

SUMMARY OF ANALYSIS (SAMPLE ID: SA32085)

Testing Location:	Customer ID: 2161	Order ID: OR9977	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13131379289	Mass: 12.51g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 08/17/2022
License: ADH 113	License: 00065C	6006H20220701CBS4	Date Received: 08/17/2022
Cultivar (Strain) or Sample Description: Crunch Berries			Date Completed: 08/20/2022

*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 (%)

12.9

Water Activity (aw)

0.501 @ 25.0°C

PASS/FAIL

PASS

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

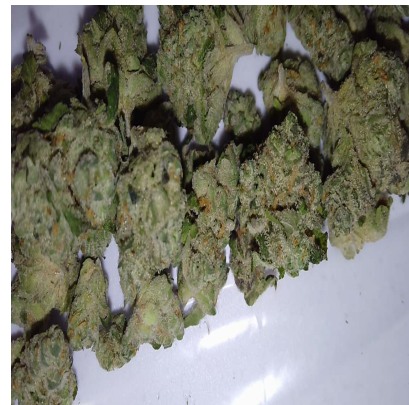
Moisture content levels less than 15% are recommended but the sample does not fail. Water activity levels must be less than 0.65aw.

Cannabinoids (Top 3)	(%)	mg/g
THCA	20.9	209
Δ9-THC	0.804	8.04
CBGA	0.383	3.83
TOTAL CBD	0.0329	0.329
TOTAL THC	19.1	191
TOTAL CANNABINOIDS	22.5	225

Terpenes (Top 5)	(%)	µg/g
α-Pinene	0.684	6840
β-Myrcene	0.407	4070
β-Caryophyllene	0.385	3850
β-Pinene	0.334	3340
Linalool	0.174	1740
TOTAL TERPENES	2.48	24800

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.

Mandatory Flower

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

www.FASTLaboratories.com



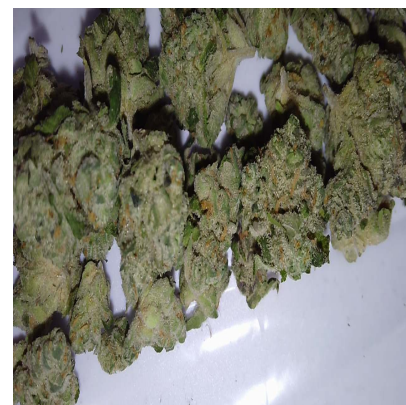
CERTIFICATE OF ANALYSIS (SAMPLE ID: SA32085)

Testing Location:	Customer ID: 2161	Order ID: OR9977	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13131379289	Mass: 12.51g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 08/17/2022
License: ADH 113	License: 00065C	6006H20220701CBS4	Date Received: 08/17/2022
Cultivar (Strain) or Sample Description: Crunch Berries			Date Completed: 08/20/2022

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

Analysis Date/Time: 8/20/2022 1207
Analyst: PW
Method: HPLC/DAD
Instrument: Agilent 1100
Moisture Content (%): 12.9
Water Activity (aw): 0.5007 @ 25.03°C

<u>Cannabinoid</u>	<u>Result</u> (%)	<u>UM</u> (+/-%)	<u>Result</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	-	-	-	0.253	-	-	-
CBCA	-	-	-	0.253	-	-	-
CBD	-	-	-	0.253	-	-	-
CBDA	0.0376	0.00376	0.376	0.253	-	0.376	0.376
CBDV	-	-	-	0.253	-	-	-
CBDVA	0.0390	0.00351	0.390	0.253	-	0.390	0.390
CBG	0.186	0.0242	1.86	0.253	-	1.86	1.86
CBGA	0.383	0.0421	3.83	0.253	-	3.83	3.83
CBL	-	-	-	0.253	-	-	-
CBN	-	-	-	0.253	-	-	-
CBNA	-	-	-	0.253	-	-	-
Δ9-THC	0.804	0.137	8.04	0.253	-	8.04	8.04
Δ8-THC	-	-	-	0.253	-	-	-
THCA	20.9	2.09	209	0.253	-	209	209
THCV	-	-	-	0.253	-	-	-
THCVA	0.115	0.00577	1.15	0.253	-	1.15	1.15
TOTAL	22.5	2.31	225		-	225	225
TOTAL CBC	-	-	-		-	-	-
TOTAL CBD	0.0329	0.00329	0.329		-	0.329	0.329
TOTAL CBDV	0.0338	0.00304	0.338		-	0.338	0.338
TOTAL CBG	0.522	0.0611	5.22		-	5.22	5.22
TOTAL CBN	-	-	-		-	-	-
TOTAL THC	19.1	1.97	191		-	191	191
TOTAL THCV	0.100	0.00500	1.00		-	1.00	1.00



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 THCV = (THCVA x 0.867) + THCV

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: SA32085)

Testing Location:	Customer ID: 2161	Order ID: OR9977	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13131379289	Mass: 12.51g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 08/17/2022
License: ADH 113	License: 00065C	6006H20220701CBS4	Date Received: 08/17/2022
Cultivar (Strain) or Sample Description: Crunch Berries			Date Completed: 08/20/2022

TERPENOID PROFILE

Analysis Date/Time: 8/19/2022 1929

Method: GC/MS

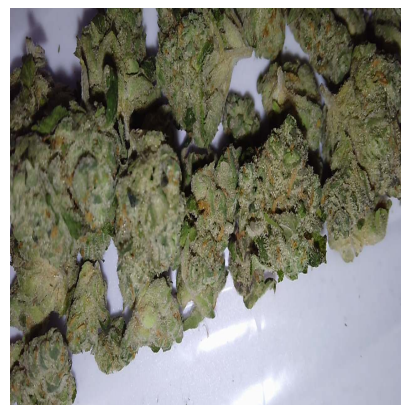
Deviations from SOP:

Analyst: KF

Instrument: Agilent 7890/5975

None

Terpene	Result (µg/g)	Result (%)	
α-Bisabolol	808	0.0808	■
Camphene	166	0.0166	■
δ-3-Carene	-	-	
β-Caryophyllene	3850	0.385	■
Caryophyllene oxide	155	0.0155	■
p-Cymene	-	-	
Eucalyptol	-	-	
Geraniol	161	0.0161	■
Guaiol	-	-	
α-Humulene	1620	0.162	■
Isopulegol	-	-	
d-Limonene	1620	0.162	■
Linalool	1740	0.174	■
β-Myrcene	4070	0.407	■
cis-Nerolidol	290	0.0290	■
trans-Nerolidol	45.5	0.00455	■
α-Ocimene	22.9	0.00229	■
β-Ocimene	-	-	
α-Pinene	6840	0.684	■
β-Pinene	3340	0.334	■
α-Terpinene	-	-	
γ-Terpinene	-	-	
Terpinolene	57.9	0.00579	■
TOTAL	24800	2.48	



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): 18.1

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: SA32085)

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: OR9977 Lot Number: M00065C13131379289 Production Run: 6006H20220701CBS4	Sample Type: Primary Matrix: Flower Mass: 12.51g Date Collected: 08/17/2022 Date Received: 08/17/2022
--	---	--	--

Cultivar (Strain) or Sample Description: Crunch Berries

Date Completed: 08/20/2022

PESTICIDES PROFILE (SOP: SOP-PEST-001)

Analysis Date/Time: 8/19/2022 1744

Method: LC/MS/MS

Deviations from SOP:

Analyst: KF

Instrument: Shimadzu LC-8050

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)	-	0.0181	0.144	0.5	Kresoxim-methyl (143390-89-0)	-	0.0181	0.144	0.4
Acephate (30560-19-1)	-	0.0181	0.144	0.4	Malathion (121-75-5)	-	0.0181	0.144	0.2
Acetamiprid (135410-20-7)	-	0.0181	0.144	2	Metalaxyl (57837-19-1)	-	0.0181	0.144	0.2
Aldicarb (116-06-3)	-	0.0181	0.144	0.4	Methiocarb (2032-65-7)	-	0.0181	0.144	0.2
Azoxystrobin (131860-33-8)	-	0.0181	0.144	0.2	Methomyl (16752-77-5)	-	0.0181	0.144	0.4
Bifenazate (149877-41-8)	-	0.0181	0.144	0.2	Methyl parathion (298-0-0)	-	0.0181	0.144	0.2
Bifenthrin (82657-04-3)	-	0.0181	0.144	0.2	MGK 264 (113-48-4)	-	0.0181	0.144	0.2
Boscalid (188425-85-6)	-	0.0181	0.144	0.4	Myclobutanil (88671-89-0)	-	0.0181	0.144	0.2
Carbaryl (63-25-2)	-	0.0181	0.144	0.2	Naled (300-76-5)	-	0.0181	0.144	0.5
Carbofuran (1563-66-2)	-	0.0181	0.144	0.2	Oxamyl (23135-22-0)	-	0.0181	0.144	1
Chlorantraniliprole (800008-45-7)	-	0.0181	0.144	0.2	Paclobutrazol (76738-62-0)	-	0.0181	0.144	0.4
Chlorfenapyr (122453-73-0)	-	0.0181	0.144	1	Permethrins (52645-53-1)	-	0.0181	0.144	0.2
Chlorpyrifos (2921-88-2)	-	0.0181	0.144	0.2	Phosmet (732-11-6)	-	0.0181	0.144	0.2
Clofentezine (74115-24-5)	-	0.0181	0.144	0.2	Piperonyl butoxide (51-03-6)	-	0.0181	0.144	2
Cyfluthrin (68359-37-5)	-	0.0181	0.144	1	Prallethrin (2331-36-9)	-	0.0181	0.144	0.2
Cypermethrin (52315-07-8)	-	0.0181	0.144	1	Propiconazole (60207-90-1))	-	0.0181	0.144	0.4
Daminozide (1596-84-5)	-	0.0181	0.144	1	Propoxur (114-26-1)	-	0.0181	0.144	0.2
DDVP (62-73-7)	-	0.0181	0.144	0.1	Pyrethrins (8003-34-7)	-	0.0181	0.144	1
Diazinon (333-41-5)	-	0.0181	0.144	0.2	Pyridaben (96489-71-3)	-	0.0181	0.144	0.2
Dimethoate (60-51-5)	-	0.0181	0.144	0.2	Spinosad (168316-95-8)	-	0.0181	0.144	0.2
Ethoprophos (13194-48-4)	-	0.0181	0.144	0.2	Spiromesifen (283594-90-1)	-	0.0181	0.144	0.2
Etofenprox (80844-07-1)	-	0.0181	0.144	0.4	Spirotetramat (203313-25-1)	-	0.0181	0.144	0.2
Etazoxole (153233-91-1)	-	0.0181	0.144	0.2	Spiroxamine (118134-30-8)	-	0.0181	0.144	0.4
Fenoxycarb (72490-01-8)	-	0.0181	0.144	0.2	Tebuconazole (80443-41-0)	-	0.0181	0.144	0.4
(E)-Fenpyroximate (134098-61-6)	-	0.0181	0.144	0.4	Thiacloprid (111988-49-9)	-	0.0181	0.144	0.2
Fipronil (120068-37-3)	-	0.0181	0.144	0.4	Thiamethoxam (153719-23-4)	-	0.0181	0.144	0.2
Flonicamid (158062-67-0)	-	0.0181	0.144	1	Trifloxystrobin (141517-21-7)	-	0.0181	0.144	0.2
Fludioxinil (131341-86-1)	-	0.0181	0.144	0.4					
Hexythiazox (78587-05-0)	-	0.0181	0.144	1					
Imazalil (35554-44-0)	-	0.0181	0.144	0.2					
Imidacloprid (138261-41-3)	-	0.0181	0.144	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
Kyle W. Felling, Ph.D.
Laboratory Director



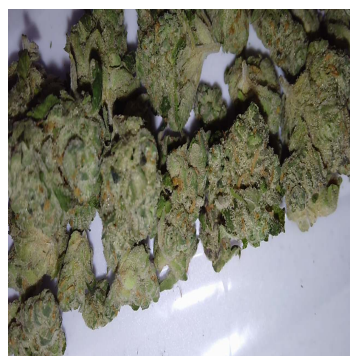
CERTIFICATE OF ANALYSIS (SAMPLE ID: SA32085)

Testing Location:	Customer ID: 2161	Order ID: OR9977	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13131379289	Mass: 12.51g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 08/17/2022
License: ADH 113	License: 00065C	6006H20220701CBS4	Date Received: 08/17/2022
Cultivar (Strain) or Sample Description: Crunch Berries			Date Completed: 08/20/2022

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

Analysis Date/Time: 08/19/2022 0953 (ICP/OES)	Method: ICP/OES	Deviations from SOP:
Analysis Date/Time: - (DMA)	Instrument: Agilent 720-ES	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)	-	56.8	90.0	200
Cadmium (Cd)	-	56.8	90.0	200
Lead (Pb)	-	56.8	90.0	500
Mercury (Hg)	-	56.8	90.0	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



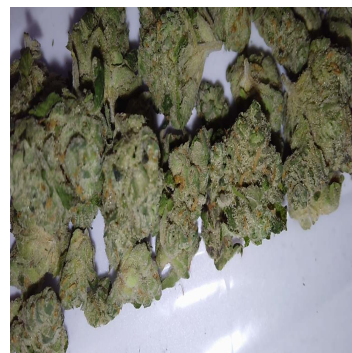
CERTIFICATE OF ANALYSIS (SAMPLE ID: SA32085)

Testing Location:	Customer ID: 2161	Sample ID: SA32085	Sample Type: Primary
Arkansas	River Valley Relief Cultivation	Lot Number:	Matrix: Flower
232 S. Broadview St.	5601 Old Greenwood Rd Suite C	M00065C13131379289	Mass: 12.51g
Greenbrier, AR 72058	Fort Smith, AR 72903	Production Run:	Date Collected: 08/17/2022
License: ADA 05_H273	License: 00065C	6006H20220701CBS4	Date Received: 08/17/2022
Cultivar (Strain) or Sample Description: Crunch Berries			Date Completed: 08/20/2022

MICROBIOLOGICAL PROFILE (SOP: SOP-Micro-001)

Analysis Date/Time: 8/19/2022 1314	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	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

