

SUMMARY OF ANALYSIS (SAMPLE ID: SA28001)

Testing Location: OKC 3680 E. I-240 Service Rd. Oklahoma City, OK 73135 License: LAAA-4Y4X-Z72Z	Customer ID: 1648 Red Dirt Sungrown P.O. Box 1399 Guthrie, OK 73044 License: GAAA-41RN-M7KD	Order ID: OR8711 Lot Number: Not Entered Batch Number: Not Entered	Sample Type: Primary Matrix: Flower Mass: 5g Date Collected: 06/02/2020 Date Received: 06/01/2020
Cultivar (Strain) or Sample Description: Citral Glue			Date Completed: 06/08/2020

*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.

*For Oklahoma, with the new OMMA rules to be effective April 1, 2020, limits on moisture are proposed at 15% and water activity at 0.65aw.

Moisture Content (%) 14.8	PASS/FAIL PASS	Water Activity (aw) 0.43 @ 27.7°C	PASS/FAIL PASS
-------------------------------------	---------------------------------	---	---------------------------------

Cannabinoids (Top 3)	(%)	mg/g
THCa	26.3	263
Δ9-THC	0.633	6
CBGa	0.521	5
TOTAL CBD	0.0775	0.775
TOTAL THC	23.7	237
TOTAL CANNABINOIDS	27.7	277

Terpenes (Top 5)	(%)	µg/g
β-Caryophyllene	0.761	7607
β-Myrcene	0.720	7201
d-Limonene	0.543	5427
α-Humulene	0.331	3309
Linalool	0.165	1652
TOTAL TERPENES	2.84	28369

Contaminants	PASS/FAIL
Heavy Metals:	PASS
Microbiology:	PASS
Mycotoxins:	PASS
Pesticides:	PASS
Visual Inspection:	PASS



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 of Oklahoma City, LLC

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

www.FASTLaboratories.com



CERTIFICATE OF ANALYSIS (SAMPLE ID: SA28001)

Testing Location: OKC 3680 E. I-240 Service Rd. Oklahoma City, OK 73135 License: LAAA-4Y4X-Z72Z	Customer ID: 1648 Red Dirt Sungrown P.O. Box 1399 Guthrie, OK 73044 License: GAAA-41RN-M7KD	Order ID: OR8711 Lot Number: Not Entered Batch Number: Not Entered	Sample Type: Primary Matrix: Flower Mass: 5g Date Collected: 06/02/2020 Date Received: 06/01/2020
--	--	---	--

Cultivar (Strain) or Sample Description: Citral Glue **Date Completed:** 06/08/2020

CANNABINOID (POTENCY) PROFILE

Analysis Date/Time: 06/02/2020 1159 **Method:** HPLC/DAD **Moisture Content (%):** 14.8
Analyst: WW **Instrument:** Agilent 1100 **Water Activity (aw):** 0.4329 @ 27.73Å°C

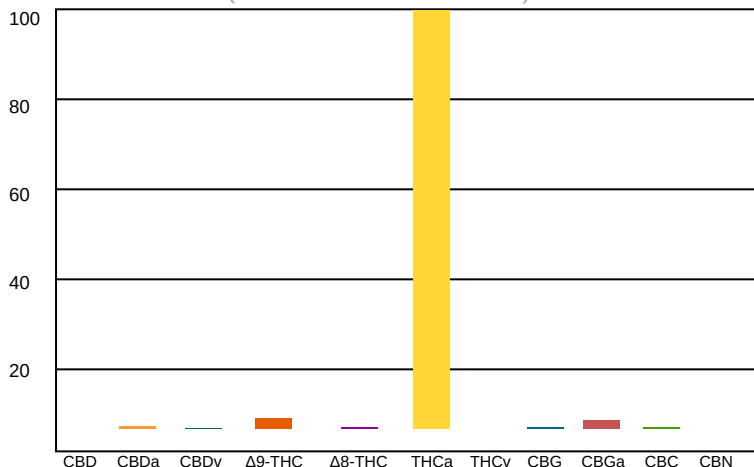
Cannabinoid	Result (%)	Result (mg/g)	Reporting Limit (mg/g)	Result (mg/mL)	Per Unit (mg)
CBD	-	-	0.0508	-	-
CBDa	0.0884	0.884	0.0508	-	0.884
CBDv	0.0142	0.142	0.0508	-	0.142
Δ9-THC	0.633	6.33	0.0508	-	6
Δ8-THC	0.0361	0.361	0.0508	-	0.361
THCa	26.3	263	0.0508	-	263
THCv	-	-	0.0508	-	-
CBC	0.0436	0.436	0.0508	-	0.436
CBG	0.0623	0.623	0.0508	-	0.623
CBGa	0.521	5.21	0.0508	-	5
CBN	-	-	0.0508	-	-
TOTAL	27.7	277			277
TOTAL THC	23.7	237			237
TOTAL CBD	0.0775	0.775			0.775



UNIT MASS (g): 1

"-" Not detected above RL.

Cannabinoid Distribution (% of Total Cannabinoids)



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 THC = (THCa x 0.877) + Δ9-THC
Total CBD = (CBDa x 0.877) + CBD

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

Abbreviations: UV - Ultraviolet, HPLC - High Pressure Liquid Chromatography, RL - Reporting Limit, RPD - Relative Percent Difference, RSD - Relative Standard Deviation

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 of Oklahoma City, LLC

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



SUMMARY OF ANALYSIS (SAMPLE ID: SA28001)

Testing Location: OKC 3680 E. I-240 Service Rd. Oklahoma City, OK 73135 License: LAAA-4Y4X-Z72Z	Customer ID: 1648 Red Dirt Sungrown P.O. Box 1399 Guthrie, OK 73044 License: GAAA-41RN-M7KD	Order ID: OR8711 Lot Number: Not Entered Batch Number: Not Entered	Sample Type: Primary Matrix: Flower Mass: 5g Date Collected: 06/02/2020 Date Received: 06/01/2020
Cultivar (Strain) or Sample Description: Citral Glue			Date Completed: 06/08/2020

TERPENOID PROFILE

Analysis Date/Time: 06/02/2020 1159 **Method:** HS/GC/FID (Internal Method-002) **Deviations from SOP:**
Analyst: DJ **Instrument:** Agilent 6890 None

<u>Terpene</u>	<u>Result (µg/g)</u>	<u>Result (%)</u>	
α-Bisabolol	839	0.0839	█
Camphene	161	0.0161	█
δ-3-Carene	18	0.00183	█
β-Caryophyllene	7607	0.761	█
Caryophyllene oxide	174	0.0174	█
p-Cymene	37	0.00372	█
Eucalyptol	-	-	
Geraniol	-	-	
Guaiol	-	-	
α-Humulene	3309	0.331	█
Isopulegol	81	0.00808	█
d-Limonene	5427	0.543	█
Linalool	1652	0.165	█
β-Myrcene	7201	0.72	█
cis-Nerolidol	-	-	
trans-Nerolidol	-	-	
α-Ocimene	-	-	
β-Ocimene	44	0.00439	█
α-Pinene	509	0.0509	█
β-Pinene	1164	0.116	█
α-Terpinene	35	0.00349	█
γ-Terpinene	-	-	
Terpinolene	112	0.0112	█
TOTAL	28369	2.84	



Abbreviations: HS - Headspace, 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): 2.03

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Felling Analytical Services and Technology of Oklahoma City, LLC

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

www.FASTLaboratories.com



SUMMARY OF ANALYSIS (SAMPLE ID: SA28001)

Testing Location: OKC 3680 E. I-240 Service Rd. Oklahoma City, OK 73135 License: LAAA-4Y4X-Z72Z	Customer ID: 1648 Red Dirt Sungrown P.O. Box 1399 Guthrie, OK 73044 License: GAAA-41RN-M7KD	Order ID: OR8711 Lot Number: Not Entered Batch Number: Not Entered	Sample Type: Primary Matrix: Flower Mass: 5g Date Collected: 06/02/2020 Date Received: 06/01/2020
--	--	---	--

Cultivar (Strain) or Sample Description: Citral Glue **Date Completed:** 06/08/2020

PESTICIDES PROFILE

Analysis Date/Time: 06/02/2020 1159

Method: LC/MS/MS

Deviations from SOP:

Analyst: DJ

Instrument: Waters Acquity/TQD

None

<u>Pesticide</u>	<u>Result</u> (µg/g)	<u>Action Level</u> (µg/g)
Abamectin (71751-41-2)	-	0.5
Azoxystrobin (131860-33-8)	-	0.5
Bifenazate* (149877-41-8)	-	0.5
Etoazazole (153233-91-1)	-	0.5
Imazalil (35554-44-0)	-	0.5
Imidacloprid (138261-41-3)	-	0.5
Malathion (121-75-5)	-	0.5
Myclobutanil (88671-89-0)	-	0.5
Permethrins* (52645-53-1)	-	0.5
Spinosad A (168316-95-8)	-	0.5
Spinosad D (168316-95-8)	-	0.5
Spiromesifen (283594-90-1)	-	0.5
Spirotetramat (203313-25-1)	-	0.5
Tebuconazole (80443-41-0)	-	0.5

Color Key

RESULT < 1/2 AL
1/2 AL < RESULT < AL
RESULT > AL



Reporting Limit (µg/g)
1/2 of AL

"-" not detected above reporting limit

"*" analyzed by GC/MS (all others analyzed by LC/MS/MS)

Permethrins measured as the cumulative residue of the *cis*- and *trans*-permethrin isomers.

Abbreviations: LC - Liquid Chromatography, GC - Gas Chromatography, MS - Mass Spectrometry, RL - Reporting Limit, AL - Action Level, CAS - Chemical Abstract Services

<u>Pesticide</u>	<u>Synonym(s)</u>	<u>Pesticide</u>	<u>Synonym(s)</u>	<u>Pesticide</u>	<u>Synonym(s)</u>
Cyfluthrin	Baythroid	Myclobutanil	Sythane	Propiconazole	Tilt
DDVP	Dichlorvos	Naled	Dibrom	Propoxur	Baygon
Ethoprophos	Prophos	Phosmet	Imidan		

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 of Oklahoma City, LLC

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



SUMMARY OF ANALYSIS (SAMPLE ID: SA28001)

Testing Location: OKC 3680 E. I-240 Service Rd. Oklahoma City, OK 73135 License: LAAA-4Y4X-Z72Z	Customer ID: 1648 Red Dirt Sungrown P.O. Box 1399 Guthrie, OK 73044 License: GAAA-41RN-M7KD	Order ID: OR8711 Lot Number: Not Entered Batch Number: Not Entered	Sample Type: Primary Matrix: Flower Mass: 5g Date Collected: 06/02/2020 Date Received: 06/01/2020
Cultivar (Strain) or Sample Description: Citral Glue			Date Completed: 06/08/2020

MYCOTOXIN PROFILE

Analysis Date/Time: 06/02/2020 1159
Analyst: DJ

Method: LC/MS/MS
Instrument: Waters Acquity/TQD

Deviations from SOP:
None

<u>Mycotoxin</u>	<u>Result (µg/kg)</u>	<u>Action Level (µg/kg)</u>
Aflatoxin B1	-	20
Aflatoxin B2	-	20
Aflatoxin G1	-	20
Aflatoxin G2	-	20
Ochratoxin A	-	20



Abbreviations: EC - Escherichia Coli, CFU - Colony-Forming Unit, RL - Reporting Limit, AL - Action Level

Color Key

RESULT < 1/2 AL
1/2 AL < RESULT < AL
RESULT > AL

Reporting Limit (CFU/g)
1

"-" not detected above reporting limit

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 of Oklahoma City, LLC

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



SUMMARY OF ANALYSIS (SAMPLE ID: SA28001)

Testing Location: OKC 3680 E. I-240 Service Rd. Oklahoma City, OK 73135 License: LAAA-4Y4X-Z72Z	Customer ID: 1648 Red Dirt Sungrown P.O. Box 1399 Guthrie, OK 73044 License: GAAA-41RN-M7KD	Order ID: OR8711 Lot Number: Not Entered Batch Number: Not Entered	Sample Type: Primary Matrix: Flower Mass: 5g Date Collected: 06/02/2020 Date Received: 06/01/2020 Date Completed: 06/08/2020
Cultivar (Strain) or Sample Description: Citral Glue			

HEAVY METAL PROFILE

Analysis Date/Time: 06/02/2020 1159
Analyst: CC

Method: ICP/MS
Instrument: PerkinElmer Elan 9000

Deviations from SOP:
None

<u>Heavy Metal</u>	<u>Result (µg/kg)</u>	<u>Action Level (µg/kg)</u>
Arsenic (As)	-	400
Cadmium (Cd)	-	440
Lead (Pb)	-	1000
Mercury (Hg)	-	200



Abbreviations: ICP - Inductively-Coupled Plasma, OES - Optical Emission Spectroscopy, MS - Mass Spectroscopy, RL - Reporting Limit, AL - Action Level

Color Key

RESULT < 1/2 AL
1/2 AL < RESULT < AL
RESULT > AL

Reporting Limit (µg/kg)
50

"-" not detected above reporting limit

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 of Oklahoma City, LLC

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



SUMMARY OF ANALYSIS (SAMPLE ID: SA28001)

Testing Location: OKC 3680 E. I-240 Service Rd. Oklahoma City, OK 73135 License: LAAA-4Y4X-Z72Z	Customer ID: 1648 Red Dirt Sungrown P.O. Box 1399 Guthrie, OK 73044 License: GAAA-41RN-M7KD	Order ID: OR8711 Lot Number: Not Entered Batch Number: Not Entered	Sample Type: Primary Matrix: Flower Mass: 5g Date Collected: 06/02/2020 Date Received: 06/01/2020
Cultivar (Strain) or Sample Description: Citral Glue			Date Completed: 06/08/2020

MICROBIOLOGICAL PROFILE

Analysis Date/Time: 06/02/2020 1159 **Method:** Hardy Diagnostics CompactDry **Deviations from SOP:**
Analyst: DJ **Instrument:** Thermo Incubator None

<u>Bacteria/Microbe</u>	<u>Result (CFU/g)</u>	<u>Action Level (CFU/g)</u>
Escherichia Coli (E. Coli)	Absent	1
Mold/Yeast	Absent	10000
Salmonella spp.	Absent	1
Staphylococcus Aureus	Absent	1



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 < 1/2 AL
1/2 AL < RESULT < AL
RESULT > AL

Reporting Limit (CFU/g)
1

"-" not detected above reporting limit

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 of Oklahoma City, LLC

