







SUMMARY OF ANALYSIS (SAMPLE ID: SA34415)

Testing Location:Customer ID: 2161Order ID: OR10306Sample Type: PrimaryArkansasRiver Valley Relief CultivationLot Number:Matrix: Flower232 S. Broadview St.5601 Old Greenwood Rd Suite CM00065C13137799970Mass: 13g

Greenbrier, AR 72058 Fort Smith, AR 72903 **Production Run: Date Collected:** 02/13/2023 License: ADH 113 License: 00065C 1022H20221228GMS-2 **Date Received:** 02/13/2023 **Cultivar (Strain) or Sample Description:** Gush Mints **Date Completed:** 02/17/2023

*This page is simply a summary of the analysis performed. For analytical details, please consult the individual Certificate(s) of Analysis for each of the specific test(s)

 Moisture Content (%)
 Water Activity (aw)
 PASS/FAIL

 11.6
 0.483 @ 24.4°C
 PASS

Moisture content/water activity action levels are referenced from the State of Arkansas MMJ testing guidelines.

performed. All contaminant action levels are referenced from the State of Arkansas MMJ testing guidelines

Moisture content levels less than 15% are recommended but the sample does not fail. Water activity levels must be less than 0.65aw.

<u>Cannabino</u>	ds (Top 3)	<u>(%)</u>	mg/g
THO	CA	20.8	208
CBC	GA	0.702	7.02
Δ9-Τ	НС	0.619	6.19
TOTAL	CBD	-	1
TOTAI	THC	18.8	188
TOTAL CAN	NABINOIDS	22.4	224
<u>Terpenes (Top 5)</u>		<u>(%)</u>	<u>µg/g</u>
α-Bisa	α-Bisabolol		5590
β-Caryophyllene		0.333	3330
d-Limo	d-Limonene		1690
β-Муг	β-Myrcene		1060
Linalool		0.0987	987
TOTAL TERPENES		1.66	16600
Contaminants	PASS/FAIL	Sample Pictur	e Upon Receipt

Contaminants	PASS/FAIL
Heavy Metals:	PASS
Microbiology:	PASS
Pesticides:	PASS







Scan the QR code to verify results.

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Testing Location: Arkansas 232 S. Broadview St.

Cultivar (Strain) or Sample Description: Gush Mints

Greenbrier, AR 72058 License: ADH 113

Customer ID: 2161 River Valley Relief Cultivation 5601 Old Greenwood Rd Suite C Fort Smith, AR 72903 License: 00065C

Order ID: OR10306 Lot Number:

M00065C13137799970 **Production Run:** 1022H20221228GMS-2 Sample Type: Primary Matrix: Flower

Mass: 13g

Date Collected: 02/13/2023 **Date Received:** 02/13/2023

Date Completed: 02/17/2023

CANNABINOID (POTENCY) PROFILE (SOP: SOP-CANN-001)

Method: HPLC/DAD **Analysis Date/Time:** 2/16/2023 1635 Moisture Content (%): 11.6

Analyst: PW Instrument: Agilent 1100

Water Activity (aw): 0.483 @ 24.35°C



SERVING MASS (g): 1.00 SERVINGS/UNIT: 1

"-" Not detected above LOD.

Deviations from standard operating procedure: None

Recoveries for all analyte standards: 90-110% Replicate Uncertainties: <5% RSD, <20% RPD Sample/Reagent Blanks: < RL for all analytes

Values for plant matter are adjusted for moisture content.

Total CBC = $(CBCA \times 0.877) + CBC$ Total CBD = $(CBDA \times 0.877) + CBD$ Total CBDV = (CBDVA \times 0.867) + CBDV Total CBG = $(CBGA \times 0.878) + CBG$ Total CBN = $(CBNA \times 0.876) + CBN$ Total THC = (THCA x 0.877) + Δ 9-THC Total THCV = (THCVA x 0.867) + THCV

Percentage results are reported by mass.

mg/g results are reported as mass component per mass material.

Cannabinoid	Result (%)	<u>UM</u> (+/-%)	Result (mg/g)	LOQ (mg/g)	Result (mg/ mL)	Per Serving (mg)	Per Unit (mg)
CBC	-	-	-	0.534	-	-	-
CBCA	0.213	0.0170	2.13	1.66	-	2.13	2.13
CBD	-	-	-	3.77	-	-	-
CBDA	-	-	-	1.39	-	-	-
CBDV	-	-	-	0.604	-	-	-
CBDVA	-	-	-	1.61	-	-	-
CBG	DET	-	DET	2.45	-	-	-
CBGA	0.702	0.0632	7.02	1.75	-	7.02	7.02
CBL	-	-	-	2.83	-	-	-
CBN	-	-	-	1.30	-	-	-
CBNA	-	-	-	1.40	-	-	-
Δ9-ΤΗС	0.619	0.0557	6.19	1.55	-	6.19	6.19
Δ8-ΤΗС	-	-	-	2.43	-	-	-
THCA	20.8	1.87	208	0.845	-	208	208
THCV	-	-	-	2.02	-	-	-
THCVA	0.0765	0.00229	0.765	0.644	-	0.765	0.765
TOTAL	22.4	2.01	224	_	-	224	224
TOTAL CBC	0.187	0.0149	1.87		_	1.87	1.87
TOTAL CBD	-	-	-		-	-	-
TOTAL CBDV	-	-	-		-	-	-
TOTAL CBG	0.616	0.0555	6.16		-	6.16	6.16
TOTAL CBN	-	-	-		-	-	-
TOTAL THC	18.8	1.69	188		-	188	188
TOTAL THCV	0.0663	0.00199	0.663		-	0.663	0.663
* CBCA, CBDVA, CBL, CBNA, and THCVA are in process of being added to our accreditation scope.							

CBCA, CBDVA, CBL, CBNA, and THCVA are in process of being added to our accreditation scope.

Abbreviations: DAD - Diode Array Detector, HPLC - High Pressure Liquid Chromatography, RL - Reporting Limit, RPD - Relative Percent Difference, RSD - Relative Standard Deviation, DET - Detected (less than LOQ), LOD - Limit of Detection, LOQ - Limit of Quantitation, UM - Measurement Uncertainty

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Testing Location:

Arkansas 232 S. Broadview St.

Greenbrier, AR 72058 License: ADH 113

Customer ID: 2161

River Valley Relief Cultivation 5601 Old Greenwood Rd Suite C

> Result <u>(%)</u>

> > 0.559

0.0288

0.333

0.0880

0.169

0.0987

0.106

0.0862

0.0359

0.0576

0.0704

0.0280

1.66

Fort Smith, AR 72903 License: 00065C

Order ID: OR10306 Lot Number:

M00065C13137799970

Production Run: 1022H20221228GMS-2 Sample Type: Primary

Matrix: Flower **Mass:** 13g

Date Collected: 02/13/2023 **Date Received:** 02/13/2023

Date Completed: 02/17/2023

TERPENOID PROFILE

Analysis Date/Time:02/17/2023 1040

Cultivar (Strain) or Sample Description: Gush Mints

Result

 $(\mu g/g)$

5590

288

3330

880

1690

987

1060

862

359

576

704

280

16600

Analyst: KF

Terpene

α-Bisabolol

Camphene

δ-3-Carene β-Caryophyllene

Caryophyllene oxide p-Cymene Eucalyptol Geraniol Guaiol

α-Humulene

Isopulegol

Linalool

β-Myrcene

cis-Nerolidol

α-Ocimene

β-Ocimene

α-Pinene

B-Pinene

TOTAL

α-Terpinene y-Terpinene Terpinolene

trans-Nerolidol

d-Limonene

Method: GC/MS

Instrument: Agilent 7890/5975

Deviations from SOP:

None



Abbreviations: GC - Gas Chromatography, MS - Mass Spectrometry, RL - Reporting Limit

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"-" Not detected above RL

Reporting Limit (µg/g): 46.3

Kyle W. Felling, Ph.D.



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02/17/2023









Testing Location:

Arkansas 232 S. Broadview St.

Greenbrier, AR 72058 License: ADH 113

Analyst: KF

Customer ID: 2161 River Valley Relief Cultivation

5601 Old Greenwood Rd Suite C Fort Smith, AR 72903

License: 00065C

Order ID: OR10306

Lot Number:

M00065C13137799970

Production Run: 1022H20221228GMS-2

Sample Type: Primary

Matrix: Flower **Mass:** 13g

Date Collected: 02/13/2023 **Date Received:** 02/13/2023

Date Completed: 02/17/2023

PESTICIDES PROFILE (SOP: SOP-PEST-001)

Analysis Date/Time: 02/17/2023 0948

iiie: 02/1//2023 0940

Cultivar (Strain) or Sample Description: Gush Mints

Method: LC/MS/MS

Instrument: Shimadzu LC-8050

Deviations from SOP:

None

<u>Pesticide</u>	Result (µg/g)	<u>LOD</u> (µg/g)	<u>LOQ</u> (µg/g)	<u>Action</u> <u>Level</u> (μg/g)	<u>Pesticide</u>	Result (μg/g)	<u>LOD</u> (µg/g)	LOQ (µg/g)	Action Level (µg/g)
Abamectin (71751-41-2)	-	0.0463	0.371	0.5	Kresoxim-methyl	_	0.0463	0.371	0.4
Acephate (30560-19-1)	-	0.0463	0.371	0.4	(143390-89-0)				
Acequinocyl (57960-19-7)	-	0.0463	0.371	2	Malathion (121-75-5)	-	0.0463	0.371	0.2
Acetamiprid (135410-20-7)	-	0.0463	0.371	0.2	Metalaxyl (57837-19-1) Methiocarb (2032-65-7)	-	0.0463 0.0463	0.371 0.371	0.2 0.2
Aldicarb (116-06-3)	-	0.0463	0.371	0.4	Methomyl (16752-77-5)	-	0.0463	0.371	0.4
Azoxystrobin (131860-33-8)	-	0.0463	0.371	0.2	Methyl parathion (298-0-0)	-	0.0463	0.371	0.2
Bifenazate (149877-41-8)	-	0.0463	0.371	0.2	MGK 264 (113-48-4)	-	0.0463	0.371	0.2
Bifenthrin (82657-04-3)	-	0.0463	0.371	0.2	Myclobutanil		0.0463	0.371	0.2
Boscalid (188425-85-6)	-	0.0463	0.371	0.4	(88671-89-0)				
Carbaryl (63-25-2)	-	0.0463	0.371	0.2	Naled (300-76-5)	-	0.0463	0.371	0.5
Carbofuran (1563-66-2)	-	0.0463	0.371	0.2	Oxamyl (23135-22-0)	-	0.0463	0.371	1
Chlorantraniliprole (800008-45-7)	-	0.0463	0.371	0.2	Paclobutrazol (76738-62-0)	-	0.0463	0.371	0.4
Chlorfenapyr (122453-73-0)	-	0.0463	0.371	1	Permethrins (52645-53-1) Phosmet (732-11-6)	-	0.0463 0.0463	0.371 0.371	0.2 0.2
Chlorpyrifos (2921-88-2)	_	0.0463	0.371	0.2	Piperonyl butoxide				
Clofentezine (74115-24-5)	-	0.0463	0.371	0.2	(51-03-6)	-	0.0463	0.371	2
Cyfluthrin (68359-37-5)	_	0.0463	0.371	1	Prallethrins (2331-36-9)	-	0.0463	0.371	0.2
Cypermethrin (52315-07-8)	-	0.0463	0.371	1	Propiconazole (60207-90-1))	-	0.0463	0.371	0.4
Daminozide (1596-84-5)	_	0.0463	0.371	1	Propoxur (114-26-1)	-	0.0463	0.371	0.2
DDVP (62-73-7)	_	0.0463	0.371	0.1	Pyrethrins (8003-34-7)	-	0.0463	0.371	1
Diazinon (333-41-5)	_	0.0463	0.371	0.2	Pyridaben (96489-71-3)	-	0.0463	0.371	0.2
Dimethoate (60-51-5)	_	0.0463	0.371	0.2	Spinosad (168316-95-8)	-	0.0463	0.371	0.2
Ethoprophos (13194-48-4)	_	0.0463	0.371	0.2	Spiromesifen	_	0.0463	0.371	0.2
Etofenprox (80844-07-1)	_	0.0463	0.371	0.4	(283594-90-1)				
Etoxazole (153233-91-1)	_	0.0463	0.371	0.2	Spirotetramat (203313-25-1)	-	0.0463	0.371	0.2
Fenoxycarb (72490-01-8)	-	0.0463	0.371	0.2	Spiroxamine				
(E)-Fenpyroximate (134098-61-6)	-	0.0463	0.371	0.4	(118134-30-8) Tebuconazole	-	0.0463	0.371	0.4
Fipronil (120068-37-3)	_	0.0463	0.371	0.4	(80443-41-0)	-	0.0463	0.371	0.4
Flonicamid (158062-67-0)	_	0.0463	0.371	1	Thiacloprid		0.0463	0.371	0.2
Fludioxinil (131341-86-1)	-	0.0463	0.371	0.4	(111988-49-9)		0.0403	0.3/1	0.2
Hexythiazox (78587-05-0)	-	0.0463	0.371	1	Thiamethoxam	-	0.0463	0.371	0.2
Imazalil (35554-44-0)	-	0.0463	0.371	0.2	(153719-23-4) Trifloxystrobin				
Imidacloprid (138261-41-3)	-	0.0463	0.371	0.4	(141517-21-7)	-	0.0463	0.371	0.2



Color Key

RESULT < AL

"DET" detected less than LOQ

"-" not detected above LOD

Permethrins measured as the cumulative residue of the *cis*- and *trans*- permethrin isomers.

Pyrethrins measured as the cumulative residue of the pyrethrin I, cinerin I, and jasmolin I isomers.

Action levels are referenced from the

State of Arkansas MMJ testing guidelines.

A value of "-" for the action level means that analyte is not currently regulated by the regulations referenced above.

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Abbreviations: LC - Liquid Chromatography, MS - Mass Spectrometry, RL - Reporting Limit, AL - Action Level, CAS - Chemical Abstract Services, LOD - Limit of Detection, LOQ - Limit of Quantification

<u>Pesticide</u>	Synonym(s)	<u>Pesticide</u>	Synonym(s)	<u>Pesticide</u>	Synonym(s)
Cyfluthrin	Baythroid	Myclobutanil	Systhane	Propiconazole	Tilt
DDVP	Dichlorvos	Naled	Dibrom	Propoxur	Baygon
Ethoprophos	Prophos	Phosmet	Imidan		













Order ID: OR10306 **Testing Location:** Customer ID: 2161 Arkansas River Valley Relief Cultivation

232 S. Broadview St. 5601 Old Greenwood Rd Suite C

Greenbrier, AR 72058 Fort Smith, AR 72903 License: ADH 113 License: 00065C

Cultivar (Strain) or Sample Description: Gush Mints

Lot Number:

M00065C13137799970

Production Run: 1022H20221228GMS-2 Sample Type: Primary

Matrix: Flower **Mass:** 13g

Date Collected: 02/13/2023 **Date Received:** 02/13/2023

Date Completed: 02/17/2023

HEAVY METAL PROFILE (SOP: SOP-ICP-200.7)

Analysis Date/Time: 02/17/2023 0855 (ICP/OES) Method: ICP/OES **Deviations from SOP:**

Analysis Date/Time: - (DMA) **Instrument:** Agilent 720-ES None

Analyst: KF

<u>Heavy Metal</u>	<u>Result</u> (μg/kg)	LOD (µg/kg)	LOQ (µg/kg)	<u>Action Level</u> (μg/kg)
Arsenic (As)	-	59.4	94.1	200
Cadmium (Cd)	-	59.4	94.1	200
Lead (Pb)	-	59.4	94.1	500
Mercury (Hg)	-	59.4	94.1	100



Abbreviations: ICP - Inductively-Coupled Plasma, OES - Optical Emission Spectroscopy,

DMA - Direct Mercury Analyzer, RL - Reporting Limit, AL - Action Level, LOD - Limit of Detection, LOQ - Limit of Quantitation

Color Key

RESULT < AI RESULT > AI

"DET" detected less than LOQ

"-" not detected above LOD

Action levels for heavy metals are referenced from the State of Arkansas MMJ testing guidelines.

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232 S. Broadview St.





M00065C13137799970



CERTIFICATE OF ANALYSIS (SAMPLE ID: SA34415)

Testing Location:Customer ID: 2161Sample ID: SA34415Sample Type: PrimaryArkansasRiver Valley Relief CultivationLot Number:Matrix: Flower

Greenbrier, AR 72058 Fort Smith, AR 72903 **Production Run: Date Collected:** 02/13/2023 License: ADA 05_H273 License: 00065C 1022H20221228GMS-2 **Date Received:** 02/13/2023

Cultivar (Strain) or Sample Description: Gush Mints

Date Completed: 02/17/2023

MICROBIOLOGICAL PROFILE (SOP: SOP-Micro-001)

Analysis Date/Time: 20230216 1550 **Method:** Hardy Diagnostics CompactDry **Deviations from SOP:**

Analyst: PW Instrument: Thermo Incubator None

5601 Old Greenwood Rd Suite C

Bacteria/Microbe	Result (CFU/g)	Action Level (CFU/g)
Aerobic Plate Count	NT	-
Coliforms, Total	Absent	1
Escherichia Coli (E. Coli)	Absent	100
Mold/Yeast	NT	-
Pseudomonas aeruginosa	NT	1
Salmonella spp.	NT	-
Staphylococcus aureus	NT	-



Mass: 13g

Abbreviations: EC - Escherichia Coli, CFU - Colony-Forming Unit, RL - Reporting Limit, AL - Action Level, TNTC - Too Numerous To Count, NT - Not Tested Absent - Not Detected Above RL, Present - Detected Above RL

Color Key

RESULT < AL
RESULT > AL

Reporting Limit (CFU/g)

Action levels for microbiology are referenced from the State of Arkansas MMJ testing guidelines. A value of "-" for the action level means that analyte is not currently regulated by the regulations referenced above.

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