



### Critical Berries

Sample ID: G3K0196-02

Matrix: Industrial Hemp

Test ID: 5023471

Source ID:

Date Sampled: 11/13/23

Date Accepted: 11/13/23

**Fern Valley Farms**  
fernvalleycbd@gmail.com

### Results at a Glance

Total THC : 0.72 %

Total CBD : 19 %

Total CBG : 0.32 %

Percent Moisture : 8.93 % **PASS**

Total Terpenes : 2.328 % **PASS**



Eric Wendt  
Chief Science Officer - 11/17/2023



### Critical Berries

Sample ID: G3K0196-02

Matrix: Industrial Hemp

Test ID: 5023471

Source ID:

Date Sampled: 11/13/23

Date Accepted: 11/13/23

**Fern Valley Farms**  
fernvalleycbd@gmail.com

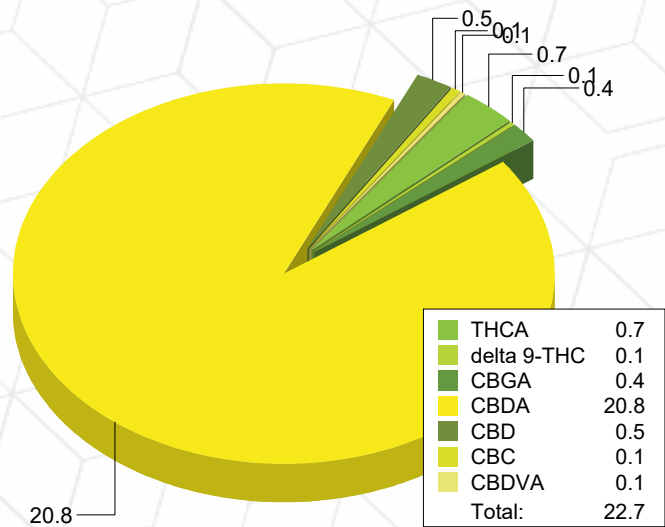
### Potency Analysis

Date/Time Extracted: 11/15/23 15:45

Analysis Method/SOP: 215

Batch Identification: 2346045

	LOQ (%)	% by Wt.	mg/g	Cannabinoids Profile	
Total THC	0.010	0.72	7.2		
Total CBD	0.009	19	190		
Total CBG	0.0009	0.32	3.2		
THCA	0.0005	0.74	7.4		
delta 9-THC	0.0005	0.067	0.67		
delta 8-THC	0.005	< LOQ	< LOQ		
THCV	0.006	< LOQ	< LOQ		
THCVA	0.002	< LOQ	< LOQ		
CBD	0.002	0.51	5.1		
CBDA	0.002	21	210		
CBDV	0.005	< LOQ	< LOQ		
CBDVA	0.002	0.079	0.79		
CBN	0.003	< LOQ	< LOQ		
CBG	0.0009	< LOQ	< LOQ		
CBGA	0.0009	0.37	3.7		
CBC	0.010	0.14	1.4		



### Moisture

Date/Time Extracted: 11/16/23 14:55

Analysis Method/SOP: 103

Moisture: 8.93 %

Action Level: 90%

Potency results are reported on a dry weight basis.

Total THC = delta 9-THC + (THCA \* 0.877)

Total CBD = CBD + (CBDA \* 0.877)

Total CBG = CBG + (CBGA \* 0.878)

LOQ=Limit of Quantification, the lowest measurable concentration of an analyte.

THCA, delta 9-THC, delta 8-THC, CBDA and CBD are accredited by TNI 2016 and ISO 17025



**ISO 17025  
ACCREDITED  
LABORATORY**

Eric Wendt  
Chief Science Officer - 11/17/2023

These results relate only to the sample included on this report. The report may not be reproduced except in full, without the written permission of Green Leaf Lab.

This is for informational testing and is not compliance testing. Lab results apply to the sample as received.



### Critical Berries

Sample ID: G3K0196-02

Matrix: Industrial Hemp

Test ID: 5023471

Source ID:

Date Sampled: 11/13/23

Date Accepted: 11/13/23

**Fern Valley Farms**  
fernvalleycbd@gmail.com

### Terpene Analysis by GCMS

Date/Time Extracted: 11/15/23 15:45

Analysis Method/SOP: 204

Date/Time Analyzed: 11/16/23 04:23

Analyte	Result	LOD	LOQ	Units	Analyte	Result	LOD	LOQ	Units
(-)-Borneol	< LOQ	0.001	0.003	mg/g	(+)-Borneol	< LOQ	0.001	0.003	mg/g
3-Carene	< LOQ	0.001	0.003	mg/g	alpha-Bisabolol	0.22	0.001	0.003	mg/g
alpha-Cedrene	< LOQ	0.001	0.003	mg/g	alpha-Humulene	1.14	0.001	0.003	mg/g
Alpha-Phellandrene	< LOQ	0.001	0.003	mg/g	alpha-Pinene	5.94	0.001	0.003	mg/g
alpha-Terpinene	< LOQ	0.001	0.003	mg/g	alpha-Thujone	< LOQ	0.001	0.003	mg/g
A-Terpineol	0.18	0.001	0.003	mg/g	beta-Caryophyllene	2.43	0.001	0.003	mg/g
beta-Myrcene	5.14	0.001	0.003	mg/g	beta-Pinene	2.72	0.001	0.003	mg/g
Camphene	0.11	0.001	0.003	mg/g	Camphor	< LOQ	0.001	0.003	mg/g
Carvacrol	< LOQ	0.001	0.003	mg/g	Carvone	< LOQ	0.001	0.003	mg/g
Caryophyllene Oxide	0.23	0.001	0.003	mg/g	Cedrol	< LOQ	0.001	0.003	mg/g
Cis-beta-Farnesene	0.68	0.001	0.003	mg/g	Cis-beta-Ocimene	< LOQ	0.001	0.003	mg/g
cis-Nerolidol	< LOQ	0.001	0.003	mg/g	Citral	< LOQ	0.001	0.003	mg/g
Citronellol	< LOQ	0.001	0.003	mg/g	Endo-fenchyl alcohol	< LOQ	0.001	0.003	mg/g
Eucalyptol	< LOQ	0.001	0.003	mg/g	Farnesol 1	< LOQ	0.001	0.003	mg/g
Farnesol 2	0.13	0.001	0.003	mg/g	gamma-Terpinene	< LOQ	0.001	0.003	mg/g
Geraniol	< LOQ	0.001	0.003	mg/g	Geranyl acetate	< LOQ	0.001	0.003	mg/g
Guaiol	< LOQ	0.001	0.003	mg/g	Isoborneol	< LOQ	0.001	0.003	mg/g
Isobornyl Acetate	< LOQ	0.001	0.003	mg/g	Isopulegol	< LOQ	0.001	0.003	mg/g
Limonene	1.05	0.001	0.003	mg/g	Linalool	< LOQ	0.001	0.003	mg/g
Menthol	< LOQ	0.001	0.003	mg/g	Menthone	< LOQ	0.001	0.003	mg/g
Nootkatone	< LOQ	0.001	0.003	mg/g	Octyl Acetate	< LOQ	0.001	0.003	mg/g
p-Cymene	< LOQ	0.001	0.003	mg/g	Phytane	< LOQ	0.001	0.003	mg/g
Piperitone	< LOQ	0.001	0.003	mg/g	Pulegone	< LOQ	0.001	0.003	mg/g
Sabinene	2.61	0.001	0.003	mg/g	Sabinene hydrate	< LOQ	0.001	0.003	mg/g
Safranal	< LOQ	0.001	0.003	mg/g	Squalene	< LOQ	0.001	0.003	mg/g
Terpinen-4-ol	< LOQ	0.001	0.003	mg/g	Terpinolene	< LOQ	0.001	0.003	mg/g
Thymol	< LOQ	0.001	0.003	mg/g	trans-beta-Farnesene	0.71	0.001	0.003	mg/g
trans-beta-Ocimene	< LOQ	0.001	0.003	mg/g	trans-Nerolidol	< LOQ	0.001	0.003	mg/g
Valencene	< LOQ	0.001	0.003	mg/g	Verbenone	< LOQ	0.001	0.003	mg/g
<b>Total Terpenes</b>	<b>23.28</b>	<b>0.001</b>	<b>0.003</b>	<b>mg/g</b>					

ND - Compound not detected, <LOQ - Results below the Limit of Quantitation  
Terpenes are not Accredited by ORELAP to TNI 2016 and ISO 17025



Eric Wendt  
Chief Science Officer - 11/17/2023

These results relate only to the sample included on this report. The report may not be reproduced except in full, without the written permission of Green Leaf Lab.

This is for informational testing and is not compliance testing. Lab results apply to the sample as received.



### Critical Berries

Sample ID: G3K0196-02

Matrix: Industrial Hemp

Test ID: 5023471

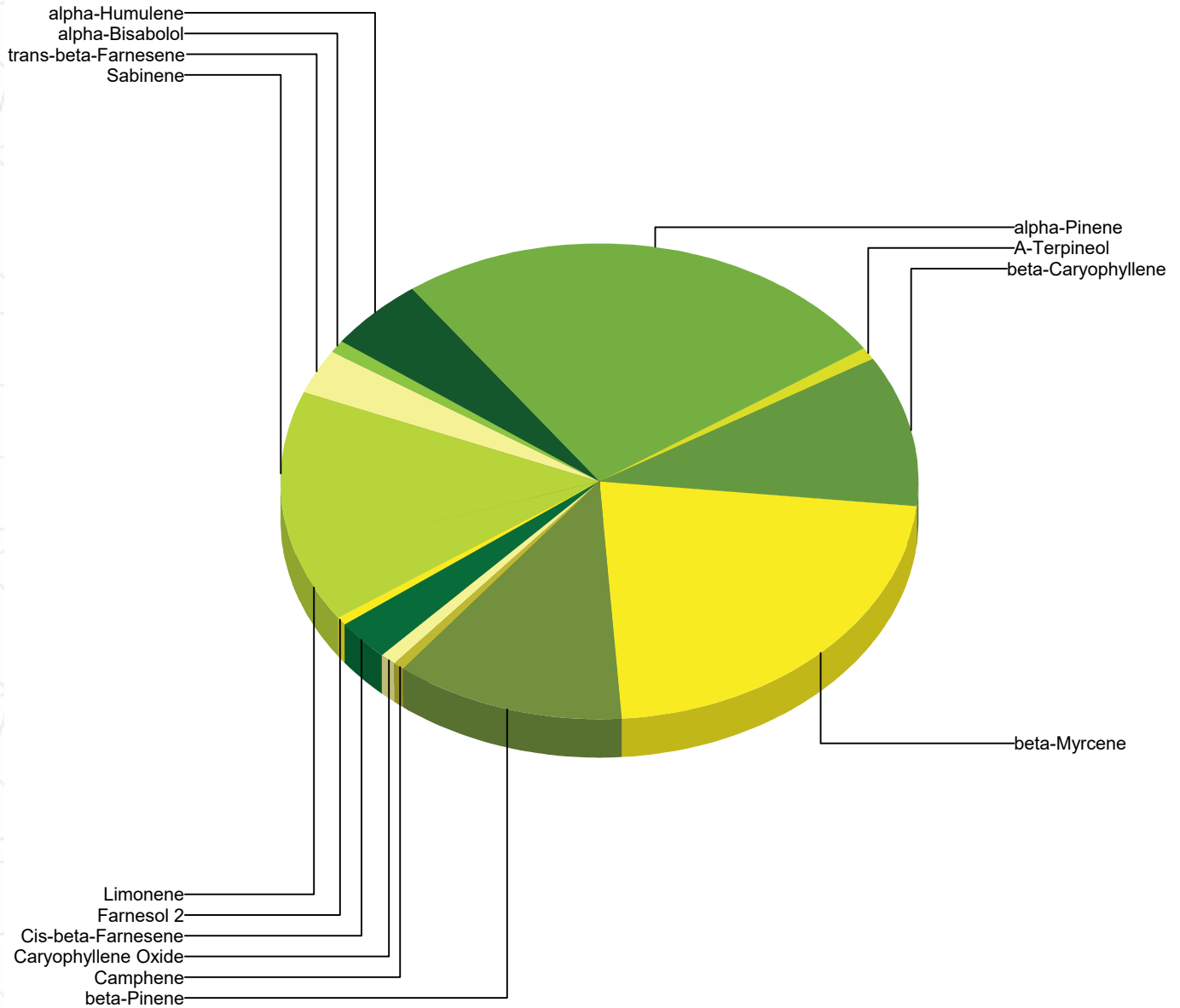
Source ID:

Date Sampled: 11/13/23

Date Accepted: 11/13/23

**Fern Valley Farms**  
fernvalleycbd@gmail.com

### Terpene Profile



### Percentage of Total Terpenes Identified



Eric Wendt  
Chief Science Officer - 11/17/2023



### Quality Control Potency

Batch: 2346045 - 215-Hemp

Blank(2346045-BLK1)							
Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
THCA	< LOQ	0.0005	%		11/15/23 15:45	11/16/23 05:19	
delta 9-THC	< LOQ	0.0005	%		11/15/23 15:45	11/16/23 05:19	
delta 8-THC	< LOQ	0.004	%		11/15/23 15:45	11/16/23 05:19	
THCV	< LOQ	0.005	%		11/15/23 15:45	11/16/23 05:19	
THCVA	< LOQ	0.002	%		11/15/23 15:45	11/16/23 05:19	
CBD	< LOQ	0.0005	%		11/15/23 15:45	11/16/23 05:19	
CBDA	< LOQ	0.0005	%		11/15/23 15:45	11/16/23 05:19	
CBDV	< LOQ	0.005	%		11/15/23 15:45	11/16/23 05:19	
CBDVA	< LOQ	0.002	%		11/15/23 15:45	11/16/23 05:19	
CBN	< LOQ	0.003	%		11/15/23 15:45	11/16/23 05:19	
CBG	< LOQ	0.0008	%		11/15/23 15:45	11/16/23 05:19	
CBGA	< LOQ	0.0008	%		11/15/23 15:45	11/16/23 05:19	
CBC	< LOQ	0.009	%		11/15/23 15:45	11/16/23 05:19	

Reference(2346045-SRM1)							
Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
THCA	95.2	0.0005	%	90-110	11/15/23 15:45	11/16/23 05:42	
delta 9-THC	98.2	0.0005	%	90-110	11/15/23 15:45	11/16/23 05:42	
delta 8-THC	106	0.004	%	90-110	11/15/23 15:45	11/16/23 05:42	
CBD	106	0.0005	%	90-110	11/15/23 15:45	11/16/23 05:42	
CBDA	98.4	0.0005	%	90-110	11/15/23 15:45	11/16/23 05:42	

### Terpene Analysis

Batch: 2346045 - 215-Hemp

Blank(2346045-BLK2)							
Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
alpha-Bisabolol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Camphene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Camphor	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
3-Carene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
beta-Caryophyllene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Caryophyllene Oxide	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
alpha-Cedrene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Cedrol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Endo-fenchyl alcohol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Eucalyptol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Geraniol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Geranyl acetate	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Guaiol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	



Eric Wendt  
Chief Science Officer - 11/17/2023

These results relate only to the sample included on this report. The report may not be reproduced except in full, without the written permission of Green Leaf Lab.

This is for informational testing and is not compliance testing. Lab results apply to the sample as received.



### Quality Control Terpene Analysis (Continued)

Batch: 2346045 - 215-Hemp (Continued)

Blank(2346045-BLK2)							
Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
alpha-Humulene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Isoborneol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Isopulegol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Limonene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Linalool	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
beta-Myrcene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
trans-Nerolidol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
alpha-Pinene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
beta-Pinene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Pulegone	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Sabinene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Sabinene hydrate	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
gamma-Terpinene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
alpha-Terpinene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Terpinolene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Valencene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Verbenone	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
trans-beta-Farnesene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
A-Terpineol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
cis-Nerolidol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Thymol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Terpinen-4-ol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Squalene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Safranal	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Piperitone	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Phytane	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
p-Cymene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Octyl Acetate	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Nootkatone	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Menthone	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Menthol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Isobornyl Acetate	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Farnesol 1	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Carvone	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
alpha-Thujone	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Alpha-Phellandrene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
(+)-Borneol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
(-)-Borneol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	



Eric Wendt  
Chief Science Officer - 11/17/2023

These results relate only to the sample included on this report. The report may not be reproduced except in full, without the written permission of Green Leaf Lab.

This is for informational testing and is not compliance testing. Lab results apply to the sample as received.



### Quality Control Terpene Analysis (Continued)

#### Batch: 2346045 - 215-Hemp (Continued)

Blank(2346045-BLK2)							
Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Carvacrol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
trans-beta-Ocimene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Cis-beta-Ocimene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Citral	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Citronellol	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Farnesol 2	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	
Cis-beta-Farnesene	< LOQ	0.00025	%		11/15/23 15:45	11/16/23 03:28	

Reference(2346045-SRM2)							
Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
alpha-Bisabolol	129	0.00025	%	70-130	11/15/23 15:45	11/16/23 03:46	
beta-Caryophyllene	99.7	0.00025	%	70-130	11/15/23 15:45	11/16/23 03:46	
alpha-Humulene	99.3	0.00025	%	70-130	11/15/23 15:45	11/16/23 03:46	
Limonene	103	0.00025	%	70-130	11/15/23 15:45	11/16/23 03:46	

#### Batch: 2346056 - 103

Blank(2346056-BLK1)							
Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Percent Moisture	0.440		%		11/16/23 14:55	11/16/23 14:55	

Blank(2346056-BLK2)							
Analyte	Result	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Percent Moisture	0.320		%		11/16/23 14:55	11/16/23 14:55	

Reference(2346056-SRM1)							
Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Percent Moisture	105		%	80-120	11/16/23 14:55	11/16/23 14:55	

Reference(2346056-SRM2)							
Analyte	% Recovery	LOQ	Units	%Recovery Limits	Extracted	Analyzed	Notes
Percent Moisture	102		%	80-120	11/16/23 14:55	11/16/23 14:55	



Eric Wendt  
Chief Science Officer - 11/17/2023

These results relate only to the sample included on this report. The report may not be reproduced except in full, without the written permission of Green Leaf Lab.

This is for informational testing and is not compliance testing. Lab results apply to the sample as received.



### Notes and Definitions

Regulatory Compliance samples were collected onsite at facility according to SOP-402 and SOP-403 and following Sampling Plan FN117. Quality Control samples were tested as received. Results do not include uncertainty of measurements. Available upon request.

- ATM Non-cannabis matrix related interference or suppression of Internal standard
  - BLI Baseline Interference - Cannabinoid peak interference in chromatographic baseline affecting QC recovery .
  - BLK Analyte detected in method blank, but not associated samples.
  - BSH Blank Spike High - Blank Spike recovery above method limit. no detections in samples.
  - BSL Blank Spike Low - Blank Spike recovery below lower method limit, analyte chromatography reviewed manually for all samples.
  - CBD Interference due to co-elution
  - CV1 CBD matrix interference on GC Pest chromatography
  - CV2 CCV was above acceptance criteria, Non-detect samples are considered acceptable.
  - INF CCV was below acceptance criteria, sample still exceeds regulatory limit.
  - ISH One or more QC falls outside acceptance criteria. Data entered into LIMS for informational purposes only.
  - ISL Internal Standard concentration is above acceptance criteria.
  - MSH Internal Standard concentration is below acceptance criteria.
  - MSI Matrix Spike High - Matrix Spike recovery above method limits.
  - MSL Matrix Spike Interference - Matrix spike source sample contains analyte hit above calibration affecting recovery accuracy in Matrix Spike.
  - TPP
  - U Matrix Spike Low - Matrix Spike recovery below lower method limit, analyte chromatography reviewed manually for all samples.
- Internal Standard concentration outside control limit due to matrix interference



Eric Wendt  
Chief Science Officer - 11/17/2023

These results relate only to the sample included on this report. The report may not be reproduced except in full, without the written permission of Green Leaf Lab.

This is for informational testing and is not compliance testing. Lab results apply to the sample as received.