene	0.014	<LOQ	
Hexahydrothymol	0.02	<LOQ		Isoborneol	0.02	<LOQ	
Isopulegol	0.02	<LOQ		Linalool	0.02	<LOQ	
Nerol	0.02	<LOQ		(+)-Cedrol	0.02	<LOQ	
Pulegone	0.02	<LOQ		Sabinene	0.02	<LOQ	
Geraniol	0.02	<LOQ		Sabinene Hydrate	0.02	<LOQ	
Terpinolene	0.02	<LOQ		Total Terpeneol	0.02	<LOQ	
trans-Nerolidol	0.02	<LOQ		Geranyl acetate	0.02	<LOQ	
Fenchone	0.02	<LOQ		beta-Pinene	0.02	<LOQ	
3-Carene	0.02	<LOQ		alpha-Cedrene	0.02	<LOQ	
alpha-Phellandrene	0.02	<LOQ		alpha-Pinene	0.02	<LOQ	
alpha-Terpinene	0.02	<LOQ		Gamma-Terpinene	0.02	<LOQ	
Borneol	0.04	<LOQ		Camphene	0.02	<LOQ	
Camphors	0.04	<LOQ		Caryophyllene oxide	0.02	<LOQ	
cis-Nerolidol	0.02	<LOQ		Eucalyptol	0.02	<LOQ	
Fenchyl Alcohol	0.02	<LOQ		Valencene	0.02	<LOQ	

Total Terpenes: 0.336%

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Lab Toxicologist

Aixia Sun
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Heavy Metals

Specimen Weight: 248.600 mg

Passed
(ICP-MS)

Dilution Factor: 2.000

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Arsenic (As)	100	1500	<LOQ	Cadmium (Cd)	100	500	<LOQ
Lead (Pb)	100	500	<LOQ	Mercury (Hg)	100	3000	<LOQ



Mycotoxins

Specimen Weight: 174.200 mg

Passed
(LCMS)

Dilution Factor: 8.611

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Aflatoxin B1	6	20	<LOQ	Aflatoxin B2	6	20	<LOQ
Aflatoxin G1	6	20	<LOQ	Aflatoxin G2	6	20	<LOQ
Ochratoxin A	12	20	<LOQ				

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Pesticides FL V4

Specimen Weight: 174.200 mg

Passed
(LCMS/GCMS)

Dilution Factor: 8.611

Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)	Analyte	LOQ (ppb)	Action Level (ppb)	Result (ppb)
Abamectin	28.23	300	<LOQ	Acephate	30	3000	<LOQ
Acequinocyl	48	2000	<LOQ	Acetamiprid	30	3000	<LOQ
Aldicarb	30	100	<LOQ	Azoxystrobin	10	3000	<LOQ
Bifenazate	30	3000	<LOQ	Bifenthrin	30	500	<LOQ
Boscalid	10	3000	<LOQ	Captan	30	3000	<LOQ
Carbaryl	10	500	<LOQ	Carbofuran	10	100	<LOQ
Chlorantraniliprole	10	3000	<LOQ	Chlordane	10	100	<LOQ
Chlorfenapyr	30	100	<LOQ	Chloromequat Chloride	10	3000	<LOQ
Chlorpyrifos	30	100	<LOQ	Clofentazine	30	500	<LOQ
Coumaphos	48	100	<LOQ	Cyfluthrin	30	1000	<LOQ
Cypermethrin	30	1000	<LOQ	Daminozide	30	100	<LOQ
Diazinon	30	200	<LOQ	Dichlorvos	30	100	<LOQ
Dimethoate	30	100	<LOQ	Dimethomorph	48	3000	<LOQ
Ethoprophos	30	100	<LOQ	Etofenprox	30	100	<LOQ
Etoxazole	30	1500	<LOQ	Fenhexamid	10	3000	<LOQ
Fenoxycarb	30	100	<LOQ	Fenpyroximate	30	2000	<LOQ
Fipronil	30	100	<LOQ	Flonicamid	30	2000	<LOQ
Fludioxonil	48	3000	<LOQ	Hexythiazox	30	2000	<LOQ
Imazalil	30	100	<LOQ	Imidacloprid	30	3000	<LOQ
Kresoxim Methyl	30	1000	<LOQ	Malathion	30	2000	<LOQ
Metaxalyl	10	3000	<LOQ	Methiocarb	30	100	<LOQ
Methomyl	30	100	<LOQ	methyl-Parathion	10	100	<LOQ
Mevinphos	10	100	<LOQ	Myclobutanil	30	3000	<LOQ
Naled	30	500	<LOQ	Oxamyl	30	500	<LOQ
Paclobutrazol	30	100	<LOQ	Pentachloronitrobenzene	10	200	<LOQ
Permethrin	30	1000	<LOQ	Phosmet	30	200	<LOQ
Piperonylbutoxide	30	3000	<LOQ	Prallethrin	30	400	<LOQ
Propiconazole	30	1000	<LOQ	Propoxur	30	100	<LOQ
Pyrethrins	30	1000	<LOQ	Pyridaben	30	3000	<LOQ
Spinetoram	10	3000	<LOQ	Spinosad	30	3000	<LOQ
Spiromesifen	30	3000	<LOQ	Spirotetramat	30	3000	<LOQ
Spiroxamine	30	100	<LOQ	Tebuconazole	30	1000	<LOQ
Thiacloprid	30	100	<LOQ	Thiamethoxam	30	1000	<LOQ
Trifloxystrobin	30	3000	<LOQ				

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Residual Solvents - FL (CBD)

Specimen Weight: 9.600 mg

Passed
(GCMS)

Dilution Factor: 1.000

Analyte	LOQ (ppm)	Action Level (ppm)	Result (ppm)	Analyte	LOQ (ppm)	Action Level (ppm)	Result (ppm)
Acetone	2.08	5000	<LOQ	Benzene	0.02	2	<LOQ
Butanes	2.5	2000	<LOQ	Ethanol	2.78	5000	<LOQ
Ethyl Acetate	1.11	5000	<LOQ	Heptane	1.39	5000	<LOQ
Hexane	1.17	290	<LOQ	Isopropyl alcohol	1.39	500	<LOQ
Methanol	0.69	3000	<LOQ	Pentane	2.08	5000	<LOQ
Propane	5.83	2100	<LOQ	Toluene	2.92	890	<LOQ
Total Xylenes	2.92	2170	<LOQ				



Pathogenic Microbiology SAE (MicroArray)

Specimen Weight: 1043.030 mg

Passed
(Micro Array)

Dilution Factor: 1.000

Analyte	Result (cfu/g)	Analyte	Result (cfu/g)
Aspergillus flavus	Absence in 1g	Aspergillus fumigatus	Absence in 1g
Aspergillus niger	Absence in 1g	Aspergillus terreus	Absence in 1g
Salmonella	Absence in 1g	STEC E. Coli	Absence in 1g

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Listeria Monocytogenes

Specimen Weight: 1004.000 mg

Passed
(qPCR)

Dilution Factor: 1.000

Analyte	Action Level (cfu/g)	Result
Listeria Monocytogenes	1	Absence in 1g

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