

SUMMARY OF ANALYSIS (SAMPLE ID: SA36335)

Testing Location:	Customer ID: 2161	Order ID: OR10682	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13137541157	Mass: 20g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 10/30/2023
License: ADH 113	License: 00065C	4046H20231012RTZ-1	Date Received: 10/31/2023
Cultivar (Strain) or Sample Description: Runtz			Date Completed: 11/01/2023

*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 (%)

13.2

Water Activity (aw)

0.460 @ 24.4°C

PASS/FAIL

PASS

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

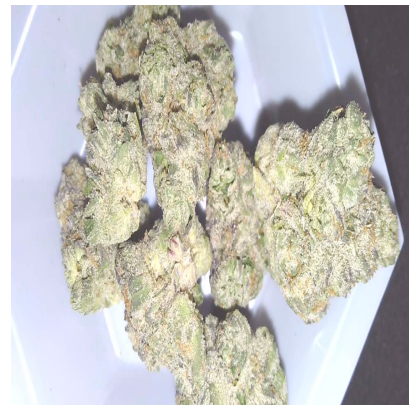
Moisture content levels less than 15% are recommended but the sample does not fail. Water activity levels must be less than 0.65aw.

Cannabinoids (Top 3)	(%)	mg/g
THCA	33.1	331
Δ9-THC	0.582	5.82
CBGA	0.302	3.02
TOTAL CBD	-	-
TOTAL THC	29.6	296
TOTAL CANNABINOIDS	34.2	342

Terpenes (Top 5)	(%)	µg/g
d-Limonene	0.391	3910
β-Myrcene	0.344	3440
Linalool	0.341	3410
β-Caryophyllene	0.335	3350
trans-Nerolidol	0.0919	919
TOTAL TERPENES	1.69	16900

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: SA36335)

Testing Location:	Customer ID: 2161	Order ID: OR10682	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13137541157	Mass: 20g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 10/30/2023
License: ADH 113	License: 00065C	4046H20231012RTZ-1	Date Received: 10/31/2023
Cultivar (Strain) or Sample Description: Runtz			Date Completed: 11/01/2023

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

Analysis Date/Time: 10/31/2023 1730

Method: HPLC/DAD

Moisture Content (%): 13.2

Analyst: PW

Instrument: Agilent 1100

Water Activity (aw): 0.460 @ 24.4°C

<u>Cannabinoid</u>	<u>Result</u> (%)	<u>Result</u> (mg/g)	<u>LOD</u> (mg/g)	<u>LOQ</u> (mg/g)	<u>Result</u> (mg/ mL)	<u>Per</u> <u>Serving</u> (mg)	<u>Per</u> <u>Unit</u> (mg)
CBC	ND	ND	0.0406	0.0947	-	-	-
CBCA	ND	ND	0.126	0.294	-	-	-
CBD	ND	ND	0.286	0.668	-	-	-
CBDA	ND	ND	0.105	0.246	-	-	-
CBDV	ND	ND	0.0459	0.107	-	-	-
CBDVA	ND	ND	0.122	0.286	-	-	-
CBG	0.0950	0.950	0.186	0.434	-	0.825	0.825
CBGA	0.302	3.02	0.263	0.311	-	2.62	2.62
CBL	ND	ND	0.215	0.501	-	-	-
CBN	ND	ND	0.0986	0.230	-	-	-
CBNA	ND	ND	0.106	0.248	-	-	-
Δ9-THC	0.582	5.82	0.118	0.275	-	5.06	5.06
Δ8-THC	ND	ND	0.184	0.430	-	-	-
THCA	33.1	331	0.0641	0.150	-	288	288
THCV	ND	ND	0.154	0.358	-	-	-
THCVA	0.111	1.11	0.0491	0.114	-	0.968	0.968
TOTAL	34.2	342			-	297	297
TOTAL CBC	-	-			-	-	-
TOTAL CBD	-	-			-	-	-
TOTAL CBDV	-	-			-	-	-
TOTAL CBG	0.360	3.60			-	3.13	3.13
TOTAL CBN	-	-			-	-	-
TOTAL THC	29.6	296			-	257	257
TOTAL THC V	0.0967	0.967			-	0.839	0.839



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 = (CBDA 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 THC V = (THCVA x 0.867) + THC V

Percentage results are reported by mass.

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

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: SA36335)

Testing Location:	Customer ID: 2161	Order ID: OR10682	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13137541157	Mass: 20g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 10/30/2023
License: ADH 113	License: 00065C	4046H20231012RTZ-1	Date Received: 10/31/2023
Cultivar (Strain) or Sample Description: Runtz			Date Completed: 11/01/2023

TERPENOID PROFILE

Analysis Date/Time: 11/1/2023 0142

Method: GC/MS

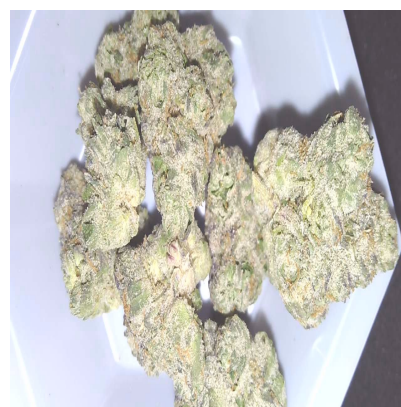
Deviations from SOP:

Analyst: KF

Instrument: Agilent 7890/5975

None

<u>Terpene</u>	<u>Result</u> <u>(µg/g)</u>	<u>Result</u> <u>(%)</u>	
α-Bisabolol	ND	-	
Camphene	178	0.0178	
δ-3-Carene	ND	-	
β-Caryophyllene	3350	0.335	
Caryophyllene oxide	ND	-	
p-Cymene	ND	-	
Eucalyptol	ND	-	
Geraniol	ND	-	
Guaiol	ND	-	
α-Humulene	712	0.0712	
Isopulegol	ND	-	
d-Limonene	3910	0.391	
Linalool	3410	0.341	
β-Myrcene	3440	0.344	
cis-Nerolidol	ND	-	
trans-Nerolidol	919	0.0919	
α-Ocimene	ND	-	
β-Ocimene	ND	-	
α-Pinene	445	0.0445	
β-Pinene	504	0.0504	
α-Terpinene	ND	-	
γ-Terpinene	ND	-	
Terpinolene	ND	-	
TOTAL	16900	1.69	



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

Abbreviations: ND - Not Detected, LOD - Limit of Detection, LOQ - Limit of Quantitation

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.

Reporting Limit (µg/g): 74.1

"-" Not detected above LOD.

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: SA36335)

Testing Location:	Customer ID: 2161	Order ID: OR10682	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13137541157	Mass: 20g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 10/30/2023
License: ADH 113	License: 00065C	4046H20231012RTZ-1	Date Received: 10/31/2023
Cultivar (Strain) or Sample Description: Runtz			Date Completed: 11/01/2023

PESTICIDES PROFILE (SOP: SOP-PEST-001)

Analysis Date/Time: 10/31/2023 1812

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)	-	0.0442	0.353	0.5	Kresoxim-methyl (143390-89-0)	-	0.0442	0.353	0.4
Acephate (30560-19-1)	-	0.0442	0.353	0.4	Malathion (121-75-5)	-	0.0442	0.353	0.2
Acetaminophen (57960-19-7)	-	0.0442	0.353	2	Metalaxyl (57837-19-1)	-	0.0442	0.353	0.2
Acetamiprid (135410-20-7)	-	0.0442	0.353	0.2	Methiocarb (2032-65-7)	-	0.0442	0.353	0.2
Aldicarb (116-06-3)	-	0.0442	0.353	0.4	Methomyl (16752-77-5)	-	0.0442	0.353	0.4
Azoxystrobin (131860-33-8)	-	0.0442	0.353	0.2	Methyl parathion (298-0-0)	-	0.0442	0.353	0.2
Bifenazate (149877-41-8)	-	0.0442	0.353	0.2	MGK 264 (113-48-4)	-	0.0442	0.353	0.2
Bifenthrin (82657-04-3)	-	0.0442	0.353	0.2	Myclobutanil (88671-89-0)	-	0.0442	0.353	0.2
Boscalid (188425-85-6)	-	0.0442	0.353	0.4	Naled (300-76-5)	-	0.0442	0.353	0.5
Carbaryl (63-25-2)	-	0.0442	0.353	0.2	Oxamyl (23135-22-0)	-	0.0442	0.353	1
Carbofuran (1563-66-2)	-	0.0442	0.353	0.2	Paclobutrazol (76738-62-0)	-	0.0442	0.353	0.4
Chlorantraniliprole (800008-45-7)	-	0.0442	0.353	0.2	Permethrins (52645-53-1)	-	0.0442	0.353	0.2
Chlorfenapyr (122453-73-0)	-	0.0442	0.353	1	Phosmet (732-11-6)	-	0.0442	0.353	0.2
Chlorpyrifos (2921-88-2)	-	0.0442	0.353	0.2	Piperonyl butoxide (51-03-6)	-	0.0442	0.353	2
Clofentezine (74115-24-5)	-	0.0442	0.353	0.2	Prallethrin (2331-36-9)	-	0.0442	0.353	0.2
Cyfluthrin (68359-37-5)	-	0.0442	0.353	1	Propiconazole (60207-90-1))	-	0.0442	0.353	0.4
Cypermethrin (52315-07-8)	-	0.0442	0.353	1	Propoxur (114-26-1)	-	0.0442	0.353	0.2
Daminozide (1596-84-5)	-	0.0442	0.353	1	Pyrethrins (8003-34-7)	-	0.0442	0.353	1
DDVP (62-73-7)	-	0.0442	0.353	0.1	Pyridaben (96489-71-3)	-	0.0442	0.353	0.2
Diazinon (333-41-5)	-	0.0442	0.353	0.2	Spinosad (168316-95-8)	-	0.0442	0.353	0.2
Dimethoate (60-51-5)	-	0.0442	0.353	0.2	Spiromesifen (283594-90-1)	-	0.0442	0.353	0.2
Ethoprophos (13194-48-4)	-	0.0442	0.353	0.2	Spirotetramat (203313-25-1)	-	0.0442	0.353	0.2
Etofenprox (80844-07-1)	-	0.0442	0.353	0.4	Spiroxamine (118134-30-8)	-	0.0442	0.353	0.4
Etoxazole (153233-91-1)	-	0.0442	0.353	0.2	Tebuconazole (80443-41-0)	-	0.0442	0.353	0.4
Fenoxycarb (72490-01-8)	-	0.0442	0.353	0.2	Thiacloprid (111988-49-9)	-	0.0442	0.353	0.2
(E)-Fenpyroximate (134098-61-6)	-	0.0442	0.353	0.4	Thiamethoxam (153719-23-4)	-	0.0442	0.353	0.2
Fipronil (120068-37-3)	-	0.0442	0.353	0.4	Trifloxystrobin (141517-21-7)	-	0.0442	0.353	0.2
Flonicamid (158062-67-0)	-	0.0442	0.353	1					
Fludioxinil (131341-86-1)	-	0.0442	0.353	0.4					
Hexythiazox (78587-05-0)	-	0.0442	0.353	1					
Imazalil (35554-44-0)	-	0.0442	0.353	0.2					
Imidacloprid (138261-41-3)	-	0.0442	0.353	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



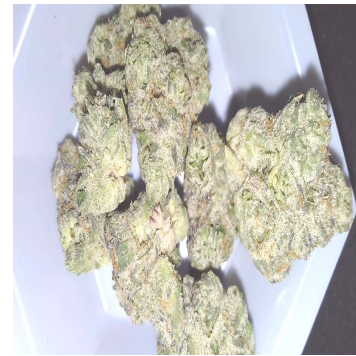
CERTIFICATE OF ANALYSIS (SAMPLE ID: SA36335)

Testing Location:	Customer ID: 2161	Order ID: OR10682	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13137541157	Mass: 20g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 10/30/2023
License: ADH 113	License: 00065C	4046H20231012RTZ-1	Date Received: 10/31/2023
Cultivar (Strain) or Sample Description: Runtz			Date Completed: 11/01/2023

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

Analysis Date/Time: 10/31/2023 1804 (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)	-	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.

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



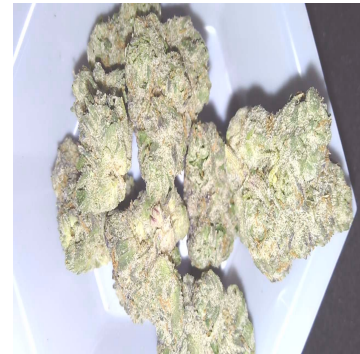
CERTIFICATE OF ANALYSIS (SAMPLE ID: SA36335)

Testing Location:	Customer ID: 2161	Sample ID: SA36335	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13137541157	Mass: 20g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 10/30/2023
License: ADA 05_H273	License: 00065C	4046H20231012RTZ-1	Date Received: 10/31/2023
Cultivar (Strain) or Sample Description: Runtz			Date Completed: 11/01/2023

MICROBIOLOGICAL PROFILE (SOP: SOP-Micro-001)

Analysis Date/Time: 11/01/2023 0904	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)	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)

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

