







# **SUMMARY OF ANALYSIS (SAMPLE ID: SA35195)**

Testing Location:Customer ID: 2161Order ID: OR10451Sample Type: PrimaryArkansasRiver Valley Relief CultivationLot Number:Matrix: Flower232 S. Broadview St.5601 Old Greenwood Rd Suite CM00065C13139404703Mass: 23g

Greenbrier, AR 72058 Fort Smith, AR 72903 **Production Run: Date Collected:** 05/15/2023 License: ADH 113 License: 00065C 4032H20230405SMC-2 **Date Received:** 05/15/2023 **Cultivar (Strain) or Sample Description:** SunMac **Date Completed:** 05/18/2023

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

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

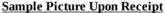
 12.2
 0.499 @ 25.6°C
 PASS

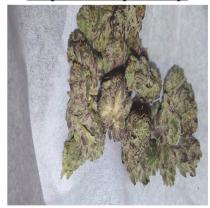
Moisture content/water activity action levels are referenced from the State of Arkansas MMJ testing guidelines.

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>	ids (Top 3)	<u>(%)</u>	mg/g
TH	CA	30.4	304
СВ	GA	1.32	13.2
Δ9-7	THC	0.187	1.87
TOTA	L CBD	-	-
TOTA	LTHC	26.8	268
TOTAL CAN	NABINOIDS	32.0	320
<u>Terpene</u>	s (Top 5)	<u>(%)</u>	µg/g
d-Lim	d-Limonene		3180
α-Oci	α-Ocimene		2880
Lina	Linalool		2060
β-Caryo	β-Caryophyllene		1610
β-Oci	β-Ocimene		1420
TOTAL T	ERPENES	1.56	15600
Contaminants	PASS/FAII	Sample Dictur	e Unon Receipt

<b>Contaminants</b>	PASS/FAIL
Heavy Metals:	PASS
Microbiology:	PASS
Pesticides:	PASS







Scan the QR code to verify results.

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Greenbrier, AR 72058

License: ADH 113







# **CERTIFICATE OF ANALYSIS (SAMPLE ID: SA35195)**

**Testing Location:** Customer ID: 2161 Arkansas River Valley Relief Cultivation 232 S. Broadview St. 5601 Old Greenwood Rd Suite C

Cultivar (Strain) or Sample Description: SunMac

Fort Smith, AR 72903

License: 00065C

**Order ID:** OR10451 Lot Number:

M00065C13139404703

**Production Run:** 4032H20230405SMC-2 Sample Type: Primary

Matrix: Flower **Mass:** 23g

**Date Collected:** 05/15/2023 **Date Received:** 05/15/2023

**Date Completed:** 05/18/2023

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

**Analysis Date/Time:** 05/16/2023 1758 Method: HPLC/DAD Moisture Content (%): 12.2

**Analyst: PW Instrument:** Agilent 1100 **Water Activity (aw):** 0.499 @ 25.6°C

<u>Cannabinoid</u>	Result (%)	Result (mg/g)	LOD (mg/g)	LOQ (mg/g)	Result (mg/ mL)	Per Serving (mg)	Per Unit (mg)
CBC	ND	ND	0.202	0.471	-	-	-
CBCA	ND	ND	0.626	1.46	-	-	-
CBD	ND	ND	1.42	3.32	-	-	-
CBDA	ND	ND	0.105	0.245	-	-	-
CBDV	ND	ND	0.228	0.533	-	-	-
CBDVA	ND	ND	0.609	1.42	-	-	-
CBG	0.0984	0.984	0.354	0.708	-	0.984	0.984
CBGA	1.32	13.2	0.662	1.54	-	13.2	13.2
CBL	ND	ND	1.07	2.49	-	-	-
CBN	ND	ND	0.490	1.14	-	-	-
CBNA	ND	ND	0.529	1.23	-	-	-
Δ9-ΤΗС	0.187	1.87	0.587	1.37	-	1.87	1.87
Δ8-ΤΗС	ND	ND	0.917	2.14	-	-	-
THCA	30.4	304	0.318	0.745	-	304	304
THCV	ND	ND	0.764	1.78	-	-	-
THCVA	0.0680	0.680	0.244	0.568	-	0.680	0.680
TOTAL	32.0	320				320	320
TOTAL CBC	-	-				_	-
TOTAL CBD	-	-			-	-	-
TOTAL CBDV	-	-			-	-	-
TOTAL CBG	1.26	12.6			-	12.6	12.6
TOTAL CBN	-	-			-	-	-
TOTAL THC	26.8	268			-	268	268
TOTAL THCV	0.0590	0.590			-	0.590	0.590

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

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) +  $\Delta$ 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.





<sup>&</sup>quot;-" Not detected above LOD.









# **CERTIFICATE OF ANALYSIS (SAMPLE ID: SA35195)**

**Testing Location:** Arkansas

232 S. Broadview St. Greenbrier, AR 72058 License: ADH 113

**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** 

α-Terpinene

y-Terpinene

Terpinolene

trans-Nerolidol

d-Limonene

Customer ID: 2161 River Valley Relief Cultivation

Fort Smith, AR 72903 License: 00065C

5601 Old Greenwood Rd Suite C

Result **(%)** 

0.0108

0.161

0.0498

0.318

0.206

0.0200

0.113

0.0954

0.288

0.142

0.0363

0.0565

0.0578

0.00361

**Order ID:** OR10451 Lot Number:

M00065C13139404703

**Production Run:** 4032H20230405SMC-2 Sample Type: Primary

Matrix: Flower **Mass:** 23g

**Date Collected:** 05/15/2023 **Date Received:** 05/15/2023

**Date Completed:** 05/18/2023

#### TERPENOID PROFILE

Analysis Date/Time:05/17/2023 2050

**Analyst: KF** 

Result

 $(\mu g/g)$ 

108

1610

498

3180

2060

200

1130

954

2880

1420

363

565

578

36.1

Cultivar (Strain) or Sample Description: SunMac

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

**TOTAL** 15600 1.56 Reporting Limit (µg/g): 188













# **CERTIFICATE OF ANALYSIS (SAMPLE ID: SA35195)**

**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

Fort Smith, AR 72903 License: 00065C

**Order ID:** OR10451 Lot Number:

M00065C13139404703

**Production Run:** 4032H20230405SMC-2 Sample Type: Primary

Matrix: Flower **Mass:** 23g

**Date Collected:** 05/15/2023 **Date Received:** 05/15/2023

**Date Completed:** 05/18/2023

# PESTICIDES PROFILE (SOP: SOP-PEST-001)

**Analysis Date/Time:** 05/17/2023 1624

Cultivar (Strain) or Sample Description: SunMac

**Analyst: KF** 

Method: LC/MS/MS

Instrument: Shimadzu LC-8050

**Deviations from SOP:** 

None

<i>J</i> • • •									
<u>Pesticide</u>	Result (μg/g)	<u>LOD</u> (µg/g)	LOQ (µg/g)	<u>Action</u> <u>Level</u> (μg/g)	<u>Pesticide</u>	Result (μg/g)	<u>LOD</u> (µg/g)	LOQ (µg/g)	<u>Action</u> <u>Level</u> (μg/g)
Abamectin (71751-41-2)	-	0.0441	0.353	0.5	Kresoxim-methyl	_	0.0441	0.353	0.4
Acephate (30560-19-1)	-	0.0441	0.353	0.4	(143390-89-0)				
Acequinocyl (57960-19-7)	-	0.0441	0.353	2	Malathion (121-75-5)	-	0.0441	0.353	0.2
Acetamiprid (135410-20-7)	-	0.0441	0.353	0.2	Metalaxyl (57837-19-1) Methiocarb (2032-65-7)	-	0.0441 0.0441	0.353 0.353	0.2 0.2
Aldicarb (116-06-3)	_	0.0441	0.353	0.4	Methomyl (16752-77-5)	_	0.0441	0.353	0.4
Azoxystrobin (131860-33-8)	-	0.0441	0.353	0.2	Methyl parathion (298-0-0)	-	0.0441	0.353	0.2
Bifenazate (149877-41-8)	_	0.0441	0.353	0.2	MGK 264 (113-48-4)	-	0.0441	0.353	0.2
Bifenthrin (82657-04-3)	_	0.0441	0.353	0.2	Myclobutanil		0.0441	0.252	0.2
Boscalid (188425-85-6)	-	0.0441	0.353	0.4	(88671-89-0)	_	0.0441	0.353	0.2
Carbaryl (63-25-2)	-	0.0441	0.353	0.2	Naled (300-76-5)	-	0.0441	0.353	0.5
Carbofuran (1563-66-2)	-	0.0441	0.353	0.2	Oxamyl (23135-22-0)	-	0.0441	0.353	1
Chlorantraniliprole (800008-45-7)	-	0.0441	0.353	0.2	Paclobutrazol (76738-62-0)	-	0.0441	0.353	0.4
Chlorfenapyr (122453-73-0)	-	0.0441	0.353	1	Permethrins (52645-53-1) Phosmet (732-11-6)	-	0.0441 0.0441	0.353 0.353	0.2 0.2
Chlorpyrifos (2921-88-2)	-	0.0441	0.353	0.2	Piperonyl butoxide		0.0441	0.353	2
Clofentezine (74115-24-5)	-	0.0441	0.353	0.2	(51-03-6)				_
Cyfluthrin (68359-37-5)	-	0.0441	0.353	1	Prallethrins (2331-36-9)	-	0.0441	0.353	0.2
Cypermethrin (52315-07-8)	-	0.0441	0.353	1	Propiconazole (60207-90-1))	-	0.0441	0.353	0.4
Daminozide (1596-84-5)	-	0.0441	0.353	1	Propoxur (114-26-1)	-	0.0441	0.353	0.2
DDVP (62-73-7)	-	0.0441	0.353	0.1	Pyrethrins (8003-34-7)	-	0.0441	0.353	1
Diazinon (333-41-5)	-	0.0441	0.353	0.2	Pyridaben (96489-71-3)	-	0.0441	0.353	0.2
Dimethoate (60-51-5)	-	0.0441	0.353	0.2	Spinosad (168316-95-8)	-	0.0441	0.353	0.2
Ethoprophos (13194-48-4)	-	0.0441	0.353	0.2	Spiromesifen (283594-90-1)	_	0.0441	0.353	0.2
Etofenprox (80844-07-1)	-	0.0441	0.353	0.4	Spirotetramat				
Etoxazole (153233-91-1)	-	0.0441	0.353	0.2	(203313-25-1)	-	0.0441	0.353	0.2
Fenoxycarb (72490-01-8)	-	0.0441	0.353	0.2	Spiroxamine	_	0.0441	0.353	0.4
(E)-Fenpyroximate (134098-61-6)	-	0.0441	0.353	0.4	(118134-30-8) Tebuconazole		0.0441	0.353	0.4
Fipronil (120068-37-3)	-	0.0441	0.353	0.4	(80443-41-0)		0.0441	0.555	0.4
Flonicamid (158062-67-0)	-	0.0441	0.353	1	Thiacloprid (111988-49-9)	-	0.0441	0.353	0.2
Fludioxinil (131341-86-1)	-	0.0441	0.353	0.4	Thiamethoxam				
Hexythiazox (78587-05-0)	-	0.0441	0.353	1	(153719-23-4)	-	0.0441	0.353	0.2
Imazalil (35554-44-0) Imidacloprid	-	0.0441	0.353	0.2	Trifloxystrobin (141517-21-7)	-	0.0441	0.353	0.2
(138261-41-3)	-	0.0441	0.353	0.4	(1+131/-21-/)				



Color Key

"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

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

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







Cultivar (Strain) or Sample Description: SunMac







# **CERTIFICATE OF ANALYSIS (SAMPLE ID: SA35195)**

Testing Location:Customer ID: 2161Order ID: OR10451ArkansasRiver Valley Relief CultivationLot Number:

232 S. Broadview St. 5601 Old Greenwood Rd Suite C M00065C13139404703

Greenbrier, AR 72058 Fort Smith, AR 72903 **Production Run:**License: ADH 113 License: 00065C 4032H20230405SMC-2

**Sample Type:** Primary **Matrix:** Flower

Mass: 23g

**Date Collected:** 05/15/2023 **Date Received:** 05/15/2023

**Date Completed:** 05/18/2023

**HEAVY METAL PROFILE (SOP: SOP-ICP-200.6)** 

Analysis Date/Time: 05/15/2023 1720 (ICP/OES) Method: ICP/MS Deviations from SOP:

Analysis Date/Time: - (DMA) Instrument: Agilent 7500ce None

**Analyst: KF** 

Heavy Metal	<u>Result</u> (μg/kg)	<u>LOD</u> (μg/kg)	LOQ (µg/kg)	<u>Action Level</u> (μg/kg)
Arsenic (As)	-	59.3	93.8	200
Cadmium (Cd)	-	59.3	93.8	200
Lead (Pb)	-	59.3	93.8	500
Mercury (Hg)	-	59.3	93.8	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 < AL
RESULT > AL

"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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# **CERTIFICATE OF ANALYSIS (SAMPLE ID: SA35195)**

Testing Location:Customer ID: 2161Sample ID: SA35195Sample Type: PrimaryArkansasRiver Valley Relief CultivationLot Number:Matrix: Flower

 232 S. Broadview St.
 5601 Old Greenwood Rd Suite C
 M00065C13139404703
 Mass: 23g

 Greenbrier, AR 72058
 Fort Smith, AR 72903
 Production Run:
 Date Collected: 05/15/2023

 License: ADA 05 H273
 License: 00065C
 4032H20230405SMC-2
 Date Received: 05/15/2023

Cultivar (Strain) or Sample Description: SunMac Date Completed: 05/18/2023

# MICROBIOLOGICAL PROFILE (SOP: SOP-Micro-001)

Analysis Date/Time: 05/16/2023 1213 Method: Hardy Diagnostics CompactDry Deviations from SOP:

Analyst: PW Instrument: Thermo Incubator None

Bacteria/Microbe	<u>Result</u> (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	-



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)

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