

SUMMARY OF ANALYSIS (SAMPLE ID: SA34811)

Testing Location:	Customer ID: 2161	Order ID: OR10373	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13133929542	Mass: 21g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 03/27/2023
License: ADH 113	License: 00065C	6027H20230227	Date Received: 03/27/2023
Cultivar (Strain) or Sample Description: Orange 43			Date Completed: 03/30/2023

*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 (%)

12.3

Water Activity (aw)

0.448 @ 24.6°C

PASS/FAIL

PASS

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

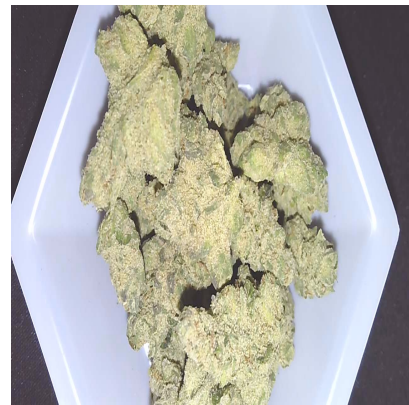
Moisture content levels less than 15% are recommended but the sample does not fail. Water activity levels must be less than 0.65aw.

Cannabinoids (Top 3)	(%)	mg/g
THCA	29.4	294
Δ9-THC	1.42	14.2
CBGA	1.13	11.3
TOTAL CBD	-	-
TOTAL THC	27.2	272
TOTAL CANNABINOIDS	32.1	321

Terpenes (Top 5)	(%)	µg/g
Caryophyllene oxide	0.778	7780
Terpinolene	0.412	4120
β-Myrcene	0.274	2740
Guaiol	0.201	2010
d-Limonene	0.142	1420
TOTAL TERPENES	2.39	23900

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

Sample Picture Upon Receipt



Scan the QR code to verify results.

This information is provided as a service and makes no claims of efficacy and/or safety of this product.

Results are applicable only for the sample(s) analyzed and for the specific analysis conducted.

This report is for informational purposes only and should not be used to diagnose, treat, or prevent any medical-related symptoms.

The statements and results herein have not been approved and/or endorsed by the FDA.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of
Felling Analytical Services and Technology (F.A.S.T.), LLC

www.FASTLaboratories.com

Kyle W. Felling
Kyle W. Felling, Ph.D.
Laboratory Director



CERTIFICATE OF ANALYSIS (SAMPLE ID: SA34811)

Testing Location:	Customer ID: 2161	Order ID: OR10373	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13133929542	Mass: 21g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 03/27/2023
License: ADH 113	License: 00065C	6027H20230227	Date Received: 03/27/2023
Cultivar (Strain) or Sample Description: Orange 43			Date Completed: 03/30/2023

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

Analysis Date/Time: 3/28/2023 1729

Analyst: PW

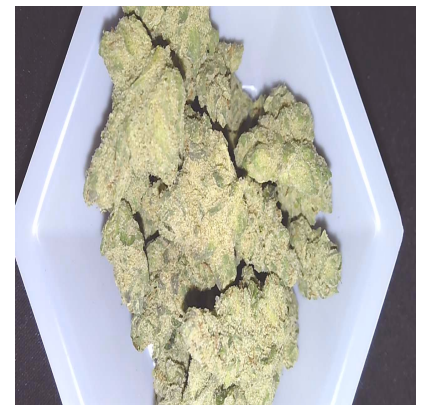
Method: HPLC/DAD

Instrument: Agilent 1100

Moisture Content (%): 12.3

Water Activity (aw): 0.448 @ 24.65°C

<u>Cannabinoid</u>	<u>Result (%)</u>	<u>Result (mg/g)</u>	<u>LOD (mg/g)</u>	<u>LOQ (mg/g)</u>	<u>Result (mg/mL)</u>	<u>Per Serving (mg)</u>	<u>Per Unit (mg)</u>
CBC	ND	ND	0.215	0.501	-	-	-
CBCA	ND	ND	0.666	1.55	-	-	-
CBD	ND	ND	1.51	3.53	-	-	-
CBDV	ND	ND	0.557	1.30	-	-	-
CBDVA	ND	ND	0.243	0.566	-	-	-
CBG	ND	ND	0.647	1.51	-	-	-
CBGA	ND	ND	0.982	2.29	-	-	-
CBL	1.13	11.3	0.704	1.64	-	11.3	11.3
CBN	ND	ND	1.13	2.65	-	-	-
CBNA	ND	ND	0.521	1.22	-	-	-
Δ9-THC	ND	ND	0.563	1.31	-	-	-
Δ8-THC	1.42	14.2	0.625	1.46	-	14.2	14.2
THCA	ND	ND	0.975	2.28	-	-	-
THCV	29.4	294	0.339	0.792	-	294	294
THCVA	ND	ND	0.813	1.90	-	-	-
THCVA	0.131	1.31	0.260	0.604	-	1.31	1.31
TOTAL	32.1	321			-	321	321
TOTAL CBC	-	-			-	-	-
TOTAL CBD	-	-			-	-	-
TOTAL CBDV	-	-			-	-	-
TOTAL CBG	0.992	9.92			-	9.92	9.92
TOTAL CBN	-	-			-	-	-
TOTAL THC	27.2	272			-	272	272
TOTAL THCVA	0.113	1.13			-	1.13	1.13



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 x 0.877) + CBC
Total CBD = (CBDV x 0.877) + CBD
Total CBDV = (CBDVA x 0.867) + CBDV
Total CBG = (CBGA x 0.878) + CBG
Total CBN = (CBNA x 0.876) + CBN
Total THC = (THCA x 0.877) + Δ9-THC
Total THCVA = (THCVA x 0.867) + THCVA

Percentage results are reported by mass.

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

* 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

This information is provided as a service and makes no claims of efficacy and/or safety of this product.
Results are applicable only for the sample(s) analyzed and for the specific analysis conducted.
This report is for informational purposes only and should not be used to diagnose, treat, or prevent any medical-related symptoms.

The statements and results herein have not been approved and/or endorsed by the FDA.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of
Felling Analytical Services and Technology (F.A.S.T.), LLC

www.FASTLaboratories.com

Kyle W. Felling
Kyle W. Felling, Ph.D.
Laboratory Director



CERTIFICATE OF ANALYSIS (SAMPLE ID: SA34811)

Testing Location:	Customer ID: 2161	Order ID: OR10373	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13133929542	Mass: 21g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 03/27/2023
License: ADH 113	License: 00065C	6027H20230227	Date Received: 03/27/2023
Cultivar (Strain) or Sample Description: Orange 43			Date Completed: 03/30/2023

TERPENOID PROFILE

Analysis Date/Time: 03/29/2023 1821

Analyst: KF

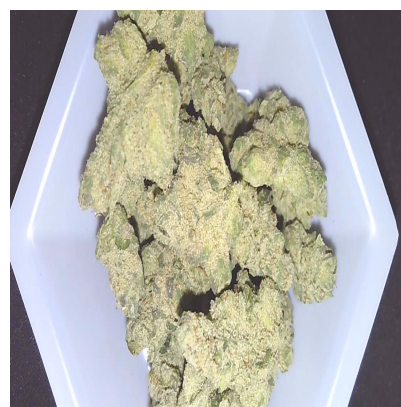
Method: GC/MS

Instrument: Agilent 7890/5975

Deviations from SOP:

None

Terpene	Result (µg/g)	Result (%)	
α-Bisabolol	517	0.0517	
Camphene	230	0.0230	
δ-3-Carene	264	0.0264	
β-Caryophyllene	836	0.0836	
Caryophyllene oxide	7780	0.778	
p-Cymene	-	-	
Eucalyptol	-	-	
Geraniol	-	-	
Guaiol	2010	0.201	
α-Humulene	197	0.0197	
Isopulegol	-	-	
d-Limonene	1420	0.142	
Linalool	584	0.0584	
β-Myrcene	2740	0.274	
cis-Nerolidol	-	-	
trans-Nerolidol	106	0.0106	
α-Ocimene	-	-	
β-Ocimene	686	0.0686	
α-Pinene	649	0.0649	
β-Pinene	1060	0.106	
α-Terpinene	276	0.0276	
γ-Terpinene	407	0.0407	
Terpinolene	4120	0.412	
TOTAL	23900	2.39	



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

This information is provided as a service and makes no claims of efficacy and/or safety of this product.

Results are applicable only for the sample(s) analyzed and for the specific analysis conducted.

This report is for informational purposes only and should not be used to diagnose, treat, or prevent any medical-related symptoms.

The statements and results herein have not been approved and/or endorsed by the FDA.

"-" Not detected above RL.

Reporting Limit (µg/g): 43.6

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Felling Analytical Services and Technology (F.A.S.T.), LLC

www.FASTLaboratories.com

Kyle W. Felling
Kyle W. Felling, Ph.D.
Laboratory Director



CERTIFICATE OF ANALYSIS (SAMPLE ID: SA34811)

Testing Location:	Customer ID: 2161	Order ID: OR10373	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13133929542	Mass: 21g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 03/27/2023
License: ADH 113	License: 00065C	6027H20230227	Date Received: 03/27/2023
Cultivar (Strain) or Sample Description: Orange 43			Date Completed: 03/30/2023

PESTICIDES PROFILE (SOP: SOP-PEST-001)

Analysis Date/Time: 03/28/2023 1955

Analyst: KF

Method: LC/MS/MS

Instrument: Shimadzu LC-8050

Deviations from SOP:

None

Pesticide	Result (µg/g)	LOD (µg/g)	LOQ (µg/g)	Action Level (µg/g)	Pesticide	Result (µg/g)	LOD (µg/g)	LOQ (µg/g)	Action Level (µg/g)
Abamectin (71751-41-2)	-	0.0436	0.349	0.5	Kresoxim-methyl (143390-89-0)	-	0.0436	0.349	0.4
Acephate (30560-19-1)	-	0.0436	0.349	0.4	Malathion (121-75-5)	-	0.0436	0.349	0.2
Acetaminophen (57960-19-7)	-	0.0436	0.349	2	Metalaxyl (57837-19-1)	-	0.0436	0.349	0.2
Acetamiprid (135410-20-7)	-	0.0436	0.349	0.2	Methiocarb (2032-65-7)	-	0.0436	0.349	0.2
Aldicarb (116-06-3)	-	0.0436	0.349	0.4	Methomyl (16752-77-5)	-	0.0436	0.349	0.4
Azoxystrobin (131860-33-8)	-	0.0436	0.349	0.2	Methyl parathion (298-0-0)	-	0.0436	0.349	0.2
Bifenazate (149877-41-8)	-	0.0436	0.349	0.2	MGK 264 (113-48-4)	-	0.0436	0.349	0.2
Bifenthrin (82657-04-3)	-	0.0436	0.349	0.2	Myclobutanil (88671-89-0)	-	0.0436	0.349	0.2
Boscalid (188425-85-6)	-	0.0436	0.349	0.4	Naled (300-76-5)	-	0.0436	0.349	0.5
Carbaryl (63-25-2)	-	0.0436	0.349	0.2	Oxamyl (23135-22-0)	-	0.0436	0.349	1
Carbofuran (1563-66-2)	-	0.0436	0.349	0.2	Paclobutrazol (76738-62-0)	-	0.0436	0.349	0.4
Chlorantraniliprole (800008-45-7)	-	0.0436	0.349	0.2	Permethrins (52645-53-1)	-	0.0436	0.349	0.2
Chlorfenapyr (122453-73-0)	-	0.0436	0.349	1	Phosmet (732-11-6)	-	0.0436	0.349	0.2
Chlorpyrifos (2921-88-2)	-	0.0436	0.349	0.2	Piperonyl butoxide (51-03-6)	-	0.0436	0.349	2
Clofentezine (74115-24-5)	-	0.0436	0.349	0.2	Prallethrin (2331-36-9)	-	0.0436	0.349	0.2
Cyfluthrin (68359-37-5)	-	0.0436	0.349	1	Propiconazole (60207-90-1)	-	0.0436	0.349	0.4
Cypermethrin (52315-07-8)	-	0.0436	0.349	1	Propoxur (114-26-1)	-	0.0436	0.349	0.2
Daminozide (1596-84-5)	-	0.0436	0.349	1	Pyrethrins (8003-34-7)	-	0.0436	0.349	1
DDVP (62-73-7)	-	0.0436	0.349	0.1	Pyridaben (96489-71-3)	-	0.0436	0.349	0.2
Diazinon (333-41-5)	-	0.0436	0.349	0.2	Spinosad (168316-95-8)	-	0.0436	0.349	0.2
Dimethoate (60-51-5)	-	0.0436	0.349	0.2	Spiromesifen (283594-90-1)	-	0.0436	0.349	0.2
Ethoprophos (13194-48-4)	-	0.0436	0.349	0.2	Spirotetramat (203313-25-1)	-	0.0436	0.349	0.2
Etofenprox (80844-07-1)	-	0.0436	0.349	0.4	Spiroxamine (118134-30-8)	-	0.0436	0.349	0.4
Etoazole (153233-91-1)	-	0.0436	0.349	0.2	Tebuconazole (80443-41-0)	-	0.0436	0.349	0.4
Fenoxycarb (72490-01-8)	-	0.0436	0.349	0.2	Thiacloprid (111988-49-9)	-	0.0436	0.349	0.2
(E)-Fenpyroximate (134098-61-6)	-	0.0436	0.349	0.4	Thiamethoxam (153719-23-4)	-	0.0436	0.349	0.2
Fipronil (120068-37-3)	-	0.0436	0.349	0.4	Trifloxystrobin (141517-21-7)	-	0.0436	0.349	0.2
Flonicamid (158062-67-0)	-	0.0436	0.349	1					
Fludioxinil (131341-86-1)	-	0.0436	0.349	0.4					
Hexythiazox (78587-05-0)	-	0.0436	0.349	1					
Imazalil (35554-44-0)	-	0.0436	0.349	0.2					
Imidacloprid (138261-41-3)	-	0.0436	0.349	0.4					



Color Key

RESULT < AL

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.

Disclaimer: This information is provided as a service and makes no claims of efficacy and/or safety of this product. Results are applicable only for the sample(s) analyzed and for the specific analysis conducted. This report is for informational purposes only and should not be used to diagnose, treat, or prevent any medical-related symptoms. The statements and results herein have not been approved and/or endorsed by the FDA.

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		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Felling Analytical Services and Technology (F.A.S.T.), LLC

www.FASTLaboratories.com

Kyle W. Felling
Laboratory Director



CERTIFICATE OF ANALYSIS (SAMPLE ID: SA34811)

Testing Location:	Customer ID: 2161	Order ID: OR10373	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13133929542	Mass: 21g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 03/27/2023
License: ADH 113	License: 00065C	6027H20230227	Date Received: 03/27/2023
Cultivar (Strain) or Sample Description: Orange 43			Date Completed: 03/30/2023

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

Analysis Date/Time: 3/28/2023 1952 (ICP/OES)	Method: ICP/OES	Deviations from SOP:
Analysis Date/Time: - (DMA)	Instrument: Agilent 720-ES	None
Analyst: KF		

Heavy Metal	Result (µg/kg)	LOD (µg/kg)	LOQ (µg/kg)	Action Level (µg/kg)
Arsenic (As)	-	55.7	88.1	200
Cadmium (Cd)	-	55.7	88.1	200
Lead (Pb)	-	55.7	88.1	500
Mercury (Hg)	-	55.7	88.1	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 < 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.

Disclaimer: This information is provided as a service and makes no claims of efficacy and/or safety of this product. Results are applicable only for the sample(s) analyzed and for the specific analysis conducted. This report is for informational purposes only and should not be used to diagnose, treat, or prevent any medical-related symptoms. The statements and results herein have not been approved and/or endorsed by the FDA.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of
Felling Analytical Services and Technology (F.A.S.T.), LLC

www.FASTLaboratories.com

Kyle W. Felling
Kyle W. Felling, Ph.D.
Laboratory Director



CERTIFICATE OF ANALYSIS (SAMPLE ID: SA34811)

Testing Location:	Customer ID: 2161	Sample ID: SA34811	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13133929542	Mass: 21g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 03/27/2023
License: ADA 05_H273	License: 00065C	6027H20230227	Date Received: 03/27/2023
Cultivar (Strain) or Sample Description: Orange 43			Date Completed: 03/30/2023

MICROBIOLOGICAL PROFILE (SOP: SOP-Micro-001)

Analysis Date/Time: 03/29/2023 1127	Method: Hardy Diagnostics CompactDry	Deviations from SOP:
Analyst: PW	Instrument: Thermo Incubator	None

Bacteria/Microbe	Result (CFU/g)	Action Level (CFU/g)
Aerobic Plate Count	NT	-
Coliforms, Total	Absent	1
Escherichia Coli (E. Coli)	NT	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)

1

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.

Disclaimer: This information is provided as a service and makes no claims of efficacy and/or safety of this product. Results are applicable only for the sample(s) analyzed and for the specific analysis conducted. This report is for informational purposes only and should not be used to diagnose, treat, or prevent any medical-related symptoms. The statements and results herein have not been approved and/or endorsed by the FDA.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of
Felling Analytical Services and Technology (F.A.S.T.), LLC

www.FASTLaboratories.com

Kyle W. Felling
Kyle W. Felling, Ph.D.
Laboratory Director

