Hemp Quality Assurance Testing
CERTIFICATE OF ANALYSIS

DATE ISSUED 08/05/2023

SAMPLE NAME: Lemon
Flower, Hemp

CULTIVATOR / MANUFACTURER
Business Name:
License Number:
Address:

DISTRIBUTOR / TESTED FOR
Business Name: Stoney Branch Ag Ventures LLC
License Number:
Address:

SAMPLE DETAIL
Batch Number: 00207
Sample ID: 230803S010

Date Collected: 08/03/2023
Date Received: 08/03/2023
Batch Size:
Sample Size:
Unit Mass:
Serving Size:

Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: 0.57%

Total CBD: 12.85%

Sum of Cannabinoids: 16.27%

Total Cannabinoids: 14.37%

Total THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during the decarboxylation step:
Total THC = Δ^9-THC + (THCa (0.877))
Total CBD = CBD + (CBDa (0.877))
Sum of Cannabinoids = Δ^9-THC + THCa + CBD + CBDa + CBG + CBGa + THCV + THCVa + CBC + CBCa + CBDV + CBDVa + Δ^8-THC + CBL + CBN
Total Cannabinoids = (Δ^9-THC+0.877*THCa) + (CBD+0.877*CBDa) + (CBG+0.877*CBGa) + (THCV+0.877*THCVa) + (CBC+0.877*CBCa) + (CBDV+0.877*CBDVa) + Δ^8-THC + CBL + CBN

TERPENOID ANALYSIS - SUMMARY

39 TESTED, TOP 3 HIGHLIGHTED

Total Terpenoids: 1.5662%

Terpinolene 6.439 mg/g Limonene 1.634 mg/g Myrcene 1.257 mg/g

For quality assurance purposes. Not a Regulatory Hemp Lab Test Report. These results relate only to the sample included on this report. This report shall not be reproduced, except in full, without written approval of the laboratory.

Sample Certification: California Code of Regulations Title 4 Division 19. Department of Cannabis Control Business and Professions Code. Reference: Sections 26100, 26104 and 26110, Business and Professions Code.

Decision Rule: Statements of conformity (e.g. Pass/Fail) to specifications are made in this report without taking measurement uncertainty into account. Where statements of conformity are made in this report, the following decision rules are applied: PASS - Results within limits/specifications, FAIL - Results exceed limits/specifications.

References: limit of detection (LOD), limit of quantification (LOQ), not detected (ND), not tested (NT)

LQC verified by: Carmen Stackhouse
Job Title: Senior Laboratory Analyst
Date: 08/05/2023

Approved by: Josh Wurzer
Job Title: Chief Compliance Officer
Date: 08/05/2023

Cannabinoid Analysis

Tested by high-performance liquid chromatography with diode-array detection (HPLC-DAD).

Method: QSP 1157 - Analysis of Cannabinoids by HPLC-DAD

TOTAL THC: 0.57%
Total THC (Δ^9-THC+0.877*THCa)

TOTAL CBD: 12.85%
Total CBD (CBD+0.877*CBDa)

TOTAL CANNABINOIDS: 14.37%
Total Cannabinoids (Total THC) + (Total CBD) + (Total CBG) + (Total THCV) + (Total CBC) + (Total CBDV) + Δ^8-THC + CBL + CBN

TOTAL CBG: 0.28%
Total CBG (CBG+0.877*CBGa)

TOTAL THCV: ND
Total THCV (THCV+0.877*THCVa)

TOTAL CBC: 0.62%
Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: 0.05%
Total CBDV (CBDV+0.877*CBDVa)

CANNABINOID TEST RESULTS - 08/05/2023

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBDa	*0.06 / 0.22*	*±4.562*	138.66	13.866
CBD	*0.1 / 0.3*	*±0.29*	6.9	0.69
CBCa	*0.1 / 0.4*	*±0.44*	6.4	0.64
THCa	*0.04 / 0.24*	*±0.165*	5.15	0.515
CBGa	*0.1 / 0.4*	*±0.17*	3.2	0.32
Δ^9-THC	*0.1 / 0.4*	*±0.04*	1.2	0.12
CBC	*0.1 / 0.2*	*±0.02*	0.6	0.06
CBDVa	*0.02 / 0.22*	*±0.005*	0.57	0.057
Δ^8-THC	*0.05 / 0.50*	*N/A*	ND	ND
THCV	*0.07 / 0.21*	*N/A*	ND	ND
THCVa	*0.05 / 0.17*	*N/A*	ND	ND
CBDV	*0.1 / 0.3*	*N/A*	ND	ND
CBG	*0.2 / 0.5*	*N/A*	ND	ND
CBL	*0.1 / 0.4*	*N/A*	ND	ND
CBN	*0.07 / 0.20*	*N/A*	ND	ND
SUM OF CANNABINOIDS			162.7 mg/g	16.27%

Terpenoid Analysis

Terpene analysis utilizing gas chromatography-flame ionization detection (GC-FID).

Method: QSP 1192 - Analysis of Terpenoids by GC-FID

1 Terpinolene
Also known as δ-terpinene, it is of four isomers of the monoterpene Terpinene. It has a fragrance that can be described as fresh, woody, piney, herbal with a hint of lemon. Found in conifers, cumin, apple, rosemary, sage, tea tree, lilac, nutmeg...etc.

TERPENOID TEST RESULTS - 08/05/2023

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
Terpinolene	*0.008 / 0.027*	*±0.0972*	6.439	0.6439
Limonene	*0.005 / 0.016*	*±0.0533*	1.634	0.1634
Myrcene	*0.007 / 0.025*	*±0.0445*	1.257	0.1257
β-Caryophyllene	*0.004 / 0.013*	*±0.0636*	1.182	0.1182
β-Ocimene	*0.005 / 0.018*	*±0.0385*	0.979	0.0979
Guaiol	*0.011 / 0.035*	*±0.0382*	0.702	0.0702
α-Bisabolol	*0.008 / 0.026*	*±0.0249*	0.579	0.0579
β-Pinene	*0.004 / 0.015*	*±0.0170*	0.526	0.0526
α-Humulene	*0.009 / 0.031*	*±0.0189*	0.351	0.0351
α-Pinene	*0.005 / 0.015*	*±0.0122*	0.340	0.0340
α-Phellandrene	*0.006 / 0.019*	*±0.0067*	0.297	0.0297
Terpineol	*0.008 / 0.025*	*±0.0163*	0.267	0.0267
Δ^3-Carene	*0.005 / 0.018*	*±0.0057*	0.203	0.0203

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Terpenoid Analysis *Continued*

2 Limonene
A monoterpene with a fragrance that can be described as orangey, citrusy, sweet and tart. It is most commonly found in nature as D-Limonene and is a primary contributor to the distinct scent of orange peels, from which it is commonly derived. Found in numerous pines, red maple, silver maple, aspens, cottonwoods, hemlocks, sumac, cedar, junipers...etc.

3 Myrcene
A monoterpene with a fragrance that can be described as peppery, spicy, herbal, floral and woody. Although it has a pleasant odor, it is typically used by the perfume industry as precursor for developing other fragrances. Found in hops, houttuynia, bay, thyme, lemon grass, mango, verbena, cardamom, citrus...etc.

TERPENOID TEST RESULTS - 08/05/2023 *continued*

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
α-Terpinene	*0.006 / 0.019*	*±0.0041*	**0.192**	**0.0192**
γ-Terpinene	*0.005 / 0.018*	*±0.0033*	**0.139**	**0.0139**
Fenchol	*0.009 / 0.029*	*±0.0048*	**0.131**	**0.0131**
trans-β-Farnesene	*0.008 / 0.028*	*±0.0049*	**0.086**	**0.0086**
Borneol	*0.004 / 0.014*	*±0.0029*	**0.062**	**0.0062**
Linalool	*0.009 / 0.030*	*±0.0022*	**0.055**	**0.0055**
Nerolidol	*0.006 / 0.020*	*±0.0042*	**0.053**	**0.0053**
Sabinene	*0.004 / 0.014*	*±0.0012*	**0.039**	**0.0039**
Caryophyllene Oxide	*0.011 / 0.038*	*±0.0023*	**0.039**	**0.0039**
Eucalyptol	*0.005 / 0.018*	*±0.0015*	**0.038**	**0.0038**
Sabinene Hydrate	*0.007 / 0.022*	*±0.0014*	**0.038**	**0.0038**
Camphene	*0.004 / 0.014*	*±0.0011*	**0.034**	**0.0034**
p-Cymene	*0.005 / 0.015*	*N/A*	**<LOQ**	**<LOQ**
α-Cedrene	*0.005 / 0.017*	*N/A*	**<LOQ**	**<LOQ**
Valencene	*0.010 / 0.033*	*N/A*	**<LOQ**	**<LOQ**
Fenchone	*0.008 / 0.026*	*N/A*	**ND**	**ND**
Isopulegol	*0.004 / 0.013*	*N/A*	**ND**	**ND**
Camphor	*0.005 / 0.015*	*N/A*	**ND**	**ND**
Isoborneol	*0.003 / 0.011*	*N/A*	**ND**	**ND**
Menthol	*0.008 / 0.025*	*N/A*	**ND**	**ND**
Nerol	*0.003 / 0.011*	*N/A*	**ND**	**ND**
Citronellol	*0.003 / 0.010*	*N/A*	**ND**	**ND**
Pulegone	*0.003 / 0.010*	*N/A*	**ND**	**ND**
Geraniol	*0.002 / 0.007*	*N/A*	**ND**	**ND**
Geranyl Acetate	*0.004 / 0.012*	*N/A*	**ND**	**ND**
Cedrol	*0.009 / 0.032*	*N/A*	**ND**	**ND**
TOTAL TERPENOIDS			**15.662 mg/g**	**1.5662%**