

# Hemp Quality Assurance Testing

# **CERTIFICATE OF ANALYSIS**

**DATE ISSUED 08/08/2024** 

SAMPLE NAME: HF PG Pineapple Trainwreck

Infused, Hemp

**CULTIVATOR / MANUFACTURER** 

Business Name: License Number:

Address:

SAMPLE DETAIL

Batch Number: 1233 Sample ID: 240807L054 **DISTRIBUTOR / TESTED FOR** 

Business Name: The Brewing

Projekt

License Number:

Address:

Date Collected: 08/07/2024 Date Received: 08/07/2024

Batch Size:

Sample Size: 1.0 units

Unit Mass: 355 milliliters per Unit

Serving Size:







Scan QR code to verify authenticity of results.

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

Total THC: 24.1465 mg/unit

Total CBD: 0.3905 mg/unit

Sum of Cannabinoids: 24.8210 mg/unit

Total Cannabinoids: 24.8210 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 =  $\Delta^9\text{-THC}$  + (THCa (0.877))

Total CBD = CBD + (CBDa (0.877))

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

(CBDV+0.877\*CBDVa) +  $\Delta$ <sup>8</sup>-THC + CBL + CBN

Density: 0.998 g/mL

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.

Job Title: Senior Laboratory Analyst Date: 08/08/2024

LOC verified by: Yasmin Kakkar

Approved by: Josh Wurzer Job Title: Chief Compliance Officer

Date: 08/08/2024



HF PG PINEAPPLE TRAINWRECK | DATE ISSUED 08/08/2024





# 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: 24.1465 mg/unit

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

TOTAL CBD: 0.3905 mg/unit

Total CBD (CBD+0.877\*CBDa)

TOTAL CANNABINOIDS: 24.8210 mg/unit

$$\label{eq:total_constraint} \begin{split} & Total \ Cannabinoids \ (Total \ THC) + (Total \ CBD) + (Total \ CBG) + (Total \ THCV) + (Total \ CBC) + (Total \ CBDV) + \Delta^8 - THC + CBL + CBN \end{split}$$

**TOTAL CBG: ND** 

Total CBG (CBG+0.877\*CBGa)

**TOTAL THCV: <LOQ** 

Total THCV (THCV+0.877\*THCVa)

TOTAL CBC: ND

Total CBC (CBC+0.877\*CBCa)

**TOTAL CBDV: ND** 

Total CBDV (CBDV+0.877\*CBDVa)

#### **CANNABINOID TEST RESULTS - 08/08/2024**

COMPOUND	LOD/LOQ (mg/mL)	MEASUREMENT UNCERTAINTY (mg/mL)	RESULT (mg/mL)	RESULT (%)
Δ <sup>9</sup> -THC	0.0001 / 0.0005	±0.00265	0.0683	0.00684
CBD	0.0001/0.0004	±0.00004	0.0011	0.00011
CBN	0.0001/0.0003	±0.00002	0.0008	0.00008
THCV	0.0001 / 0.0005	N/A	<loq< th=""><th><loq< th=""></loq<></th></loq<>	<loq< th=""></loq<>
Δ <sup>8</sup> -THC	0.0003 / 0.0008	N/A	ND	ND
THCa	0.0001 / 0.0002	N/A	ND	ND
THCVa	0.0001 / 0.0007	N/A	ND	ND
CBDa	0.0001/0.0010	N/A	ND	ND
CBDV	0.0001 / 0.0005	N/A	ND	ND
CBDVa	0.0001 / 0.0007	N/A	ND	ND
CBG	0.0001 / 0.0002	N/A	ND	ND
CBGa	0.0001 / 0.0003	N/A	ND	ND
CBL	0.0001 / 0.0004	N/A	ND	ND
СВС	0.0001 / 0.0004	N/A	ND	ND
CBCa	0.0001 / 0.0006	N/A	ND	ND
SUM OF CANNA	ABINOIDS		0.0702 mg/mL	0.00703%

### Unit Mass: 355 milliliters per Unit

Δ <sup>9</sup> -THC per Unit	24.1465 mg/unit
Total THC per Unit	24.1465 mg/unit
CBD per Unit	0.3905 mg/unit
Total CBD per Unit	0.3905 mg/unit
Sum of Cannabinoids per Unit	24.8210 mg/unit
Total Cannabinoids per Unit	24.8210 mg/unit

#### **DENSITY TEST RESULT**

0.998 g/mL

Tested 08/08/2024

Method: QSP 7870 - Sample

Preparation



# Hemp Quality Assurance Testing

# **CERTIFICATE OF ANALYSIS**

**DATE ISSUED 08/10/2024** 

SAMPLE NAME: Water Soluble Full Panel (CBG, CBN, D9, CBD)

Concentrate, Product Inhalable

**CULTIVATOR / MANUFACTURER** 

**Business Name:** License Number:

Address:

SAMPLE DETAIL

Batch Number: 1233 Sample ID: 240807L054 **DISTRIBUTOR / TESTED FOR** 

Business Name: Superior Molecular

License Number:

Address:

Date Collected: 08/05/2024 Date Received: 08/05/2024

Batch Size: 1.0 units Sample Size: 1.0 units **Unit Mass:** 1 grams per Unit

Serving Size: 0.05 grams per Serving







Scan QR code to verify authenticity of results.

**CANNABINOID ANALYSIS - SUMMARY** 

Density: 1.0024 g/mL

#### **SAFETY ANALYSIS - SUMMARY**

Pesticides: PASS

Microbiology (PCR): PASS

Residual Solvents: PASS

Microbiology (Plating): DETECTED

**Heavy Metals: DETECTED** 

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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), too numerous to count >250 cfu/plate (TNTC), colony-forming unit (cfu)

LOC verified by Samantha LeBeau Job Title: Laboratory Assistant Date: 08/10/2024

Approved by: Josh Wurzer Title: Chief Compliance Officer

Date: 08/10/2024



WATER SOLUBLE FULL PANEL (CBG, CBN, D9, CBD) | DATE ISSUED 08/10/2024





# **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

### PESTICIDE TEST RESULTS - 08/07/2024 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	0.02 / 0.07	0.1	N/A	ND	PASS
	Bifenazate	0.01 / 0.04	0.1	N/A	ND	PASS
	Bifenthrin	0.02 / 0.05	3	N/A	ND	PASS
	Boscalid	0.03 / 0.09	0.1	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
	Etoxazole	0.02 / 0.06	0.1	N/A	ND	PASS
	Hexythiazox	0.02 / 0.07	0.1	N/A	ND	PASS
	Imidacloprid	0.04 / 0.11	5	N/A	ND	PASS
	Malathion	0.03 / 0.09	0.5	N/A	ND	PASS
	Myclobutanil	0.03 / 0.09	0.1	N/A	ND	PASS
	Permethrin	0.04 / 0.12	0.5	N/A	ND	PASS
	Piperonyl Butoxide	0.02 / 0.07	3	N/A	ND	PASS
	Propiconazole	0.02 / 0.07	0.1	N/A	ND	PASS
	Spiromesifen	0.02 / 0.05	0.1	N/A	ND	PASS
Ī	Tebuconazole	0.02 / 0.07	0.1	N/A	ND	PASS
	Trifloxystrobin	0.03 / 0.08	0.1	N/A	ND	PASS



# **Residual Solvents Analysis**

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

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

### 

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (μg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (μg/g)	RESULT
Propane	10/2 <mark>0</mark>	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

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WATER SOLUBLE FULL PANEL (CBG, CBN, D9, CBD) | DATE ISSUED 08/10/2024





### RESIDUAL SOLVENTS TEST RESULTS - 08/07/2024 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 - 08/07/2024 DETECTED

	COMPOUND	LOD/LOQ (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)
	Boron	0.21 / 0.64	±0.187	2.00
	Chromium	0.12 / 0.35	N/A	ND
	Cobalt	0.10 / 0.30	±0.023	0.31
	Copper	0.14 / 0.44	N/A	ND
	Lithium	0.10 / 0.31	N/A	ND
	Manganese	0.13 / 0.40	±0.312	4.34
	Molybdenum	0.15 / 0.44	N/A	ND
	Nickel	0.13 / 0.39	N/A	ND
Ī	Selenium	0.5 / 1.5	N/A	ND
	Silver	0.15 / 0.47	N/A	ND
	Sulfur	78 / 235	N/A	ND
Ī	Titanium	0.12 / 0.38	N/A	<loq< th=""></loq<>
	Tungsten	0.10 / 0.32	N/A	ND
	Zinc	0.8 / 2.5	N/A	ND



# **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) - 08/10/2024 PASS

COMPOUND	(cfu/g)	(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		ND	
Staphylococcus aureus		ND	









Microbiology Analysis Continued MICROBIOLOGY TEST RESULTS (PLATING) - 08/10/2024 DETECTED

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

**Method:** QSP 6794 - Plating with  $3M^{TM}$  Petrifilm $^{TM}$ 

COMPOUND	(cfu/g)
Total Aerobic Bacteria	100.0
Total Yeast and Mold	ND