

### **CERTIFICATE OF ANALYSIS**

**DATE ISSUED 06/05/2022** 

**SAMPLE NAME: A00000144** 

Infused, Hemp Infused

**CULTIVATOR / MANUFACTURER** 

**Business Name:** License Number:

Address:

SAMPLE DETAIL

**Batch Number:** 

Sample ID: 220527S001

**DISTRIBUTOR / TESTED FOR** 

Business Name: New York Hemp Oil

License Number:

Address:

Date Collected: 05/27/2022 **Date Received:** 05/27/2022

Batch Size:

Sample Size: 1.0 units

Unit Mass: 30 milliliters per Unit Serving Size: 1 milliliters per Serving







Scan QR code to verify authenticity of results.

#### **CANNABINOID ANALYSIS - SUMMARY**

Total THC: 20.670 mg/unit

Total CBD: 649.470 mg/unit

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 =  $\Delta^9$ -THC + (THCa (0.877))

Total CBD = CBD + (CBDa (0.877))

Sum of Cannabinoids =  $\Delta^9$ -THC + THCa + CBD + CBDa + CBG + CBGa + Sum of Cannabinoids: 708.600 mg/unit THCV + THCVa + CBC + CBCa + CBDV + CBDVa +  $\Delta^8$ -THC + CBL + CBN Total Cannabinoids =  $(\Delta^9$ -THC+0.877\*THCa) + (CBD+0.877\*CBDa) +

Total Cannabinoids: 708.600 mg/unit

(CBG+0.877\*CBGa) + (THCV+0.877\*THCVa) + (CBC+0.877\*CBCa) + (CBDV+0.877\*CBDVa) + Δ8-THC + CBL + CBN

**TERPENOID ANALYSIS - SUMMARY** 

39 TESTED, TOP 3 HIGHLIGHTED

Total Terpenoids: 0.0684%

 $\beta$ -Caryophyllene 0.289 mg/g

α-Bisabolol 0.129 mg/g

Density: 0.9486 g/mL

 $\alpha$ -Humulene 0.101 mg/g

**SAFETY ANALYSIS - SUMMARY** 

Pesticides: PASS

Residual Solvents: PASS

Heavy Metals: PASS

Microbiology (PCR): PASS

Microbiology (Plating): PASS

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

Sample Certification: Action Limits used in this report are a compilation of guidance from state regulatory agencies in all states except Alaska. Action limits for required tests are the lower of any conflicting state regulations.

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 (LOO), not detected (ND), not tested (NT). too numerous to count >250 cfu/plate (TNTC), colony-forming unit (cfu)

oved by: Josh Wurzer, President te: 06/05/2022

SC Laboratories California LLC. | 100 Pioneer Street, Suite E, Santa Cruz, CA 95060 | 866-435-0709 | sclabs.com | C8-0000013-LIC | ISO/IES 17025:2017 PJLA Accreditation Number 87168 © 2022 SC Labs all rights reserved. Trademarks referenced are trademarks of either SC Labs or their respective owners. MKT0002 REV9 2/22 CoA ID: 220527S001-003 Summary Page



#### **CERTIFICATE OF ANALYSIS**

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

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

TOTAL THC: 20.670 mg/unit Total THC ( $\Delta^9$ -THC+0.877\*THCa)

TOTAL CBD: 649.470 mg/unit

Total CBD (CBD+0.877\*CBDa)

TOTAL CANNABINOIDS: 708.600 mg/unit

 $\begin{array}{l} Total \ Cannabinoids \ (Total \ THC) + (Total \ CBD) + \\ (Total \ CBG) + (Total \ THCV) + (Total \ CBC) + \\ (Total \ CBDV) + \Delta^8 - THC + CBL + CBN \end{array}$ 

TOTAL CBG: 8.970 mg/unit

Total CBG (CBG+0.877\*CBGa)

**TOTAL THCV: ND** 

Total THCV (THCV+0.877\*THCVa)

TOTAL CBC: 23.070 mg/unit

Total CBC (CBC+0.877\*CBCa)

TOTAL CBDV: 4.680 mg/unit

Total CBDV (CBDV+0.877\*CBDVa)

#### **CANNABINOID TEST RESULTS - 05/28/2022**

COMPOUND	LOD/LOQ (mg/mL)	MEASUREMENT UNCERTAINTY (mg/mL)	RESULT (mg/mL)	RESULT (%)
CBD	0.004 / 0.011	±0.8075	21.649	2.2822
СВС	0.003 / 0.010	±0.0248	0.769	0.0811
Δ <sup>9</sup> -THC	0.002 / 0.014	±0.0378	0.689	0.0726
CBG	0.002 / 0.006	±0.0145	0.299	0.0315
CBDV	0.002 / 0.012	±0.0064	0.156	0.0164
CBN	0.001 / 0.007	±0.0010	0.035	0.0037
CBL	0.003 / 0.010	±0.0008	0.023	0.0024
$\Delta^8$ -THC	0.01 / 0.02	N/A	ND	ND
THCa	0.001 / 0.005	N/A	ND	ND
THCV	0.002 / 0.012	N/A	ND	ND
THCVa	0.002/0.019	N/A	ND	ND
CBDa	0.001 / 0.026	N/A	ND	ND
CBDVa	0.001/0.018	N/A	ND	ND
CBGa	0.002 / 0.007	N/A	ND	ND
CBCa	0.001 / 0.015	N/A	ND	ND
SUM OF CANNAE	BINOIDS		23.620 mg/mL	2.490%

#### Unit Mass: 30 milliliters per Unit / Serving Size: 1 milliliters per Serving

$\Delta^9$ -THC per Unit	20.670 mg/unit
$\Delta^9$ -THC per Serving	0.689 mg/serving
Total THC per Unit	20.670 mg/unit
Total THC per Serving	0.689 mg/serving
CBD per Unit	649.470 mg/unit
CBD per Serving	21.649 mg/serving
Total CBD per Unit	649.470 mg/unit
Total CBD per Serving	21.649 mg/serving
Sum of Cannabinoids per Unit	708.600 mg/unit
Sum of Cannabinoids per Serving	23.620 mg/serving
Total Cannabinoids per Unit	708.600 mg/unit
Total Cannabinoids per Serving	23.620 mg/serving

#### **DENSITY TEST RESULT**

0.9486 g/mL

Tested 05/28/2022

**Method:** QSP 7870 - Sample Preparation



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## **Terpenoid Analysis**

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

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



#### **β-Caryophyllene**

A sesquiterpene with a fragrance that can be described as spicy, woody, dry, dusty and mildly sweet. It was one of the first organic compounds to fully synthesized in a laboratory and plays a role in the endocannabinoid system as it is a functional CB<sub>2</sub> receptor agonist. Found in black pepper, clove, hops, rosemary, black-jack, perilla, spicebush, Indian pennywort, celery, frankincense, vitex, parsley, marigold, tamarind...etc.



#### $\alpha$ -Bisabolol

A sesquiterpene alcohol with a fragrance that can be described as floral, peppery, sweet and clean. Found in chamomile, figwort, yarrow, skullcaps, lavender, ironwort, germander...etc.



#### $\alpha$ -Humulene

Also known as  $\alpha$ -caryophyllene, it is an isomer of the sesquiterpene  $\beta$ -Caryophyllene which frequently occurs in nature with many aromatic plants across the globe. It has a fragrance that can be described as earthy or musky with spicy undertones. Found in hops, forskohlii, skullcaps, basil, nutmeg, cloves, sage, cotton, tamarind, black pepper, guava, Scotch pine...etc.

#### TERPENOID TEST RESULTS - 06/01/2022

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
β-Caryophyllene	0.004 / 0.012	±0.0080	0.289	0.0289
α-Bisabolol	0.008 / 0.026	±0.0054	0.129	0.0129
α-Humulene	0.009/0.029	±0.0025	0.101	0.0101
Guaiol	0.009 / 0.030	±0.0034	0.094	0.0094
Caryophyllene Oxide	0.010 / 0.033	±0.0016	0.044	0.0044
trans-β-Farnesene	0.008 / 0.025	±0.0007	0.027	0.0027
Linalool	0.009 / 0.032	N/A	<loq< td=""><td><loq< td=""></loq<></td></loq<>	<loq< td=""></loq<>
Fenchol	0.010 / 0.034	N/A	<loq< td=""><td><loq< td=""></loq<></td></loq<>	<loq< td=""></loq<>
Borneol	0.005 / 0.016	N/A	<loq< td=""><td><loq< td=""></loq<></td></loq<>	<loq< td=""></loq<>
Valencene	0.009/0.030	N/A	<loq< td=""><td><loq< td=""></loq<></td></loq<>	<loq< td=""></loq<>
Nerolidol	0.006 / 0.019	N/A	<loq< td=""><td><loq< td=""></loq<></td></loq<>	<loq< td=""></loq<>
α-Pinene	0.005 / 0.017	N/A	ND	ND
Camphene	0.005 / 0.015	N/A	ND	ND
Sabinene	0.004 / 0.014	N/A	ND	ND
β-Pinene	0.004 / 0.014	N/A	ND	ND
Myrcene	0.008 / 0.025	N/A	ND	ND
α-Phellandrene	0.006 / 0.020	N/A	ND	ND
$\Delta^3$ -Carene	0.005 / 0.018	N/A	ND	ND
α-Terpinene	0.005 / 0.017	N/A	ND	ND
p-Cymene	0.005 / 0.016	N/A	ND	ND
Limonene	0.005 / 0.016	N/A	ND	ND
Eucalyptol	0.006 / 0.018	N/A	ND	ND
β-Ocimene	0.006 / 0.020	N/A	ND	ND
γ-Terpinene	0.006 / 0.018	N/A	ND	ND
Sabinene Hydrate	0.006 / 0.022	N/A	ND	ND
Fenchone	0.009 / 0.028	N/A	ND	ND
Terpinolene	0.008 / 0.026	N/A	ND	ND
Isopulegol	0.005 / 0.016	N/A	ND	ND
Camphor	0.006 / 0.019	N/A	ND	ND
Isoborneol	0.004 / 0.012	N/A	ND	ND
Menthol	0.008 / 0.025	N/A	ND	ND
Terpineol	0.009 / 0.031	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 / 0.011	N/A	ND	ND
Geraniol	0.002 / 0.007	N/A	ND	ND
Geranyl Acetate	0.004 / 0.014	N/A	ND	ND
α-Cedrene	0.005 / 0.016	N/A	ND	ND
Cedrol	0.008 / 0.027	N/A	ND	ND
TOTAL TERPENOIDS			0.684 mg/g	0.0684%



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## **Pesticide Analysis**

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

Exclusions<sup>1</sup> see last page

#### PESTICIDE TEST RESULTS - 06/03/2022 **⊘** PASS

	COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
Ī	Abamectin	0.03 / 0.10	0.3	N/A	ND	PASS
Ī	Azoxystrobin	0.02 / 0.07	40	N/A	ND	PASS
	Bifenazate	0.01/0.04	5	N/A	ND	PASS
Ī	Bifenthrin	0.02 / 0.05	0.5	N/A	ND	PASS
Ī	Boscalid	0.03 / 0.09	10	N/A	ND	PASS
	Chlorpyrifos	0.02 / 0.06	≥LOD	N/A	ND	PASS
Ī	Cypermethrin	0.11/0.32	1	N/A	ND	PASS
Ī	Etoxazole	0.02 / 0.06	1.5	N/A	ND	PASS
	Hexythiazox	0.02 / 0.07	2	N/A	ND	PASS
Ī	Imidacloprid	0.04 / 0.11	3	N/A	ND	PASS
	Malathion	0.03 / 0.09	5	N/A	ND	PASS
	Myclobutanil	0.03 / 0.09	9	N/A	ND	PASS
Ī	Permethrin	0.04 / 0.12	20	N/A	ND	PASS
	Piperonyl Butoxide	0.02 / 0.07	8	N/A	ND	PASS
	Propiconazole	0.02 / 0.07	20	N/A	ND	PASS
	Spiromesifen	0.02 / 0.05	12	N/A	ND	PASS
	Tebuconazole	0.02 / 0.07	2	N/A	ND	PASS
	Trifloxystrobin	0.03 / 0.08	30	N/A	ND	PASS
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# $\overline{\mathbb{Q}}$ Residual Solvents Analysis

Residual Solvent analysis utilizing gas chromatography-mass spectrometry (GC-MS).

Method: QSP 1204 - Analysis of Residual Solvents by GC-MS

Exclusions<sup>2</sup> see last page

#### RESIDUAL SOLVENTS TEST RESULTS - 06/02/2022 **⊘** PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (μg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
Propane	10/20	5000	N/A	ND	PASS
n-Butane	10/50	5000	N/A	ND	PASS
n-Pentane	20/50	5000	N/A	ND	PASS
n-Hexane	2/5	290	N/A	ND	PASS
n-Heptane	20/60	5000	N/A	ND	PASS
Benzene	0.03 / 0.09	1	N/A	ND	PASS
Toluene	7/21	890	N/A	ND	PASS
Total Xylenes	50 / 160	2170	N/A	ND	PASS
Methanol	50/200	3000	N/A	ND	PASS
Ethanol	20/50	5000	N/A	ND	PASS
2-Propanol (Isopropyl Alcohol)	10/40	5000	N/A	ND	PASS
Acetone	20/50	5000	N/A	ND	PASS
Ethyl Ether	20/50	5000	N/A	ND	PASS
Ethylene Oxide	0.3 / 0.8	1	N/A	ND	PASS
Ethyl Acetate	20/60	5000	N/A	ND	PASS
Chloroform	0.1 / 0.2	1	N/A	ND	PASS
Dichloromethane (Methylene Chloride)	0.3/0.9	1	N/A	ND	PASS

Continued on next page



#### **CERTIFICATE OF ANALYSIS**



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#### **RESIDUAL SOLVENTS TEST RESULTS** - 06/02/2022 continued **⊘ PASS**

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
Trichloroethylene	0.1/0.3	1	N/A	ND	PASS
1,2-Dichloroethane	0.05 / 0.1	1	N/A	ND	PASS
Acetonitrile	2/7	410	N/A	ND	PASS



### **Heavy Metals Analysis**

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

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

#### **HEAVY METALS TEST RESULTS - 06/01/2022 @ PASS**

	COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)	RESULT
	Arsenic	0.02 / 0.1	0.42	N/A	ND	PASS
	Cadmium	0.02 / 0.05	0.27	N/A	ND	PASS
4	Lead	0.04 / 0.1	0.5	N/A	ND	PASS
	Mercury	0.002 / 0.01	0.4	N/A	ND	PASS



## **Microbiology Analysis**

PCR AND PLATING

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

Method: QSP 1221 - Analysis of Microbiological Contaminants

#### MICROBIOLOGY TEST RESULTS (PCR) - 06/05/2022 PASS

COMPOUND	ACTION LIMIT (cfu/g)	RESULT (cfu/g)	RESULT
Shiga toxin-producing Escherichia coli	Not Detected in 1g	ND	PASS
Salmonella spp.	Not Detected in 1g	ND	PASS
Bile-Tolerant Gram-Negative Bacteria	100	ND	PASS
Staphylococcus aureus	Not Detected in 1g	ND	PASS

Analysis conducted by  $3M^{TM}$  Petrifilm and plate counts of microbiological contaminants.

**Method:** QSP 6794 - Plating with 3M<sup>™</sup> Petrifilm<sup>™</sup>

#### MICROBIOLOGY TEST RESULTS (PLATING) - 06/05/2022 PASS

COMPOUND	ACTION LIMIT (cfu/g)	RESULT (cfu/g)	RESULT
Total Aerobic Bacteria	100	ND	PASS
Total Yeast and Mold	10	ND	PASS

#### NOTES

CoA amended Update: Order Details

Regulation Title 4 Division 19

<sup>1.</sup> Exclusions: Sample Certification: California Code of

Regulation Title 4 Division 19

<sup>2.</sup> Exclusions: Sample Certification: California Code of