

## **Hemp Quality Assurance Testing**

## **CERTIFICATE OF ANALYSIS**

**DATE ISSUED 02/14/2025** 

## **SAMPLE DETAILS**

SAMPLE NAME: Arthridiol - 3000mg - Muscle Gel

Infused, Hemp

**CULTIVATOR / MANUFACTURER** 

Business Name: License Number:

Address:

SAMPLE DETAIL

Batch Number:

Sample ID: 250205K056

**DISTRIBUTOR / TESTED FOR** 

Business Name: Erth, LLC

License Number:

Address: CA

**Date Collected:** 02/05/2025 **Date Received:** 02/05/2025

Batch Size:

Sample Size: 1.0 units

Unit Mass: 50 grams per Unit

Serving Size:









Scan QR code to verify authenticity of results.

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

Total THC: 1.300 mg/unit

Total CBD: 2960.700 mg/unit

Sum of Cannabinoids: 2999.950 mg/unit

Total Cannabinoids: 2999.950 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 =  $\Delta^{\circ}$ -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\*CBGa) + (THCV+0.877\*THCVa) + (CBC+0.877\*CBGa) + (THCV+0.877\*THCVa) + (CBC+0.877\*CBGa) + (THCV+0.877\*THCVa) + (CBC+0.877\*CBCa) +

(CBDV+0.877\*CBDVa) +  $\Delta^8$ -THC + CBL + CBN

## **SAFETY ANALYSIS - SUMMARY**

Pesticides: ND Mycotoxins: ND

Microbiology (PCR): ND Foreign Material: PASS

Residual Solvents: DETECTED

Heavy Metals: ND

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.

LQC verified by: Michael Pham Job Title: Senior Laboratory Analyst Date: 02/14/2025 Approved by: Josh Wurzer
Job Title: Chief Compliance Officer
Date: 02/14/2025

Amendment to Certificate of Analysis 250205K056-001



DATE ISSUED 02/14/2025





## 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: 1.300 mg/unit

Total THC (Δ<sup>9</sup>-THC+0.877\*THCa)

TOTAL CBD: 2960.700 mg/unit

Total CBD (CBD+0.877\*CBDa)

TOTAL CANNABINOIDS: 2999.950 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: 7.650 mg/unit

Total CBG (CBG+0.877\*CBGa)

**TOTAL THCV: ND** 

Total THCV (THCV+0.877\*THCVa)

TOTAL CBC: <LOQ
Total CBC (CBC+0.877\*CBCa)

TOTAL CBDV: 30.300 mg/unit

Total CBDV (CBDV+0.877\*CBDVa)

#### **CANNABINOID TEST RESULTS - 02/08/2025**

	COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
Ī	CBD	0.004 / 0.011	±2.2087	59.214	5.9214
	CBDV	0.002 / 0.012	±0.0247	0.606	0.0606
	CBG	0.002 / 0.006	±0.0074	0.153	0.0153
	Δ <sup>9</sup> -THC	0.002 / 0.014	±0.0014	0.026	0.0026
	СВС	0.003 / 0.010	N/A	<loq< th=""><th><loq< th=""></loq<></th></loq<>	<loq< th=""></loq<>
	$\Delta^8$ -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
it-	THCVa	0.002/0.019	N/A	ND	ND
111	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
	CBL	0.003 / 0.010	N/A	ND	ND
	CBN	0.001 / 0.007	N/A	ND	ND
	CBCa	0.001 / 0.015	N/A	ND	ND
	SUM OF CANNA	BINOIDS		59.999 mg/g	5.9999%

## Unit Mass: 50 grams per Unit

$\Delta^9$ -THC per Unit	1.300 mg/unit
Total THC per Unit	1.300 mg/unit
CBD per Unit	2960.700 mg/unit
Total CBD per Unit	2960.700 mg/unit
Sum of Cannabinoids per Unit	2999.950 mg/unit
Total Cannabinoids per Unit	2999.950 mg/unit



## **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 - 02/14/2025 ND

COMPOUND	LOD/LOQ (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (μg/g)
Abamectin	0.03 / 0.10	N/A	ND
Acephate	0.02 / 0.07	N/A	ND
Acequinocyl	0.02 / 0.07	N/A	ND
Acetamiprid	0.02 / 0.05	N/A	ND
Aldicarb	0.03 / 0.08	N/A	ND
Azoxystrobin	0.02 / 0.07	N/A	ND
Bifenazate	0.01 / 0.04	N/A	ND
Bifenthrin	0.02 / 0.05	N/A	ND
Boscalid	0.03 / 0.09	N/A	ND
Captan	0.19 / 0.57	N/A	ND
Carbaryl	0.02 / 0.06	N/A	ND

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## **Pesticide Analysis** Continued

## PESTICIDE TEST RESULTS - 02/14/2025 continued ND

COMPOUND	LOD/LOQ (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)
Carbofuran	0.02 / 0.05	N/A	ND
Chlorantraniliprole	0.04 / 0.12	N/A	ND
Chlordane*	0.03 / 0.08	N/A	ND
Chlorfenapyr*	0.03 / 0.10	N/A	ND
Chlorpyrifos	0.02 / 0.06	N/A	ND
Clofentezine	0.03 / 0.09	N/A	ND
Coumaphos	0.02 / 0.07	N/A	ND
Cyfluthrin	0.12 / 0.38	N/A	ND
Cypermethrin	0.11/0.32	N/A	ND
Daminozide	0.02 / 0.07	N/A	ND
Diazinon	0.02 / 0.05	N/A	ND
Dichlorvos (DDVP)	0.03 / 0.09	N/A	ND
Dimethoate	0.03 / 0.08	N/A	ND
Dimethomorph	0.03 / 0.09	N/A	ND
Ethoprophos	0.03 / 0.10	N/A	ND
Etofenprox	0.02 / 0.06	N/A	ND
Etoxazole	0.02 / 0.06	N/A	ND
Fenhexamid	0.03 / 0.09	N/A	ND
Fenoxycarb	0.03 / 0.08	N/A	ND
Fenpyroximate	0.02 / 0.06	N/A	ND
Fipronil	0.03 / 0.08	N/A	ND
Flonicamid	0.03 / 0.10	N/A	ND
Fludioxonil	0.03/0.10	N/A	ND
Hexythiazox	0.02/0.07	N/A	ND
Imazalil	0.02 / 0.06	N/A	ND
Imidacloprid	0.04 / 0.11	N/A	ND
Kresoxim-methyl	0.02 / 0.07	N/A	ND
Malathion	0.03 / 0.09	N/A	ND
Metalaxyl	0.02 / 0.07	N/A	ND
Methiocarb	0.02 / 0.07	N/A	ND
Methomyl	0.03 / 0.10	N/A	ND
Mevinphos	0.03 / 0.09	N/A	ND
Myclobutanil	0.03 / 0.09	N/A	ND
Naled	0.02 / 0.07	N/A	ND
Oxamyl	0.04 / 0.11	N/A	ND
Paclobutrazol	0.02/0.05	N/A	ND
Parathion-methyl	0.03 / 0.10	N/A	ND
Pentachloronitro- benzene (Quintozene)*	0.03/0.09	N/A	ND
Permethrin	0.04 / 0.12	N/A	ND
Phosmet	0.03 / 0.10	N/A	ND
Piperonyl Butoxide	0.02 / 0.07	N/A	ND

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## Pesticide Analysis Continued

#### PESTICIDE TEST RESULTS - 02/14/2025 continued ND

COMPOUND	LOD/LOQ (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)
Prallethrin	0.03 / 0.08	N/A	ND
Propiconazole	0.02 / 0.07	N/A	ND
Propoxur	0.03 / 0.09	N/A	ND
Pyrethrins	0.04 / 0.12	N/A	ND
Pyridaben	0.02 / 0.07	N/A	ND
Spinetoram	0.02 / 0.07	N/A	ND
Spinosad	0.02 / 0.07	N/A	ND
Spiromesifen	0.02 / 0.05	N/A	ND
Spirotetramat	0.02 / 0.06	N/A	ND
Spiroxamine	0.03 / 0.08	N/A	ND
Tebuconazole	0.02 / 0.07	N/A	ND
Thiacloprid	0.03 / 0.10	N/A	ND
Thiamethoxam	0.03 / 0.10	N/A	ND
Trifloxystrobin	0.03 / 0.08	N/A	ND



## **Mycotoxin Analysis**

Mycotoxin analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS).

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

#### MYCOTOXIN TEST RESULTS - 02/14/2025 ND

COMPOUND	LOD/LOQ (µg/kg)	MEASUREMENT UNCERTAINTY (μg/kg)	RESULT (µg/kg)
Aflatoxin B1	2.0 / 6.0	N/A	ND
Aflatoxin B2	1.8 / 5.6	N/A	ND
Aflatoxin G1	1.0 / 3.1	N/A	ND
Aflatoxin G2	1.2 / 3.5	N/A	ND
Ochratoxin A	6.3 / 19.2	N/A	ND
Total Aflatoxin			ND



## **Residual Solvents Analysis**

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

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

#### **RESIDUAL SOLVENTS TEST RESULTS - 02/13/2025 DETECTED**

COMPOUND	LOD/LOQ (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (μg/g)
Propane	10/20	N/A	ND
n-Butane	10/50	N/A	ND
n-Pentane	20/50	N/A	ND
n-Hexane	2/5	N/A	ND
n-Heptane	20/60	N/A	ND
Benzene	0.03 / 0.09	N/A	ND
Toluene	7/21	N/A	ND
Total Xylenes	50 / 160	N/A	ND
Methanol	50 / 200	N/A	ND
Ethanol	20/50	±50.2	1736

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#### **RESIDUAL SOLVENTS TEST RESULTS - 02/13/2025 continued DETECTED**

COMPOUND	LOD/LOQ (µg/g)	MEASUREMENT UNCERTAINTY (μg/g)	RESULT (µg/g)
2-Propanol (Isopropyl Alcohol)	10/40	N/A	<loq< th=""></loq<>
Acetone	20/50	N/A	ND
Ethyl Ether	20/50	N/A	ND
Ethylene Oxide	0.3 / 0.8	N/A	ND
Ethyl Acetate	20/60	N/A	ND
Chloroform	0.1/0.2	N/A	ND
Dichloromethane (Methylene Chloride)	0.3/0.9	N/A	ND
Trichloroethylene	0.1/0.3	N/A	ND
1,2-Dichloroethane	0.05 / 0.1	N/A	ND
Acetonitrile	2/7	N/A	<loq< th=""></loq<>



## **Heavy Metals Analysis**

coupled plasma-mass spectrometry (ICP-MS).

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

## Heavy metal analysis utilizing inductively

**HEAVY METALS TEST RESULTS - 02/13/2025 ND** 

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



## **Microbiology Analysis**

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

Method: QSP 1221 - Analysis of Microbiological Contaminants

#### MICROBIOLOGY TEST RESULTS (PCR) - 02/12/2025 ND

COMPOUND	RESULT
Salmonella spp.	ND
Shiga toxin producing Eccharichia cali	ND



# Foreign Material Analysis

Visual analysis includes, but is not limited to, sand, soil, cinders, dirt, mold, hair, insect fragments, and mammalian excreta.

Method: QSP 1226 - Analysis of Foreign Material in Cannabis and Cannabis Products

## FOREIGN MATERIAL TEST RESULTS - 02/12/2025 PASS

COMPOUND	ACTION LIMIT	RESULT	RESULT
Hair Count	> 1 per 3 grams	0.0	PASS
Insect Fragment Count	> 1 per 3 grams	0.0	PASS
Mammalian Excreta Count	> 1 per 3 grams	0.0	PASS
Total Sample Area Covered by an Imbedded Foreign Material	>25%	None	PASS
Total Sample Area Covered by Mold	>25%	None	PASS
Total Sample Area Covered by Sand, Soil, Cinders, or Dirt	>25%	None	PASS

## **NOTES**

Reason for Amendment: Add/Remove Test(s)