







# **SUMMARY OF ANALYSIS (SAMPLE ID: SA35464)**

**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: Orange 43

Order ID: OR10498 Lot Number:

M00065C13137073418

**Production Run:** 6034H20230504O43-1 Sample Type: Primary

Matrix: Flower **Mass:** 23g

**Date Collected:** 06/19/2023 **Date Received:** 06/20/2023

**Date Completed:** 06/21/2023

\*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

> PASS/FAIL **Moisture Content (%)** Water Activity (aw) 0.487 @ 24.4°C **PASS** 11.1

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.

Cannabinoids (Top 3)	(%)	mg/g
THCA	29.8	298
CBGA	1.65	16.5
Δ9-ΤΗС	1.22	12.2
TOTAL CBD	-	-
TOTAL THC	27.4	274
TOTAL CANNABINOIDS	32.9	329
<u>Terpenes (Top 5)</u>	(%)	ħã∕ā
Terpinolene	0.318	3180
β-Myrcene	0.231	2310
d-Limonene	0.0953	953
β-Ocimene	0.0578	578
β-Pinene	0.0498	498
TOTAL TERPENES	0.886	8860
Contaminants PASS/FAIL	Sample Picture	Upon Receipt

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





Scan the QR code to verify results.

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# **CERTIFICATE OF ANALYSIS (SAMPLE ID: SA35464)**

Order ID: OR10498 **Testing Location:** Customer ID: 2161 Sample Type: Primary Arkansas River Valley Relief Cultivation Lot Number: Matrix: Flower

232 S. Broadview St. 5601 Old Greenwood Rd Suite C M00065C13137073418 **Mass:** 23g Greenbrier, AR 72058 Fort Smith, AR 72903 **Production Run: Date Collected:** 06/19/2023 6034H20230504O43-1 License: ADH 113 License: 00065C **Date Received:** 06/20/2023

Cultivar (Strain) or Sample Description: Orange 43 **Date Completed:** 06/21/2023

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

**Analysis Date/Time:** 06/20/2023 1647 Method: HPLC/DAD Moisture Content (%): 11.1

**Analyst: PW Instrument:** Agilent 1100 Water Activity (aw): 0.487 @ 24.4°C

Cannabinoid	Result (%)	Result (mg/g)	LOD (mg/g)	LOQ (mg/g)	Result (mg/ mL)	Per Serving (mg)	Per <u>Unit</u> (mg)
CBC	ND	ND	0.0376	0.0876	-	-	-
CBCA	ND	ND	0.117	0.272	-	-	-
CBD	ND	ND	0.265	0.618	-	-	-
CBDA	ND	ND	0.0975	0.228	-	-	-
CBDV	ND	ND	0.0425	0.0992	-	-	-
CBDVA	ND	ND	0.113	0.265	-	-	-
CBG	0.0881	0.881	0.172	0.402	-	0.881	0.881
CBGA	1.65	16.5	0.244	0.288	-	16.5	16.5
CBL	ND	ND	0.199	0.464	-	-	-
CBN	ND	ND	0.0912	0.213	-	-	-
CBNA	ND	ND	0.0985	0.230	-	-	-
Δ9-ΤΗС	1.22	12.2	0.109	0.255	-	12.2	12.2
Δ8-ΤΗС	ND	ND	0.171	0.398	-	-	-
THCA	29.8	298	0.0593	0.139	-	298	298
THCV	ND	ND	0.142	0.332	-	-	-
THCVA	0.162	1.62	0.0455	0.106	-	1.62	1.62
TOTAL	32.9	329				329	329
TOTAL CBC	-	-		*	-	_	-
TOTAL CBD	-	-			-	-	-
TOTAL CBDV	-	-			-	-	-
TOTAL CBG	1.54	15.4			-	15.4	15.4
TOTAL CBN	-	-			-	-	-
TOTAL THC	27.4	274			-	274	274
TOTAL THCV	0.140	1.40			-	1.40	1.40

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** 

"-" 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) +  $\Delta$ 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.





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06/21/2023









**Date Collected:** 06/19/2023

**Date Received:** 06/20/2023

## **CERTIFICATE OF ANALYSIS (SAMPLE ID: SA35464)**

Testing Location:Customer ID: 2161Order ID: OR10498Sample Type: PrimaryArkansasRiver Valley Relief CultivationLot Number:Matrix: Flower232 S. Broadview St.5601 Old Greenwood Rd Suite CM00065C13137073418Mass: 23g

Greenbrier, AR 72058 Fort Smith, AR 72903 **Production Run:**License: ADH 113 License: 00065C 6034H20230504O43-1

Cultivar (Strain) or Sample Description: Orange 43

Date Completed: 06/21/2023

## TERPENOID PROFILE

Analysis Date/Time:06/21/2023 0648Method: GC/MSDeviations from SOP:Analyst: KFInstrument: Agilent 7890/5975None

Analyst: KF		Instrument	:
<u>Terpene</u>	<u>Result</u> (μg/g)	Result (%)	
α-Bisabolol	9.06	0.000906	
Camphene	45.3	0.00453	
δ-3-Carene	122	0.0122	
β-Caryophyllene	226	0.0226	
Caryophyllene oxide	-	-	
p-Cymene	-	-	
Eucalyptol	20.8	0.00208	
Geraniol	7.68	0.000768	
Guaiol	-	-	
α-Humulene	72.2	0.00722	
Isopulegol	-	-	
d-Limonene	953	0.0953	
Linalool	149	0.0149	
β-Myrcene	2310	0.231	
cis-Nerolidol	-	-	
trans-Nerolidol	27.4	0.00274	
α-Ocimene	-	-	
β-Ocimene	578	0.0578	
α-Pinene	375	0.0375	
β-Pinene	498	0.0498	
α-Terpinene	170	0.0170	

118

3180

0.0118

0.318



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

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"-" Not detected above RL

TOTAL 8860 0.886 Reporting Limit (µg/g): 115



y-Terpinene

Terpinolene









6034H20230504O43-1



# **CERTIFICATE OF ANALYSIS (SAMPLE ID: SA35464)**

Order ID: OR10498 **Testing Location:** Customer ID: 2161 Sample Type: Primary Arkansas River Valley Relief Cultivation Lot Number: Matrix: Flower

232 S. Broadview St. 5601 Old Greenwood Rd Suite C M00065C13137073418 **Mass:** 23g Greenbrier, AR 72058 Fort Smith, AR 72903 **Production Run: Date Collected:** 06/19/2023

License: ADH 113 Cultivar (Strain) or Sample Description: Orange 43 **Date Completed:** 06/21/2023

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

**Analysis Date/Time:** 06/20/2023 1751 Method: LC/MS/MS **Deviations from SOP:** 

**Analyst: KF** Instrument: Shimadzu LC-8050 None

License: 00065C

<u>Pesticide</u>	Result (μg/g)	<u>LOD</u> (μg/g)	LOQ (µg/g)	Action Level (µg/g)	<u>Pesticide</u>	<u>Result</u> (μg/g)	<u>LOD</u> (µg/g)	<u>LOQ</u> (µg/g)	Action Level (µg/g)
Abamectin (71751-41-2)	-	0.0410	0.328	0.5	Kresoxim-methyl	_	0.0410	0.328	0.4
Acephate (30560-19-1)	-	0.0410	0.328	0.4	(143390-89-0)		0.0410	0.220	0.0
Acequinocyl (57960-19-7)	-	0.0410	0.328	2	Malathion (121-75-5)	-	0.0410	0.328	0.2
Acetamiprid (135410-20-7)	-	0.0410	0.328	0.2	Metalaxyl (57837-19-1) Methiocarb (2032-65-7)	-	0.0410 0.0410	0.328 0.328	0.2 0.2
Aldicarb (116-06-3)	-	0.0410	0.328	0.4	Methomyl (16752-77-5)	-	0.0410	0.328	0.4
Azoxystrobin (131860-33-8)	-	0.0410	0.328	0.2	Methyl parathion (298-0-0)	-	0.0410	0.328	0.2
Bifenazate (149877-41-8)	-	0.0410	0.328	0.2	MGK 264 (113-48-4)	-	0.0410	0.328	0.2
Bifenthrin (82657-04-3)	-	0.0410	0.328	0.2	Myclobutanil		0.0410	0.328	0.2
Boscalid (188425-85-6)	-	0.0410	0.328	0.4	(88671-89-0)		0.0410	0.520	
Carbaryl (63-25-2)	-	0.0410	0.328	0.2	Naled (300-76-5)	-	0.0410	0.328	0.5
Carbofuran (1563-66-2)	-	0.0410	0.328	0.2	Oxamyl (23135-22-0)	-	0.0410	0.328	1
Chlorantraniliprole (800008-45-7)	-	0.0410	0.328	0.2	Paclobutrazol (76738-62-0)	-	0.0410	0.328	0.4
Chlorfenapyr					Permethrins (52645-53-1)	-	0.0410	0.328	0.2
(122453-73-0)	-	0.0410	0.328	1	Phosmet (732-11-6)	-	0.0410	0.328	0.2
Chlorpyrifos (2921-88-2)	-	0.0410	0.328	0.2	Piperonyl butoxide	_	0.0410	0.328	2
Clofentezine (74115-24-5)	-	0.0410	0.328	0.2	(51-03-6)		0.0410	0.220	0.2
Cyfluthrin (68359-37-5)	-	0.0410	0.328	1	Prallethrins (2331-36-9)	-	0.0410	0.328	0.2
Cypermethrin (52315-07-8)	-	0.0410	0.328	1	Propiconazole (60207-90-1))	-	0.0410	0.328	0.4
Daminozide (1596-84-5)	-	0.0410	0.328	1	Propoxur (114-26-1)	-	0.0410	0.328	0.2
DDVP (62-73-7)	-	0.0410	0.328	0.1	Pyrethrins (8003-34-7)	-	0.0410	0.328	1
Diazinon (333-41-5)	-	0.0410	0.328	0.2	Pyridaben (96489-71-3)	-	0.0410	0.328	0.2
Dimethoate (60-51-5)	-	0.0410	0.328	0.2	Spinosad (168316-95-8)	-	0.0410	0.328	0.2
Ethoprophos (13194-48-4)	-	0.0410	0.328	0.2	Spiromesifen	_	0.0410	0.328	0.2
Etofenprox (80844-07-1)	-	0.0410	0.328	0.4	(283594-90-1) Spirotetramat				
Etoxazole (153233-91-1)	-	0.0410	0.328	0.2	(203313-25-1)	-	0.0410	0.328	0.2
Fenoxycarb (72490-01-8)	-	0.0410	0.328	0.2	Spiroxamine		0.0410	0.328	0.4
(E)-Fenpyroximate (134098-61-6)	-	0.0410	0.328	0.4	(118134-30-8) Tebuconazole	-			
Fipronil (120068-37-3)	-	0.0410	0.328	0.4	(80443-41-0)	-	0.0410	0.328	0.4
Flonicamid (158062-67-0)	-	0.0410	0.328	1	Thiacloprid	_	0.0410	0.328	0.2
Fludioxinil (131341-86-1)	-	0.0410	0.328	0.4	(111988-49-9)				
Hexythiazox (78587-05-0)	-	0.0410	0.328	1	Thiamethoxam (153719-23-4)	-	0.0410	0.328	0.2
Imazalil (35554-44-0)	-	0.0410	0.328	0.2	Trifloxystrobin				
Imidacloprid (138261-41-3)	-	0.0410	0.328	0.4	(141517-21-7)		0.0410	0.328	0.2



Color Key

**Date Received:** 06/20/2023

"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

<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		





REPORT OF LABORATORY ANALYSIS









# **CERTIFICATE OF ANALYSIS (SAMPLE ID: SA35464)**

Testing Location:Customer ID: 2161Order ID: OR10498Sample Type: PrimaryArkansasRiver Valley Relief CultivationLot Number:Matrix: Flower232 S. Broadview St.5601 Old Greenwood Rd Suite CM00065C13137073418Mass: 23g

 Greenbrier, AR 72058
 Fort Smith, AR 72903
 Production Run:
 Date Collected: 06/19/2023

 License: ADH 113
 License: 00065C
 6034H20230504O43-1
 Date Received: 06/20/2023

Cultivar (Strain) or Sample Description: Orange 43

Date Completed: 06/21/2023

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

Analysis Date/Time: 06/20/2023 1826 (ICP/OES) Method: ICP/MS Deviations from SOP:

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

**Analyst:** KF

<u>Heavy Metal</u>	<u>Result</u> (μg/kg)	<u>LOD</u> (µg/kg)	<u>LOQ</u> (µg/kg)	<u>Action Level</u> (μg/kg)
Arsenic (As)	-	58.3	92.3	200
Cadmium (Cd)	-	58.3	92.3	200
Lead (Pb)	-	58.3	92.3	500
Mercury (Hg)	-	58.3	92.3	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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**Mass:** 23g



232 S. Broadview St.





M00065C13137073418



## **CERTIFICATE OF ANALYSIS (SAMPLE ID: SA35464)**

Testing Location:Customer ID: 2161Sample ID: SA35464Sample Type: PrimaryArkansasRiver Valley Relief CultivationLot Number:Matrix: Flower

 Greenbrier, AR 72058
 Fort Smith, AR 72903
 Production Run:
 Date Collected: 06/19/2023

 License: ADA 05\_H273
 License: 00065C
 6034H20230504O43-1
 Date Received: 06/20/2023

Cultivar (Strain) or Sample Description: Orange 43

Date Completed: 06/21/2023

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

Analysis Date/Time: 06/21/2023 0953 Method: Hardy Diagnostics CompactDry Deviations from SOP:

Analyst: PW Instrument: Thermo Incubator None

5601 Old Greenwood Rd Suite C

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	-
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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