

May 18, 2022

LeafLine Labs
8235 97th Street South
Cottage Grove, MN 55016

Work Order Number: 2202189

Enclosed are the results of analyses for samples received by the laboratory on 05/06/22 and tested per the requirements of the MDH Office of Medical Cannabis program. If there are any questions concerning this report, please feel free to contact me or the Quality Assurance Department.

Results are not blank corrected unless noted within the report.

The results in this report apply to the samples as received.

All samples will be retained by Legend Technical Services, Inc. unless consumed in the analysis, for 30 days from the date of this report and then returned, discarded, or retained per current agreement and in accordance with the requirements of LEGEND's Controlled Substance Program.

Prepared by,

LEGEND TECHNICAL SERVICES, INC.
Approved Testing Laboratory, MDH Office of Medical Cannabis
ISO/IEC 17025:2017 Accredited, A2LA Certificate 2950.01



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LeafLine Labs
8235 97th Street South
Cottage Grove, MN 55016

LEGEND Project: Flower Products

Project Manager:

Work Order #: 2202189
Date Reported: 05/18/22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
45.05-10.14.21-R2-Flower (4 Bags)	2202189-01	Flower	05/05/22 07:30	05/06/22 10:33

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Cottage Grove, MN 55016	Project Manager:	

PERCENT MOISTURE
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
45.05-10.14.21-R2-Flower (4 Bags) (2202189-01) Flower Sampled: 05/05/22 07:30 Received: 05/06/22 10:33										
% Moisture	10.4	0.100		%	1	B2E0940	05/09/22	05/10/22	% calculation	

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TOTAL CANNABINOIDS

Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
45.05-10.14.21-R2-Flower (4 Bags) (2202189-01) Flower Sampled: 05/05/22 07:30 Received: 05/06/22 10:33										
Average Cannabidiol (CBD)	<0.00200	0.00200		%	1	B2E1829	05/18/22	05/18/22	HPLC	
Average Cannabidiolic Acid (CBDA)	0.0295	0.00200		%	1	"	"	"	"	
Average Delta-9-Tetrahydrocannabinol (d9-THC)	0.436	0.00200		%	1	"	"	"	"	
Average THCA-A	14.1	0.00200		%	1	"	"	"	"	
Average Total CBD	0.0258	0.00200		%	1	"	"	"	"	
Average Total THC	12.8	0.00200		%	1	"	"	"	"	
Cannabidiol (CBD)	<0.00400	0.00400		%	1	B2E1738	05/16/22	05/16/22	"	
Cannabidiolic Acid (CBDA)	0.0293	0.00400		%	1	"	"	"	"	
Delta-9-Tetrahydrocannabinol (d9-THC)	0.439	0.0400		%	10	"	"	05/16/22	"	
THCA-A	14.2	0.400		%	100	"	"	05/16/22	"	
Total CBD	0.0257	0.00751		% by Weight	1	[CALC]	"	05/16/22	"	
Total THC	12.9	0.391		% by Weight	100	"	"	05/16/22	"	
45.05-10.14.21-R2-Flower (4 Bags) (2202189-01RE1) Flower Sampled: 05/05/22 07:30 Received: 05/06/22 10:33										
Cannabidiol (CBD)	<0.00400	0.00400		%	1	B2E1738	05/16/22	05/16/22	HPLC	
Cannabidiolic Acid (CBDA)	0.0293	0.00400		%	1	"	"	"	"	
Delta-9-Tetrahydrocannabinol (d9-THC)	0.432	0.0400		%	10	"	"	05/16/22	"	
THCA-A	13.9	0.400		%	100	"	"	05/16/22	"	
Total CBD	0.0257	0.00751		% by Weight	1	[CALC]	"	05/16/22	"	
Total THC	12.7	0.391		% by Weight	100	"	"	05/16/22	"	
45.05-10.14.21-R2-Flower (4 Bags) (2202189-01RE2) Flower Sampled: 05/05/22 07:30 Received: 05/06/22 10:33										
Cannabidiol (CBD)	<0.00344	0.00344		%	1	B2E1738	05/16/22	05/16/22	HPLC	
Cannabidiolic Acid (CBDA)	0.0298	0.00344		%	1	"	"	"	"	
Delta-9-Tetrahydrocannabinol (d9-THC)	0.436	0.0344		%	10	"	"	05/16/22	"	
THCA-A	14.1	0.344		%	100	"	"	05/16/22	"	
Total CBD	0.0261	0.00646		% by Weight	1	[CALC]	"	05/16/22	"	
Total THC	12.8	0.336		% by Weight	100	"	"	05/16/22	"	

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TERPENES
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
45.05-10.14.21-R2-Flower (4 Bags) (2202189-01) Flower Sampled: 05/05/22 07:30 Received: 05/06/22 10:33										
(-)-Alpha-Bisabolol	0.051	0.0080	0.0018	% by Weight	2	B2E1116	05/11/22	05/13/22	EPA 8270E	
(-)-beta-Pinene	0.022	0.0080		% by Weight	2	"	"	"	"	
(-)-Guaiaol	0.038	0.0080		% by Weight	2	"	"	"	"	
(-)-Isopulegol	<0.0080	0.0080		% by Weight	2	"	"	"	"	
(R)-(+)-Limonene	0.098	0.0080	0.0015	% by Weight	2	"	"	"	"	
alpha-Humulene	0.028	0.0080	0.00058	% by Weight	2	"	"	"	"	
alpha-Pinene	0.012	0.0080	0.0010	% by Weight	2	"	"	"	"	
alpha-Terpinene	<0.040	0.040		% by Weight	2	"	"	"	"	
beta-Myrcene	0.20	0.0080	0.00062	% by Weight	2	"	"	"	"	
Camphene	<0.0080	0.0080		% by Weight	2	"	"	"	"	
delta-3-carene	<0.020	0.020		% by Weight	2	"	"	"	"	
gamma-Terpinene	<0.0080	0.0080		% by Weight	2	"	"	"	"	
Geraniol	<0.0080	0.0080	0.0024	% by Weight	2	"	"	"	"	
Linalool	<0.0080	0.0080	0.00084	% by Weight	2	"	"	"	"	
Nerolidol	0.021	0.0080		% by Weight	2	"	"	"	"	
Ocimene	<0.0080	0.0080		% by Weight	2	"	"	"	"	
p-Isopropyltoluene (p-Cymene)	<0.020	0.020		% by Weight	2	"	"	"	"	
Terpinolene	<0.0080	0.0080	0.00094	% by Weight	2	"	"	"	"	
trans-Caryophyllene	0.10	0.0080	0.00098	% by Weight	2	"	"	"	"	

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AFLATOXINS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
45.05-10.14.21-R2-Flower (4 Bags) (2202189-01) Flower Sampled: 05/05/22 07:30 Received: 05/06/22 10:33										
Aflatoxin B1	<3.0	3.0		ng/g	1	B2E1209	05/12/22	05/12/22	LC-MS/MS	
Aflatoxin B2	<3.0	3.0		ng/g	1	"	"	"	"	
Aflatoxin G1	<3.0	3.0		ng/g	1	"	"	"	"	
Aflatoxin G2	<6.0	6.0		ng/g	1	"	"	"	"	
Ochratoxin A	<20	20		ng/g	1	"	"	"	"	L5a, V1

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PESTICIDES
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
45.05-10.14.21-R2-Flower (4 Bags) (2202189-01) Flower Sampled: 05/05/22 07:30 Received: 05/06/22 10:33										
Acetamiprid	<0.16	0.16		ug/g	1	B2E1210	05/16/22	05/16/22	LC-MS/MS	
Aldicarb	<0.16	0.16		ug/g	1	"	"	"	"	
Azoxystrobin	<0.16	0.16		ug/g	1	"	"	"	"	
Bifenazate	<0.16	0.16		ug/g	1	"	"	"	"	
Bifenthrin	<0.16	0.16		ug/g	1	"	"	"	"	L5a
Boscalid	<0.16	0.16		ug/g	1	"	"	"	"	
Carbaryl	<0.16	0.16		ug/g	1	"	"	"	"	
Carbofuran (Furadan)	<0.16	0.16		ug/g	1	"	"	"	"	
Chlorantraniliprole	<0.16	0.16		ug/g	1	"	"	"	"	
Clofentezine	<0.16	0.16		ug/g	1	"	"	"	"	M2
Cypermethrin	<0.16	0.16		ug/g	1	"	"	"	"	
Diazinon	<0.16	0.16		ug/g	1	"	"	"	"	
Dichlorvos	<0.16	0.16		ug/g	1	"	"	"	"	
Dimethoate	<0.16	0.16		ug/g	1	"	"	"	"	
Dursban	<0.16	0.16		ug/g	1	"	"	"	"	
Ethoprophos	<0.16	0.16		ug/g	1	"	"	"	"	
Etofenprox	<0.16	0.16		ug/g	1	"	"	"	"	M2
Etoxazole	<0.16	0.16		ug/g	1	"	"	"	"	
Fenoxycarb	<0.16	0.16		ug/g	1	"	"	"	"	M2
Fenpyroximate	<0.16	0.16		ug/g	1	"	"	"	"	
Flonicamid	<0.16	0.16		ug/g	1	"	"	"	"	
Imazalil	<0.16	0.16		ug/g	1	"	"	"	"	
Imidacloprid	<0.16	0.16		ug/g	1	"	"	"	"	
Kresoxim methyl	<0.16	0.16		ug/g	1	"	"	"	"	
Malathion	<0.16	0.16		ug/g	1	"	"	"	"	
Metalaxyl	<0.16	0.16		ug/g	1	"	"	"	"	
Methiocarb	<0.16	0.16		ug/g	1	"	"	"	"	M2
Methomyl	<0.16	0.16		ug/g	1	"	"	"	"	
Myclobutanil	<0.16	0.16		ug/g	1	"	"	"	"	
Naled	<0.16	0.16		ug/g	1	"	"	"	"	A-01, V1
Oxamyl	<0.16	0.16		ug/g	1	"	"	"	"	
Permethrin	<0.16	0.16		ug/g	1	"	"	"	"	M2
Phosmet	<0.16	0.16		ug/g	1	"	"	"	"	
Piperonyl butoxide	<0.16	0.16		ug/g	1	"	"	"	"	
Prallethrin	<0.16	0.16		ug/g	1	"	"	"	"	M2
Propiconazole	<0.16	0.16		ug/g	1	"	"	"	"	
Propoxur	<0.16	0.16		ug/g	1	"	"	"	"	
Pyrethrin I	<0.040	0.040		ug/g	1	"	"	"	"	
Pyrethrin II	<0.020	0.020		ug/g	1	"	"	"	"	
Pyridaben	<0.16	0.16		ug/g	1	"	"	"	"	
Spinosad	<0.16	0.16		ug/g	1	"	"	"	"	M2
Spiromesifen	<0.16	0.16		ug/g	1	"	"	"	"	

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PESTICIDES
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45.05-10.14.21-R2-Flower (4 Bags) (2202189-01) Flower Sampled: 05/05/22 07:30 Received: 05/06/22 10:33										
Spirotetramat	<0.16	0.16		ug/g	1	B2E1210	05/16/22	05/16/22	LC-MS/MS	
Spiroxamine	<0.16	0.16		ug/g	1	"	"	"	"	M2
Thiacloprid	<0.16	0.16		ug/g	1	"	"	"	"	
Thiamethoxam	<0.16	0.16		ug/g	1	"	"	"	"	
Trifloxystrobin	<0.16	0.16		ug/g	1	"	"	"	"	

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TOTAL METALS ANALYSIS
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
45.05-10.14.21-R2-Flower (4 Bags) (2202189-01) Flower Sampled: 05/05/22 07:30 Received: 05/06/22 10:33										
Arsenic	<0.25	0.25	0.074	ug/g wet	1	B2E1123	05/11/22	05/12/22	EPA 6020B	L4
Cadmium	<0.10	0.10	0.017	ug/g wet	1	"	"	"	"	N5
Lead	<0.10	0.10	0.016	ug/g wet	1	"	"	"	"	V1
Mercury	<0.10	0.10	0.016	ug/g wet	1	"	"	05/16/22	"	L4

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MICRO ANALYSES
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
45.05-10.14.21-R2-Flower (4 Bags) (2202189-01) Flower Sampled: 05/05/22 07:30 Received: 05/06/22 10:33										
Salmonella	<1.0	1.0		CFU/g	1	B2E1307	05/11/22	05/13/22	AOAC 2014.01	
Total Aerobic Bacteria	<220	220		CFU/g	1	B2E1306	05/10/22	05/12/22	AOAC 990.12	
Total Bile Tolerant Gram-Negative Bacteria	<130	130		CFU/g	1	"	"	05/11/22	AOAC 2003.01	
Total Coliform	<9.0	9.0		CFU/g	1	"	"	05/11/22	AOAC 991.14	
Total E.coli	<0.90	0.90		CFU/g	1	"	"	05/12/22	"	
Total Yeast and Mold	1800	900		CFU/g	100	"	"	05/13/22	AOAC 997.02	

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WATER ACTIVITY
Legend Technical Services, Inc.

Analyte	Result	RL	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
45.05-10.14.21-R2-Flower (4 Bags) (2202189-01) Flower Sampled: 05/05/22 07:30 Received: 05/06/22 10:33										
Water Activity	0.43	0.14		aW	1	B2E0930	05/09/22	05/10/22	NA	

Report Comments:

B2E1123-BS1/BSD1 - IS failure high, recovery passed. Qualifier N1

Notes and Definitions

V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
R7	LFB/LFBD (LCS/LCSD) RPD exceeded laboratory acceptance limit. Recoveries met acceptance criteria.
N5	The minimum reporting limit verification check did not meet the method acceptance limit.
N1	See case narrative.
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.
L5a	The associated blank spike recovery was above laboratory/method acceptance limits. This analyte was not detected in the sample.
L4	The associated blank spike recovery was below method acceptance limits.
A-01	Reporting Limit Verification (RLV) recovery was above laboratory limits. Compound not detected in the sample.
<	Less than value listed
RL	Reporting Limit
CFU/g	Colony Forming Units per gram