

SAMPLE NAME: WHOLE PLANT 0013

Concentrate, Product Inhalable

CULTIVATOR / MANUFACTURER

Business Name:

License Number:

Address:

DISTRIBUTOR / TESTED FOR

Business Name: Tonic CBD

License Number:

Address: 2466 Pennsylvania Ave
 Sayre PA 18840



SAMPLE DETAIL

Batch Number: 0013WP

Sample ID: 210402R025

Date Collected: 04/02/2021

Date Received: 04/02/2021

Batch Size:

Sample Size: 1.0 units

Unit Mass: 13 grams per Unit

Serving Size:



Scan QR code to verify authenticity of results.

CANNABINOID ANALYSIS - SUMMARY

Total THC: 2.521%

Total CBD: 69.247%

Sum of Cannabinoids: 78.759%

Total Cannabinoids: 78.719%

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 = $\Delta 9\text{THC} + (\text{THCa} \cdot 0.877)$

Total CBD = $\text{CBD} + (\text{CBDA} \cdot 0.877)$

Sum of Cannabinoids = $\Delta 9\text{THC} + \text{THCa} + \text{CBD} + \text{CBDA} + \text{CBG} + \text{CBGa} + \text{THCV} + \text{THCVa} + \text{CBC} + \text{CBCa} + \text{CBDV} + \text{CBDVa} + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$

Total Cannabinoids = $(\Delta 9\text{THC} + 0.877 \cdot \text{THCa}) + (\text{CBD} + 0.877 \cdot \text{CBDA}) +$

$(\text{CBG} + 0.877 \cdot \text{CBGa}) + (\text{THCV} + 0.877 \cdot \text{THCVa}) + (\text{CBC} + 0.877 \cdot \text{CBCa}) +$

$(\text{CBDV} + 0.877 \cdot \text{CBDVa}) + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$

SAFETY ANALYSIS - SUMMARY

$\Delta 9\text{THC}$ per Unit: **PASS**

Pesticides: **PASS**

Heavy Metals: **PASS**

Microbiology (PCR): **PASS**

For quality assurance purposes. Not a Pre-Harvest 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 16 Effect Date January 16, 2019. Authority: Section 26013, 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: Jose Rangel
 Date: 06/03/2021


 Approved by: Josh Wurzer, President
 Date: 06/03/2021



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: 2.521%

Total THC ($\Delta 9$ THC+0.877*THCa)

TOTAL CBD: 69.247%

Total CBD (CBD+0.877*CBDA)

TOTAL CANNABINOIDS: 78.719%

Total Cannabinoids (Total THC) + (Total CBD) + (Total CBG) + (Total THCv) + (Total CBC) + (Total CBDV) + $\Delta 8$ THC + CBL + CBN

TOTAL CBG: 1.673%

Total CBG (CBG+0.877*CBGa)

TOTAL THCV: ND

Total THCV (THCV+0.877*THCVa)

TOTAL CBC: 4.69%

Total CBC (CBC+0.877*CBCa)

TOTAL CBDV: 0.528%

Total CBDV (CBDV+0.877*CBDVa)

CANNABINOID TEST RESULTS - 04/04/2021

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBD	0.07 / 0.29	±31.929	689.62	68.962
CBC	0.2 / 0.5	±1.38	46.9	4.69
$\Delta 9$ THC	0.06 / 0.26	±0.867	25.21	2.521
CBG	0.06 / 0.19	±0.659	16.73	1.673
CBDV	0.04 / 0.15	±0.230	5.28	0.528
CBDA	0.02 / 0.19	±0.095	3.25	0.325
CBN	0.1 / 0.3	±0.04	0.6	0.06
$\Delta 8$ THC	0.1 / 0.4	N/A	ND	ND
THCa	0.05 / 0.14	N/A	ND	ND
THCV	0.1 / 0.2	N/A	ND	ND
THCVa	0.07 / 0.20	N/A	ND	ND
CBDVa	0.03 / 0.53	N/A	ND	ND
CBGa	0.1 / 0.2	N/A	ND	ND
CBL	0.06 / 0.24	N/A	ND	ND
CBCa	0.07 / 0.28	N/A	ND	ND
SUM OF CANNABINOIDS			787.59 mg/g	78.759%

Unit Mass: 13 grams per Unit

$\Delta 9$ THC per Unit	1120 per-package limit	327.73 mg/unit	PASS
Total THC per Unit		327.73 mg/unit	
CBD per Unit		8965.06 mg/unit	
Total CBD per Unit		9002.11 mg/unit	
Sum of Cannabinoids per Unit		10238.67 mg/unit	
Total Cannabinoids per Unit		10233.47 mg/unit	





Pesticide Analysis

CATEGORY 1 PESTICIDE TEST RESULTS - 04/04/2021 ✔ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Chlorpyrifos	0.02 / 0.06	≥ LOD	N/A	ND	PASS

CATEGORY 2 PESTICIDE TEST RESULTS - 04/04/2021 ✔ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Abamectin	0.03 / 0.10	0.1	N/A	ND	PASS
Azoxystrobin	0.01 / 0.04	0.1	N/A	ND	PASS
Bifenazate	0.01 / 0.02	0.1	N/A	ND	PASS
Bifenthrin	0.01 / 0.02	3	N/A	ND	PASS
Boscalid	0.02 / 0.06	0.1	N/A	ND	PASS
Cypermethrin	0.1 / 0.3	1	N/A	ND	PASS
Etoxazole	0.010 / 0.028	0.1	N/A	ND	PASS
Hexythiazox	0.01 / 0.04	0.1	N/A	ND	PASS
Imidacloprid	0.01 / 0.04	5	N/A	ND	PASS
Malathion	0.02 / 0.05	0.5	N/A	ND	PASS
Myclobutanil	0.03 / 0.1	0.1	N/A	ND	PASS
Permethrin	0.03 / 0.09	0.5	N/A	ND	PASS
Piperonylbutoxide	0.003 / 0.009	3	±0.0006	0.013	PASS
Propiconazole	0.01 / 0.03	0.1	N/A	ND	PASS
Spiromesifen	0.02 / 0.05	0.1	N/A	ND	PASS
Tebuconazole	0.02 / 0.07	0.1	N/A	ND	PASS
Trifloxystrobin	0.01 / 0.03	0.1	N/A	ND	PASS

CATEGORY 1 AND 2 PESTICIDES

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS).

*GC-MS utilized where indicated.

Method: QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS or QSP 1213 - Analysis of Pesticides by GC-MS



Heavy Metals Analysis

HEAVY METALS TEST RESULTS - 04/04/2021 ✔ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Arsenic	0.02 / 0.1	0.2	N/A	ND	PASS
Cadmium	0.02 / 0.05	0.2	N/A	ND	PASS
Lead	0.04 / 0.1	0.5	N/A	<LOQ	PASS
Mercury	0.002 / 0.01	0.1	N/A	ND	PASS

Heavy metal analysis utilizing inductively coupled plasma-mass spectrometry (ICP-MS).

Method: QSP 1160 - Analysis of Heavy Metals by ICP-MS



Microbiology Analysis

MICROBIOLOGY TEST RESULTS (PCR) - 04/04/2021 ✔ PASS

COMPOUND	ACTION LIMIT	RESULT	RESULT
Shiga toxin-producing <i>Escherichia coli</i>	Detect	ND	PASS
<i>Salmonella</i> spp.	Detect	ND	PASS

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbiological contaminants.

Method: QSP 1221 - Analysis of Microbiological Contaminants



NOTES

COA amended, update to results.