

SUMMARY OF ANALYSIS (SAMPLE ID: SA38685)

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: OR11159 Lot Number: M00065C13138119469 Production Run: 2072H20240730APT-1	Sample Type: Primary Matrix: Flower Mass: 8g Date Collected: 08/22/2024 Date Received: 08/23/2024 Date Completed: 08/26/2024
Cultivar (Strain) or Sample Description: Apple Tartz			

*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 (%)

11.8

Water Activity (aw)

0.507 @ 24.7°C

PASS/FAIL

PASS

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

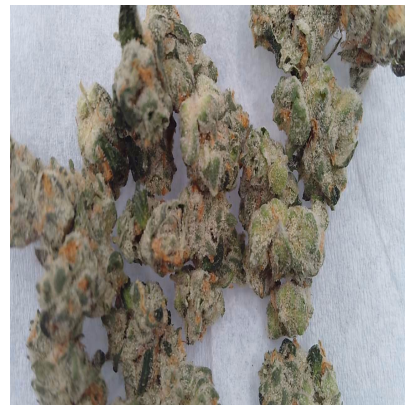
Moisture content levels less than 15% are recommended but the sample does not fail. Water activity levels must be less than 0.65aw.

Cannabinoids (Top 3)	(%)	mg/g
THCA	34.5	345
CBGA	1.04	10.4
Δ9-THC	0.764	7.64
TOTAL CBD	-	-
TOTAL THC	31.0	310
TOTAL CANNABINOIDS	36.5	365

Terpenes (Top 5)	(%)	µg/g
β-Caryophyllene	1.05	10500
d-Limonene	0.848	8480
β-Myrcene	0.599	5990
Linalool	0.394	3940
α-Humulene	0.345	3450
TOTAL TERPENES	3.70	37000

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

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



CERTIFICATE OF ANALYSIS (SAMPLE ID: SA38685)

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: OR11159 Lot Number: M00065C13138119469 Production Run: 2072H20240730APT-1	Sample Type: Primary Matrix: Flower Mass: 8g Date Collected: 08/22/2024 Date Received: 08/23/2024
Cultivar (Strain) or Sample Description: Apple Tartz			Date Completed: 08/26/2024

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

Analysis Date/Time: 08/23/2024 1535 **Method:** HPLC/DAD **Moisture Content (%):** 11.8
Analyst: PW **Instrument:** Agilent 1100 **Water Activity (aw):** 0.507 @ 24.7°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	0.0414	0.0965	-	-	-
CBCA	ND	ND	0.128	0.300	-	-	-
CBD	ND	ND	0.292	0.681	-	-	-
CBDV	ND	ND	0.107	0.251	-	-	-
CBDVA	ND	ND	0.125	0.291	-	-	-
CBG	ND	ND	0.189	0.442	-	-	-
CBGA	1.04	10.4	0.268	0.317	-	9.17	9.17
CBL	ND	ND	0.219	0.511	-	-	-
CBN	ND	ND	0.100	0.235	-	-	-
CBNA	ND	ND	0.108	0.253	-	-	-
Δ9-THC	0.764	7.64	0.120	0.281	-	6.74	6.74
Δ8-THC	ND	ND	0.188	0.439	-	-	-
THCA	34.5	345	0.0653	0.153	-	304	304
THCV	ND	ND	0.157	0.365	-	-	-
THCVA	0.210	2.10	0.0501	0.116	-	1.86	1.86
TOTAL	36.5	365				322	322
TOTAL CBC	-	-				-	-
TOTAL CBD	-	-				-	-
TOTAL CBDV	-	-				-	-
TOTAL CBG	0.913	9.13				8.05	8.05
TOTAL CBN	-	-				-	-
TOTAL THC	31.0	310				273	273
TOTAL THC V	0.182	1.82				1.61	1.61



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 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



CERTIFICATE OF ANALYSIS (SAMPLE ID: SA38685)

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: OR11159 Lot Number: M00065C13138119469 Production Run: 2072H20240730APT-1	Sample Type: Primary Matrix: Flower Mass: 8g Date Collected: 08/22/2024 Date Received: 08/23/2024
Cultivar (Strain) or Sample Description: Apple Tartz			Date Completed: 08/26/2024

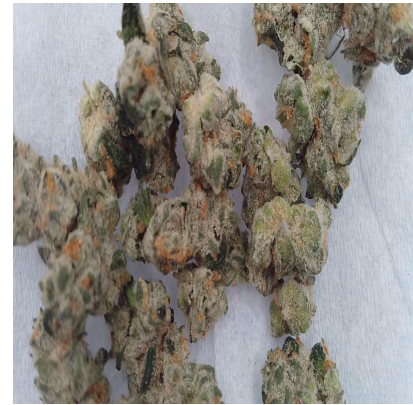
TERPENOID PROFILE

Analysis Date/Time: 08/23/2024 1645
Analyst: KF

Method: GC/MS
Instrument: Agilent 7890/5975

Deviations from SOP:
None

<u>Terpene</u>	<u>Result (µg/g)</u>	<u>Result (%)</u>	
α-Bisabolol	509	0.0509	
Camphene	326	0.0326	
δ-3-Carene	ND	-	
β-Caryophyllene	10500	1.05	█
Caryophyllene oxide	89.4	0.00894	
p-Cymene	ND	-	
Eucalyptol	ND	-	
Geraniol	72.1	0.00721	
Guaiol	ND	-	
α-Humulene	3450	0.345	█
Isopulegol	84.5	0.00845	
d-Limonene	8480	0.848	█
Linalool	3940	0.394	█
β-Myrcene	5990	0.599	█
cis-Nerolidol	ND	-	
trans-Nerolidol	411	0.0411	
α-Ocimene	118	0.0118	
β-Ocimene	ND	-	
α-Pinene	1040	0.104	
β-Pinene	1920	0.192	█
α-Terpinene	ND	-	
γ-Terpinene	ND	-	
Terpinolene	137	0.0137	
TOTAL	37000	3.70	



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): 45.3

"-" Not detected above LOD.

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

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



CERTIFICATE OF ANALYSIS (SAMPLE ID: SA38685)

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: OR11159 Lot Number: M00065C13138119469 Production Run: 2072H20240730APT-1	Sample Type: Primary Matrix: Flower Mass: 8g Date Collected: 08/22/2024 Date Received: 08/23/2024
Cultivar (Strain) or Sample Description: Apple Tartz			Date Completed: 08/26/2024

PESTICIDES PROFILE (SOP: SOP-PEST-001)

Analysis Date/Time: 08/23/2024 1623
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)	-	0.0451	0.361	0.5	Kresoxim-methyl (143390-89-0)	-	0.0451	0.361	0.4
Acephate (30560-19-1)	-	0.0451	0.361	0.4	Malathion (121-75-5)	-	0.0451	0.361	0.2
Acetamiprid (135410-20-7)	-	0.0451	0.361	0.2	Metalaxyl (57837-19-1)	-	0.0451	0.361	0.2
Aldicarb (116-06-3)	-	0.0451	0.361	0.4	Methiocarb (2032-65-7)	-	0.0451	0.361	0.2
Azoxystrobin (131860-33-8)	-	0.0451	0.361	0.2	Methomyl (16752-77-5)	-	0.0451	0.361	0.4
Bifenazate (149877-41-8)	-	0.0451	0.361	0.2	Methyl parathion (298-0-0)	-	0.0451	0.361	0.2
Bifenthrin (82657-04-3)	-	0.0451	0.361	0.2	MGK 264 (113-48-4)	-	0.0451	0.361	0.2
Boscalid (188425-85-6)	-	0.0451	0.361	0.4	Myclobutanil (88671-89-0)	-	0.0451	0.361	0.2
Carbaryl (63-25-2)	-	0.0451	0.361	0.2	Naled (300-76-5)	-	0.0451	0.361	0.5
Carbofuran (1563-66-2)	-	0.0451	0.361	0.2	Oxamyl (23135-22-0)	-	0.0451	0.361	1
Chlorantraniliprole (800008-45-7)	-	0.0451	0.361	0.2	Pacllobutrazol (76738-62-0)	-	0.0451	0.361	0.4
Chlorfenapyr (122453-73-0)	-	0.0451	0.361	1	Permethrins (52645-53-1)	-	0.0451	0.361	0.2
Chlorpyrifos (2921-88-2)	-	0.0451	0.361	0.2	Phosmet (732-11-6)	-	0.0451	0.361	0.2
Clofentezine (74115-24-5)	-	0.0451	0.361	0.2	Piperonyl butoxide (51-03-6)	-	0.0451	0.361	2
Cyfluthrin (68359-37-5)	-	0.0451	0.361	1	Prallethrins (2331-36-9)	-	0.0451	0.361	0.2
Cypermethrin (52315-07-8)	-	0.0451	0.361	1	Propiconazole (60207-90-1))	-	0.0451	0.361	0.4
Daminozide (1596-84-5)	-	0.0451	0.361	1	Propoxur (114-26-1)	-	0.0451	0.361	0.2
DDVP (62-73-7)	-	0.0451	0.361	0.1	Pyrethrins (8003-34-7)	-	0.0451	0.361	1
Diazinon (333-41-5)	-	0.0451	0.361	0.2	Pyridaben (96489-71-3)	-	0.0451	0.361	0.2
Dimethoate (60-51-5)	-	0.0451	0.361	0.2	Spinosad (168316-95-8)	-	0.0451	0.361	0.2
Ethoprophos (13194-48-4)	-	0.0451	0.361	0.2	Spiromesifen (283594-90-1)	-	0.0451	0.361	0.2
Etofenprox (80844-07-1)	-	0.0451	0.361	0.4	Spirotetramat (203313-25-1)	-	0.0451	0.361	0.2
Etoxazole (153233-91-1)	-	0.0451	0.361	0.2	Spiroxamine (118134-30-8)	-	0.0451	0.361	0.4
Fenoxycarb (72490-01-8)	-	0.0451	0.361	0.2	Tebuconazole (80443-41-0)	-	0.0451	0.361	0.4
(E)-Fenpyroximate (134098-61-6)	-	0.0451	0.361	0.4	Thiacloprid (111988-49-9)	-	0.0451	0.361	0.2
Fipronil (120068-37-3)	-	0.0451	0.361	0.4	Thiamethoxam (153719-23-4)	-	0.0451	0.361	0.2
Fonicamid (158062-67-0)	-	0.0451	0.361	1	Trifloxystrobin (141517-21-7)	-	0.0451	0.361	0.2
Fludioxinil (131341-86-1)	-	0.0451	0.361	0.4					
Hexythiazox (78587-05-0)	-	0.0451	0.361	1					
Imazalil (35554-44-0)	-	0.0451	0.361	0.2					
Imidacloprid (138261-41-3)	-	0.0451	0.361	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



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

CERTIFICATE OF ANALYSIS (SAMPLE ID: SA38685)

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: OR11159 Lot Number: M00065C13138119469 Production Run: 2072H20240730APT-1	Sample Type: Primary Matrix: Flower Mass: 8g Date Collected: 08/22/2024 Date Received: 08/23/2024
Cultivar (Strain) or Sample Description: Apple Tartz			Date Completed: 08/26/2024

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

Analysis Date/Time: 08/23/2024 1718 **Method:** ICP/MS **Deviations from SOP:** None
Analyst: KF **Instrument:** Agilent 7500ce

<u>Heavy Metal</u>	<u>Result (µg/kg)</u>	<u>LOD (µg/kg)</u>	<u>LOQ (µg/kg)</u>	<u>Action Level (µg/kg)</u>
Arsenic (As)	-	59.2	93.7	200
Cadmium (Cd)	-	59.2	93.7	200
Lead (Pb)	-	59.2	93.7	500
Mercury (Hg)	-	59.2	93.7	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

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



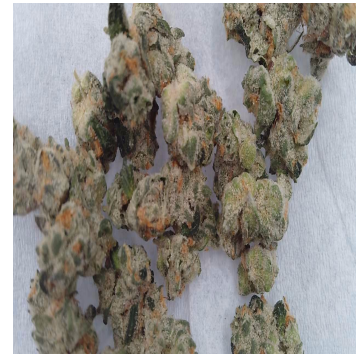
CERTIFICATE OF ANALYSIS (SAMPLE ID: SA38685)

Testing Location: Arkansas 232 S. Broadview St. Greenbrier, AR 72058 License: ADA 05_H273	Customer ID: 2161 River Valley Relief Cultivation 5601 Old Greenwood Rd Suite C Fort Smith, AR 72903 License: 00065C	Sample ID: SA38685 Lot Number: M00065C13138119469 Production Run: 2072H20240730APT-1	Sample Type: Primary Matrix: Flower Mass: 8g Date Collected: 08/22/2024 Date Received: 08/23/2024 Date Completed: 08/26/2024
Cultivar (Strain) or Sample Description: Apple Tartz			

MICROBIOLOGICAL PROFILE (SOP: SOP-Micro-001)

Analysis Date/Time: 08/24/2024 1204 **Method:** Hardy Diagnostics CompactDry **Deviations from SOP:**
Analyst: PW **Instrument:** Thermo Incubator None

<u>Bacteria/Microbe</u>	<u>Result (CFU/g)</u>	<u>Action Level (CFU/g)</u>
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

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

