

**CERTIFICATE OF ANALYSIS**

PRODUCED: AUG 08, 2023

SAMPLE: GORILLA GLUE 4 (FLOWER) // CLIENT: ALPHA GROW // BATCH: PASS



**BATCH NO.:** 1A40503000252ED000001509  
**METRC TAG:** 1A40503000252ED000001530  
**MATRIX:** FLOWER  
**CATEGORY:** INHALABLE  
**SAMPLE ID:** CL-310723-004  
**COLLECTED ON:** JUL 31, 2023  
**RECEIVED ON:** JUL 31, 2023  
**BATCH/SAMPLE SIZE:** 15692 G / 79.1 G  
**RECEIVED BY:** GERON GOSSELIN

CANNABINOID OVERVIEW	
<b>TOTAL THC:</b>	<b>29.18 %</b>
<b>TOTAL CBD:</b>	<b>0 %</b>
<b>TOTAL CANNABINOIDS:</b>	<b>33.65 %</b>

**CULTIVATOR INFO**

**CULTIVATOR**  
 42469 IRWIN, LLC  
 42469 IRWIN DRIVE  
 HARRISON TOWNSHIP, MI 48045

**LICENSE**  
 AU-G-C-000603  
 ADULT-USE - CLASS C MARIHUANA  
 GROWER

BATCH RESULT: PASS			
<b>POTENCY</b>	TESTED	<b>PESTICIDES</b>	PASS
<b>FOREIGN</b>	PASS	<b>TERPENES</b>	TESTED
<b>METALS</b>	PASS	<b>WATER</b>	PASS
<b>MICROBIAL</b>	PASS		

**CL-01: CANNABINOID POTENCY BY HPLC-PDA // AUG 02, 2023**

ANALYTE	LIMIT	AMT	LOD/LOQ (mg/g)	PASS/FAIL	ANALYTE	LIMIT	AMT	LOD/LOQ (mg/g)	PASS/FAIL
CBC		ND	0.01800/0.05900	N/A	CBN		ND	0.01600/0.05400	N/A
CBD		ND	0.03800/0.13000	N/A	Δ <sup>8</sup> -THC		ND	0.04400/0.15000	N/A
CBDA		ND	0.02000/0.06800	N/A	Δ <sup>9</sup> -THC		1.302 %	0.04300/0.14000	N/A
CBDV		ND	0.03500/0.12000	N/A	THCA		31.793 %	0.02300/0.07700	N/A
CBDA		ND	0.01900/0.06400	N/A	THCV		ND	0.04100/0.14000	N/A
CBG		ND	0.03900/0.13000	N/A	<b>TOTAL THC **</b>		29.184 %		N/A
CBGA		0.559 %	0.02100/0.07000	N/A	<b>TOTAL CBD **</b>		ND		N/A

\*\* TOTAL THC = DELTA-8-THC + DELTA-9-THC + (THCA X 0.877)  
 \*\* TOTAL CBD = CBD + (CBDA X 0.877)

**CL-02: TERPENE ANALYSIS BY GC-MS WITH HEADSPACE // AUG 03, 2023**

ANALYTE	AMT	LOD/LOQ (ppm)	PASS/FAIL	ANALYTE	AMT	LOD/LOQ (ppm)	PASS/FAIL
<b>TOTAL TERPENES</b>	1.852 %		N/A	<b>CAMPHENE</b>	0.019 %	0.03000/0.10100	N/A
LIMONENE	0.378 %	0.03500/0.11800	N/A	α-BISABOLOL	0.005 %	0.88400/2.94800	N/A
CIS-NEROLIDOL	0.368 %	0.32300/1.07600	N/A	GERANIOL	0.003 %	0.07600/0.25200	N/A
TRANS-CARYOPHYLLENE	0.266 %	0.26700/0.88900	N/A	ISOPULEGOL	0.002 %	0.21300/0.70800	N/A
TRANS-NEROLIDOL	0.197 %	0.31300/1.04500	N/A	α-TERPINENE	0.001 %	0.03000/0.10200	N/A
β-MYRCENE	0.119 %	0.04200/0.13900	N/A	EUCALYPTOL	0.001 %	0.07100/0.23600	N/A
LINALOOL	0.114 %	0.07600/0.25200	N/A	γ-TERPINENE	0.001 %	0.02100/0.07100	N/A
CIS-β-OCIMENE	0.109 %	0.02200/0.07400	N/A	GUAIOL	0.001 %	0.23800/0.79500	N/A
β-PINENE	0.110 %	0.01900/0.06200	N/A	TERPINOLENE	0.001 %	0.05300/0.17700	N/A
α-HUMULENE	0.098 %	0.04400/0.14600	N/A	CARYOPHYLLENE OXIDE	ND	0.26700/0.88900	N/A
α-PINENE	0.059 %	0.01700/0.05700	N/A	Δ <sup>3</sup> -CARENE	ND	0.02700/0.08900	N/A



PER ISO 17025, THIS REPORT ONLY CONTAINS AND CONCERNS THE SAMPLES LISTED WITHIN THIS DOCUMENT. SAMPLES WERE SAMPLED AND TESTED IN ACCORDANCE WITH THE SAFETY COMPLIANCE FACILITY SAMPLING AND TESTING INFORMATION PROVIDED BY THE STATE OF MICHIGAN.

**RESULTS CERTIFIED BY:** MANIK GUDIMANI  
 LAB DIRECTOR, SC LABS  
 AUG 08, 2023

*Manik Gudimani*

## CL-04: PESTICIDE ANALYSIS BY LC-MS/MS // AUG 08, 2023

ANALYTE	LIMIT	AMT (ppm)	LOD/LOQ (ppm)	PASS/FAIL
ABAMECTIN	0.5 ppm	ND	0.00080/0.00250	PASS
ACEPHATE	0.4 ppm	ND	0.00440/0.01320	PASS
ACEQUINOCYL	2 ppm	ND	0.00780/0.02370	PASS
ACETAMIPRID	0.2 ppm	ND	0.00040/0.00130	PASS
ALDICARB	0.4 ppm	ND	0.00030/0.00090	PASS
AZOXYSTROBIN	0.2 ppm	ND	0.00030/0.00090	PASS
BIFENAZATE	0.2 ppm	ND	0.00020/0.00070	PASS
BIFENTHRIN	0.2 ppm	ND	0.00040/0.00130	PASS
BOSCALID	0.4 ppm	ND	0.00300/0.00910	PASS
CARBARYL	0.2 ppm	ND	0.00040/0.00130	PASS
CARBOFURAN	0.2 ppm	ND	0.00001/0.00002	PASS
CHLORANTRANIL-IPROLE	0.2 ppm	ND	0.00020/0.00070	PASS
CHLORFENAPYR	1 ppm	ND	0.04490/0.13620	PASS
CHLORPYRIFOS	0.2 ppm	ND	0.00020/0.00050	PASS
CLOFENTEZINE	0.2 ppm	ND	0.00030/0.00100	PASS
CYFLUTHRIN	1 ppm	ND	0.00630/0.01910	PASS
CYPERMETHRIN	1 ppm	ND	0.00480/0.01460	PASS
DAMINOZIDE	1 ppm	ND	0.00030/0.00100	PASS
DIAZINON	0.2 ppm	ND	0.00010/0.00040	PASS
DICHLORVOS	1 ppm	ND	0.00010/0.00020	PASS
DIMETHOATE	0.2 ppm	ND	0.00020/0.00060	PASS
ETHOPROPHOS	0.2 ppm	ND	0.00020/0.00050	PASS
ETOFENPROX	0.4 ppm	ND	0.00030/0.00090	PASS
ETOXAZOLE	0.2 ppm	ND	0.00020/0.00050	PASS
FENOXYCARB	0.2 ppm	ND	0.00030/0.00090	PASS
FENPYROXIMATE	0.4 ppm	ND	0.00020/0.00070	PASS
FIPRONIL	0.4 ppm	ND	0.00100/0.00310	PASS
FLONICAMID	1 ppm	ND	0.00030/0.00090	PASS
FLUDIOXONIL	0.4 ppm	ND	0.00040/0.00110	PASS
HEXYTHIAZOX	1 ppm	ND	0.00020/0.00050	PASS
IMAZALIL	0.2 ppm	ND	0.00180/0.00560	PASS
IMIDACLOPRID	0.4 ppm	ND	0.00050/0.00140	PASS

ANALYTE	LIMIT	AMT (ppm)	LOD/LOQ (ppm)	PASS/FAIL
KRESOXIM-METHYL	0.4 ppm	ND	0.00030/0.00080	PASS
MALATHION	0.2 ppm	ND	0.00020/0.00070	PASS
METALAXYL	0.2 ppm	ND	0.00010/0.00030	PASS
METHIOCARB	0.2 ppm	ND	0.00010/0.00040	PASS
METHOMYL	0.4 ppm	ND	0.00070/0.00200	PASS
METHYL PARATHION	0.2 ppm	ND	0.00210/0.00630	PASS
MGK-264	0.2 ppm	ND	0.02370/0.07170	PASS
MYCLOBUTANIL	0.2 ppm	ND	0.00030/0.00100	PASS
NALED	0.5 ppm	ND	0.00080/0.00250	PASS
OXAMYL	1 ppm	ND	0.00340/0.01020	PASS
PACLOBUTRAZOL	0.4 ppm	ND	0.00040/0.00110	PASS
PERMETHRIN	0.2 ppm	ND	0.02330/0.07070	PASS
PHOSMET	0.2 ppm	ND	0.00020/0.00070	PASS
PRALLETHRIN	0.2 ppm	ND	0.00090/0.00270	PASS
PROPICONAZOLE	0.4 ppm	ND	0.00050/0.00140	PASS
PROPOXUR	0.2 ppm	ND	0.00010/0.00030	PASS
PYRETHRINS	1 ppm	ND		PASS
PYRETHRINS CINERIN I		ND	0.00050/0.00350	N/A
PYRETHRINS JASMOLIN I		ND	0.00090/0.00270	N/A
PYRETHRINS PYRETHRIN I		ND	0.00030/0.00100	N/A
PYRIDABEN	0.2 ppm	ND	0.00020/0.00050	PASS
SPINOSAD	0.2 ppm	ND		PASS
SPINOSAD A		ND	0.00030/0.00080	N/A
SPINOSAD D		ND	0.00020/0.00060	N/A
SPIROMESIFEN	0.2 ppm	ND	0.00030/0.00110	PASS
SPIROTETRAMAT	0.2 ppm	ND	0.00100/0.00300	PASS
SPIROXAMINE	0.4 ppm	ND	0.00010/0.00050	PASS
TEBUCONAZOLE	0.4 ppm	ND	0.00010/0.00040	PASS
THIACLOPRID	0.2 ppm	ND	0.00020/0.00070	PASS
THIAMETHOXAM	0.2 ppm	ND	0.00030/0.00090	PASS
TRIFLOXYSTROB-IN	0.2 ppm	ND	0.00010/0.00050	PASS



## CL-07: ASPERGILLUS BY QPCR // AUG 03, 2023

ANALYTE	LIMIT	AMT (CFU/g)	PASS/FAIL
ASPERGILLUS FLAVUS	Any amount in 1 gram	ND	PASS
ASPERGILLUS FUMIGATUS	Any amount in 1 gram	ND	PASS
ASPERGILLUS NIGER	Any amount in 1 gram	ND	PASS

ANALYTE	LIMIT	AMT (CFU/g)	PASS/FAIL
ASPERGILLUS SPP.	Any amount in 1 gram	ND	PASS
ASPERGILLUS TERREUS	Any amount in 1 gram	ND	PASS

## CL-07: E. COLI AND SALMONELLA BY QPCR // AUG 03, 2023

ANALYTE	LIMIT	AMT (CFU/g)	PASS/FAIL
SALMONELLA SPP.	Any amount in 1 gram	ND	PASS

ANALYTE	LIMIT	AMT (CFU/g)	PASS/FAIL
SHIGA TOXIN-PRODUCING E. COLI	Any amount in 1 gram	ND	PASS

## CL-07: COLIFORMS AND YEAST & MOLD // AUG 04, 2023

ANALYTE	LIMIT	AMT (CFU/g)	LOQ (CFU/g)	PASS/FAIL
COLIFORMS	1000 CFU/g	< LOQ	100.00000	PASS

ANALYTE	LIMIT	AMT (CFU/g)	LOQ (CFU/g)	PASS/FAIL
YEAST & MOLD	100000 CFU/g	< LOQ	100.00000	PASS

## CL-06: HEAVY METAL ANALYSIS BY ICP-MS // AUG 02, 2023

ANALYTE	LIMIT	AMT (ppm)	LOD/LOQ (ppm)	PASS/FAIL
ARSENIC	0.4 ppm	0.037	0.00600/0.01600	PASS
CADMIUM	0.4 ppm	< LOQ	0.00200/0.00600	PASS
CHROMIUM	1.2 ppm	ND	0.09400/0.28000	PASS
COPPER		8.306	0.13800/0.29600	N/A

ANALYTE	LIMIT	AMT (ppm)	LOD/LOQ (ppm)	PASS/FAIL
LEAD	1 ppm	ND	0.00200/0.00500	PASS
MERCURY	0.2 ppm	ND	0.02690/0.06000	PASS
NICKEL	1 ppm	ND	0.06800/0.19600	PASS

## CL-09: WATER ACTIVITY // AUG 01, 2023

ANALYTE	LIMIT	AMT (Aw)	PASS/FAIL
WATER ACTIVITY	0.65 Aw	0.4699	0.00300/0.00300 PASS

## CL-10: FOREIGN MATTER ANALYSIS // AUG 01, 2023

ANALYTE	LIMIT	AMT (%)	PASS/FAIL
INORGANIC MATTER	Any amount	ND	PASS
ORGANIC MATTER	2 %	ND	PASS

ANALYTE	LIMIT	AMT (%)	PASS/FAIL
STEMS	5 %	ND	PASS

## NOTES

MANIK GUDIMANI      TERPENE ANALYSIS BY GC-MS WITH HEADSPACE  
 AUG 08, 2023      FOR INFORMATION PURPOSES ONLY

## FOREIGN MATTER IMAGES

